GE	Geotechnical Environment Associates	& .	Tytten Co	hanger House ursers Road St Albans AL4 0PG	Site Queen: Hertfor	swood Sch dshire	nool, Shep	herd's \	Way, Ha	atfield,			Probe Numb	
Method Opendriver Sampler (To	Percussive errier rig)	Cone Dimensions	Ground I	_evel (mOD)	1000	swood Sch	nool						Job Numb J090	
		Location	Dates 21/0	08/2009	Enginee Colin T	r oms and F	artners						Sheet	
Depth (m)	Blows for Depth Increment	Field Records	Level (mOD)	Depth (m)	0 4	8				rement	8 32	3	6	40
0.20-0.30 0.30-0.40 0.40-0.50 0.50-0.60 0.60-0.70 0.70-0.80 0.80-0.90 1.00-1.10 1.10-1.20 1.20-1.30 1.30-1.40 1.40-1.50 1.50-1.60 1.60-1.70 1.70-1.80 1.80-1.90 2.00-2.10 2.10-2.20 2.20-2.30 2.30-2.40 2.40-2.50 2.50-2.60 2.50-2.60 2.90-3.00	6 12 8 7 5 2 1 2 2 3 4 6 7 8 8 9 10 2 16 7 17 17 15 16 2 2 5 3 3 3 3			0.00 1.00 1.00 1.50 1.50 2.50 3.50 4.00 5.50 6.50 7.50 7.50										
Remarks				8.00							Sc (ap	ale prox)	Logg	ed
											Fig	40 Jure N	MI No. 20a.DF	

GE	Geotechnica Environmen Associates	l & tal	Tytter Co	nhanger House ursers Road St Albans AL4 0PG	Site Queen Hertfor	swood Sch rdshire	nool, Shep	oherd's	Way, H	atfield,			Prob Num DF	
Method Opendriver Sampler (T	Percussive errier rig)	Cone Dimensions	Ground I	Level (mOD)	Client Queen	swood Sch	nool						Job Num J090	
		Location	Dates 21/0	08/2009	Enginee Colin 7	er Foms and F	Partners						Shee	
Depth (m)	Blows for Depth Increment	Field Records	Level (mOD)	Depth (m)	0 4	1 8	Blows			rement	28 32	2 3	36	40
0.20-0.30 0.30-0.40 0.40-0.50 0.50-0.60 0.60-0.70 0.70-0.80 0.80-0.90	4 6 6 3 2 1			0.00										
0.90-1.00 1.00-1.10 1.10-1.20 1.20-1.30	1			1.00										
1.30-1.40 1.40-1.50 1.50-1.60 1.60-1.70 1.70-1.80	3 4 4 3			1.50										
1.80-1.90 1.90-2.00 2.00-2.10 2.10-2.20	3 2 3 4 4 4 3 3 3 3 4 4 6 7 8			2.00										F
2.20-2.30 2.30-2.40 2.40-2.50 2.50-2.60 2.60-2.70 2.70-2.80	7 8 10 22 25 32 31			2.50										F
2.80-2.90 2.90-3.00	32 31			3.00										F
				3.50										E
				4.00										F
				4.50										_
														E
				5.50										H
				6.00										
				- - - - - - -										Ė
				7.00										
				7.50										F
Remarks				8.00										
Chimina											1	cale pprox) 1:40 igure N	М	IL

PROJECT NAME PROJECT NO:

QUEENSWOOD SCHOOL, HATFIELD, HERTFORDSHIRE

J Sturges

Approved

29/09/2009

Date

GEO / 14933

									and friends		and Hologolding invall collings				Challing Lesis	
Borehole	Depth	No.	Type	Description	MC	김	2	<425 B	Bulk Dry	Cell		Shear	표	2:1 W/S	Ground	Other tests and comments
No.	(m)				(%)	(%)	20		(Mg/m³)	Pressure (kPa)	(kPa)	Stress (kPa)		(g/l)	(g/l)	
	0.80		0	Mottled light brown and grey silty sandy fine gravelly CLAY with rare rootlets	59											
	1.10		٥	Mottled orange brown light grey silty sandy slightly gravelly CLAY, gravel is fine grained	26 78	24	9	66								
	1.30	•	٥	Mottled orange brown and light grey silty sandy slightly gravelly CLAY, gravel is fine grained	24 68	22	46 9	66								
	1.60	1	۵	Orange and light grey slightly gravelly sandy CLAY, gravel is fine to medium grained	20								8.2	0.072		
	1.90		٥	Mottled orange brown and light grey silty sandy CLAY	22											
2	0.70		٥	Mottled orange brown and light grey silty sandy slightly gravelly CLAY with rare rootlets, gravel is fine grained	31 72	23	49 9	66					8.3	0.38		
8	1.30	•	۵	Mottled orange and light grey silty sandy slightly gravelly CLAY, gravel is fine grained	9		-	+								
7	1.60	•	٥	Mottled orange and light grey silty sandy CLAY with rare rootlets	23 60	19	41 10	100								
2	2.60	,	۵	Orange grey clayey silty gravelly SAND, gravel is fine to coarse sandstone												Particle Size Distribution Test
-								+								

SUMMARY OF GEOTECHNICAL TESTING

Test Report by GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
Authorised Signatories: • J R Masters (Qual Mgr) • C F Wallace (Tech Mgr) • G J Corio (Tech Mgr) | NJ Sturges (Tech Mgr) • R J Platt (Snr Tech) • J J M Powell (Tech Dir) Client: Geotechnical & Environmental Associates Limited, Tyttenhanger House, Courses Road, St Albans, Hertfordshire AL4 0PG

GEOLABS ®

Ref: 4085.602986 Page 1 of 1 GEOLABS LIMITED ®

BS1377: Part 2: Clause 9: 1990

Determination of Particle Size Distribution

Borehole Number: 2

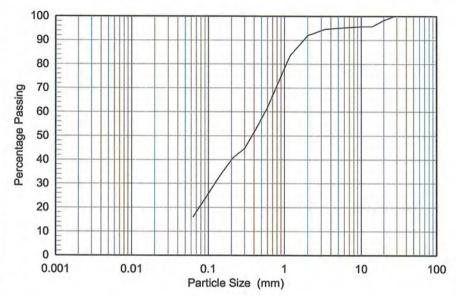
Sample Number: Depth (m): 1.60 Description:

Orange grey clayey silty gravelly SAND, gravel is fine to coarse sandstone

BS1377: Part 2: Clause 9.2: 1990 Wet Sieving Method







Particle Pr	oporti	ons
Cobbles	0.0	%
Gravel	8.0	%
Sand	76.1	%
Silt & Clay	15.9	%

Checked and Approved

Initials:

15 Date: 29/09/2009 Project Number:

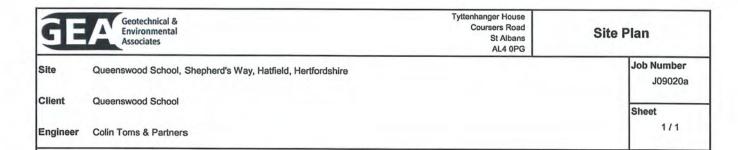
Project Name:

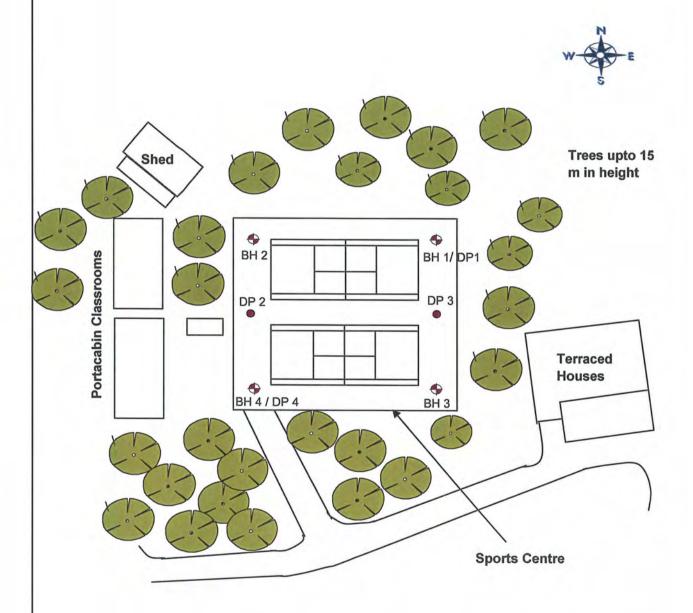
QUEENSWOOD SCHOOL, HATFIELD, HERTFORDSHIRE

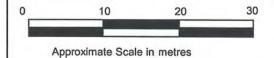
GEO / 14933













Appendix C

Exploratory hole logs

Title: PHASE TWO GROUND INVESTIGATION REPORT

Project: Queenswood School, Hatfield, Hertfordshire, AL9 6NS

Client: Ball Hall (Project Management) Limited

Project No.: 47875

3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP1

Sheet 1 of 1 Project No. Co-ords: Date Project Queenswood School Name: 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 2.10 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Logged Depth (m): Ball Hall (Project Management) Ltd Client: on c

Cilent		` ,	t Management)	Liu			2.	.90`´				<u> </u>	
Ground		nples & In S		Level	Depth	Legend		9	Stratum Des	cription			
ığ ×	Depth	Туре	Results	(m)	(m)								
	0.20 0.20	ES1 PID	PID=1.5				to r sub pla pla	medium S pangular f		roots. C ium bri	Gravel of ck, glas	f	-
	0.70 0.70 0.80	ES2 PID IVN	PID=0.5 40		0.60		sar rar SA	ndy CLAY e fine flint	ÄVEL OF U	sional r	oots and	ď	1 -
	1.20 1.20	D1 IVN	74		1.30		Fin	m orange	and pale g	irev mo	ottled		
•	1.50	IVN	63				slig sub SA AN	ghtly grave pangular f ND & GR ID ORIGIN	elly, silty Ci ine to med AVEL OF U	LAÝ. Gr ium flin JNCEF	ravel of t. RTAIN A	GE	-
	2.00 2.00	D2 PID	PID=0.5		2.10		cla	yey fine to	n, slightly coarse S	AND. G	Gravel of		2 -
	2.40 2.40	D3 PID	PID=1.2				flin SA	t.	o subround AVEL OF U N				
	2.90 2.90	B1 PID	PID=0.8		2.90				End of Pit at 2	2.900m			3 -
													4 -
Groun	dwater: G	roundwater	seepage at 1.5m,	moderate	inflow at 2	2.2m	Р	Diet		ey	112	and Vana	
Stabili	ity: St	able					D B	В	urbed Julk	IVN	PIE	and Vane Reading	
Rema	rks: Te	erminated	due to groundw	ater inflo)W		ES	Enviro	nmental vater strike	PP	Pocket	Penetrom	eter

3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP2

Sheet 1 of 1

Project No. Date Co-ords: Project Queenswood School Name: 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 1.90 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Logged Depth (m): Ball Hall (Project Management) Ltd Client:

, iieiii	1	, ,	ot Management)	Liu	1		3	.00`				JŠ	
water			Situ Testing	Level	Depth	Legend		S	Stratum Des	cription			
Š	Depth	Туре	Results	(m)	(m)								
	0.10 0.10	ES1 PID	PID=2.4				me suk	dium SAN pangular to	slightly graving slight	its. Gra ded fine	vel of	e to	
	0.30 0.30	ES2 PID	PID=0.5		0.30		\ MA	DE GRO			/ grava		
	0.50 0.50	ES3 PID	PID=0.3		0.50		CL suk	AY. Grave	wn, slightly I of subang fine to coal JND	gular to)	lly	
							Firi slig suk	m, orange jhtly grave pangular fi	mottled greatly CLAY. (In to mediate to mediate)	Gravel ium flin	of t.		
	1.00 1.00	D1 IVN	64				AN	D ORIGIN				GE	1
	1.20	IVN	40		1.30			Locally soft	at 1.2m				
	1.50	B1					CL	AY.	led pale gr AVEL OF U				
_	1.50	PID	PID=0.0				AN	D ORIGIN	ı				2
<u> </u>	2.50 2.50	B2 PID	PID=0.0		2.20		coa rou SA AN	arse ŠANI Inded, fine		of subar flint.	ngular to)	
					3.00				End of Pit at 3	3.000m			3
													4
_		<u> </u>			a	2.0			17	01/			_
			seepage at 1.8m, r	noderate	intlow at 2	2.2m	D	Dist	urbed K	ey IVN	Ha	and Vane	—
bil			lapse from 2.2m				В	В	ulk	PID	PIE	Reading	
na	ırks: T	erminated	due to groundw	ater inflo	w		ES		nmental /ater strike	PP		Penetron	



3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP2A Sheet 1 of 1

Project No. Co-ords: Date Project Queenswood School Name: 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 1.80 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Depth (m): Logged **JS** Ball Hall (Project Management) Ltd Client: 1.80

			•	. –				1.80 JS
water	S Dept		s & In S Type	Results	Level (m)	Depth (m)	Legend	Stratum Description
) -	Бері		туре	Veanita	,,	0.20		Dark brown slightly gravelly clayey fine to medium SAND with roots, decayed plant matter, occasional brick and plastic fragments. MADE GROUND
						0.80		Firm orange brown mottled grey slightly gravelly CLAY. Gravel of subangular fine to medium flint. SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN Orange mottled pale grey, slightly sandy CLAY with occasional sand pockets. SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN
						1.30		Orange mottled pale grey very sandy CLAY. SAND & GRAVEL OF UNCERTAIN AGE
						1.80		AND ORIGIN End of Pit at 1.800m
								Wa
roun abili		Groui Stabl		not encountered	a.			D Disturbed IVN Hand Vane
emai				est undertaken l	between	~1.3m -	1.8m	B Bulk PID PID Reading ES Environmental PP Pocket Penetrome Groundwater strike Standing water level

3 YORK HOUSE GREAT SHELFORD CAMBRIDGE CB22 5NE

Trial Pit No. TP3

Groundwater strike

Sheet 1 of 1 Project No. Date Co-ords: **Project** Queenswood School Name: 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 2.40 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 0.60 1:20 Logged Depth (m): Ball Hall (Project Management) Ltd Client:

Cilent		` -	i Management)	Liu	ı	, ,	3	.50 ′				JŠ
Ground		1 1	itu Testing	Level	Depth	Legend		ç	Stratum Des	scription		
Grc wa	Depth	Туре	Results	(m)	(m)					•		
	0.20 0.20	ES1 PID	PID=2.3		0.25 0.40		wit pac MA So	h frequent ckaging. ADE GROU ft grey bro	clayey fine t roots and UND wwn gravel o subroun	l rare pl	astic ⁄. Gravel	of
	0.50 0.50 0.60	ES2 PID IVN	PID=1.3 50				flin MA Fin CL	t. ADE GROUM m becomin AY with or	UND ng stiff, ora ccasional s	ange m	ottled gre	Эу
	0.90	IVN	74				SA	edium flint .ND & GR/ ID ORIGIN	ÄVEL OF	UNCEF	RTAIN AG	iE 1
	1.10 1.10 1.10	D1 IVN PID	92 PID=0.3									
					1.80				sandy from			
•	1.90 1.90	D2 PID	PID=0.0				ver of s flin SA	ry clayey, t subrounde t.	led grey, s fine to coa ed to round AVEL OF	rse SA ded, find	ND. Grave to coars	se 2
	2.60 2.60	B1 PID	PID=0.0		2.60		fine	e to coarse	n slightly SAND wrtings. Gra	ith freq	uent grey	
					2.90		to s SA AN Yel gra rou SA	subrounde .ND & GRA ID ORIGIN llowish gre avelly SAN inded, fine	ed, fine to AVEL OF N ey brown fi ID. Gravel e to coarse AVEL OF	medium UNCEF ine to m of suba e flint.	n flint RTAIN AG nedium, angular to	3 D
	3.50 3.50	B2 PID	PID=0.0		3.50		AIN	יווטואט עו	End of Pit at	3.500m		4
irour	ndwater: Grou	undwater	encountered at	2.0m						(ey		
Stabil	ity: Som	e sidewa	all collapse				D B		urbed ulk	PID		nd Vane Reading
Rema	rks:					-	ES	Enviro	nmental /ater strike	PP	Pocket F	Penetrometer



3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP4

Sheet 1 of 1

Project No. Co-ords: Date **Project** Queenswood School 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 1.50 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 0.60 Logged **JW** Depth (m): Ball Hall (Project Management) Ltd Client: 1.45

			-					1.45 JW
Ground water			s & In S	Situ Testing	Level	Depth	Legend	Stratum Description
Gro	Depti	h	Type	Results	(m)	(m)	Logona	Guatam Sessiption
	0.30)	ES1			0.35		Dark brown, slightly gravelly, silty fine to coarse SAND with roots. Gravel and occasional cobbles of flint, brick and wood fragments. MADE GROUND
	0.50 0.50		D1 IVN	40		0.00	×_ × ×_ × ×_ ×	Soft orange mottled grey, slightly sandy silty CLAY with roots. SAND & GRAVEL OF UNCERTAIN AGE
				40			×— —x ×— —x	AND ORIGINLocally soft at 0.60m
•	0.80)	ES2				×x ×x	
	1.00 1.00		D2 IVN	105			XX XX XX	Becoming stiff and slightly gravelly from 1.0m
						1.45	X	End of Pit at 1.450m
								2
								3
								4
Groun	ndwater:	Perch	ned grou	undwater at 0.5 ar	nd 0.9m			Key
Stabil	ity:	Stable	e					D Disturbed IVN Hand Vane B Bulk PID PID Reading
Rema	rks:	Exca	vated t	o expose founda	ation			ES Environmental PP Pocket Penetromete Groundwater strike Standing water level

3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP5

Sheet 1 of 1 Project No. Co-ords: Date **Project** Queenswood School 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 1.90 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Depth (m): Logged **JS** Ball Hall (Project Management) Ltd Client: 3.10

	epth	Туре	itu Testing Results	Level	Depth	Legend	Stratum Description	
		٠.		(m)	(m)	Legend	Guatam 50001ption	
0).10).10).40	ES1 PID	PID=0.1		0.20		Dark brown CLAY with humus and frequent roots, wood and decayed plant matter. MADE GROUND Soft grey brown gravelly CLAY. Gravel of fine to coarse subangular to subrounded	
0	0.40	PID	PID=0.3		0.60		flint. MADE GROUND Becoming darker grey from 0.4m Firm orange mottled grey, slightly gravelly CLAY. Gravel of fine to coarse subangular flint.	- - - - - -
1	.00	IVN	70				SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN	1 -
	.20 .20	D1 PID	PID=0.0		1.30		Firm orange mottled grey, slightly gravelly silty CLAY with orange sandy pockets. Gravel of subangular fine to medium flint. SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN	- - - - - - - - - - - - - - - - - - -
	2.00 2.00	D2 PID	PID=0.0		2.20	X - X - X - X - X - X - X - X - X - X -	Orange mottled grey, slightly gravelly, clayey fine to medium SAND. Gravel of	2 —
▼ 2	2.50	B1			2.60		fine to coarse subangular to subrounded flint. SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN Yellow brown, slightly clayey, gravelly, fine to coarse SAND, Gravel of subrounded to rounded fine to coarse	- - - - - - -
3	3.00	B2			3.10		flint. SAND & GRAVEL OF UNCERTAIN AGE AND ORIGIN End of Pit at 3.100m	3
							W	4 —
			encountered at 2				Key D Disturbed IVN Hand Vane	
Stability: Remarks:		-	idewalls from 2.5 due to collapse		alls		B Bulk PID PID Reading ES Environmental PP Pocket Penetrome Groundwater strike Standing water level	eter



3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP6

Sheet 1 of 1

Project No. Co-ords: Date **Project** Queenswood School Name: 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 2.30 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Logged **JW** Depth (m): Ball Hall (Project Management) Ltd Client: 1.10

			` •	, wanagement)		1		1.	.10				J	W
water			I	Situ Testing	Level	Depth	Legend		Ş	Stratum Des	cription			
×	Dep	th	Type	Results	(m)	(m)	Logona							
	0.30		ES1			0.30 0.40		clay ma cer MA	yey, silty f tter, roots amic tile f DE GROI ft grey bro	wn gravell	with or ncrete	ganic and ⁄. Grav		
	0.50 0.50		D1 IVN	62				flin MA Firr	t. \DE GROI m orange	e subangul JND brown mot y, slightly g	ttled pa	le grey	/,	
	1.00 1.00		D2 IVN	50		1.10		rare me SA AN	e roots. G dium flint ND & GRA D ORIGIN Becoming	ravel of su and rare c AVEL OF U	bround halk. JNCER	ed, fin	e to	1
										End of Pit at 1	1.100m			
														2
														3
														4
ound	dwater:	Grou	ndwate	r seepage at 1.00	m	1	1				ey			
abilit		Stabl		-				D B		urbed ulk	IVN		Hand Va ID Rea	
mar		Exca	vated t	to expose found	ation			ES	Enviro	nmental /ater strike	PP	Pocke	et Pene	tromete

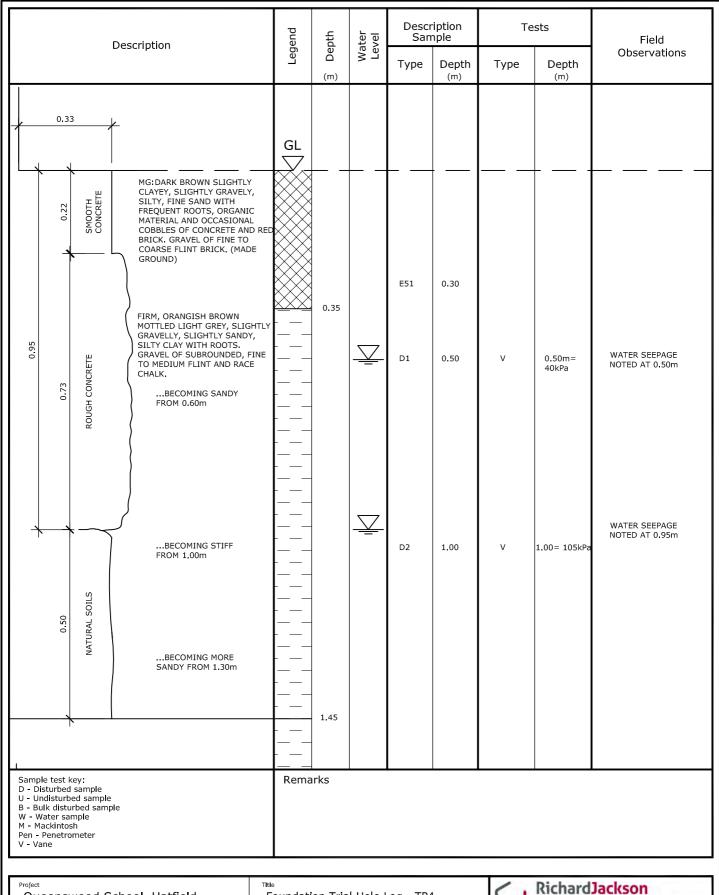
3 YORK HOUSE GREAT SHELFORD **CAMBRIDGE** CB22 5NE

Trial Pit No. TP7

Sheet 1 of 1

Project No. Co-ords: Date **Project** Queenswood School 47875 Orientation: Dimensions (m) 14/02/2017 Level (m, aOD): 2.00 Scale Location: Shepherds Way, Hatfield, Hertfordshire, AL9 6NS 1:20 Logged **JS** Depth (m): Client: Ball Hall (Project Management) Ltd 3.00

	I	` -	wanagement)				3	.00			JS
Ground water		les & In Si		Level	Depth	Legend		Stratum Des	cription		
P. S.	Depth	Туре	Results	(m)	(m)				-		
	0.20	ES1					WO	rk brown CLAY with od and decayed plar DE GROUND			
	0.40	ES2			0.30		gra suk MA	ft grey brown mottled velly CLAY. Gravel o pangular to subround DE GROUND	of fine to ded flint	coarse	-
					0.00		slig suk me SA	ft becoming firm, ora phtly gravelly CLAY. pangular to subround dium flint. ND & GRAVEL OF U D ORIGIN	Gravel ded fine	of to	
	1.20 1.20	D1 IVN	45								-
	2.00	D2			1.80		gra fine SA	m orange mottled gr velly, silty CLAY. Gra to coarse subangu ND & GRAVEL OF U D ORIGIN	avel of a lar flint.	subangula	2 -
					2.30		SA SA AN	ange and grey silty fi ND. ND & GRAVEL OF UD ORIGIN	JNCER		-
	2.90	В3			3.00	***************************************	Bro coa rou SA	Becoming gravelly from own slightly silty, graverse SAND. Gravel sinded, fine to coarse ND & GRAVEL OF UD ORIGIN	velly, fir subrour flint.	ded to	3 -
								End of Pit at 3	3.000m		-
											4 -
Grour	ndwater: Grou	undwater	encountered at	2.7m			<u> </u>		ey VVN	11	\/on=
Stabil	lity: Side	wall colla	pse from 2.70m				D B	Disturbed Bulk	PID	Hand PID Re	eading
Rema	rks: Terr	ninated d	lue to groundw	ater inflo)W		ES	Environmental Groundwater strike	PP	Pocket Per	netrometer



Queenswood School, Hatfield	Title Foundation T	rial Hole Log -	- TP4	RichardJackson Engineering Consultants 847 The Crescent, Colchester, Essex CO4 9VQ Suite 409, 1 Alie Street, London E1 80E York House, 3 Stathon Court, Great Shelford, Cambs C822 5NE 6 The Old Church, St. Matthews Road, Norwich, Norfolk NR1 15P Tel: 01603 230240			
This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.	Cllent Ball Hall (Pro	perty Manage	ment) LTD	The Wheelhouse, Bonds Mil, Stonehouse, Glouosstershire GLI0 3RF Tel: 01172 020070 Email Address: mail@rj.uk.com Borehole/Trial Hole Log No. 47875-G-TP4			
Scale 1:10 @ A4 Drawn MW Date March 2017	Logged By JW	Checked	Approved JW	Drawing Status ☑ INFORMATION ☐ TENDER	☐ APPROVAL☐ CONSTRUCTION	☐ COSTING☐ AS CONSTRUCTED	

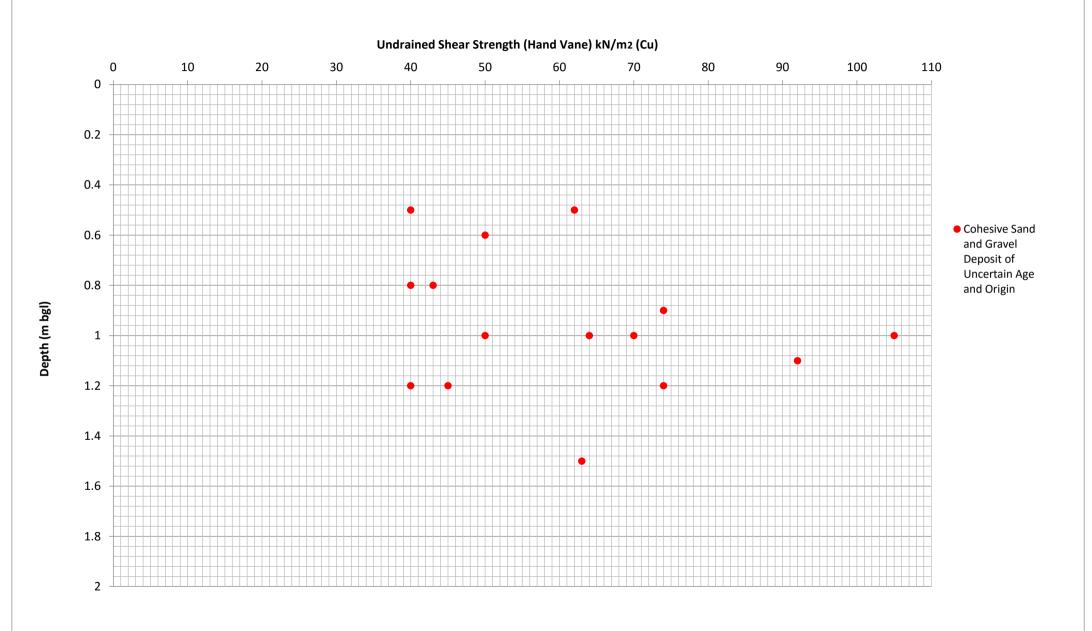
DO NOT SCALE © Richard Jackson Ltd

Description Description Description Description Tests Field Observations Field Observations Field Observations Field Observations O.31 O.31 O.31 O.31 DARK BROWN SLIGHTLY GRAVELY, SILICHTLY GRAVELY, SILICHTLY GRAVELY, SILICHTLY GRAVELY, SILICHTLY GRAVELY, SILICHTLY GRAVELY, SILICHTLY GRAVELY GRAVELY GRAVEL OF FINE TO COASE TO SUBSOUNCED FIINT: O.40 FIRM, GRAVELY, GAVEL OF GRAVELY, GRAVEL OF GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVELY GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVEL OF GRAVELY GRAVELY GRAVELY GRAVEL OF GRAVELY G
GL DARK BROWN SLIGHTLY GRAVELLY, SILTY, FINE SAMD WITH ORGANIC MATTER, ROOTS, WOOD MATERIAL AND FRAGMENTS OF CONCRETE AND CERANIC TILE (MADE GROUND) SOFT GREY BROWN GRAVELLY CLAY, GRAVEL OF FINE TO COARSE SUBANGULAR TO SUBROUNDED FINT. FIREM, ORANGESH BROWN MOTTLE LIGHT GREY, SLIGHTLY GRAVELLY, SILTY OLAY WITH CORE ROOTS, GRAVEL OF SUBROUNDED, FIRET OR BEDUM, FLINT AND RAFE CHALK. BECOMING SANDY FROM 0.80m D2 1.00 V 1.00= 50kPa WATER SEEPAGES WATER SEEPAGES
Sample test key: D - Disturbed sample NOTED AT 1.00M

Queenswood School, Hatfield	Foundation T	rial Hole Log -	- TP6	RichardJackson Engineering Consultants 847 The Crescent, Calchester, Essex CO4 9YQ Suite 409, 1 Aler Street, London E1 80E Tel: 020 7448 9910			
This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.	Gllent Ball Hall (Property Management) LTD			York House, 3 Station Court, Great Shelford, Cambs CB22 SNE Tel: 01223 314794 © 16 The Old Church, St. Matthews Road, Norwich, Nordick Ntl 157 Tel: 01603 202040 © Tel: 010172 020070 © Tenail Address: mail@rj.uk.com Website: http://www.rj.uk.com Borehole/Trial Hole Log No. 47875-G-TP6			
Scale 1:10 @ A4 Drawn MW Date March 2017	Logged By JW	Checked	Approved JW	Drawing Status ☑ INFORMATION ☐ TENDER	☐ APPROVAL ☐ CONSTRUCTION	☐ COSTING☐ AS CONSTRUCTED	

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Plot of Undrained Shear Strength vs Depth at Queenswood School, Hatfield - 47875





Appendix D

Results of Chemical Analyses

Title: PHASE TWO GROUND INVESTIGATION REPORT

Project: Queenswood School, Hatfield, Hertfordshire, AL9 6NS

Client: Ball Hall (Project Management) Limited

Project No.: 47875





Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Email: info@chemtest.co.uk

Final Report

Report No.: 17-03897-1

Initial Date of Issue: 21-Feb-2017

Client Richard Jackson Limited

Client Address: 847 The Crescent

Colchester Business Park

Colchester Essex CO4 9YQ

Contact(s): Jessica Sheridan

Project 47875 Queenswood School Hatfield

Quotation No.: Date Received: 17-Feb-2017

Order No.: Date Instructed: 17-Feb-2017

No. of Samples: 6

Turnaround (Wkdays): 3 Results Due: 21-Feb-2017

Date Approved: 21-Feb-2017

Approved By:

Details: Keith Jones, Technical Manager



Client: Richard Jackson Limited			mtest Jo		17-03897	17-03897	17-03897	17-03897	17-03897	17-03897
Quotation No.:	C	Chemte	est Sam	ple ID.:	413410	413411	413412	413413	413414	413415
Order No.:			nt Samp		TP1	TP2	TP3	TP4	TP6	TP7
		Cli	ent Sam	ple ID.:	ES1	ES1	ES1	ES1	ES1	ES1
				e Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Dep	oth (m):	0.2	0.1	0.2	0.3	0.3	0.2
			Date Sa	ampled:	14-Feb-2017	14-Feb-2017	14-Feb-2017	14-Feb-2017	14-Feb-2017	14-Feb-2017
			Asbest	os Lab:	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD						
ACM Type	U	2192		N/A	1	ı	1	-	-	ı
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected					
Moisture	N	2030	%	0.020	49	72	30	35	27	33
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones, Roots	Roots	Stones, Roots	Stones, Roots	Stones, Roots	Stones, Root
Soil Texture	N	2040	i –	N/A	Loam	Loam	Loam	Clay	Clay	Clav
oH	M	2010	l	N/A	6.5	4.5	5.5	6.0	4.8	4.0
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.026	0.031	0.027	< 0.010	< 0.010	0.027
Total Sulphur	M	2175	%	0.010	0.080	0.16	0.050	0.060	0.050	0.030
Cyanide (Total)	M	2300		0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Arsenic	М	2450	mg/kg	1.0	14	1.6	16	13	13	3.5
Cadmium	M	2450		0.10	0.52	0.72	0.86	1.6	0.61	0.29
Chromium	M	2450	mg/kg	1.0	18	5.6	23	25	17	7.0
Copper	M	2450	mg/kg	0.50	33	27	27	36	38	5.9
Mercury	M	2450	mg/kg	0.10	0.28	0.39	0.23	0.28	0.54	0.10
Nickel	M	2450		0.50	14	8.9	13	22	11	3.4
Lead	M	2450	mg/kg	0.50	140	120	150	150	160	67
Selenium	M	2450	mg/kg	0.20	0.21	0.63	0.69	0.76	0.39	< 0.20
Zinc	M	2450	mg/kg	0.50	100	75	110	1400	190	29
Organic Matter	M	2625	%	0.40	26	72	15	14	8.3	9.5
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C0-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C5-C7 Aromatic TPH >C7-C8	N	2680		1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10 Aromatic TPH >C10-C12	M	2680		1.0	< 1.0	< 1.0	< 1.0	< 1.0 < 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12 Aromatic TPH >C12-C16	M	2680	mg/kg	1.0		< 1.0 < 1.0				
Aromatic TPH >C12-C16 Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0 3.7	< 1.0 4.7	< 1.0 < 1.0	_	< 1.0 2.9	< 1.0 < 1.0
	M		mg/kg mg/kg	1.0	_		_	< 1.0	< 1.0	< 1.0 < 1.0
Aromatic TPH >C21-C35		2680			< 1.0	< 1.0	< 1.0	< 1.0		