BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole **BH3**
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **43.78** m OD

Scale 1:50

Sampling			Properties			Strata			
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
30.20	**D**					**At 30.20m, fissures become extremely closely spaced, subhorizontal, smooth, dull and clean with occasional black mottling.**	**30.20**		**13.58**
						End of Borehole			

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC/CO**

Figure **4 of 4**
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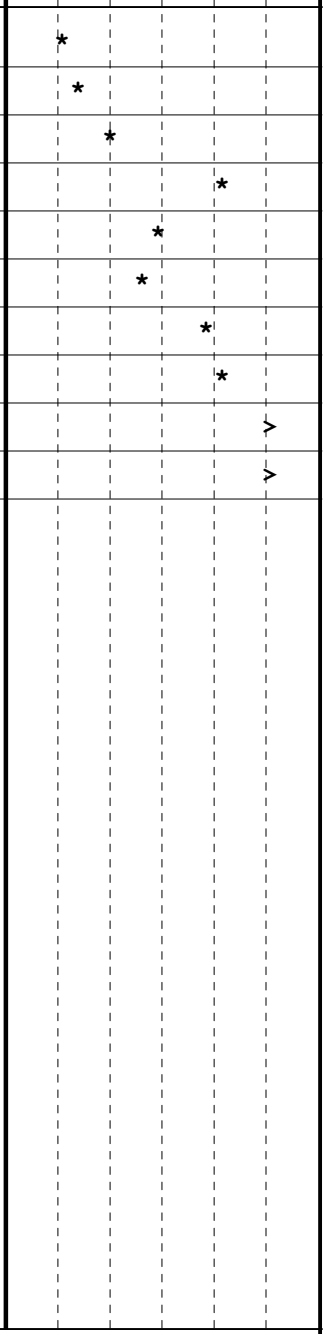
geotechnics

Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive 0-75 (mm)	Seating Drive 75-150 (mm)	Test Drive 0-75 (mm)	Test Drive 75-150 (mm)	Test Drive 150-225 (mm)	Test Drive 225-300 (mm)	SPT 'N' Value
BH3	1.20	42.58	S	-	1	-	2	1	3	4	10
BH3	4.20	39.58	S	-	1	3	3	3	4	5	15
BH3	7.20	36.58	S	-	3	3	4	5	6	6	21
BH3	10.20	33.58	S	-	3	10	10	9	10	12	41
BH3	13.20	30.58	S	-	4	5	6	7	7	9	29
BH3	16.20	27.58	S	-	4	5	5	7	7	8	27
BH3	19.20	24.58	S	-	4	5	8	8	10	12	38
BH3	22.20	21.58		-	5	8	10	9	10	14	43
BH3	25.20	18.58	S	-	6	10	12	14	11	13/70	50/295
BH3	28.20	15.58	S	-	5	10	14	14	15	7/55	50/280



Driller	Chris Rainsbury
Hammer No.	SDS04
Energy Ratio, Er (%)	81.00
Calibration Date	13/02/2012

Remarks
Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005

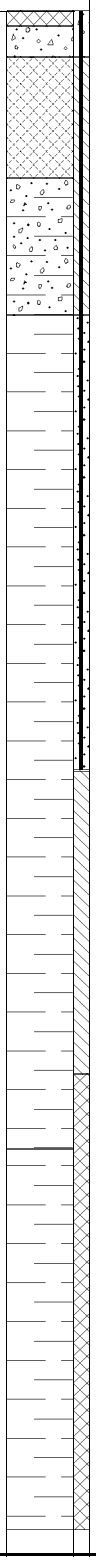
-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH4**
Project No **PC124991**
Client **ROLTON GROUP**
Ground Level **41.65** m OD
Scale 1:50

Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Level m OD
							G.L.	41.65
						Tarmac. **	0.10	41.55
						[MADE GROUND]		
0.30- 0.60	B						0.30	41.35
0.30	D					Concrete with reinforcing. **		
0.30	E					[MADE GROUND]		
1.00	D					Firm light brown, locally mottled grey and orange brown, slightly sandy slightly gravelly clay with occasional pockets (up to 3mm in size) of black carbonaceous deposits. Gravel is angular to subrounded fine to medium quartzite, flint and calcareous siltstone.		
1.00	E						1.10	40.55
1.10	D							
1.20- 1.65	D	1.20 (DRY)			S9	[PROBABLE MADE GROUND] At 1.00m, driller notes presence of claystone.		
2.00	D					Firm thinly laminated in parts, brown locally bluish grey and orange brown mottled slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to medium calcareous siltstone.	2.00	39.65
2.00	E							
2.70- 3.15	U40	1.20 (DRY)	67	34		Firm brown locally bluish grey and orange brown mottled CLAY, thinly laminated in parts. At 2.70m, medium strength		
3.15	D					Below 3.15m, fissured with rare medium to coarse sand sized gypsum crystals. Fissures are extremely closely spaced and randomly orientated.		
4.20- 4.65	D	1.50 (DRY)			S11			
5.70- 6.15	U70	1.50 (DRY)						
6.15	D					Below 6.15m, polished surface on some discontinuities.		
7.20- 7.65	D	1.50 (DRY)			S15			
							7.50	34.15
7.70- 8.00	B					Stiff thinly laminated fissured brownish grey micaceous CLAY. Fissures are extremely to very closely spaced randomly orientated with rare white silt dustings on some surfaces.		
8.70- 9.15	UT90	1.50 (DRY)						
9.15	D					Below 9.15m, with occasional dark grey silt dustings on some surfaces.		
9.60	D					At 9.60m, recovered as angular to subrounded medium to coarse gravel and cobble sized fragments of medium strong grey calcareous siltstone.		



Boring

Depth	Hole Dia	Technique	Crew
1.20		Inspection Pit	DC
20.00	0.15	Cable Percussion	DC

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
G.L.			21/08/12	08:00
20.00	1.50	DRY	21/08/12	18:00

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					None encountered during boring.

Remarks

Inspection pit hand excavated to 1.20m depth, 0.5 hours breaking out concrete.
** Drillers description.
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
A 50mm standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **NT/CO**

Figure **1 of 2**
20/09/2012

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH4**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **41.65** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
10.20-10.65	**D**	**1.50 (DRY)**			**S26**				
11.70-12.15	**U100**	**1.50 (DRY)**							
12.15	**D**								
13.20-13.65	**D**	**1.50 (DRY)**			**S25**				
14.70-15.15	**U110**	**1.50 (DRY)**							
15.15	**D**					**Below 15.15m, becoming stiff to very stiff and grey and brownish grey in colour.**			
15.50	**D**								
16.40-16.85	**D**	**1.50 (DRY)**			**S31**	**Between 16.40-16.85m, with rare fine gravel sized shell fragments and rare orange brown silt dustings on some discontinuities.**			
17.90-18.35	**UT110**	**1.50 (DRY)**							
18.35	**D**					**Below 18.35m, with occasional angular to subrounded fine to coarse gravel sized calcareous siltstone / mudstone.**			
19.50-19.95	**D**	**1.50 (DRY)**			**S38**				
						End of Borehole	**20.00**		**21.65**

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **NT/CO**

Figure **2 of 2**
20/09/2012

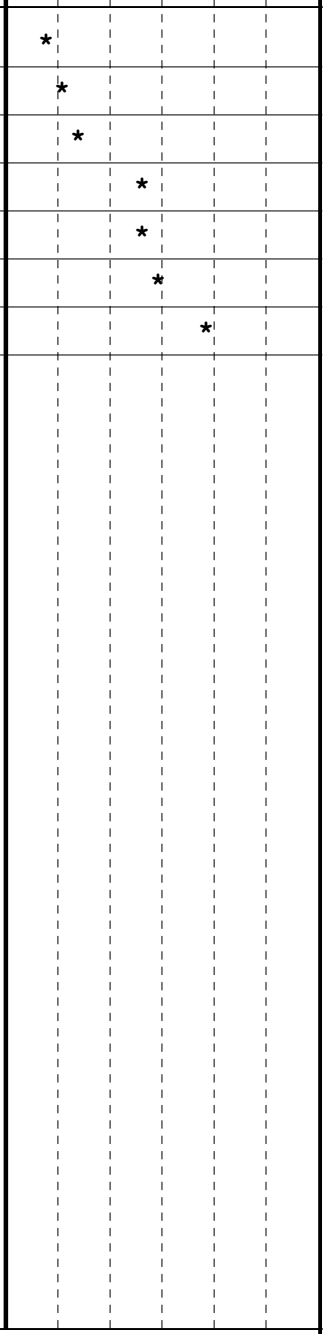
geotechnics

Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive 0-75 (mm)	Seating Drive 75-150 (mm)	Test Drive 0-75 (mm)	Test Drive 75-150 (mm)	Test Drive 150-225 (mm)	Test Drive 225-300 (mm)	SPT 'N' Value
BH4	1.20	40.45	S	-	1	1	2	2	2	3	9
BH4	4.20	37.45	S	-	1	2	2	3	3	3	11
BH4	7.20	34.45	S	-	2	3	3	4	4	4	15
BH4	10.20	31.45	S	-	3	4	6	6	7	7	26
BH4	13.20	28.45	S	-	3	4	6	6	6	7	25
BH4	16.40	25.25	S	-	3	5	7	7	7	10	31
BH4	19.50	22.15	S	-	3	10	8	9	10	11	38



Driller	David Cowling
Hammer No.	EQU436
Energy Ratio, Er (%)	74.00
Calibration Date	23/03/2012

Remarks
Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD – Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH5** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **44.75** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
							G.L.		44.75
						Tarmac. ** [MADE GROUND]	0.05		44.70
0.30- 0.90	B								
0.30	D					Concrete. ** [MADE GROUND]	0.30		44.45
0.30	E								
0.90- 1.20	B					Soft brown sandy gravelly clay with occasional roots. Gravel is angular to subangular fine to coarse brick, flint, clinker and concrete. [MADE GROUND]	0.90		43.85
0.90	D								
0.90	E								
1.20- 1.65	D	1.20 (DRY)			S6				
						Firm greyish brown mottled orangish brown slightly sandy CLAY with occasional rootlets. With rare angular to subangular fine to medium flint gravel. Below 1.80m, becoming brown mottled bluish grey and slightly micaceous.			
1.80	D								
1.90- 2.40	B								
1.90	E								
1.90- 2.35	UF40	1.50 (DRY)							
2.40- 2.85	U43	1.50 (DRY)							
2.85	D								
						At 3.20m, recovered with angular to subangular coarse gravel of claystone.			
3.20	D								
3.30- 3.90	B					Below 3.30m, becoming stiff with occasional firm to medium gravel sized sandy pockets.			
3.30	D								
						Below 3.90m, becoming thinly laminated in places			
3.90- 4.35	D	1.50 (DRY)			S12	and fissured. Fissures are randomly orientated extremely closely to very closely spaced, dull and clean with occasional black staining and an occasional silt dusting.			
5.40- 5.85	U78	1.50 (DRY)							
						Below 5.80m, fissures becoming extremely to very			
5.85	D					closely spaced, subhorizontal to subvertical.			
6.90- 7.35	D	1.50 (DRY)			S18				
8.20	D					Below 8.20m, becoming very stiff and dark greyish brown in colour. Fissures slightly polished with dark orangish brown staining in places.			
8.40- 8.70	UT90	1.50 (DRY)	76	30		At 8.40m, high strength			
8.70	D								
8.90- 9.30	B								
9.90-10.35	D	1.50 (DRY)			S23				

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	DC/LC	G.L.			13/08/12	08:00						None encountered during boring.
30.00	0.15	Cable Percussion	DC/LC	25.50	1.50	DRY	13/08/12	18:00						
				25.50	1.50	DRY	14/08/12	08:00						
				30.00	1.50	DRY	14/08/12	18:00						

Remarks

Inspection pit hand excavated to 1.20m depth.
** Drillers description.
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
A 50mm standpipe was installed to 5.00m with a slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: gravel filter up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**

Figure **1 of 4**

20/09/2012

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BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH5**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **44.75** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
11.40-11.85	U100	1.50 (DRY)	156	24		At 11.40m, very high strength			
11.85	D					At 11.85m, becoming slightly sandy and with occasional shell fragments. Laminae absent.			
12.90-13.35	D	1.50 (DRY)			S26	Below 12.95m, with silt partings (up to 1mm in thickness) and occasional silt pockets (up to 1cm in size).			
14.40-14.85	U110	1.50 (DRY)							
14.85	D					Below 14.85m, with occasional black staining on fissure surfaces.			
16.00-16.45	D	1.50 (DRY)			S35				
17.50-17.80	UT120	1.50 (DRY)	151	27		At 17.50m, thinly laminated. At 17.50m, very high strength			
17.80	D								
19.00-19.45	D	1.50 (DRY)			S36				
						Below 20.00m, with occasional shell fragments.			

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **Driller notes claystone boulder pushed from 26.6 to 28.0m, pushed aside at 28.0m.**

Logged by **SC**

Figure **2 of 4**
20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH5**
Project No **PC124991**
Client **ROLTON GROUP**
Ground Level **44.75** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
20.50-20.80	U130	1.50 (DRY)							
20.80	D								
22.00-22.45	D	1.50 (DRY)			S34				
23.50-23.95	U120	1.50 (DRY)	87	28		At 23.50m, with occasional fine gravel sized shell fragments. At 23.50m, high strength Between 23.95-26.62m, fissures occasionally polished.			
23.95	D								
25.00-25.45	D	1.50 (DRY)			S48				
26.40-26.60	UTF 130	1.50 (DRY)				At 26.60m, driller notes presence of claystone boulder.			
26.50-26.60	D								
26.60-27.50	B								
26.80-26.80		1.50 (DRY)			C50*/1				
28.00-28.50	B								
28.00	D								
28.00-28.45	UF100	1.50 (DRY)							
28.50-28.95	D	1.50 (DRY)			S51				
29.50-29.95	U130	1.50 (DRY)	17	28		At 29.50m, extremely closely fissured, randomly orientated and open (possibly affected by disturbance during sampling) At 29.95m, Fissures become subhorizontal and extremely closely spaced. At 29.50m, very low strength			
29.95	D						30.00		14.75

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **At 23.50 and 29.50, measured undrained strength possibly affected by fissuring in test specimen and disturbance during sampling. At 26.40m, UT sample shoe damaged.**

Logged by **SC**

Figure **3 of 4**
20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

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BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole **BH5**
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **44.75** m OD

Scale 1:50

Sampling			Properties			Strata			
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
						End of Borehole	**30.00**		**14.75**

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**

Figure **4 of 4**
20/09/2012

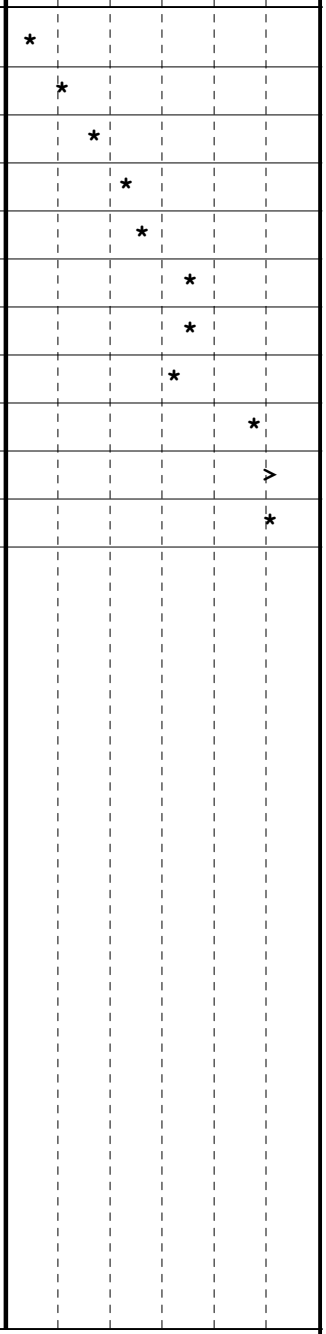
geotechnics

Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive 0-75 (mm)	Seating Drive 75-150 (mm)	Test Drive 0-75 (mm)	Test Drive 75-150 (mm)	Test Drive 150-225 (mm)	Test Drive 225-300 (mm)	SPT 'N' Value
BH5	1.20	43.55	S	-	1	-	1	1	2	2	6
BH5	3.90	40.85	S	-	2	3	3	3	3	3	12
BH5	6.90	37.85	S	-	2	3	4	4	5	5	18
BH5	9.90	34.85	S	-	4	4	4	6	6	7	23
BH5	12.90	31.85	S	-	3	4	6	6	7	7	26
BH5	16.00	28.75	S	-	6	8	8	9	9	9	35
BH5	19.00	25.75	S	-	6	7	8	9	9	10	36
BH5	22.00	22.75	S	-	6	8	8	8	9	9	34
BH5	25.00	19.75	S	-	8	8	10	11	13	14	48
BH5	26.80	17.95	C	-	50/1						50*/1
BH5	28.50	16.25	S	-	6	7	11	11	13	16	51



Driller	David Cowling
Hammer No.	EQU436
Energy Ratio, Er (%)	74.00
Calibration Date	23/03/2012

Remarks
Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH6** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **43.13** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
						Concrete slab. ** [MADE GROUND]	**G.L.** **0.17**		**43.13** **42.96**
0.30 **0.50**	**E** **D**					**Brick fill. ** [MADE GROUND]**	**0.50**		**42.63**
1.00	**E**					**Soft brown mottled bluish grey and black slightly sandy slightly gravelly clay. Gravel is angular to subrounded fine to medium quartz, flint, brick and clinker. [MADE GROUND]**	**1.20**		**41.93**
1.20- 1.65	**D**	**NIL (DRY)**			**S9**				
						Stiff brown mottled bluish grey CLAY.			
2.00	**D**								
2.70- 3.15	**U40**	**NIL (DRY)**	**82**	**32**		**At 2.70m, high strength**			
3.20	**D**						**3.20**		**39.93**
						Stiff fissured brown mottled bluish grey and orange CLAY, thinly laminated in parts. Fissures are extremely to very closely spaced, randomly orientated, dull and clean with occasional orangish brown staining.			
4.20- 4.65	**D**	**2.50 (DRY)**			**S18**				
5.70- 6.15	**U45**	**2.50 (DRY)**							
6.20	**D**					**At 6.20m, with a little sand and fine gravel sized gypsum crystals.**			
7.20- 7.65	**D**	**2.50 (DRY)**			**S24**	**Below 7.20m, becoming dark greyish brown with occasional fine to coarse gravel sized pockets of grey silt.**			
8.70- 9.15	**U50**	**2.50 (DRY)**							
9.20	**D**					**Below 9.20m, becoming dark brownish grey in colour.**			

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		**Inspection Pit**	**CR/PJ**	**G.L.**			**20/08/12**	**08:00**						**None encountered during boring.**
19.65	**0.15**	**Cable Percussion**	**CR/PJ**	**19.65**	**2.50**	**DRY**	**20/08/12**	**18:00**						

Remarks

Inspection pit hand excavated to 1.20m depth.
**** Drillers description.**
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
Backfill details from base of hole: arisings up to ground level.

Logged by **CO**

Figure **1 of 2**
20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH6**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **43.13** m OD

Scale 1:50

Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
10.20-10.65	**D**	**2.50 (DRY)**			**S23**	**At 10.20m, with rare fine gravel sized shell fragments.**			
11.70-12.15	**U55**	**2.50 (DRY)**							
12.20	**D**					**Below 12.20m, fissures becoming closely spaced with a silt dusting.**			
13.20-13.65	**D**	**2.50 (DRY)**			**S32**				
14.70-15.15	**U60**	**2.50 (DRY)**							
15.20	**D**					**Below 15.20m, becoming very stiff. Fissures becoming occasionally polished with black mottling, silt dusting absent.**			
16.20-16.65	**D**	**2.50 (DRY)**			**S31**				
17.70-18.15	**U75**	**2.50 (DRY)**							
18.20	**D**								
19.20-19.65	**D**	**2.50 (DRY)**			**S37**				
						End of Borehole	**19.65**		**23.48**

Boring

Depth	Hole Dia	Technique	Crew

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **CO**

Figure **2 of 2**
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geotechnics

Fieldwork Results - *SPT Results Summary*

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive 0-75 (mm)	Seating Drive 75-150 (mm)	Test Drive 0-75 (mm)	Test Drive 75-150 (mm)	Test Drive 150-225 (mm)	Test Drive 225-300 (mm)	SPT 'N' Value	Uncorrected SPT 'N'
BH6	1.20	41.93	S	-	1	1	2	2	2	3	9	*
BH6	4.20	38.93	S	-	2	3	4	4	5	5	18	*
BH6	7.20	35.93	S	-	2	4	5	6	6	7	24	*
BH6	10.20	32.93	S	-	3	4	5	6	5	7	23	*
BH6	13.20	29.93	S	-	3	5	6	8	8	10	32	*
BH6	16.20	26.93	S	-	2	4	6	7	8	10	31	*
BH6	19.20	23.93	S	-	4	6	8	8	9	12	37	*

Uncorrected SPT 'N' — 10 20 30 40 50

Driller	Chris Rainsbury
Hammer No.	SDS04
Energy Ratio, Er (%)	81.00
Calibration Date	13/02/2012

Remarks
Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH7** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **42.10** m OD

Scale 1:50

Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Level m OD
							G.L.	42.10
						Concrete with reinforcing. ** [MADE GROUND]	0.20	41.90
0.30	D							
0.30	E					Brown mottled red, orange and bluish grey very gravelly sand, very clayey in places. Gravel is subangular to subrounded fine to medium brick, clinker, concrete and flint. [MADE GROUND]	0.80	41.30
0.50- 1.00	B						1.10	41.00
0.50	W							
1.00	D							
1.00	E							
1.10	D							
1.30- 1.75	D	1.30 (1.00)			S7	Dark brown mottled black and reddish brown very sandy gravel with a high brick and concrete cobble content and rare fine to medium gravel sized pockets of clay. Gravel is angular to subangular fine to coarse brick, slag concrete and clinker. [MADE GROUND]		
1.80- 2.20	B							
2.00	D							
2.00	E					Firm fissured brown mottled bluish grey CLAY. Fissures are extremely to very closely spaced, randomly orientated, dull and smooth occasionally stained bluish grey.		
2.80- 3.25	U47	1.50 (DRY)	98	32		At 2.80m, high strength		
3.25	D					Between 3.25-4.75m, thinly laminated and micaceous.		
4.30- 4.75	D	1.50 (DRY)			S18	Below 4.30m, fissures stained orangish brown.		
5.80- 6.25	U85	1.50 (DRY)						
6.25	D					At 6.25m, becoming stiff and laminated with occasional fine gravel sized shell fragments. Occasionally with silt partings up to 1mm thick.		
7.30- 7.75	D	1.50 (DRY)			S22			
7.80- 8.30	B							
8.80- 9.25	UT90	1.50 (DRY)	110	29		At 8.80m, becoming very stiff and dark greyish brown. Fissures very closely spaced, slightly polished occasionally stained dark brown. At 8.80m, high strength		
9.25	D					Below 9.25m, laminae absent.		

Boring

Depth	Hole Dia	Technique	Crew
1.20		Inspection Pit	DC
20.00	0.15	Cable Percussion	DC

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
G.L.			14/08/12	08:00
10.80	1.50	DRY	14/08/12	18:00
10.80	1.50	DRY	15/08/12	08:00
20.00	1.50	DRY	15/08/12	18:00

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
0.50	NIL			1.50	

Remarks

Inspection pit hand excavated to 1.20m depth, 0.5hours breaking out concrete.
** Drillers description.
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
A 50mm standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, gravel filter up to 2.00m, bentonite seal up to 0.30m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**

Figure **1 of 2**

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BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH7**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **42.10** m OD

Sampling | Properties | Strata — Scale 1:50

Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
10.30-10.75	D	1.50 (DRY)			S28				
11.80-12.25	U100	1.50 (DRY)	136	28		At 11.80m, high strength			
12.25	D					Below 12.25m, Fissure spacing increasing, silt and staining absent			
13.30-13.75	D	1.50 (DRY)			S31				
14.80-15.25	U120	1.50 (DRY)							
15.25	D								
16.40-16.85	D	1.50 (DRY)			S26	At 16.40m, with occasional light grey rootlet tracks.			
17.70	D					At 17.70m, claystone boulder, recovered as angular to subangular medium to coarse gravel sized fragments.			
18.00-18.45	UT110	1.50 (DRY)	114	28		At 18.00m, fissure approximately 45 degrees, very closely to closely spaced and sub-vertical, slightly polished.			
18.45	D					At 18.45m, fissures extremely closely spaced, randomly orientated, smooth, occasionally stepped and clean. At 18.00m, high strength			
19.50-19.95	D	1.50 (DRY)			S28				
						End of Borehole	20.00		22.10

Boring | Progress | Groundwater

Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC**

Figure **2 of 2**
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geotechnics

Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive 0-75 (mm)	Seating Drive 75-150 (mm)	Test Drive 0-75 (mm)	Test Drive 75-150 (mm)	Test Drive 150-225 (mm)	Test Drive 225-300 (mm)	SPT 'N' Value	Uncorrected SPT 'N'
BH7	1.30	40.80	S	-	1	1	1	2	2	2	7	*
BH7	4.30	37.80	S	-	1	2	3	4	5	6	18	*
BH7	7.30	34.80	S	-	2	4	5	5	6	6	22	*
BH7	10.30	31.80	S	-	4	6	6	7	7	8	28	*
BH7	13.30	28.80	S	-	5	6	8	7	7	9	31	*
BH7	16.40	25.70	S	-	3	6	5	7	7	7	26	*
BH7	19.50	22.60	S	-	4	5	6	7	7	8	28	*

Uncorrected SPT 'N' — 10 20 30 40 50

Driller	David Cowling
Hammer No.	EQU436
Energy Ratio, Er (%)	74.00
Calibration Date	23/03/2012

Remarks
Equipment checked and calibration carried out in accordance with BS EN ISO 22476-3: 2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH8** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **42.20** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
						Concrete with reinforcing. ** [MADE GROUND]	G.L.		42.20
0.30- 0.50	B						0.20		42.00
0.30	D					**Firm brown mottled red, orange and black very gravelly sand, occasionally very clayey. Gravel is subangular to subrounded fine to medium brick, clinker and concrete. [MADE GROUND]**	0.50		41.70
0.30	E								
0.50- 0.80	B								
0.50	D								
1.00	D								
1.00	E								
1.20- 1.70	B					**Soft dark brown mottled red, orange, yellow and black sandy gravelly clay, with occasional timber fragments (upto 15cm in size) and a medium cobble content of subangular brick and concrete. Gravel is angular to subangular fine to coarse brick, concrete and clinker. [MADE GROUND]**	1.20		41.00
1.20- 1.65	D	1.20 (DRY)			S10				
1.70	D						1.70		40.50
2.00	D								
2.00	E								
2.20- 2.65	U50	1.50 (DRY)	55	33		**Soft dark brownish grey mottled black slightly sandy slightly gravelly slightly organic clay, fissured in parts. Fissures are randomly orientated extremely closely spaced. Gravel is angular to subrounded fine to medium brick, quartzite and flint. [MADE GROUND]**			
2.65	D								
						Stiff fissured brown mottled bluish grey slightly micaceous CLAY, thinly laminated in parts and with occasional rootlets. Fissures are randomly orientated, extremely to very closely spaced, smooth, dull with a slight silt dusting.			
3.80- 4.25	D	1.50 (DRY)			S18	**At 2.20m, medium strength**			
5.30- 5.75	U65	1.50 (DRY)	87	30		**At 5.30m, high strength**			
5.75	D					**Below 5.75m, becoming very stiff and dark greyish brown, with occasional fine to medium gravel sized shell fragments and orange staining on fissure surfaces.**			
6.80- 7.25	D	1.50 (DRY)			S21				
7.40	D								
7.60- 8.05	UT100	1.50 (DRY)							
8.05	D					**Below 8.05m, orange staining absent.**			
9.10- 9.55	D	1.50 (DRY)			S22	**Between 9.10-10.95m, with rare silt pockets (upto 10mm in size).**			
10.00-10.40	B								

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	DC/LC	G.L.	NIL	DRY	15/08/12	08:00						None encountered during boring.
20.00	0.15	Cable Percussion	DC/LC	10.00	1.50	DRY	15/08/12	18:00						
				10.00	1.50	DRY	16/08/12	08:00						
				20.00	1.50	DRY	16/08/12	18:00						

Remarks AGS **Inspection pit hand excavated to 1.20m depth, 1 hour breaking out concrete.**
**** Drillers description.**
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
Backfill details from base of hole: arisings up to 2.50m, bentonite seal up to 0.50m, concrete up to ground level.

Logged by **CO**

Figure **1 of 2**
20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH8**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **42.20** m OD

Sampling | Properties | Strata — Scale 1:50

Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
10.50-10.95	U90	1.50 (DRY)							
10.98	D					Below 10.95m, fissures mottled black.			
12.00-12.45	D	1.50 (DRY)			S24				
13.50-13.95	U100	1.50 (DRY)							
13.95	D								
15.00-15.45	D	1.50 (DRY)			S27				
15.80	D					At 15.80m, with a subrounded claystone cobble			
16.50-16.80	UT130	1.50 (DRY)							
18.00-18.45	D	1.50 (DRY)			S30	Below 18.00m, fissure spacing increasing and silt absent.			
18.80	D								
19.50-19.80	U130	1.50 (DRY)							
19.80	D					At 19.80m, fissures predominantly subhorizontal.			
20.00	D						20.00		22.20
						End of Borehole			

Boring | Progress | Groundwater

Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **CO**

Figure **2 of 2**
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Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N' 10 20 30 40 50
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		
BH8	1.20	41.00	S	-	1	1	2	2	4	2	10	*
BH8	3.80	38.40	S	-	2	2	3	4	5	6	18	*
BH8	6.80	35.40	S	-	2	3	5	5	5	6	21	*
BH8	9.10	33.10	S	-	3	4	4	5	5	8	22	*
BH8	12.00	30.20	S	-	4	4	5	6	6	7	24	*
BH8	15.00	27.20	S	-	3	6	6	6	7	8	27	*
BH8	18.00	24.20	S	-	5	6	7	7	8	8	30	*

Remarks
In accordance with BS EN ISO22476-3:2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON** Engineer **ROLTON GROUP** Borehole **BH9** Project No **PC124991**

Client **ROLTON GROUP** Ground Level **42.09** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
						Reinforced concrete slab. ** [MADE GROUND]	**G.L.**		**42.09**
0.30	**D**						**0.20**		**41.89**
0.30	**E**					**Brown slightly clayey gravelly sand. Gravel is angular to subangular fine to coarse brick, concrete, quartzite and flint. [MADE GROUND]**			
0.70	**D**								
1.00	**E**								
1.20- 1.65	**D**						**1.20**		**40.89**
1.20- 1.65		**NIL (DRY)**			**S9**	**Firm orangish brown slightly sandy CLAY.**			
2.00	**E**								
2.70- 3.15	**U40**	**NIL (DRY)**	**65**	**35**		**At 2.70m, medium strength**			
3.20	**D**					**Below 3.20m, thinly laminated in places and fissured. Fissures are subhorizontal extremely closely to very closely spaced dull with a silt dusting and occasional orange staining.**			
							4.00		**38.09**
4.20- 4.65	**D**	**2.50 (DRY)**			**S14**	**Stiff fissured dark greyish brown mottled orangish brown slightly micaceous CLAY, slightly sandy in parts. Fissures are extremely closely to very closely spaced and randomly orientated with occasional silt dusting and occasional orange staining.**			
5.70- 6.15	**U55**	**2.50 (DRY)**							
6.20	**D**					**Below 6.20m, orange staining absent.**			
7.20- 7.65	**D**	**2.50 (DRY)**			**S22**	**Below 7.20m, becoming stiff, mottling absent with silt partings on fissure surfaces (upto 1mm in thickness)**			
8.70- 9.15	**U55**	**2.50 (DRY)**	**80**	**29**		**At 8.70m, high strength**			
9.20	**D**					**At 9.20m, with occasional silt layers (upto 5mm in thickness)**			

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		**Inspection Pit**	**CR/PJ**	**G.L.**			**15/08/12**	**08:00**						**None encountered during boring.**
30.15	**0.15**	**Cable Percussion**	**CR/PJ**	**18.20**	**2.50**	**DRY**	**15/08/12**	**18:00**						
				18.20	**2.50**	**DRY**	**16/08/12**	**08:00**						
				30.15	**2.50**	**DRY**	**16/08/12**	**18:00**						

Remarks

Inspection pit hand excavated to 1.20m depth.
**** Drillers description.**
E sample = 1 x vial, 1 x plastic jar and 1 amber jar
A standpipe was installed to 5.00m with a geowrapped slotted section from 2.00m to 5.00m with flush lockable protective cover. Backfill details from base of hole: arisings up to 7.00m, bentonite seal up to 5.00m, fine gravel filter up to 2.00m, bentonite seal up to 0.50m, concrete up to ground level.

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC / CO**

Figure **1 of 4**

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BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**
Engineer **ROLTON GROUP**
Borehole **BH9**
Project No **PC124991**

Client **ROLTON GROUP**
Ground Level **42.09** m OD

Sampling			Properties			Strata			Scale 1:50
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
10.20-10.65	D	2.50 (DRY)			S29	Below 10.00m, becoming very stiff greyish brown with occasional fine gravel sized shell fragments, silt layers absent.			
11.70-12.15	U60	2.50 (DRY)							
12.20	D					Below 12.20m, fissures occasionally polished.			
13.20-13.65	D	2.50 (DRY)			S46				
						At 13.60m, recovered with angular medium to coarse gravel of claystone			
14.70-15.15	U75	2.50 (DRY)	113	29		At 14.70m, high strength			
15.20	D					Below 15.20m, fissure spacing increasing, silt dusting absent.			
16.20-16.65	D	2.50 (DRY)			S34				
17.70-18.15	U75	2.50 (DRY)							
18.20	D								
19.20-19.65	D	2.50 (DRY)			S33				

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **At 14.70m, measured undrained strength possibly affected by fissuring in test specimen.**

Logged by **SC / CO**

Figure **2 of 4**
20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole **BH9**
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.09** m OD

Scale 1:50

Sampling			Properties			Strata			
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
20.70-21.15	**U75**	**2.50 (DRY)**	**111**	**26**		**At 20.70m, high strength**			
21.20	**D**					**Below 21.20m, with occasional black staining on fissure surfaces.**			
22.20-22.65	**D**	**2.50 (DRY)**			**S41**				
23.70-24.15	**U80**	**2.50 (DRY)**							
24.20	**D**								
25.20-25.65	**D**	**2.50 (DRY)**			**S36**				
26.50	**D**					**At 26.50m, medium strong grey claystone cobble or boulder, recovered as angular medium to coarse gravel sized fragments**			
26.70-27.15	**U80**	**2.50 (DRY)**	**107**	**26**		**At 26.70m, with occasional coarse gravel sized fragments of light brown claystone. Fissures extremely to very closely spaced, randomly orientated and open (possibly affected by disturbance during sampling).**			
27.20	**D**					**Below 27.20m, with rare fine to medium gravel sized silt pockets**			
						At 26.70m, high strength			
28.20-28.65	**D**	**2.50 (DRY)**			**S45**				
29.70-30.15	**U100**	**2.50 (DRY)**							

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks **At 20.70m, measured undrained strength possibly affected by fissuring in test specimen. At 26.70m, measured undrained strength possibly affected by fissuring in test specimen and disturbance during sampling.**

Logged by **SC / CO**

Figure **3 of 4**

20/09/2012

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

geotechnics

BOREHOLE RECORD - Cable Percussion

Project **BACTON LOW RISE, GOSPEL OAK, NORTH LONDON**

Engineer **ROLTON GROUP**

Borehole **BH9**
Project No **PC124991**

Client **ROLTON GROUP**

Ground Level **42.09** m OD

Scale 1:50

Sampling			Properties			Strata			
Depth	Sample Type	Depth Cased & (to Water)	Strength kPa	w %	SPT N	Description	Depth	Legend	Level m OD
						End of Borehole	**30.15**		**11.94**

Boring				Progress					Groundwater					
Depth	Hole Dia	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbreviations are explained on the accompanying key sheet.

All dimensions are in metres.

Logged in accordance with BS5930:1999 + A2:2010

Logged by **SC / CO**

Figure **4 of 4**
20/09/2012

geotechnics

Fieldwork Results - SPT Results Summary

Project BACTON LOW RISE, GOSPEL OAK, NORTH LONDON **Project No** PC124991

Client ROLTON GROUP

Hole	Depth m bgl	Level m OD	Type	SWP (mm)	Seating Drive		Test Drive				SPT 'N' Value	Uncorrected SPT 'N'
					0-75 (mm)	75-150 (mm)	0-75 (mm)	75-150 (mm)	150-225 (mm)	225-300 (mm)		10 20 30 40 50
BH9	1.20	40.89	S	-	1	2	2	2	2	3	9	*
BH9	4.20	37.89	S	-	2	2	4	3	4	3	14	*
BH9	7.20	34.89	S	-	1	2	5	5	5	7	22	*
BH9	10.20	31.89	S	-	2	2	6	6	8	9	29	*
BH9	13.20	28.89	S	-	3	4	5	6	25	10	46	*
BH9	16.20	25.89	S	-	2	5	7	9	8	10	34	*
BH9	19.20	22.89	S	-	3	5	8	7	8	10	33	*
BH9	22.20	19.89	S	-	3	7	10	10	10	11	41	*
BH9	25.20	16.89	S	-	4	7	9	9	9	9	36	*
BH9	28.20	13.89	S	-	4	6	8	10	14	13	45	*

Remarks
In accordance with BS EN ISO22476-3:2005

-/- Blows/penetration (mm) after seating
-*/- Total blows/penetration (mm)
SWP Penetration under own weight (mm)

S - Standard Penetration Test (SPT)
C - SPT with cone
L - Split Spoon with liner used

APPENDIX 5

Exploratory Hole Location Plan