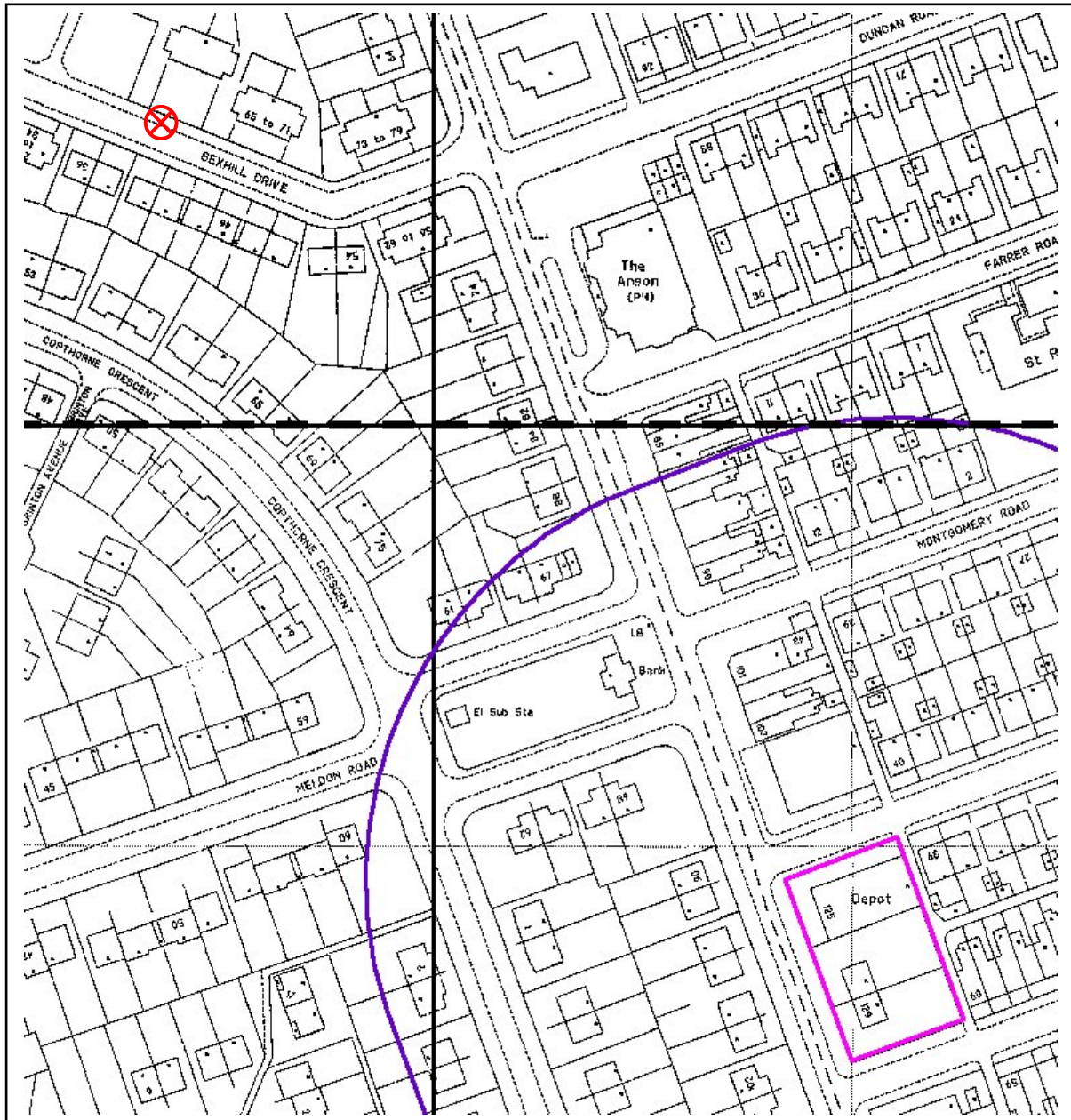


APPENDIX D

BGS borehole record






 BGS Borehole
 SJ89NE488

Client CCS Consulting Ltd c/o Makki Masjid	Project Makki Masjid, Beresford Road, Longsight, Manchester	Job No CGN/2638
	Title BGS borehole location plan	Appendix D

~~REF ID: A111~~ SJ89NE 486-507.

22.

NGDC ACCESSION NUMBER 35776.....
--

REPORT NO. 7013

BEXHILL DRIVE

for
MOSSCARE HOUSING ASSOCIATION LTD
61 Barnhill Street
off Great Western Street
Moss Side
Manchester
M14 4LL

requested by
EDWARD ROSCOE ASSOCIATES
Prospect House
Mellor Road
Cheadle Hulme
Cheshire
SK8 5AU

compiled by
A. W. WALKER BSc
Chief Soils Engineer

STRATA SURVEYS LIMITED
Strata House
Holmes Chapel Road
Middlewich
Cheshire
CW10 0JB

Tel: 0606-834637
Fax: 0606-836657

23rd June 1993

STRATA SURVEYS LTD., Telephone: 0606 834637 Fax: 0606 836657						Borehole Number : 3 Sheet 1 of 1.						
Job Number : 7013 Location : Bexhill Drive Client : Edward Roscoe Associates						Dia. & Drilling Methods light cable percussion 150mm diameter						
Description of Strata	Red. Level	Legend	Thick-ness	Depth m	Sample Depths	Sample Types	N Value	Cu	#	Water Level	Piezo-meter	Daily Prog.
MADE GROUND (Clayey ash and brick fill)				0.00								
				0.50 - 0.95	S-1	N 7						
			(1.80)	1.00	D-1							
				1.50 - 1.95	U-1							
				1.80						7 20 mins		
Firm and soft grey brown silty CLAY with a little fine and medium gravel				2.00	W-1					slow		
			(1.50)	2.50 - 2.95	U-2							
				3.00	D-2			59	0			
				3.30								
Soft grey brown sandy silty CLAY with a little fine and medium gravel			(0.40)	3.50 - 3.95	U-3							
				3.70								
Very stiff becoming stiff brown slightly sandy silty CLAY with a little fine and medium gravel				4.00	D-3			36	21			
				4.50 - 4.95	U-4							
				5.00	D-4							
				6.00 - 6.45	U-5							
				6.50	D-5			80	22			
			(6.30)	7.50 - 7.95	U-6							
				8.00	D-6							
				9.00 - 9.45	U-7							
				9.50	D-7							
				10.00								
Borehole Completed												21/5
General Remarks : Water strike at 2.00m rose to 1.70m in 20 minutes						Dates : 21 May 1993 Driller : PB Engineer: MSN Coordinates :						

APPENDIX E

Borehole logs and dynamic probe test results



Window Sample Logsheet WS2

Project: Makki Masjid

Project No: CGN/2638

Client: CCS Consulting c/o Makki Masjid

Date: 22/02/2010

Location: Beresford Road, Longsight, Manchester

Ground level:

Sheet: 1 of 1

SUBSURFACE PROFILE				SAMPLE/TESTS				Well data	Depth to water (m)
Depth	Description	Legend	Depth (m)	No.	Type	Depth (m)	Undrained shear strength (kPa)		
0.0	Ground Surface		0						
0.3	MADE GROUND: tarmacadam over brick								
1.0	MADE GROUND: Soft dark brown clay with fragments of brick and bits of ceramic				D	0.5			
1.5	Soft to firm dark brown CLAY with occasional gravel. Gravel is medium to coarse subrounded flint.				SPT	1.2	N=2		
2.0	[REWORKED INFILLED GROUND]				HSV	1.6	18		
	Soft grey sandy CLAY. Plant matter was noted at 1.8m.				D	1.8			
3.0	[REWORKED INFILLED GROUND]				SPT	2.0	N=1		
	No recovery								
3.5	Medium dense clayey SAND. [GLACIAL TILL]				SPT	3.0	N=12		
3.8	Medium dense red brown clayey SAND. [GLACIAL TILL]				D	3.55			
4.7	Medium dense dark brown slightly gravelly clayey SAND. Gravel is fine to medium subangular to subrounded flints. [GLACIAL TILL]				SPT	4	N=26		
5.0	Part recovery - possibly soft wet clay collapsed from above.				D	4.8			
	Medium dense dark brown slightly gravelly clayey SAND. Gravel is fine to medium subangular to subrounded flints. [GLACIAL TILL]				SPT	5	N=17		
	End of Borehole								

Logged by: HO

Comments and Notes

Checked by: RLP

Water was noted slowly seeping into the borehole at 0.25m

Excavation Method: Window sampler rig

The core was not recovered between 2m and 3m. Possibly fell back down the borehole.

Orientation:

Dimensions:

D = disturbed sample
SPT = standard penetration test
HSV = Hand shear vane (kPa)

Card Geotechnics Limited
Windsor House
Cornwall Road
Harrogate
HG1 2PW

Window Sample Logsheet WS3

Project: Makki Masjid

Project No: CGN/2638

Client: CCS Consulting c/o Makki Masjid

Date: 22/02/2010

Location: Beresford Road, Longsight, Manchester

Ground level:

Sheet: 1 of 1

SUBSURFACE PROFILE				SAMPLE/TESTS				Well data	Depth to water (m)
Depth	Description	Legend	Depth (m)	No.	Type	Depth (m)	Undrained shear strength (kPa)		
0.0	Ground Surface		0						
0.9	MADE GROUND: turf over dark brown topsoil comprising soft clay with rootlets and occasional brick.								
1.2	Soft to firm brown mottled grey sandy CLAY with occasional gravel. Gravel is fine to coarse subrounded flint. [GLACIAL TILL]		1		D	0.9			
2.0	Firm to stiff brown mottled grey sandy CLAY with occasional gravel of subrounded black flint. [GLACIAL TILL]		2		SPT	1.2	N=12		
					D	1.55			
					D	1.65			
					HSV	1.75	120		
					HSV	1.9	94		
					SPT	2	N=27		
					HSV	2.25	96		
	Stiff to very stiff brown sandy CLAY with occasional gravel of subrounded black flint. Becoming less sandy with depth. [GLACIAL TILL]		3		HSV	2.6	130		
					D	2.8			
					SPT	3	N=35		
					HSV	3.15	140		
			4		D	3.55			
					HSV	3.57	100		
					SPT	4	N=27		
5.0	End of Borehole		5		SPT	5	N=21		
			6						

Logged by: HO

Checked by:

Excavation Method: Window sampler rig

Orientation:

Dimensions:

Card Geotechnics Limited
Windsor House
Cornwall Road
Harrogate
HG1 2PW

Comments and Notes

Installation details; 0-1m plain pipe with bentonite seal, 1-3m slotted pipe with gravel surround, 3-3.5m bentonite seal and 3.5-5m backfilled with clay arisings.

D = disturbed sample
SPT = standard penetration test
HSV = Hand shear vane (kPa)

Window Sample Logsheet WS4

Project: Makki Masjid

Project No: CGN/2638

Client: CCS Conulting c/o Makki Masjid

Date: 22/02/2010

Location: Beresford Road, Longsight, Manchester

Ground level:

Sheet: 1 of 1

SUBSURFACE PROFILE				SAMPLE/TESTS				Well data	Depth to water (m)
Depth	Description	Legend	Depth (m)	No.	Type	Depth (m)	Undrained shear strength (kPa)		
0.0	Ground Surface		0						
0.5	MADE GROUND: turf over dark brown topsoil comprising soft clay with rootlets and occasional brick and wood fragments.								
1.2	Soft to firm brown mottled grey sandy CLAY with occasional gravel of fine to coarse subrounded flint. [GLACIAL TILL]		1		D	0.7			
					SPT	1	N=12		
					HSV	1.17	120		
2.3	Firm brown mottled grey sandy CLAY with occasional gravel of subrounded black flint. [GLACIAL TILL]		2		D	1.6			
					HSV	1.7	140		
					SPT	2	N=26		
					HSV	2.3	116		
					HSV	2.5	140		
	Stiff brown slightly sandy CLAY with occasional gravel of subrounded to subangular black flint. Becoming less sandy with depth. [GLACIAL TILL]		3		SPT	3	N=35		
					HSV	3.3	102		
			4		D	3.6			
					HSV	3.65	94		
					SPT	4	N=27		
5.0	End of Borehole		5		SPT	5	N=23		
			6						

Logged by: HO

Checked by: RLP

Excavation Method: Window sampler rig

Orientation:

Dimensions:

Card Geotechnics Limited
Windsor House
Cornwall Road
Harrogate
HG1 2PW

Comments and Notes

Installation details; 0-1m plain pipe with bentonite seal, 1-3m slotted pipe with gravel surround, 3-3.5m bentonite seal and 3.5-5m backfilled with clay arisings.

D = disturbed sample
SPT = standard penetration test
HSV = Hand shear vane (kPa)

Depth	DP1		DP2		DP3	
	mbgl	n100 Equivalent SPT N	n100	Equivalent SPT N	N100	Equivalent SPT N
0.1	0	0	0	0	1	2
0.2	0	0	0	0	1	2
0.3	0	0	0	0	1	2
0.4	0	0	0	0	1	2
0.5	0	0	0	0	1	2
0.6	0	0	0	0	1	2
0.7	0	0	0	0	1	2
0.8	0	0	0	0	1	2
0.9	0	0	0	0	1	2
1	0	0	0	0	1	2
1.1	0	0	0	0	1	2
1.2	0	0	0	0	1	2
1.3	2	4	0	0	2	4
1.4	2	4	0	0	2	4
1.5	2	4	0	0	2	4
1.6	2	4	0	0	3	6
1.7	2	4	0	0	3	6
1.8	2	4	0	0	2	4
1.9	2	4	0	0	2	4
2	2	4	0	0	2	4
2.1	3	6	0	0	2	4
2.2	4	8	0	0	4	8
2.3	4	8	0	0	4	8
2.4	4	8	0	0	5	10
2.5	3	6	0	0	5	10
2.6	3	6	1	2	5	10
2.7	4	8	1	2	5	10
2.8	3	6	1	2	5	10
2.9	3	6	1	2	6	12
3	3	6	1	2	6	12
3.1	3	6	1	2	6	12
3.2	2	4	3	6	6	12
3.3	3	6	2	4	5	10
3.4	3	6	2	4	5	10
3.5	3	6	2	4	6	12
3.6	2	4	1	2	5	10
3.7	2	4	2	4	5	10
3.8	2	4	4	8	5	10
3.9	3	6	5	10	5	10
4	2	4	5	10	5	10
4.1	2	4	6	12	5	10
4.2	2	4	6	12	5	10
4.3	2	4	5	10	4	8
4.4	2	4	7	14	4	8
4.5	2	4	8	16	4	8
4.6	2	4	5	10	4	8
4.7	2	4	7	14	4	8
4.8	3	6	7	14	3	6
4.9	3	6	5	10	3	6
5	2	4	5	10	3	6
5.1	2	4	6	12	4	8
5.2	2	4	6	12	3	6
5.3	2	4	5	10	5	10
5.4	3	6	5	10	4	8
5.5	3	6	5	10	4	8
5.6	4	8	4	8	4	8
5.7	4	8	5	10	4	8
5.8	5	10	5	10	4	8
5.9	6	12	5	10	4	8
6	5	10	5	10	4	8
6.1	5	10	5	10	4	8
6.2	5	10	7	14	4	8
6.3	6	12	8	16	5	10
6.4	7	14	9	18	5	10
6.5	8	16	9	18	5	10
6.6	10	20	10	20	5	10
6.7	10	20	10	20	6	12
6.8	11	22	10	20	8	16
6.9	13	26	10	20	7	14
7	15	30	10	20	7	14
7.1			11	22	7	14
7.2			11	22	7	14
7.3			11	22	8	16
7.4			10	20	8	16
7.5			11	22	8	16
7.6			13	26	8	16
7.7			15	30	9	18
7.8			16	32	11	22
7.9			18	36	11	22
8			20	40	12	24

APPENDIX F

Gas monitoring record



BOREHOLE/GAS MONITORING RESULTS

JOB DETAILS

Location :	Makki Masjid, Beresford Road, Longsight, Manchester			Engineer :	HO	
Date :	05/03/2010	Job No :	CGN/2638	Time :	12:00	

METEOROLOGICAL AND SITE INFORMATION

State of ground:	☒ Dry	☐ Moist	☐ Wet
Wind:	☐ Calm	☒ Light	☐ Moderate
Cloud cover:	☐ None	☒ Slight	☐ Cloudy
Precipitation:	☒ None	☐ Slight	☐ Moderate
Barometric pressure (mb):	1026		Air temperature (°C): 7
			☐ Strong ☐ Overcast ☐ Heavy

INSTRUMENTATION USED:

1649

LAST CALIBRATION DATE:

24/02/2010

Well No.	Time (s)	Flow (l/hr)	dP (PA)	CO ₂ (% vol. in air)	O ₂ (% vol. in air)	CH ₄ (% vol. in air)	H ₂ S (ppm)	PID (ppm)	Depth to GW (m)	Free product (mm)	Comments (samples taken?)
WS1	0	0.0	0.0	0.0	20.5	0.0			0.6		
WS1	15	0.0	0.0	0.0	21.0	0.0					
WS1	30	0.0	0.3	0.0	20.9	0.0					
WS1	45	0.0	0.0	0.0	20.9	0.0					
WS1	60	0.0	0.0	0.0	20.9	0.0					
WS1	75	0.0	0.0	0.0	20.9	0.0					
WS1	90	0.0	0.0	0.0	20.8	0.0					
WS1	105	0.0	0.0	0.0	20.8	0.0					
WS1	120	0.0	0.0	0.0	20.8	0.0					
WS3	0	0.0	0.1	0.0	21.2	0.0			0.64		
WS3	15	0.0	0.1	0.0	21.2	0.0					
WS3	30	0.0	0.2	0.0	20.8	0.0					
WS3	45	0.1	0.2	0.0	20.8	0.0					
WS3	60	0.0	0.1	0.0	20.8	0.0					
WS3	75	0.0	0.2	0.0	20.8	0.0					

Location :	Makki Masjid, Beresford Road, Longsight, Manchester			Engineer :	HO	
Date :	05/03/2010	Job No :	CGN/2638		Time :	12.00

State of ground:	☒ Dry	☐ Moist	☐ Wet
Wind:	☐ Calm	☒ Light	☐ Moderate
Cloud cover:	☐ None	☒ Slight	☐ Cloudy
Precipitation:	☒ None	☐ Slight	☐ Moderate
Barometric pressure (mb):	1026		Air temperature (°C): 7

1649

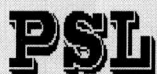
24/02/2010

[illegible]

APPENDIX G

Geotechnical laboratory results





Professional Soils Laboratory

LABORATORY REPORT



4043

Contract Number: PSL10/0360

Client's Reference:

Report Date: 11 March 2010

Client Name: Card Geotechnics
2nd Floor, Kings House
Kings Street
Leeds
West Yorkshire
LS1 2HH

For the attention of: Heather Oatridge

Contract Title: Maki Mosque, Longsight, Manchester

Date Received: 2-Mar-10

Date Commenced: 2-Mar-10

Date Completed: 11-Mar-10

Notes: Observations and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

R Gunson
(Director)

A Watkins
(Director)

D Lambe
(Senior Technician)

5 – 7 Hexthorpe Road, Hexthorpe,
Doncaster DN4 0AR
tel: +44 (0)844 815 6641
fax: +44 (0)844 815 6642
e-mail: rgunson@prosoils.co.uk
awatkins@prosoils.co.uk

Page 1 of

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

[illegible]

Professional Soils Laboratory

Compiled by	Date	Checked by	Date	Approved by	Date
<i>mat</i>	8/3/10	<i>RE</i>	8/3/10	<i>RE</i>	8/3/10
MAKI MOSQUE, LONGSIGHT, MANCHESTER.				Contract No:	PSL10/0360
				Client Ref:	CGN2638

SUMMARY OF SOIL CLASSIFICATION TESTS

(B.S. 1377 : PART 2 : 1990)

[illegible]

SYMBOLS : NP : Non Plastic

*** : Liquid Limit and Plastic Limit Wet Sieved.**



Professional Soils Laboratory

Compiled by

Date _____

Checked by

Date _____

Approved by _____

Date _____

Mat

2/3/10

RE

8/3/10



8/3/10

MAKI MOSQUE, LONGSIGHT, MANCHESTER.

Contract No:

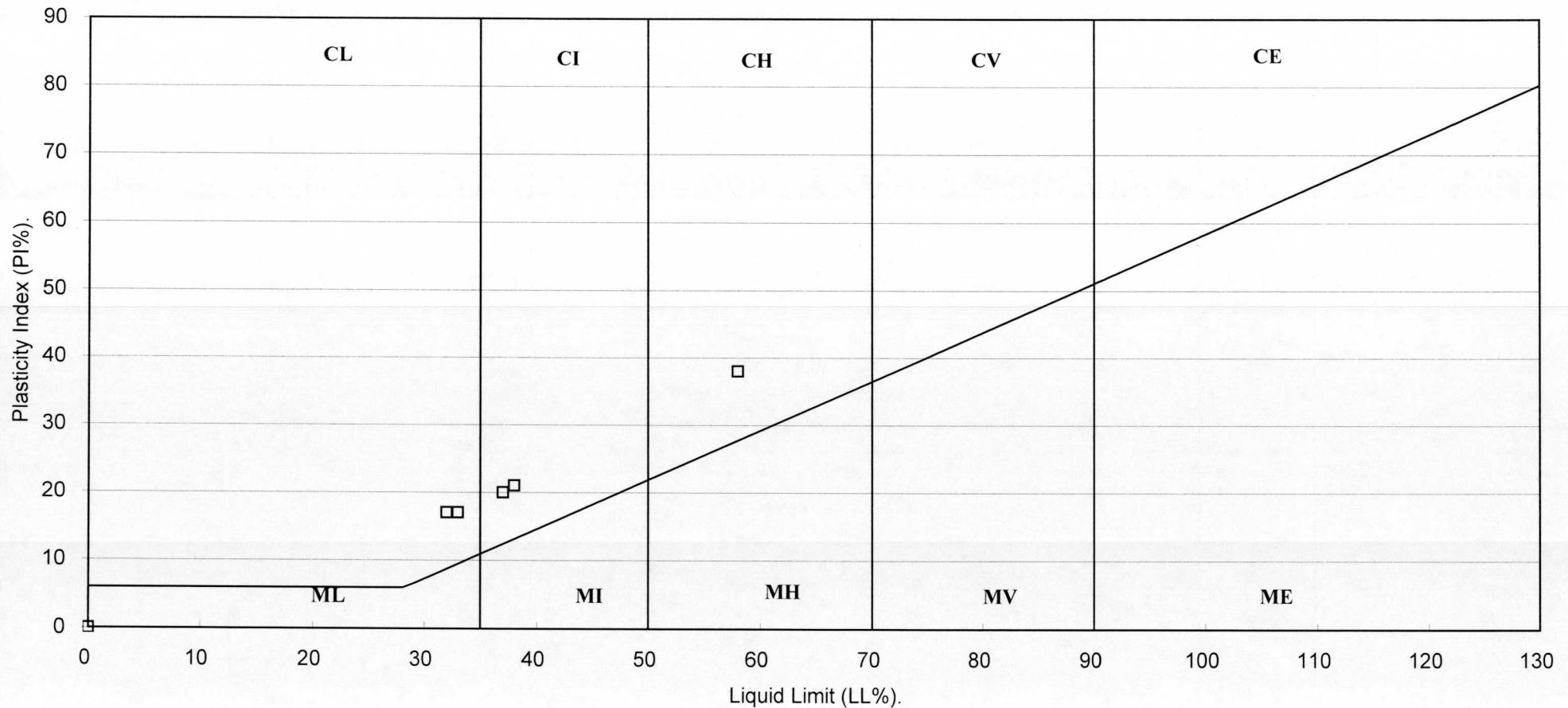
PSL10/0360

Client Ref:

CGN2638

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

(B.S.5930 : 1999)



PSL

Professional Soils Laboratory

Compiled by

ma

Date

8/3/10

Checked by

RL

Date

8/3/10

Approved by

RL

Date

8/3/10

MAKI MOSQUE, LONGSIGHT, MANCHESTER.

Contract No:

PSL10/0360

Client Ref:

CGN2638

Particle Size Distribution Test

BS1377 : Part 2 : 1990

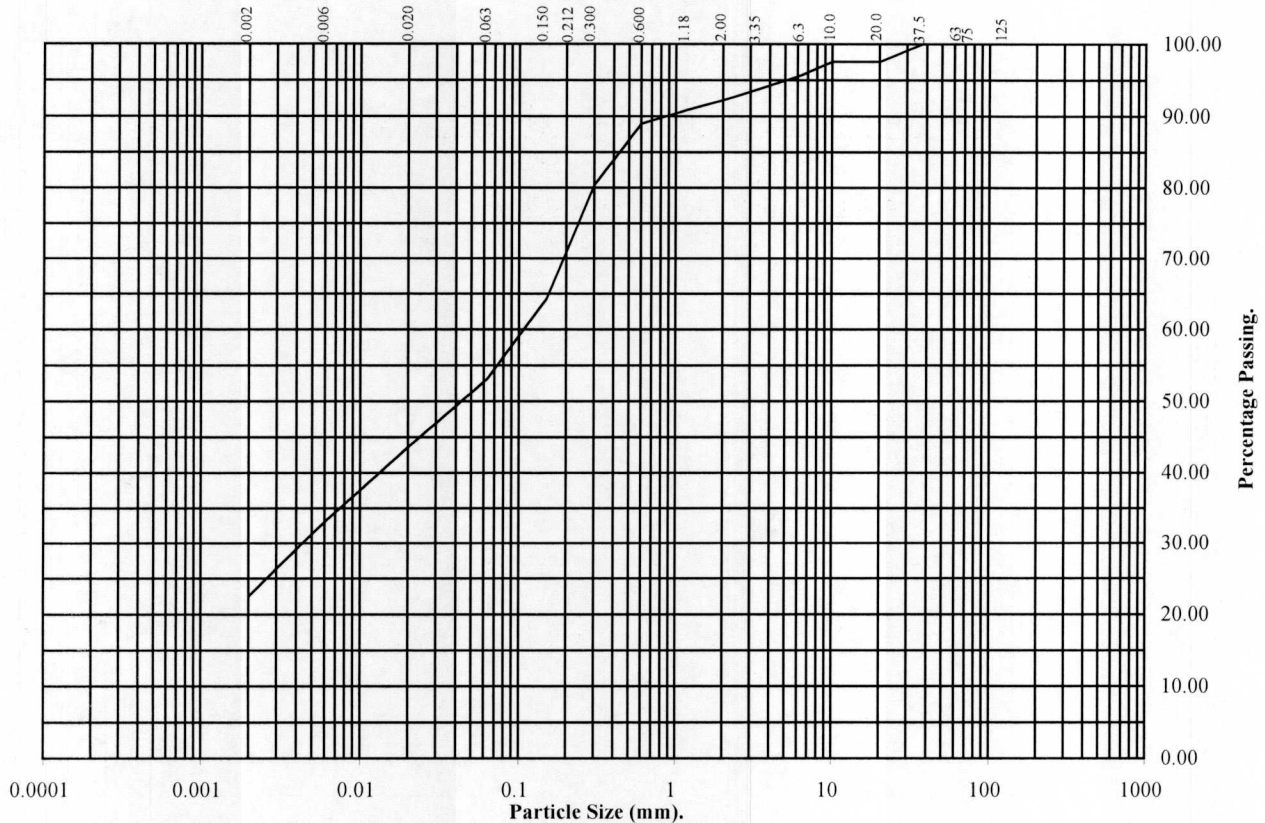
Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Hole Number: WS3

Depth (m): 1.50-2.00

Sample Number: 12

Sample Type:



BS Test Sieve	Percentage Passing
125	100
75	100
63	100
37.5	100
20	98
10	98
6.3	96
3.35	94
2	92
1.18	91
0.6	89
0.3	80
0.212	72
0.15	64
0.063	53

Particle Diameter	Percentage Passing
0.02	44
0.006	33
0.002	23

Soil Fraction	Total Percentage
Cobbles	0
Gravel	8
Sand	39
Silt	30
Clay	23

Remarks:

See summary of soil descriptions.

Checked By	Date	Approved By	Date
RE	8/3/10	RE	8/3/10

PSL

Professional Soils Laboratory

MAKI MOSQUE, LONGSIGHT,
MANCHESTER.

Contract No.:
PSL10/0360



2139

Certificate of Analysis

Date: 11/03/2010

Certificate Number: 10-36153

Client: Professional Soils Laboratory Ltd
5/7 Hexthorpe Road
Hexthorpe
DN4 0AR

Our Reference: 10-36153

Client Reference: PSL10/0360

Contract Title: Maki Mosque Longsight Manchetser

Description: 6 soil samples

Date Received: 04/03/2010

Date Started: 04/03/2010

Date Completed: 11/03/2010

Test Procedures: Identified by prefix DETSn, details available upon request.

Notes: Observations and interpretations are outside the scope of UKAS accreditation
* denotes test not included in laboratory scope of accreditation
denotes test that holds MCERT accreditation, however, MCERTS accreditation is only implied if the report carries the MCERTS logo
\$ denotes tests completed by an approved subcontractor
I/S denotes insufficient sample to carry out test
U/S denotes that the sample is not suitable for testing
DETSM denotes tests carried out by DETS Midlands laboratory
Solid samples will be disposed 1 month and liquids 2 weeks after the date of issue of this test certificate
Asbestos subsamples will be kept for 6 months

Approved By:

A handwritten signature in black ink, appearing to read 'Rob Brown'.

Authorised Signatories: Rob Brown
Business Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Summary of Chemical Analysis
Soil Samples

Our Ref: 10-36153
Client Ref: PSL10/0360
Contract Title: Maki Mosque Longsight Manchester

		Lab No.	246142	246143	246144	246145	246146
		Sample Ref	WS1	WS2	WS2	WS3	WS3
		Depth	1.80-2.00	0.50	4.80-5.00	0.90-1.20	2.80-2.90
		Other Ref	3	6	10	13	17
		Sample Type					
Test	Units	DETSxx					
Sulphate Aqueous Extract as SO4	g/l	DETS 076#	0.03	0.05	0.02	0.09	0.3
pH		DETS 008#	9.4	9.9	9.5	9.3	9.3

Summary of Chemical Analysis
Soil Samples

Our Ref: 10-36153
Client Ref: PSL10/0360
Contract Title: Maki Mosque Longsight Manchetsr

Lab No. 246149
Sample Ref WS4
Depth 3.60-3.80
Other Ref 17
Sample Type

Test	Units	DETSxx	
Sulphate Aqueous Extract as SO4	g/l	DETS 076#	0.03
pH		DETS 008#	9.5