APPENDIX J

Geotechnical Test Results

Appendix J(1)

Geotechnical Test Results
GRM (2006) Investigation

BUREAU VERITAS LABORATORIES LIMITED
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: + 44 (0) 1327 703828
Facsimile: + 44 (0) 1327 300154
daventry@uk.bureauveritas.com

BUREAU VERITAS

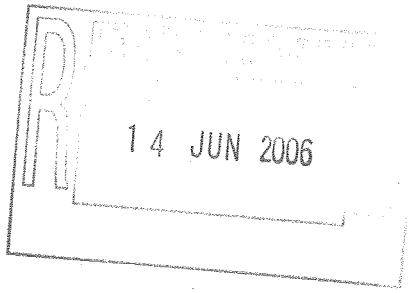
UKAS TESTING
0199

TEST REPORT

Report No: 50014386/06/1
Our Ref: DAM0005698

Client

Ground Risk Management Limited
Bretby Business Park
Ashby Road
Burton-Upon-Trent
Staffordshire
DE15 0YZ



Test Report

Site: Harpur Hill, Buxton

Test Requested: Determination of Moisture Content, Atterberg Limits, Sulphate Content and pH Value

Test Method: BS 1377-2: 1990: Method 3.2, 4.4 and 5
BS 1377-3: 1990: Method 5 and 9

Sample Details:

Sampled by:	Client
Date Received:	24.05.06
Tested From:	24.05.06 to 07.06.06

Results: See attached sheets

Signed: _____

[ ] J. Cross - Section Manager
[ ] D. Goddard - Laboratory Manager

For and on behalf of **Bureau Veritas Laboratories Limited**

BUREAU VERITAS LABORATORIES LIMITED
2 Newton Close
Drayton Fields Industrial Estate
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daventry@uk.bureauveritas.com

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TEST REPORT

Determination of Moisture Content and Atterberg Limits

Client: Ground Risk Management Limited
Site: Harpur Hill, Buxton

Report No: 50014386/06/1

Laboratory Reference	Location	Depth (m)	Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Retained 425µm BS Test Sieve (Estimated)
45026938	STP2	0.50-0.70	28	36	21	15	0
45026939	STP5	0.40-0.60	25	32	21	11	0
45026940	TP5	0.60-0.80	25	33	23	10	0
45026941	TP9	1.40-1.60	17	43	19	24	0
45026942	TP16A	0.60-0.80	20	32	20	12	3
45026943	TP1	0.30-0.50	28	34	24	10	21
45026944	TP12	0.40-0.60	32	52	26	26	0
45026945	TP13	0.40-0.60	21	31	20	11	0
45026946	TP15	0.30-0.50	30	44	21	23	0

Comments: Sample Type Disturbed

Sample Preparation: Natural

Descriptions:

45026938 Soft to firm slightly sandy CLAY
45026939 Soft brown sandy CLAY
45026940 Soft brown silty CLAY
45026941 Soft to firm yellow grey brown mottled CLAY
45026942 Soft brown fine sandy CLAY with occasional gravel
45026943 Soft brown sandy CLAY with occasional gravel
45026944 Soft brown sandy CLAY
45026945 Soft brown sandy CLAY
45026946 Soft brown CLAY

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Date: 09.06.06

Signed: JCross

[✓] J. Cross - Section Manager
[ ] D. Goddard - Laboratory Manager

For and on behalf of **Bureau Veritas Laboratories Limited**

BUREAU VERITAS LABORATORIES LIMITED
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
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daventry@uk.bureauveritas.com

BUREAU VERITAS

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TEST REPORT

Determination of Sulphate Content and pH Value

Client: Ground Risk Management Limited
Site: Harpur Hill, Buxton

Report No: 50014386/06/1

Laboratory Reference	Location	Depth (m)	% Passing 2mm BS Test Sieve	pH Value	Water Soluble Sulphate Content (g/l)
45026928	TP2	0.50-0.70	100	7.2	0.04
45026929	STP1	0.30-0.50	100	7.4	0.05
45026930	TP8	0.30-0.50	100	6.7	0.08
45026931	TP16A	2.10-2.30	95	8.0	0.07
45026932	TP19	0.30-0.50	100	6.8	0.03
45026933	STP4	0.30-0.50	100	7.0	0.03
45026934	TP10	0.30-0.50	100	7.8	0.03
45026935	TP6	1.00-1.20	100	8.1	0.03
45026936	STP5	1.20-1.40	71	7.1	0.04
45026937	TP11	1.10-1.30	92	7.1	0.04

Comments: Sulphate Content expressed as SO_4

Certified that the laboratory testing was carried out in accordance with BS 1377-3: 1990: Method 5 and 9
Tested by UKAS laboratory No. 451

Date: 09.06.06

Signed: _____

[✓] J. Cross - Section Manager
[ ] D. Goddard - Laboratory Manager

For and on behalf of **Bureau Veritas Laboratories Limited**

Appendix J(2)

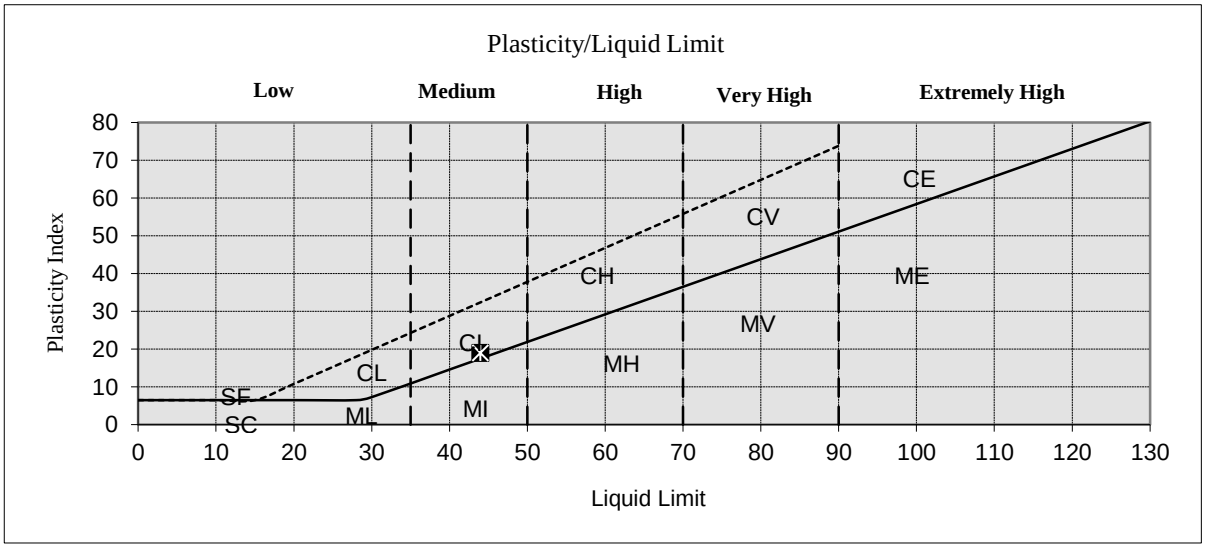
Geotechnical Test Results
ALM (2017) Investigation

James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT
LIQUID & PLASTIC LIMIT TESTS BS 1377: Part 2: 1990 Cl 4.4,5.3

Site Ref.:	Burlow Road, Buxton - Site B	**Job No.:**	N/A
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Sample Ref.:	TB101
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
Originator:	**Keith**	**Date Reported:**	15/09/2017

Sampling Certificate	**Yes**
Sampled By	**Client**
Sample Type	**Bulk**
Sample Preparation Method	**As Received**
MATERIAL	**Crumbly Brown Soily CLAY**
Retained 425 micron (%)	**0.3**
Natural Moisture Content (%)	**30.6**
Liquid Limit (single point)(%)	**44**
Plastic Limit (%)	**25**
Plasticity Index	**19**



K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

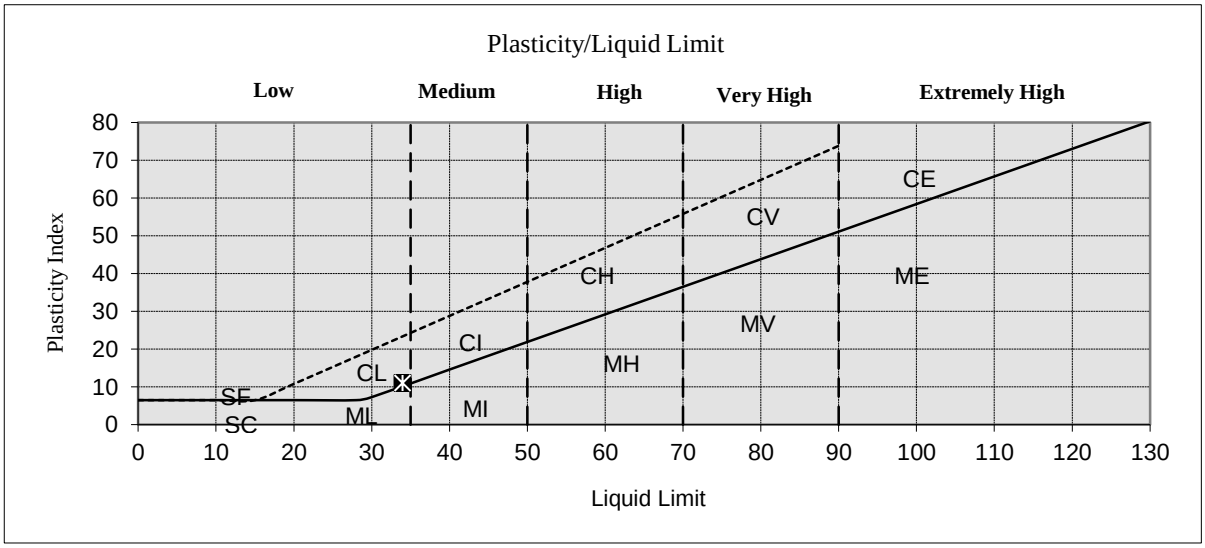
R02 R2 WTN

James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT
LIQUID & PLASTIC LIMIT TESTS BS 1377: Part 2: 1990 Cl 4.4,5.3

Site Ref.:	Burlow Road, Buxton - Site B	**Job No.:**	N/A
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Sample Ref.:	TB105
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
Originator:	**Keith**	**Date Reported:**	15/09/2017

Sampling Certificate	**Yes**
Sampled By	**Client**
Sample Type	**Bulk**
Sample Preparation Method	**As Received**
MATERIAL	**Brown Silty CLAY**
Retained 425 micron (%)	**1.4**
Natural Moisture Content (%)	**26.3**
Liquid Limit (single point)(%)	**34**
Plastic Limit (%)	**23**
Plasticity Index	**11**



K.Monks
Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

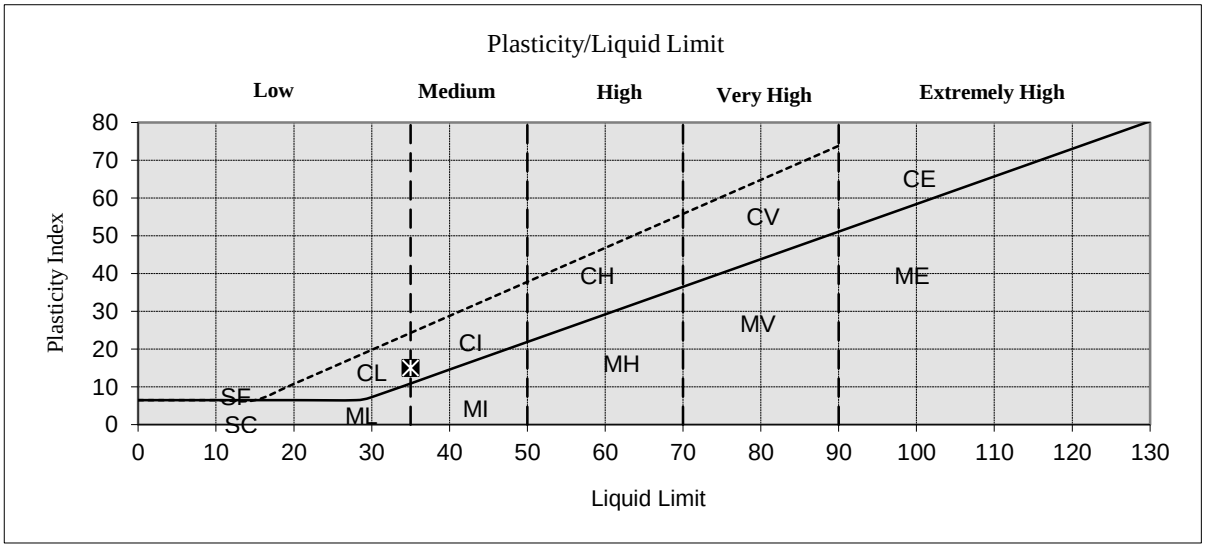
R02 R2 WTN

James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT
LIQUID & PLASTIC LIMIT TESTS BS 1377: Part 2: 1990 Cl 4.4,5.3

Site Ref.:	Burlow Road, Buxton - Site B	**Job No.:**	N/A
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Sample Ref.:	TB110
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
Originator:	**Keith**	**Date Reported:**	15/09/2017

Sampling Certificate	**Yes**
Sampled By	**Client**
Sample Type	**Bulk**
Sample Preparation Method	**As Received**
MATERIAL	**Crumbly Brown Silty CLAY**
Retained 425 micron (%)	**0.5**
Natural Moisture Content (%)	**28.4**
Liquid Limit (single point)(%)	**35**
Plastic Limit (%)	**20**
Plasticity Index	**15**



K.Monks
Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R02 R2 WTN

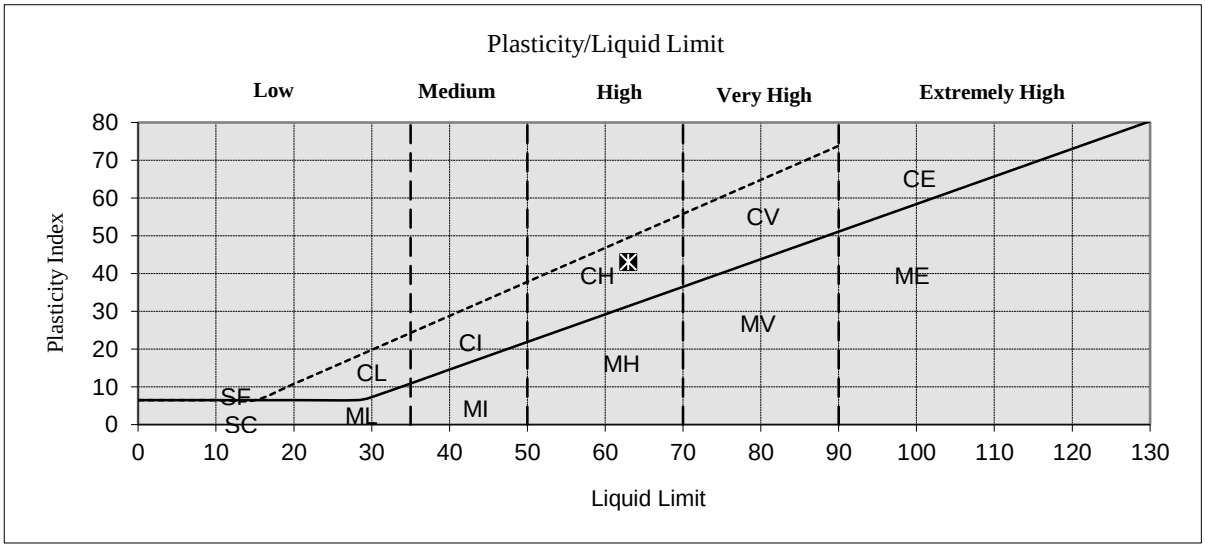
James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

UKAS TESTING 0955

LABORATORY TEST REPORT
LIQUID & PLASTIC LIMIT TESTS BS 1377: Part 2: 1990 Cl 4.4,5.3

Site Ref.:	Burlow Road, Buxton - Site B	**Job No.:**	N/A
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Sample Ref.:	TB115
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
Originator:	**Keith**	**Date Reported:**	15/09/2017

Sampling Certificate	**Yes**
Sampled By	**Client**
Sample Type	**Bulk**
Sample Preparation Method	**As Received**
MATERIAL	**Soft Yellow CLAY**
Retained 425 micron (%)	**0.2**
Natural Moisture Content (%)	**33.0**
Liquid Limit (single point)(%)	**63**
Plastic Limit (%)	**20**
Plasticity Index	**43**



K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R02 R2 WTN

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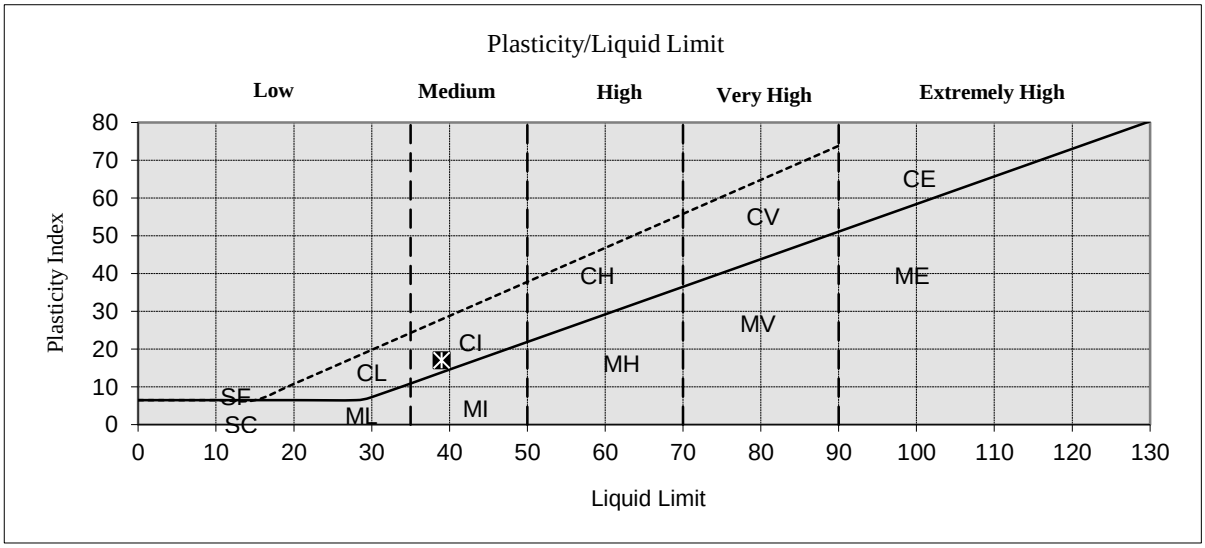
James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

UKAS TESTING 0955

LABORATORY TEST REPORT
LIQUID & PLASTIC LIMIT TESTS BS 1377: Part 2: 1990 Cl 4.4,5.3

Site Ref.:	Burlow Road, Buxton - Site B	**Job No.:**	N/A
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Sample Ref.:	TB123
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
Originator:	**Keith**	**Date Reported:**	15/09/2017

Sampling Certificate	**Yes**
Sampled By	**Client**
Sample Type	**Bulk**
Sample Preparation Method	**As Received**
MATERIAL	**Crumbly Brown Silty CLAY**
Retained 425 micron (%)	**0**
Natural Moisture Content (%)	**29.3**
Liquid Limit (single point)(%)	**39**
Plastic Limit (%)	**22**
Plasticity Index	**17**



K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R02 R2 WTN

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Marine Services Worldwide

James Fisher Testing Services
Ruby House, 40A Hardwick Grange, Warrington WA1 4RF
Tel (01925 286880) Fax (01925 286881)

LABORATORY TEST REPORT

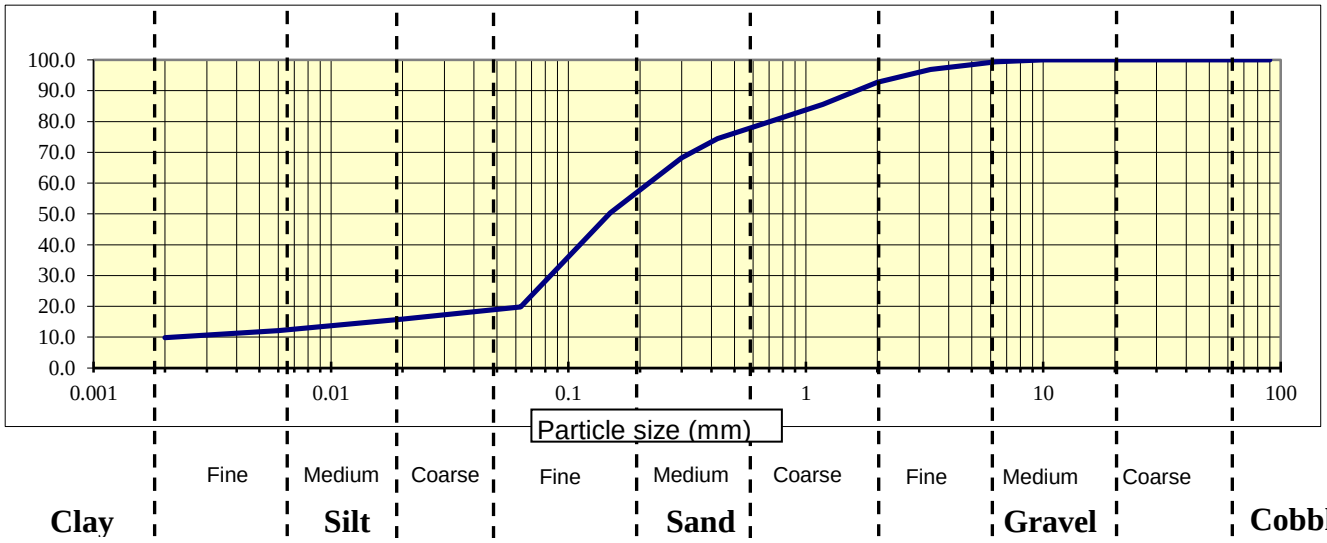
Determination of Particle Size Distribution - BS 1377 : Part 2 : 1990

Site:	Burlow Road, Buxton - Site B	**Job No.:**	n/a
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
		Date Reported:	15/09/2017
Originator: Keith			

Client Ref.: TB106

Description: Clayey Silt with soft lumps

BS Sieve Size	% Passing	Specification
125.0mm	100	
90.0mm	100	
75.0mm	100	
37.5mm	100	
28.0mm	100	
20.0mm	100	
14.0mm	100	
10.0mm	100	
6.3mm	99	
5.00mm	98	
3.35mm	97	
2.00mm	93	
1.18mm	86	
0.600mm	78	
0.425mm	74	
0.300mm	68	
0.150mm	50.4	
0.063mm	19.8	
0.02mm	15.9	
0.006mm	12.1	
0.002mm	9.8	



Tested in accordance with BS 1377: Part 2 : 1990 Clause 9.2 and 9.5
Sedimentation by Hydrometer, clause 9.5 - not UKAS Accredited

K.Monks
Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

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Ruby House, 40A Hardwick Grange, Warrington WA1 4RF
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LABORATORY TEST REPORT

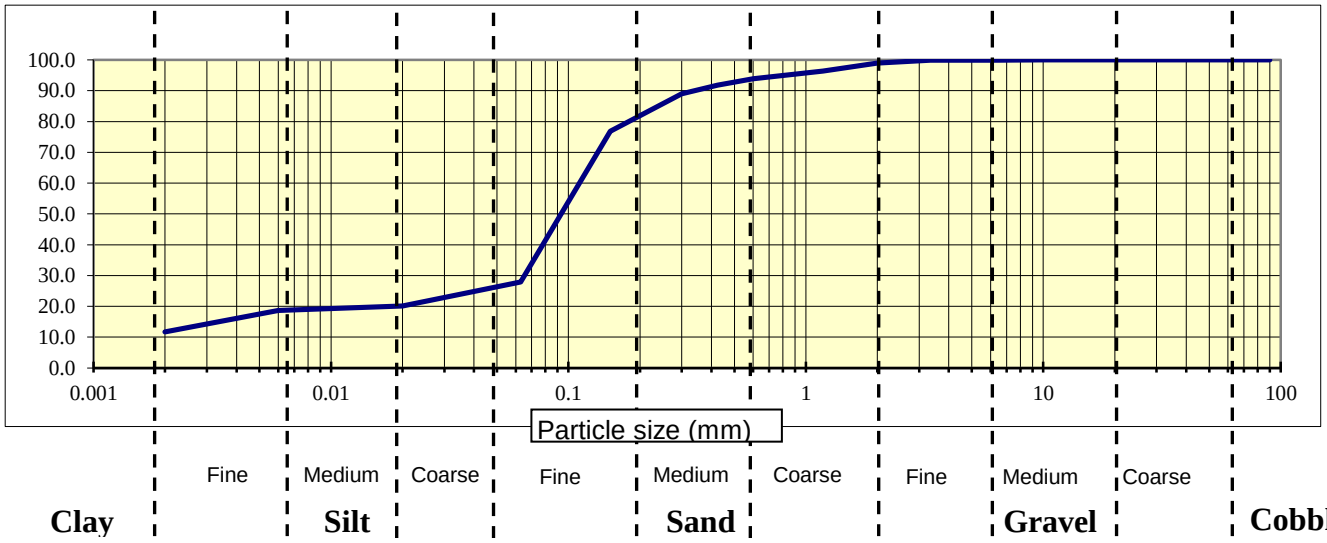
Determination of Particle Size Distribution - BS 1377 : Part 2 : 1990

Site:	Burlow Road, Buxton - Site B	**Job No.:**	n/a
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
		Date Reported:	15/09/2017
Originator: Keith			

Client Ref.: TB108

Description: Silt

BS Sieve Size	% Passing	Specification
125.0mm	100	
90.0mm	100	
75.0mm	100	
37.5mm	100	
28.0mm	100	
20.0mm	100	
14.0mm	100	
10.0mm	100	
6.3mm	100	
5.00mm	100	
3.35mm	100	
2.00mm	99	
1.18mm	96	
0.600mm	94	
0.425mm	92	
0.300mm	89	
0.150mm	76.8	
0.063mm	27.9	
0.02mm	20.1	
0.006mm	18.7	
0.002mm	11.7	



Tested in accordance with BS 1377: Part 2 : 1990 Clause 9.2 and 9.5
Sedimentation by Hydrometer, clause 9.5 - not UKAS Accredited

K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

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LABORATORY TEST REPORT

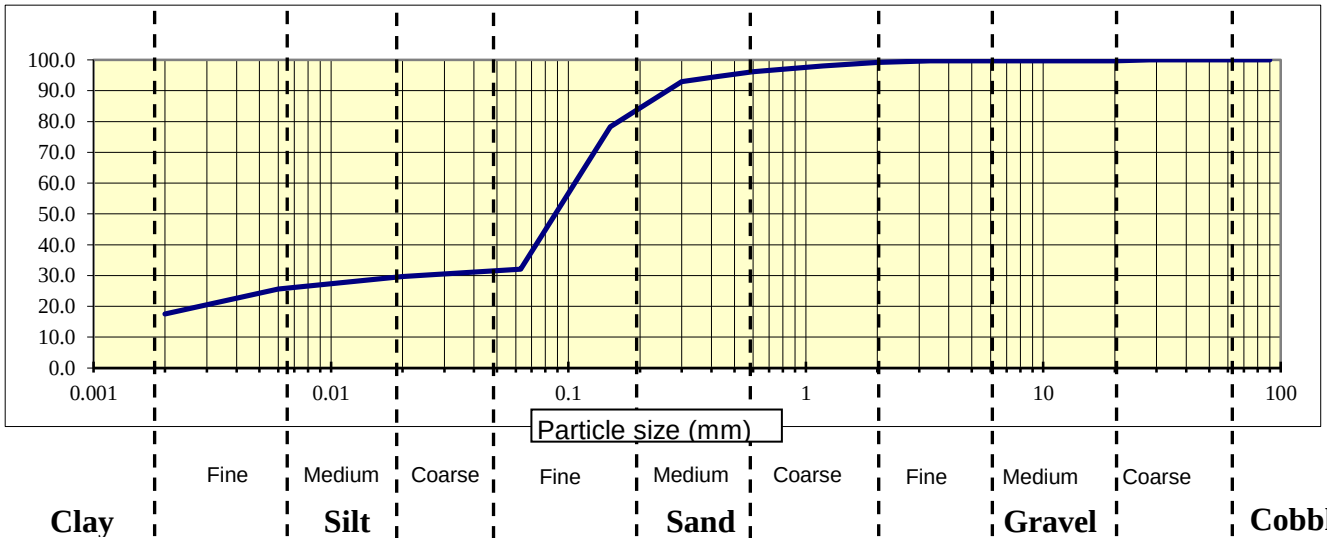
Determination of Particle Size Distribution - BS 1377 : Part 2 : 1990

Site:	Burlow Road, Buxton - Site B	**Job No.:**	n/a
Client:	ALM Consult	**Lab Ref No.:**	SA30854
		Date Received:	29/08/2017
		Date Tested:	15/09/2017
		Date Reported:	15/09/2017
Originator: Keith			

Client Ref.: TB121

Description: Clayey Silt

BS Sieve Size	% Passing	Specification
125.0mm	100	
90.0mm	100	
75.0mm	100	
37.5mm	100	
28.0mm	100	
20.0mm	100	
14.0mm	100	
10.0mm	100	
6.3mm	100	
5.00mm	100	
3.35mm	100	
2.00mm	99	
1.18mm	98	
0.600mm	96	
0.425mm	95	
0.300mm	93	
0.150mm	78.3	
0.063mm	32.0	
0.02mm	29.7	
0.006mm	25.7	
0.002mm	17.6	



Tested in accordance with BS 1377: Part 2 : 1990 Clause 9.2 and 9.5
Sedimentation by Hydrometer, clause 9.5 - not UKAS Accredited

K.Monks
Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT

UKAS TESTING 0955

DETERMINATION OF PARTICLE DENSITY BS 1377 : Part 2 : 1990

Project :	Burlow Road, Buxton - Site B	**Lab Ref No:**	SA30854
Client :	ALM Consult	**Date Received:**	29/08/2017
		Date Tested:	08/09/2017
		Date Reported:	15/09/2017
		Material Type:	Silt/Clay
Originator:	Keith	**Sampling Certificate:**	Yes

Sample Reference	Material Type	Particle Density (Mg/m^3)
TB106	**Loose Brown Clayey silt**	**2.59**
TB108	**Brown silt**	**2.61**
TB121	**Brown silt**	**2.60**

Tested in accordance with BS 1377: Part 2: 1990

K.Monks

Approved Signature

James Fisher Testing Services

■ Karl Monks, Acting Lab Team Leader

James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT

UKAS TESTING 0955

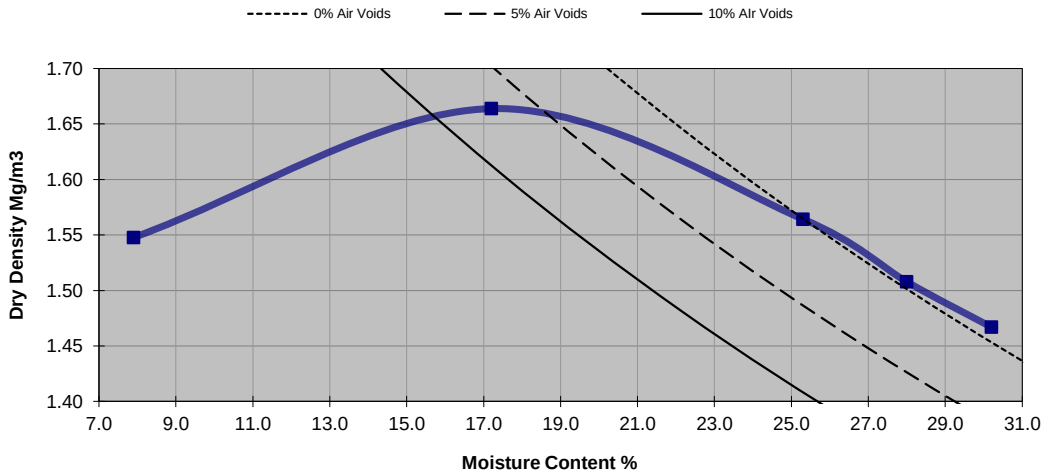
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP - BS 1377: Part 4: 1990

Project:	Burlow Road, Buxton - Site B	**Lab Ref No.:**	SA30854
Client:	ALM Consult	**Date Received:**	29/08/2017
		Date Tested:	14/09/2017
		Date Reported:	15/09/2017
		Material:	Loose brown clayey silt
Originator:	**Keith**	**Specification:**	SHW Series 600: Table 6/2

Client Sample Ref :	**TB106**	***Sample Type :***	Bulk
Supplier:	Site Won	***Description :***	Loose brown clayey silt
Location:	Not Stated		
Date sampled :	28/09/2017	***Comments :***	
Sampling Cert :	Yes		

Rammer used :	2.5	**No of layers:**	3
No of sub samples :	5	**% retained on 37.5mm sieve**	0.0
Mould Size:	1L	**% retained on 20mm sieve**	0.0

Bulk Density: Mg/m³	1.67	1.95	1.96	1.93	1.91
Moisture Content: %	7.9	17.2	25.3	28.0	30.2
Dry Density: Mg/m³	1.55	1.66	1.56	1.51	1.47



Maximum Dry Density (Mg/m³)	**1.66**
Optimum Moisture Content (%)	**17**

Tested in accordance with BS 1377: Part 4:1990
Particle Density (Mg/m³) - 2.59Determined

K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R05 R2 WTN

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James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT

UKAS TESTING 0955

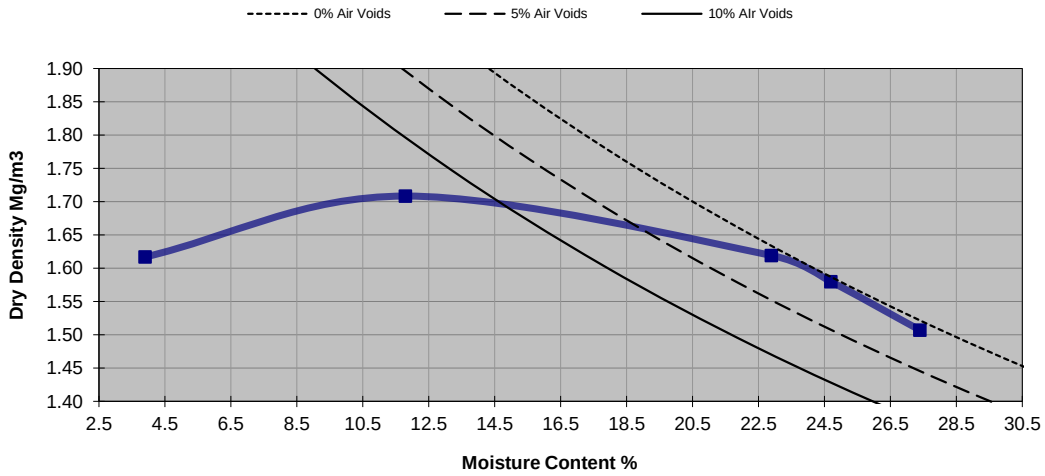
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP - BS 1377: Part 4: 1990

Project:	Burlow Road, Buxton - Site B	**Lab Ref No.:**	SA30854
Client:	ALM Consult	**Date Received:**	29/08/2017
		Date Tested:	14/09/2017
		Date Reported:	15/09/2017
		Material:	Brown Silt
Originator:	**Keith**	**Specification:**	SHW Series 600: Table 6/2

Client Sample Ref :	**TB108**	***Sample Type :***	Bulk
Supplier:	Site Won	***Description :***	Brown Silt
Location:	Not Stated		
Date sampled :	28/09/2017	***Comments :***	
Sampling Cert :	Yes		

Rammer used :	2.5	**No of layers:**	3
No of sub samples :	5	**% retained on 37.5mm sieve**	0.0
Mould Size:	1L	**% retained on 20mm sieve**	0.0

Bulk Density: Mg/m³	1.68	1.91	1.99	1.97	1.92
Moisture Content: %	3.9	11.8	22.9	24.7	27.4
Dry Density: Mg/m³	1.62	1.71	1.62	1.58	1.51



Maximum Dry Density (Mg/m³)	**1.71**
Optimum Moisture Content (%)	**12**

Tested in accordance with BS 1377: Part 4:1990
Particle Density (Mg/m³) - 2.61Determined

K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R05 R2 WTN

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James Fisher Testing Services
Ruby House, 40A Hardwick Grange
Warrington
WA1 4RF

LABORATORY TEST REPORT

UKAS TESTING 0955

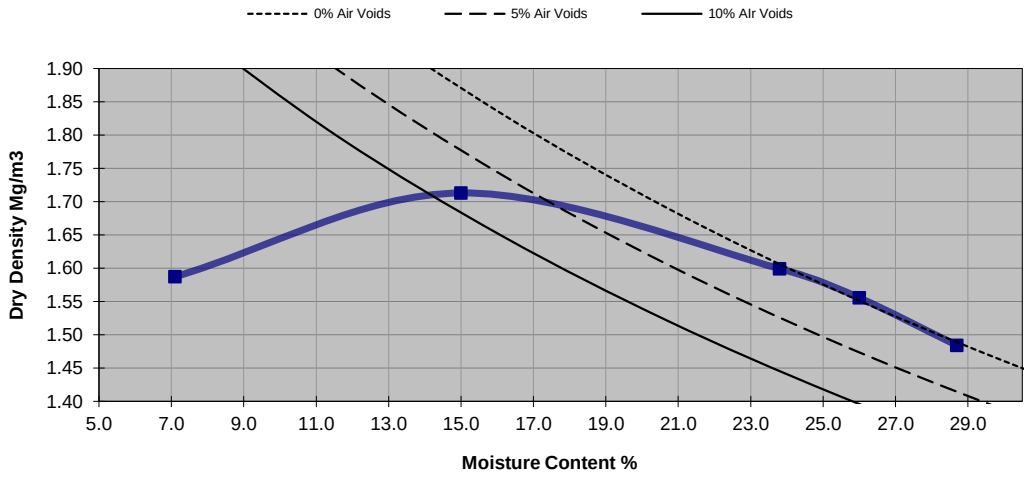
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP - BS 1377: Part 4: 1990

Project:	Burlow Road, Buxton - Site B	**Lab Ref No.:**	SA30854
Client:	ALM Consult	**Date Received:**	29/08/2017
		Date Tested:	14/09/2017
		Date Reported:	15/09/2017
		Material:	Brown Silt
Originator:	**Keith**	**Specification:**	SHW Series 600: Table 6/2

Client Sample Ref :	**TB121**	***Sample Type :***	Bulk
Supplier:	Site Won	***Description :***	Brown Silt
Location:	Not Stated		
Date sampled :	28/09/2017	***Comments :***	
Sampling Cert :	Yes		

Rammer used :	2.5	**No of layers:**	3
No of sub samples :	5	**% retained on 37.5mm sieve**	0.0
Mould Size:	1L	**% retained on 20mm sieve**	0.0

Bulk Density: Mg/m³	1.70	1.97	1.98	1.96	1.91
Moisture Content: %	7.1	15.0	23.8	26.0	28.7
Dry Density: Mg/m³	1.59	1.71	1.60	1.56	1.48



Maximum Dry Density (Mg/m³)	**1.71**
Optimum Moisture Content (%)	**15**

Tested in accordance with BS 1377: Part 4:1990

Particle Density (Mg/m^2) - 2.60 Determined

K.Monks

Approved Signature
James Fisher Testing Services
■ Karl Monks, Acting Lab Team Leader

R05 R1 WTN

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James Fisher Testing Services
Ruby House,
40A Hardwick Grange
Warrington, WA1 4RF

UKAS TESTING 0955

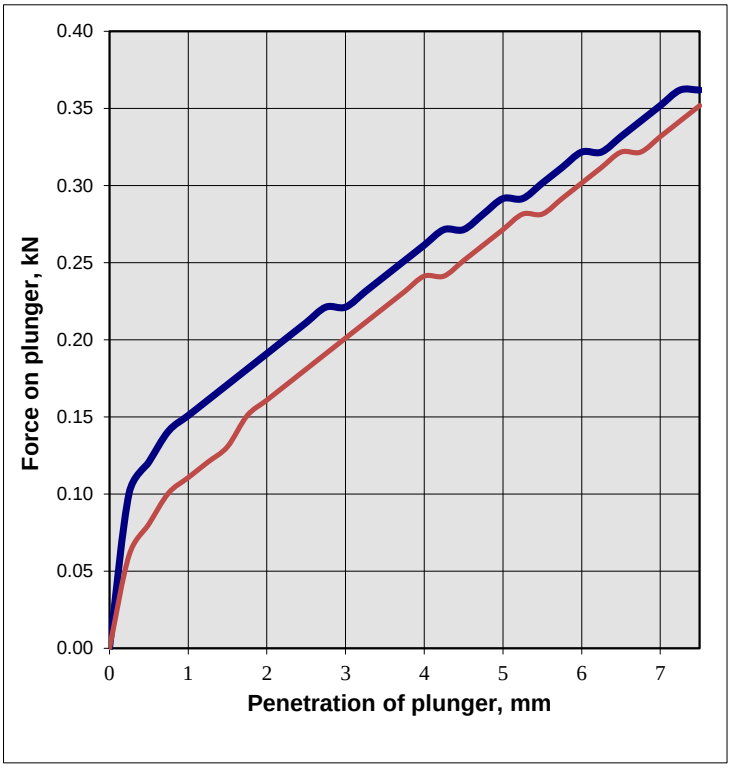
LABORATORY TEST REPORT

DETERMINATION OF CALIFORNIA BEARING RATIO - BS 1377 : Part 4 : 1990

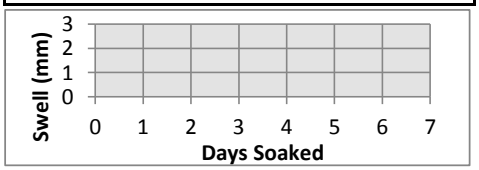
Project :	Burlow Rd, Buxton - Site B	**Job No.**	n/a
Client :	ALM Consult	**Lab Ref No**	SA30854
		Date Received	29/08/2017
		Date Tested	12/09/2017
		Date Reported	18/09/2017

Originator : Keith

Location : TB112



Type of Reaction Load
Load Frame
Technician(s)
Shauna O'Hara
Mass of Surcharge Weights
8.8Kg
Overburden Pressure
3.9kPa
Material Type
Crumbly Brown Silty CLAY
Density (Mg/m³)
1.91
Max Particle Size Under Test Area (mm)
<20



Final Swell (mm):	N/A

Penetration (mm)	Force (kN)	Standard Force (kN)	Top CBR (%)
2.5	0.21	13.2	1.6
5.0	0.29	20.0	1.5

Penetration (mm)	Force (kN)	Standard Force (kN)	Bottom CBR (%)
2.5	0.18	13.2	1.4
5.0	0.27	20.0	1.4
Moisture content : 27%		**Mean Insitu CBR value : 1.5%**	

Moisture content determined in accordance with BS 1377 : Part 2 : 1990 - oven drying method

CBR determined in accordance with BS 1377 : Part 4 : 1990

K.Monks

Approved Signature

R70 R2 WTN

James Fisher Testing Services

❑ Karl Monks, Acting Lab Team Leader

A part of James Fisher and Sons plc Marine Services Worldwide

James Fisher Testing Services
Ruby House,
40A Hardwick Grange
Warrington, WA1 4RF

UKAS TESTING 0955

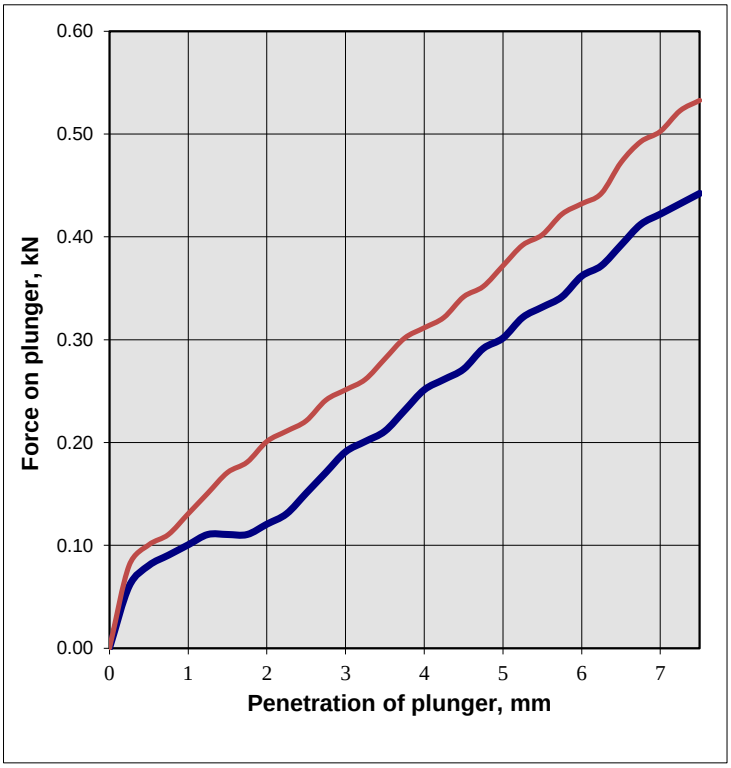
LABORATORY TEST REPORT

DETERMINATION OF CALIFORNIA BEARING RATIO - BS 1377 : Part 4 : 1990

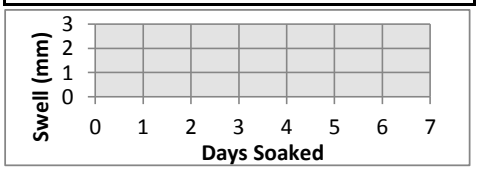
Project :	Burlow Rd, Buxton - Site B	**Job No.**	n/a
Client :	ALM Consult	**Lab Ref No**	SA30854
		Date Received	29/08/2017
		Date Tested	12/09/2017
		Date Reported	18/09/2017

Originator : Keith

Location : TB122



Type of Reaction Load
Load Frame
Technician(s)
Shauna O'Hara
Mass of Surcharge Weights
8.8Kg
Overburden Pressure
3.9kPa
Material Type
Crumbly Brown Silty CLAY
Density (Mg/m³)
1.82
Max Particle Size Under Test Area (mm)
<20



Final Swell (mm):	N/A

Penetration (mm)	Force (kN)	Standard Force (kN)	Top CBR (%)
2.5	0.15	13.2	1.1
5.0	0.30	20.0	1.5

Penetration (mm)	Force (kN)	Standard Force (kN)	Bottom CBR (%)
2.5	0.22	13.2	1.7
5.0	0.37	20.0	1.9
Moisture content : 32%		**Mean Insitu CBR value : 1.6%**	

Moisture content determined in accordance with BS 1377 : Part 2 : 1990 - oven drying method

CBR determined in accordance with BS 1377 : Part 4 : 1990

K.Monks

Approved Signature

R70 R2 WTN

James Fisher Testing Services

❑ Karl Monks, Acting Lab Team Leader

A part of James Fisher and Sons plc Marine Services Worldwide

Appendix J(3)

In Situ Soakaway Test Results
ALM (2017) Investigation

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365: 1991

Client:	**Barratt Homes Manchester**
Job Name:	**Burlow Road, Buxton - SITE B**
Job No.:	**30156**

Trial Pit No.	**SAB1**
Test No.	**1**

Time	Elpsed Time	Depth to water form ground level	
	(min)	(m)	(mm)
	0	1.48	1480
	1	1.50	1500

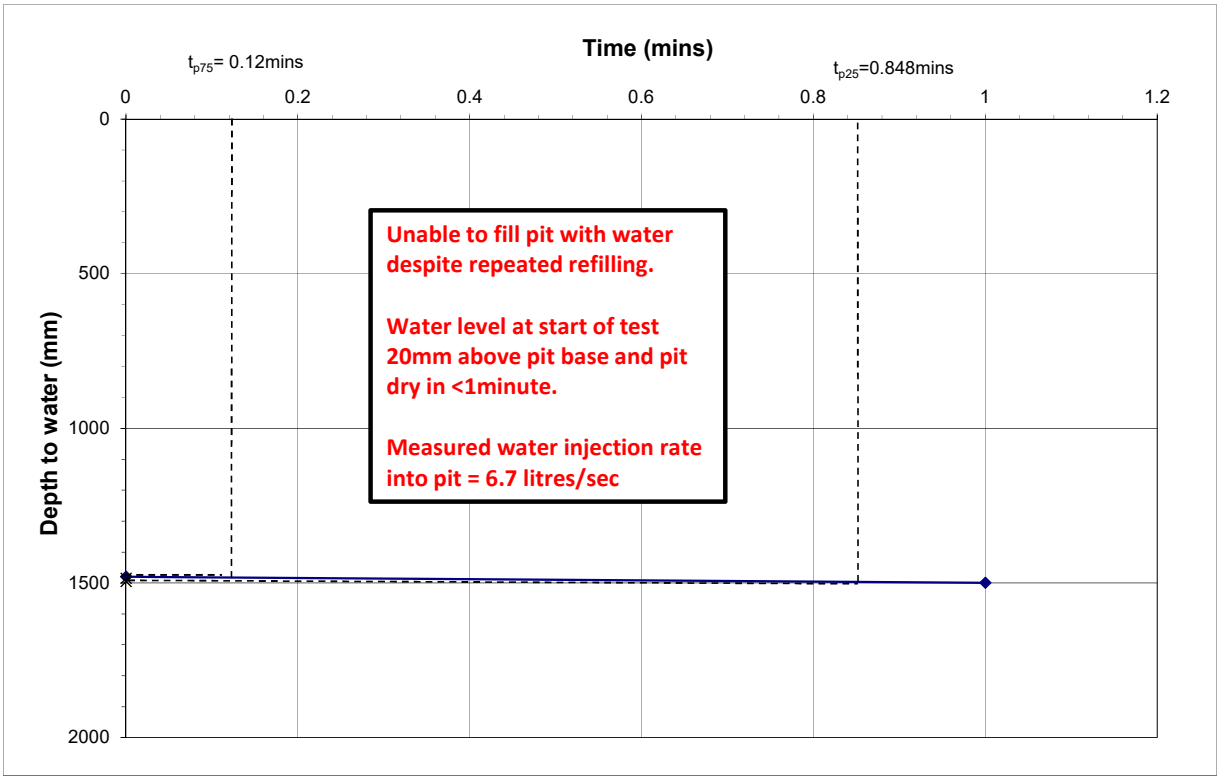
SOAKAWAY TRIAL PIT			
Dimensions		(m)	(mm)
Length	=	1.80	1800
Width	=	0.70	700
Depth	=	1.50	1500

Effective Depth (empty)		mm	m
75%	=	1495.00	1.495
50%	=	1490.00	1.49
25%	=	1485.00	1.85

Depth at start of test (mm)	=	1480
Depth at end of test (mm)	=	1500

Base area of pit	=	1.26
a_{p50} - 50% internal surface area inc. base	=	-0.515
V_{p75-25} - Volume 75 - 25%	=	-0.4473

Read from the graph:		
$t_{p\ 75}$ (min)	=	0.12
$t_{p\ 25}$ (min)	=	0.848



Soil infiltration rate, f, (m/s) =	**1.99E-02**	**(normal test)**
Soil infiltration rate, f, (m/s) =	***5.97E-03***	***(pit filled with stone)***

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365: 1991

Client:	**Barratt Homes Manchester**
Job Name:	**Burlow Road, Buxton - SITE B**
Job No.:	**30156**

Trial Pit No.	**SAB2**
Test No.	**1**

Time	Elpsed Time	Depth to water form ground level	
	(min)	(m)	(mm)
	0	0.42	420
	1	0.47	470
	2	0.52	520
	3	0.56	560
	4	0.60	600
	5	0.63	630
	7	0.68	680
	12	0.77	770
	17	0.86	860
	22	0.93	930
	27	0.99	990
	37	1.11	1110
	42	1.22	1220
	47	1.30	1300

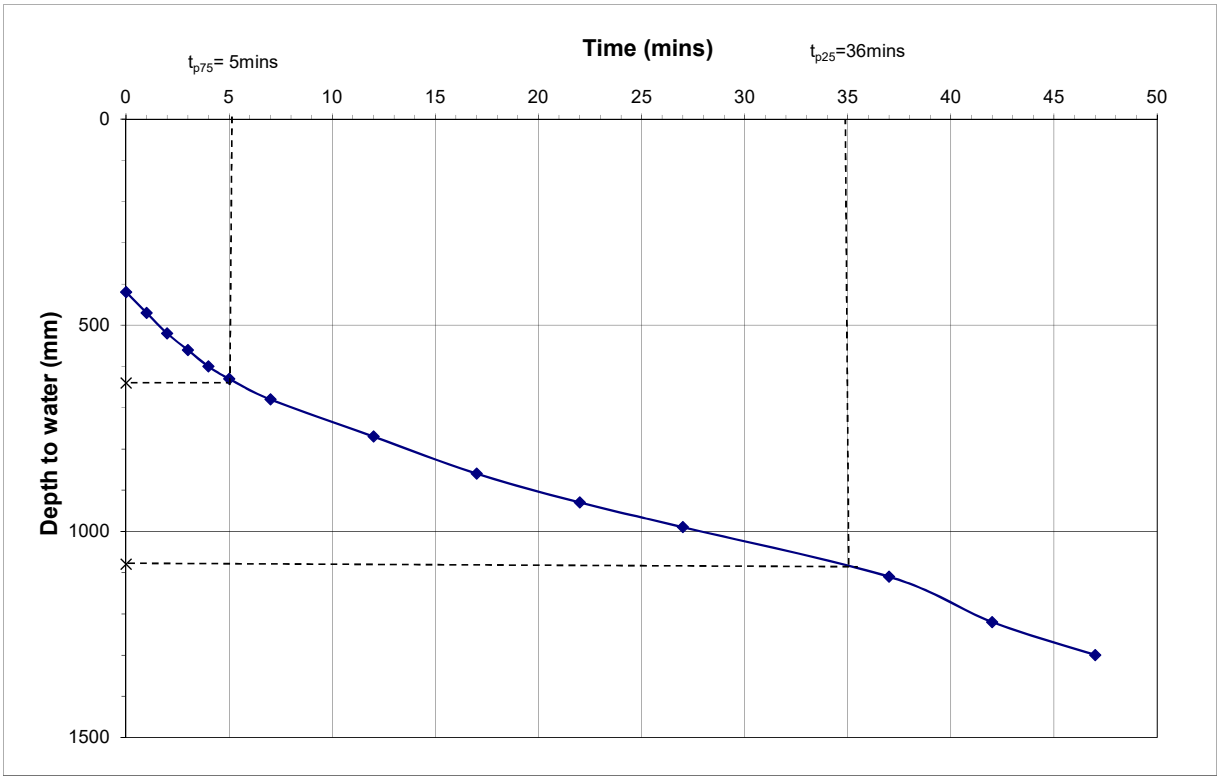
SOAKAWAY TRIAL PIT			
Dimensions		(m)	(mm)
Length	=	2.10	2100
Width	=	0.77	770
Depth	=	1.30	1300

Effective Depth (empty)		mm	m
75%	=	1080.00	1.08
50%	=	860.00	0.86
25%	=	640.00	0.64

Depth at start of test (mm)	=	420
Depth at end of test (mm)	=	1300

Base area of pit	=	1.617
a_{p50} - 50% internal surface area inc. base	=	4.1426
V_{p75-25} - Volume 75 - 25%	=	0.71148

Read from the graph:		
$t_{p\ 75}$ (min)	=	5
$t_{p\ 25}$ (min)	=	35



Soil infiltration rate, f, (m/s) =	**9.54E-05**	**(normal test)**
Soil infiltration rate, f, (m/s) =	***2.86E-05***	***(pit filled with stone)***

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365: 1991

Client:	**Barratt Homes Manchester**
Job Name:	**Burlow Road, Buxton - SITE B**
Job No.:	**30156**

Trial Pit No.	**SAB2**
Test No.	**2**

Time	Elpsed Time	Depth to water form ground level	
	(min)	(m)	(mm)
	0	0.38	380
	1	0.44	440
	2	0.50	500
	3	0.55	550
	4	0.60	600
	5	0.64	640
	6	0.67	670
	7	0.71	710
	8	0.75	750
	10	0.80	800
	15	0.87	870
	20	0.92	920
	25	0.98	980
	30	1.04	1040
	40	1.12	1120
	50	1.19	1190
	60	1.25	1250
	70	1.30	1300

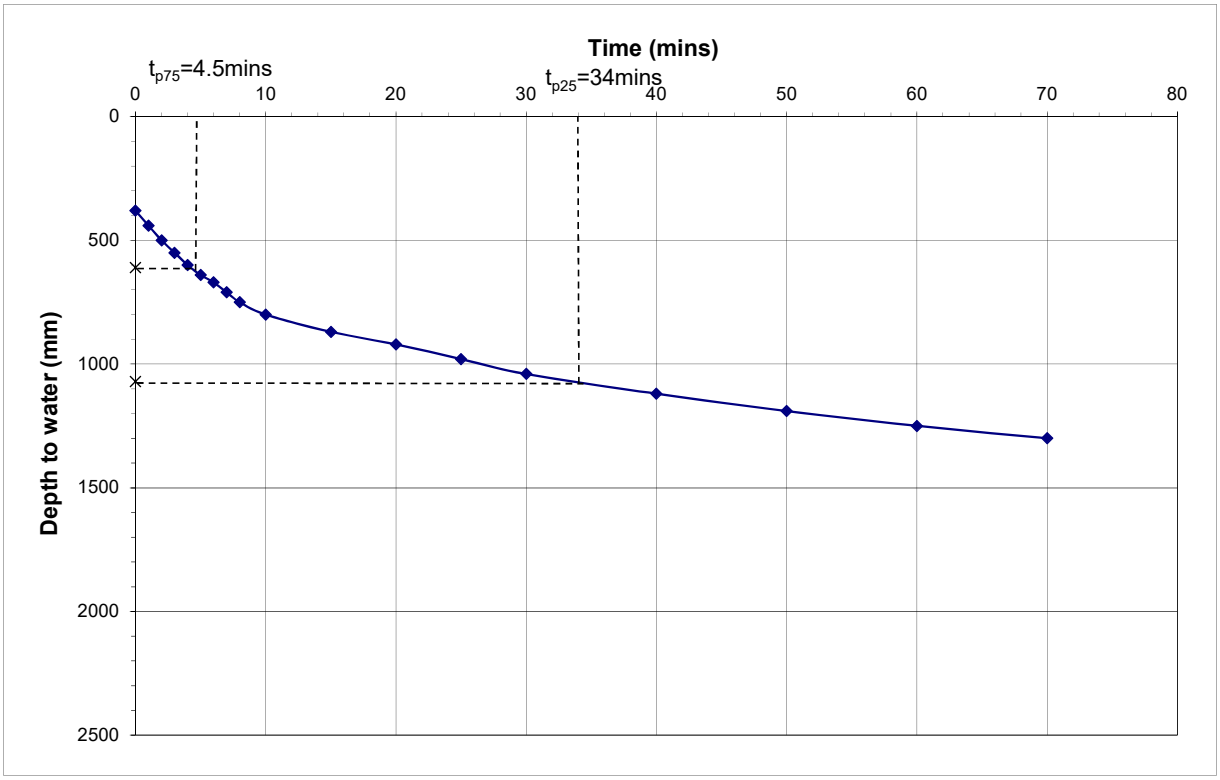
SOAKAWAY TRIAL PIT			
Dimensions		(m)	(mm)
Length	=	2.10	2100
Width	=	0.77	770
Depth	=	1.30	1300

Effective depth (empty)		mm	m
75%	=	1070.00	1.07
50%	=	840.00	0.84
25%	=	610.00	0.61

Depth at start of test (mm)	=	574
Depth at end of test (mm)	=	1022

Base area of pit	=	1.617
a_{p50} - 50% internal surface area inc. base	=	4.2574
V_{p75-25} - Volume 75 - 25%	=	0.74382

Read from the graph:		
$t_{p\,75}$ (min)	=	4.5
$t_{p\,25}$ (min)	=	34



Soil infiltration rate, f, (m/s) =	**9.87E-05**	**(normal test)**
Soil infiltration rate, f, (m/s) =	***2.96E-05***	***(pit filled with stone)***