

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 35020.6.1.5

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	4.98	3.76	3.51	0.00	0.00	0.00	0.00
8.0	49.4	4.73	3.51	3.25	0.25	0.25	0.26	0.25
11.0	68.5	4.48	3.24	3.01	0.50	0.52	0.50	0.51
14.1	87.5	4.21	2.98	2.76	0.77	0.78	0.75	0.77
17.2	106.5	3.95	2.72	2.50	1.03	1.04	1.01	1.03
21.8	135.1	3.71	2.45	2.23	1.27	1.31	1.28	1.29
24.8	154.1	3.45	2.20	1.98	1.53	1.56	1.53	1.54
27.9	173.2	3.19	1.95	1.73	1.79	1.81	1.78	1.79
31.0	192.2	2.95	1.69	1.48	2.03	2.07	2.03	2.04

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
19-Mar-18



0927

Report Format: STP S8 rev.1

Northdown House, Ashford Road
Harrietsham, Nr Maidstone
Kent ME17 1QW

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CET is the trading name for CET Structures Limited.
Registered in England No. 02527130

Report version 1

Page 2 of 2

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Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 35020.6.1.5

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

16/03/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Matt Arnold

SITE:

Pump Lane, Southall

LOCATION:

B2-L11/4Y

MATERIAL:

Brown Stabilised Gravelly Clay

Equipment Details

Average Bearing Pressure

Estimated C.B.R Value

Type of Kentledge: 13T Roller
Plate Diameter: 453 mm
Plate Area: 0.161171 m²
Plate Correction: 0.65

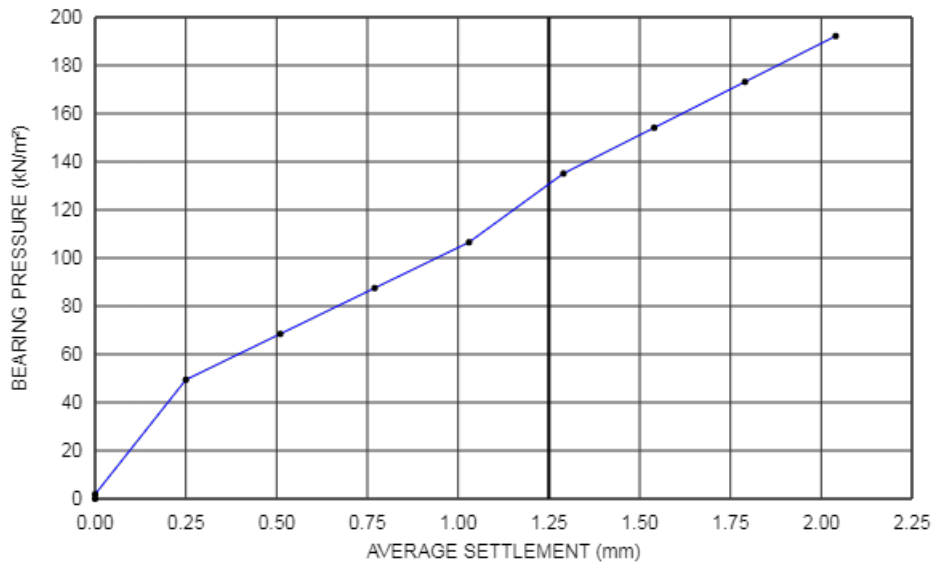
Average Bearing Pressure (P) at 1.25mm penetration

P = 131 kN / m²

Estimated C.B.R at 1.25mm penetration

Estimated C.B.R = 14 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 14 %

Remarks:

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392872 / 35020.6.1.5

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	4.98	3.76	3.51	0.00	0.00	0.00	0.00
8.0	49.4	4.73	3.51	3.25	0.25	0.25	0.26	0.25
11.0	68.5	4.48	3.24	3.01	0.50	0.52	0.50	0.51
14.1	87.5	4.21	2.98	2.76	0.77	0.78	0.75	0.77
17.2	106.5	3.95	2.72	2.50	1.03	1.04	1.01	1.03
21.8	135.1	3.71	2.45	2.23	1.27	1.31	1.28	1.29
24.8	154.1	3.45	2.20	1.98	1.53	1.56	1.53	1.54
27.9	173.2	3.19	1.95	1.73	1.79	1.81	1.78	1.79
31.0	192.2	2.95	1.69	1.48	2.03	2.07	2.03	2.04

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
19-Mar-18



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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33168.6.1.5

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

15/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

James Harrison

SITE:

Pump Lane, Southall

LOCATION:

B-I1/4xx

MATERIAL:

Stabilised Brown clay and gravel

Equipment Details

Average Bearing Pressure

Estimated C.B.R Value

Type of Kentledge: 360
Plate Diameter: 450 mm
Plate Area: 0.159043 m²
Plate Correction: 0.64

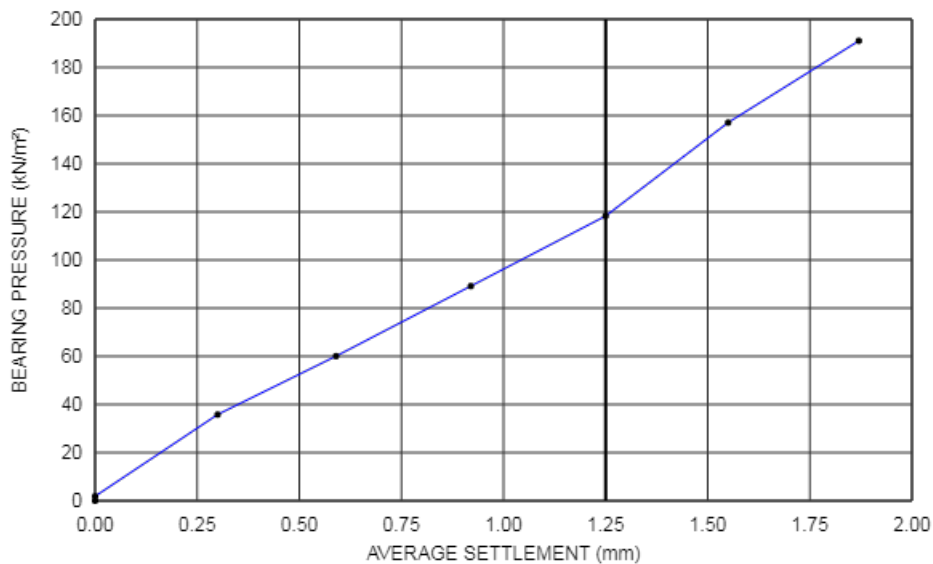
Average Bearing Pressure (P) at 1.25mm penetration

P = 119 kN / m²

Estimated C.B.R at 1.25mm penetration

Estimated C.B.R = 12 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 12 %

Remarks:

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Page 1 of 2

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Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33168.6.1.5

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	21.08	11.94	9.98	0.00	0.00	0.00	0.00
5.7	35.8	20.84	11.63	9.64	0.24	0.31	0.34	0.30
9.6	60.1	20.56	11.34	9.34	0.52	0.60	0.64	0.59
14.2	89.2	20.21	11.03	9.01	0.87	0.91	0.97	0.92
18.8	118.3	19.89	10.69	8.68	1.19	1.25	1.30	1.25
25.0	157.1	19.61	10.38	8.37	1.47	1.56	1.61	1.55
30.4	191.0	19.33	10.04	8.02	1.75	1.90	1.96	1.87

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
15-Feb-18



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Page 2 of 2

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Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33168.6.1.6

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

15/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

James Harrison

SITE:

Pump Lane, Southall

LOCATION:

B-I2/4yy

MATERIAL:

Stabilised Brown clay with gravel

Equipment Details

Average Bearing Pressure

Estimated C.B.R Value

Type of Kentledge: 360
Plate Diameter: 450 mm
Plate Area: 0.159043 m²
Plate Correction: 0.64

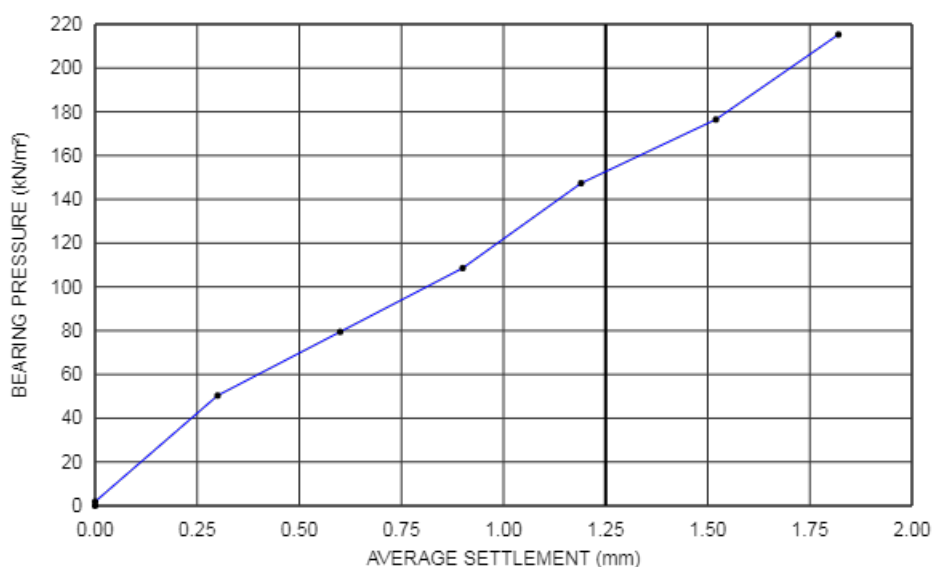
Average Bearing Pressure (P) at 1.25mm penetration

P = 153 kN / m²

Estimated C.B.R at 1.25mm penetration

Estimated C.B.R = 19 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 19 %

Remarks:

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Page 1 of 2

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Estimation of California Bearing Ratio

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REPORT NUMBER:

392872 / 33168.6.1.6

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	18.98	17.11	14.43	0.00	0.00	0.00	0.00
8.0	50.4	18.71	16.81	14.09	0.27	0.30	0.34	0.30
12.6	79.5	18.43	16.49	13.81	0.55	0.62	0.62	0.60
17.3	108.6	18.11	16.20	13.52	0.87	0.91	0.91	0.90
23.4	147.4	17.86	15.88	13.21	1.12	1.23	1.22	1.19
28.1	176.5	17.55	15.49	12.92	1.43	1.62	1.51	1.52
34.2	215.3	17.29	15.16	12.60	1.69	1.95	1.83	1.82

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
15-Feb-18



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Page 2 of 2

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Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33168.6.1.7

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

15/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

James Harrison

SITE:

Pump Lane, Southall

LOCATION:

B-12/4yy

MATERIAL:

Stabilised Brown clay with gravel

Equipment Details

Average Bearing Pressure

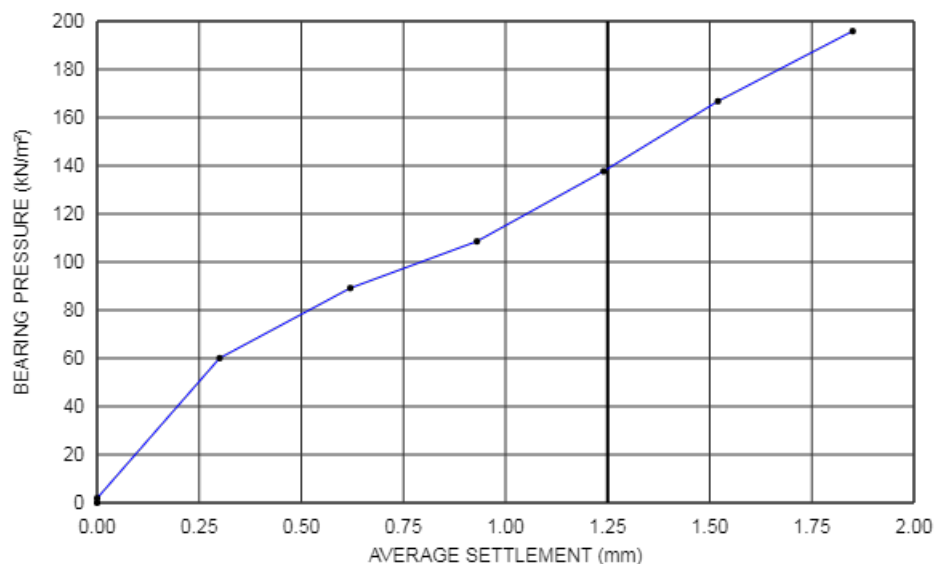
Estimated C.B.R Value

Type of Kentledge: 360
Plate Diameter: 450 mm
Plate Area: 0.159043 m²
Plate Correction: 0.64

Average Bearing Pressure (P) at 1.25mm penetration
P = 139 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 16 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 16 %

Remarks:

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Page 1 of 2

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REPORT NUMBER:

392872 / 33168.6.1.7

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	15.52	12.24	9.85	0.00	0.00	0.00	0.00
9.6	60.1	15.21	11.91	9.58	0.31	0.33	0.27	0.30
14.2	89.2	14.91	11.62	9.21	0.61	0.62	0.64	0.62
17.3	108.6	14.60	11.29	8.93	0.92	0.95	0.92	0.93
21.9	137.7	14.28	11.01	8.61	1.24	1.23	1.24	1.24
26.5	166.8	14.00	10.68	8.38	1.52	1.56	1.47	1.52
31.2	195.9	13.68	10.28	8.11	1.84	1.96	1.74	1.85

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
15-Feb-18



0927

Report Format: STP S8 rev.1

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33258.6.1.1

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

16/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Matt Arnold

SITE:

Pump Lane, Southall

LOCATION:

B-L3/4XX

MATERIAL:

Brown Gravelly Stabilised Clay

Equipment Details

Average Bearing Pressure

Estimated C.B.R Value

Type of Kentledge: 13.5T 360
Plate Diameter: 453 mm
Plate Area: 0.161171 m²
Plate Correction: 0.65

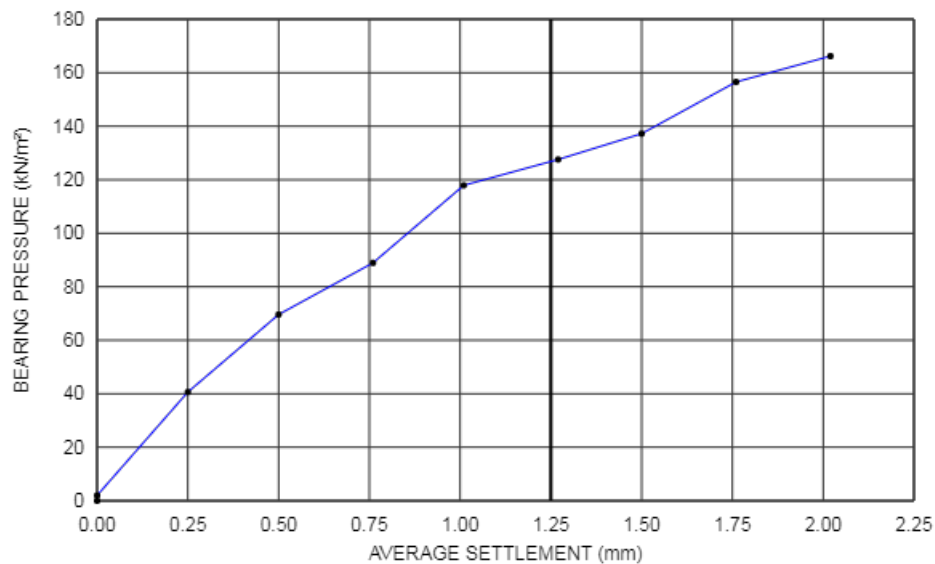
Average Bearing Pressure (P) at 1.25mm penetration

P = 127 kN / m²

Estimated C.B.R at 1.25mm penetration

Estimated C.B.R = 14 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 14 %

Remarks:

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Page 1 of 2

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Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33258.6.1.1

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	9.74	8.49	6.00	0.00	0.00	0.00	0.00
6.5	40.6	9.48	8.24	5.76	0.26	0.25	0.24	0.25
11.2	69.6	9.23	7.98	5.51	0.51	0.51	0.49	0.50
14.3	88.9	8.98	7.72	5.25	0.76	0.77	0.75	0.76
19.0	117.9	8.72	7.47	5.00	1.02	1.02	1.00	1.01
20.6	127.6	8.47	7.22	4.74	1.27	1.27	1.26	1.27
22.1	137.2	8.25	6.98	4.49	1.49	1.51	1.51	1.50
25.2	156.5	7.98	6.72	4.24	1.76	1.77	1.76	1.76
26.8	166.2	7.73	6.46	3.98	2.01	2.03	2.02	2.02

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
20-Feb-18



0927

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33349.6.1.1

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

17/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Lee Honey

SITE:

Pump Lane, Southall

LOCATION:

B-L4/4YY

MATERIAL:

Stabilised Brown Clay and Gravel

Equipment Details

Average Bearing Pressure

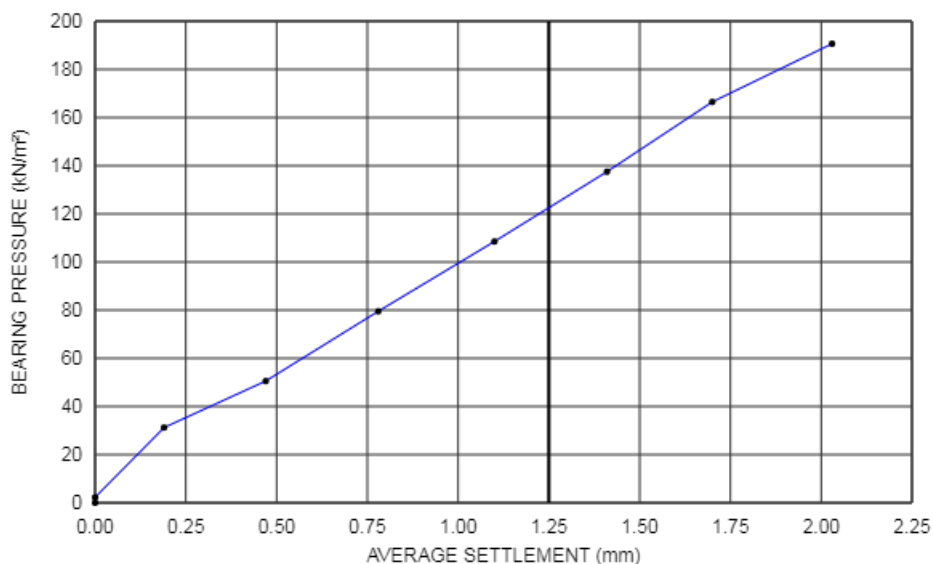
Estimated C.B.R Value

Type of Kentledge: 360/20 Ton
Plate Diameter: 455 mm
Plate Area: 0.162597 m²
Plate Correction: 0.65

Average Bearing Pressure (P) at 1.25mm penetration
P = 123 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 13 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 13 %

Remarks:

Report Format: STP S8 rev.1

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Kent ME17 1QW

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Page 1 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33349.6.1.1

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	24.11	24.02	24.31	0.00	0.00	0.00	0.00
5.1	31.2	23.94	23.76	24.18	0.17	0.26	0.13	0.19
8.2	50.5	23.62	23.50	23.92	0.49	0.52	0.39	0.47
12.9	79.5	23.27	23.23	23.59	0.84	0.79	0.72	0.78
17.6	108.5	22.94	22.99	23.21	1.17	1.03	1.10	1.10
22.4	137.5	22.52	22.74	22.96	1.59	1.28	1.35	1.41
27.1	166.5	22.18	22.47	22.68	1.93	1.55	1.63	1.70
31.0	190.6	21.85	22.20	22.30	2.26	1.82	2.01	2.03

Remarks:

For and on behalf of CETi
Phil Mayhew - Contracts Supervisor



Approved Signatory
19-Feb-18



0927

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33349.6.1.2

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

17/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Lee Honey

SITE:

Pump Lane, Southall

LOCATION:

B-L5/4XX

MATERIAL:

Stabilised Brown Clay and Gravel

Equipment Details

Average Bearing Pressure

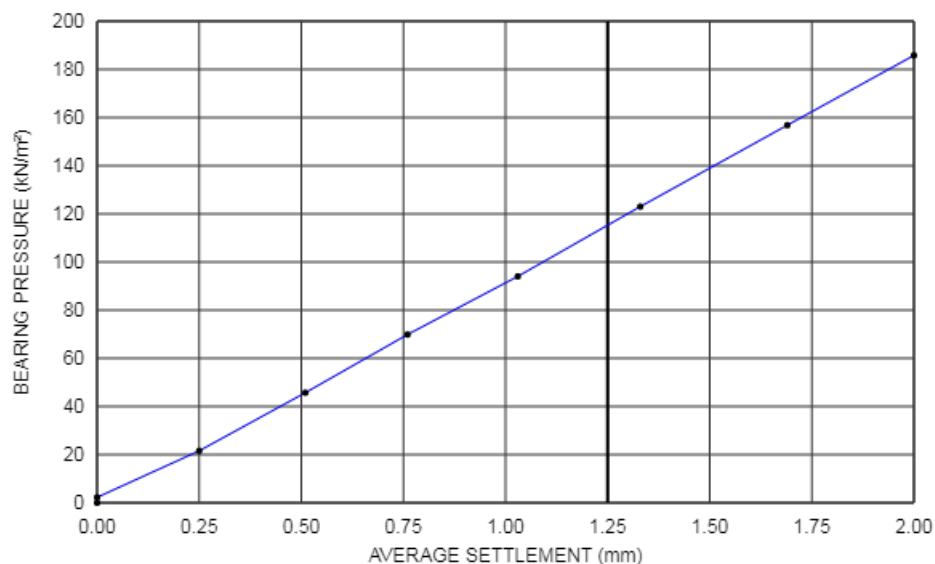
Estimated C.B.R Value

Type of Kentledge: 360/20 Ton
Plate Diameter: 455 mm
Plate Area: 0.162597 m²
Plate Correction: 0.65

Average Bearing Pressure (P) at 1.25mm penetration
P = 115 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 12 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 12 %

Remarks:

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REPORT NUMBER:

392872 / 33349.6.1.2

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	24.35	24.14	24.02	0.00	0.00	0.00	0.00
3.5	21.6	24.08	23.95	23.74	0.27	0.19	0.28	0.25
7.4	45.7	23.81	23.69	23.49	0.54	0.45	0.53	0.51
11.4	69.9	23.58	23.44	23.22	0.77	0.70	0.80	0.76
15.3	94.0	23.25	23.19	22.97	1.10	0.95	1.05	1.03
20.0	123.0	22.94	22.94	22.65	1.41	1.20	1.37	1.33
25.5	156.8	22.49	22.66	22.30	1.86	1.48	1.72	1.69
30.2	185.8	22.17	22.37	21.98	2.18	1.77	2.04	2.00

Remarks:

For and on behalf of CETi
Phil Mayhew - Contracts Supervisor



Approved Signatory
19-Feb-18



0927

Report Format: STP S8 rev.1

Northdown House, Ashford Road
Harrietsham, Nr Maidstone
Kent ME17 1QW

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CET is the trading name for CET Structures Limited.
Registered in England No. 02527130

Report version 1

Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33348.6.1.4

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

19/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Matt Arnold

SITE:

Pump Lane, Southall

LOCATION:

B-L6/4YY

MATERIAL:

Brown Stabilised Clay w/Gravel

Equipment Details

Average Bearing Pressure

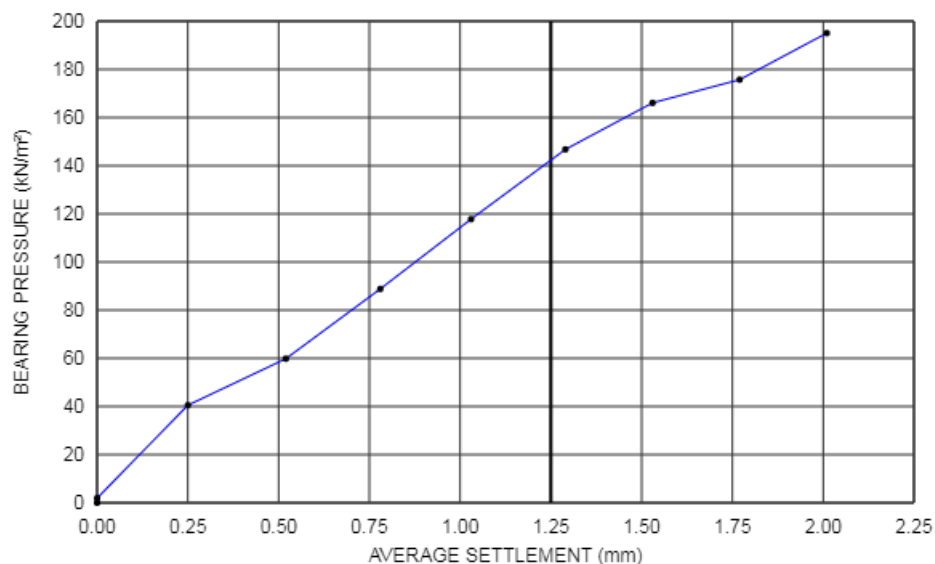
Estimated C.B.R Value

Type of Kentledge: 13.5T 360
Plate Diameter: 453 mm
Plate Area: 0.161171 m²
Plate Correction: 0.65

Average Bearing Pressure (P) at 1.25mm penetration
P = 143 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 17 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 17 %

Remarks:

Report Format: STP S8 rev.1

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TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33348.6.1.4

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	4.96	6.49	8.74	0.00	0.00	0.00	0.00
6.5	40.5	4.71	6.24	8.48	0.25	0.25	0.26	0.25
9.6	59.8	4.45	5.97	8.22	0.51	0.52	0.52	0.52
14.3	88.8	4.19	5.71	7.96	0.77	0.78	0.78	0.78
19.0	117.8	3.94	5.46	7.71	1.02	1.03	1.03	1.03
23.7	146.8	3.69	5.19	7.45	1.27	1.30	1.29	1.29
26.8	166.1	3.44	4.96	7.19	1.52	1.53	1.55	1.53
28.3	175.8	3.20	4.72	6.96	1.76	1.77	1.78	1.77
31.4	195.1	2.94	4.50	6.71	2.02	1.99	2.03	2.01

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
20-Feb-18



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Report Format: STP S8 rev.1

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33349.6.1.3

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

17/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Lee Honey

SITE:

Pump Lane, Southall

LOCATION:

C1-L1/4XX

MATERIAL:

Stabilised Brown Clay and Gravel

Equipment Details

Average Bearing Pressure

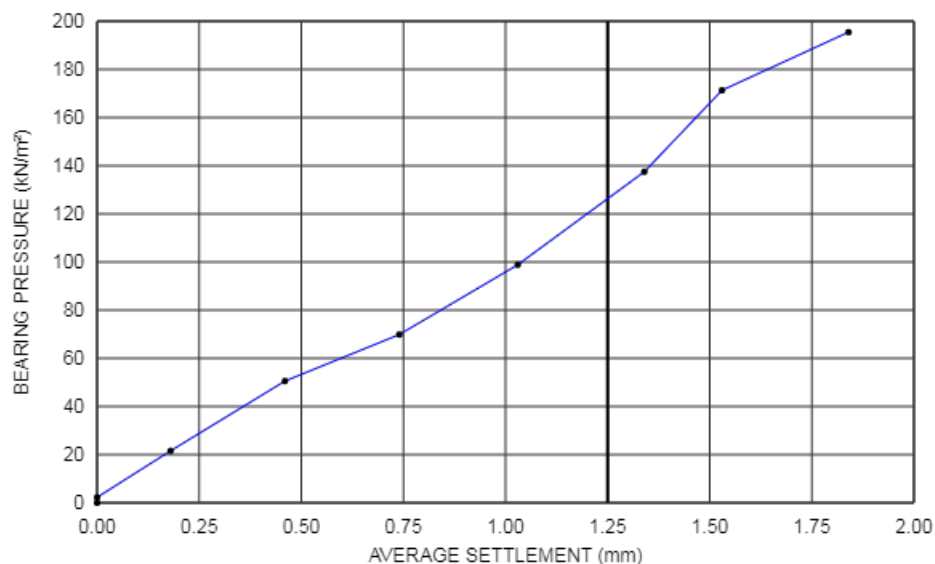
Estimated C.B.R Value

Type of Kentledge: 360/20 Ton
Plate Diameter: 455 mm
Plate Area: 0.162597 m²
Plate Correction: 0.65

Average Bearing Pressure (P) at 1.25mm penetration
P = 127 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 14 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 14 %

Remarks:

Report Format: STP S8 rev.1

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Page 1 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33349.6.1.3

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	24.55	24.01	24.24	0.00	0.00	0.00	0.00
3.5	21.6	24.42	23.75	24.10	0.13	0.26	0.14	0.18
8.2	50.5	24.15	23.49	23.77	0.40	0.52	0.47	0.46
11.4	69.9	23.83	23.25	23.49	0.72	0.76	0.75	0.74
16.1	98.9	23.51	22.99	23.21	1.04	1.02	1.03	1.03
22.4	137.5	23.19	22.73	22.87	1.36	1.28	1.37	1.34
27.9	171.3	22.96	22.76	22.49	1.59	1.25	1.75	1.53
31.8	195.5	22.63	22.48	22.17	1.92	1.53	2.07	1.84

Remarks:

For and on behalf of CETi
Phil Mayhew - Contracts Supervisor



Approved Signatory
19-Feb-18



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Report Format: STP S8 rev.1

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

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REPORT NUMBER:

392872 / 33348.6.1.3

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

19/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Matt Arnold

SITE:

Pump Lane, Southall

LOCATION:

L1-L2/4XX

MATERIAL:

Brown Stabilised Clay w/gravel

Equipment Details

Average Bearing Pressure

Estimated C.B.R Value

Type of Kentledge: 13.5T 360
Plate Diameter: 453 mm
Plate Area: 0.161171 m²
Plate Correction: 0.65

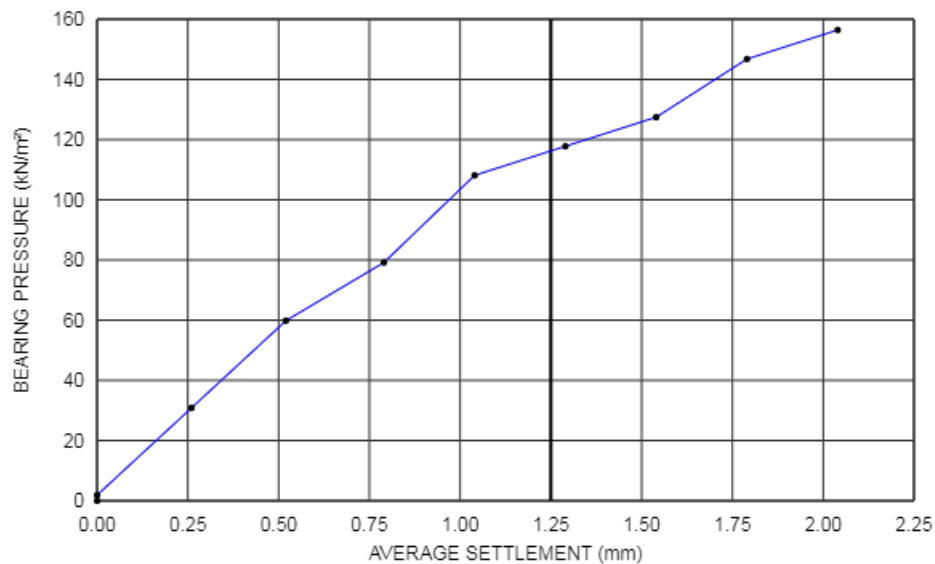
Average Bearing Pressure (P) at 1.25mm penetration

P = 116 kN / m²

Estimated C.B.R at 1.25mm penetration

Estimated C.B.R = 12 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 12 %

Remarks:

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Page 1 of 2

TEST REPORT:

Estimation of California Bearing Ratio

Tested in accordance with BS 1377-9 : 1990 & Design Manual for Roads and Bridges Vol. 7, Sect. 2 HD 25-94

REPORT NUMBER:

392872 / 33348.6.1.3

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	6.98	4.53	9.24	0.00	0.00	0.00	0.00
5.0	30.8	6.72	4.27	8.98	0.26	0.26	0.26	0.26
9.6	59.8	6.47	4.00	8.72	0.51	0.53	0.52	0.52
12.8	79.1	6.19	3.74	8.46	0.79	0.79	0.78	0.79
17.4	108.1	5.95	3.47	8.20	1.03	1.06	1.04	1.04
19.0	117.8	5.69	3.22	7.96	1.29	1.31	1.28	1.29
20.5	127.4	5.45	2.98	7.70	1.53	1.55	1.54	1.54
23.7	146.8	5.21	2.72	7.44	1.77	1.81	1.80	1.79
25.2	156.4	4.95	2.48	7.20	2.03	2.05	2.04	2.04

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
20-Feb-18



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Report Format: STP S8 rev.1

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Page 2 of 2

TEST REPORT:

Estimation of California Bearing Ratio

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REPORT NUMBER:

392872 / 33348.6.1.3

CLIENT REF:

392872

CLIENT:

Cognition Land & Water Ltd

DATE COMPLETED:

19/02/2018

ADDRESS:

Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ

TESTED BY:

Matt Arnold

SITE:

Pump Lane, Southall

LOCATION:

L1-L2/4XX

MATERIAL:

Brown Stabilised Clay w/gravel

Equipment Details

Average Bearing Pressure

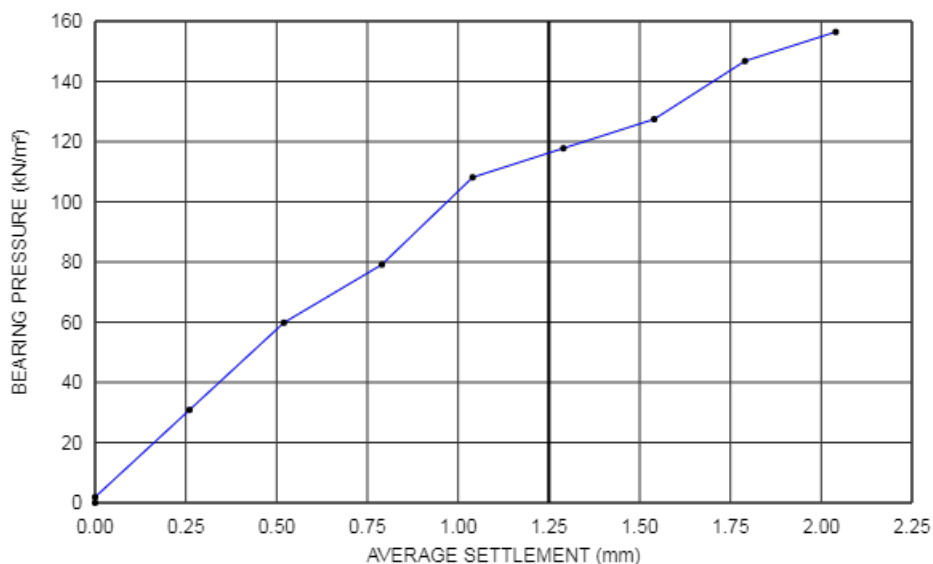
Estimated C.B.R Value

Type of Kentledge: 13.5T 360
Plate Diameter: 453 mm
Plate Area: 0.161171 m²
Plate Correction: 0.65

Average Bearing Pressure (P) at 1.25mm penetration
P = 116 kN / m²

Estimated C.B.R at 1.25mm penetration
Estimated C.B.R = 12 %

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Estimated C.B.R: 12 %

Remarks:

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TEST REPORT:

Estimation of California Bearing Ratio

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REPORT NUMBER:

392872 / 33348.6.1.3

TEST RESULTS

LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.0	0.0	6.98	4.53	9.24	0.00	0.00	0.00	0.00
5.0	30.8	6.72	4.27	8.98	0.26	0.26	0.26	0.26
9.6	59.8	6.47	4.00	8.72	0.51	0.53	0.52	0.52
12.8	79.1	6.19	3.74	8.46	0.79	0.79	0.78	0.79
17.4	108.1	5.95	3.47	8.20	1.03	1.06	1.04	1.04
19.0	117.8	5.69	3.22	7.96	1.29	1.31	1.28	1.29
20.5	127.4	5.45	2.98	7.70	1.53	1.55	1.54	1.54
23.7	146.8	5.21	2.72	7.44	1.77	1.81	1.80	1.79
25.2	156.4	4.95	2.48	7.20	2.03	2.05	2.04	2.04

Remarks:

For and on behalf of CETi
Matt Butt - Operations Supervisor



Approved Signatory
20-Feb-18



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Report Format: STP S8 rev.1

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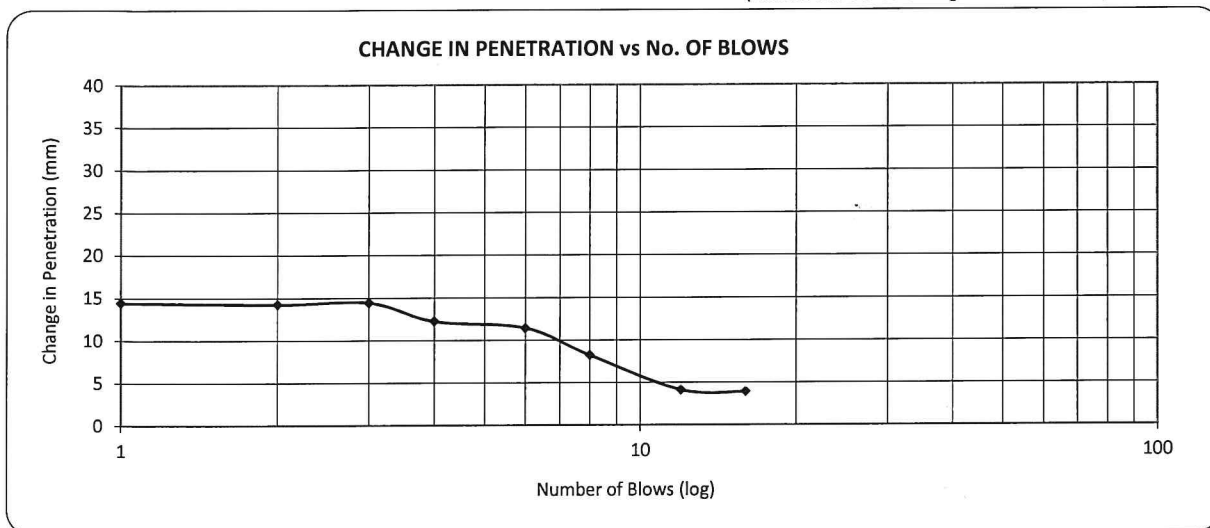
Page 2 of 2

TEST REPORT: DETERMINATION OF MOISTURE CONDITION VALUE (M.C.V.)
BS 1377 Part 4 : 1990 Clause 5.4 - Natural Moisture Content (Site Test)

REPORT No.:	F18-392872-178961-1	CLIENT:	Cognition Land & Water Ltd
SAMPLE No.:	178961/1	ADDRESS:	Springfield House, Oatlands Drive, Weybridge
CLIENT REF:	Trial Pad	SITE:	Pump Lane, Southall
DATE SAMPLED:	08/02/2018	SUPPLIER:	Details Not Supplied
SAMPLED BY:	James Harrison	MATERIAL:	Clay And Gravel
DATE RECEIVED:	09/02/2018	CUT LOCATION:	N/A
DATE TEST COMPLETED:	12/02/2018	FILL LOCATION:	Details Not Supplied
TESTED BY:	JH/RB	CERTIFICATE OF SAMPLING:	Not Available
ORIENTATION OF TEST SPECIMEN		VARIATIONS FROM STANDARD:	None
WITHIN ORIGINAL SAMPLE:	N/A	TYPE OF SAMPLE:	Disturbed

RESULTS:

MOISTURE CONDITION VALUE	:	10.4
NATURAL MOISTURE CONTENT (%)	:	17
PERCENTAGE RETAINED 20mm (%)	:	7.4
INTERPRETATION OF CURVE	:	Steepest straight line
PREPARATION METHOD	:	BS 1377: Part 4: 1990 clause 5.4 (Natural and sieved through 20mm test sieve)



REMARKS:

Remaining sample will be retained for a minimum of 28 days from date of report.

Page 1 of 1
Report Format: L/Rep S10a rev.3

For and on behalf of CET

Approved Signatory
12-Feb-18

John Newbery - Laboratory Manager
Matt Oliver - Site Manager
Adrian McGilvery - Senior Technician
Chris Davidson - Laboratory Supervisor
Phil Mayhew - Operations Supervisor

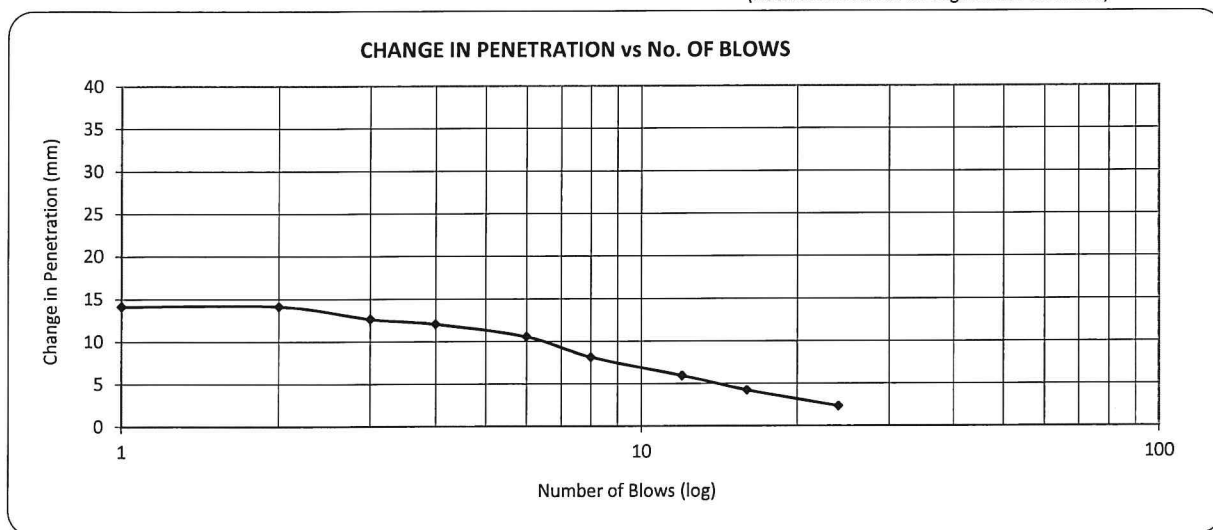


TEST REPORT: DETERMINATION OF MOISTURE CONDITION VALUE (M.C.V.)
BS 1377 Part 4 : 1990 Clause 5.4 - Natural Moisture Content (Site Test)

REPORT No.:	F18-392872-178962-1	CLIENT:	Cognition Land & Water Ltd
SAMPLE No.:	178962/1	ADDRESS:	Springfield House, Oatlands Drive, Weybridge
CLIENT REF:	Trial Pad	SITE:	Pump Lane, Southall
DATE SAMPLED:	09/02/2018	SUPPLIER:	Details Not Supplied
SAMPLED BY:	Lee Honey	MATERIAL:	Clay And Gravel
DATE RECEIVED:	09/02/2018	CUT LOCATION:	N/A
DATE TEST COMPLETED:	12/12/2018	FILL LOCATION:	Details Not Supplied
TESTED BY:	LH/RB	CERTIFICATE OF SAMPLING:	Not Available
ORIENTATION OF TEST SPECIMEN		VARIATIONS FROM STANDARD:	None
WITHIN ORIGINAL SAMPLE:	N/A	TYPE OF SAMPLE:	Disturbed

RESULTS:

MOISTURE CONDITION VALUE	:	10.0
NATURAL MOISTURE CONTENT (%)	:	8.6
PERCENTAGE RETAINED 20mm (%)	:	4.3
INTERPRETATION OF CURVE	:	Steepest straight line
PREPARATION METHOD	:	BS 1377: Part 4: 1990 clause 5.4 (Natural and sieved through 20mm test sieve)



REMARKS:

Remaining sample will be retained for a minimum of 28 days from date of report.

Page 1 of 1
Report Format: L/Rep S10a rev.3

For and on behalf of CET

Approved Signatory
12-Feb-18

John Newbery - Laboratory Manager
Matt Oliver - Site Manager
Adrian McGilvery - Senior Technician
Chris Davidson - Laboratory Supervisor
Phil Mayhew - Operations Supervisor

