

APPENDIX E

Site Won Fill Material Acceptability Testing

TEST REPORT:

REPORT NUMBER:

SAMPLE NUMBER:

CLIENT REF:

DATE SAMPLED:

SAMPLED BY:

DATE RECEIVED:

DATE COMPLETED:

TESTED BY:

TYPE OF SAMPLE:

VARIATIONS:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & MOISTURE CONTENT

BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving and BS 1377 2 : 1990, Method 3.2

C1055642 / 170938.4.1.1

CLIENT:

ADDRESS:

SITE:

SUPPLIER:

MATERIAL:

CLASSIFICATION:

LOCATION:

PREPARATION METHOD:

SAMPLING PLAN:

Collins Earthworks Limited

Whiteley Road, Ripley, Derbyshire, DE5 3QL

Havant, Portsmouth

On site , Situ

Clay/ballast mix

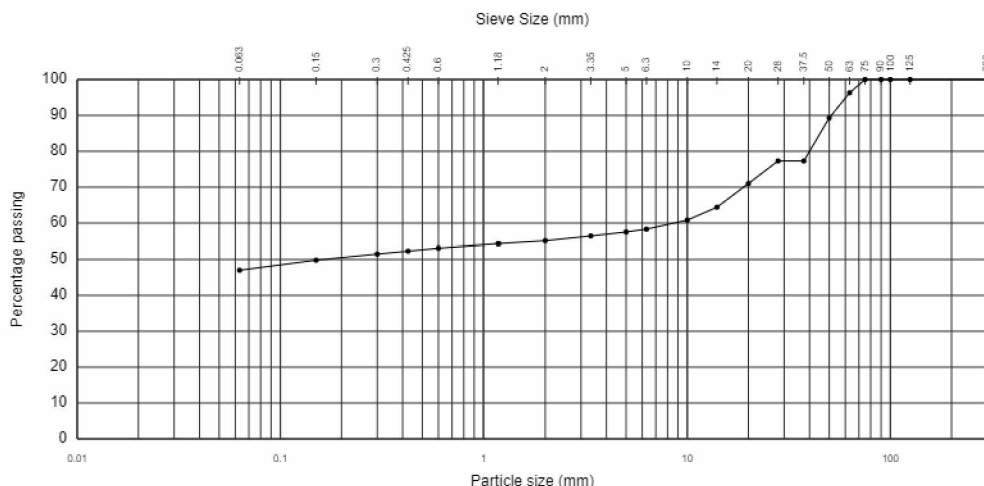
Class 2C

Stockpile

BS 1377:Part 1:1990 clause 7.3 & 7.4.5

Client Specification

RESULT Test Location: Harrietsham Lab



SIEVE ANALYSYS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	100 - 100
100	100	
90	100	
75	100	
63	96	
50	89	
37.5	77	
28	77	
20	71	
14	64	
10	61	
6.3	58	
5	58	
3.35	56	
2	55	15 - 80
1.18	54	
0.6	53	
0.425	52	
0.3	52	
0.15	50	
0.063	47	15 - 80

Class 2C - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 2C

Uniformity Coefficient (D60/D10) N/A

Percentage passing 63µm > 10% therefore uniformity coefficient is estimated minimum.

Sample complies with the grading specification

Moisture content: 14%

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

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For and on behalf of CTS

Mike Gray - Laboratory Supervisor

Approved Signatory

Report date 15-Feb-22

Construction Testing Solutions Ltd.

Registered in England No. 05998333



0927

TEST REPORT:	DETERMINATION OF THE PLASTICITY INDEX OF SOIL		
	BS 1377:Part 2:1990 clause 5.4		
REPORT NUMBER:	C1055642 / 170938.2.1.1		
SAMPLE NUMBER:	262765	CLIENT:	Collins Earthworks Limited
CLIENT REF:	262765	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	27/01/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	On site , Situ
DATE RECEIVED:	01/02/2022	MATERIAL:	Clay/ballast mix Yet to be classified
DATE COMPLETED:	15/02/2022	LOCATION:	Stockpile ,
TESTED BY:	Marilena Decu	PREPARATION METHOD:	BS 1377:Part 1:1990 cl 7.3 & 7.4.3
TYPE OF SAMPLE:	Disturbed	VARIATIONS:	None
WITHIN ORIGINAL SAMPLE:	N/A		

RESULTS:

TEST DETAILS	TEST RESULT	SPECIFICATION LIMITS	
		Lower Limit	Upper Limit
THE LIQUID LIMIT OF THE SAMPLE:	36%	N/A	N/A
THE PLASTIC LIMIT OF THE SAMPLE:	17%	N/A	N/A
THE PLASTICITY INDEX OF THE SAMPLE:	19%		
THE PERCENTAGE PASSING 425µm TEST SIEVE:	52%		
Sample History:	The material was tested after washing through a 425µm test sieve		

Remarks:
 Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.
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For and on behalf of CTS
 Buntu Melamane - Laboratory Training Supervisor



Approved Signatory
 Report date 15-Feb-22



0927

TEST REPORT:
DETERMINATION OF MOISTURE CONDITION VALUE (M.C.V.)

BS 1377 Part 4 : 1990 Clause 5.4 - Natural Moisture Content (Lab Test)

REPORT NUMBER:

C1055642 / 171279.1.1.1

SAMPLE NUMBER:

262765

CLIENT:

Collins Earthworks Limited

CLIENT REF:

262765

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

27/01/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

On site , Situ

DATE RECEIVED:

01/02/2022

MATERIAL:

Clay/ballast mix

DATE COMPLETED:

12/02/2022

FILL LOCATION:

Stockpile

TESTED BY:

EU, KJ

CERTIFICATE OF SAMPLING:

Yes

TYPE OF SAMPLE:

Disturbed

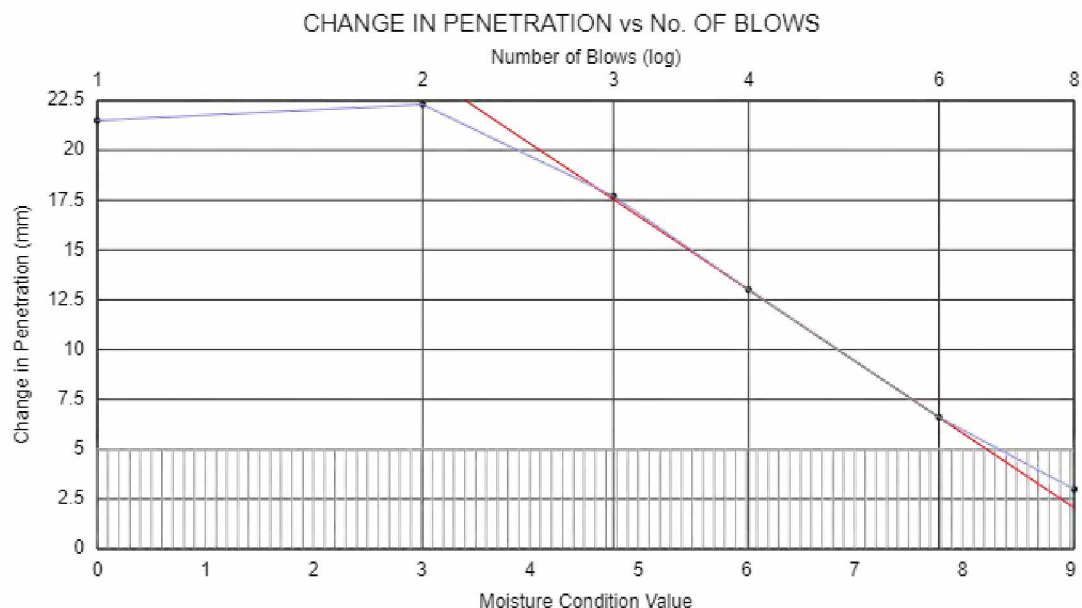
SAMPLING PLAN:

Client Specification

RESULTS

Test Location: Harrietsham Lab

MOISTURE CONDITION VALUE	8.2
NATURAL MOISTURE CONTENT (%)	18
PERCENTAGE RETAINED 20mm (%)	16.6
INTERPRETATION OF CURVE	Steepest straight line
PREPARATION METHOD	BS 1377: Part 4: 1990 clause 5.4 (Natural and sieved through 20mm test sieve)


Remarks:

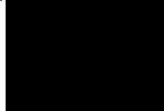
Test results reported relate only to the items tested.

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Hsv 56

For and on behalf of CTS

Dan [Signature] Manager



Approved Signatory

Report date 14-Feb-22



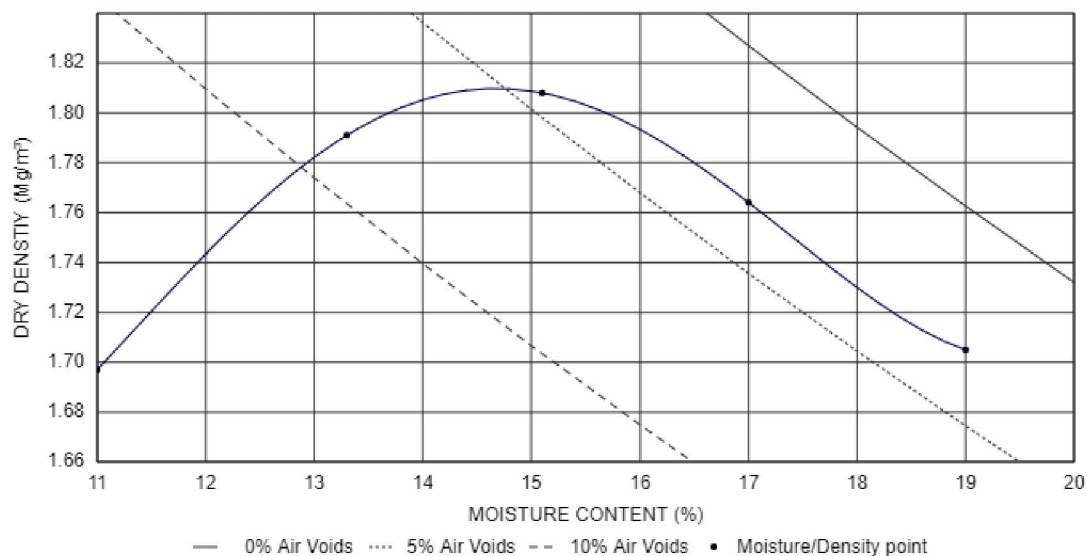
0927

TEST REPORT:	DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP		
	BS 1377:Part 4:1990 clause 3.4 2.5kg Rammer method		
REPORT NUMBER:	C1055642 / 170938.3.1.1		
SAMPLE NUMBER:	262765	CLIENT:	Collins Earthworks Limited
CLIENT REF:	262765	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	27/01/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	On site , Situ
DATE RECEIVED:	01/02/2022	MATERIAL:	Clay/ballast mix
DATE COMPLETED:	15/02/2022	LOCATION:	Stockpile
TESTED BY:	Colin Gourlay	PREPARATION METHOD:	CBR Mould (BS1377:Pt1:1990 Cl7.6.3) : Material chopped to <20mm, for cohesive soil.
TYPE OF SAMPLE:	Disturbed	COMPACTION SAMPLE:	Separate samples
VARIATIONS:	None	SAMPLING PLAN:	Client Specification

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.81 Mg/m³
OPTIMUM MOISTURE CONTENT: 15 %
AMOUNT (By Dry Mass) RETAINED ON >20mm TEST SIEVE: 29 %
AMOUNT (By Dry Mass) RETAINED ON >37.5mm TEST SIEVE: 23 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³

MOISTURE CONTENT / DRY DENSITY RELATIONSHIP



Remarks:
 Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.
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For and on behalf of CTS
 Director/Manager

Approved Signatory
 Report date 16-Feb-22



0927

TEST REPORT:**DETERMINATION OF THE MOISTURE CONTENT OF SOILS**

BS 1377:Part 2:1990 clause 3.2 - oven drying method

REPORT NUMBER: C1055642 / 170938.1.1.1

SAMPLE NUMBER: See Below

CLIENT:

Collins Earthworks Limited

CLIENT REF: See Below

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED: 27/01/2022

SITE:

Havant, Portsmouth

SAMPLED BY: Thomas Cook

SUPPLIER:

On site

DATE RECEIVED: 01/02/2022

SOURCE:

Situ

DATE COMPLETED: 14/02/2022

MATERIAL:

See Below

TESTED BY: Matt Webley

LOCATION:

See Below

TYPE OF SAMPLE: Disturbed

PREPARATION METHOD:

BS 1377-1: 1990 clause 7

TEST RESULT:

SAMPLE NO.	CLIENT REF.	LOCATION OF TEST	MATERIAL DESCRIPTION	MOISTURE CONTENT (%)	LOWER LIMIT	UPPER LIMIT
262765	262765	Stockpile	Clay/ballast mix	14	NA	NA

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

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For and on behalf of CTS

Mike Gray - Laboratory Supervisor



Approved Signatory

Report date 17-Feb-22

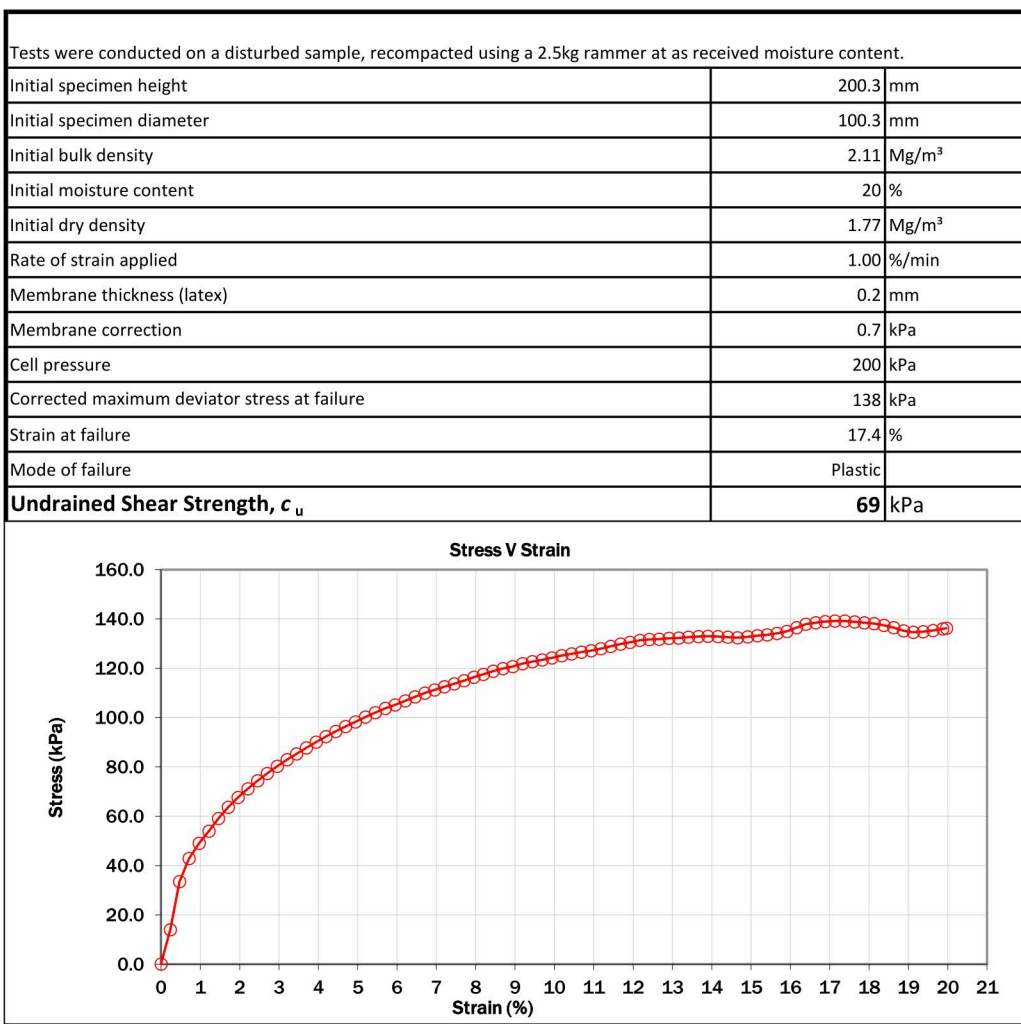


0927

DETERMINATION OF UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT PORE PRESURE MEASUREMENT

BS 1377 : Part 7 : 1990 Clause 8

REPORT No.:	1055642 / 170938.5.1.1	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	262765	ADDRESS:	Whiteley Road
CLIENT REF:	262765	SITE:	Havant, Portsmouth
DATE SAMPLED:	27/01/2022	SUPPLIER:	On site
SAMPLED BY:	Thomas Cook	MATERIAL:	Clay/ballast mix
DATE RECEIVED:	01/02/2022	LOCATION:	Stockpile
DATE TEST COMPLETED:	16/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	JT	ORIENTATION OF TEST SPECIMEN	
TYPE OF SAMPLE:	Remoulded	WITHIN ORIGINAL SPECIMEN:	N/A
IF REMOULDED;			
METHOD OF COMPACTION:	2.5kg rammer		


REMARKS:

Bulk sample will be kept for a minimum 28 days from date of test.
 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the laboratory.

Laboratory Report	260053	Contract Sample No	/260053	 Construction Testing Solutions		
Report Date	28/01/2022	Clients Reference	/260053			
		Material Description	Brown Clay Ballast Material	 Quarry Farm View		
Collins Earthworks Ltd		Date Sampled	19/01/2022			
Whiteley Road		Sampling Plan	CTS Procedure	Bowbridge Lane		
Ripley		Source	Not Stated	Newark		
Derbyshire		Supplier	Not Stated	Notts		
DE5 3QL		Sampled By	CTS	NG24 3BZ		
		Sampling Environment	Not Stated	Tel: (01636) 705100 Web: www.constructiontesting.co.uk		
		Sample Type	Bulk	Email: enquiries@constructiontesting.co.uk		
		Location in sample	Not Stated	Date Received	19/01/2022	
Havant		Sample Location	Routine Cut Finished Formation	Date Tests Completed	28/01/2022	
				TEST REPORT		

Quarry Farm View

Tel: (01636) 705100

Email: enquiries@constructiontesting.co.uk

Date Received

Date Tests Complete

TEST REPORT

Determination of moisture content

Moisture Content

Particle size distribution (wet sieving method) - Tested in accordance with BS 1377: Part 2: 1990 Clause 9.2

Sample prepared in Accordance with BS 1377: Part 1: 2016 clause 8.3.4(a)

[illegible]

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Laboratory Report	260053	Contract Sample No	/260053	 Construction Testing Solutions Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk		
Report Date	28/01/2022	Clients Reference	/260053			
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL Havant	Material Description	Brown Clay Ballast Material				
	Date Sampled	19/01/2022				
	Sampling Plan	CTS Procedure				
	Source	Not Stated				
	Supplier	Not Stated				
	Sampled By	CTS		Tel: (01636) 705100 Web: www.constructiontesting.co.uk		
	Sampling Environment	Not Stated		Email: enquiries@constructiontesting.co.uk		
	Sample Type	Bulk		Date Received	19/01/2022	
	Location in sample	Not Stated		Date Tests Completed	28/01/2022	
Sample Location	Routine Cut Finished Formation		TEST REPORT			
Determination of Plastic Limit, Liquid Limit and Plasticity Index - Tested in Accordance with BS 1377: Part2: 1990 The sample was prepared from a natural soil specimen and in accordance with BS1377: Part 1: 2016: Clause 8.3.4(b)						% Passing Sieve taken from Particle Size Distribution test.
Liquid Limit (BS 1377: Part 2: 1990 Clause 4.4 - One Point)					40 %	
Plastic Limit (BS 1377: Part 2: 1990 Clause 5.3)					19 %	
Plasticity Index (BS 1377: Part 2: 1990 Clause 5.4)					21 %	
Material Passing 425 µm test sieve					25 %	
Material Retained on 425 µm test sieve					75 %	
Determination of Moisture Condition Value (MCV) at Natural Moisture Content Prepared and Tested on a Single Sample in Accordance with BS 1377: Part 4: 1990: Clause 5.4						
MCV - interpreted from the steepest straight line of the plot.					9.0	
Moisture Content in Accordance with BS 1377: Part 2: 1990: Clause 3.2					15 %	
Percentage of material retained on 20mm test sieve					18 %	

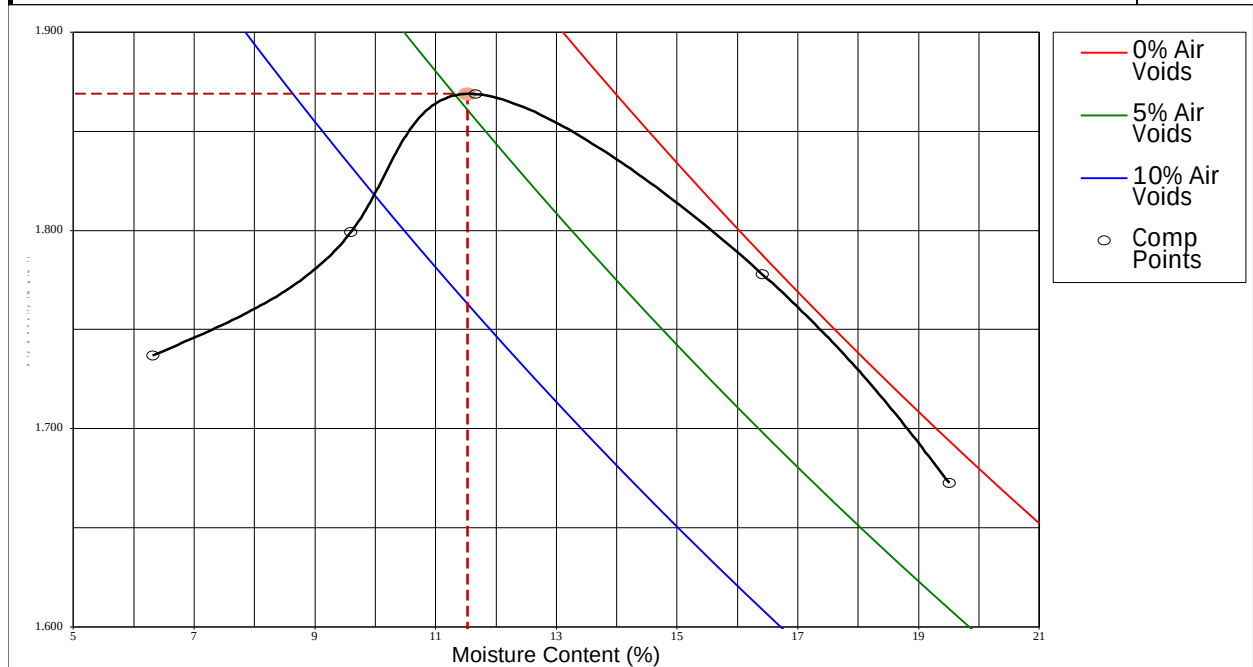
Laboratory Report	260053	Contract Sample No	/260053	 Construction Testing Solutions Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk	
Report Date	28/01/2022	Clients Reference	/260053		
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL Havant	Material Description	Brown Clay Ballast Material			
	Date Sampled	19/01/2022			
	Sampling Plan	CTS Procedure			
	Source	Not Stated			
	Supplier	Not Stated			
	Sampled By	CTS			
	Sampling Environment	Not Stated			
	Sample Type	Bulk			
Location in sample	Not Stated		Date Received	19/01/2022	
Sample Location	Routine Cut Finished Formation		Date Tests Completed	28/01/2022	
TEST REPORT					

Determination of Dry Density / Moisture Content Relationship

Tested in Accordance with BS 1377: Part 4: 1990 Clause 3.4.4.2 (2.5kg Rammer, CBR mould)

The test was carried out using separate samples, each prepared in Accordance with BS1377: Part 1: 2016 Clause 8.3.4(b)

Sample particle size adjustment:



Optimum Moisture Content (%)	12 %
Maximum Dry Density	1.87 Mg/m³
Material Retained on 37.5mm test sieve	6 %
Material Retained on 20.0mm test sieve	18 %
Particle Density (Assumed)	2.53 Mg/m³

Laboratory Report	260053	Contract Sample No	/260053	 Construction Testing Solutions  4161	
Report Date	28/01/2022	Clients Reference	/260053		
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL		Material Description	Brown Clay Ballast Material	Quarry Farm View	
		Date Sampled	19/01/2022	Bowbridge Lane	
		Sampling Plan	CTS Procedure	Newark	
		Source	Not Stated	Notts	
		Supplier	Not Stated	NG24 3BZ	
		Sampled By	CTS	Tel: (01636) 705100 Web: www.constructiontesting.co.uk	
		Sampling Environment	Not Stated	Email: enquiries@constructiontesting.co.uk	
		Sample Type	Bulk	Date Received	19/01/2022
		Location in sample	Not Stated	Date Tests Completed	28/01/2022
		Havant	Sample Location	Routine Cut Finished Formation	TEST REPORT

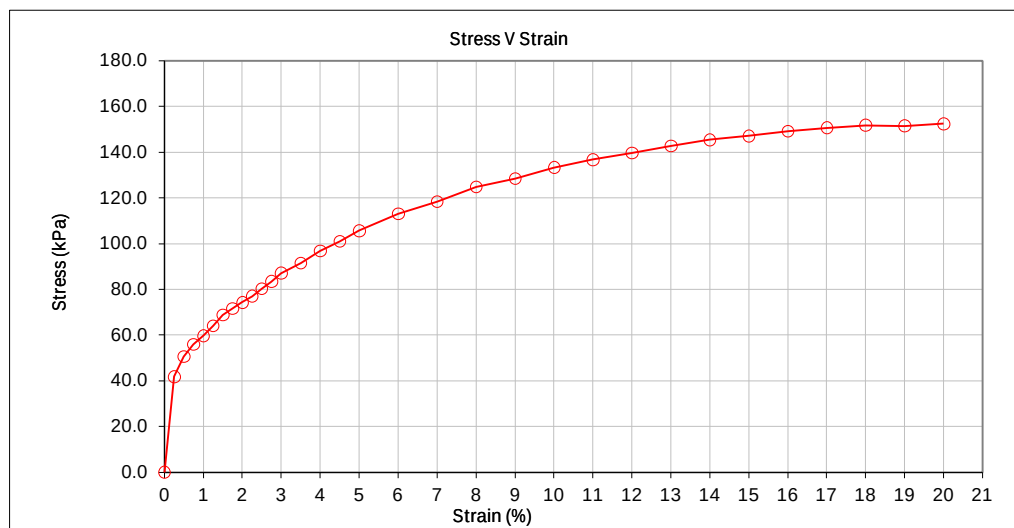
Determination of Undrained Shear Strength in Triaxial Compression Without Pore Pressure Measurement

Tested in Accordance with BS 1377: Part 7: 1990 Clause 8

Tests were conducted on an undisturbed sample trimmed from block sample, prepared in accordance with BS 1377-1: 1990: Clause 8.5

Initial specimen height	200	mm
Initial specimen diameter	100	mm
Initial bulk density	2.10	Mg/m ³
Initial moisture content	19	%
Initial dry density	1.76	Mg/m ³
Rate of strain applied	2.00	%/min
Membrane thickness (latex)	0.4	mm
Membrane correction	1.5	kPa
Cell pressure	200	kPa
Corrected maximum deviator stress at failure	151	kPa
Strain at failure	20.0	%
Time at Failure	10 Minutes, 0 Seconds	
Mode of failure	Compound	

Laboratory Temperature
18-22 °C



Undrained Shear Strength, c_u
75 kPa

Tested at rate of strain of 1%/minute as required by Specification for Highway Works Series 600, clause 633

Template Version: 1.6

Authorised Signatory

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**** END OF REPORT ****

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Laboratory Report	262298	Contract Sample No	/ 262298	 Construction Testing Solutions 	
Report Date	11/02/2022	Clients Reference	/ 262298		
		Material Description	Stiff Brown Gravelly Clay	 Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ	
Collins Earthworks Ltd		Date Sampled	01/02/2022		
Whiteley Road		Sampling Plan	CTS Procedure	 4161	
Ripley		Source	Not Stated		
Derbyshire		Supplier	Not Stated	Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk	
DE5 3QL		Sampled By	CTS		
		Sampling Environment	Not Stated	Date Received 01/02/2022 Date Tests Completed 11/02/2022	
		Sample Type	Bulk		
		Location in sample	Not Stated	TEST REPORT	
Havant		Sample Location	Stockpile		

Quarry Farm View

Tel: (01636) 705100

Email: enquiries@constructiontesting.co.uk

Date Received

Date Tests Complete

TEST REPORT

Determination of moisture content

Moisture Content

Particle size distribution (wet sieving method) - Tested in accordance with BS 1377: Part 2: 1990 Clause 9.2

Sample prepared in Accordance with BS 1377: Part 1: 2016 clause 8.3.4(a)

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Laboratory Report	262298	Contract Sample No	/262298	 Construction Testing Solutions Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk			
Report Date	11/02/2022	Clients Reference	/262298				
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL Havant	Material Description	Stiff Brown Gravelly Clay					
	Date Sampled	01/02/2022					
	Sampling Plan	CTS Procedure					
	Source	Not Stated					
	Supplier	Not Stated					
	Sampled By	CTS					
	Sampling Environment	Not Stated					
	Sample Type	Bulk		Date Received		01/02/2022	
	Location in sample	Not Stated		Date Tests Completed		11/02/2022	
Sample Location	Stockpile						
TEST REPORT							
Determination of Plastic Limit, Liquid Limit and Plasticity Index - Tested in Accordance with BS 1377: Part2: 1990 The sample was prepared from a natural soil specimen and in accordance with BS1377: Part 1: 2016: Clause 8.3.4(b)							% Passing Sieve taken from Particle Size Distribution test.
Liquid Limit (BS 1377: Part 2: 1990 Clause 4.4 - One Point)					38 %		
Plastic Limit (BS 1377: Part 2: 1990 Clause 5.3)					18 %		
Plasticity Index (BS 1377: Part 2: 1990 Clause 5.4)					20 %		
Material Passing 425 µm test sieve					28 %		
Material Retained on 425 µm test sieve					72 %		
Determination of Moisture Condition Value (MCV) at Natural Moisture Content Prepared and Tested on a Single Sample in Accordance with BS 1377: Part 4: 1990: Clause 5.4							
MCV - interpreted from the steepest straight line of the plot.					9.8		
Moisture Content in Accordance with BS 1377: Part 2: 1990: Clause 3.2					14 %		
Percentage of material retained on 20mm test sieve					13 %		

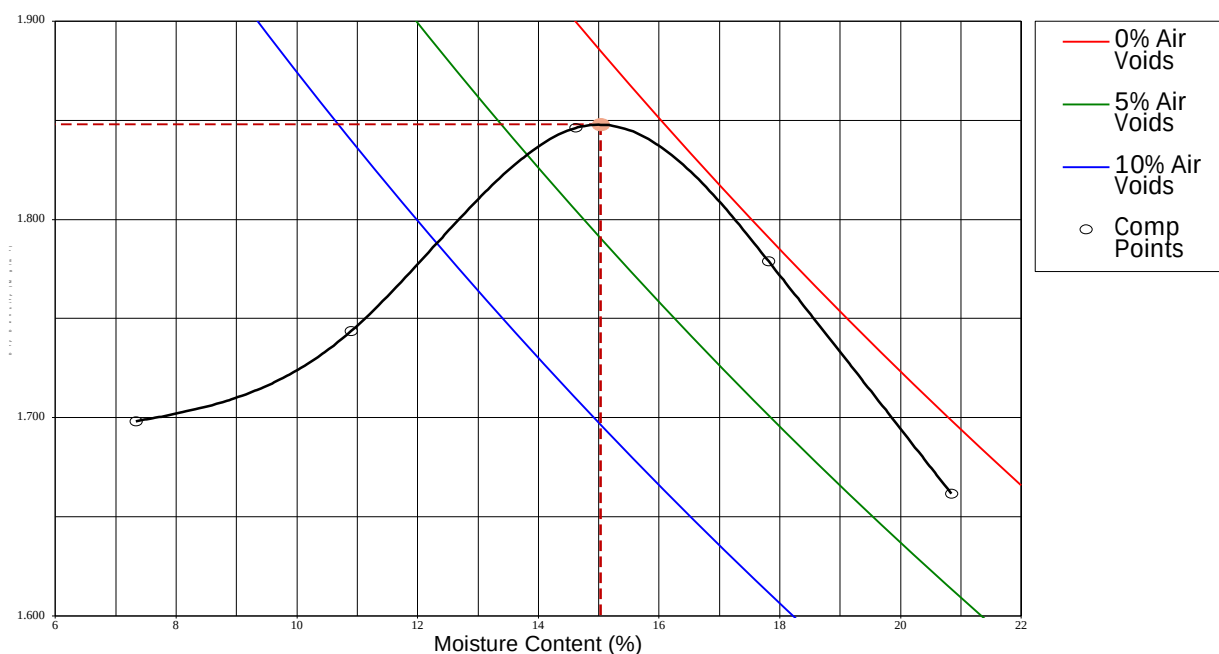
Laboratory Report	262298	Contract Sample No	/262298	 Construction Testing Solutions  Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ 4161 Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk	
Report Date	11/02/2022	Clients Reference	/262298		
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL Havant		Material Description	Stiff Brown Gravelly Clay	 4161	
		Date Sampled	01/02/2022		
		Sampling Plan	CTS Procedure		
		Source	Not Stated		
		Supplier	Not Stated		
		Sampled By	CTS		
		Sampling Environment	Not Stated		
		Sample Type	Bulk		
		Location in sample	Not Stated		
Sample Location	Stockpile	TEST REPORT			

Determination of Dry Density / Moisture Content Relationship

Tested in Accordance with BS 1377: Part 4: 1990 Clause 3.4.4.2 (2.5kg Rammer, CBR mould)

The test was carried out using separate samples, each prepared in Accordance with BS1377: Part 1: 2016 Clause 8.3.4(b)

Sample particle size adjustment:



Optimum Moisture Content (%)

15 %

Maximum Dry Density

1.85 Mg/m³

Material Retained on 37.5mm test sieve

4 %

Material Retained on 20.0mm test sieve

13 %

Particle Density (Assumed)

2.63 Mg/m³

Laboratory Report	262298	Contract Sample No	/262298	 Construction Testing Solutions  Quarry Farm View Bowbridge Lane Newark Notts NG24 3BZ 4161 Tel: (01636) 705100 Web: www.constructiontesting.co.uk Email: enquiries@constructiontesting.co.uk	
Report Date	11/02/2022	Clients Reference	/262298		
Collins Earthworks Ltd Whiteley Road Ripley Derbyshire DE5 3QL Havant		Material Description	Stiff Brown Gravelly Clay	 4161	
		Date Sampled	01/02/2022		
		Sampling Plan	CTS Procedure		
		Source	Not Stated		
		Supplier	Not Stated		
		Sampled By	CTS		
		Sampling Environment	Not Stated		
		Sample Type	Bulk		
		Location in sample	Not Stated		
Sample Location	Stockpile	TEST REPORT			

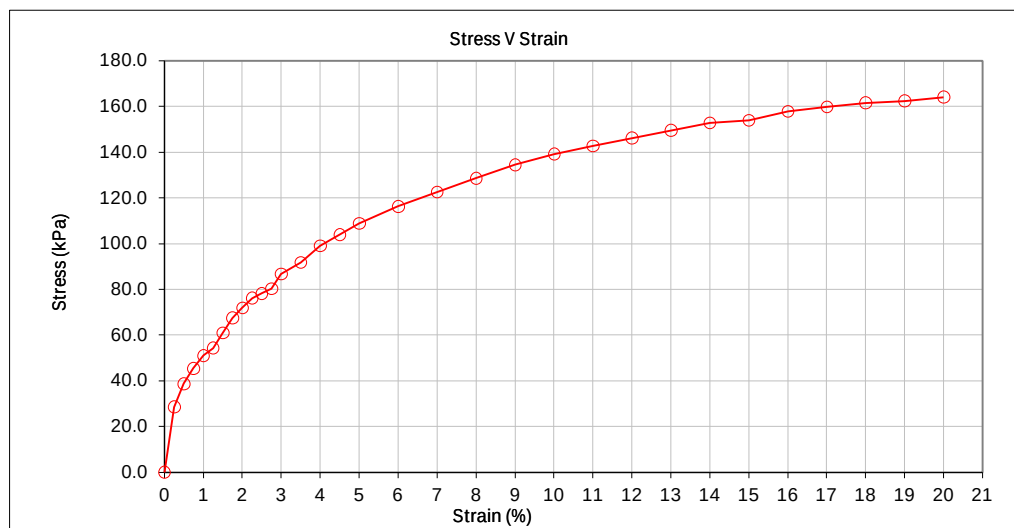
Determination of Undrained Shear Strength in Triaxial Compression Without Pore Pressure Measurement

Tested in Accordance with BS 1377: Part 7: 1990 Clause 8

Tests were conducted on a disturbed sample, recompacted using a 2.5kg rammer at as received moisture content.

Initial specimen height	200	mm
Initial specimen diameter	100	mm
Initial bulk density	2.08	Mg/m ³
Initial moisture content	14	%
Initial dry density	1.83	Mg/m ³
Rate of strain applied	2.00	%/min
Membrane thickness (latex)	0.4	mm
Membrane correction	1.5	kPa
Cell pressure	200	kPa
Corrected maximum deviator stress at failure	163	kPa
Strain at failure	20.0	%
Time at Failure	10 Minutes, 0 Seconds	
Mode of failure	Compound	

Laboratory Temperature
18-22 °C



Undrained Shear
Strength, c_u
81 kPa

Tested at rate of strain of 1%/minute as required by Specification for Highway Works Series 600, clause 633

Template Version: 1.6

Authorised Signatory

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**** END OF REPORT ****

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APPENDIX F

Recycled Aggregate Material Acceptability Testing

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & MOISTURE CONTENT

BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving and BS 1377 2 : 1990, Method 3.2

REPORT NUMBER:

C1055642 / 163252.6.1.1

SAMPLE NUMBER:

257633

CLIENT:

Collins Earthworks Limited

CLIENT REF:

21/12/21

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

21/12/2021

SITE:

Havant, Portsmouth

SAMPLED BY:

Mitchell Butler

SUPPLIER:

Unknown

DATE RECEIVED:

06/01/2022

MATERIAL:

Crushed concrete

DATE COMPLETED:

19/01/2022

CLASSIFICATION:

Class 6F2

TESTED BY:

SM, ND

LOCATION:

Stockpile

WITHIN ORIGINAL SPECIMEN:

N/A

PREPARATION METHOD:

BS 1377:Part 1:1990 clause 7.3 & 7.4.5

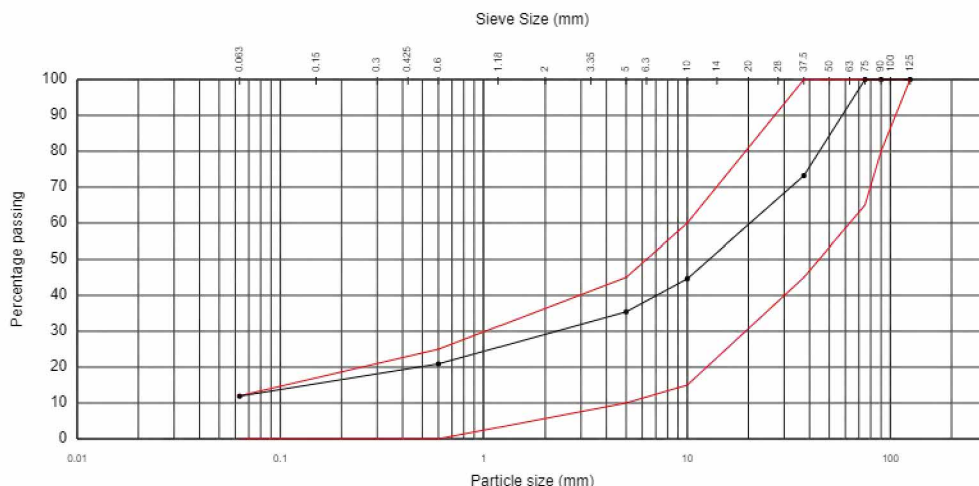
TYPE OF SAMPLE:

Disturbed

VARIATIONS:

No variations

RESULT



SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	100	65 - 100
63	87	
50	80	
37.5	73	45 - 100
28	65	
20	56	
14	51	
10	45	15 - 60
6.3	38	
5	35	10 - 45
3.35	31	
2	27	
1.18	24	
0.6	21	0 - 25
0.425	19	
0.3	18	
0.15	14	
0.063	12	0 - 12

Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Percentage passing 63µm > 10% therefore uniformity coefficient is estimated minimum.

Sample complies with the grading specification

Moisture content: 8.2%

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Sasha Mahon - Laboratory Supervisor

Approved Signatory

19-Jan-22



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 170606.5.1.1

SAMPLE NUMBER:

265199

CLIENT:

Collins Earthworks Limited

CLIENT REF:

265199

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

08/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

Unknown

DATE RECEIVED:

14/02/2022

MATERIAL:

6f5 crushed recycled concrete

DATE COMPLETED:

17/02/2022

CLASSIFICATION:

Class 6F5

TESTED BY:

MD, MW, JF

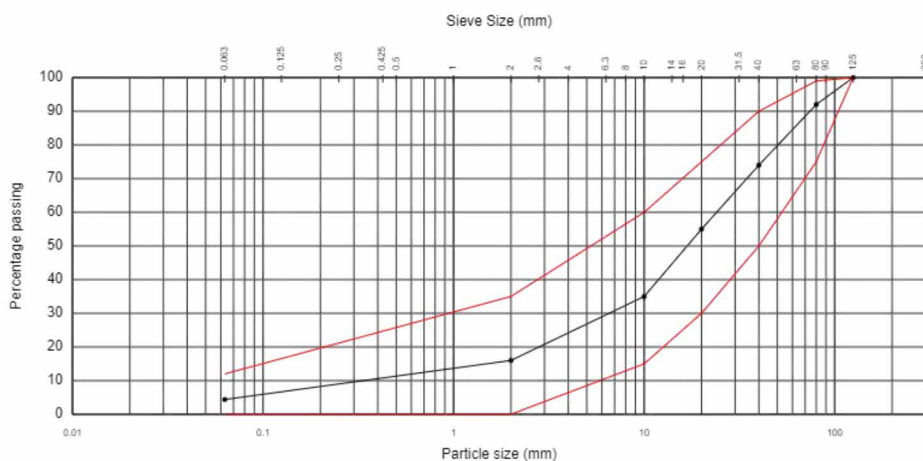
LOCATION:

Stockpile 1

SAMPLING PLAN:

Client Provided

RESULT Test Location: Harrietsham Lab



Class 6F5 - Specification for Highway Works (2016) Table 6/5 Earthworks Materials - Class 6F5

Uniformity Coefficient (D60/D10) N/A

Moisture content: 10.3%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	100 - 100
90	100	
80	92	75 - 99
63	85	
40	74	50 - 90
31.5	67	
20	55	30 - 75
16	48	
14	44	
10	35	15 - 60
8	30	
6.3	25	
4	18	
2.8	17	
2	16	0 - 35
1	13	
0.5	10	
0.425	9	
0.25	7	
0.125	6	
0.063	4.4	0 - 12

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

[Signature] Supervisor



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 170606.5.1.2

SAMPLE NUMBER:

265204

CLIENT:

Collins Earthworks Limited

CLIENT REF:

265204

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

08/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

Unknown

DATE RECEIVED:

14/02/2022

MATERIAL:

6f5 crushed recycled concrete

DATE COMPLETED:

17/02/2022

CLASSIFICATION:

Class 6F5

TESTED BY:

MD, MW, JF

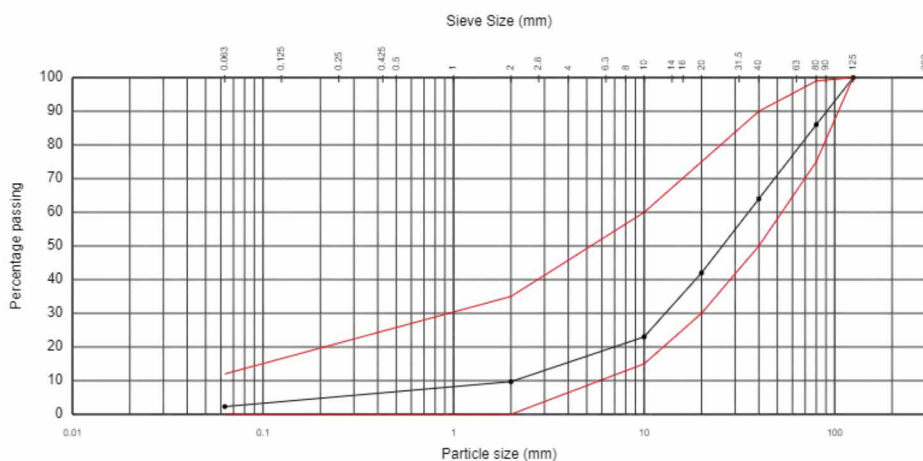
LOCATION:

Stockpile 1

SAMPLING PLAN:

Client Provided

RESULT Test Location: Harrietsham Lab



Class 6F5 - Specification for Highway Works (2016) Table 6/5 Earthworks Materials - Class 6F5

Uniformity Coefficient (D60/D10) N/A

Moisture content: 8.5%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	100 - 100
90	100	
80	86	75 - 99
63	78	
40	64	50 - 90
31.5	55	
20	42	30 - 75
16	36	
14	32	
10	23	15 - 60
8	19	
6.3	16	
4	12	
2.8	11	
2	10	0 - 35
1	8	
0.5	6	
0.425	5	
0.25	4	
0.125	3	
0.063	2.3	0 - 12

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Mike Gray - Laboratory Supervisor



Approved Signatory

Report date 17-Feb-22



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 170606.5.1.3

SAMPLE NUMBER:

265205

CLIENT:

Collins Earthworks Limited

CLIENT REF:

265205

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

08/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

Unknown

DATE RECEIVED:

14/02/2022

MATERIAL:

6f5 crushed recycled concrete

DATE COMPLETED:

21/02/2022

CLASSIFICATION:

Class 6F5

TESTED BY:

HS, MD, MW

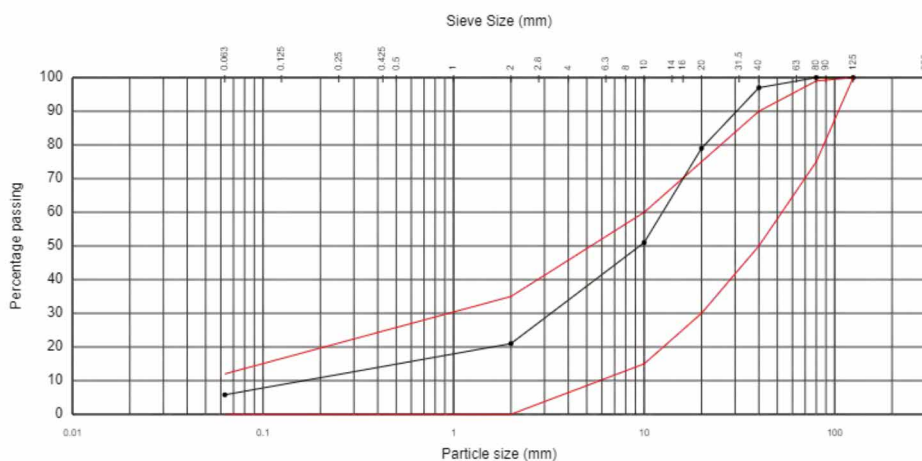
LOCATION:

Stockpile 1

SAMPLING PLAN:

Client Provided

RESULT Test Location: Harrietsham Lab



Class 6F5 - Specification for Highway Works (2016) Table 6/5 Earthworks Materials - Class 6F5

Uniformity Coefficient (D60/D10) N/A

Moisture content: 10.9%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	100 - 100
90	100	
80	100	75 - 99 *
63	100	
40	97	50 - 90 *
31.5	92	
20	79	30 - 75 *
16	71	
14	65	
10	51	15 - 60
8	43	
6.3	37	
4	27	
2.8	24	
2	21	0 - 35
1	14	
0.5	10	
0.425	10	
0.25	8	
0.125	7	
0.063	5.8	0 - 12

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Dan Gay, Laboratory Manager

Ap
Re



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 169623.7.1.1

SAMPLE NUMBER:

263556

CLIENT:

Collins Earthworks Limited

CLIENT REF:

263556

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

01/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

Not Specified, Not Specified

DATE RECEIVED:

10/02/2022

MATERIAL:

Type 1 Aggregate

DATE COMPLETED:

15/02/2022

CLASSIFICATION:

Type 1

TESTED BY:

HS, MD, MW

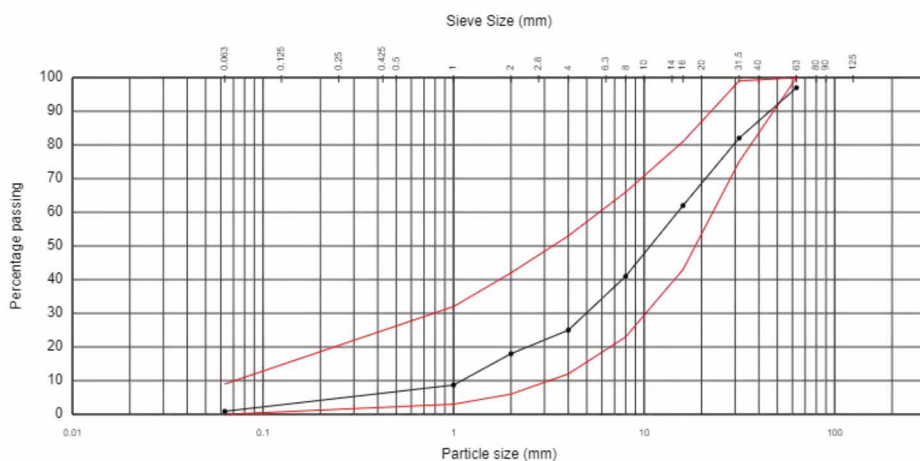
LOCATION:

Front Stockpile

SAMPLING PLAN:

Client Specification

RESULT Test Location: Harrietsham Lab



Type 1 - Specification For Highway Works (2016) Table 8/5, Clause 803

Uniformity Coefficient (D60/D10) 13

Moisture content: 7.5%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	
90	100	
80	100	
63	97	* 100 - 100
40	88	
31.5	82	75 - 99
20	69	
16	62	43 - 81
14	58	
10	46	
8	41	23 - 66
6.3	34	
4	25	12 - 53
2.8	22	
2	18	6 - 42
1	9	3 - 32
0.5	5	
0.425	4	
0.25	2	
0.125	2	
0.063	0.9	0 - 9

Remarks:

A certificate of sampling is available.

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Supervisor

Report date 15 Feb 22



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 169623.7.1.2

SAMPLE NUMBER:

263557

CLIENT:

Collins Earthworks Limited

CLIENT REF:

263557

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

01/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

On site , In situ

DATE RECEIVED:

10/02/2022

MATERIAL:

Type 1 crushed concrete

DATE COMPLETED:

17/02/2022

CLASSIFICATION:

Type 1

TESTED BY:

MD, MW, JT

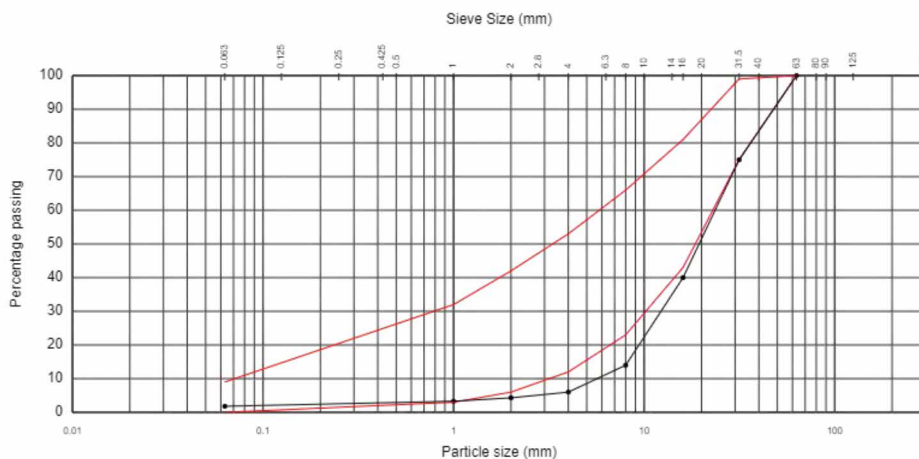
LOCATION:

Front stockpile

SAMPLING PLAN:

Client Provided

RESULT Test Location: Harrietsham Lab



Type 1 - Specification For Highway Works (2016) Table 8/5, Clause 803

Uniformity Coefficient (D60/D10) 4

Moisture content: 5.9%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	
90	100	
80	100	
63	100	100 - 100
40	78	
31.5	75	75 - 99
20	50	
16	40	* 43 - 81
14	31	
10	19	
8	14	* 23 - 66
6.3	10	
4	6	* 12 - 53
2.8	5	
2	4	* 6 - 42
1	3	3 - 32
0.5	3	
0.425	3	
0.25	2	
0.125	2	
0.063	1.8	0 - 9

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Mike Gray - Laboratory Supervisor



Approved Signatory

Report date 17-Feb-22



0927

TEST REPORT:

TEST REPORT: DETERMINATION OF PARTICLE SIZE DISTRIBUTION & WATER CONTENT

BS EN 933-1 : 2012 Washing & Dry Sieving and BS EN 1097-5 : 2008

REPORT NUMBER:

C1055642 / 169623.7.1.3

SAMPLE NUMBER:

263558

CLIENT:

Collins Earthworks Limited

CLIENT REF:

263558

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

DATE SAMPLED:

01/02/2022

SITE:

Havant, Portsmouth

SAMPLED BY:

Thomas Cook

SUPPLIER:

On site , In situ

DATE RECEIVED:

10/02/2022

MATERIAL:

Type 1 crushed concrete

DATE COMPLETED:

17/02/2022

CLASSIFICATION:

Type 1

TESTED BY:

MD, MW, JF

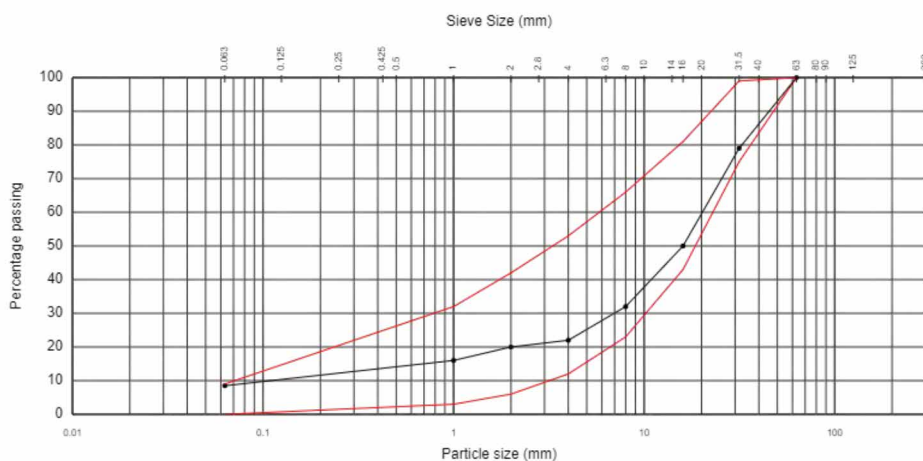
LOCATION:

Front stockpile

SAMPLING PLAN:

Client Provided

RESULT Test Location: Harrietsham Lab



Type 1 - Specification For Highway Works (2016) Table 8/5, Clause 803

Uniformity Coefficient (D60/D10) 101

Moisture content: 6.3%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
500	100	
300	100	
125	100	
90	100	
80	100	
63	100	100 - 100
40	88	
31.5	79	75 - 99
20	61	
16	50	43 - 81
14	45	
10	36	
8	32	23 - 66
6.3	28	
4	22	12 - 53
2.8	21	
2	20	6 - 42
1	16	3 - 32
0.5	14	
0.425	13	
0.25	11	
0.125	9	
0.063	8.5	0 - 9

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Mike Gray - Laboratory Supervisor



Report date 17-Feb-22



0927

TEST REPORT : **DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION**
Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 169623.8.1.1	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263556	ADDRESS:	Whiteley Road
CLIENT REF.:	263556	SITE:	Havant, Portsmouth
DATE RECEIVED:	10/02/2022	SUPPLIER:	Details not supplied
DATE SAMPLED:	01/02/2022	SOURCE:	Details not supplied
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	Type 1 Aggregate
TESTED BY:	JG	LOCATION:	Front Stockpile
ACCEPTABLE STANDARD :	Contract Specification	SAMPLING CERTIFICATE:	Available

RESULT:

SPECIFICATION REQUIREMENTS			
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	29	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

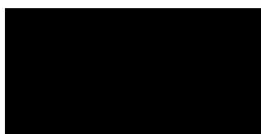
REMARKS:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the laboratory.

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

Report Format: L/Rep A10/rev.2

For and on behalf of CTS



Approved Signatory
23-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



TEST REPORT : **DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION**
Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 169623.8.1.2	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263557	ADDRESS:	Whiteley Road
CLIENT REF.:	263557	SITE:	Havant, Portsmouth
DATE RECEIVED:	10/02/2022	SUPPLIER:	On site
DATE SAMPLED:	01/02/2022	SOURCE:	Details not supplied
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	Type 1 Crushed Concrete
TESTED BY:	JG	LOCATION:	Front Stockpile
ACCEPTABLE STANDARD :	Contract Specification	SAMPLING CERTIFICATE:	Available

RESULT:

SPECIFICATION REQUIREMENTS			
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	33	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

REMARKS:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the laboratory.

For and on behalf of CTS

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

Report Format: L/Rep A10/rev.2

Chris Davidson - Laboratory Manager
Ian Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor

Approved Signatory
23-Feb-22



TEST REPORT : **DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION**
Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 169623.8.1.3	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263558	ADDRESS:	Whiteley Road
CLIENT REF.:	263558	SITE:	Havant, Portsmouth
DATE RECEIVED:	10/02/2022	SUPPLIER:	On site
DATE SAMPLED:	01/02/2022	SOURCE:	In Situ
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	Type 1 Crushed Concrete
TESTED BY:	JG	LOCATION:	-
ACCEPTABLE STANDARD :	Contract Specification	SAMPLING CERTIFICATE:	Available

RESULT:

SPECIFICATION REQUIREMENTS			
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	29	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

REMARKS:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the laboratory.

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

Report Format: L/Rep A10/rev.2

For and on behalf of CTS



Approved Signatory
23-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



TEST REPORT : **DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION**
Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 170606.7.1.1	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265199	ADDRESS:	Whiteley Road
CLIENT REF.:	265199	SITE:	Havant, Portsmouth
DATE RECEIVED:	14/02/2022	SUPPLIER:	Details not supplied
DATE SAMPLED:	08/02/2022	SOURCE:	Details not supplied
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	6F5 Crushed Recycled Concrete
TESTED BY:	JG	LOCATION:	Stockpile 1
ACCEPTABLE STANDARD : Contract Specification		SAMPLING CERTIFICATE: Available	

RESULT:

		SPECIFICATION REQUIREMENTS	
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	32	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

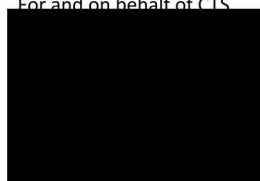
REMARKS:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the laboratory.

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

Report Format: L/Rep A10/rev.2

For and on behalf of CTS



Approved Signatory
23-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



TEST REPORT : **DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION**
Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 170606.7.1.2	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265204	ADDRESS:	Whiteley Road
CLIENT REF.:	265204	SITE:	Havant, Portsmouth
DATE RECEIVED:	14/02/2022	SUPPLIER:	Details not supplied
DATE SAMPLED:	08/02/2022	SOURCE:	Details not supplied
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	6F5 Crushed Recycled Concrete
TESTED BY:	JG	LOCATION:	Stockpile 1
ACCEPTABLE STANDARD : Contract Specification		SAMPLING CERTIFICATE: Available	

RESULT:

		SPECIFICATION REQUIREMENTS	
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	29	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

REMARKS:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the laboratory.

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

Report Format: L/Rep A10/rev.2

For and on behalf of CTS



Approved Signatory
23-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



TEST REPORT : DETERMINATION OF RESISTANCE OF COARSE AGGREGATE TO FRAGMENTATION

Los Angeles : Coarse Aggregate : BS EN 1097-2: 2010

REPORT No.:	1055642 / 170606.7.1.3	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265205	ADDRESS:	Whiteley Road
CLIENT REF.:	265205	SITE:	Havant, Portsmouth
DATE RECEIVED:	14/02/2022	SUPPLIER:	Details not supplied
DATE SAMPLED:	08/02/2022	SOURCE:	Details not supplied
DATE TEST COMPLETED:	22/02/2022	MATERIAL:	6F5 Crushed Recycled Concrete
TESTED BY:	JG	LOCATION:	Stockpile 1
ACCEPTABLE STANDARD :	Contract Specification	SAMPLING CERTIFICATE:	Available

RESULT:

		SPECIFICATION REQUIREMENTS	
		LOWER LIMIT	UPPER LIMIT
		(LA)	(LA)
THE LOS ANGELES COEFFICIENT (LA) :	27	N/A	50
SIZE FRACTION FROM WHICH TEST PORTION WAS OBTAINED:	10-14		

REMARKS:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the laboratory.

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

Report Format: L/Rep A10/rev.2

For and on behalf of CTS

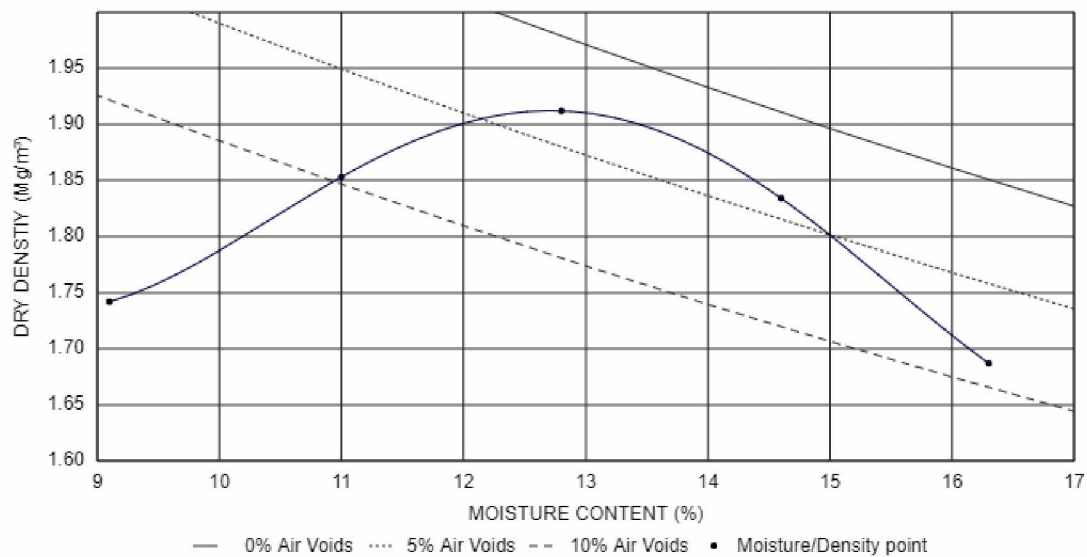
Approved Signatory
23-Feb-22Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 169623.6.1.1		
SAMPLE NUMBER:	263556	CLIENT:	Collins Earthworks Limited
CLIENT REF:	169623.1.1.1	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	01/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	Not Specified, Not Specified
DATE RECEIVED:	10/02/2022	MATERIAL:	Type 1 Aggregate
DATE COMPLETED:	16/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTION SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Specification

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.91 Mg/m³
OPTIMUM WATER CONTENT: 12.5 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 12 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³

MOISTURE CONTENT / DRY DENSITY RELATIONSHIP



Remarks:
 Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
 Dan Gay - Laboratory Manager



Approved Signatory
 Report date 16-Feb-22

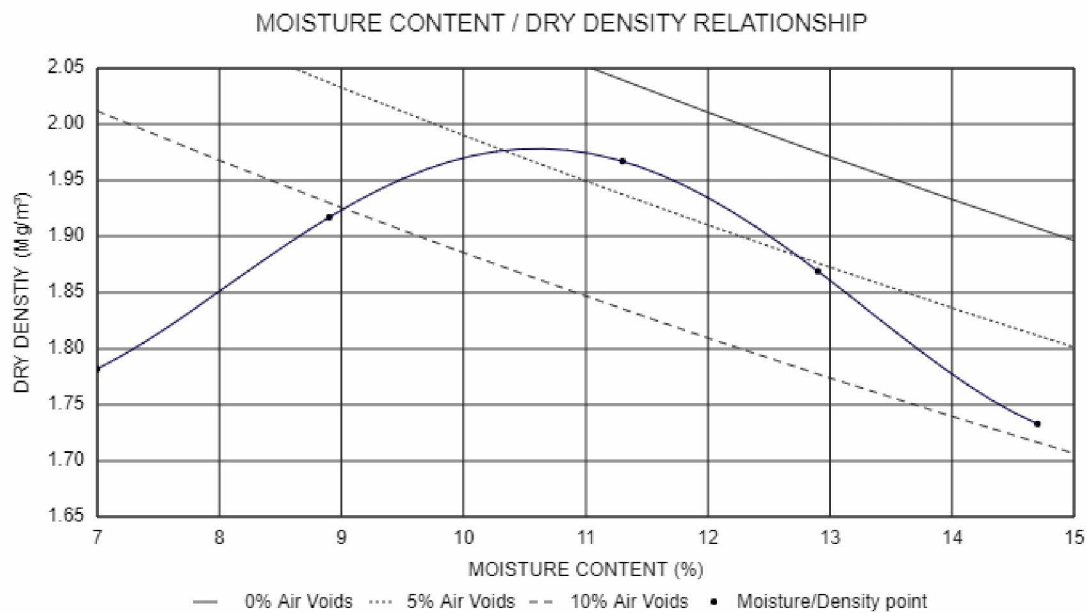


0927

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 169623.6.1.2		
SAMPLE NUMBER:	263557	CLIENT:	Collins Earthworks Limited
CLIENT REF:	169623.1.1.2	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	01/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	On site , In situ
DATE RECEIVED:	10/02/2022	MATERIAL:	Type 1 crushed concrete Type 1
DATE COMPLETED:	17/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTON SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Provided

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.98 Mg/m³
OPTIMUM WATER CONTENT: 10.5 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 21 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³



Remarks:
 Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.
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For and on behalf of CTS
 Dan Gay - Laboratory Manager

Approved Signatory
 Report date 17-Feb-22

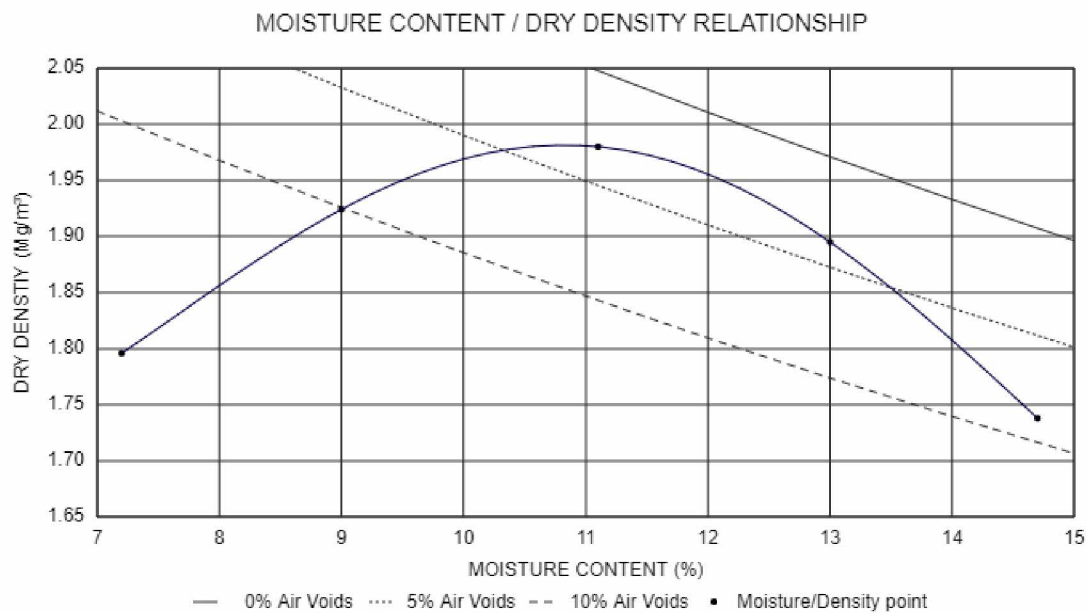


0927

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 169623.6.1.3		
SAMPLE NUMBER:	263558	CLIENT:	Collins Earthworks Limited
CLIENT REF:	169623.1.1.3	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	01/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	On site , In situ
DATE RECEIVED:	10/02/2022	MATERIAL:	Type 1 crushed concrete Type 1
DATE COMPLETED:	17/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTON SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Provided

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.98 Mg/m³
OPTIMUM WATER CONTENT: 11.0 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 12 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³



Remarks:
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For and on behalf of CTS
 Dan Gay - Laboratory Manager


 Approved Signatory
 Report date 17-Feb-22



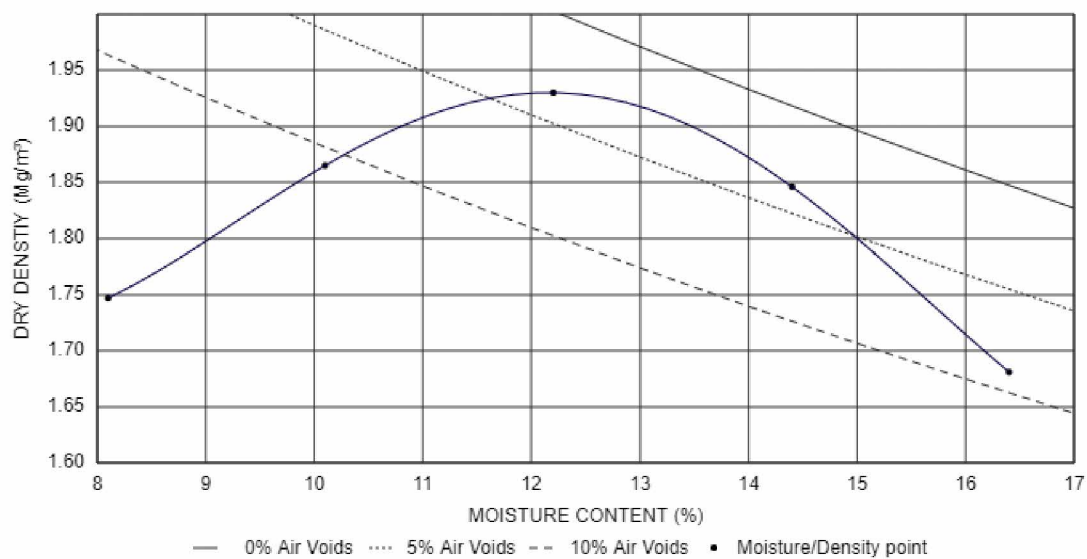
0927

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 170606.4.1.1		
SAMPLE NUMBER:	265199	CLIENT:	Collins Earthworks Limited
CLIENT REF:	170606.1.1.1	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	08/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	Unknown
DATE RECEIVED:	14/02/2022	MATERIAL:	6f5 crushed recycled concrete 6f5 recycled
DATE COMPLETED:	21/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTON SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Provided

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.93 Mg/m³
OPTIMUM WATER CONTENT: 12.0 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 25 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³

MOISTURE CONTENT / DRY DENSITY RELATIONSHIP



Remarks:
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For and on behalf of CTS
 Dan Gay - Laboratory Manager



Approved Signatory
 Report date 21-Feb-22

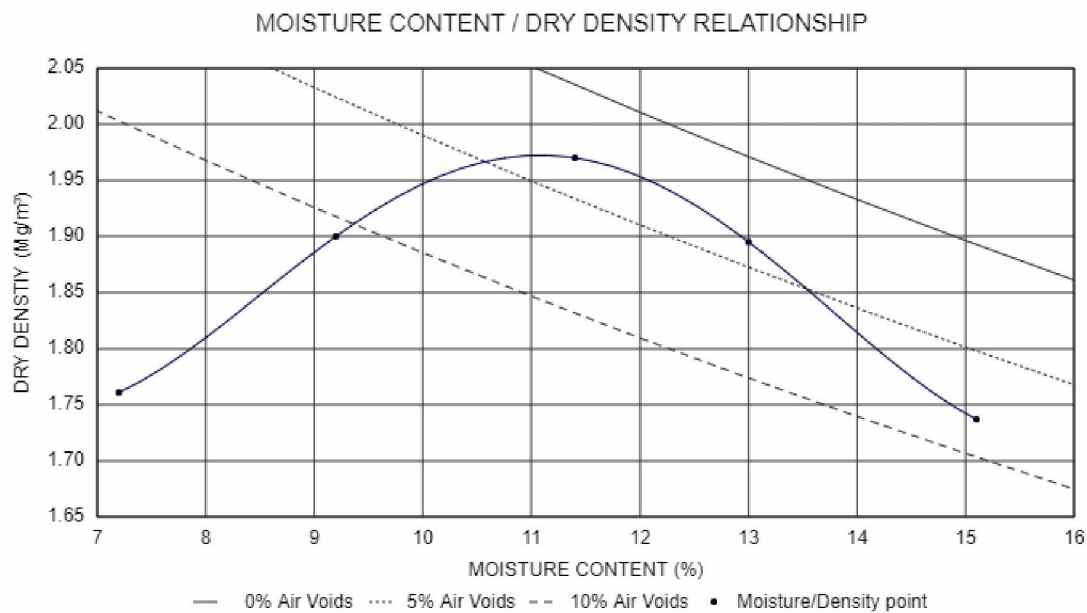


0927

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 170606.4.1.2		
SAMPLE NUMBER:	265204	CLIENT:	Collins Earthworks Limited
CLIENT REF:	170606.1.1.2	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	08/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	Unknown
DATE RECEIVED:	14/02/2022	MATERIAL:	6f5 crushed recycled concrete 6f5 recycled
DATE COMPLETED:	21/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTON SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Provided

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.97 Mg/m³
OPTIMUM WATER CONTENT: 11.0 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 34 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³



Remarks:
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For and on behalf of CTS
 Dan Gay - Laboratory Manager



Approved Signatory
 Report date 21-Feb-22



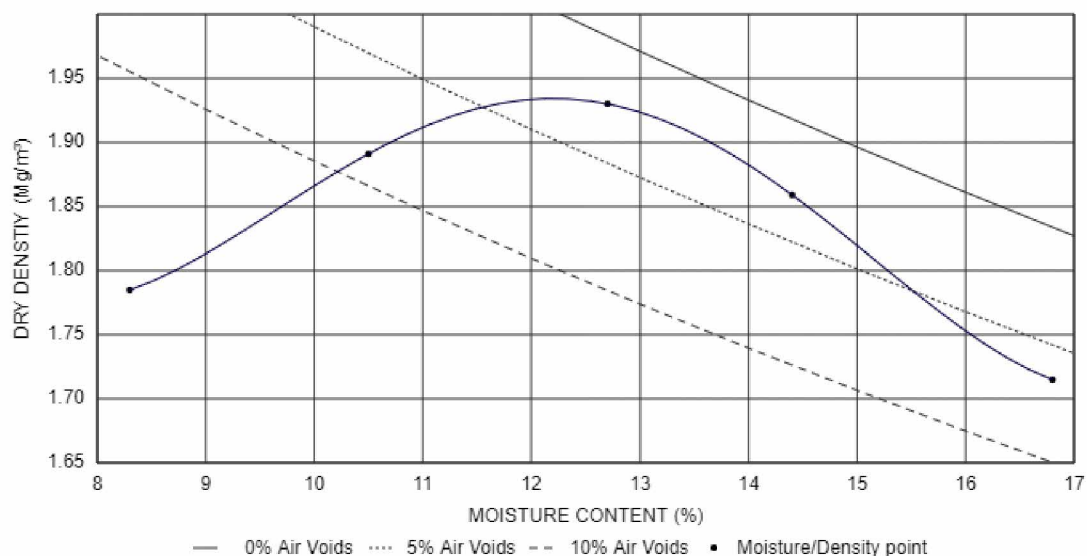
0927

TEST REPORT:	DETERMINATION OF REFERENCE DENSITY AND WATER CONTENT		
	BS EN 13286-4: 2003 - Vibrating Hammer		
REPORT NUMBER:	C1055642 / 170606.4.1.3		
SAMPLE NUMBER:	265205	CLIENT:	Collins Earthworks Limited
CLIENT REF:	170606.1.1.3	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE SAMPLED:	08/02/2022	SITE:	Havant, Portsmouth
SAMPLED BY:	Thomas Cook	SUPPLIER:	Unknown
DATE RECEIVED:	14/02/2022	MATERIAL:	6f5 crushed recycled concrete 6f5 recycled
DATE COMPLETED:	21/02/2022	LOCATION:	Ns/int
TESTED BY:	Edmund Uzande	COMPACTON SAMPLE:	Separate samples
TYPE OF SAMPLE:	Disturbed	SAMPLING PLAN:	Client Provided

RESULT Test Location: Harrietsham Lab

MAXIMUM DRY DENSITY: 1.93 Mg/m³
OPTIMUM WATER CONTENT: 12.0 %
AMOUNT (By Dry Mass) RETAINED >40.0mm: 2 %
ASSUMED PARTICLE DENSITY USED TO PLOT AIR VOIDS: 2.65 Mg/m³

MOISTURE CONTENT / DRY DENSITY RELATIONSHIP



Remarks:
 Remaining sample will be retained for a minimum of 28 days from date of report. Test results reported relate only to the items tested.
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For and on behalf of CTS
 Dan Gay - Laboratory Manager



Approved Signatory
 Report date 21-Feb-22



0927

TEST REPORT :
DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE

BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 169623.9.1.1	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263556	ADDRESS:	Whiteley Road
CLIENT REF:	263556	SITE:	Havant, Portsmouth
DATE SAMPLED:	01/02/2022	SUPPLIER:	Not Specified
SAMPLED BY:	Thomas Cook	MATERIAL:	Type 1 Aggregate
DATE RECEIVED:	10/02/2022	LOCATION:	Front Stockpile
DATE TEST COMPLETED:	15/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	<u>CONSTITUENT</u>	<u>FOUND PROPORTION</u>	<u>SPECIFICATION (%)</u>
Rc -	Concrete, concrete products & concrete masonry units.	64 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate. (% of CHALK found within Ru)	36 % 0.0 %	Not Specified
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	0.0 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	25.0
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.0 %	1.0
FL -	Floating Particles	0.0 cm ³ /kg	Not Specified

REMARKS:

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

For and on behalf of CTS

 Chris Davidson - Laboratory Manager
 Dan Gay - Laboratory Supervisor
 Matt Oliver- Site Manager
 Phil Mayhew - Operations Manager
 Matt Butt - Operations Supervisor

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Report Format: L/Rep A16/rev.1

Approved signatory

16-Feb-22



0927

REPORT No.: 1055642 / 169623.9.1.1

TEST REPORT : DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE
BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 169623.9.1.2	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263557	ADDRESS:	Whiteley Road
CLIENT REF:	263557	SITE:	Havant, Portsmouth
DATE SAMPLED:	01/02/2022	SUPPLIER:	On site
SAMPLED BY:	Thomas Cook	MATERIAL:	Type 1 Crushed Concrete
DATE RECEIVED:	10/02/2022	LOCATION:	Front Stockpile
DATE TEST COMPLETED:	21/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	CONSTITUENT	FOUND PROPORTION	SPECIFICATION (%)
Rc -	Concrete, concrete products & concrete masonry units.	80 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate.	14 %	Not Specified
	(% of CHALK found within Ru)	0.0 %	
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	5.1 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	25.0
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.1 %	1.0
FL -	Floating Particles	0.0 cm ³ /kg	Not Specified

REMARKS:

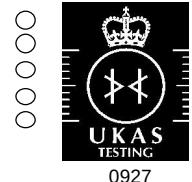
Remaining sample will be retained for a minimum of 28 days from date of report.

For and on behalf of CTS

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Report Format: L/Rep A16/rev.1

Approved signatory
25-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



REPORT No.: 1055642 / 169623.9.1.2

TEST REPORT : DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE
BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 169623.9.1.3	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	263558	ADDRESS:	Whiteley Road
CLIENT REF:	263558	SITE:	Havant, Portsmouth
DATE SAMPLED:	01/02/2022	SUPPLIER:	On site
SAMPLED BY:	Thomas Cook	MATERIAL:	Type 1 Crushed Concrete
DATE RECEIVED:	10/02/2022	LOCATION:	Front Stockpile
DATE TEST COMPLETED:	21.02.2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	CONSTITUENT	FOUND PROPORTION	SPECIFICATION (%)
Rc -	Concrete, concrete products & concrete masonry units.	70 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate.	30 %	Not Specified
	(% of CHALK found within Ru)	0.0 %	
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	0.0 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	25.0
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.0 %	1.0
FL -	Floating Particles	2.8 cm ³ /kg	Not Specified

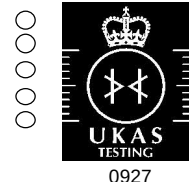
REMARKS:

For and on behalf of CTS
Remaining sample will be retained for a minimum of 28 days from date of report.

Page 1 of 1
Report Format: L/Rep A16/rev.1

Approved signatory
25-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver - Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



REPORT No.: 1055642 / 169623.9.1.3

TEST REPORT : DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE
BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 170606.8.1.1	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265199	ADDRESS:	Whiteley Road
CLIENT REF:	265199	SITE:	Havant, Portsmouth
DATE SAMPLED:	08/02/2022	SUPPLIER:	Details not supplied
SAMPLED BY:	Thomas Cook	MATERIAL:	6F5 Crushed Recycled Concrete
DATE RECEIVED:	14/02/2022	LOCATION:	Stockpile 1
DATE TEST COMPLETED:	22/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	CONSTITUENT	FOUND PROPORTION	SPECIFICATION (%)
Rc -	Concrete, concrete products & concrete masonry units.	65 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate.	34 %	Not Specified
	(% of CHALK found within Ru)	0.0 %	
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	0.8 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	Not Specified
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.0 %	1.0
FL -	Floating Particles	0.0 cm ³ /kg	Not Specified

REMARKS:

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

For and on behalf of CTS

Page 1 of 1
Report Format: L/Rep A16/rev.1

Approved signatory
22-Feb-22

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver- Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor



REPORT No.: 1055642 / 170606.8.1.1

TEST REPORT : DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE
BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 170606.8.1.2	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265204	ADDRESS:	Whiteley Road
CLIENT REF:	265204	SITE:	Havant, Portsmouth
DATE SAMPLED:	08/02/2022	SUPPLIER:	Details not supplied
SAMPLED BY:	Thomas Cook	MATERIAL:	6F5 Crushed Recycled Concrete
DATE RECEIVED:	14/02/2022	LOCATION:	Stockpile 1
DATE TEST COMPLETED:	22/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	CONSTITUENT	FOUND PROPORTION	SPECIFICATION (%)
Rc -	Concrete, concrete products & concrete masonry units.	63 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate.	34 %	Not Specified
	(% of CHALK found within Ru)	0.0 %	
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	2.2 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	Not Specified
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.3 %	1.0
FL -	Floating Particles	0.0 cm ³ /kg	Not Specified

REMARKS:

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

For and on behalf of CTS

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver- Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor

Page 1 of 1
Report Format: L/Rep A16/rev.1

Approved signatory
22-Feb-22



REPORT No.: 1055642 / 170606.8.1.2

TEST REPORT : DETERMINATION OF THE GEOMETRICAL PROPERTIES OF AGGREGATE
BSEN 933-11:2009 Classification Test For The Constituents Of Coarse Recycled Aggregate

REPORT No.:	1055642 / 170606.8.1.3	CLIENT:	Collins Earthworks Limited
SAMPLE No.:	265205	ADDRESS:	Whiteley Road
CLIENT REF:	265205	SITE:	Havant, Portsmouth
DATE SAMPLED:	08/02/2022	SUPPLIER:	Details not supplied
SAMPLED BY:	Thomas Cook	MATERIAL:	6F5 Crushed Recycled Concrete
DATE RECEIVED:	14/02/2022	LOCATION:	Stockpile 1
DATE TEST COMPLETED:	22/02/2022	ACCEPT STD:	Contract Specification
TESTED BY:	MD	SAMPLING CERT.:	Available
DRYING TEMPERATURE:	40 ± 5°C		

TEST RESULT:

	CONSTITUENT	FOUND PROPORTION	SPECIFICATION (%)
Rc -	Concrete, concrete products & concrete masonry units.	70 %	Not Specified
Ru -	Unbound aggregate, natural stone & Hydraulically bound aggregate.	28 %	Not Specified
	(% of CHALK found within Ru)	0.0 %	
Rb -	Clay masonry units (ie.bricks & tiles), calcium silicate masonry units & aerated non-floating concrete	1.3 %	Not Specified
Ra -	Bituminous Material	0.0 %	50
Rg -	Glass	0.0 %	Not Specified
X -	Other: Cohesive (ie clay & soil), gypsum plaster, miscellaneous - metals (ferrous & non ferrous), non-floating wood, plastic & rubber.	0.0 %	1.0
FL -	Floating Particles	0.0 cm ³ /kg	Not Specified

REMARKS:

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

For and on behalf of CTS

Chris Davidson - Laboratory Manager
Dan Gay - Laboratory Supervisor
Matt Oliver- Site Manager
Phil Mayhew - Operations Manager
Matt Butt - Operations Supervisor

Page 1 of 1
Report Format: L/Rep A16/rev.1

Approved signatory
22-Feb-22



REPORT No.: 1055642 / 170606.8.1.3

APPENDIX G

Moisture Content and Field Dry Density NDG and Sand Replacement
Tests

TEST REPORT:	Estimation of In-Situ Dry Density, Relative Compaction And Air Voids		
	In-House Procedure STP NDM-S Method D Direct Transmission		
REPORT NUMBER:	C1055642 / 165623.2.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	18/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
GAUGE MODEL No:	T3440	SUPPLIER:	Site Won
GAUGE SERIAL No:	15409	MATERIAL:	Sub layer soil/ballast
CORRECTION FACTORS:	Bulk $\gamma=1.020$ Moisture $b=1.087$	LOCATION:	Site Coverage
SPECIFIC GRAVITY:	2.63 Mg/m ³	MAX DRY DENSITY:	1.87 Mg/m ³

TEST RESULTS

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
B4 - Layer 1 Finished Formation	2.078	0.225	2.12	13				
	2.099	0.244	2.14	14	1.88	14	3.2	100
C4 - Formation	2.129	0.195	2.17	11				
	2.100	0.218	2.14	12	1.93	12	4.1	103
B5 - Layer 1 Finished Formation	2.095	0.221	2.14	13				
	2.082	0.234	2.12	14	1.88	13	3.7	101
C5 - Formation	2.051	0.264	2.09	16				
	2.099	0.269	2.14	16	1.83	16	1.6	98
B12 - Formation	2.101	0.258	2.14	15				
	2.112	0.251	2.15	14	1.87	15	1.2	100
C12 - Formation	2.125	0.223	2.17	13				
	2.100	0.237	2.14	14	1.90	13	2.6	102
D12 - Formation	2.025	0.282	2.07	17				
	2.095	0.265	2.14	16	1.80	16	1.6	96
D11 - Formation	2.089	0.234	2.13	14				
	2.151	0.228	2.19	13	1.91	13	2.2	102
C11 - Formation	2.154	0.208	2.20	12				
	2.116	0.215	2.16	12	1.95	12	2.9	104
B11 - Formation	2.177	0.225	2.22	12				
	2.154	0.228	2.20	13	1.96	13	0.8	105
B13 - Formation	2.179	0.207	2.22	11				
	2.134	0.215	2.18	12	1.97	12	2.1	105
C13 - Formation	2.161	0.220	2.20	12				
	2.157	0.235	2.20	13	1.95	13	0.9	105

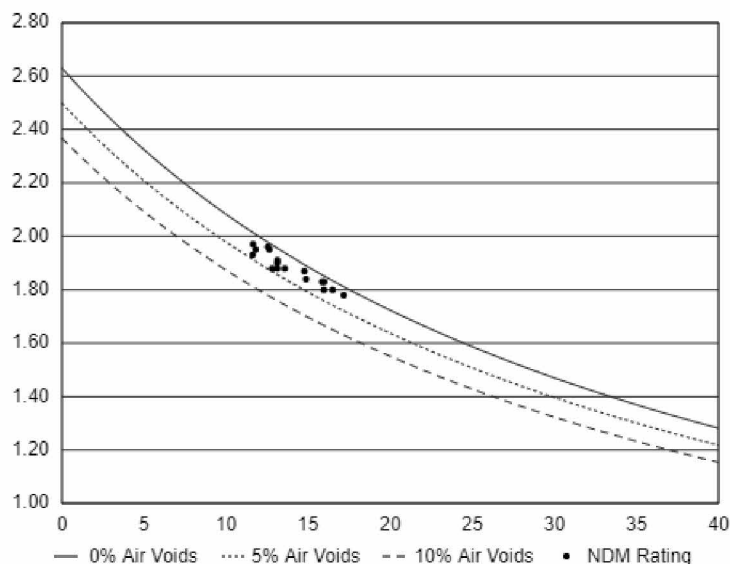
Remarks:
 Test results reported relate only to the items tested.
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TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 165623.2.1.5

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
D13 - Formation	2.061	0.268	2.10	16	1.80	16	3.0	96
	2.025	0.260	2.07	16				
E13 - Formation	2.057	0.262	2.10	16	1.83	16	1.1	98
	2.108	0.277	2.15	16				
F13 - Formation	2.050	0.288	2.09	18	1.78	17	1.5	95
	2.050	0.276	2.09	17				
G13 - Formation	2.094	0.255	2.14	15	1.84	15	2.8	98
	2.045	0.248	2.09	15				
H13 - Formation	2.099	0.232	2.14	13	1.88	13	4.3	101
	2.065	0.212	2.11	12				

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 15-Feb-22



0927

TEST REPORT:	Estimation of In-Situ Dry Density, Relative Compaction And Air Voids		
	In-House Procedure STP NDM-S Method D Direct Transmission		
REPORT NUMBER:	C1055642 / 166190.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	20/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
GAUGE MODEL No:	T3440	SUPPLIER:	Site Won
GAUGE SERIAL No:	15409	MATERIAL:	Clay/ballast
CORRECTION FACTORS:	Bulk $\gamma=1.020$ Moisture $b=1.087$	LOCATION:	Site Coverage
SPECIFIC GRAVITY:	2.63 Mg/m ³	MAX DRY DENSITY:	1.87 Mg/m ³

TEST RESULTS

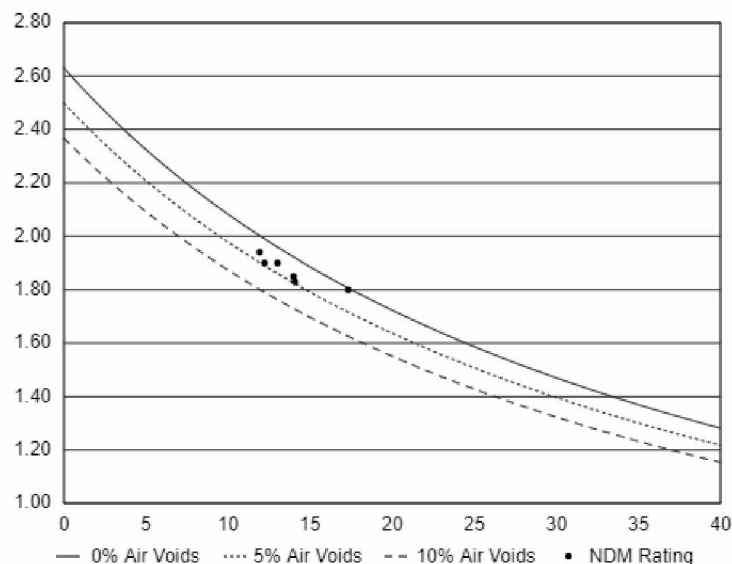
Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
G12 - Formation SRD Correlation	2.062	0.246	2.10	15				
	2.038	0.229	2.08	14	1.83	14	4.5	98
G11 - Formation SRD Correlation	2.039	0.232	2.08	14				
	2.099	0.245	2.14	14	1.85	14	3.7	99
F11 - Formation SRD Correlation	2.085	0.294	2.13	18				
	2.049	0.279	2.09	17	1.80	17	0.5	96
F12 - Formation SRD Correlation	2.134	0.229	2.18	13				
	2.084	0.227	2.13	13	1.90	13	2.8	102
E11 - Formation SRD Correlation	2.127	0.207	2.17	12				
	2.123	0.218	2.17	12	1.94	12	3.3	104
E12 - Formation SRD Correlation	2.076	0.201	2.12	12				
	2.099	0.226	2.14	13	1.90	12	4.7	101

Remarks:
 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 166190.1.1.6

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor

Approved Signatory
Report date 15-Feb-22



0927

TEST REPORT:	Estimation of In-Situ Dry Density, Relative Compaction And Air Voids		
	In-House Procedure STP NDM-S Method D Direct Transmission		
REPORT NUMBER:	C1055642 / 168578.2.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
GAUGE MODEL No:	T3440	SUPPLIER:	Site Won
GAUGE SERIAL No:	15409	MATERIAL:	Clay/soil/ballast
CORRECTION FACTORS:	Bulk $\gamma=1.020$ Moisture $b=1.087$	LOCATION:	Sub Layer Formation
SPECIFIC GRAVITY:	2.63 Mg/m ³	MAX DRY DENSITY:	1.87 Mg/m ³

TEST RESULTS

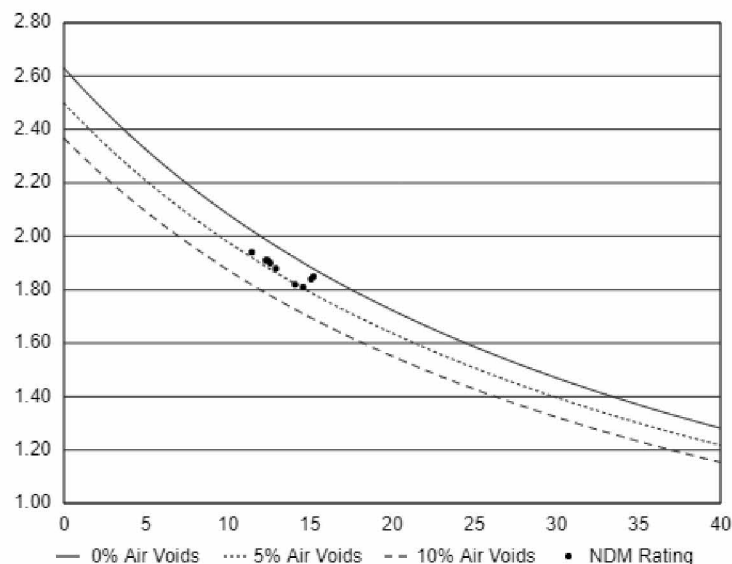
Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
K11 - Formation	2.130	0.205	2.17	11				
	2.102	0.203	2.14	12	1.94	11	4.2	104
J11 - Formation	2.120	0.217	2.16	12				
	2.081	0.215	2.12	12	1.91	12	4.0	102
H11 - Formation	2.050	0.228	2.09	13				
	2.108	0.218	2.15	12	1.88	13	4.3	100
G10 - Formation	2.079	0.248	2.12	15				
	2.080	0.263	2.12	16	1.84	15	2.1	99
F10 - Formation	2.094	0.264	2.14	16				
	2.085	0.254	2.13	15	1.85	15	1.5	99
E10 - Formation	2.045	0.245	2.09	15				
	2.017	0.240	2.06	14	1.81	15	4.9	97
E9 - Formation	2.049	0.239	2.09	14				
	2.033	0.234	2.07	14	1.82	14	4.9	98
E8 - Formation	2.089	0.215	2.13	12				
	2.101	0.224	2.14	13	1.90	13	4.0	102
E7 - Formation	2.111	0.224	2.15	13				
	2.098	0.212	2.14	12	1.91	12	3.7	102

Remarks:
 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 168578.2.1.1

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Report date 15-Feb-22



0927

TEST REPORT:	Estimation of In-Situ Dry Density, Relative Compaction And Air Voids		
	In-House Procedure STP NDM-S Method D Direct Transmission		
REPORT NUMBER:	C1055642 / 168579.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Watson Aniyeloye	SITE:	Havant, Portsmouth
GAUGE MODEL No:	T3440	SUPPLIER:	Site Won
GAUGE SERIAL No:	15409	MATERIAL:	Gravelly clay
CORRECTION FACTORS:	Bulk $\gamma=1.020$ Moisture $b=1.087$	LOCATION:	Havant
SPECIFIC GRAVITY:	2.63 Mg/m ³	MAX DRY DENSITY:	1.87 Mg/m ³

TEST RESULTS

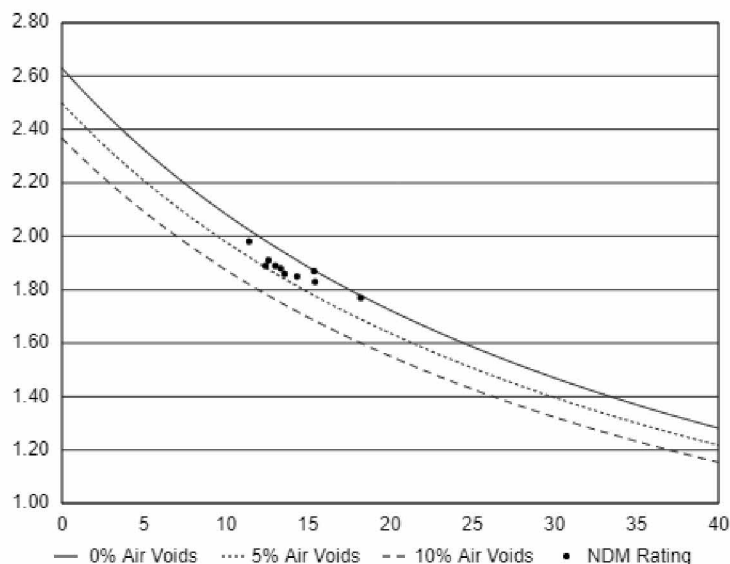
Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
F8 - Formation	2.084	0.267	2.13	16				
	2.054	0.252	2.10	15	1.83	15	2.3	98
G7 - Formation	2.143	0.203	2.19	11				
	2.185	0.213	2.23	12	1.98	11	2.1	106
G8 - Formation	2.071	0.226	2.11	13				
	2.146	0.216	2.19	12	1.91	13	3.3	102
G92 - Formation	2.100	0.243	2.14	14				
	2.058	0.246	2.10	15	1.85	14	2.9	99
F9 - Formation	2.116	0.228	2.16	13				
	2.043	0.203	2.08	12	1.89	12	4.8	101
K13 - Formation	2.074	0.275	2.12	16				
	2.148	0.252	2.19	14	1.87	15	0.3	100
J13 - Formation	2.050	0.306	2.09	19				
	2.055	0.287	2.10	18	1.77	18	0.4	95
K12 - Formation	2.115	0.236	2.16	14				
	2.077	0.217	2.12	12	1.89	13	3.5	101
J12 - Formation	2.084	0.231	2.13	13				
	2.064	0.234	2.11	14	1.86	14	3.9	100
H12 - Formation	2.111	0.239	2.15	14				
	2.061	0.222	2.10	13	1.88	13	3.6	100

Remarks:
 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 168579.1.1.1

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor

[Redacted Signature]

Approved Signatory
Report date 15-Feb-22



0927

TEST REPORT:	Estimation of In-Situ Dry Density, Relative Compaction And Air Voids		
	In-House Procedure STP NDM-S Method D Direct Transmission		
REPORT NUMBER:	C1055642 / 168918.13.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
GAUGE MODEL No:	T3440	SUPPLIER:	Site Won
GAUGE SERIAL No:	15409	MATERIAL:	Clay/ballast
CORRECTION FACTORS:	Bulk $\gamma=1.020$ Moisture $b=1.087$	LOCATION:	Sub Formation Layer
SPECIFIC GRAVITY:	2.63 Mg/m ³	MAX DRY DENSITY:	1.87 Mg/m ³

TEST RESULTS

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
B6 - Formation Layer	2.123	0.222	2.17	12	1.91	13	2.5	102
	2.112	0.235	2.15	14				
B7 - Formation	2.102	0.231	2.14	13	1.90	13	2.8	102
	2.116	0.225	2.16	13				
B8 - Formation	2.113	0.232	2.16	13	1.90	13	2.9	102
	2.100	0.225	2.14	13				
B9 - Formation	2.100	0.226	2.14	13	1.87	13	3.9	100
	2.055	0.234	2.10	14				
B10 - Formation	2.094	0.231	2.14	13	1.89	14	2.6	101
	2.111	0.239	2.15	14				
C10 - Formation	2.099	0.252	2.14	15	1.88	14	1.5	101
	2.121	0.242	2.16	14				
D10 - Formation	2.089	0.249	2.13	15	1.88	14	1.9	101
	2.121	0.239	2.16	14				
D9 - Formation	2.102	0.226	2.14	13	1.89	13	2.5	101
	2.112	0.242	2.15	14				
C9 - Formation	2.041	0.222	2.08	13	1.86	13	4.7	99
	2.084	0.232	2.13	14				
C8 - Formation	2.099	0.235	2.14	14	1.90	13	2.9	102
	2.112	0.223	2.15	13				
D8 - Formation	2.121	0.242	2.16	14	1.90	14	1.6	102
	2.119	0.238	2.16	14				
C7 - Formation	2.098	0.214	2.14	12	1.91	12	3.9	102
	2.111	0.216	2.15	12				

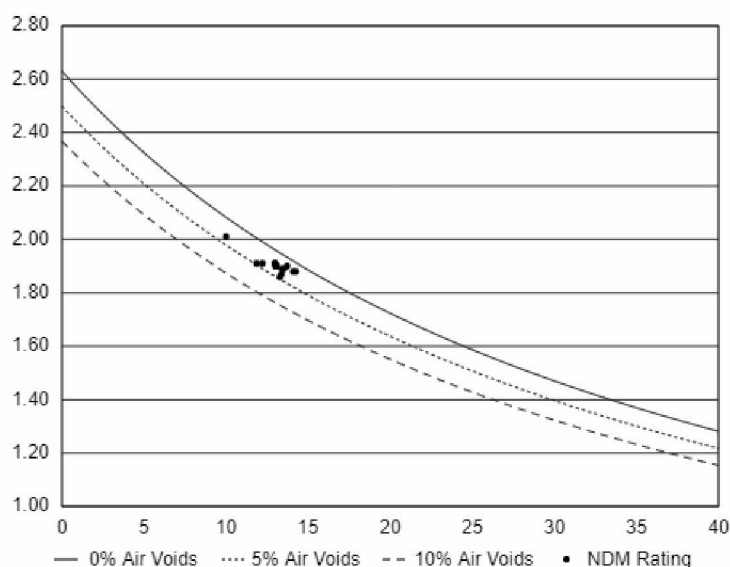
Remarks:
 Test results reported relate only to the items tested.
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TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 168918.13.1.1

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
D7 - Formation	2.101	0.233	2.14	13	1.91	13	2.8	102
	2.121	0.222	2.16	13				
C6 - Formation	2.099	0.211	2.14	12	1.91	12	4.7	102
	2.089	0.206	2.13	12				
D6 - Formation	2.145	0.175	2.19	9.5	2.01	10	3.5	107
	2.189	0.195	2.23	10				

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 15-Feb-22



0927

TEST REPORT: Estimation of In-Situ Dry Density, Relative Compaction And Air Voids
In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER: C1055642 / 169623.4.1.1

CLIENT REF: 1055642 **CLIENT:** Collins Earthworks Limited

DATE COMPLETED: 01/02/2022 **ADDRESS:** Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY: Thomas Cook **SITE:** Havant, Portsmouth

GAUGE MODEL No: T3440 **SUPPLIER:** Site Won

GAUGE SERIAL No: 15409 **MATERIAL:** Clay/ballast

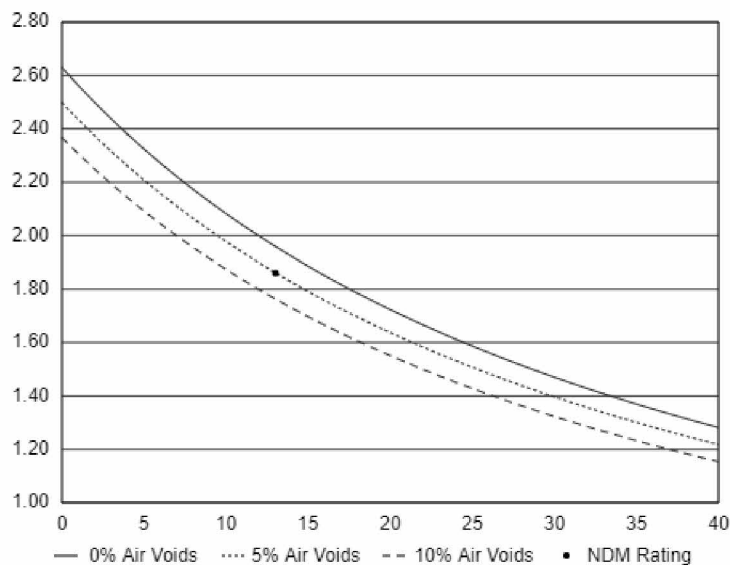
CORRECTION FACTORS: Bulk $\gamma = 1.020$ **LOCATION:** Formation Layer
Moisture $b = 1.087$

SPECIFIC GRAVITY: 2.63 Mg/m³ **MAX DRY DENSITY:** 1.87 Mg/m³

TEST RESULTS

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
H10 - Formation Layer	2.068	0.215	2.11	12	1.86	13	4.9	100
	2.059	0.231	2.10	14				

AIR VOID LINE PLOT



Remarks:
Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor

Approved Signatory
Report date 15-Feb-22



0927

TEST REPORT:
Estimation of In-Situ Dry Density, Relative Compaction And Air Voids

In-House Procedure STP NDM-S Method D Direct Transmission

REPORT NUMBER:

C1055642 / 170606.2.1.1

CLIENT REF:

1055642

CLIENT:

Collins Earthworks Limited

DATE COMPLETED:

08/02/2022

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY:

Thomas Cook

SITE:

Havant, Portsmouth

GAUGE MODEL No:

T3440

SUPPLIER:

Site Won

GAUGE SERIAL No:

15409

MATERIAL:

Clay/soil

CORRECTION FACTORS:

 Bulk $\gamma = 1.020$

 Moisture $b = 1.087$

LOCATION:

Sub Formation Layers

SPECIFIC GRAVITY:

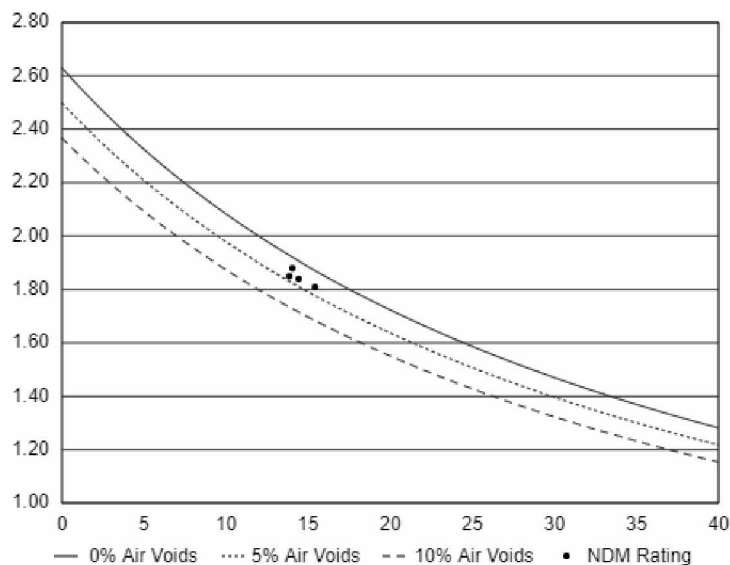
 2.63 Mg/m³

MAX DRY DENSITY:

 1.87 Mg/m³
TEST RESULTS

Test No.	Gauge Bulk Density (Mg/m ³)	Gauge Moisture Density (Mg/m ³)	Corrected Bulk Density (Mg/m ³)	Corrected Moisture Content (%)	Mean Dry Density (Mg/m ³)	Mean Moisture Content (%)	Mean Air Voids (%)	Mean Relative Compaction (%)
G4 - Formation Layer	2.111	0.235	2.15	14	1.88	14	1.9	101
	2.102	0.252	2.14	15				
F4 - Formation Layer	2.042	0.224	2.08	13	1.85	14	3.8	99
	2.098	0.249	2.14	14				
G5 - Formation Layer	2.042	0.247	2.08	15	1.81	15	3.0	97
	2.064	0.268	2.11	16				
F5 - Formation Layer	2.046	0.232	2.09	14	1.84	14	3.4	99
	2.087	0.257	2.13	15				

AIR VOID LINE PLOT


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 15-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.1		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
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TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Amended report. This test report supersedes test report version 1 -

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.1

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

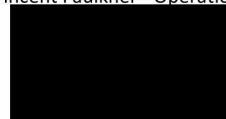
Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

Amended report. This test report supersedes test report version 1 -

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 14-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.2		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
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TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.2

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 14-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.3		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
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TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.3

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 14-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.4		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
---------------------	-------	-------	-------	-------	-------

TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.4

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 14-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.5		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
---------------------	-------	-------	-------	-------	-------

TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.5

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor

Approved Signatory

Report date 14-Feb-22



0927

TEST REPORT:	DETERMINATION OF IN-SITU DENSITY		
	BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement		
REPORT NUMBER:	C1055642 / 166048.1.1.6		
SAMPLE NO:	Collins	CLIENT:	Collins Earthworks Limited
CLIENT REF:	Collins	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
DATE TESTED:	20/01/2022	SITE:	Havant, Portsmouth
TESTED BY:	Mitchell Butler	MATERIAL:	Clay/ballast
DEVIATIONS:	None		

RESULTS

LOCATION DETAILS

Laboratory Ref:	260421	260465	260467	260483	260510
Client Ref:	Collins	Collins	Collins	Collins	Collins
Test location:	G11 - Formation SRD Correlation	G12 - Formation SRD Correlation	F12 - Formation SRD Correlation	F11 - Formation SRD Correlation	E11 - Formation SRD Correlation

Weather Conditions:	Sunny	Sunny	Sunny	Sunny	Sunny
---------------------	-------	-------	-------	-------	-------

TEST DETAILS

Bulk Density: (Mg/m ³)	2.13	2.12	2.11	2.12	2.11
Moisture Content: (%)	12	14	14	12	14
Dry Density: (Mg/m ³)	1.90	1.86	1.85	1.89	1.84

COMPLIANCE DETAILS

Compliance Limit (%)	95	95	95	95	95
Maximum Dry Density: (Mg/m ³)	1.87	1.87	1.87	1.87	1.87
Percentage Compaction: (%)	101.4	99.6	99.0	101.0	98.6
Particle Density (Mg/m ³)	2.53	2.53	2.53	2.53	2.53
Volume of Air Voids (%)	1.5	0.9	1.1	2.7	0.6

Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:**DETERMINATION OF IN-SITU DENSITY**

BS 1377:Part 9:1990 clause 2.2 Large Cylinder Sand Replacement

REPORT NUMBER:

C1055642 / 166048.1.1.6

LOCATION DETAILS

Laboratory Ref:

260534

Client Ref:

Collins

Test location:

E12 - Formation SRD Correlation

Weather Conditions:

Sunny

TEST DETAILS

Bulk Density: (Mg/m³)

2.07

Moisture Content: (%)

17

Dry Density: (Mg/m³)

1.78

COMPLIANCE DETAILS

Compliance Limit (%)

95

Maximum Dry Density: (Mg/m³)

1.87

Percentage Compaction: (%)

95.1

Particle Density (Mg/m³)

2.53

Volume of Air Voids (%)

0.2

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 14-Feb-22



0927

APPENDIX H

Hand Shear Vane, Mexe Cone and Dynamic Cone Penetrometer
Tests

TEST REPORT: DETERMINATION OF SHEAR STRENGTH

Hand Shear Vane Method

REPORT NUMBER: C1055642 / 165623.3.1.1

CLIENT REF: 1055642

CLIENT: Collins Earthworks Limited

DATE TESTED: 18/01/2022

ADDRESS: Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY: Mitchell Butler

SITE: Havant, Portsmouth

LOCATION: B4 - Layer 1 Finished Formation

SUPPLIER: Site Won

SERIAL NUMBER: HSV10

MATERIAL: Soil/ballast

CORRECTION FACTOR: 1.4

TEST RESULTS

Test No	Location	Reading 1 (kpa)	Reading 2 (kpa)	Reading 3 (kpa)	Reading 4 (kpa)	Reading 5 (kpa)	Reading 6 (kpa)	Average Shear Strength (kpa)	Comment
1	B4 - Layer 1 Finished Formation	0	0	0	0	0	0	0	Could not penetrate ground

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

Could not penetrate ground

Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22

TEST REPORT: **DETERMINATION OF SHEAR STRENGTH**
 Hand Shear Vane Method

REPORT NUMBER: C1055642 / 165623.3.1.2

CLIENT REF: 1055642 **CLIENT:** Collins Earthworks Limited

DATE TESTED: 18/01/2022 **ADDRESS:** Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY: Mitchell Butler **SITE:** Havant, Portsmouth

LOCATION: C4 **SUPPLIER:** Site Won

SERIAL NUMBER: HSV10 **MATERIAL:** Soil/ballast

CORRECTION FACTOR: 1.4

TEST RESULTS

Test No	Location	Reading 1 (kpa)	Reading 2 (kpa)	Reading 3 (kpa)	Reading 4 (kpa)	Reading 5 (kpa)	Reading 6 (kpa)	Average Shear Strength (kpa)	Comment
1	C4	0	0	0	0	0	0	0	Could not penetrate ground

Remarks:
 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Could not penetrate ground

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 19-Jan-22

TEST REPORT: SOILS : MEXI PROBE SURVEY

REPORT NUMBER: C1055642 / 165071.3.1.1

CLIENT REF: 1055642

CLIENT:

Collins Earthworks Limited

DATE TESTED: 13/01/2022

ADDRESS:

Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY: Mitchell Butler

SITE:

Havant, Portsmouth

LOCATION: G12 to F10

SUPPLIER:

Site Won

MATERIAL: Crushed stone/clay

TEST RESULTS

Location Details	Depth CBR Values are recorded from Original Ground Level						
Layer & grid ref	100mm	200mm	300mm	400mm	500mm	600mm	Comment
G12 Test 1	7.5	0					
G12 Test 2	6	5					Unable to penetrate ground on 3rd location
E12 Test 1	3	0					
E12 Test 2	4	3.5					Unable to penetrate ground on 3rd location
F12 Test 1	5.5	0					
F12 Test 2	5	4.5					Unable to penetrate ground on 3rd location
G11 Test 1	9.5	0					Unable to penetrate ground on 2nd location
F11 Test 1	9	0					
F11 Test 2	8	0					Unable to penetrate ground on 3rd location

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

Instructed to carried out 3 of each grid square

TEST REPORT:
SOILS : MEXI PROBE SURVEY
REPORT NUMBER:
C1055642 / 165071.3.1.1

G10 Test 1	2.5	0					
G10 Test 2	8.5	0					Unable to penetrate ground on 3rd location
F10 Test 1	6	11	7				Unable to penetrate ground on 2nd location

Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.
Instructed to carried out 3 of each grid square

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
14-Jan-22

TEST REPORT: **SOILS : MEXI PROBE SURVEY**

REPORT NUMBER: C1055642 / 165623.4.1.1

CLIENT REF: 1055642

CLIENT: Collins Earthworks Limited

DATE TESTED: 18/01/2022

ADDRESS: Whiteley Road, Ripley, Derbyshire, DE5 3QL

TESTED BY: Mitchell Butler

SITE: Havant, Portsmouth

LOCATION: B4 - Layer 1 Finished Formation

SUPPLIER: Site Won

MATERIAL: Soil/ballast

TEST RESULTS

Location Details	Depth CBR Values are recorded from Original Ground Level						
Layer & grid ref	100mm	200mm	300mm	400mm	500mm	600mm	Comment
B4 - Layer 1 Finished Formation							Could not penetrate ground
C4 - Formation							Could not penetrate ground

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

Could not penetrate ground

Amended report. This test report supersedes test report version 2 - Change of location

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22

TEST REPORT: **Estimation of California Bearing Ratio By DCP Method**
In accordance with in-house procedure STP S9 (60° Cone)

REPORT NUMBER: C1055642 / 166190.2.1.1

CLIENT REF: 1055642 **CLIENT:** Collins Earthworks Limited

DATE COMPLETED: 20/01/2022 **ADDRESS:** Whiteley Road, Ripley, Derbyshire, DE5 3QL

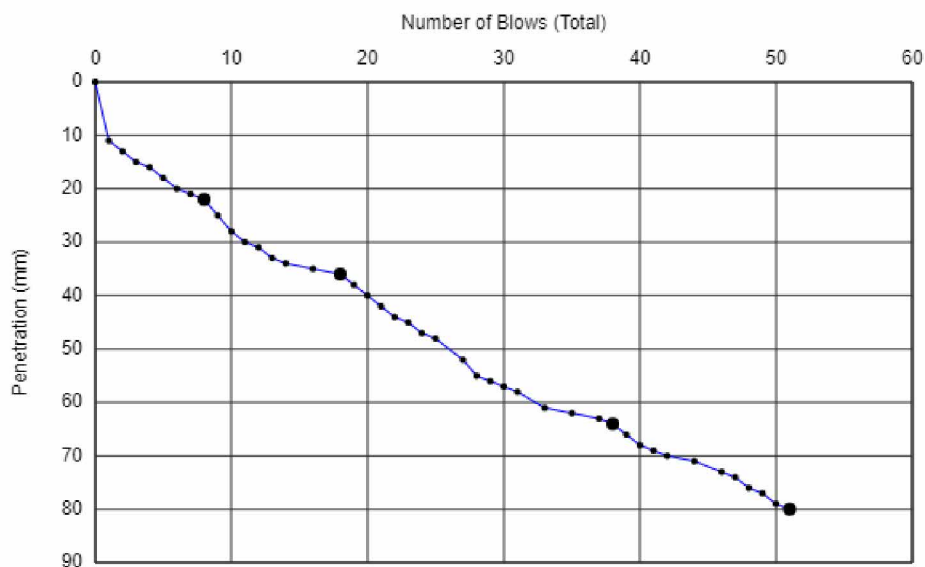
TESTED BY: Thomas Cook **SITE:** Havant, Portsmouth

LAYERS REMOVED: No layers removed **LOCATION:** C13

MATERIAL: Ballast

TEST RESULTS

Gradient Ref	Depth from (mm)	Depth to (mm)	No. of blows (per layer)	Blow rate (mm/blow)	Estimated C.B.R. Value (%)
1	9	22	8	1.6	>100
2	22	36	10	1.4	>100
3	36	64	20	1.4	>100
4	64	80	13	1.2	>100



Remarks:
Depth of layer(s) removed before test: 0mm
Layer Type: No layers removed Test results reported relate only to the items tested.
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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



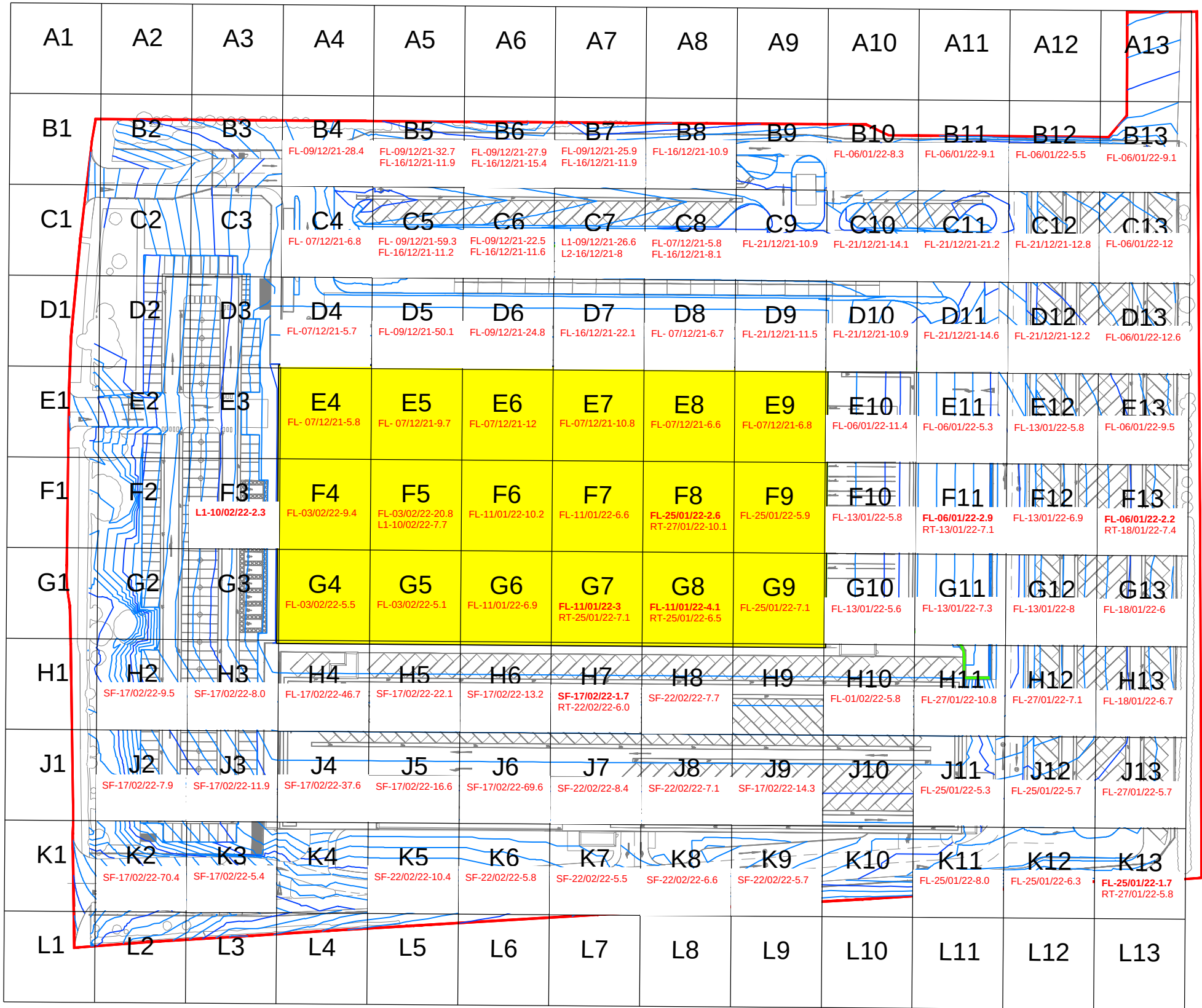
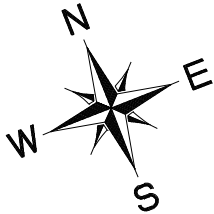
Approved Signatory
21-Jan-22



0927

APPENDIX I

CBR Plate Load Tests



Key
SF - Subformation Layer
FL - Formation Layer
L1 - Layer 1
L2 - Layer 2
RT- Retest

Bold Text indicates test value falls below that specified (5%)

- Key
- Black grid lines spaced at 25m x 25m. Use grid squares!! (not intersections)
 - Pink numbers representing the predicted number of layers in each grid square **TBC**
 - Building Footprint:

P01	16-09-21	Original Issue	SH	PG
Rev	Date	Revision detail	By	Chk'd

Client: TSL PROJECTS

Project: Havant

Title: Testing Grid & Regime

Status: APPROVAL Suitability: S4

Drawing no: C200810-CEL-XX-XX-DR-X-CTG444-XX Internal Ref: CTG444 Rev P01

Rev: P01 Date: 16-09-2021 Scale: N/A
Drawn: SH Checked: PG Approved: PG

www.collinsearthworks.co.uk

Collins Earthworks Ltd
Whiteley Road
Ripley
Derbyshire
DE5 3QL

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E4 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

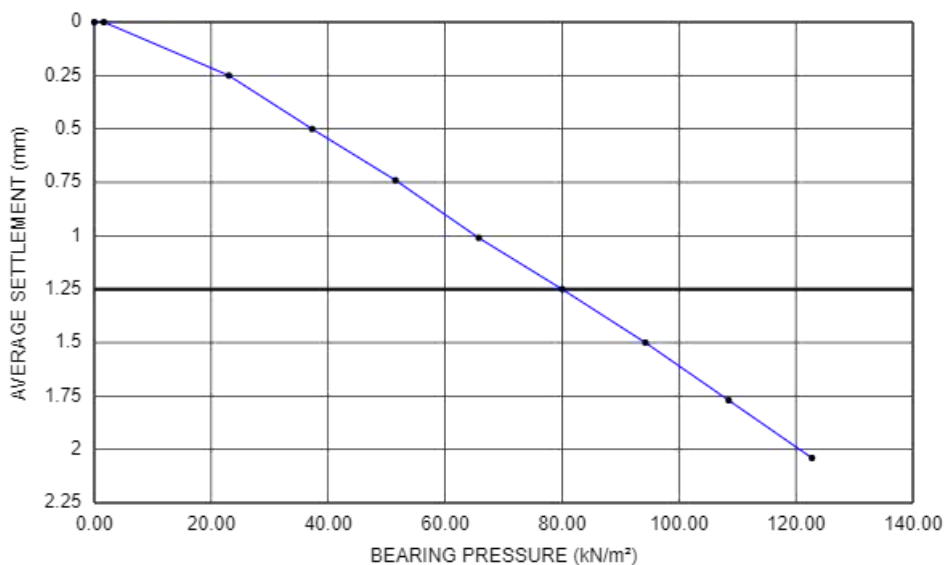
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 123 kN/m²
 Max settlement: 2.04 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 80 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

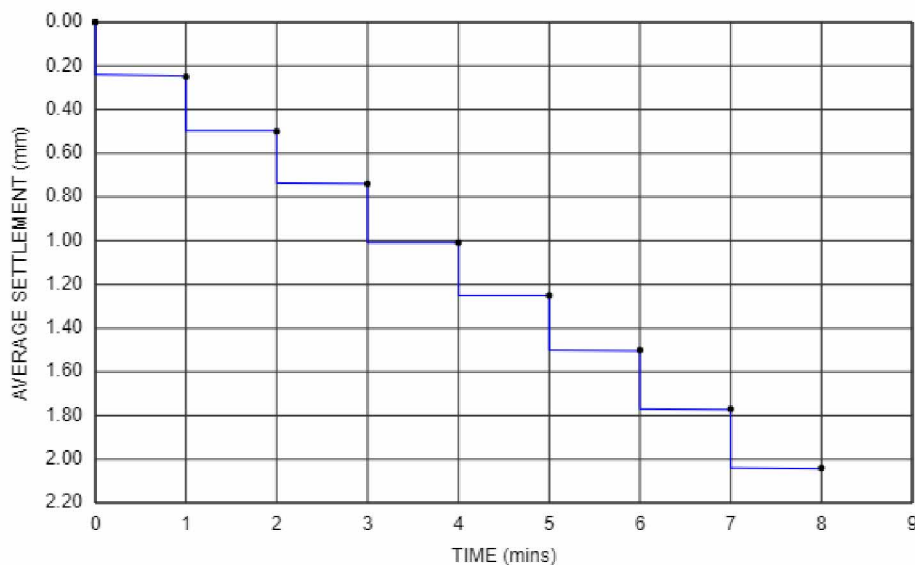
REPORT NUMBER:

C1055642 / 161585.1.1.1

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.21	-0.21	-0.32	0.21	0.21	0.32	0.25
6.0	37.3	-0.44	-0.50	-0.55	0.44	0.50	0.55	0.50
8.2	51.5	-0.68	-0.76	-0.78	0.68	0.76	0.78	0.74
10.5	65.8	-0.90	-1.03	-1.10	0.90	1.03	1.10	1.01
12.8	80.0	-1.17	-1.20	-1.38	1.17	1.20	1.38	1.25
15.1	94.3	-1.39	-1.42	-1.70	1.39	1.42	1.70	1.50
17.3	108.5	-1.65	-1.66	-2.01	1.65	1.66	2.01	1.77
19.6	122.7	-1.86	-1.95	-2.32	1.86	1.95	2.32	2.04

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

07-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E5. 07.12.21	MATERIAL:	Crushed rock with stones, fines, and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

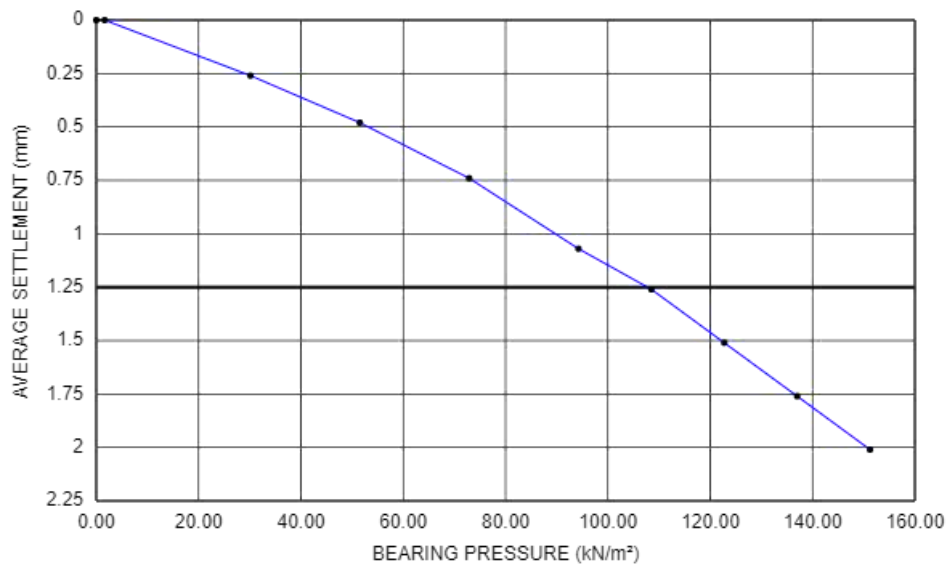
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 151 kN/m²
 Max settlement: 2.01 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 108 kN/m²
 Modulus of subgrade K762: 54 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

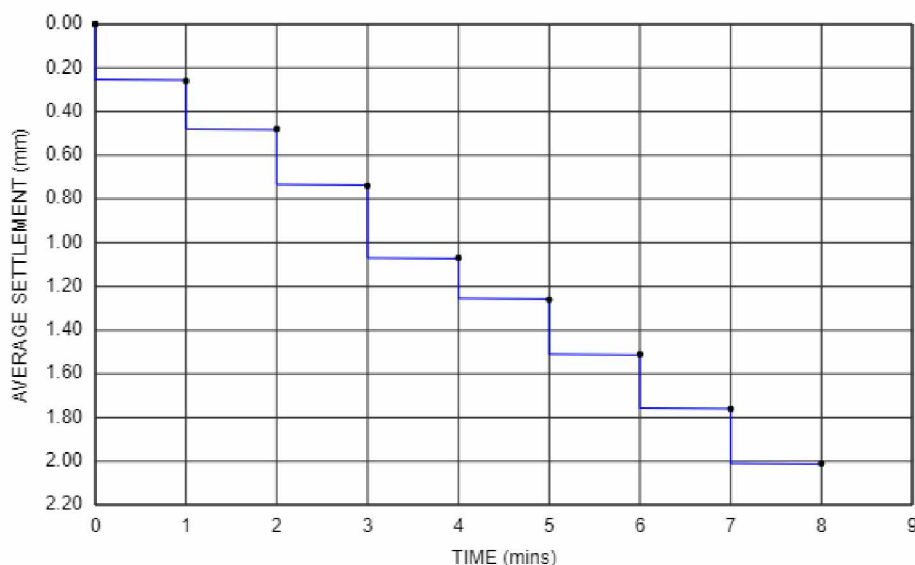
REPORT NUMBER:

C1055642 / 161585.1.1.2

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.8	30.1	-0.24	-0.19	-0.34	0.24	0.19	0.34	0.26
8.2	51.5	-0.46	-0.36	-0.63	0.46	0.36	0.63	0.48
11.6	72.9	-0.72	-0.55	-0.94	0.72	0.55	0.94	0.74
15.1	94.3	-1.09	-0.87	-1.26	1.09	0.87	1.26	1.07
17.3	108.5	-1.23	-1.04	-1.50	1.23	1.04	1.50	1.26
19.6	122.7	-1.48	-1.20	-1.86	1.48	1.20	1.86	1.51
21.9	137.0	-1.71	-1.43	-2.14	1.71	1.43	2.14	1.76
24.2	151.2	-1.97	-1.75	-2.32	1.97	1.75	2.32	2.01

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

07-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E6. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

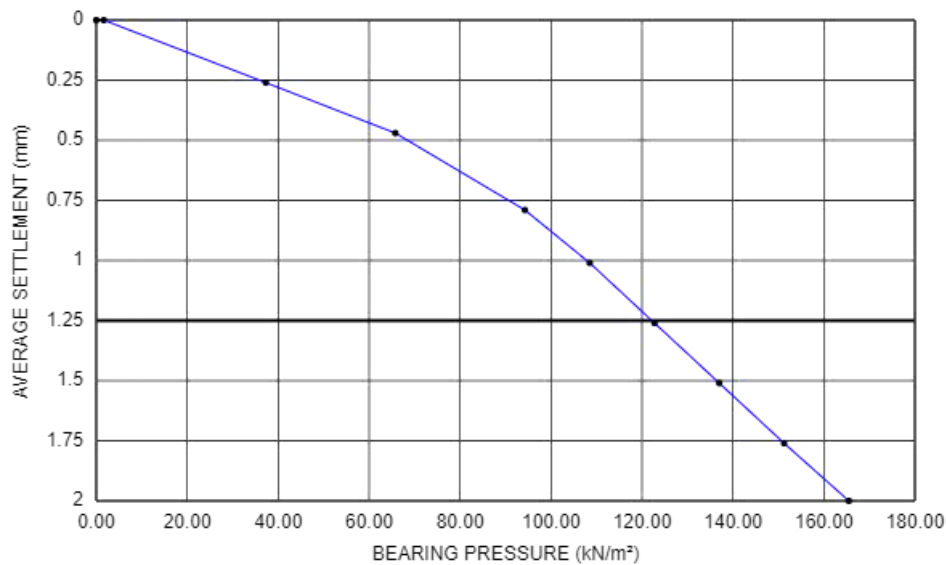
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 165 kN/m²
 Max settlement: 2.00 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 122 kN/m²
 Modulus of subgrade K762: 61 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 12.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 12.0 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

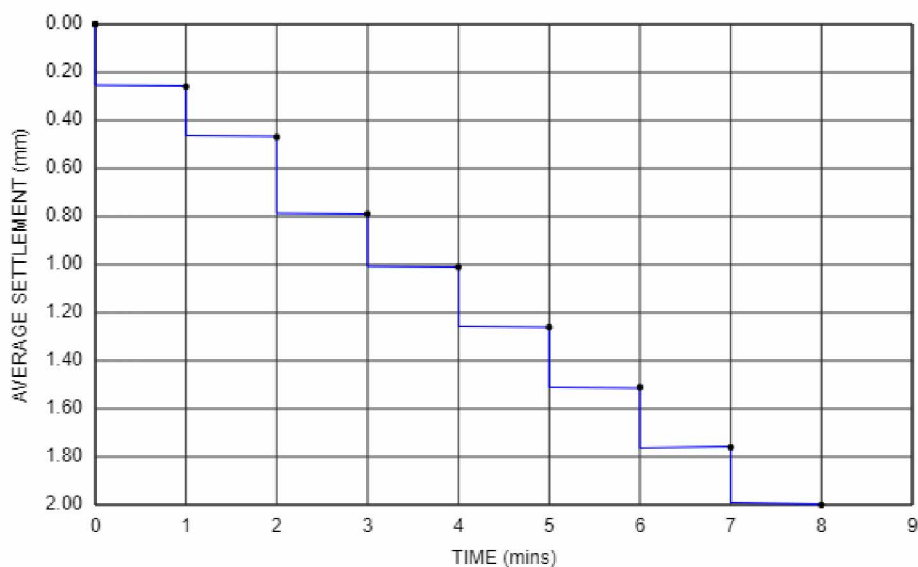
REPORT NUMBER:

C1055642 / 161585.1.1.3

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.0	37.3	-0.14	-0.42	-0.21	0.14	0.42	0.21	0.26
10.5	65.8	-0.25	-0.70	-0.45	0.25	0.70	0.45	0.47
15.1	94.3	-0.40	-1.11	-0.86	0.40	1.11	0.86	0.79
17.3	108.5	-0.60	-1.40	-1.03	0.60	1.40	1.03	1.01
19.6	122.7	-0.69	-1.87	-1.22	0.69	1.87	1.22	1.26
21.9	137.0	-0.97	-2.07	-1.50	0.97	2.07	1.50	1.51
24.2	151.2	-1.24	-2.25	-1.78	1.24	2.25	1.78	1.76
26.4	165.5	-1.50	-2.54	-1.95	1.50	2.54	1.95	2.00

SETTLEMENT RELATIONSHIP vs TIME



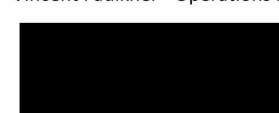
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

07-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E7. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:		SUPPLIER:	On site
TEST METHOD:	Incremental Plate Loading	SOURCE:	Site won
SAMPLING PLAN:	CTS procedure	SAMPLE TAKEN:	No

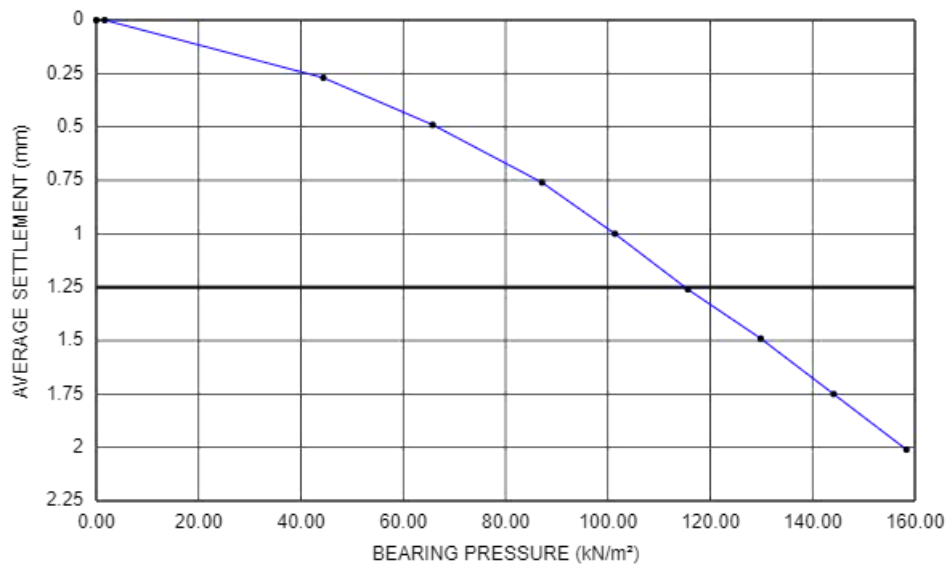
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 158 kN/m²
 Max settlement: 2.01 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 115 kN/m²
 Modulus of subgrade K762: 57 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.8 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

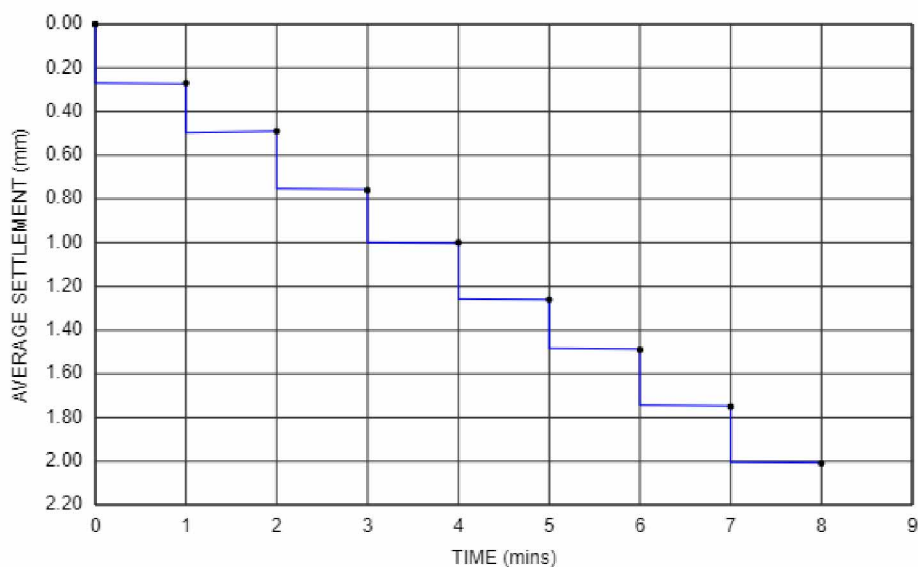
REPORT NUMBER:

C1055642 / 161585.1.1.4

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.1	44.4	-0.33	-0.26	-0.23	0.33	0.26	0.23	0.27
10.5	65.8	-0.56	-0.43	-0.48	0.56	0.43	0.48	0.49
13.9	87.1	-0.81	-0.70	-0.76	0.81	0.70	0.76	0.76
16.2	101.4	-1.19	-0.92	-0.90	1.19	0.92	0.90	1.00
18.5	115.6	-1.36	-1.19	-1.23	1.36	1.19	1.23	1.26
20.7	129.9	-1.56	-1.36	-1.54	1.56	1.36	1.54	1.49
23.0	144.1	-1.81	-1.54	-1.89	1.81	1.54	1.89	1.75
25.3	158.4	-2.01	-1.85	-2.16	2.01	1.85	2.16	2.01

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Vincent Faulkner - Operations Supervisor



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07-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E8. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

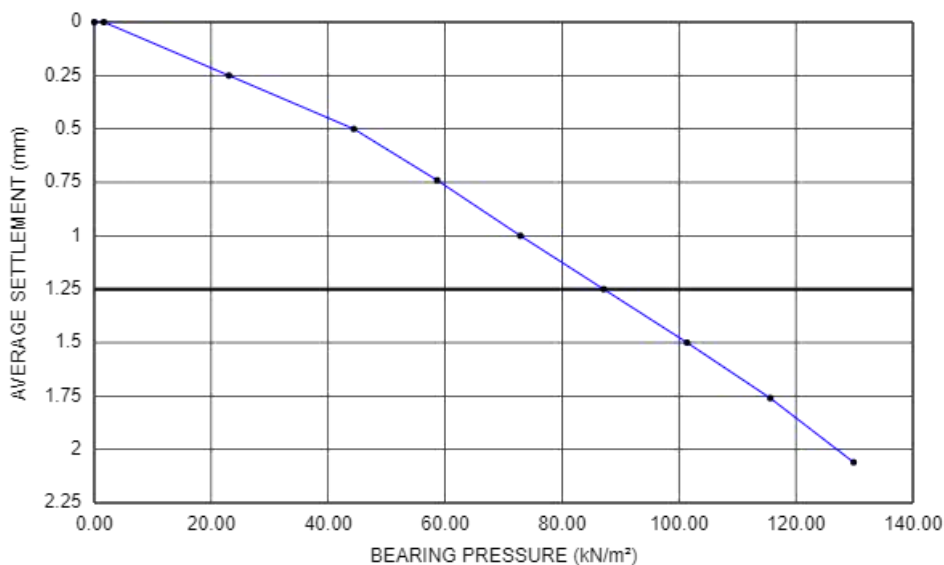
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 130 kN/m²
 Max settlement: 2.06 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 87 kN/m²
 Modulus of subgrade K762: 43 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.6 %

Remarks:

Test results reported relate only to the items tested.

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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

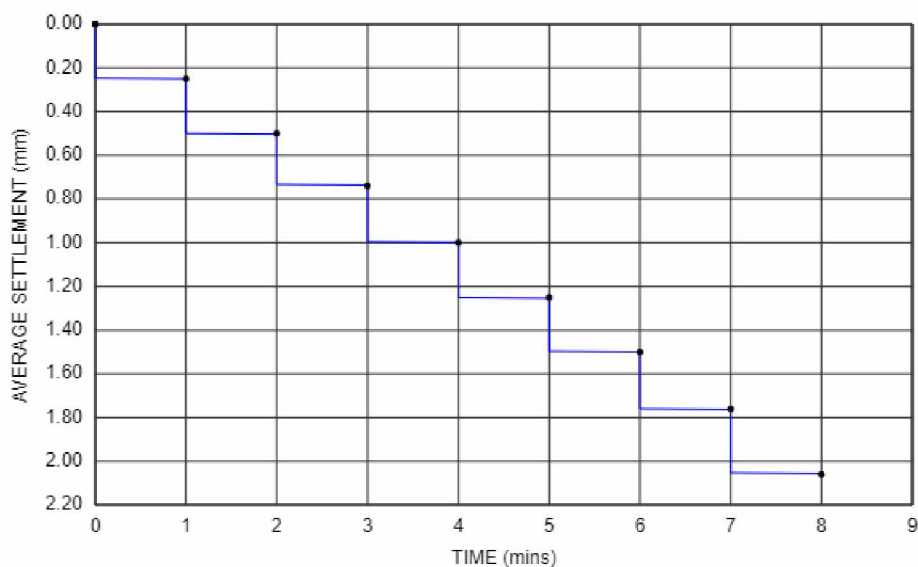
REPORT NUMBER:

C1055642 / 161585.1.1.5

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.23	-0.23	-0.29	0.23	0.23	0.29	0.25
7.1	44.4	-0.53	-0.44	-0.54	0.53	0.44	0.54	0.50
9.4	58.6	-0.73	-0.68	-0.80	0.73	0.68	0.80	0.74
11.6	72.9	-0.97	-0.89	-1.14	0.97	0.89	1.14	1.00
13.9	87.1	-1.20	-1.19	-1.37	1.20	1.19	1.37	1.25
16.2	101.4	-1.46	-1.38	-1.66	1.46	1.38	1.66	1.50
18.5	115.6	-1.69	-1.67	-1.93	1.69	1.67	1.93	1.76
20.7	129.9	-1.84	-1.99	-2.34	1.84	1.99	2.34	2.06

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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Vincent Faulkner - Operations Supervisor



Approved Signatory

10-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	07/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	E9. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

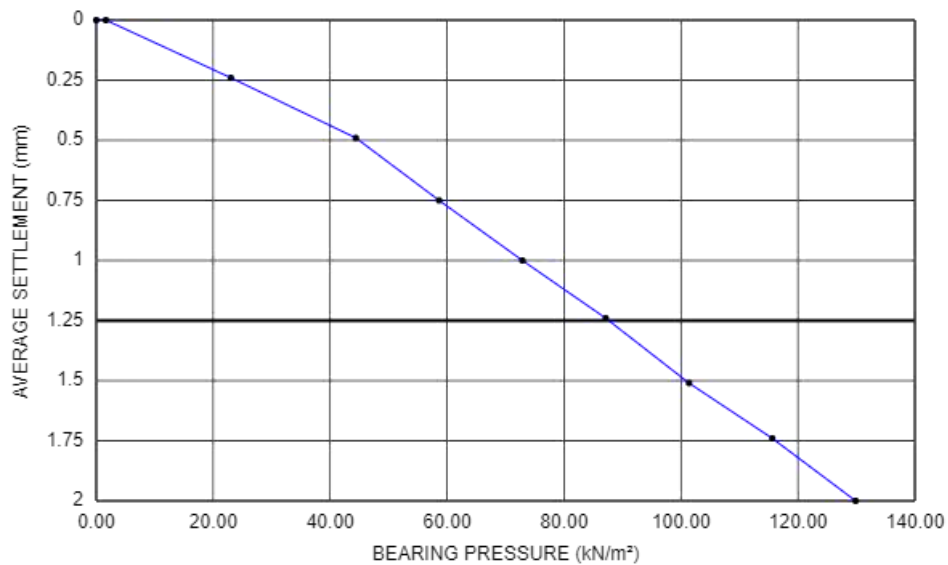
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 130 kN/m²
 Max settlement: 2.00 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 88 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.8 %

Remarks:

Test results reported relate only to the items tested.
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 Y

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

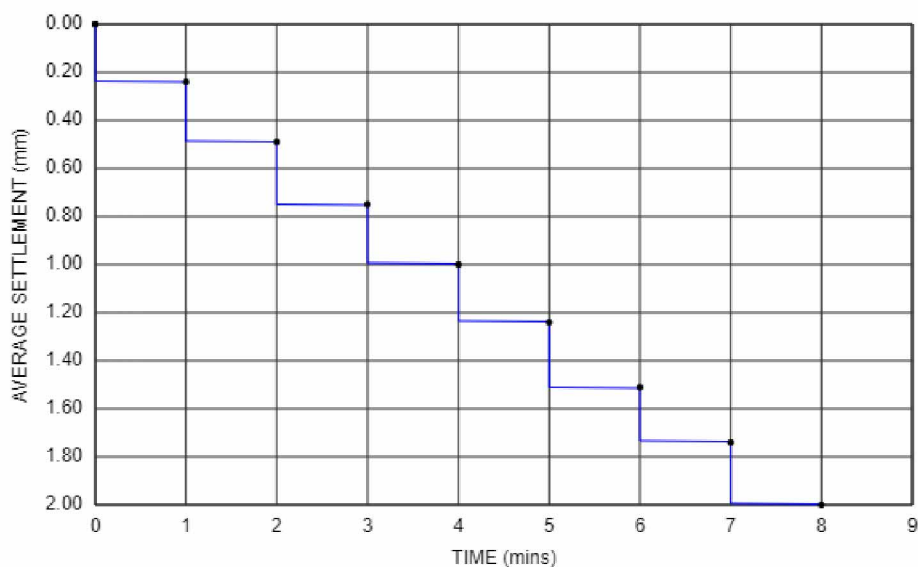
REPORT NUMBER:

C1055642 / 161585.1.1.6

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.32	-0.21	-0.19	0.32	0.21	0.19	0.24
7.1	44.4	-0.58	-0.50	-0.39	0.58	0.50	0.39	0.49
9.4	58.6	-0.85	-0.75	-0.66	0.85	0.75	0.66	0.75
11.6	72.9	-1.12	-0.98	-0.89	1.12	0.98	0.89	1.00
13.9	87.1	-1.37	-1.24	-1.10	1.37	1.24	1.10	1.24
16.2	101.4	-1.73	-1.45	-1.36	1.73	1.45	1.36	1.51
18.5	115.6	-1.99	-1.68	-1.54	1.99	1.68	1.54	1.74
20.7	129.9	-2.28	-1.93	-1.78	2.28	1.93	1.78	2.00

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Vincent Faulkner - Operations Supervisor



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10-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	08/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	D4. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

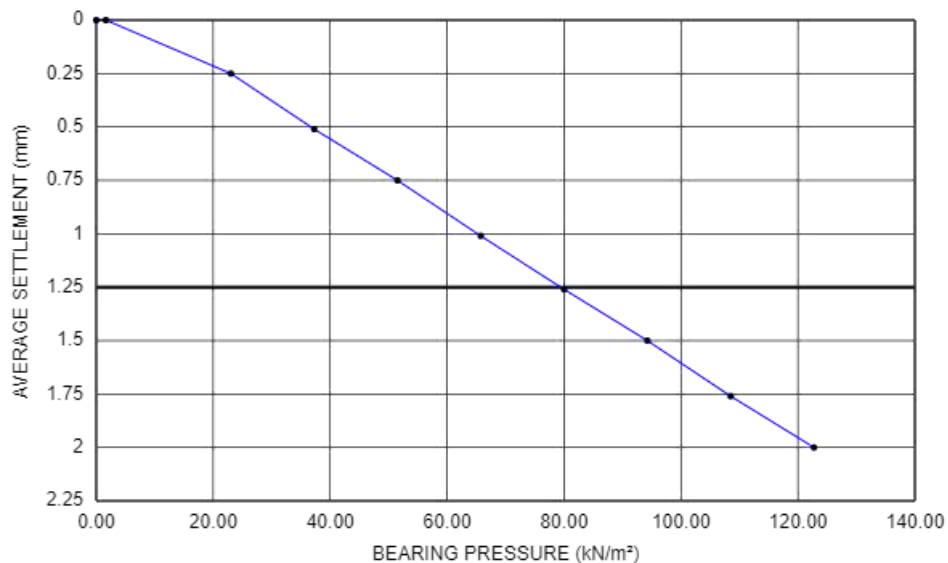
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 123 kN/m²
 Max settlement: 2.00 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 79 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.7 %

Remarks:

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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

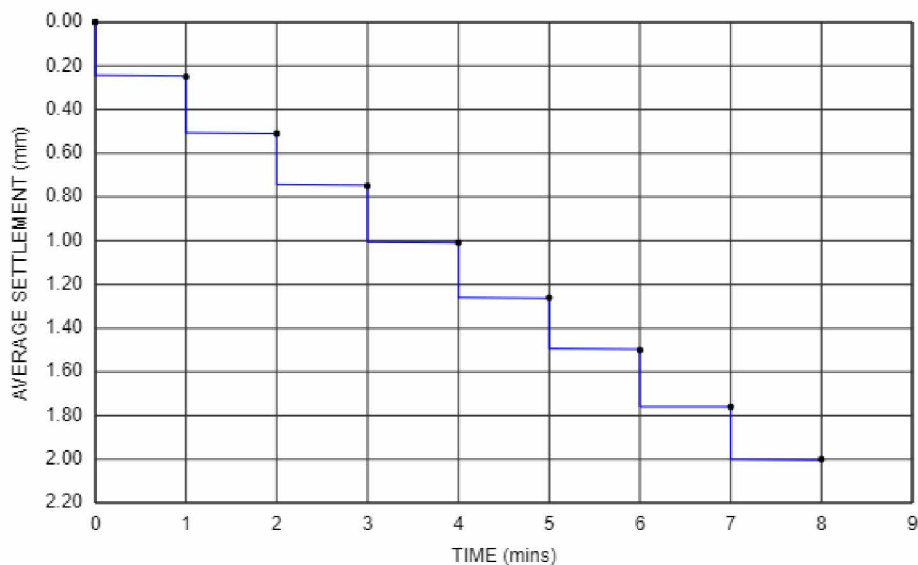
REPORT NUMBER:

C1055642 / 161585.1.1.7

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.30	-0.19	-0.25	0.30	0.19	0.25	0.25
6.0	37.3	-0.60	-0.41	-0.52	0.60	0.41	0.52	0.51
8.2	51.5	-0.79	-0.68	-0.77	0.79	0.68	0.77	0.75
10.5	65.8	-1.10	-0.93	-1.00	1.10	0.93	1.00	1.01
12.8	80.0	-1.36	-1.20	-1.23	1.36	1.20	1.23	1.26
15.1	94.3	-1.63	-1.46	-1.40	1.63	1.46	1.40	1.50
17.3	108.5	-1.88	-1.68	-1.72	1.88	1.68	1.72	1.76
19.6	122.7	-2.20	-1.86	-1.95	2.20	1.86	1.95	2.00

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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Vincent Faulkner - Operations Supervisor



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10-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	08/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	C4. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	Yes

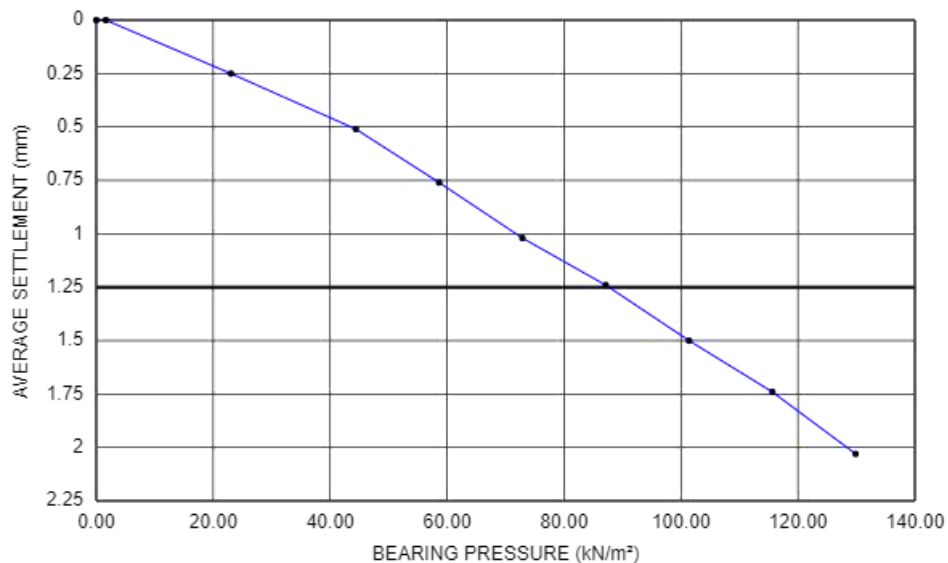
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 130 kN/m²
 Max settlement: 2.03 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 88 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.8 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

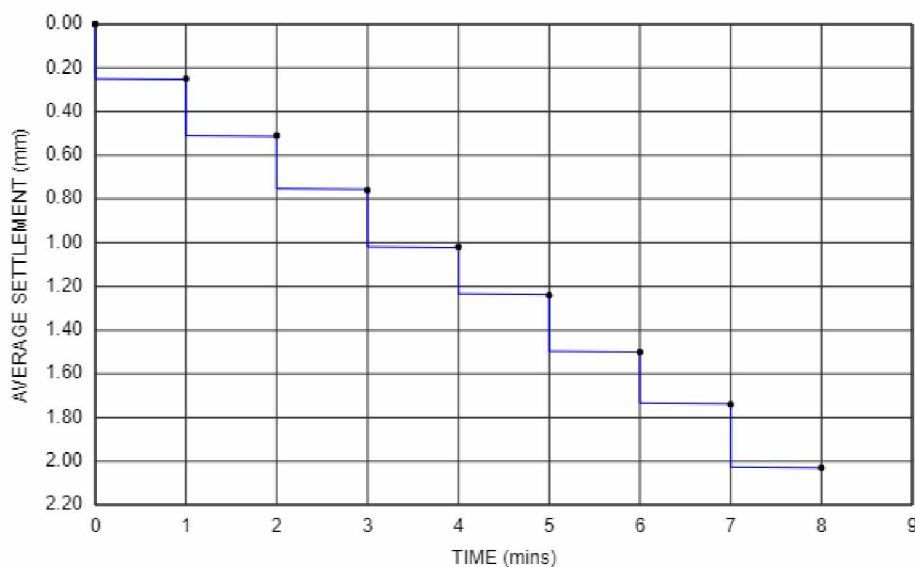
REPORT NUMBER:

C1055642 / 161585.1.1.8

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.20	-0.29	-0.27	0.20	0.29	0.27	0.25
7.1	44.4	-0.41	-0.55	-0.58	0.41	0.55	0.58	0.51
9.4	58.6	-0.69	-0.78	-0.80	0.69	0.78	0.80	0.76
11.6	72.9	-0.91	-1.01	-1.15	0.91	1.01	1.15	1.02
13.9	87.1	-1.17	-1.21	-1.33	1.17	1.21	1.33	1.24
16.2	101.4	-1.39	-1.49	-1.62	1.39	1.49	1.62	1.50
18.5	115.6	-1.65	-1.71	-1.85	1.65	1.71	1.85	1.74
20.7	129.9	-1.90	-2.00	-2.19	1.90	2.00	2.19	2.03

SETTLEMENT RELATIONSHIP vs TIME



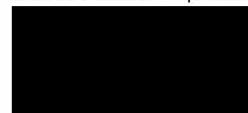
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

10-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	08/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	D8. 07.12.21	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

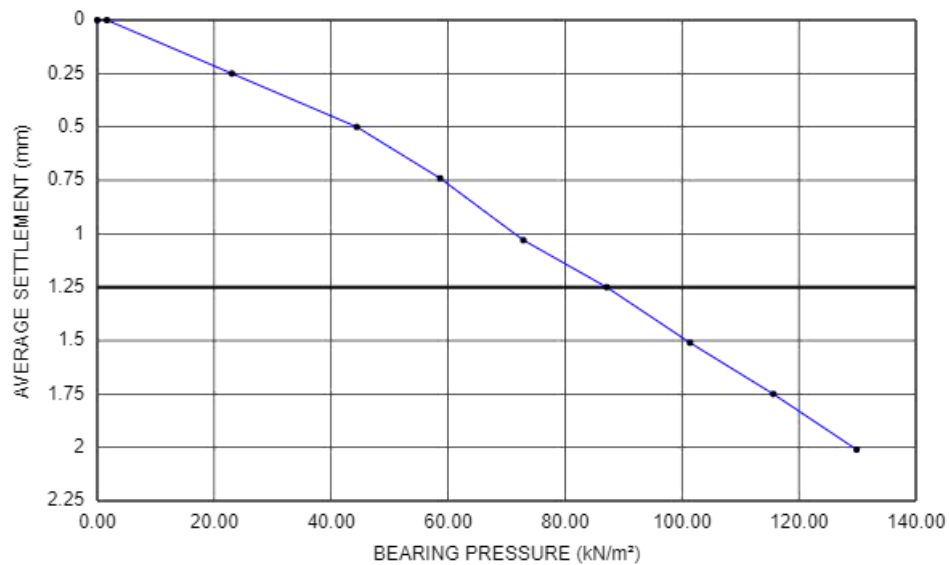
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 130 kN/m²
 Max settlement: 2.01 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 87 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

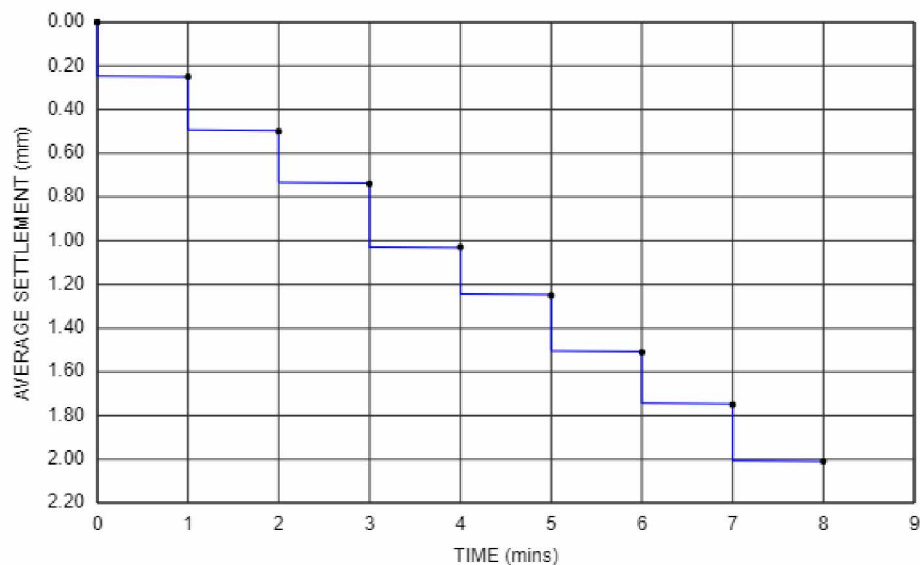
REPORT NUMBER:

C1055642 / 161585.1.1.9

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.18	-0.30	-0.27	0.18	0.30	0.27	0.25
7.1	44.4	-0.43	-0.54	-0.52	0.43	0.54	0.52	0.50
9.4	58.6	-0.70	-0.73	-0.78	0.70	0.73	0.78	0.74
11.6	72.9	-1.03	-0.98	-1.09	1.03	0.98	1.09	1.03
13.9	87.1	-1.26	-1.18	-1.30	1.26	1.18	1.30	1.25
16.2	101.4	-1.56	-1.35	-1.61	1.56	1.35	1.61	1.51
18.5	115.6	-1.72	-1.58	-1.94	1.72	1.58	1.94	1.75
20.7	129.9	-1.97	-1.88	-2.18	1.97	1.88	2.18	2.01

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

10-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161585.1.1.10		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	08/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Nnamdi Obasi	SITE:	Havant, Portsmouth
LOCATION:	C8. 07.12.21 - Layer 1, Finished Formation	MATERIAL:	Crushed rock with stones, fines and bricks
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

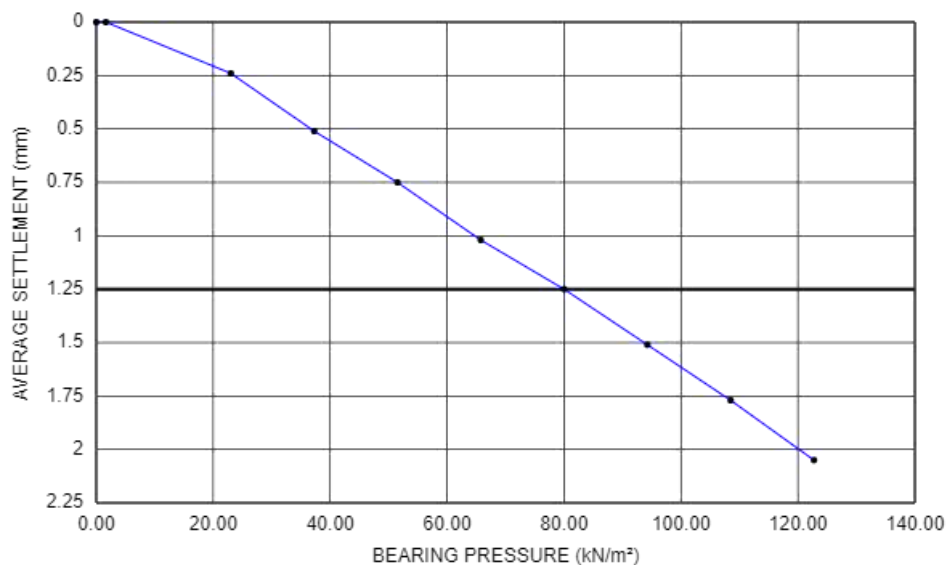
Equipment Details

Type of Kentledge: 14 Ton Excavator
 Plate Diameter: 451 mm
 Plate Area: 0.159751 m²
 Plate Correction: 0.62

Results

Max applied pressure: 123 kN/m²
 Max settlement: 2.05 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 80 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

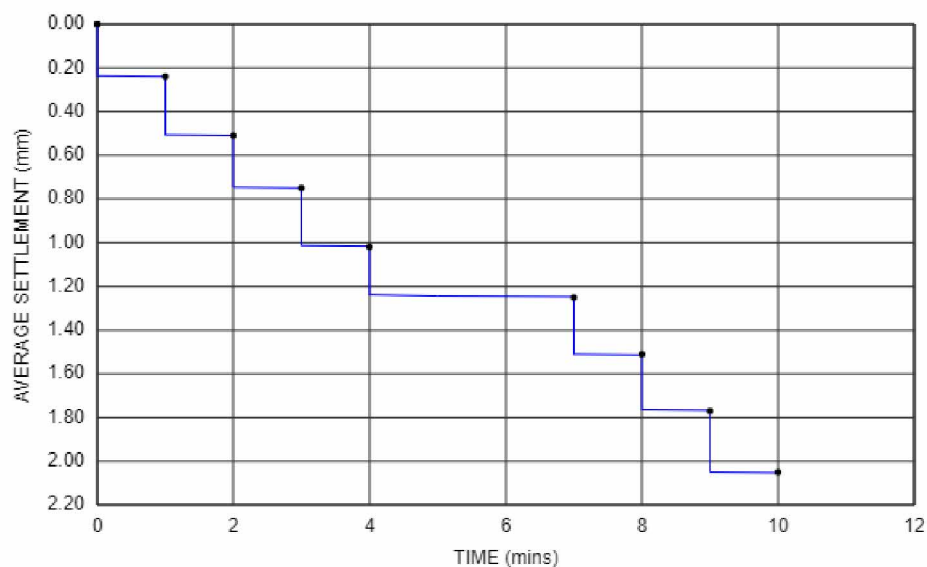
REPORT NUMBER:

C1055642 / 161585.1.1.10

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
0.3	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.7	23.0	-0.23	-0.20	-0.29	0.23	0.20	0.29	0.24
6.0	37.3	-0.44	-0.52	-0.57	0.44	0.52	0.57	0.51
8.2	51.5	-0.69	-0.74	-0.82	0.69	0.74	0.82	0.75
10.5	65.8	-0.93	-0.97	-1.15	0.93	0.97	1.15	1.02
12.8	80.0	-1.20	-1.25	-1.29	1.20	1.25	1.29	1.25
15.1	94.3	-1.44	-1.48	-1.62	1.44	1.48	1.62	1.51
17.3	108.5	-1.70	-1.65	-1.95	1.70	1.65	1.95	1.77
19.6	122.7	-1.95	-1.91	-2.30	1.95	1.91	2.30	2.05

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	C5	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

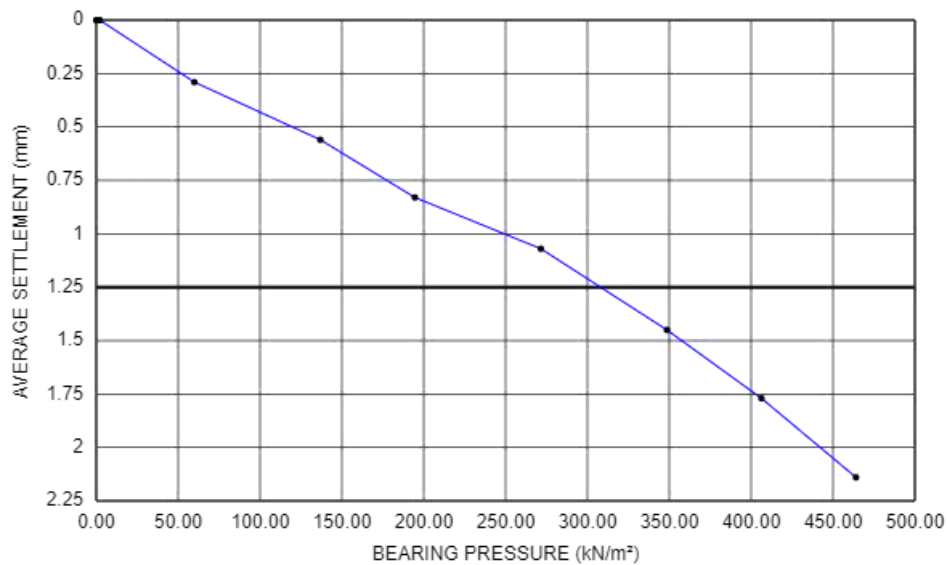
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 464 kN/m²
 Max settlement: 2.14 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 308 kN/m²
 Modulus of subgrade K762: 154 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 59.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 59.3 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

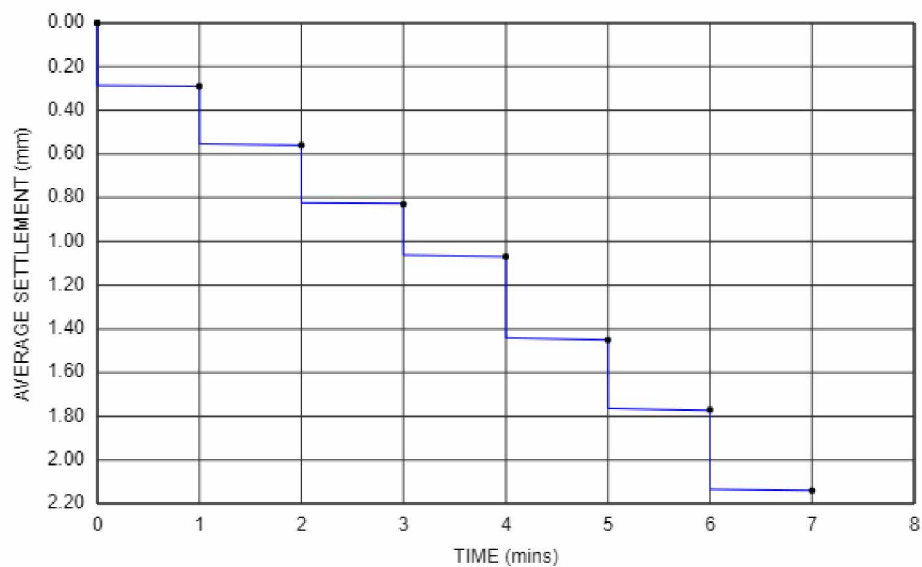
REPORT NUMBER:

C1055642 / 161933.1.1.1

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.22	-0.27	-0.38	0.22	0.27	0.38	0.29
21.8	136.9	-0.52	-0.54	-0.62	0.52	0.54	0.62	0.56
30.9	194.6	-0.76	-0.81	-0.91	0.76	0.81	0.91	0.83
43.2	271.6	-1.05	-1.10	-1.06	1.05	1.10	1.06	1.07
55.4	348.6	-1.40	-1.42	-1.53	1.40	1.42	1.53	1.45
64.6	406.3	-1.70	-1.82	-1.80	1.70	1.82	1.80	1.77
73.8	464.0	-2.02	-2.19	-2.21	2.02	2.19	2.21	2.14

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

09-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B7 - Layer 1, Finished Formation	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

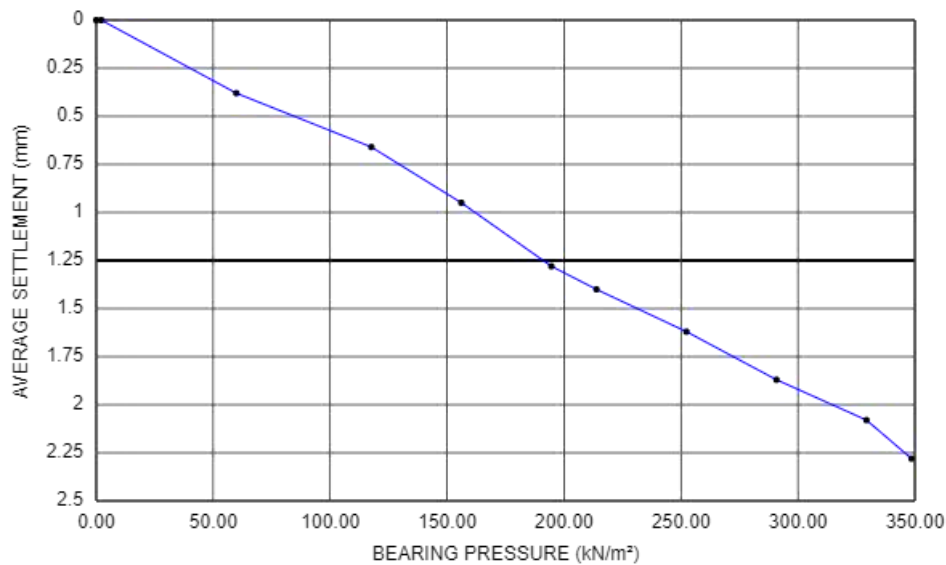
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 349 kN/m²
 Max settlement: 2.28 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 191 kN/m²
 Modulus of subgrade K762: 95 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 25.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 25.9 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

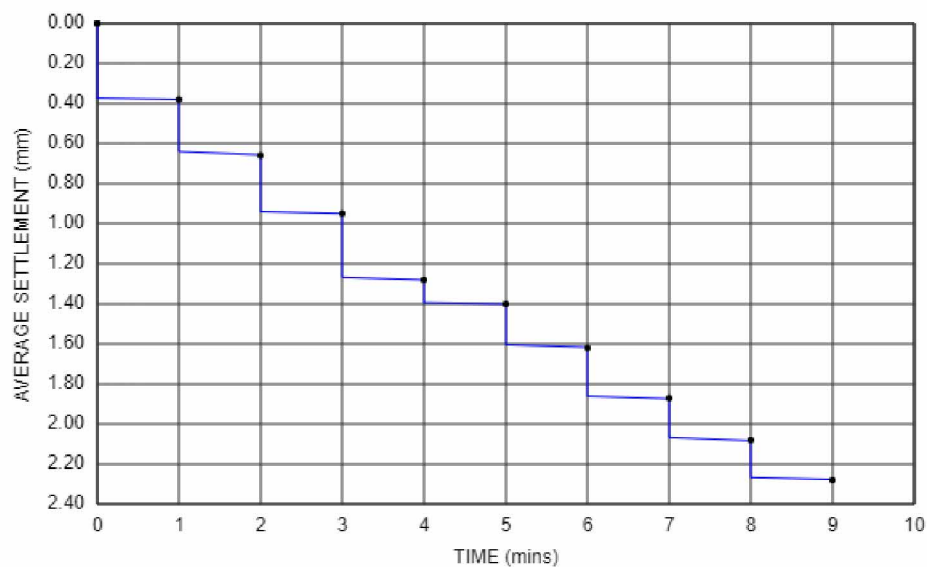
REPORT NUMBER:

C1055642 / 161933.1.1.2

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.62	-0.32	-0.20	0.62	0.32	0.20	0.38
18.7	117.6	-0.98	-0.61	-0.38	0.98	0.61	0.38	0.66
24.8	156.1	-1.28	-0.82	-0.75	1.28	0.82	0.75	0.95
30.9	194.6	-1.65	-1.19	-1.00	1.65	1.19	1.00	1.28
34.0	213.8	-1.82	-1.30	-1.08	1.82	1.30	1.08	1.40
40.1	252.3	-2.05	-1.49	-1.31	2.05	1.49	1.31	1.62
46.3	290.8	-2.29	-1.80	-1.53	2.29	1.80	1.53	1.87
52.4	329.3	-2.51	-2.03	-1.71	2.51	2.03	1.71	2.08
55.4	348.6	-2.69	-2.23	-1.91	2.69	2.23	1.91	2.28

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	C7 - Layer 1	MATERIAL:	Soil/clay with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	On site
TEST METHOD:	Incremental Plate Loading	SOURCE:	In situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

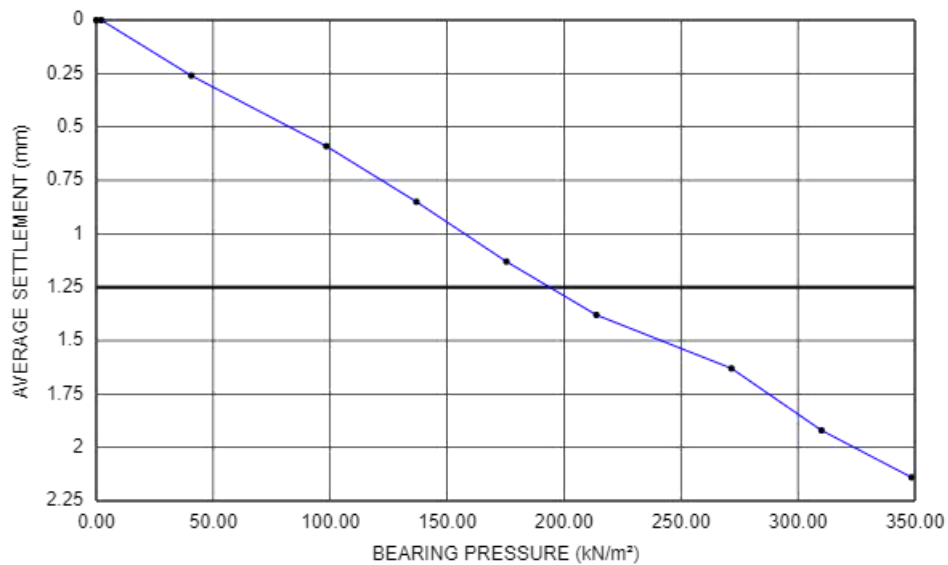
Equipment Details

Type of Kentledge: 18t dumper
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 349 kN/m²
 Max settlement: 2.14 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 194 kN/m²
 Modulus of subgrade K762: 97 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 26.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 26.6 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

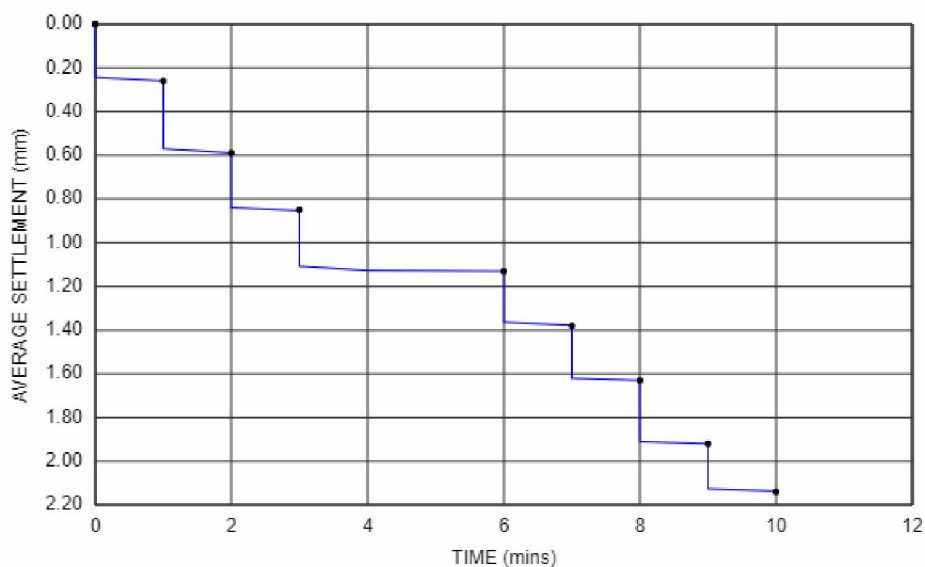
REPORT NUMBER:

C1055642 / 161933.1.1.3

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.5	40.6	-0.45	-0.28	-0.05	0.45	0.28	0.05	0.26
15.6	98.4	-0.83	-0.60	-0.34	0.83	0.60	0.34	0.59
21.8	136.9	-1.10	-0.88	-0.58	1.10	0.88	0.58	0.85
27.9	175.4	-1.38	-1.16	-0.85	1.38	1.16	0.85	1.13
34.0	213.8	-1.63	-1.41	-1.09	1.63	1.41	1.09	1.38
43.2	271.6	-1.91	-1.68	-1.30	1.91	1.68	1.30	1.63
49.3	310.1	-2.21	-2.00	-1.55	2.21	2.00	1.55	1.92
55.4	348.6	-2.49	-2.22	-1.70	2.49	2.22	1.70	2.14

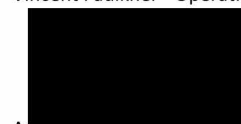
SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B4 - Layer 1, Finished Formation	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

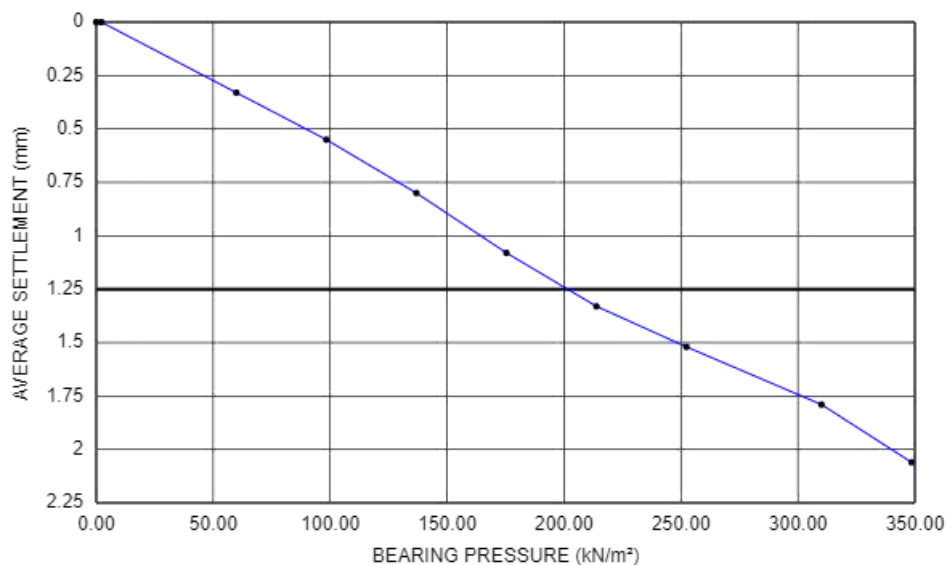
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 349 kN/m²
 Max settlement: 2.06 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 201 kN/m²
 Modulus of subgrade K762: 100 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 28.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 28.4 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

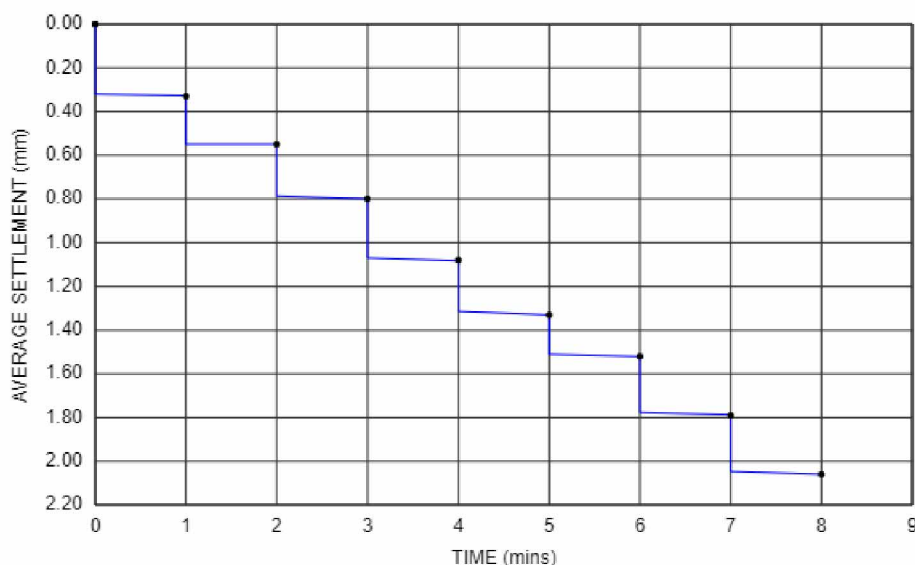
REPORT NUMBER:

C1055642 / 161933.1.1.4

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.60	-0.26	-0.12	0.60	0.26	0.12	0.33
15.6	98.4	-0.91	-0.49	-0.25	0.91	0.49	0.25	0.55
21.8	136.9	-1.26	-0.73	-0.41	1.26	0.73	0.41	0.80
27.9	175.4	-1.64	-1.02	-0.59	1.64	1.02	0.59	1.08
34.0	213.8	-1.98	-1.26	-0.75	1.98	1.26	0.75	1.33
40.1	252.3	-2.23	-1.44	-0.89	2.23	1.44	0.89	1.52
49.3	310.1	-2.59	-1.71	-1.06	2.59	1.71	1.06	1.79
55.4	348.6	-2.82	-2.03	-1.33	2.82	2.03	1.33	2.06

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	D5	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

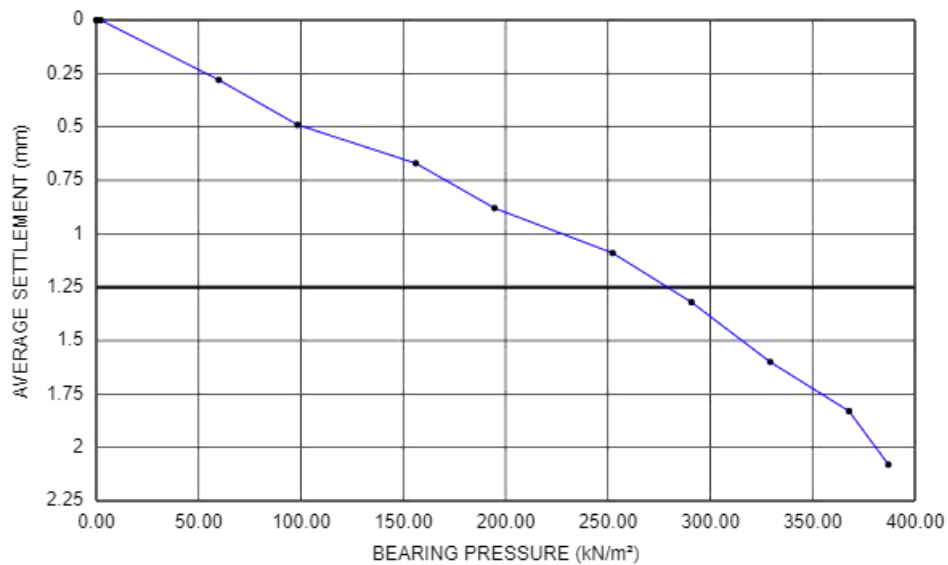
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 387 kN/m²
 Max settlement: 2.08 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 279 kN/m²
 Modulus of subgrade K762: 139 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 50.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 50.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

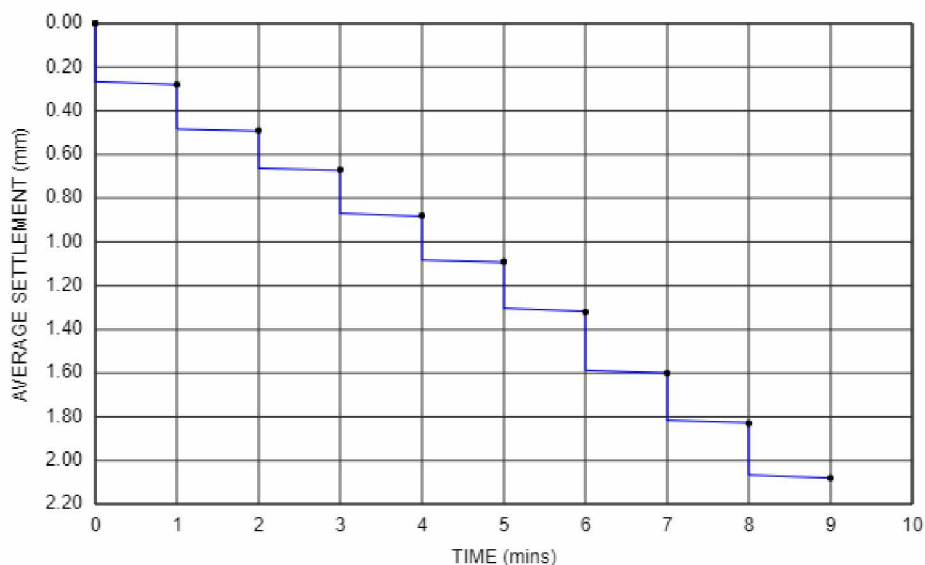
REPORT NUMBER:

C1055642 / 161933.1.1.5

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.43	-0.28	-0.13	0.43	0.28	0.13	0.28
15.6	98.4	-0.68	-0.49	-0.31	0.68	0.49	0.31	0.49
24.8	156.1	-0.89	-0.67	-0.46	0.89	0.67	0.46	0.67
30.9	194.6	-1.15	-0.87	-0.63	1.15	0.87	0.63	0.88
40.1	252.3	-1.39	-1.10	-0.79	1.39	1.10	0.79	1.09
46.3	290.8	-1.65	-1.30	-1.00	1.65	1.30	1.00	1.32
52.4	329.3	-1.97	-1.58	-1.25	1.97	1.58	1.25	1.60
58.5	367.8	-2.23	-1.82	-1.43	2.23	1.82	1.43	1.83
61.6	387.1	-2.48	-2.05	-1.71	2.48	2.05	1.71	2.08

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

09-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B5 - Layer 1, Finished Formation	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

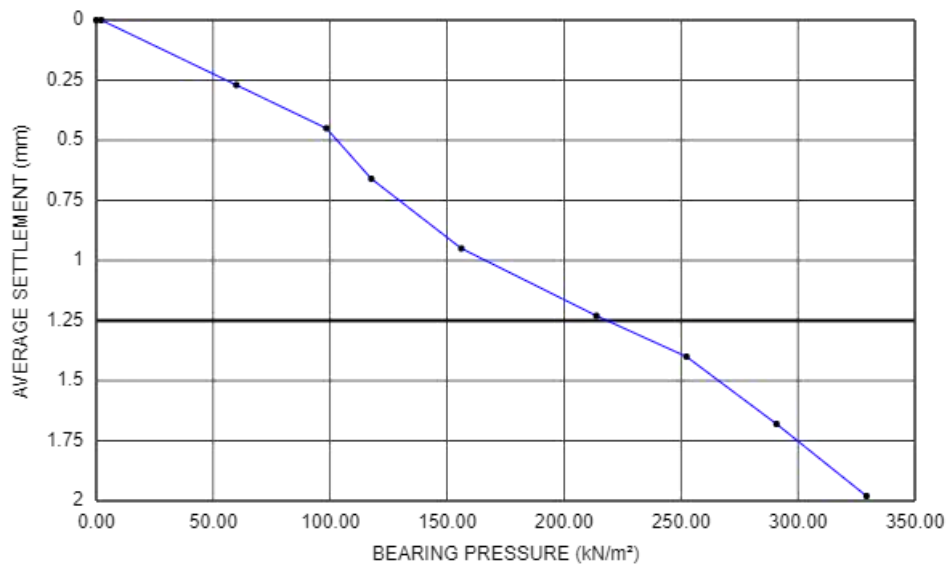
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 329 kN/m²
 Max settlement: 1.98 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 218 kN/m²
 Modulus of subgrade K762: 109 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 32.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 32.7 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

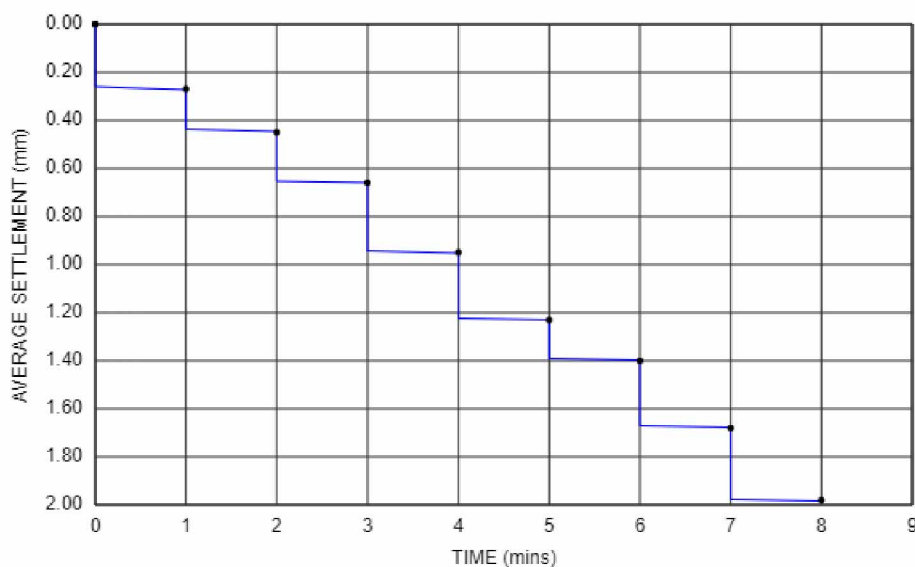
REPORT NUMBER:

C1055642 / 161933.1.1.6

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.39	-0.25	-0.18	0.39	0.25	0.18	0.27
15.6	98.4	-0.58	-0.43	-0.33	0.58	0.43	0.33	0.45
18.7	117.6	-0.82	-0.63	-0.53	0.82	0.63	0.53	0.66
24.8	156.1	-1.20	-0.89	-0.77	1.20	0.89	0.77	0.95
34.0	213.8	-1.58	-1.11	-1.00	1.58	1.11	1.00	1.23
40.1	252.3	-1.77	-1.33	-1.09	1.77	1.33	1.09	1.40
46.3	290.8	-2.09	-1.62	-1.32	2.09	1.62	1.32	1.68
52.4	329.3	-2.39	-1.98	-1.58	2.39	1.98	1.58	1.98

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B6 - Layer 1, Finished Formation	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

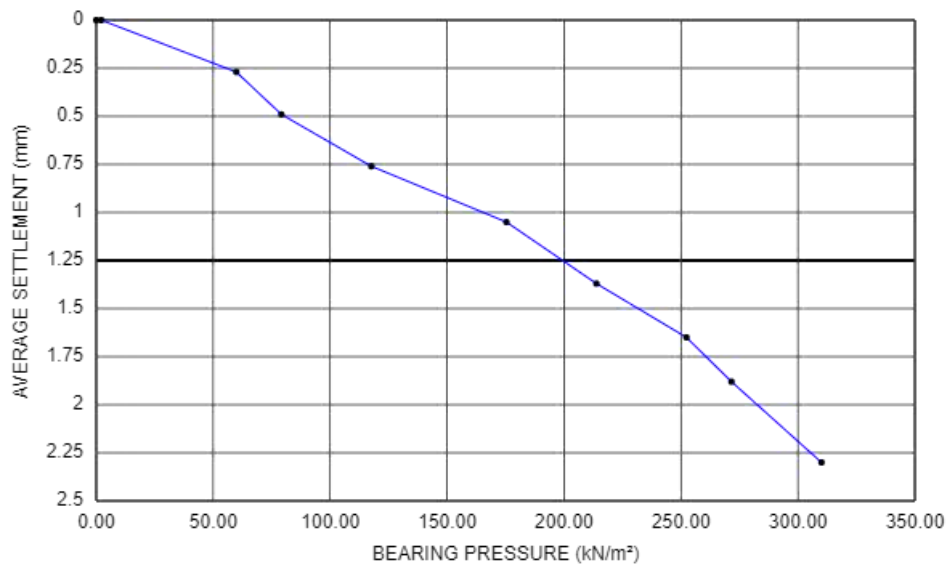
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 310 kN/m²
 Max settlement: 2.30 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 200 kN/m²
 Modulus of subgrade K762: 99 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 27.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 27.9 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

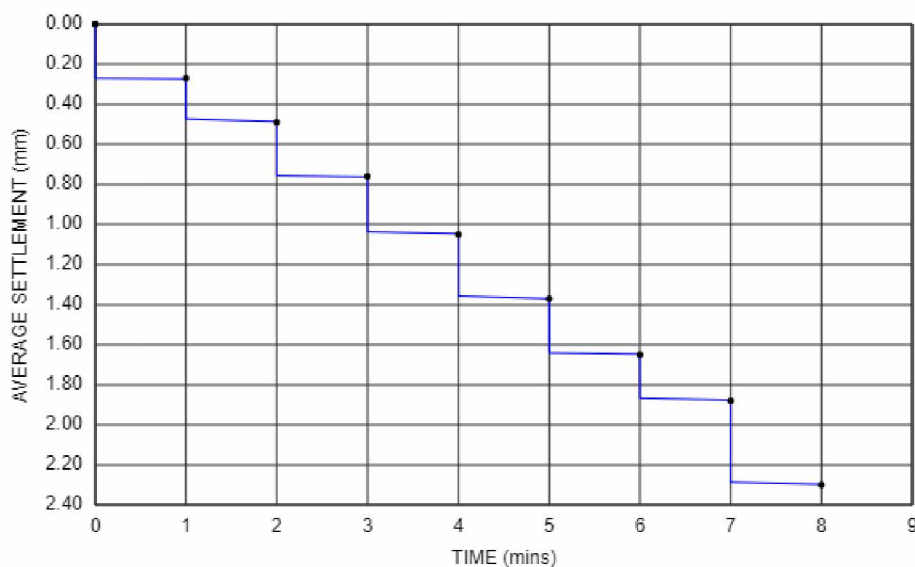
REPORT NUMBER:

C1055642 / 161933.1.1.7

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.39	-0.23	-0.20	0.39	0.23	0.20	0.27
12.6	79.1	-0.59	-0.47	-0.40	0.59	0.47	0.40	0.49
18.7	117.6	-0.88	-0.78	-0.63	0.88	0.78	0.63	0.76
27.9	175.4	-1.24	-1.02	-0.88	1.24	1.02	0.88	1.05
34.0	213.8	-1.69	-1.35	-1.07	1.69	1.35	1.07	1.37
40.1	252.3	-2.05	-1.62	-1.27	2.05	1.62	1.27	1.65
43.2	271.6	-2.32	-1.90	-1.41	2.32	1.90	1.41	1.88
49.3	310.1	-2.88	-2.23	-1.78	2.88	2.23	1.78	2.30

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	C6	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

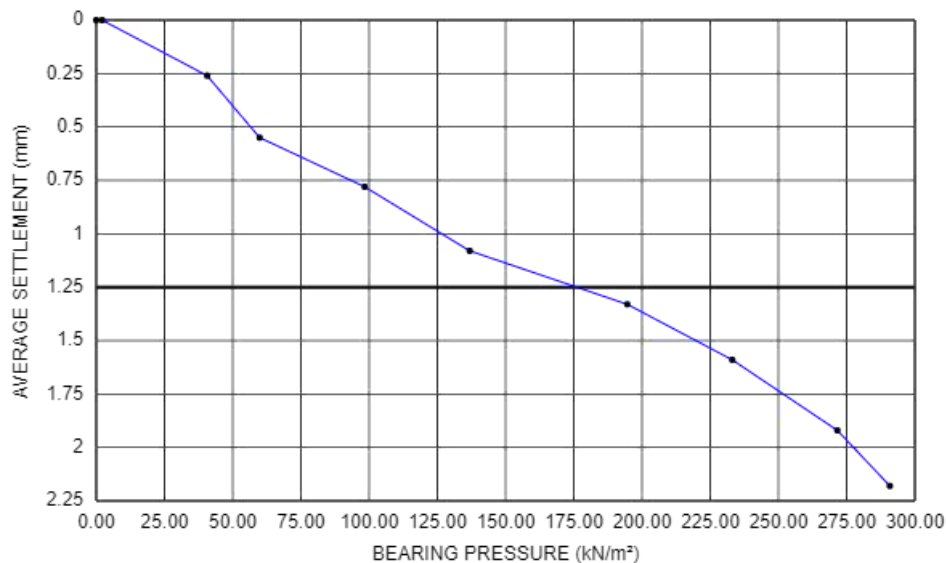
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 291 kN/m²
 Max settlement: 2.18 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 176 kN/m²
 Modulus of subgrade K762: 88 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 22.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 22.5 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

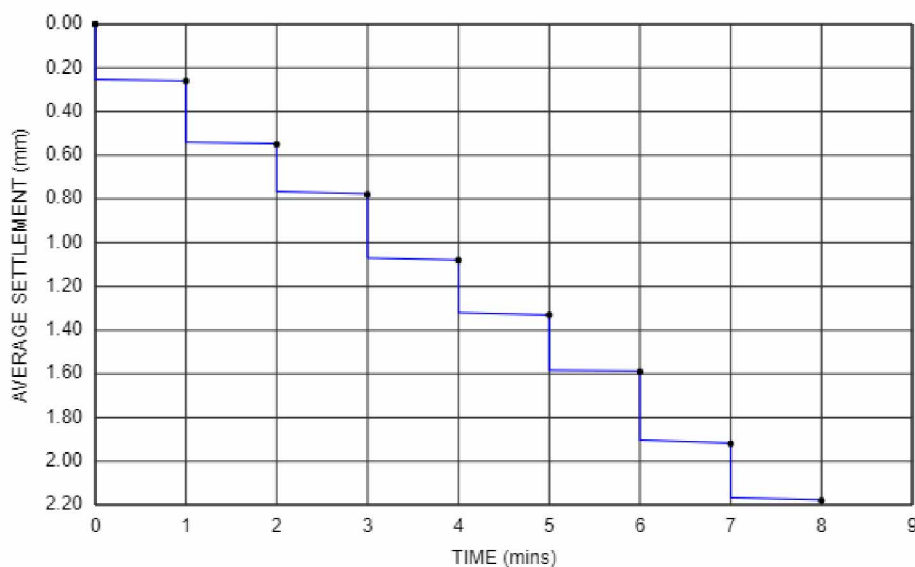
REPORT NUMBER:

C1055642 / 161933.1.1.8

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.5	40.6	-0.30	-0.21	-0.27	0.30	0.21	0.27	0.26
9.5	59.9	-0.54	-0.62	-0.48	0.54	0.62	0.48	0.55
15.6	98.4	-0.79	-0.83	-0.71	0.79	0.83	0.71	0.78
21.8	136.9	-1.09	-1.18	-0.97	1.09	1.18	0.97	1.08
30.9	194.6	-1.39	-1.42	-1.18	1.39	1.42	1.18	1.33
37.1	233.1	-1.67	-1.73	-1.36	1.67	1.73	1.36	1.59
43.2	271.6	-2.00	-2.05	-1.70	2.00	2.05	1.70	1.92
46.3	290.8	-2.22	-2.38	-1.93	2.22	2.38	1.93	2.18

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

09-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	D6	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

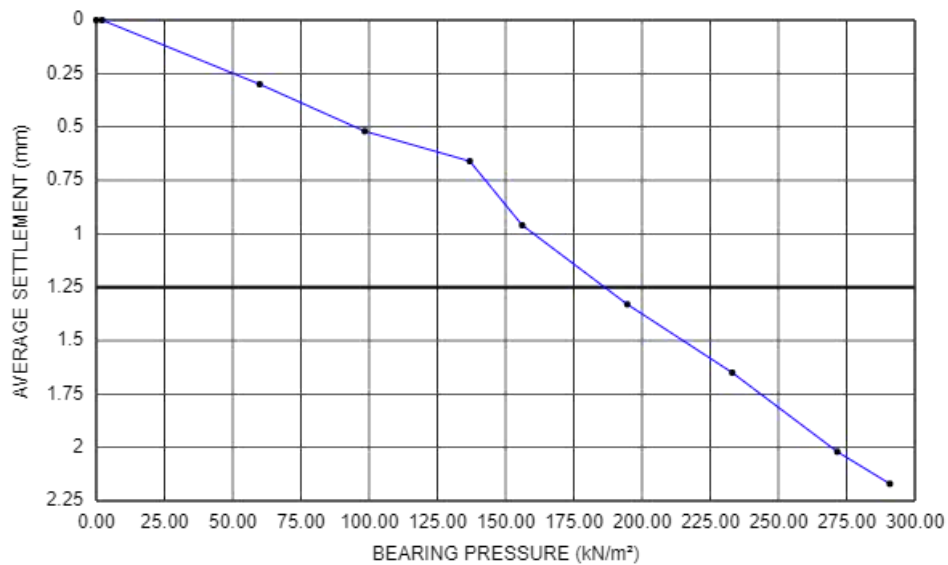
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 291 kN/m²
 Max settlement: 2.17 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 186 kN/m²
 Modulus of subgrade K762: 93 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 24.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 24.8 %

Remarks:

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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

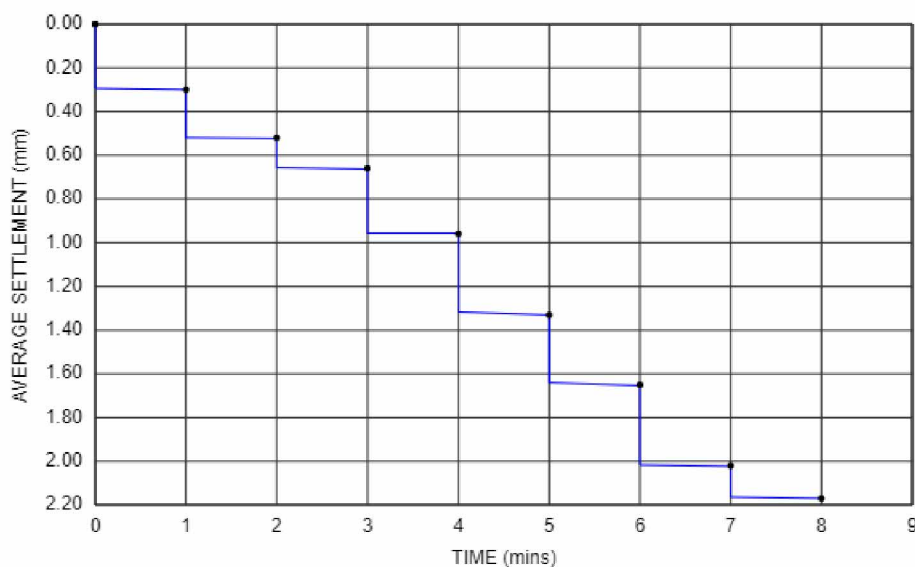
REPORT NUMBER:

C1055642 / 161933.1.1.9

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.33	-0.35	-0.22	0.33	0.35	0.22	0.30
15.6	98.4	-0.67	-0.52	-0.38	0.67	0.52	0.38	0.52
21.8	136.9	-0.81	-0.65	-0.53	0.81	0.65	0.53	0.66
24.8	156.1	-1.14	-0.93	-0.80	1.14	0.93	0.80	0.96
30.9	194.6	-1.52	-1.34	-1.13	1.52	1.34	1.13	1.33
37.1	233.1	-1.92	-1.62	-1.42	1.92	1.62	1.42	1.65
43.2	271.6	-2.33	-1.95	-1.79	2.33	1.95	1.79	2.02
46.3	290.8	-2.51	-2.09	-1.91	2.51	2.09	1.91	2.17

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

09-Dec-21



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 161933.1.1.10		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	09/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	D7	MATERIAL:	Soil with crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

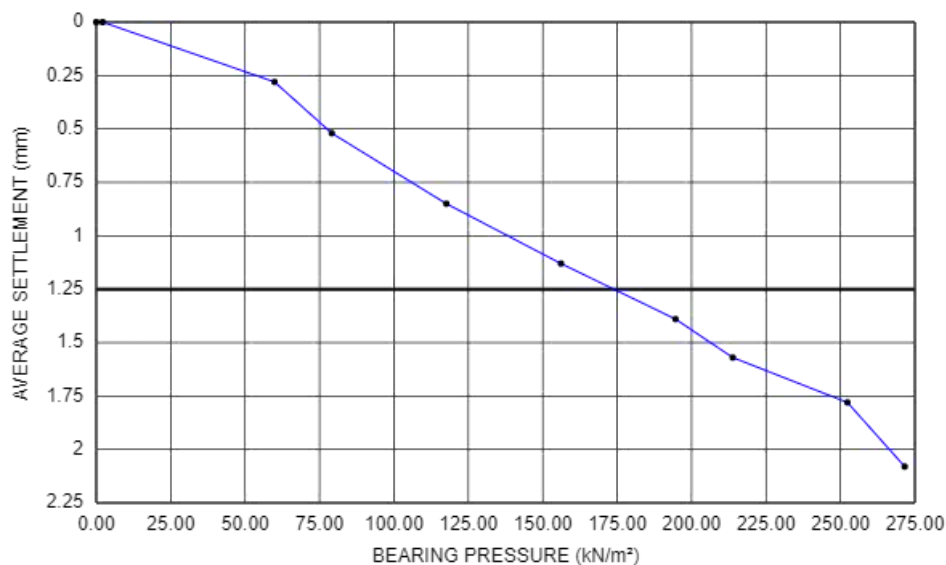
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 272 kN/m²
 Max settlement: 2.08 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 174 kN/m²
 Modulus of subgrade K762: 87 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 22.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 22.1 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

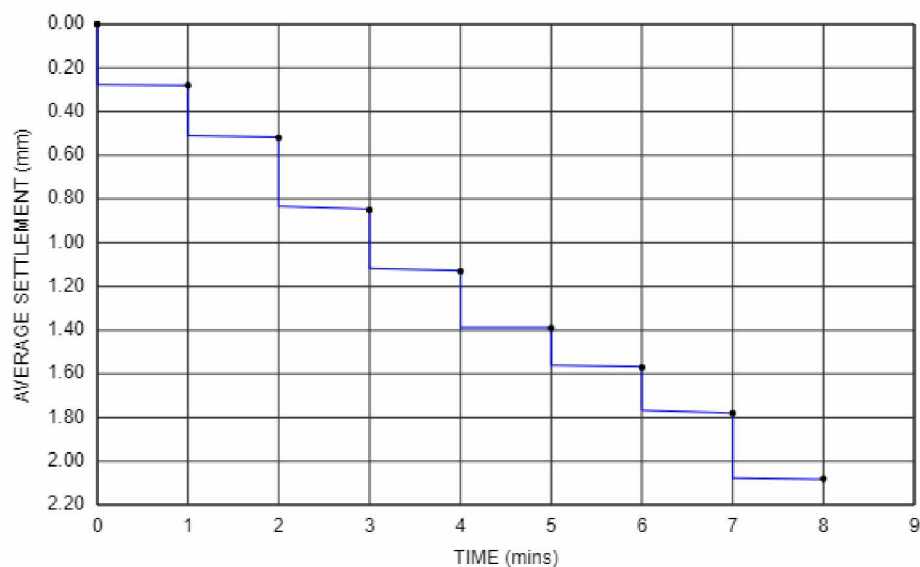
REPORT NUMBER:

C1055642 / 161933.1.1.10

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.5	59.9	-0.30	-0.21	-0.33	0.30	0.21	0.33	0.28
12.6	79.1	-0.53	-0.47	-0.55	0.53	0.47	0.55	0.52
18.7	117.6	-0.94	-0.75	-0.85	0.94	0.75	0.85	0.85
24.8	156.1	-1.14	-1.02	-1.22	1.14	1.02	1.22	1.13
30.9	194.6	-1.37	-1.26	-1.53	1.37	1.26	1.53	1.39
34.0	213.8	-1.52	-1.42	-1.76	1.52	1.42	1.76	1.57
40.1	252.3	-1.72	-1.62	-2.00	1.72	1.62	2.00	1.78
43.2	271.6	-2.05	-1.83	-2.37	2.05	1.83	2.37	2.08

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

09-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	B5 - Layer 1 Finished Formation	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

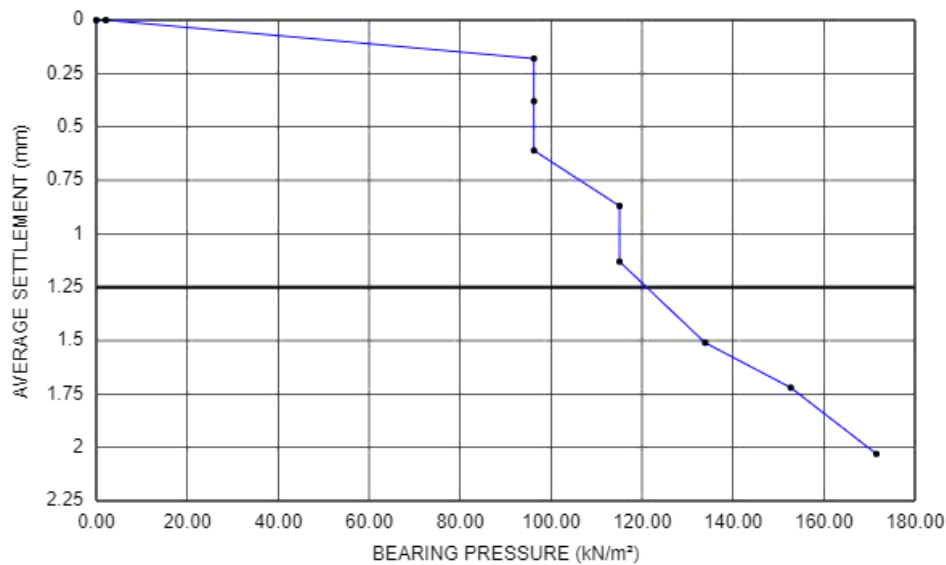
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 172 kN/m²
 Max settlement: 2.03 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 121 kN/m²
 Modulus of subgrade K762: 61 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.9 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

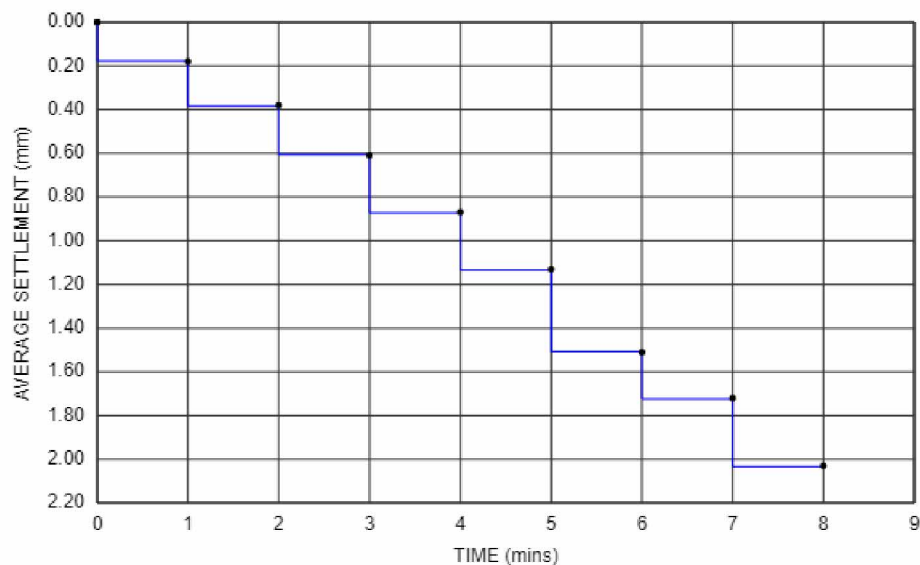
REPORT NUMBER:

C1055642 / 162737.1.1.1

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.6	96.2	-0.16	-0.25	-0.12	0.16	0.25	0.12	0.18
15.6	96.2	-0.32	-0.51	-0.32	0.32	0.51	0.32	0.38
15.6	96.2	-0.46	-0.78	-0.58	0.46	0.78	0.58	0.61
18.7	115.1	-0.66	-1.09	-0.87	0.66	1.09	0.87	0.87
18.7	115.1	-0.86	-1.38	-1.16	0.86	1.38	1.16	1.13
21.8	133.9	-1.18	-1.80	-1.54	1.18	1.80	1.54	1.51
24.8	152.7	-1.32	-2.07	-1.78	1.32	2.07	1.78	1.72
27.9	171.5	-1.55	-2.43	-2.12	1.55	2.43	2.12	2.03

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor

Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C5	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

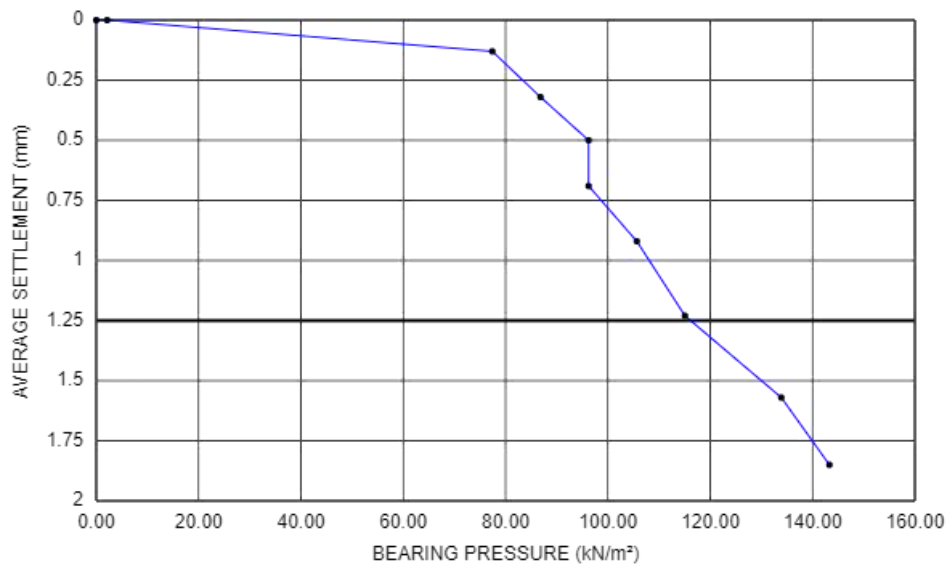
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 1.85 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 116 kN/m²
 Modulus of subgrade K762: 59 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.2 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

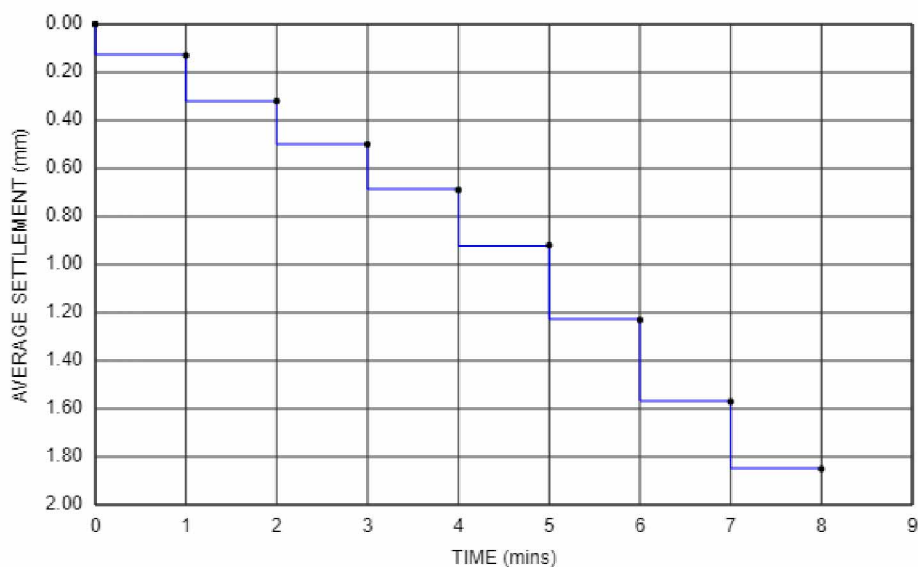
REPORT NUMBER:

C1055642 / 162737.1.1.2

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.02	-0.25	-0.11	0.02	0.25	0.11	0.13
14.1	86.8	-0.12	-0.50	-0.34	0.12	0.50	0.34	0.32
15.6	96.2	-0.22	-0.75	-0.53	0.22	0.75	0.53	0.50
15.6	96.2	-0.35	-1.01	-0.70	0.35	1.01	0.70	0.69
17.2	105.7	-0.55	-1.27	-0.95	0.55	1.27	0.95	0.92
18.7	115.1	-0.78	-1.59	-1.31	0.78	1.59	1.31	1.23
21.8	133.9	-1.07	-1.94	-1.69	1.07	1.94	1.69	1.57
23.3	143.3	-1.32	-2.21	-2.01	1.32	2.21	2.01	1.85

SETTLEMENT RELATIONSHIP vs TIME



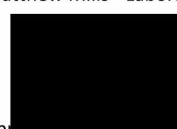
Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signature
16-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C6	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

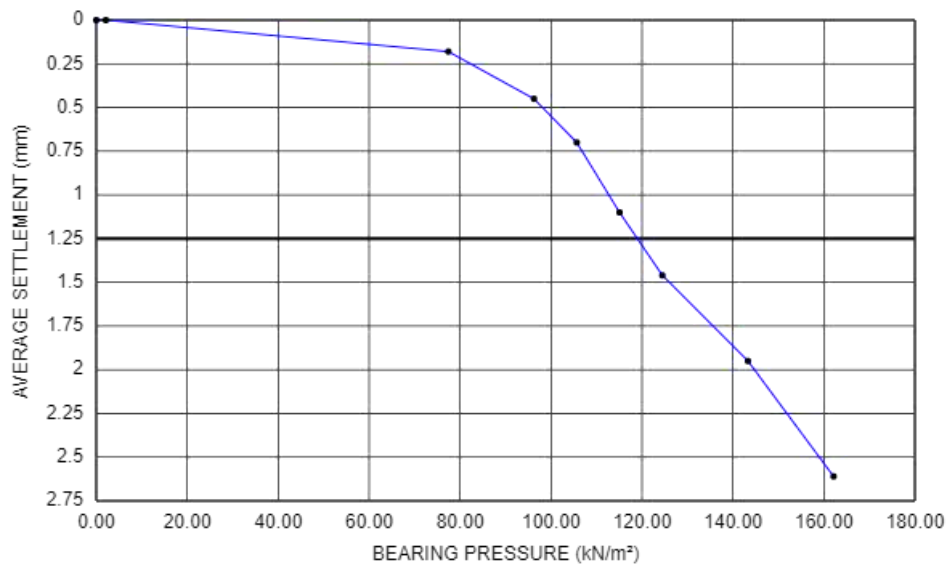
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 162 kN/m²
 Max settlement: 2.61 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 119 kN/m²
 Modulus of subgrade K762: 60 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

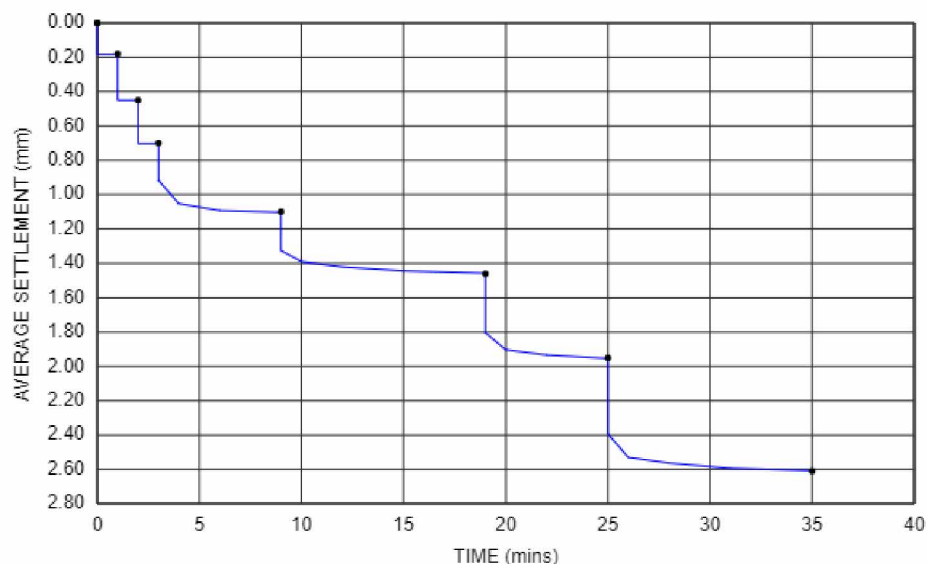
REPORT NUMBER:

C1055642 / 162737.1.1.3

TEST RESULTS

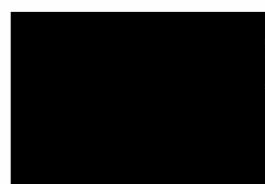
LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.12	-0.25	-0.18	0.12	0.25	0.18	0.18
15.6	96.2	-0.44	-0.51	-0.40	0.44	0.51	0.40	0.45
17.2	105.7	-0.81	-0.70	-0.60	0.81	0.70	0.60	0.70
18.7	115.1	-1.32	-1.03	-0.96	1.32	1.03	0.96	1.10
20.2	124.5	-1.79	-1.33	-1.25	1.79	1.33	1.25	1.46
23.3	143.3	-2.36	-1.75	-1.75	2.36	1.75	1.75	1.95
26.4	162.1	-3.11	-2.32	-2.39	3.11	2.32	2.39	2.61

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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 Manager
 16-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C7 - Layer 2 Finished Formation	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

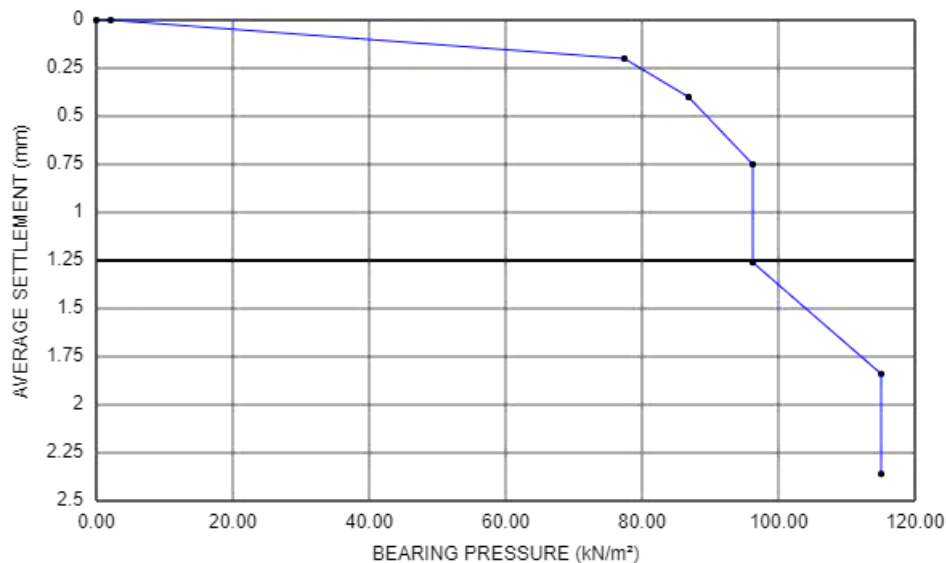
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 115 kN/m²
 Max settlement: 2.36 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 96 kN/m²
 Modulus of subgrade K762: 48 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.0 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:
Determination of Equivalent CBR Value

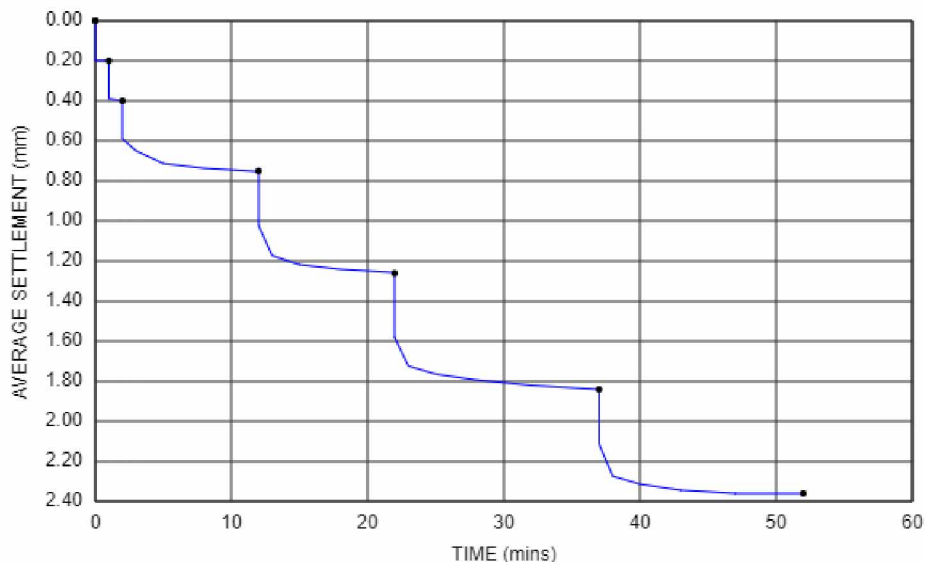
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 162737.1.1.4

TEST RESULTS

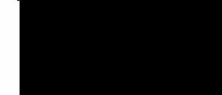
LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.10	-0.24	-0.26	0.10	0.24	0.26	0.20
14.1	86.8	-0.18	-0.46	-0.56	0.18	0.46	0.56	0.40
15.6	96.2	-0.40	-0.81	-1.05	0.40	0.81	1.05	0.75
15.6	96.2	-0.81	-1.30	-1.66	0.81	1.30	1.66	1.26
18.7	115.1	-1.35	-1.89	-2.28	1.35	1.89	2.28	1.84
18.7	115.1	-1.87	-2.39	-2.82	1.87	2.39	2.82	2.36

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.
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 Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor


 Approved Signatory
 Report date 25-Jan-22


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C8 - Layer 1 Finished Formation	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

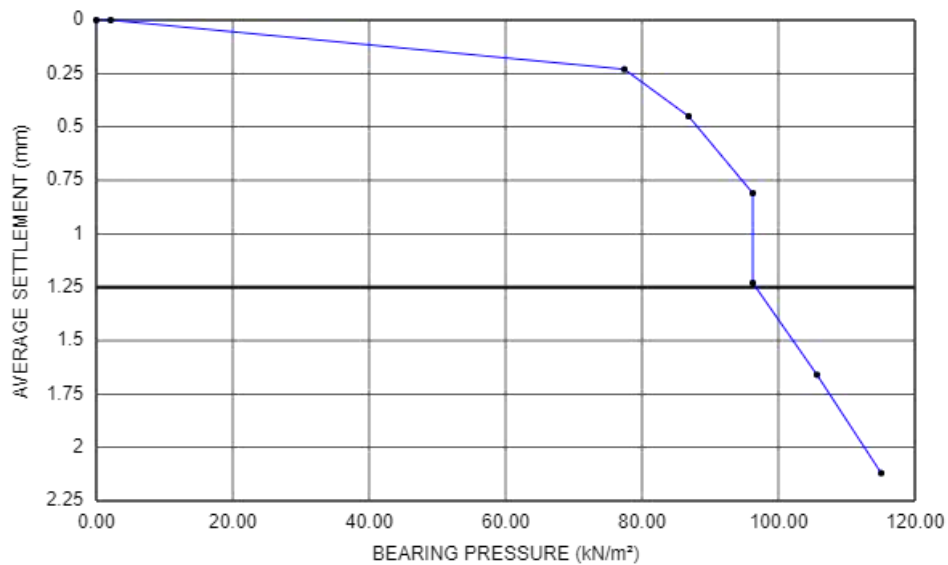
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 115 kN/m²
 Max settlement: 2.12 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 97 kN/m²
 Modulus of subgrade K762: 49 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.1 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

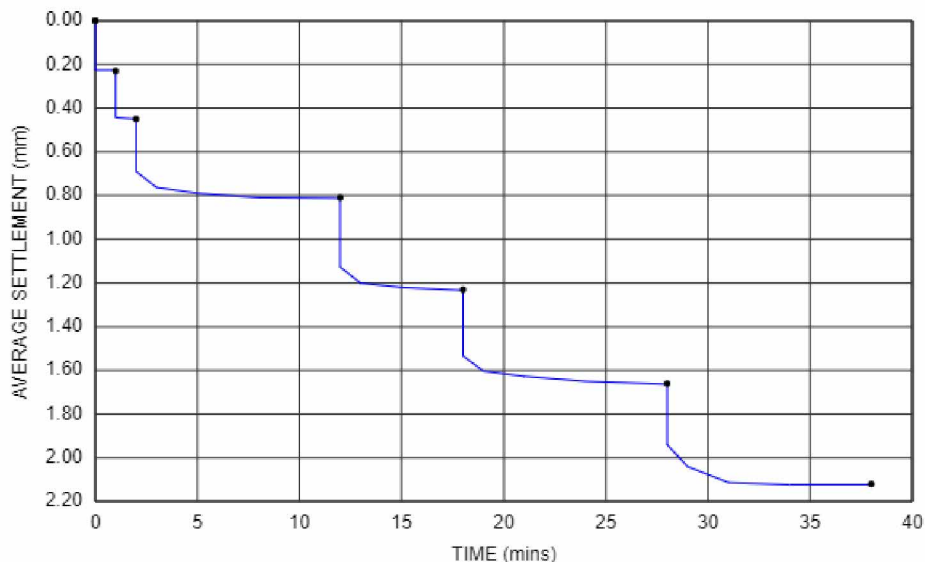
REPORT NUMBER:

C1055642 / 162737.1.1.5

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.16	-0.29	-0.23	0.16	0.29	0.23	0.23
14.1	86.8	-0.27	-0.62	-0.46	0.27	0.62	0.46	0.45
15.6	96.2	-0.56	-1.03	-0.85	0.56	1.03	0.85	0.81
15.6	96.2	-0.99	-1.44	-1.27	0.99	1.44	1.27	1.23
17.2	105.7	-1.38	-1.89	-1.72	1.38	1.89	1.72	1.66
18.7	115.1	-1.86	-2.33	-2.18	1.86	2.33	2.18	2.12

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	B8 - Layer 1 Finished Formation	MATERIAL:	Clay/crushed stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

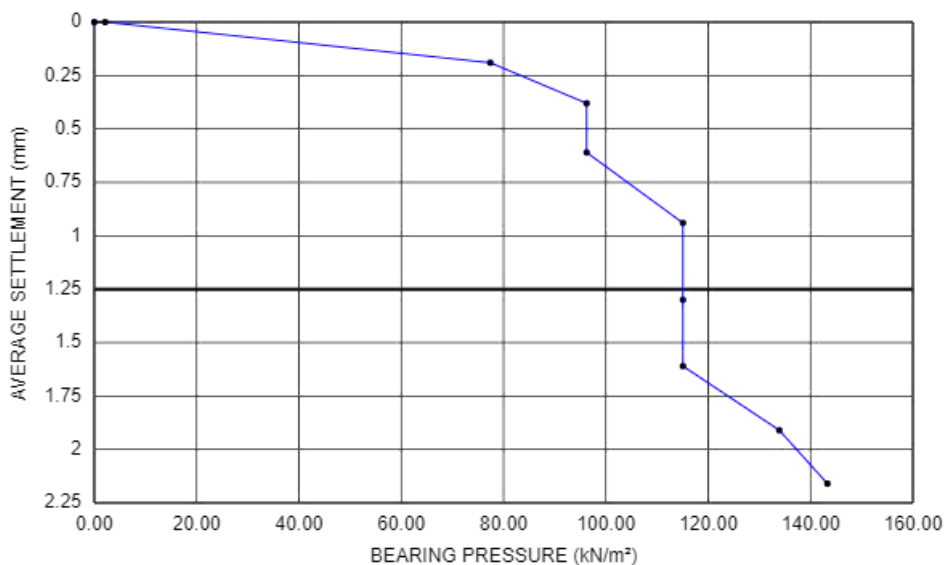
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 2.16 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 115 kN/m²
 Modulus of subgrade K762: 58 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.9 %

Remarks:

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 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

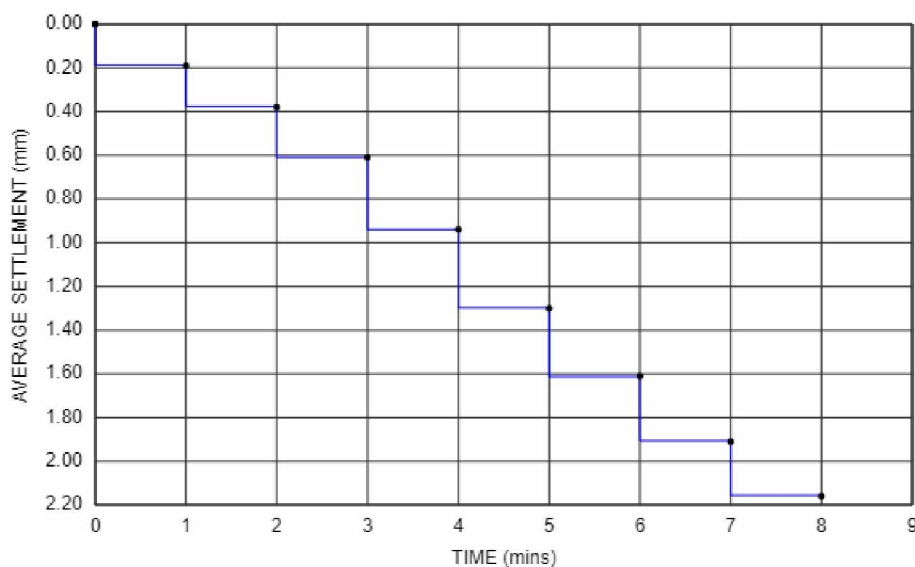
REPORT NUMBER:

C1055642 / 162737.1.1.6

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.13	-0.18	-0.25	0.13	0.18	0.25	0.19
15.6	96.2	-0.24	-0.36	-0.53	0.24	0.36	0.53	0.38
15.6	96.2	-0.44	-0.59	-0.80	0.44	0.59	0.80	0.61
18.7	115.1	-0.79	-0.97	-1.06	0.79	0.97	1.06	0.94
18.7	115.1	-1.17	-1.35	-1.37	1.17	1.35	1.37	1.30
18.7	115.1	-1.49	-1.68	-1.67	1.49	1.68	1.67	1.61
21.8	133.9	-1.85	-1.97	-1.90	1.85	1.97	1.90	1.91
23.3	143.3	-2.12	-2.25	-2.10	2.12	2.25	2.10	2.16

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor

Approved Signatory
 Report date 25-Jan-22

Construction Testing Solutions Ltd.
 Registered in England No. 05998333



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	B7 - Layer 1 Finished Formation	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

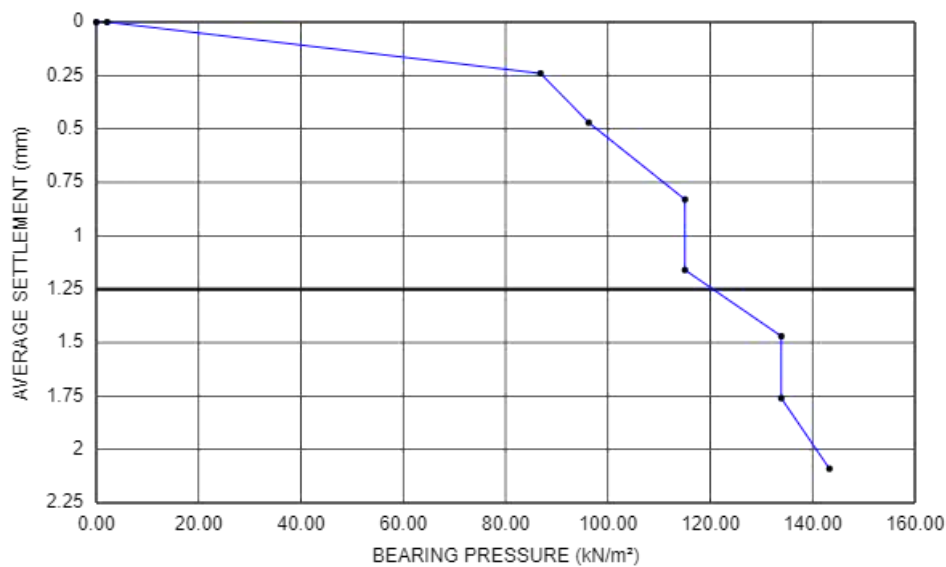
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 2.09 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 121 kN/m²
 Modulus of subgrade K762: 61 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.9 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

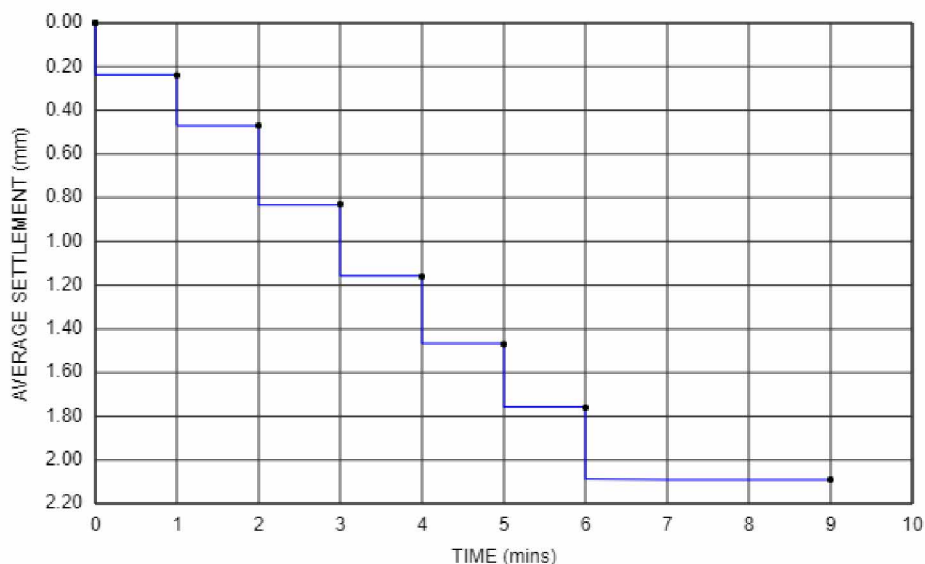
REPORT NUMBER:

C1055642 / 162737.1.1.7

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.1	86.8	-0.20	-0.24	-0.27	0.20	0.24	0.27	0.24
15.6	96.2	-0.36	-0.51	-0.54	0.36	0.51	0.54	0.47
18.7	115.1	-0.65	-0.90	-0.95	0.65	0.90	0.95	0.83
18.7	115.1	-1.00	-1.23	-1.24	1.00	1.23	1.24	1.16
21.8	133.9	-1.33	-1.53	-1.54	1.33	1.53	1.54	1.47
21.8	133.9	-1.64	-1.82	-1.81	1.64	1.82	1.81	1.76
23.3	143.3	-1.98	-2.15	-2.14	1.98	2.15	2.14	2.09

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 162737.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	16/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	B6 - Layer 1 Finished Formation	MATERIAL:	Clay/stone
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

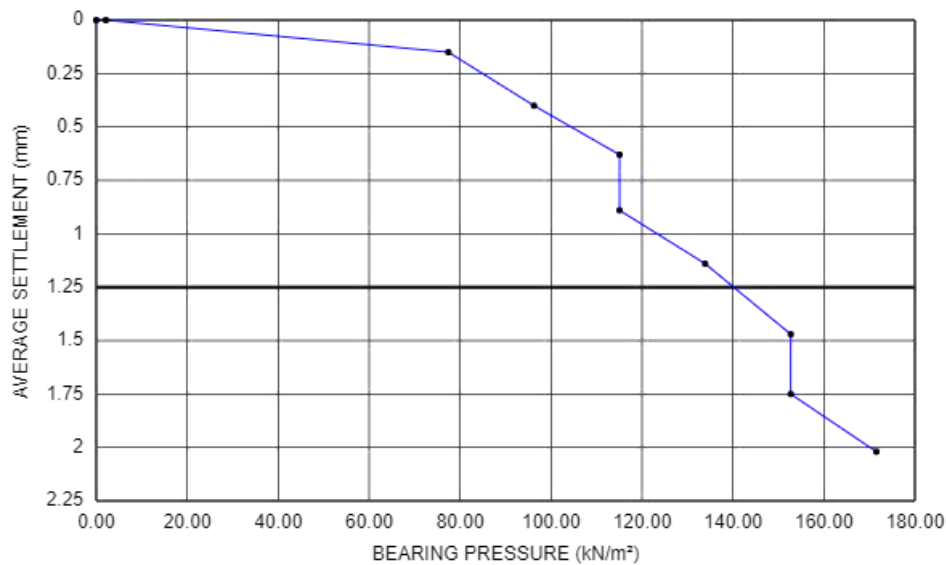
Equipment Details

Type of Kentledge: 18.7 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 172 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 140 kN/m²
 Modulus of subgrade K762: 71 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 15.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 15.4 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

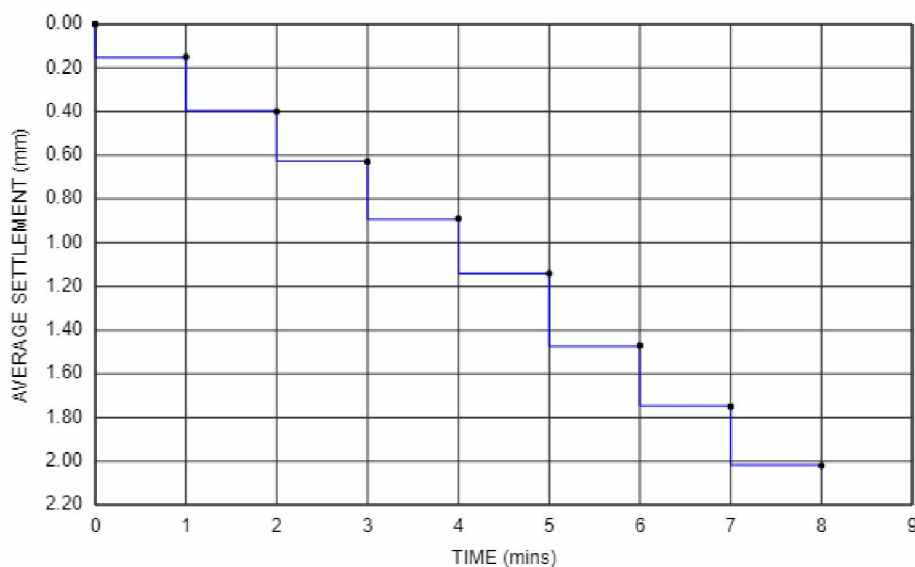
REPORT NUMBER:

C1055642 / 162737.1.1.8

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.08	-0.25	-0.13	0.08	0.25	0.13	0.15
15.6	96.2	-0.27	-0.61	-0.31	0.27	0.61	0.31	0.40
18.7	115.1	-0.51	-0.90	-0.47	0.51	0.90	0.47	0.63
18.7	115.1	-0.74	-1.23	-0.71	0.74	1.23	0.71	0.89
21.8	133.9	-0.95	-1.53	-0.94	0.95	1.53	0.94	1.14
24.8	152.7	-1.32	-1.90	-1.20	1.32	1.90	1.20	1.47
24.8	152.7	-1.59	-2.22	-1.43	1.59	2.22	1.43	1.75
27.9	171.5	-1.86	-2.50	-1.69	1.86	2.50	1.69	2.02

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.
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Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	D9	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

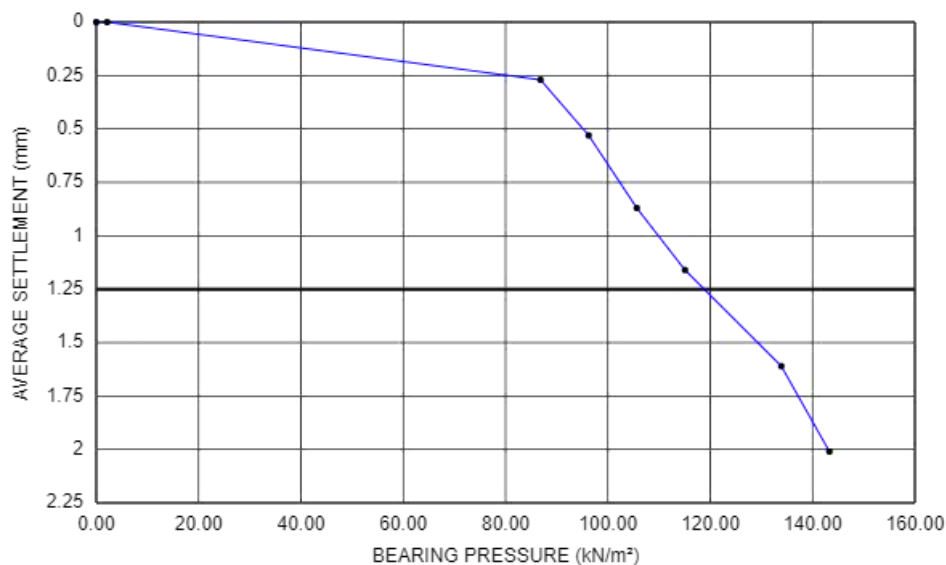
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 2.01 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 119 kN/m²
 Modulus of subgrade K762: 60 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.5 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

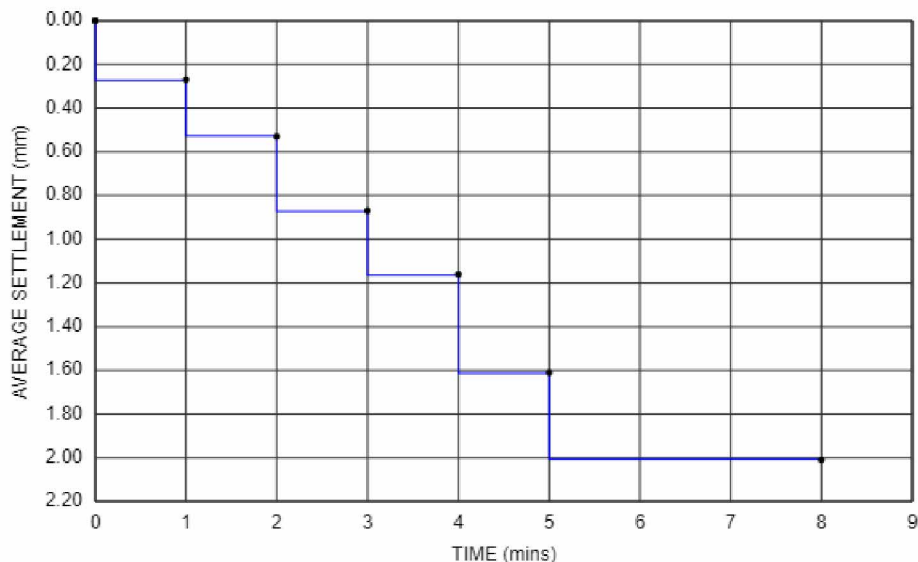
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 163252.1.1.1

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.1	86.8	-0.30	-0.25	-0.27	0.30	0.25	0.27	0.27
15.6	96.2	-0.55	-0.50	-0.53	0.55	0.50	0.53	0.53
17.2	105.7	-0.95	-0.81	-0.86	0.95	0.81	0.86	0.87
18.7	115.1	-1.25	-1.08	-1.16	1.25	1.08	1.16	1.16
21.8	133.9	-1.75	-1.51	-1.58	1.75	1.51	1.58	1.61
23.3	143.3	-2.15	-1.88	-1.99	2.15	1.88	1.99	2.01

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager


 Approved Signatory
 21-Dec-21


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C9 - Layer 1 Finished Formation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

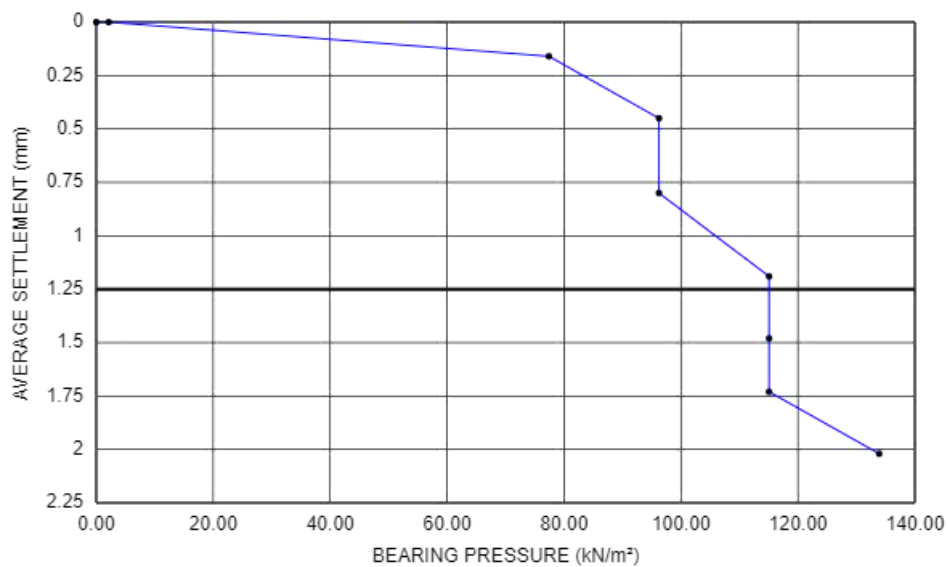
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 134 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 115 kN/m²
 Modulus of subgrade K762: 58 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.9 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Amended report. This test report supersedes test report version 1 - Change of location

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

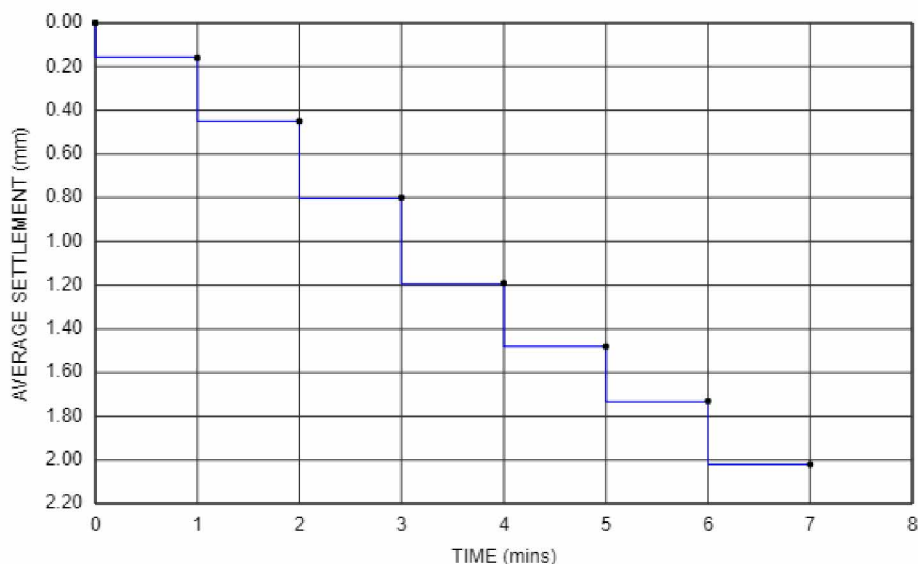
REPORT NUMBER:

C1055642 / 163252.1.1.2

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.26	-0.17	-0.04	0.26	0.17	0.04	0.16
15.6	96.2	-0.68	-0.51	-0.16	0.68	0.51	0.16	0.45
15.6	96.2	-1.14	-0.89	-0.38	1.14	0.89	0.38	0.80
18.7	115.1	-1.68	-1.27	-0.63	1.68	1.27	0.63	1.19
18.7	115.1	-2.05	-1.55	-0.84	2.05	1.55	0.84	1.48
18.7	115.1	-2.37	-1.81	-1.02	2.37	1.81	1.02	1.73
21.8	133.9	-2.75	-2.08	-1.23	2.75	2.08	1.23	2.02

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Amended report. This test report supersedes test report version 1 - Change of location

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C10	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

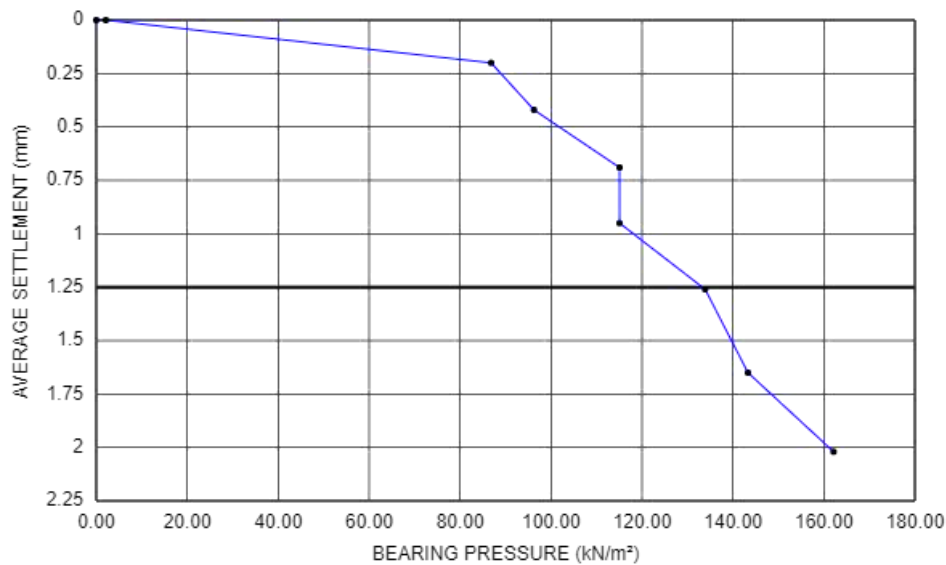
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 162 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 133 kN/m²
 Modulus of subgrade K762: 67 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 14.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 14.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

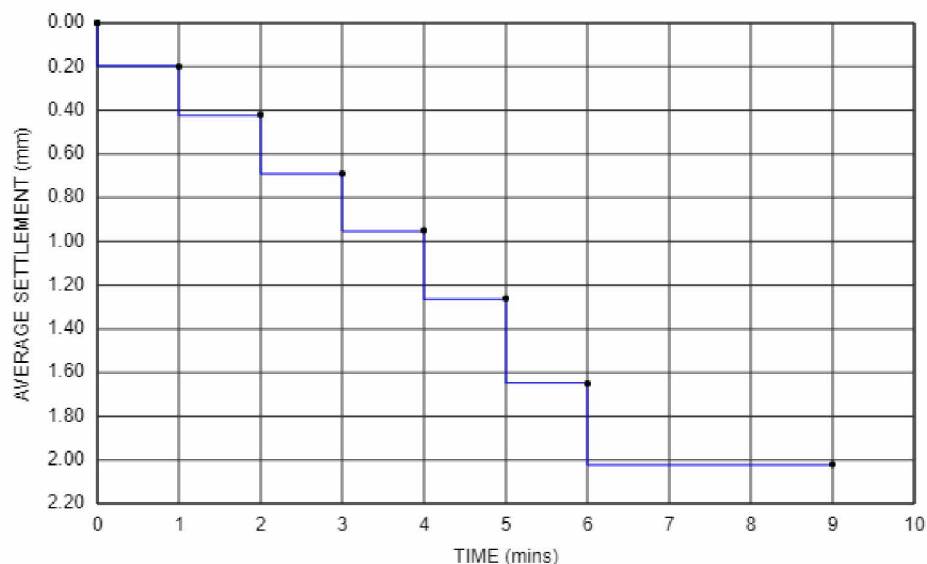
REPORT NUMBER:

C1055642 / 163252.1.1.3

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.1	86.8	-0.14	-0.18	-0.27	0.14	0.18	0.27	0.20
15.6	96.2	-0.27	-0.41	-0.59	0.27	0.41	0.59	0.42
18.7	115.1	-0.48	-0.69	-0.90	0.48	0.69	0.90	0.69
18.7	115.1	-0.70	-0.97	-1.19	0.70	0.97	1.19	0.95
21.8	133.9	-1.00	-1.30	-1.49	1.00	1.30	1.49	1.26
23.3	143.3	-1.37	-1.70	-1.87	1.37	1.70	1.87	1.65
26.4	162.1	-1.75	-2.07	-2.25	1.75	2.07	2.25	2.02

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signatory

21-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C11	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

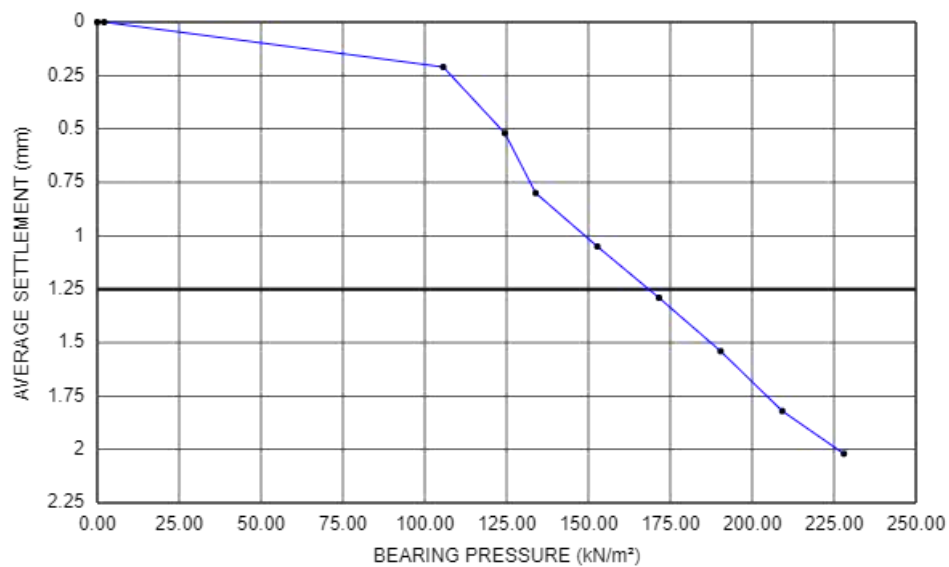
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 228 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 169 kN/m²
 Modulus of subgrade K762: 85 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 21.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 21.2 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

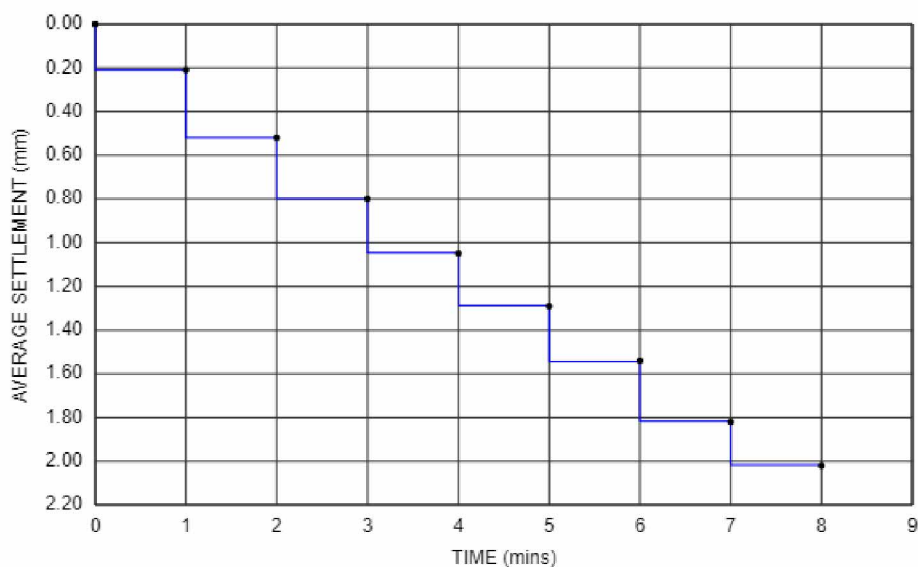
REPORT NUMBER:

C1055642 / 163252.1.1.4

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.2	105.7	-0.15	-0.19	-0.29	0.15	0.19	0.29	0.21
20.2	124.5	-0.45	-0.53	-0.58	0.45	0.53	0.58	0.52
21.8	133.9	-0.71	-0.85	-0.84	0.71	0.85	0.84	0.80
24.8	152.7	-0.93	-1.13	-1.08	0.93	1.13	1.08	1.05
27.9	171.5	-1.13	-1.41	-1.32	1.13	1.41	1.32	1.29
31.0	190.4	-1.37	-1.69	-1.57	1.37	1.69	1.57	1.54
34.0	209.2	-1.59	-1.99	-1.87	1.59	1.99	1.87	1.82
37.1	228.0	-1.75	-2.22	-2.08	1.75	2.22	2.08	2.02

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signatory

21-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	C12	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

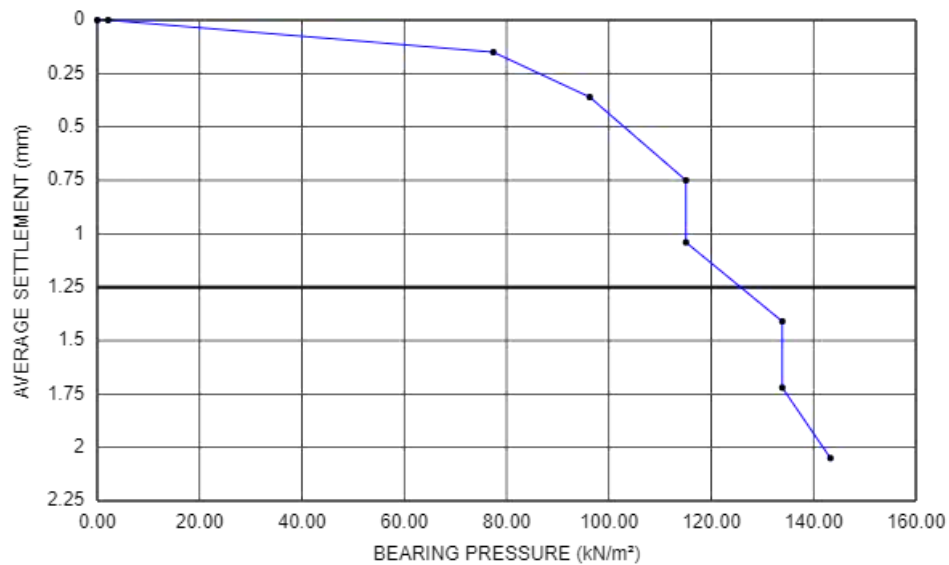
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 2.05 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 126 kN/m²
 Modulus of subgrade K762: 63 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 12.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 12.8 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

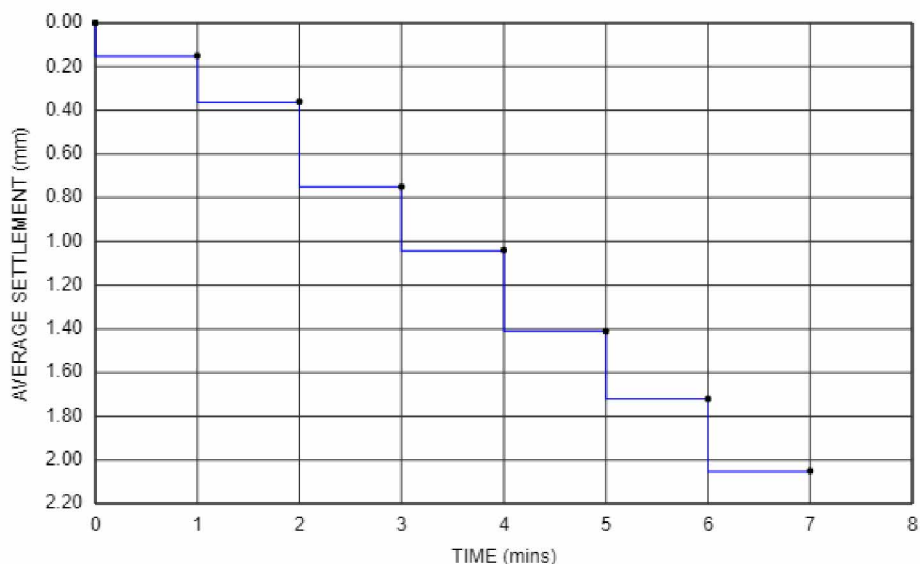
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 163252.1.1.5

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.6	77.4	-0.07	-0.13	-0.26	0.07	0.13	0.26	0.15
15.6	96.2	-0.22	-0.33	-0.54	0.22	0.33	0.54	0.36
18.7	115.1	-0.54	-0.72	-0.99	0.54	0.72	0.99	0.75
18.7	115.1	-0.81	-1.03	-1.29	0.81	1.03	1.29	1.04
21.8	133.9	-1.18	-1.40	-1.65	1.18	1.40	1.65	1.41
21.8	133.9	-1.50	-1.72	-1.94	1.50	1.72	1.94	1.72
23.3	143.3	-1.82	-2.06	-2.28	1.82	2.06	2.28	2.05

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signatory

21-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	D12	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

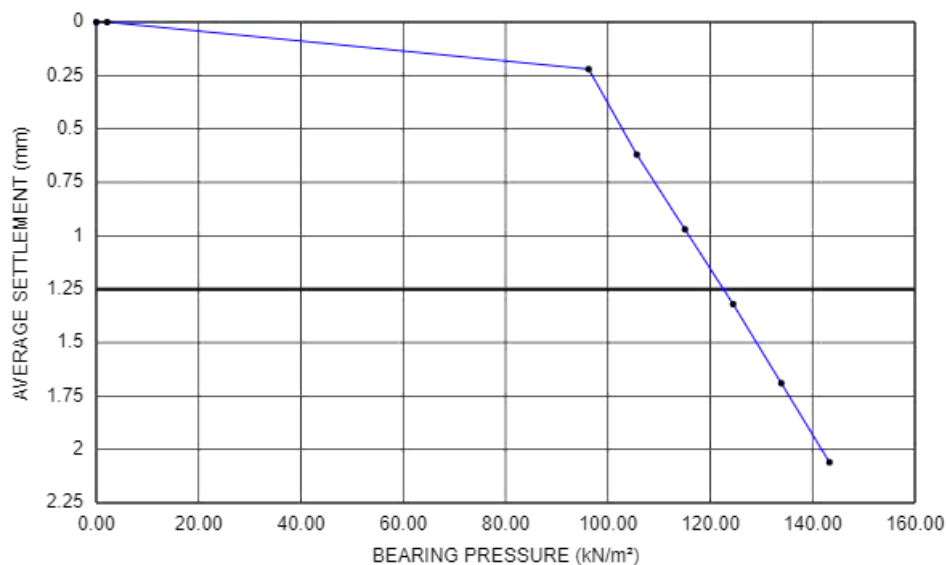
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 143 kN/m²
 Max settlement: 2.06 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 123 kN/m²
 Modulus of subgrade K762: 62 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 12.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 12.2 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

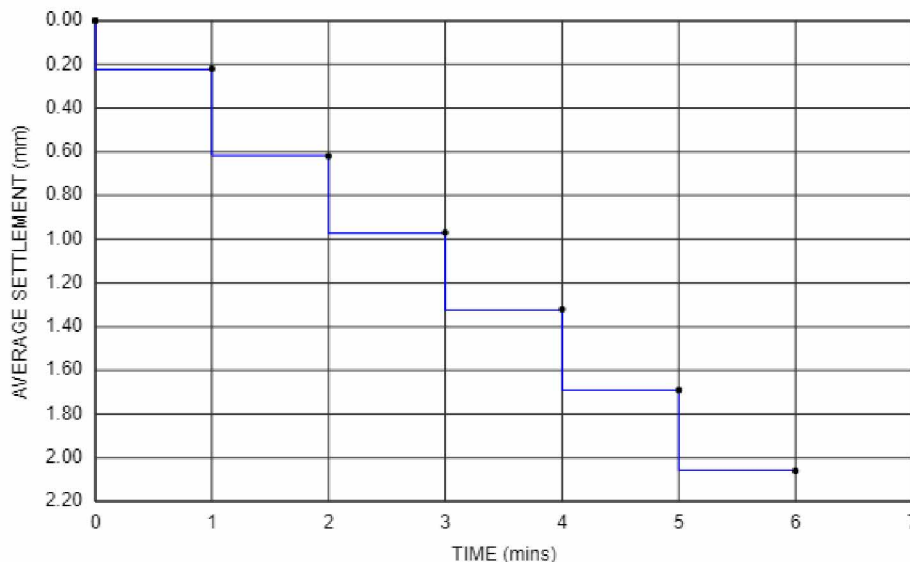
REPORT NUMBER:

C1055642 / 163252.1.1.6

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.6	96.2	-0.14	-0.25	-0.28	0.14	0.25	0.28	0.22
17.2	105.7	-0.51	-0.68	-0.66	0.51	0.68	0.66	0.62
18.7	115.1	-0.86	-1.02	-1.04	0.86	1.02	1.04	0.97
20.2	124.5	-1.22	-1.37	-1.38	1.22	1.37	1.38	1.32
21.8	133.9	-1.58	-1.75	-1.74	1.58	1.75	1.74	1.69
23.3	143.3	-1.93	-2.13	-2.11	1.93	2.13	2.11	2.06

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager


 Approved Signatory
 21-Dec-21


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	D11	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

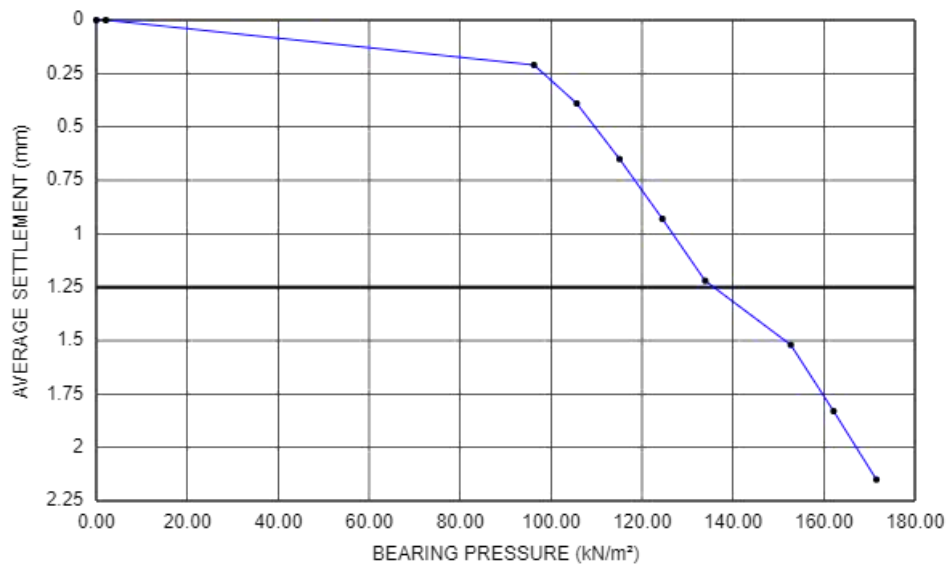
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 172 kN/m²
 Max settlement: 2.15 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 136 kN/m²
 Modulus of subgrade K762: 68 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 14.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 14.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

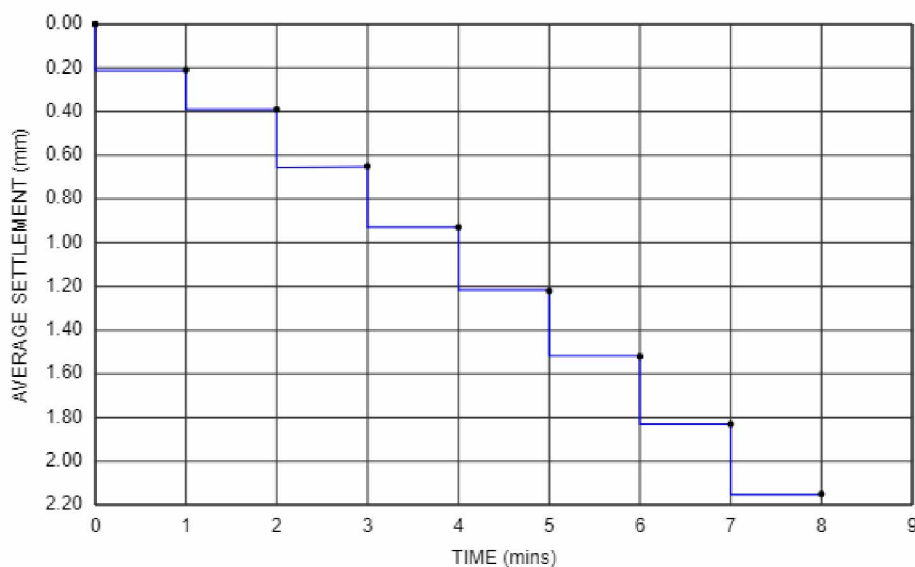
REPORT NUMBER:

C1055642 / 163252.1.1.7

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.6	96.2	-0.24	-0.15	-0.25	0.24	0.15	0.25	0.21
17.2	105.7	-0.41	-0.26	-0.50	0.41	0.26	0.50	0.39
18.7	115.1	-0.66	-0.47	-0.83	0.66	0.47	0.83	0.65
20.2	124.5	-0.93	-0.73	-1.13	0.93	0.73	1.13	0.93
21.8	133.9	-1.21	-0.99	-1.45	1.21	0.99	1.45	1.22
24.8	152.7	-1.50	-1.27	-1.78	1.50	1.27	1.78	1.52
26.4	162.1	-1.80	-1.58	-2.11	1.80	1.58	2.11	1.83
27.9	171.5	-2.11	-1.90	-2.45	2.11	1.90	2.45	2.15

SETTLEMENT RELATIONSHIP vs TIME



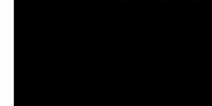
Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signatory

21-Dec-21



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 163252.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	21/12/2021	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	D10	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

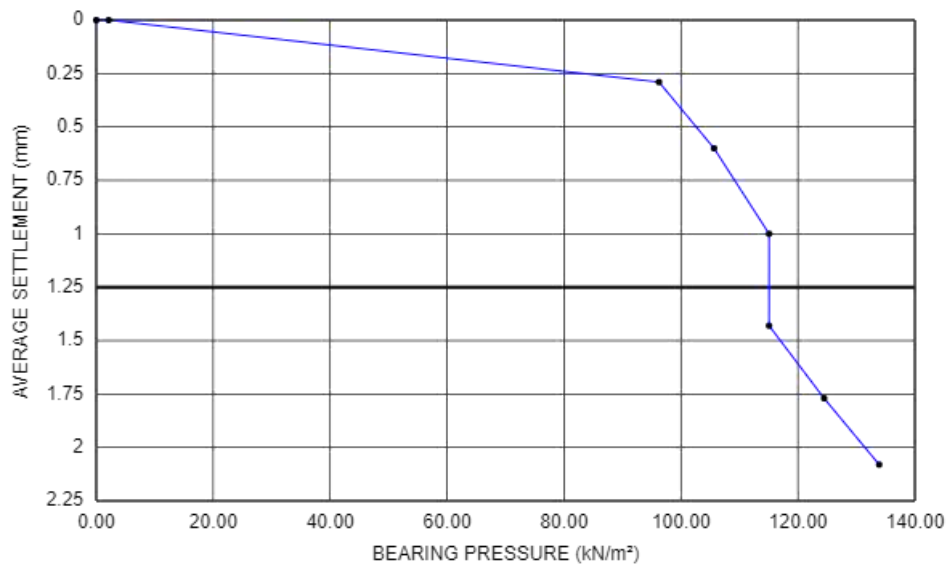
Equipment Details

Type of Kentledge: 18.8 Ton Excavator
 Plate Diameter: 455 mm
 Plate Area: 0.162597 m²
 Plate Correction: 0.63

Results

Max applied pressure: 134 kN/m²
 Max settlement: 2.08 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 115 kN/m²
 Modulus of subgrade K762: 58 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.9 %

Remarks:

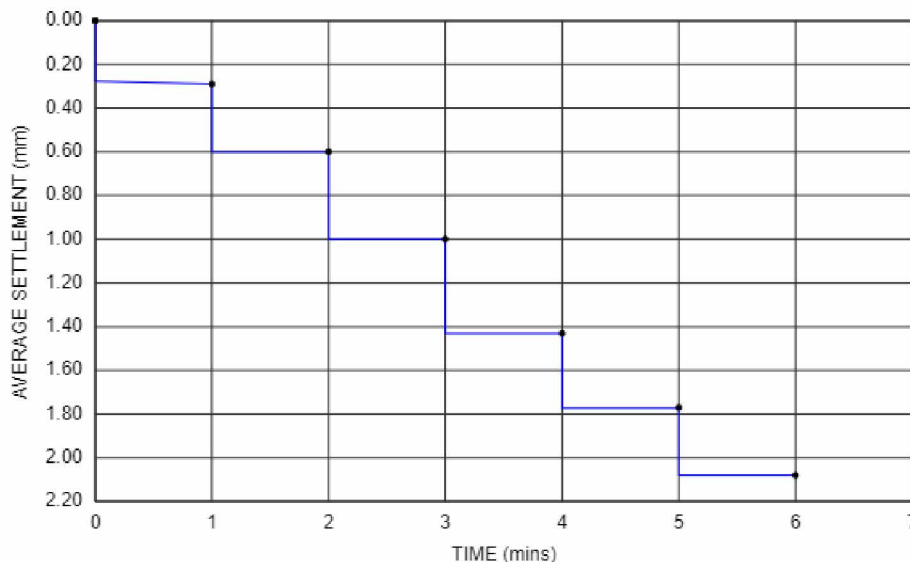
Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value
REPORT NUMBER:

 In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)
 C1055642 / 163252.1.1.9

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
0.3	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.6	96.2	-0.26	-0.32	-0.29	0.26	0.32	0.29	0.29
17.2	105.7	-0.62	-0.63	-0.55	0.62	0.63	0.55	0.60
18.7	115.1	-1.04	-1.07	-0.89	1.04	1.07	0.89	1.00
18.7	115.1	-1.48	-1.53	-1.28	1.48	1.53	1.28	1.43
20.2	124.5	-1.83	-1.89	-1.60	1.83	1.89	1.60	1.77
21.8	133.9	-2.15	-2.22	-1.87	2.15	2.22	1.87	2.08

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

 Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

 For and on behalf of CTS
 Matthew Mills - Laboratory Manager


 Approved Signatory
 21-Dec-21


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B10	MATERIAL:	Crushed type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

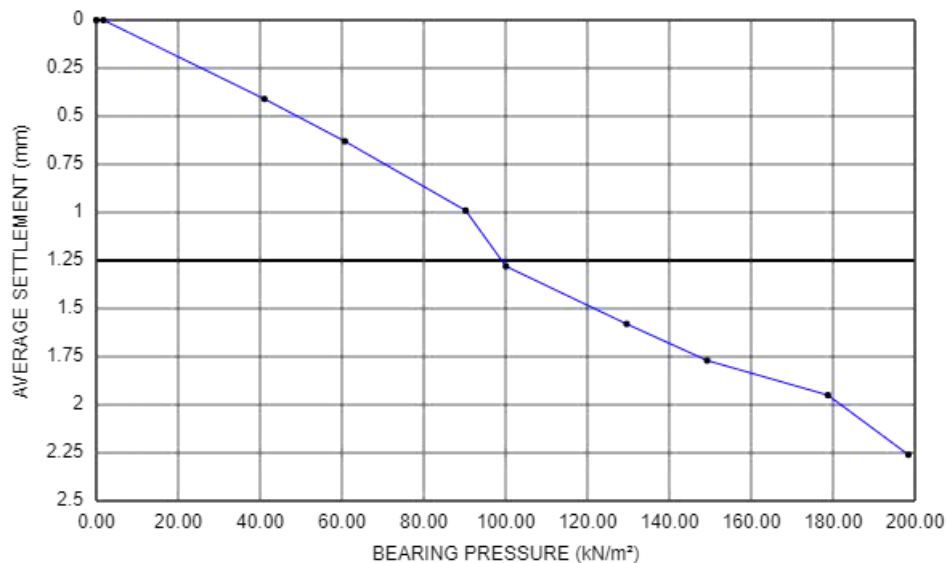
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 198 kN/m²
 Max settlement: 2.26 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 99 kN/m²
 Modulus of subgrade K762: 49 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.3 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

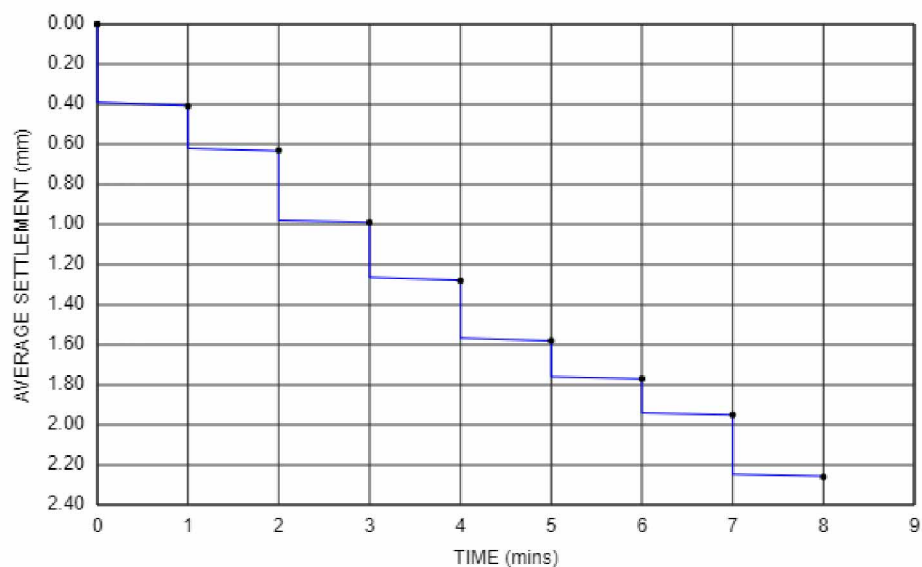
REPORT NUMBER:

C1055642 / 164200.1.1.1

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.5	41.1	-0.27	-0.46	-0.49	0.27	0.46	0.49	0.41
9.7	60.7	-0.58	-0.63	-0.69	0.58	0.63	0.69	0.63
14.4	90.2	-0.97	-1.05	-0.95	0.97	1.05	0.95	0.99
15.9	100.1	-1.30	-1.33	-1.20	1.30	1.33	1.20	1.28
20.6	129.6	-1.57	-1.69	-1.48	1.57	1.69	1.48	1.58
23.7	149.2	-1.79	-1.84	-1.68	1.79	1.84	1.68	1.77
28.4	178.7	-1.94	-2.04	-1.87	1.94	2.04	1.87	1.95
31.6	198.4	-2.35	-2.32	-2.10	2.35	2.32	2.10	2.26

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B11	MATERIAL:	Crushed type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

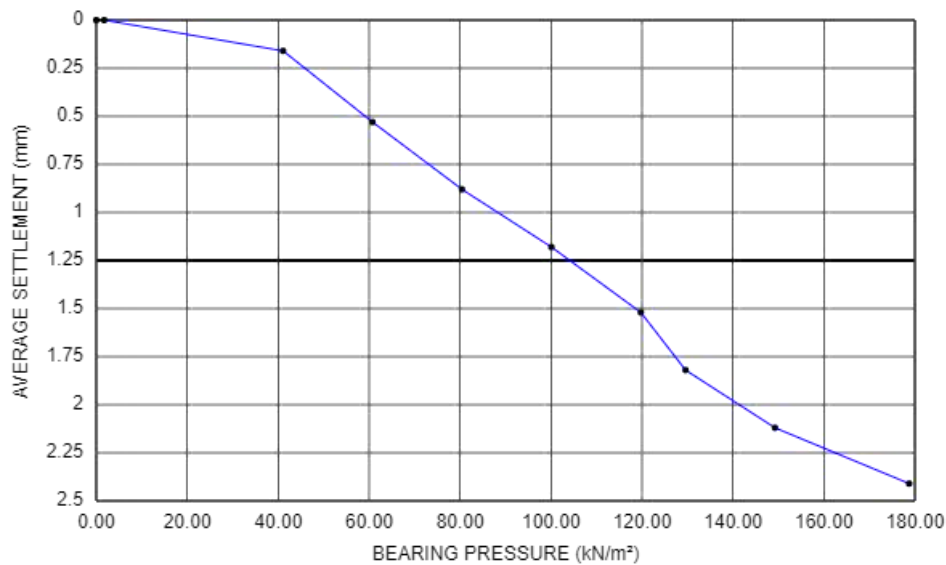
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 179 kN/m²
 Max settlement: 2.41 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 104 kN/m²
 Modulus of subgrade K762: 52 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

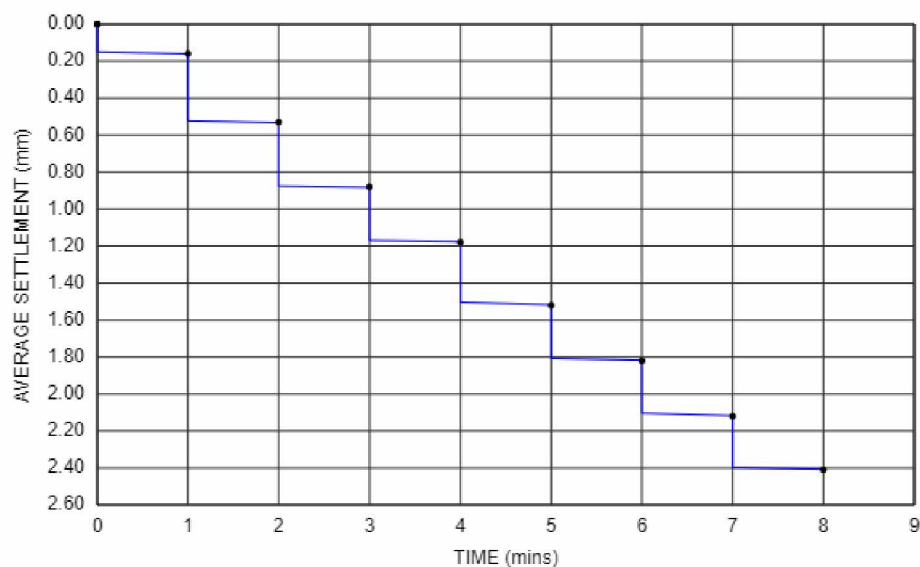
REPORT NUMBER:

C1055642 / 164200.1.1.2

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.5	41.1	-0.16	-0.23	-0.09	0.16	0.23	0.09	0.16
9.7	60.7	-0.42	-0.57	-0.61	0.42	0.57	0.61	0.53
12.8	80.4	-0.73	-0.85	-1.07	0.73	0.85	1.07	0.88
15.9	100.1	-0.97	-1.14	-1.42	0.97	1.14	1.42	1.18
19.0	119.7	-1.30	-1.46	-1.79	1.30	1.46	1.79	1.52
20.6	129.6	-1.53	-1.75	-2.17	1.53	1.75	2.17	1.82
23.7	149.2	-1.80	-2.02	-2.53	1.80	2.02	2.53	2.12
28.4	178.7	-2.05	-2.40	-2.77	2.05	2.40	2.77	2.41

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor

Approved Signatory
07-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B12	MATERIAL:	Crushed type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

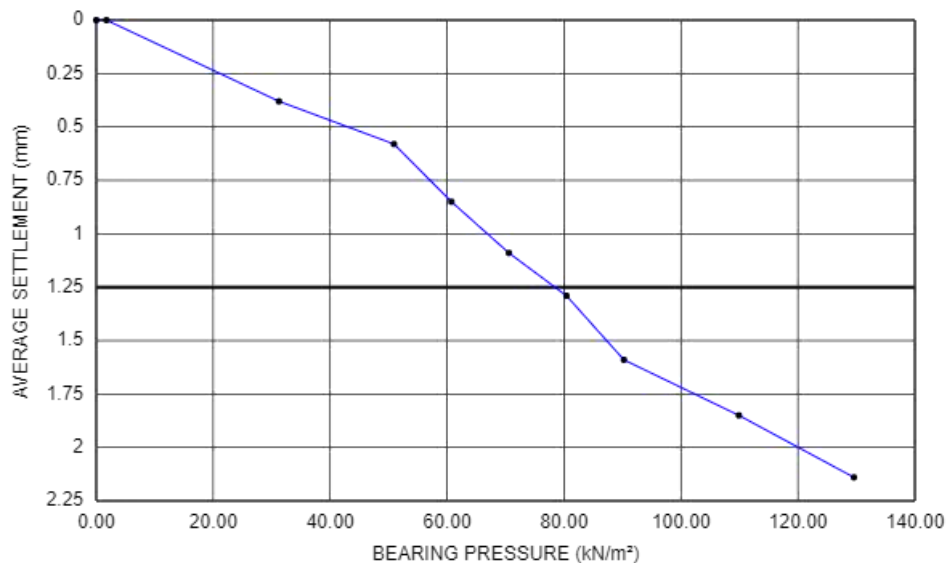
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 130 kN/m²
 Max settlement: 2.14 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 78 kN/m²
 Modulus of subgrade K762: 39 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.5 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

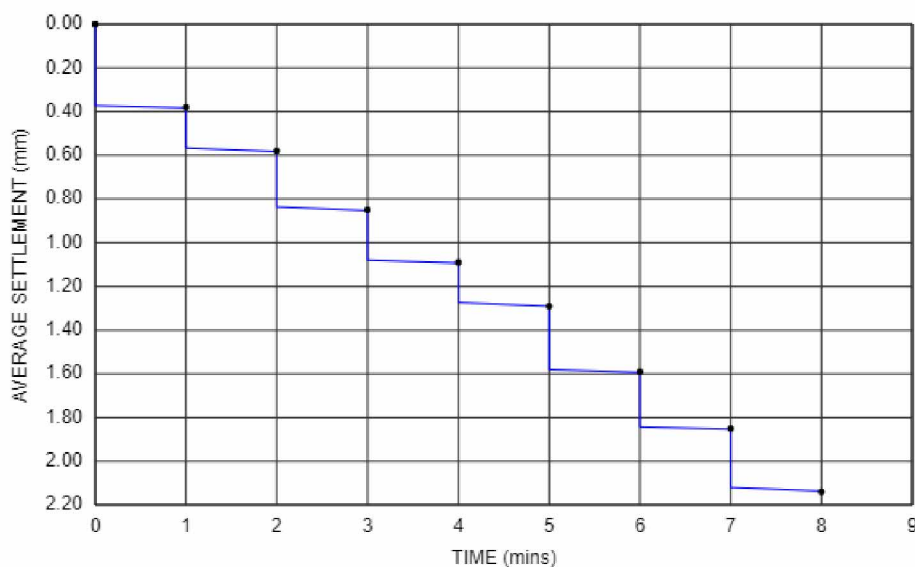
REPORT NUMBER:

C1055642 / 164200.1.1.3

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.2	-0.45	-0.27	-0.43	0.45	0.27	0.43	0.38
8.1	50.9	-0.62	-0.51	-0.62	0.62	0.51	0.62	0.58
9.7	60.7	-0.91	-0.78	-0.87	0.91	0.78	0.87	0.85
11.2	70.6	-1.15	-1.03	-1.10	1.15	1.03	1.10	1.09
12.8	80.4	-1.34	-1.23	-1.30	1.34	1.23	1.30	1.29
14.4	90.2	-1.63	-1.55	-1.60	1.63	1.55	1.60	1.59
17.5	109.9	-1.90	-1.79	-1.87	1.90	1.79	1.87	1.85
20.6	129.6	-2.18	-2.07	-2.16	2.18	2.07	2.16	2.14

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor


 Approved Signatory
07-Jan-22


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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	B13	MATERIAL:	Crushed type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

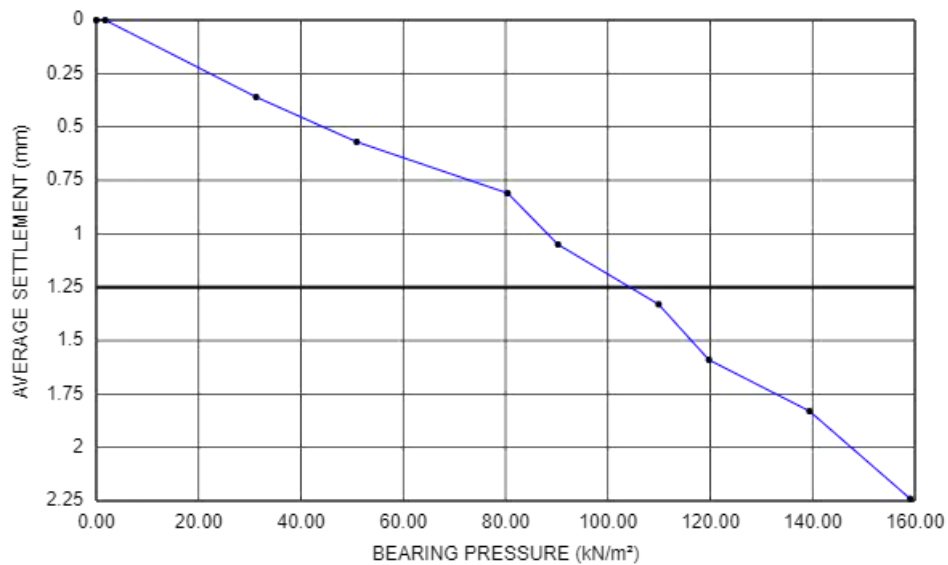
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 159 kN/m²
 Max settlement: 2.24 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 104 kN/m²
 Modulus of subgrade K762: 52 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.1 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

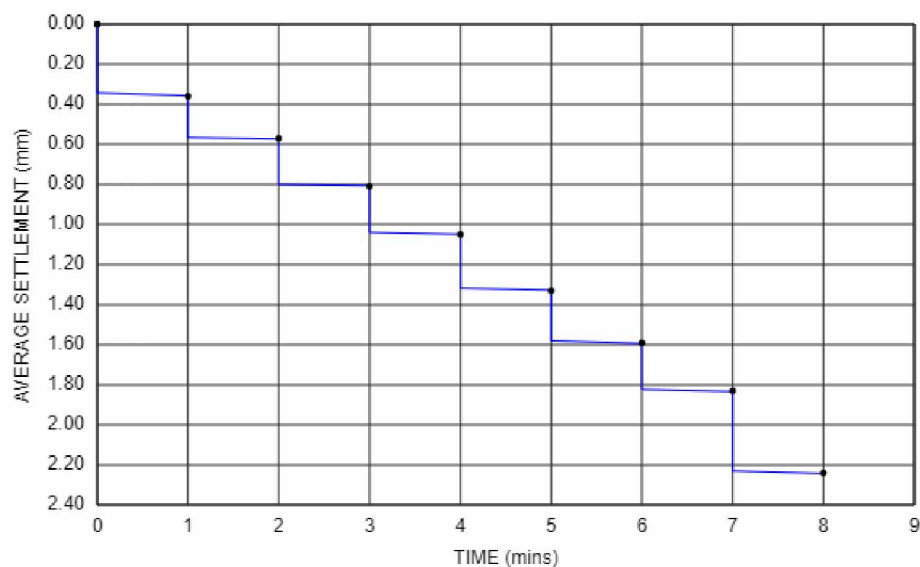
REPORT NUMBER:

C1055642 / 164200.1.1.4

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.2	-0.31	-0.43	-0.33	0.31	0.43	0.33	0.36
8.1	50.9	-0.53	-0.61	-0.58	0.53	0.61	0.58	0.57
12.8	80.4	-0.78	-0.84	-0.80	0.78	0.84	0.80	0.81
14.4	90.2	-0.98	-1.14	-1.03	0.98	1.14	1.03	1.05
17.5	109.9	-1.24	-1.41	-1.33	1.24	1.41	1.33	1.33
19.0	119.7	-1.48	-1.72	-1.58	1.48	1.72	1.58	1.59
22.2	139.4	-1.71	-1.95	-1.84	1.71	1.95	1.84	1.83
25.3	159.1	-2.03	-2.42	-2.28	2.03	2.42	2.28	2.24

SETTLEMENT RELATIONSHIP vs TIME



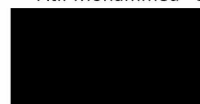
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	C13	MATERIAL:	Crushed type 1 sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

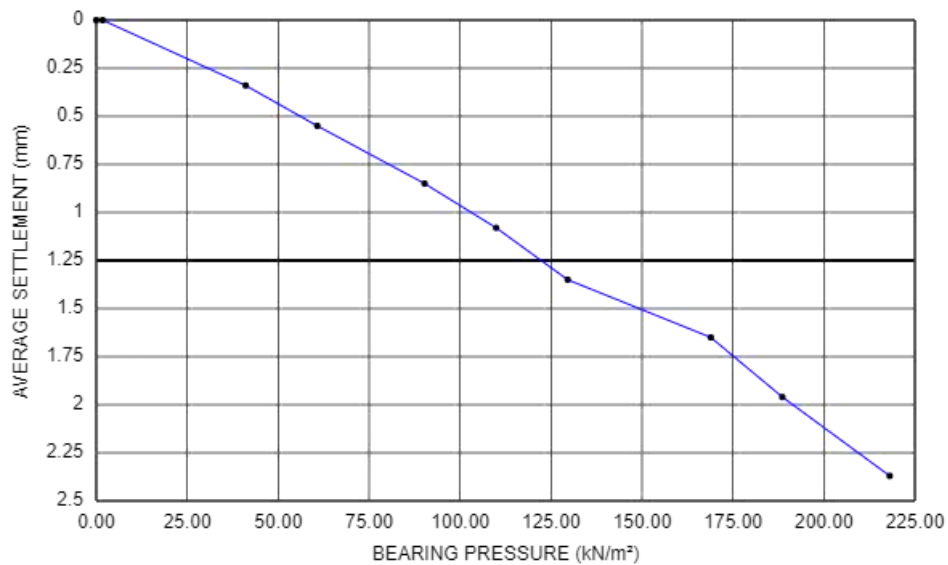
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 218 kN/m²
 Max settlement: 2.37 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 122 kN/m²
 Modulus of subgrade K762: 61 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 12.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 12.0 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

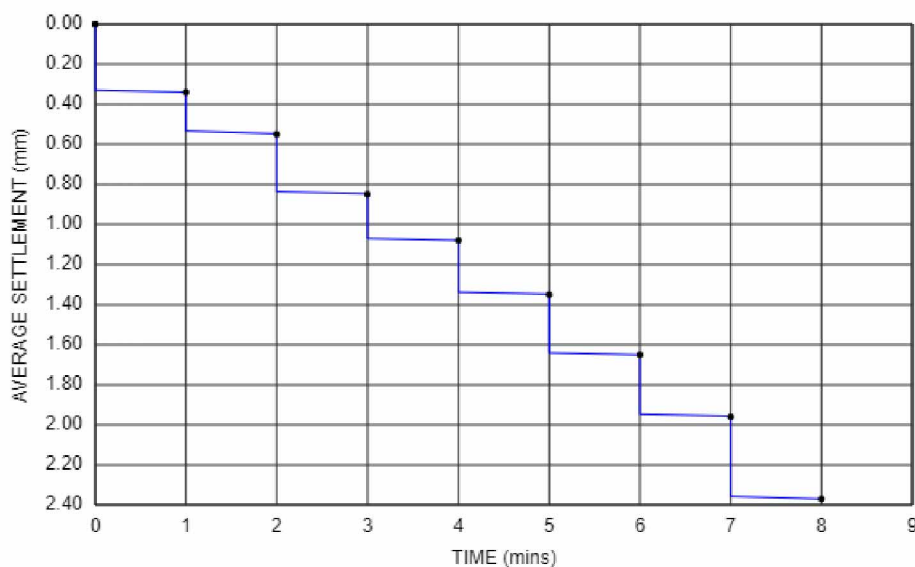
REPORT NUMBER:

C1055642 / 164200.1.1.5

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.5	41.1	-0.25	-0.44	-0.33	0.25	0.44	0.33	0.34
9.7	60.7	-0.48	-0.57	-0.59	0.48	0.57	0.59	0.55
14.4	90.2	-0.77	-0.94	-0.83	0.77	0.94	0.83	0.85
17.5	109.9	-1.01	-1.20	-1.03	1.01	1.20	1.03	1.08
20.6	129.6	-1.27	-1.45	-1.32	1.27	1.45	1.32	1.35
26.9	168.9	-1.63	-1.75	-1.57	1.63	1.75	1.57	1.65
30.0	188.6	-1.93	-2.05	-1.89	1.93	2.05	1.89	1.96
34.7	218.1	-2.30	-2.48	-2.33	2.30	2.48	2.33	2.37

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	D13	MATERIAL:	Crushed type 1 sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

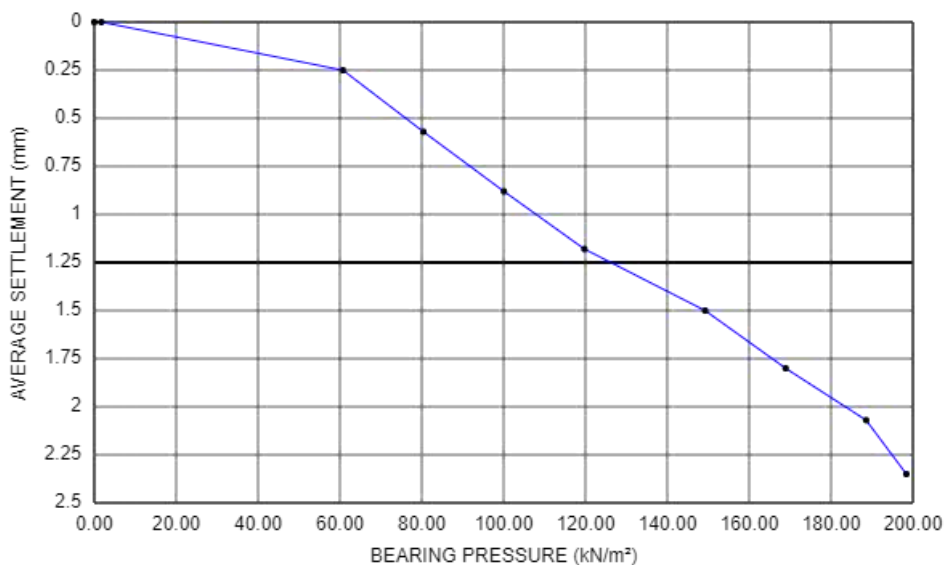
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 198 kN/m²
 Max settlement: 2.35 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 126 kN/m²
 Modulus of subgrade K762: 63 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 12.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 12.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

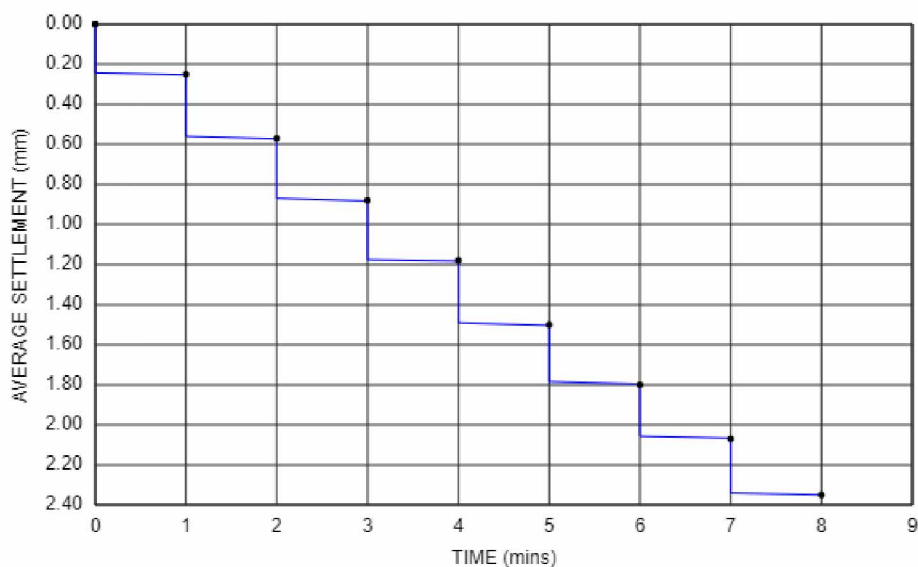
REPORT NUMBER:

C1055642 / 164200.1.1.6

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.7	60.7	-0.25	-0.24	-0.27	0.25	0.24	0.27	0.25
12.8	80.4	-0.47	-0.61	-0.64	0.47	0.61	0.64	0.57
15.9	100.1	-0.73	-0.95	-0.97	0.73	0.95	0.97	0.88
19.0	119.7	-0.98	-1.20	-1.37	0.98	1.20	1.37	1.18
23.7	149.2	-1.26	-1.59	-1.66	1.26	1.59	1.66	1.50
26.9	168.9	-1.58	-1.88	-1.93	1.58	1.88	1.93	1.80
30.0	188.6	-1.75	-2.16	-2.29	1.75	2.16	2.29	2.07
31.6	198.4	-1.96	-2.40	-2.69	1.96	2.40	2.69	2.35

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	E13	MATERIAL:	Crushed type 1 sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

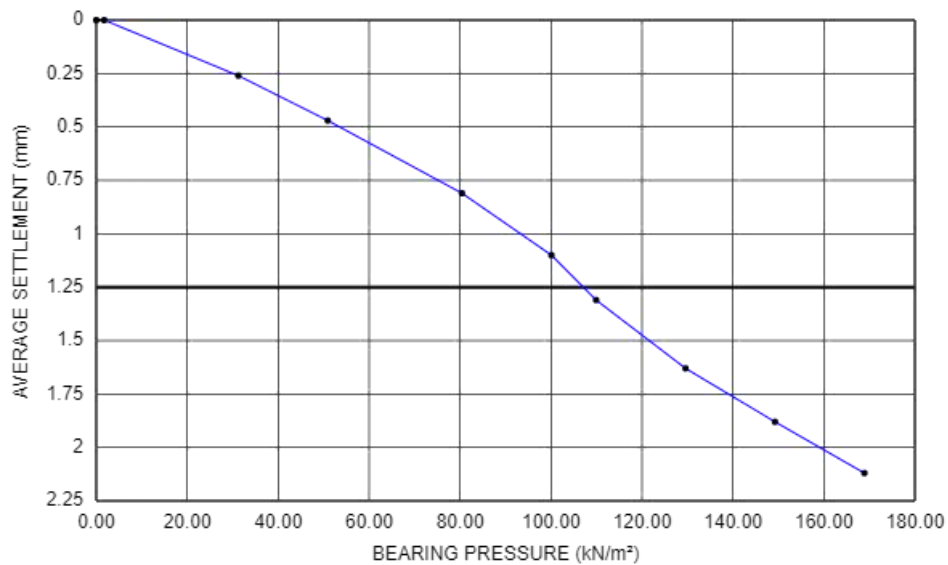
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 169 kN/m²
 Max settlement: 2.12 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 107 kN/m²
 Modulus of subgrade K762: 53 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.5 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

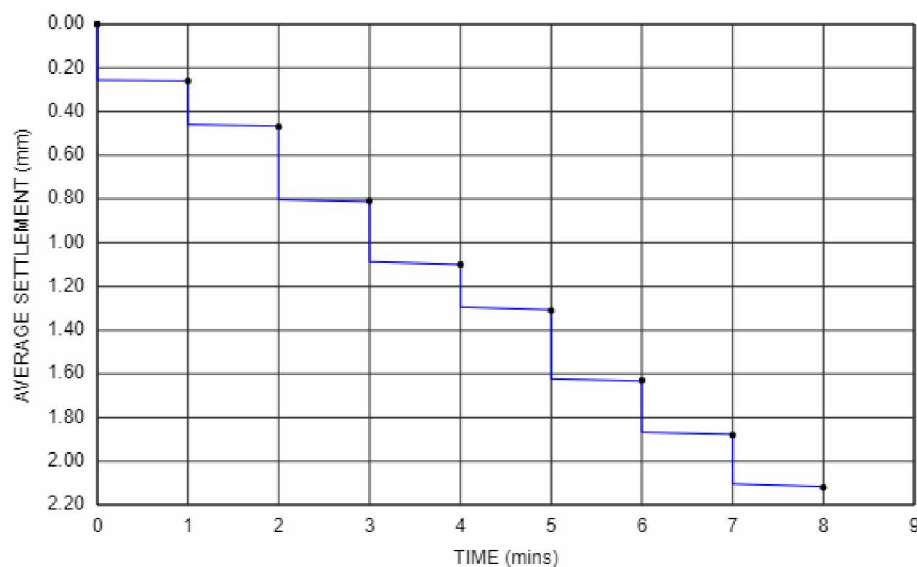
REPORT NUMBER:

C1055642 / 164200.1.1.7

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.2	-0.28	-0.33	-0.17	0.28	0.33	0.17	0.26
8.1	50.9	-0.54	-0.47	-0.39	0.54	0.47	0.39	0.47
12.8	80.4	-0.73	-0.78	-0.93	0.73	0.78	0.93	0.81
15.9	100.1	-0.96	-1.06	-1.28	0.96	1.06	1.28	1.10
17.5	109.9	-1.15	-1.30	-1.47	1.15	1.30	1.47	1.31
20.6	129.6	-1.42	-1.64	-1.84	1.42	1.64	1.84	1.63
23.7	149.2	-1.69	-1.89	-2.05	1.69	1.89	2.05	1.88
26.9	168.9	-1.92	-2.05	-2.38	1.92	2.05	2.38	2.12

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F13	MATERIAL:	Clay/soil sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

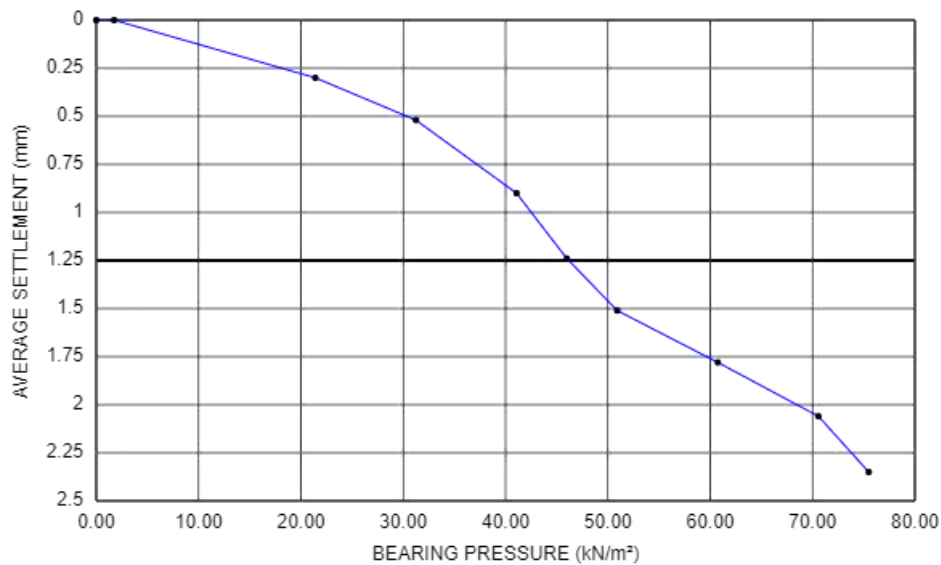
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 75 kN/m²
 Max settlement: 2.35 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 46 kN/m²
 Modulus of subgrade K762: 23 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 2.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 2.2 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

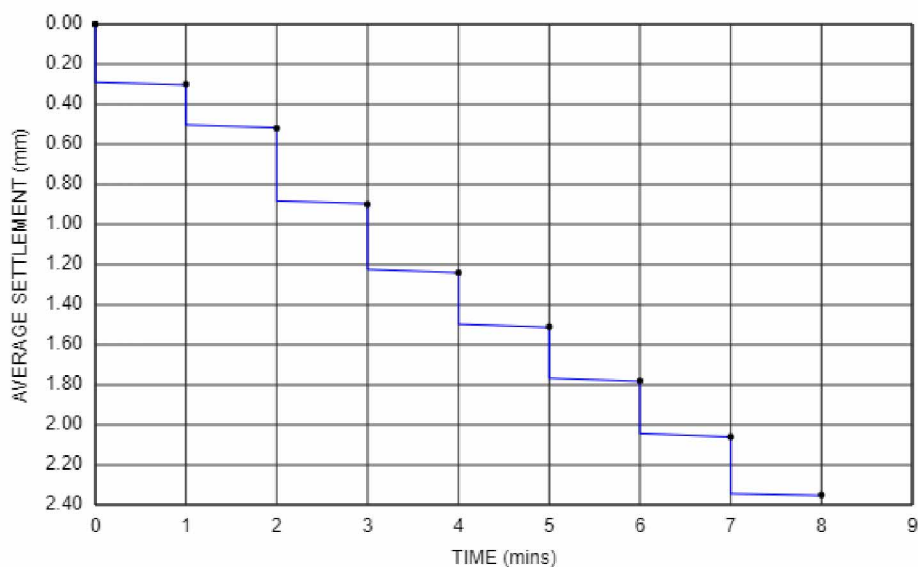
REPORT NUMBER:

C1055642 / 164200.1.1.8

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	21.4	-0.41	-0.27	-0.23	0.41	0.27	0.23	0.30
5.0	31.2	-0.65	-0.48	-0.42	0.65	0.48	0.42	0.52
6.5	41.1	-1.08	-0.84	-0.77	1.08	0.84	0.77	0.90
7.3	46.0	-1.42	-1.20	-1.10	1.42	1.20	1.10	1.24
8.1	50.9	-1.70	-1.47	-1.37	1.70	1.47	1.37	1.51
9.7	60.7	-2.01	-1.72	-1.62	2.01	1.72	1.62	1.78
11.2	70.6	-2.32	-2.01	-1.85	2.32	2.01	1.85	2.06
12.0	75.5	-2.62	-2.29	-2.15	2.62	2.29	2.15	2.35

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
07-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	E11	MATERIAL:	Soil/clay sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

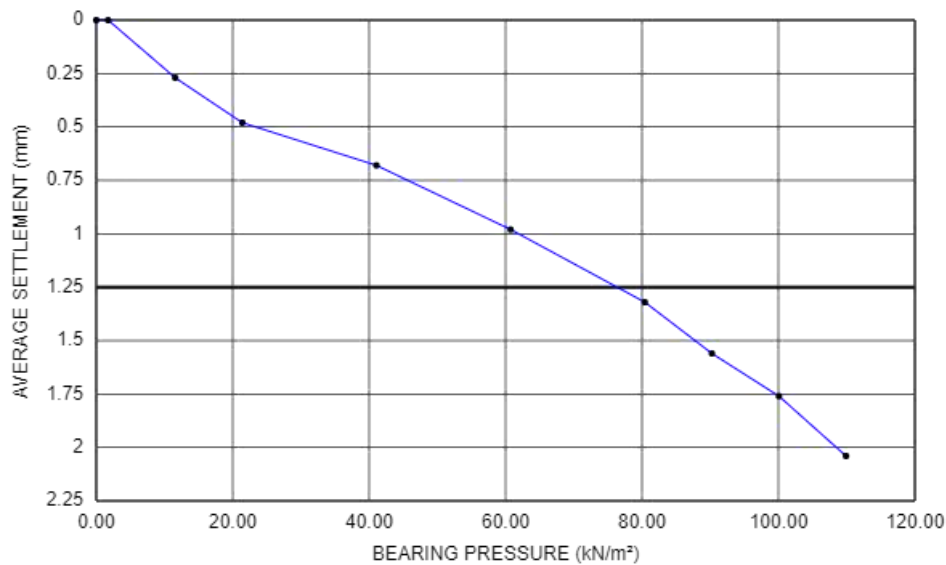
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 110 kN/m²
 Max settlement: 2.04 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 76 kN/m²
 Modulus of subgrade K762: 38 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.3 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

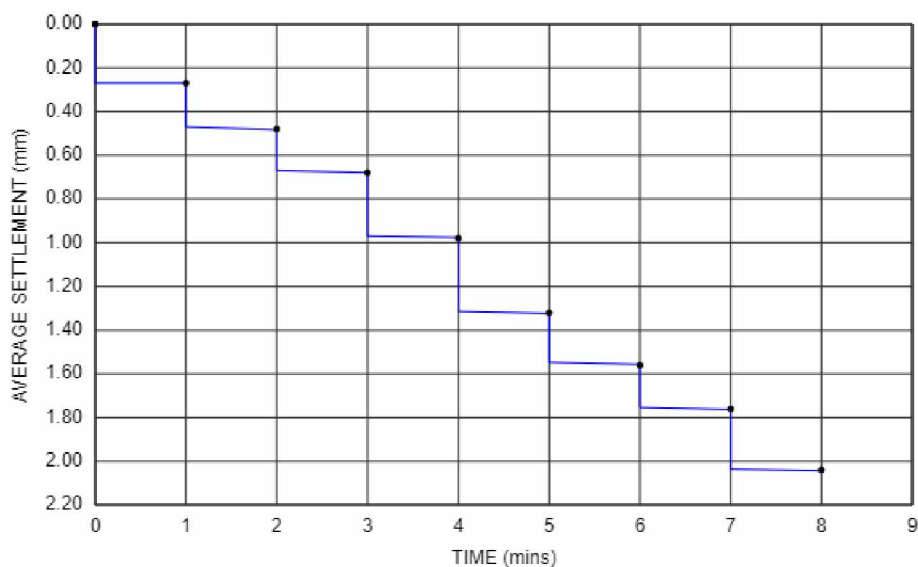
REPORT NUMBER:

C1055642 / 164200.1.1.9

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8	11.6	-0.26	-0.39	-0.16	0.26	0.39	0.16	0.27
3.4	21.4	-0.42	-0.51	-0.52	0.42	0.51	0.52	0.48
6.5	41.1	-0.62	-0.74	-0.68	0.62	0.74	0.68	0.68
9.7	60.7	-0.90	-1.03	-1.00	0.90	1.03	1.00	0.98
12.8	80.4	-1.17	-1.43	-1.37	1.17	1.43	1.37	1.32
14.4	90.2	-1.38	-1.69	-1.60	1.38	1.69	1.60	1.56
15.9	100.1	-1.64	-1.86	-1.79	1.64	1.86	1.79	1.76
17.5	109.9	-1.90	-2.17	-2.06	1.90	2.17	2.06	2.04

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Matthew Mills - Laboratory Manager


 Approved Signatory
07-Jan-22


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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.10		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F11	MATERIAL:	Clay sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

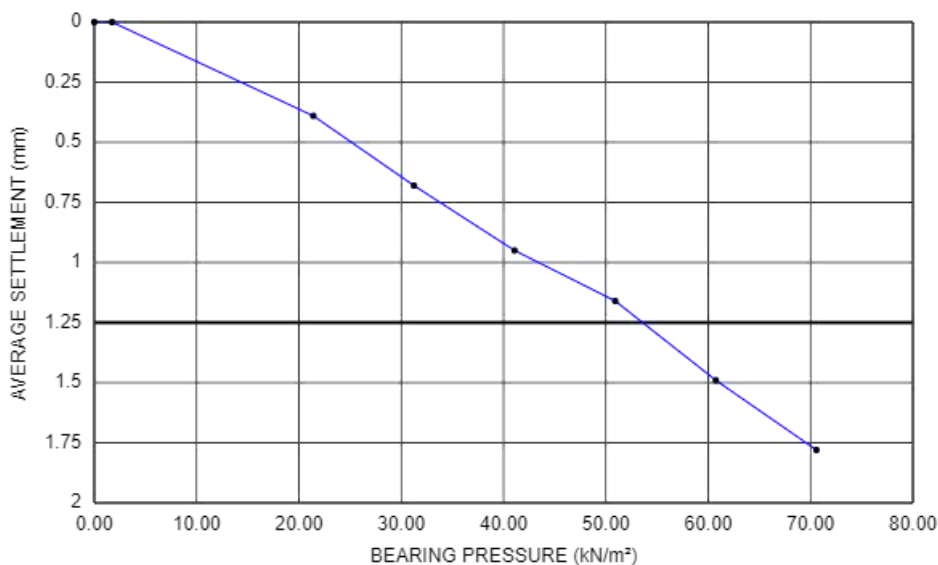
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 71 kN/m²
 Max settlement: 1.78 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 54 kN/m²
 Modulus of subgrade K762: 27 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 2.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 2.9 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

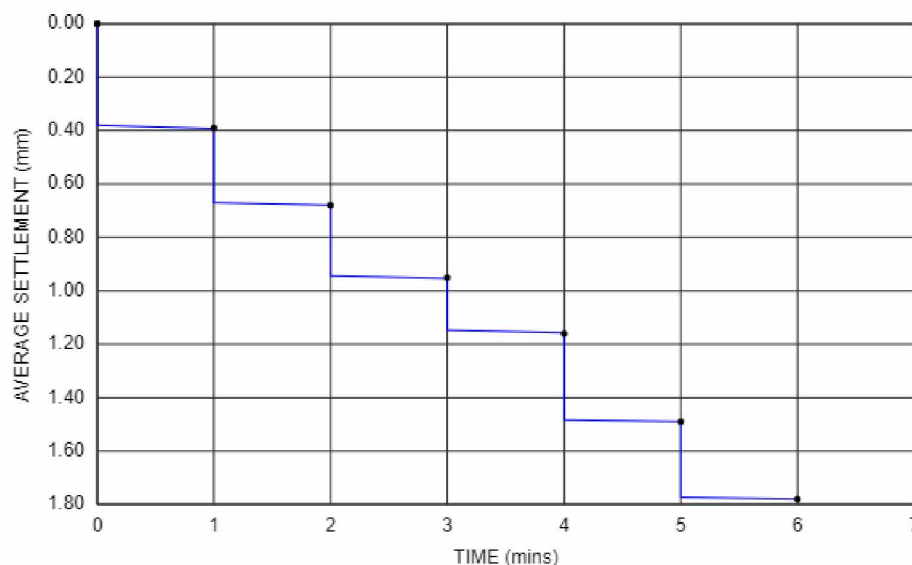
REPORT NUMBER:

C1055642 / 164200.1.1.10

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	21.4	-0.29	-0.40	-0.49	0.29	0.40	0.49	0.39
5.0	31.2	-0.59	-0.70	-0.75	0.59	0.70	0.75	0.68
6.5	41.1	-0.83	-0.99	-1.04	0.83	0.99	1.04	0.95
8.1	50.9	-1.07	-1.17	-1.23	1.07	1.17	1.23	1.16
9.7	60.7	-1.44	-1.54	-1.49	1.44	1.54	1.49	1.49
11.2	70.6	-1.68	-1.90	-1.76	1.68	1.90	1.76	1.78

SETTLEMENT RELATIONSHIP vs TIME



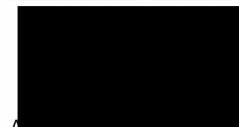
Remarks:

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For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signature

07-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164200.1.1.11		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	06/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	E10	MATERIAL:	Type 1 crushed sub formation
DISTANCE FROM EDGE OF PLATE TO WALL:	0 mm	SUPPLIER:	Site won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

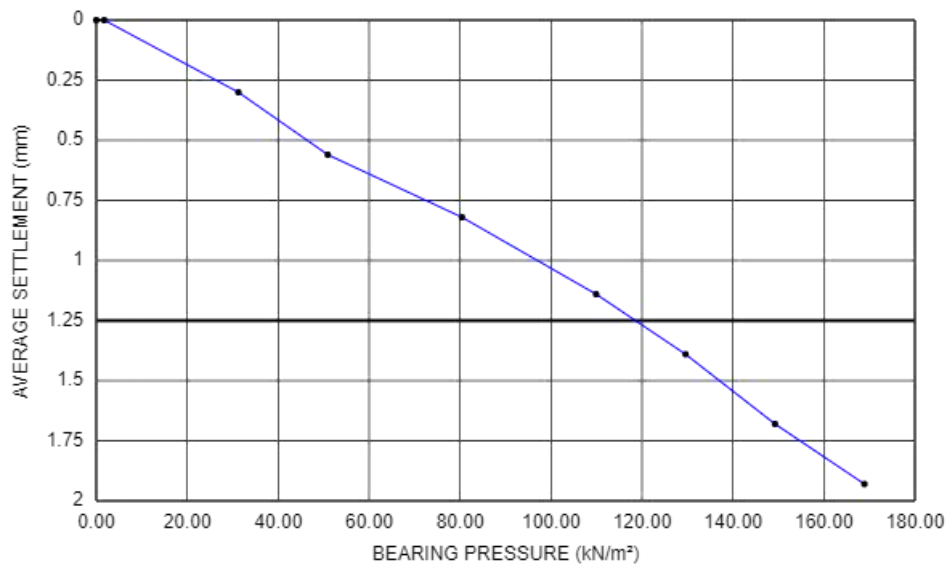
Equipment Details

Type of Kentledge: 15t dozer
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 169 kN/m²
 Max settlement: 1.93 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 119 kN/m²
 Modulus of subgrade K762: 59 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.4 %

Remarks:

Test results reported relate only to the items tested.
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 Amended report. This test report supersedes test report version 1 -

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

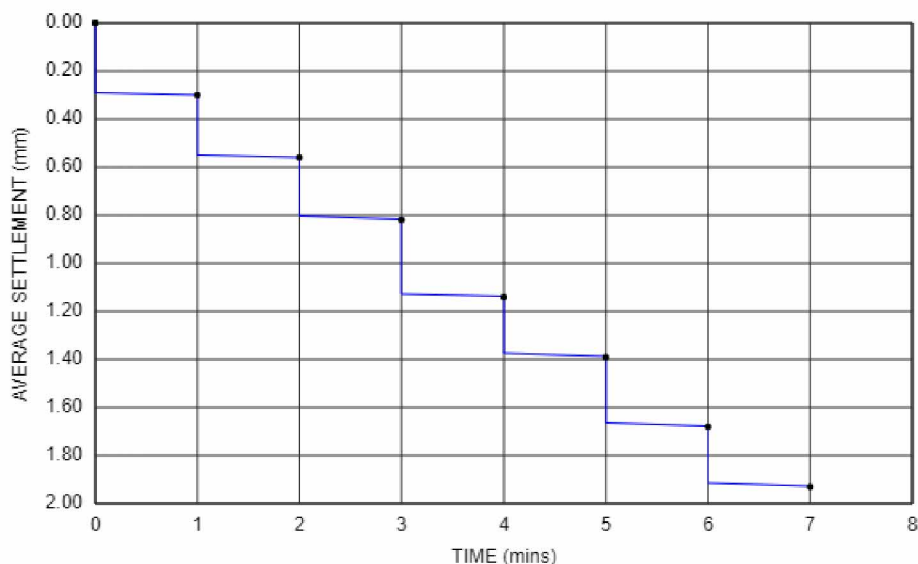
REPORT NUMBER:

C1055642 / 164200.1.1.11

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
0.3	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.2	-0.32	-0.31	-0.27	0.32	0.31	0.27	0.30
8.1	50.9	-0.57	-0.60	-0.51	0.57	0.60	0.51	0.56
12.8	80.4	-0.80	-0.92	-0.73	0.80	0.92	0.73	0.82
17.5	109.9	-1.11	-1.24	-1.06	1.11	1.24	1.06	1.14
20.6	129.6	-1.32	-1.59	-1.25	1.32	1.59	1.25	1.39
23.7	149.2	-1.66	-1.79	-1.58	1.66	1.79	1.58	1.68
26.9	168.9	-1.92	-2.05	-1.81	1.92	2.05	1.81	1.93

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.
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Amended report. This test report supersedes test report version 1 -

For and on behalf of CTS

[Redacted Signature]

07-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164766.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	11/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F7	MATERIAL:	Subformation granular fill
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

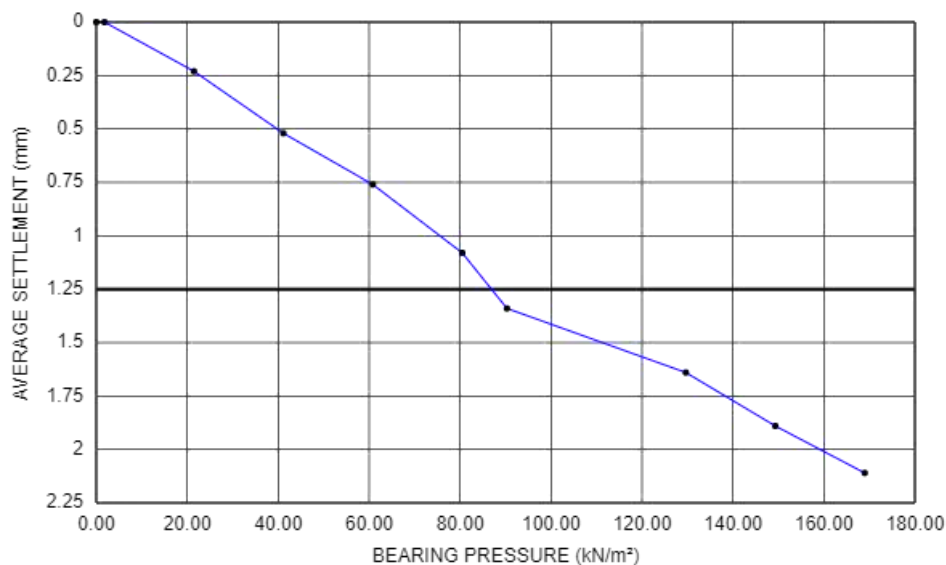
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 169 kN/m²
 Max settlement: 2.11 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 87 kN/m²
 Modulus of subgrade K762: 43 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.6 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

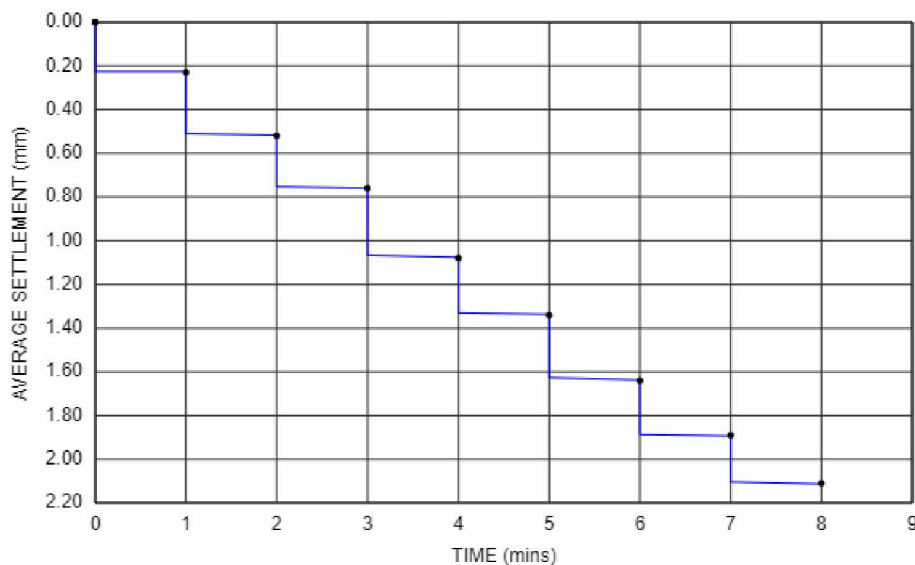
REPORT NUMBER:

C1055642 / 164766.1.1.1

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
0.3	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	21.5	-0.46	-0.12	-0.10	0.46	0.12	0.10	0.23
6.5	41.1	-0.77	-0.49	-0.29	0.77	0.49	0.29	0.52
9.7	60.8	-0.99	-0.72	-0.57	0.99	0.72	0.57	0.76
12.8	80.5	-1.32	-1.05	-0.86	1.32	1.05	0.86	1.08
14.4	90.3	-1.59	-1.32	-1.10	1.59	1.32	1.10	1.34
20.6	129.6	-1.89	-1.58	-1.44	1.89	1.58	1.44	1.64
23.7	149.3	-2.06	-1.90	-1.72	2.06	1.90	1.72	1.89
26.9	169.0	-2.29	-2.07	-1.98	2.29	2.07	1.98	2.11

SETTLEMENT RELATIONSHIP vs TIME



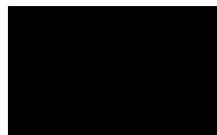
Remarks:

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For and on behalf of CTS

Atif Mohammed - Supervisor



11-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164766.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	11/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F6	MATERIAL:	Subformation layer granular fill
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

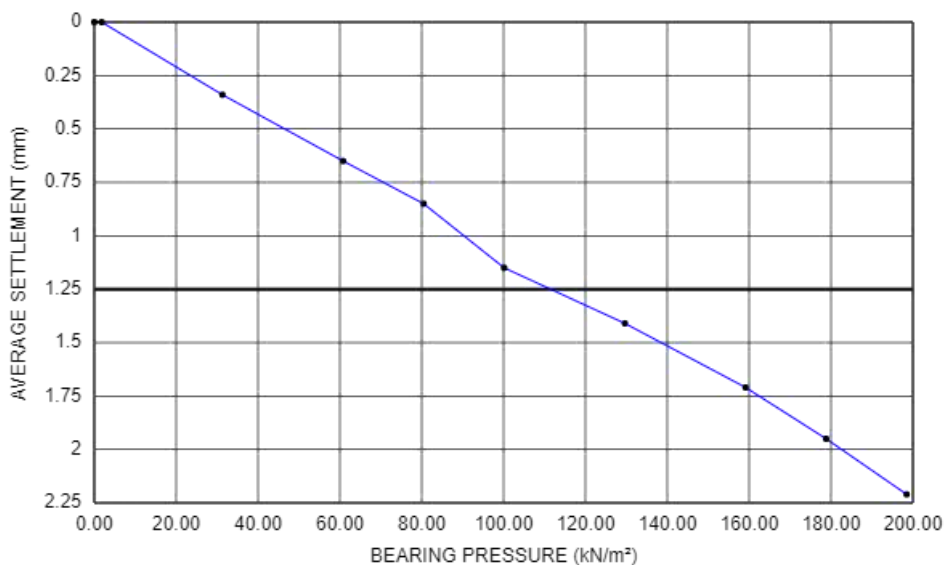
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 198 kN/m²
 Max settlement: 2.21 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 111 kN/m²
 Modulus of subgrade K762: 55 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.2 %

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

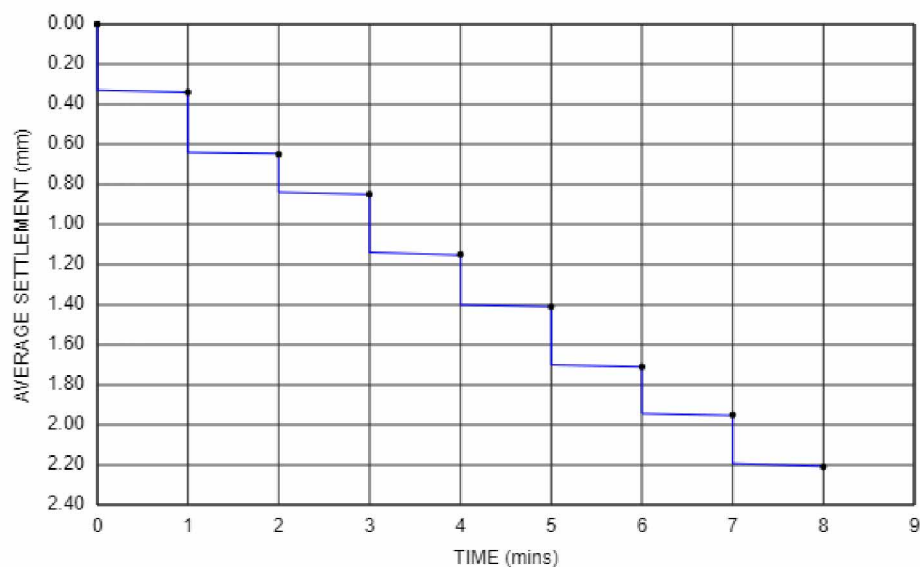
REPORT NUMBER:

C1055642 / 164766.1.1.2

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
0.3	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.3	-0.26	-0.40	-0.36	0.26	0.40	0.36	0.34
9.7	60.8	-0.57	-0.64	-0.73	0.57	0.64	0.73	0.65
12.8	80.5	-0.77	-0.85	-0.93	0.77	0.85	0.93	0.85
15.9	100.1	-1.04	-1.18	-1.24	1.04	1.18	1.24	1.15
20.6	129.6	-1.29	-1.43	-1.51	1.29	1.43	1.51	1.41
25.3	159.1	-1.58	-1.73	-1.82	1.58	1.73	1.82	1.71
28.4	178.8	-1.80	-1.98	-2.08	1.80	1.98	2.08	1.95
31.6	198.5	-2.05	-2.19	-2.38	2.05	2.19	2.38	2.21

SETTLEMENT RELATIONSHIP vs TIME



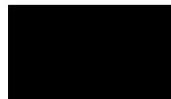
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
11-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164766.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	11/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G6	MATERIAL:	Subformation layer granular fill
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	Yes

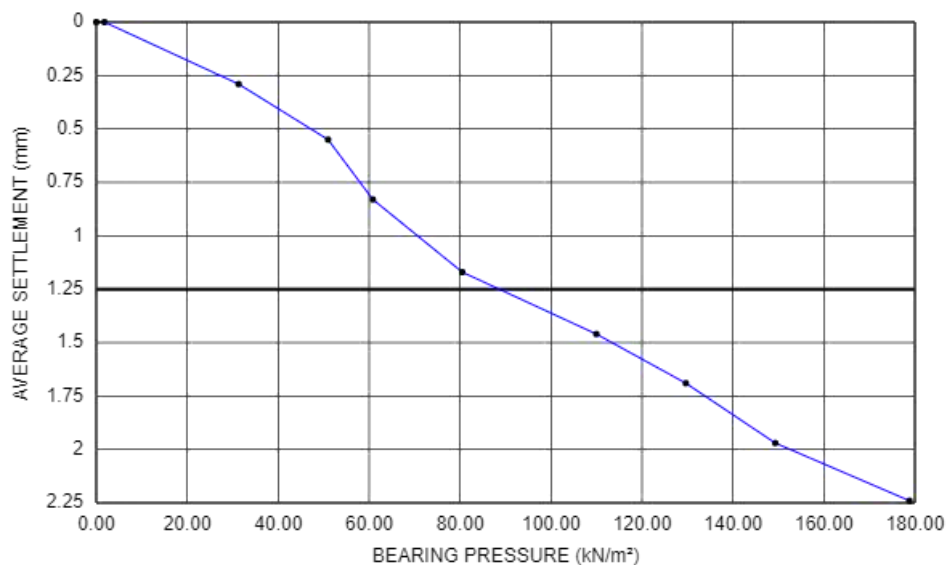
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 179 kN/m²
 Max settlement: 2.24 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 89 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.9 %

Remarks:

Test results reported relate only to the items tested.

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

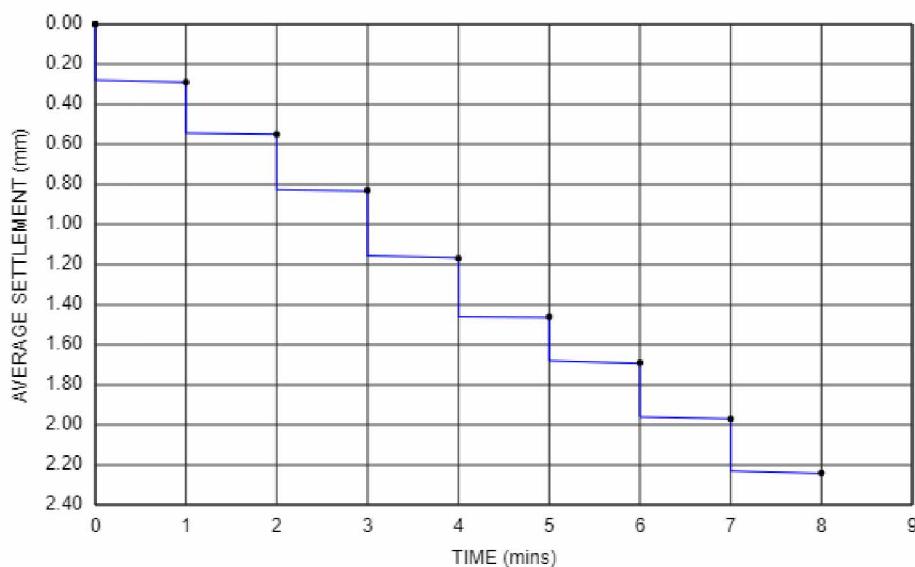
REPORT NUMBER:

C1055642 / 164766.1.1.3

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
0.3	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	31.3	-0.29	-0.27	-0.31	0.29	0.27	0.31	0.29
8.1	51.0	-0.52	-0.51	-0.62	0.52	0.51	0.62	0.55
9.7	60.8	-0.80	-0.73	-0.97	0.80	0.73	0.97	0.83
12.8	80.5	-1.07	-1.02	-1.41	1.07	1.02	1.41	1.17
17.5	110.0	-1.37	-1.27	-1.75	1.37	1.27	1.75	1.46
20.6	129.6	-1.57	-1.50	-2.01	1.57	1.50	2.01	1.69
23.7	149.3	-1.89	-1.77	-2.25	1.89	1.77	2.25	1.97
28.4	178.8	-2.05	-2.00	-2.68	2.05	2.00	2.68	2.24

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Atif Mohammed - Supervisor



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11-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164766.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	11/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G7	MATERIAL:	Subformation layer granular fill
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

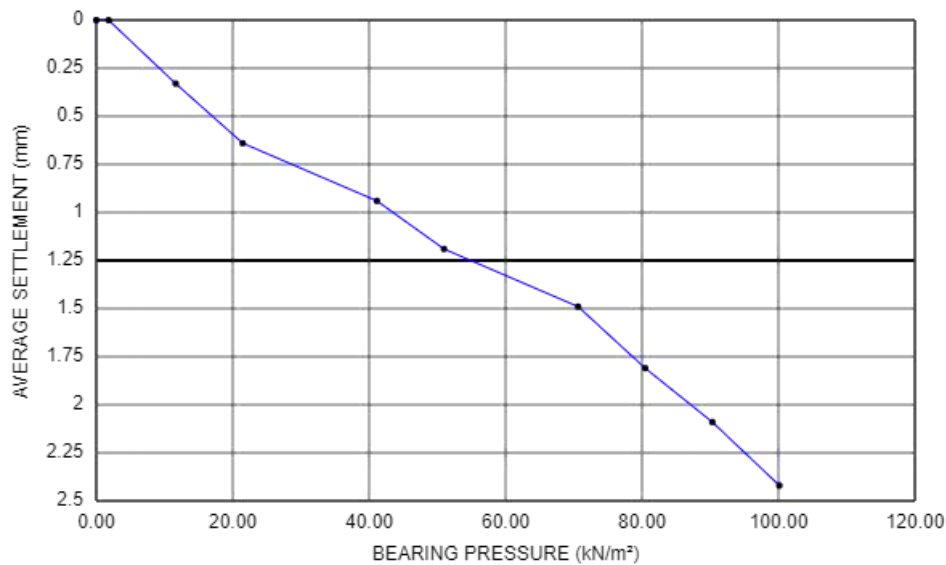
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 100 kN/m²
 Max settlement: 2.42 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 55 kN/m²
 Modulus of subgrade K762: 27 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 3.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 3.0 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

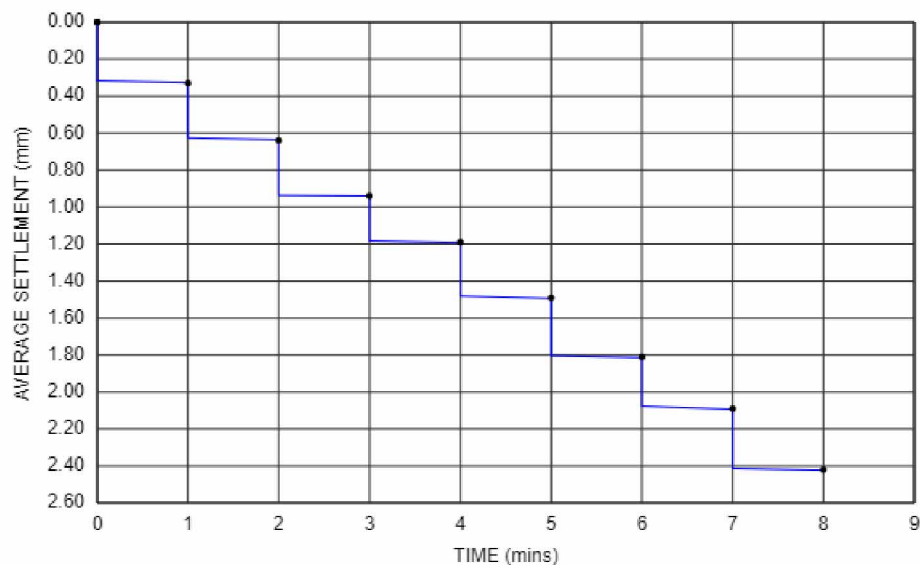
REPORT NUMBER:

C1055642 / 164766.1.1.4

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
0.3	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.9	11.6	-0.28	-0.32	-0.38	0.28	0.32	0.38	0.33
3.4	21.5	-0.59	-0.60	-0.72	0.59	0.60	0.72	0.64
6.5	41.1	-0.86	-0.93	-1.03	0.86	0.93	1.03	0.94
8.1	51.0	-1.06	-1.18	-1.34	1.06	1.18	1.34	1.19
11.2	70.6	-1.35	-1.44	-1.69	1.35	1.44	1.69	1.49
12.8	80.5	-1.68	-1.76	-2.00	1.68	1.76	2.00	1.81
14.4	90.3	-1.99	-2.05	-2.24	1.99	2.05	2.24	2.09
15.9	100.1	-2.28	-2.47	-2.52	2.28	2.47	2.52	2.42

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory
11-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 164766.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	11/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G8	MATERIAL:	Subformation layer granular fill
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

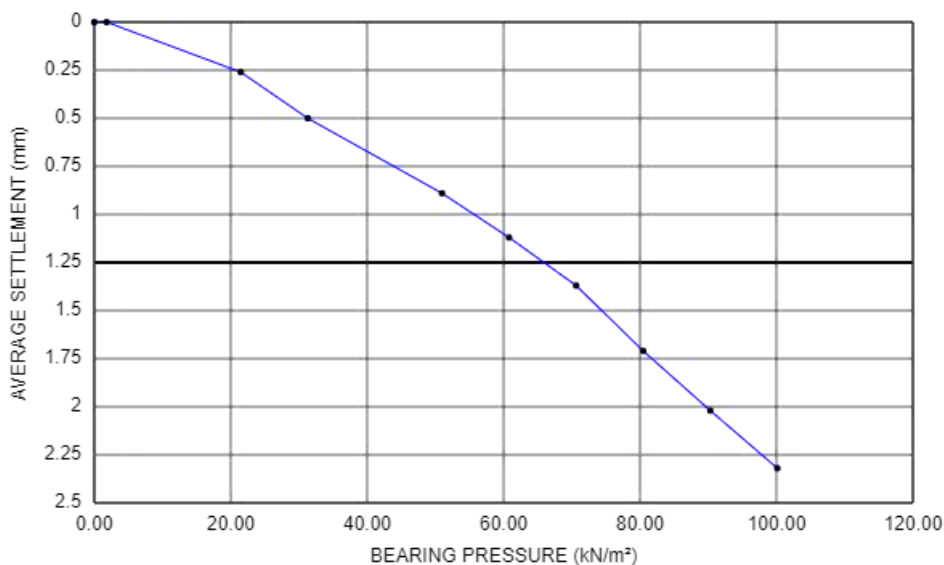
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 450 mm
 Plate Area: 0.159043 m²
 Plate Correction: 0.62

Results

Max applied pressure: 100 kN/m²
 Max settlement: 2.32 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 66 kN/m²
 Modulus of subgrade K762: 33 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 4.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 4.1 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

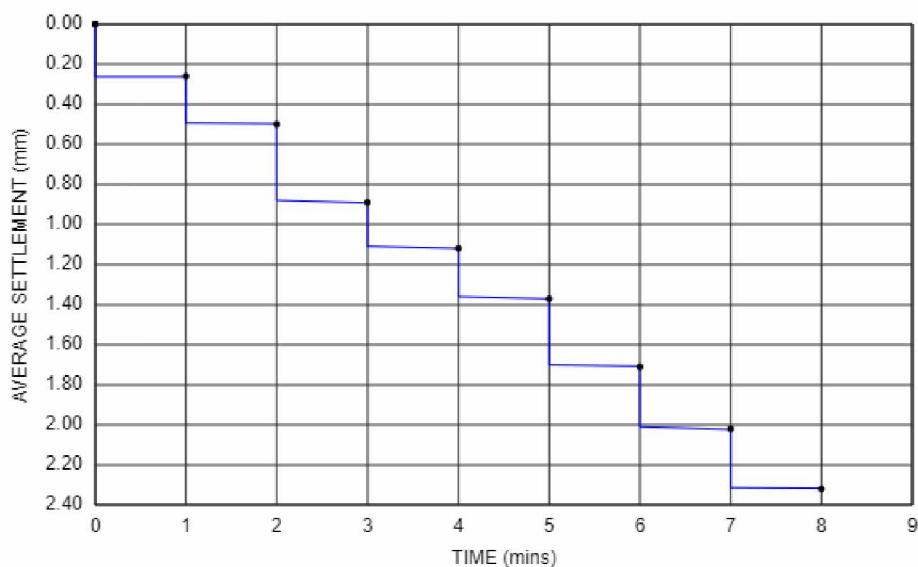
REPORT NUMBER:

C1055642 / 164766.1.1.5

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
0.3	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.4	21.5	-0.36	-0.05	-0.38	0.36	0.05	0.38	0.26
5.0	31.3	-0.53	-0.31	-0.65	0.53	0.31	0.65	0.50
8.1	51.0	-0.88	-0.70	-1.10	0.88	0.70	1.10	0.89
9.7	60.8	-1.03	-0.94	-1.39	1.03	0.94	1.39	1.12
11.2	70.6	-1.21	-1.20	-1.70	1.21	1.20	1.70	1.37
12.8	80.5	-1.46	-1.53	-2.13	1.46	1.53	2.13	1.71
14.4	90.3	-1.78	-1.80	-2.49	1.78	1.80	2.49	2.02
15.9	100.1	-2.10	-2.18	-2.67	2.10	2.18	2.67	2.32

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

11-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	E12 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

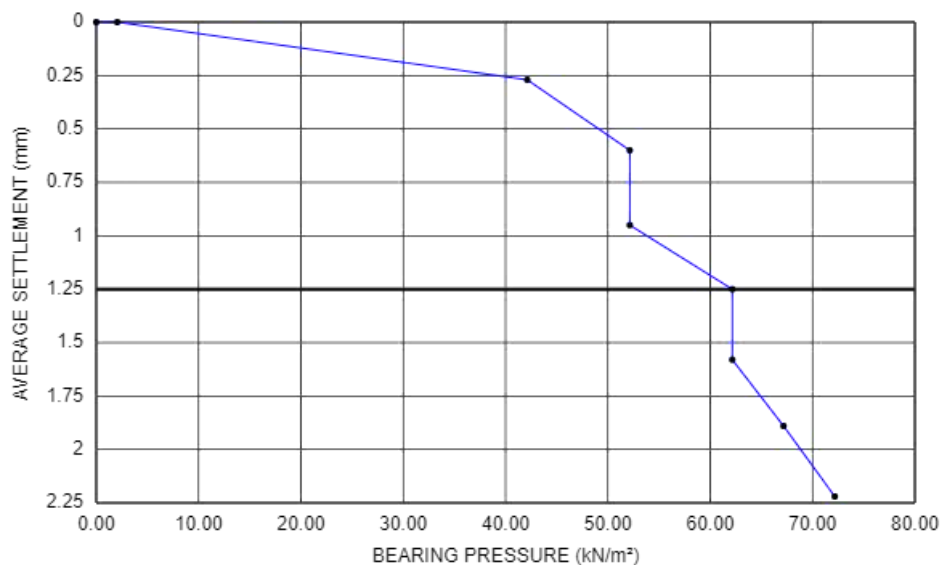
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 72 kN/m²
 Max settlement: 2.22 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

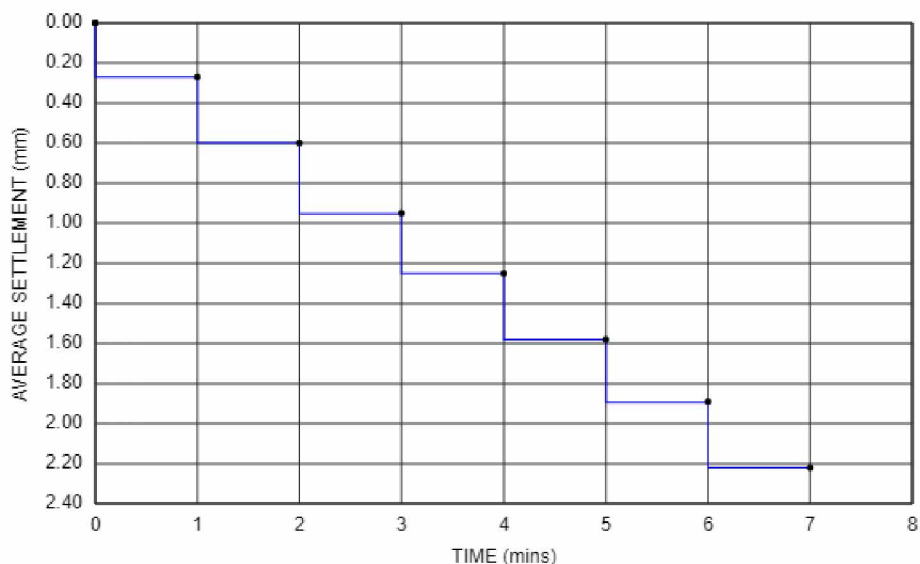
Test results reported relate only to the items tested.
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 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value
REPORT NUMBER:

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)
C1055642 / 165071.2.1.1

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.1	42.1	-0.36	-0.26	-0.19	0.36	0.26	0.19	0.27
15.0	52.1	-0.71	-0.68	-0.41	0.71	0.68	0.41	0.60
15.0	52.1	-1.05	-1.13	-0.68	1.05	1.13	0.68	0.95
17.9	62.2	-1.32	-1.46	-0.97	1.32	1.46	0.97	1.25
17.9	62.2	-1.71	-1.81	-1.22	1.71	1.81	1.22	1.58
19.3	67.2	-2.02	-2.15	-1.51	2.02	2.15	1.51	1.89
20.7	72.2	-2.36	-2.49	-1.81	2.36	2.49	1.81	2.22

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.
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Site foreman Gary requested 600mm

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
14-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	F12 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	Yes

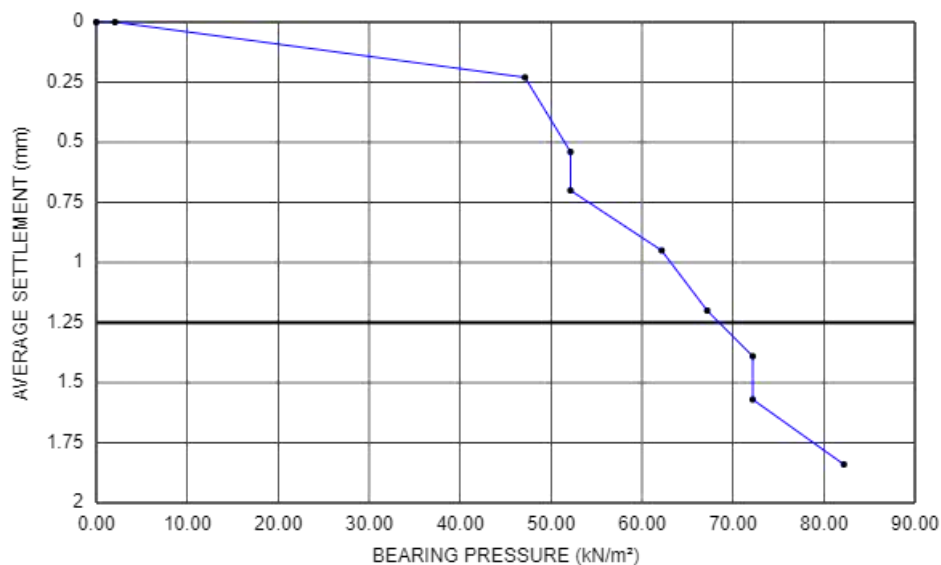
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 82 kN/m²
 Max settlement: 1.84 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 69 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.9 %

Remarks:

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 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

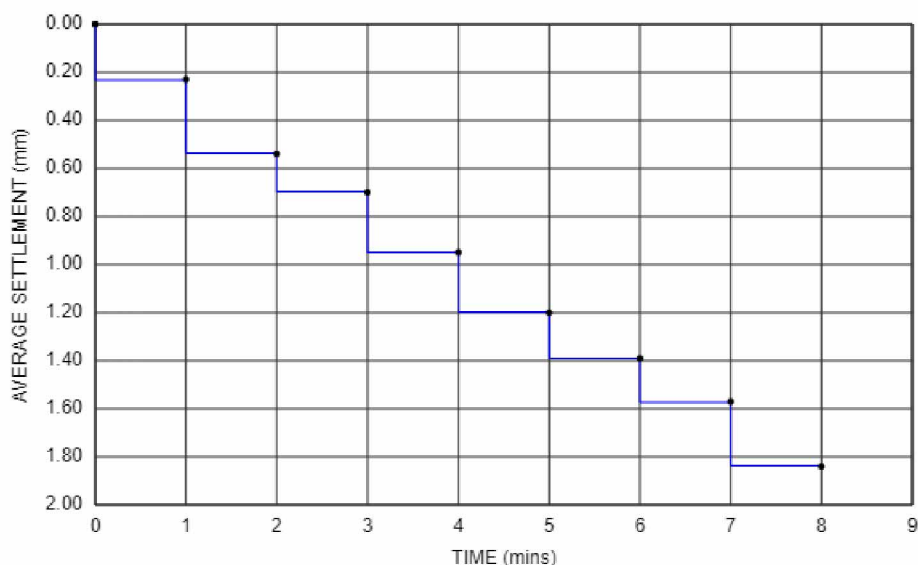
REPORT NUMBER:

C1055642 / 165071.2.1.2

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.5	47.1	-0.19	-0.36	-0.15	0.19	0.36	0.15	0.23
15.0	52.1	-0.81	-0.62	-0.18	0.81	0.62	0.18	0.54
15.0	52.1	-1.11	-0.75	-0.23	1.11	0.75	0.23	0.70
17.9	62.2	-1.48	-0.96	-0.41	1.48	0.96	0.41	0.95
19.3	67.2	-1.82	-1.13	-0.64	1.82	1.13	0.64	1.20
20.7	72.2	-2.12	-1.27	-0.78	2.12	1.27	0.78	1.39
20.7	72.2	-2.38	-1.40	-0.94	2.38	1.40	0.94	1.57
23.6	82.2	-2.75	-1.60	-1.16	2.75	1.60	1.16	1.84

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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 Site foreman Gary requested 600mm

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 14-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	G12 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

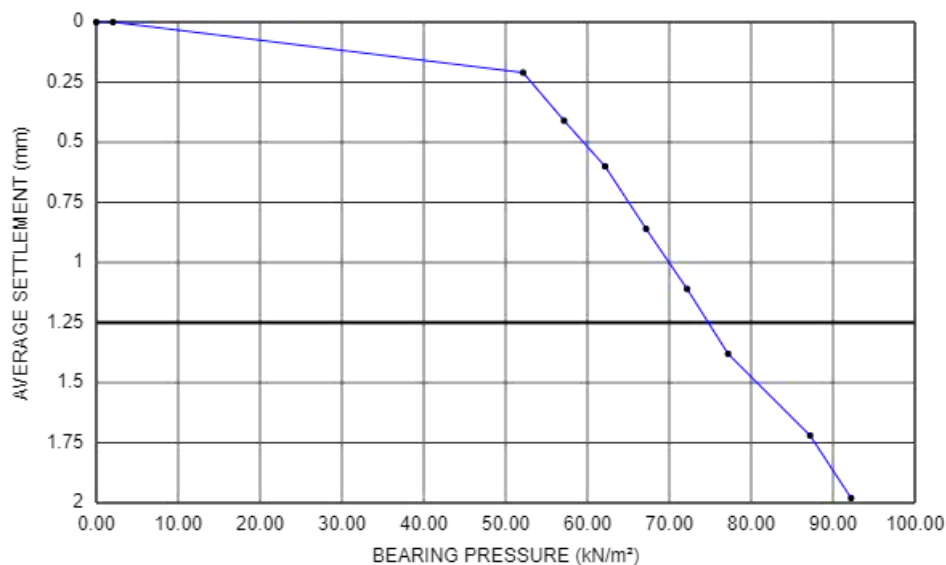
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 92 kN/m²
 Max settlement: 1.98 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 75 kN/m²
 Modulus of subgrade K762: 48 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.0 %

Remarks:

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 Site foreman Gary requested 600mm

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

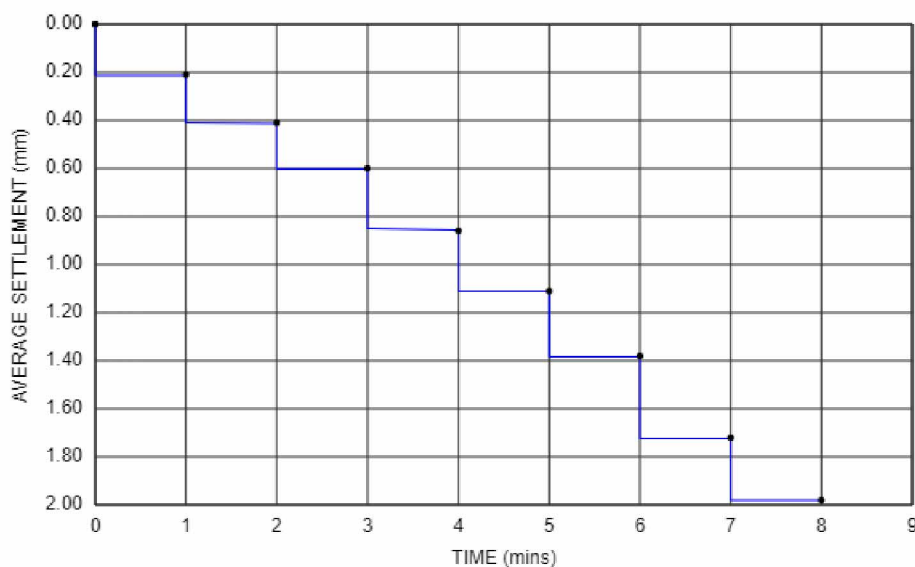
REPORT NUMBER:

C1055642 / 165071.2.1.3

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	52.1	-0.24	-0.27	-0.13	0.24	0.27	0.13	0.21
16.4	57.1	-0.55	-0.50	-0.19	0.55	0.50	0.19	0.41
17.9	62.2	-0.82	-0.67	-0.32	0.82	0.67	0.32	0.60
19.3	67.2	-1.13	-0.88	-0.56	1.13	0.88	0.56	0.86
20.7	72.2	-1.48	-1.08	-0.77	1.48	1.08	0.77	1.11
22.2	77.2	-1.80	-1.28	-1.07	1.80	1.28	1.07	1.38
25.1	87.2	-2.23	-1.58	-1.36	2.23	1.58	1.36	1.72
26.5	92.2	-2.55	-1.83	-1.56	2.55	1.83	1.56	1.98

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Site foreman Gary requested 600mm

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
14-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	G11 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	Yes

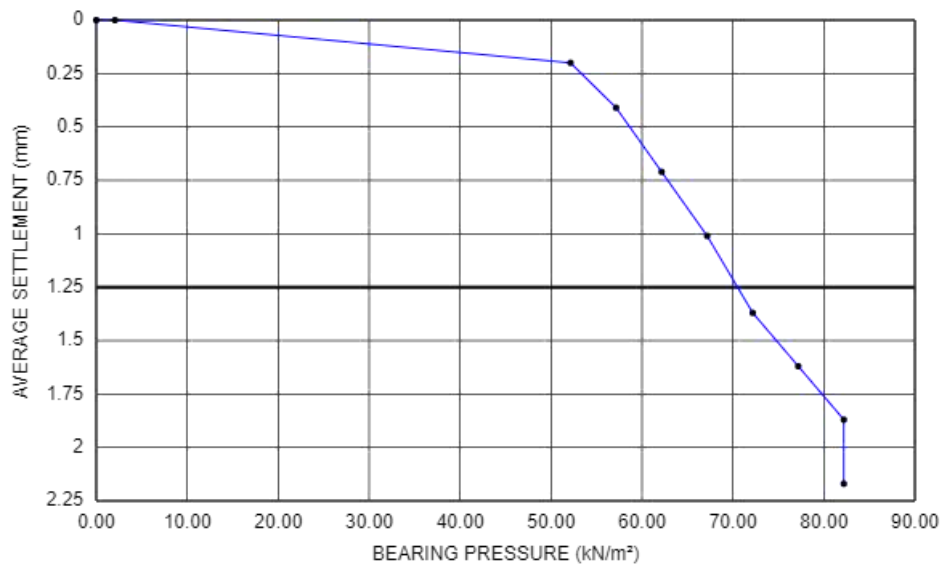
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 82 kN/m²
 Max settlement: 2.17 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 71 kN/m²
 Modulus of subgrade K762: 46 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.3 %

Remarks:

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 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

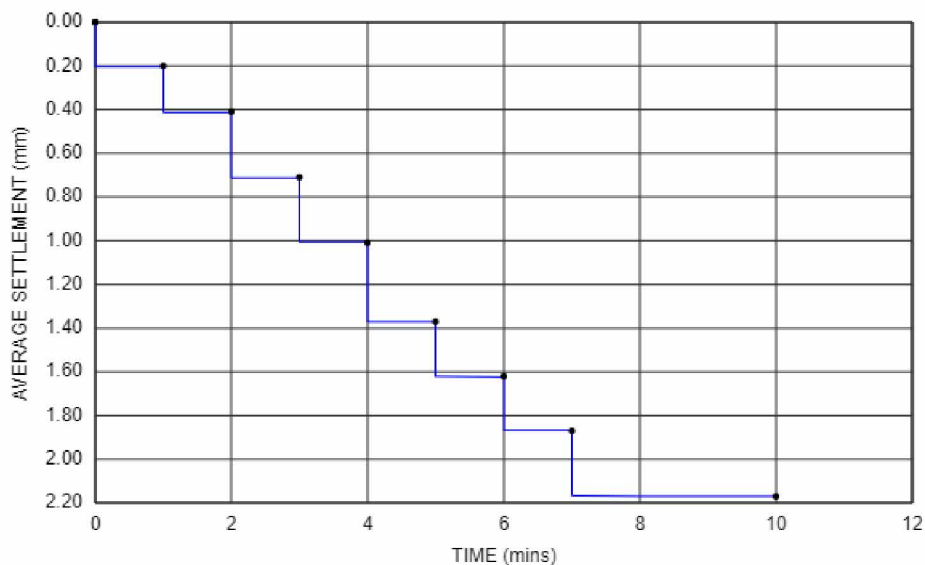
REPORT NUMBER:

C1055642 / 165071.2.1.4

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	52.1	-0.37	-0.03	-0.21	0.37	0.03	0.21	0.20
16.4	57.1	-0.71	-0.07	-0.46	0.71	0.07	0.46	0.41
17.9	62.2	-1.07	-0.21	-0.86	1.07	0.21	0.86	0.71
19.3	67.2	-1.35	-0.41	-1.26	1.35	0.41	1.26	1.01
20.7	72.2	-1.76	-0.56	-1.79	1.76	0.56	1.79	1.37
22.2	77.2	-2.06	-0.67	-2.14	2.06	0.67	2.14	1.62
23.6	82.2	-2.31	-0.80	-2.49	2.31	0.80	2.49	1.87
23.6	82.2	-2.77	-0.96	-2.78	2.77	0.96	2.78	2.17

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 14-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	F11 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

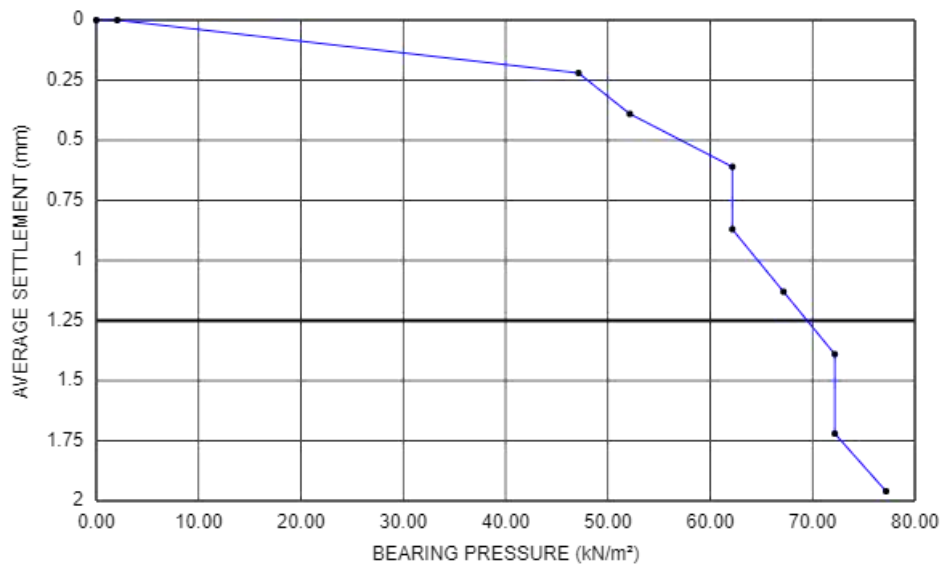
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 77 kN/m²
 Max settlement: 1.96 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 69 kN/m²
 Modulus of subgrade K762: 45 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

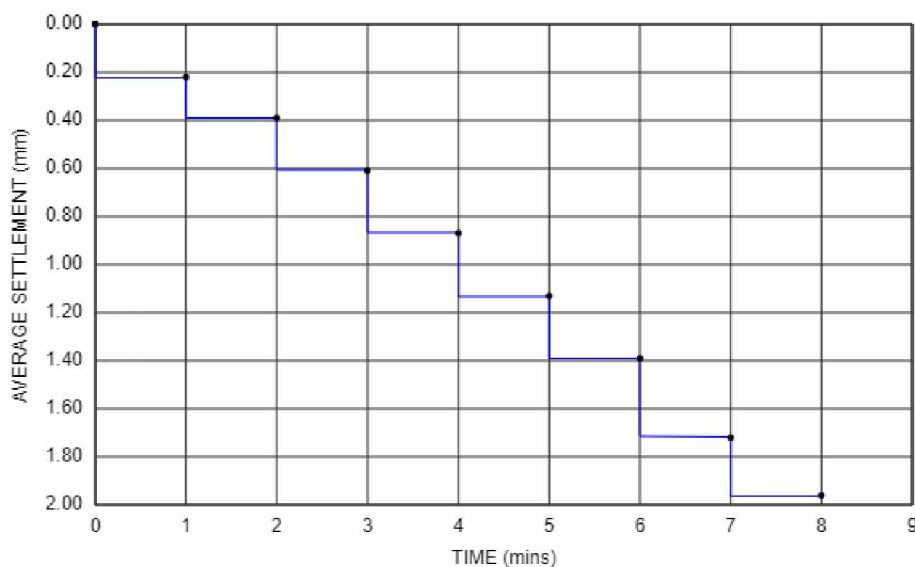
REPORT NUMBER:

C1055642 / 165071.2.1.5

TEST RESULTS

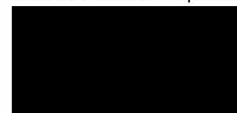
LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.5	47.1	-0.30	-0.34	-0.03	0.30	0.34	0.03	0.22
15.0	52.1	-0.52	-0.62	-0.03	0.52	0.62	0.03	0.39
17.9	62.2	-0.82	-0.97	-0.03	0.82	0.97	0.03	0.61
17.9	62.2	-1.20	-1.32	-0.08	1.20	1.32	0.08	0.87
19.3	67.2	-1.53	-1.61	-0.26	1.53	1.61	0.26	1.13
20.7	72.2	-1.77	-1.92	-0.48	1.77	1.92	0.48	1.39
20.7	72.2	-2.15	-2.28	-0.72	2.15	2.28	0.72	1.72
22.2	77.2	-2.38	-2.55	-0.96	2.38	2.55	0.96	1.96

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 14-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	G10 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

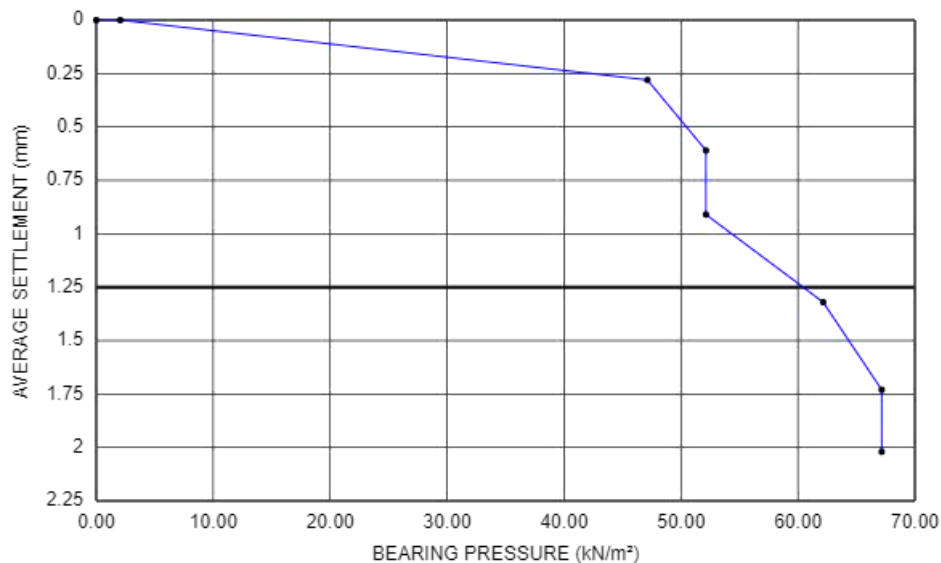
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 67 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 61 kN/m²
 Modulus of subgrade K762: 39 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value

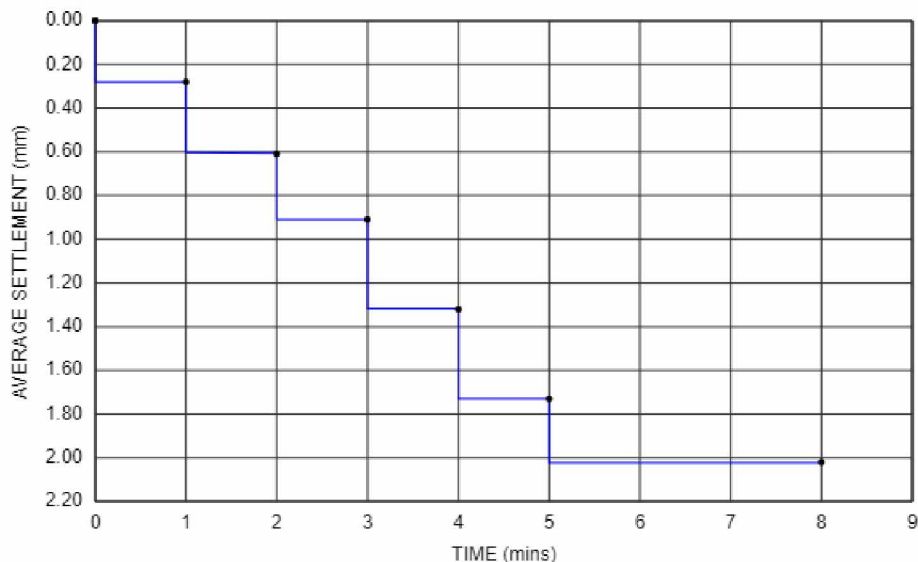
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 165071.2.1.6

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.5	47.1	-0.21	-0.31	-0.32	0.21	0.31	0.32	0.28
15.0	52.1	-0.47	-0.64	-0.71	0.47	0.64	0.71	0.61
15.0	52.1	-0.70	-0.95	-1.08	0.70	0.95	1.08	0.91
17.9	62.2	-1.03	-1.36	-1.56	1.03	1.36	1.56	1.32
19.3	67.2	-1.21	-1.88	-2.10	1.21	1.88	2.10	1.73
19.3	67.2	-1.37	-2.16	-2.54	1.37	2.16	2.54	2.02

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 14-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165071.2.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	13/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	F10 Foundation	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

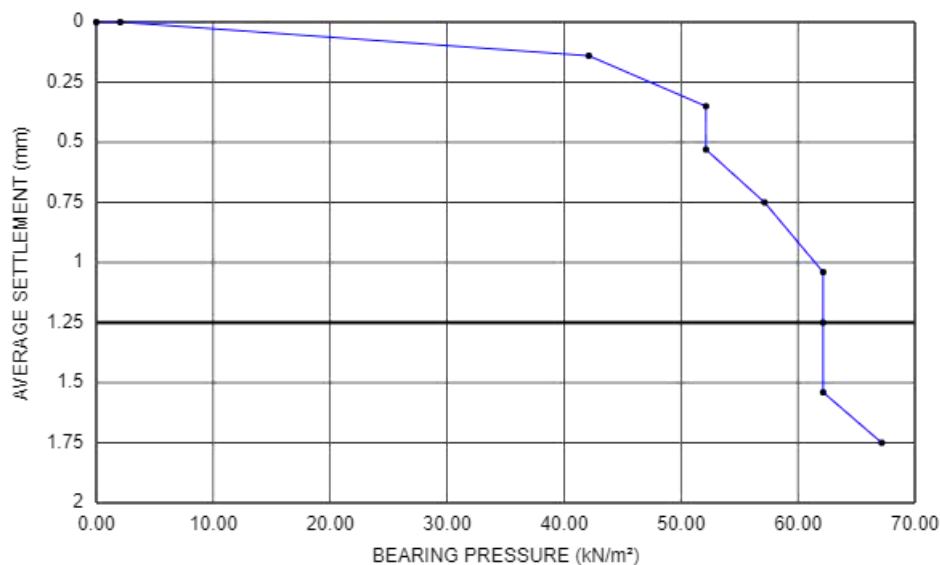
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 67 kN/m²
 Max settlement: 1.75 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

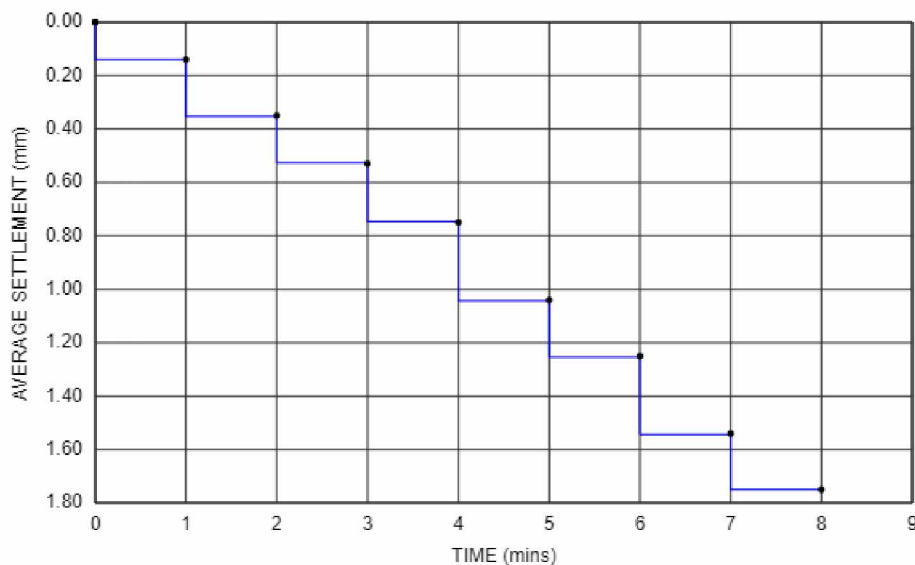
REPORT NUMBER:

C1055642 / 165071.2.1.7

TEST RESULTS

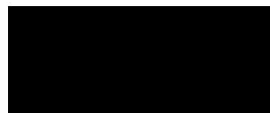
LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.1	42.1	-0.02	-0.37	-0.03	0.02	0.37	0.03	0.14
15.0	52.1	-0.24	-0.75	-0.07	0.24	0.75	0.07	0.35
15.0	52.1	-0.35	-1.13	-0.10	0.35	1.13	0.10	0.53
16.4	57.1	-0.49	-1.52	-0.23	0.49	1.52	0.23	0.75
17.9	62.2	-0.71	-1.99	-0.43	0.71	1.99	0.43	1.04
17.9	62.2	-0.84	-2.31	-0.61	0.84	2.31	0.61	1.25
17.9	62.2	-0.99	-2.66	-0.98	0.99	2.66	0.98	1.54
19.3	67.2	-1.09	-2.98	-1.18	1.09	2.98	1.18	1.75

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Site foreman Gary requested 600mm

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 14-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165623.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	18/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	F13	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

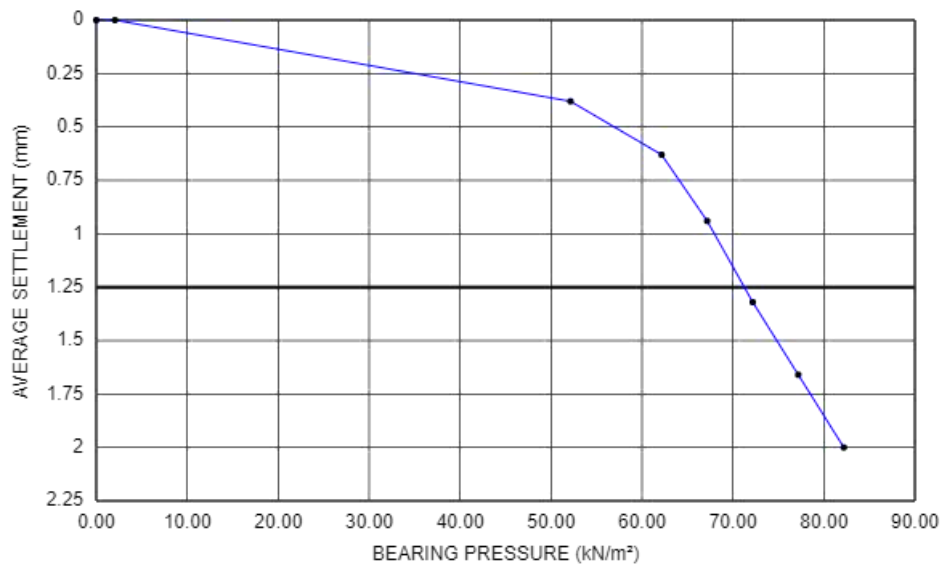
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 82 kN/m²
 Max settlement: 2.00 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 71 kN/m²
 Modulus of subgrade K762: 46 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.4 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Ground is frozen
 Amended report. This test report supersedes test report version 1 - Typo

TEST REPORT:
Determination of Equivalent CBR Value

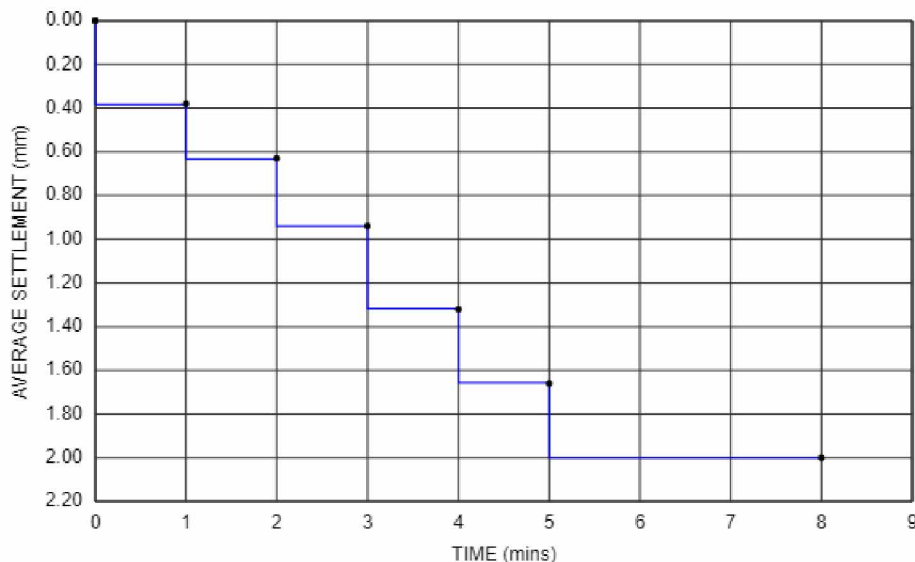
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 165623.1.1.1

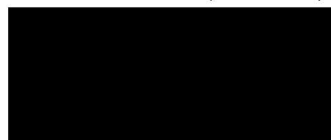
TEST RESULTS

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	52.1	-0.23	-0.58	-0.34	0.23	0.58	0.34	0.38
17.9	62.2	-0.47	-0.91	-0.52	0.47	0.91	0.52	0.63
19.3	67.2	-0.82	-1.28	-0.72	0.82	1.28	0.72	0.94
20.7	72.2	-1.25	-1.74	-0.96	1.25	1.74	0.96	1.32
22.2	77.2	-1.63	-2.12	-1.22	1.63	2.12	1.22	1.66
23.6	82.2	-2.05	-2.50	-1.45	2.05	2.50	1.45	2.00

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Ground is frozen
 Amended report. This test report supersedes test report version 1 - Typo

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



19-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165623.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	18/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	G13	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

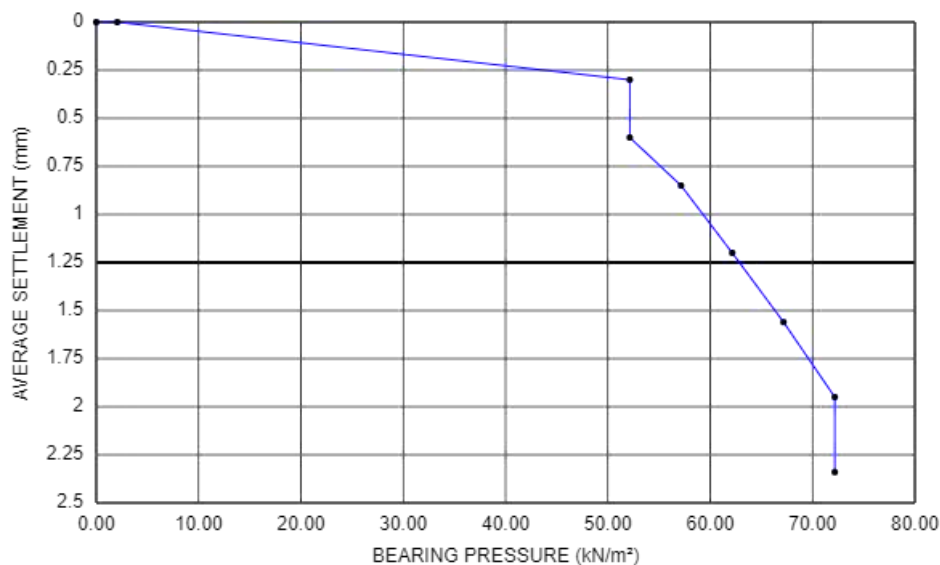
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 72 kN/m²
 Max settlement: 2.34 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 63 kN/m²
 Modulus of subgrade K762: 41 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.0 %

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

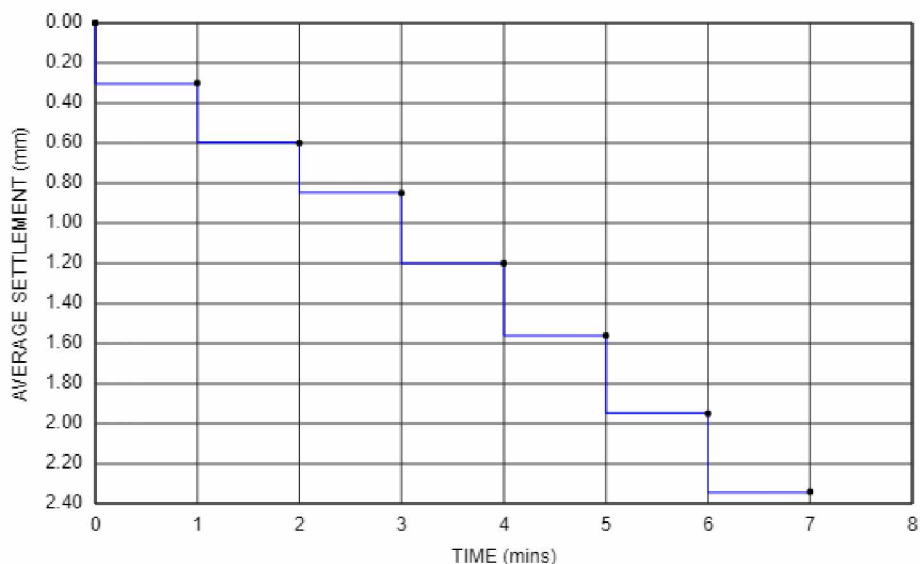
REPORT NUMBER:

C1055642 / 165623.1.1.2

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	52.1	-0.09	-0.59	-0.23	0.09	0.59	0.23	0.30
15.0	52.1	-0.40	-0.92	-0.47	0.40	0.92	0.47	0.60
16.4	57.1	-0.68	-1.18	-0.68	0.68	1.18	0.68	0.85
17.9	62.2	-1.06	-1.57	-0.97	1.06	1.57	0.97	1.20
19.3	67.2	-1.47	-1.95	-1.26	1.47	1.95	1.26	1.56
20.7	72.2	-1.88	-2.38	-1.58	1.88	2.38	1.58	1.95
20.7	72.2	-2.33	-2.77	-1.93	2.33	2.77	1.93	2.34

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Matthew Mills - Laboratory Manager



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F8 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

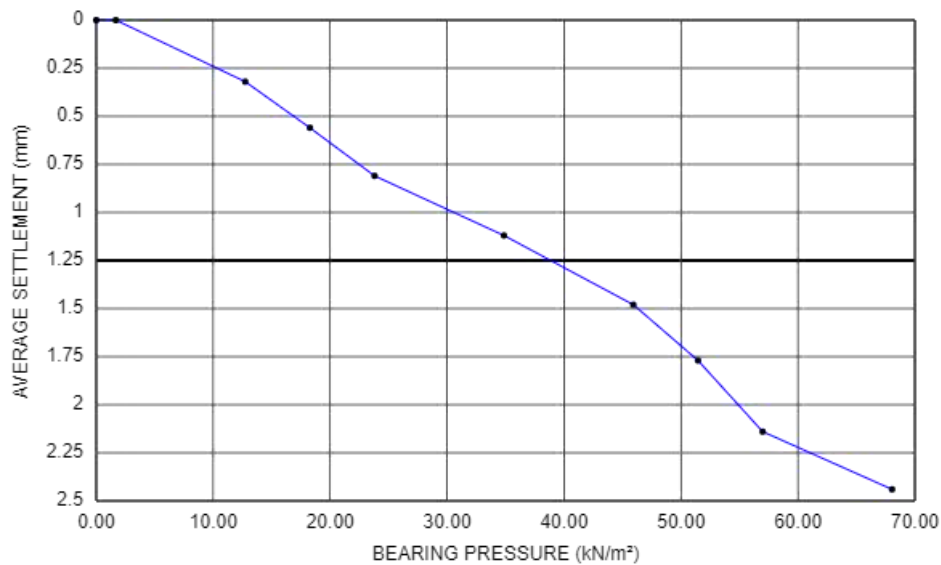
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 68 kN/m²
 Max settlement: 2.44 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 39 kN/m²
 Modulus of subgrade K762: 25 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 2.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 2.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

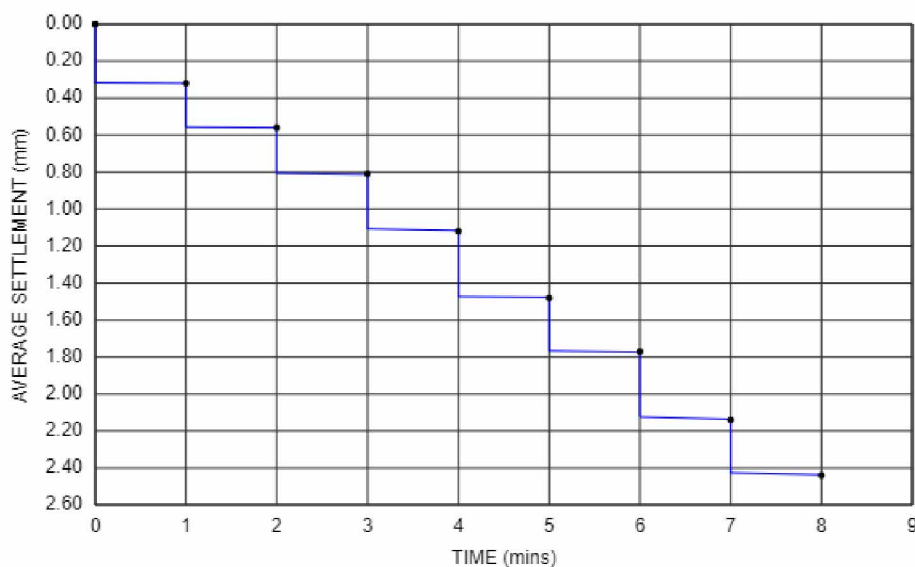
REPORT NUMBER:

C1055642 / 168578.1.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.7	-0.47	-0.39	-0.10	0.47	0.39	0.10	0.32
5.2	18.3	-0.69	-0.71	-0.28	0.69	0.71	0.28	0.56
6.7	23.8	-0.99	-1.00	-0.45	0.99	1.00	0.45	0.81
9.9	34.9	-1.29	-1.35	-0.71	1.29	1.35	0.71	1.12
13.0	45.9	-1.67	-1.76	-1.00	1.67	1.76	1.00	1.48
14.5	51.5	-1.99	-2.02	-1.31	1.99	2.02	1.31	1.77
16.1	57.0	-2.29	-2.43	-1.69	2.29	2.43	1.69	2.14
19.2	68.1	-2.52	-2.80	-1.99	2.52	2.80	1.99	2.44

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent [REDACTED] as Supervisor

Approved Signatory

Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G7 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

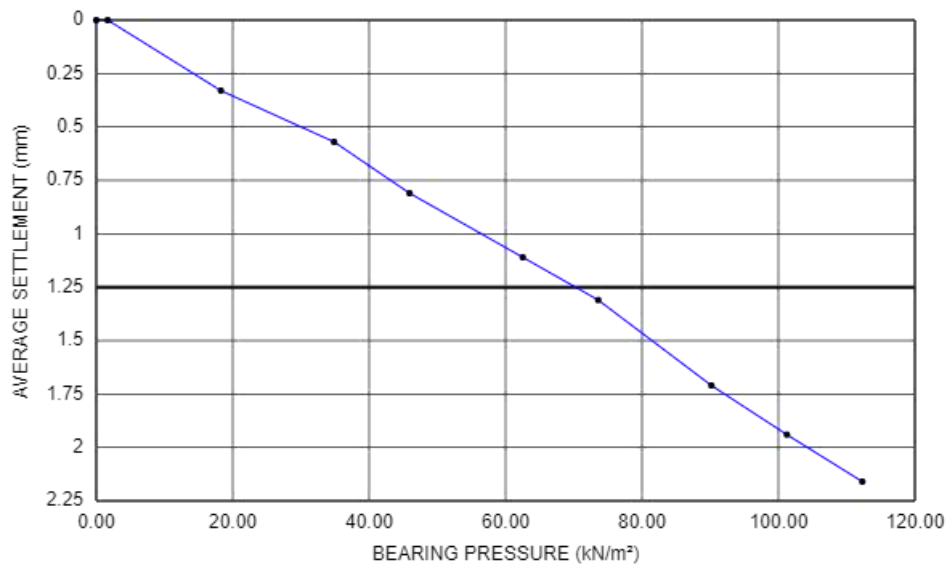
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 112 kN/m²
 Max settlement: 2.16 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 70 kN/m²
 Modulus of subgrade K762: 45 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

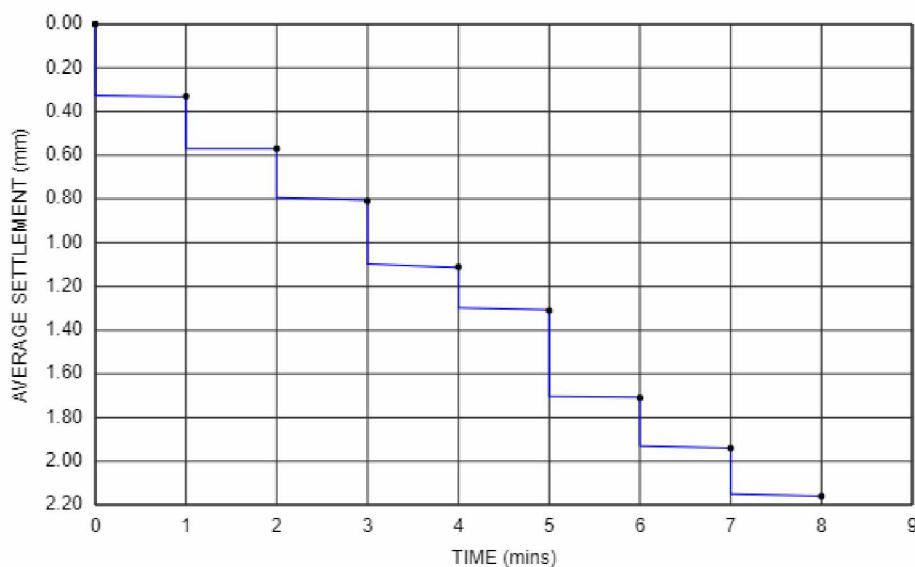
REPORT NUMBER:

C1055642 / 168578.1.1.2

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.3	-0.25	-0.37	-0.38	0.25	0.37	0.38	0.33
9.9	34.9	-0.49	-0.62	-0.60	0.49	0.62	0.60	0.57
13.0	45.9	-0.72	-0.89	-0.81	0.72	0.89	0.81	0.81
17.7	62.5	-1.00	-1.24	-1.10	1.00	1.24	1.10	1.11
20.8	73.6	-1.20	-1.46	-1.26	1.20	1.46	1.26	1.31
25.5	90.2	-1.62	-1.90	-1.60	1.62	1.90	1.60	1.71
28.6	101.2	-1.90	-2.03	-1.89	1.90	2.03	1.89	1.94
31.8	112.3	-2.11	-2.32	-2.05	2.11	2.32	2.05	2.16

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor

Approved Signatory

Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G8 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

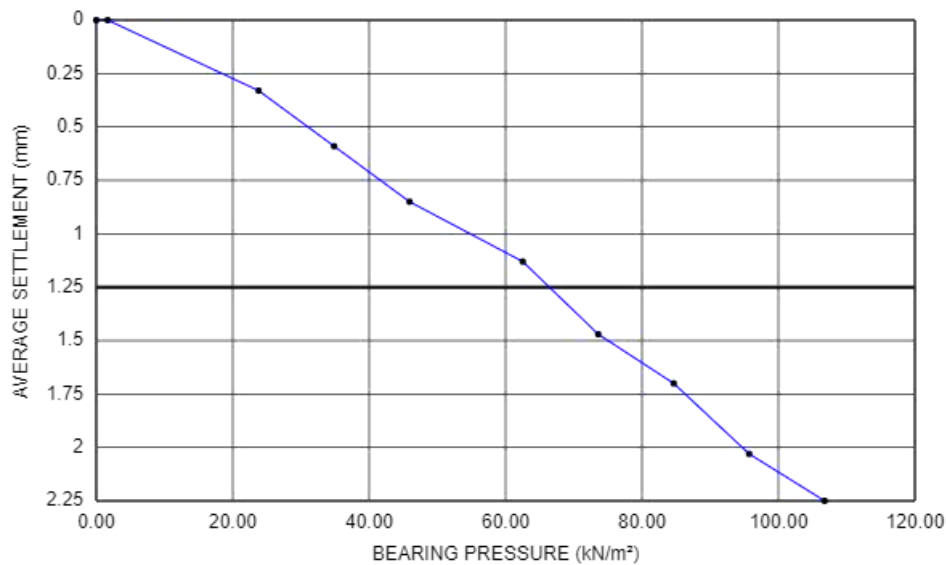
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.25 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 66 kN/m²
 Modulus of subgrade K762: 43 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.5 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

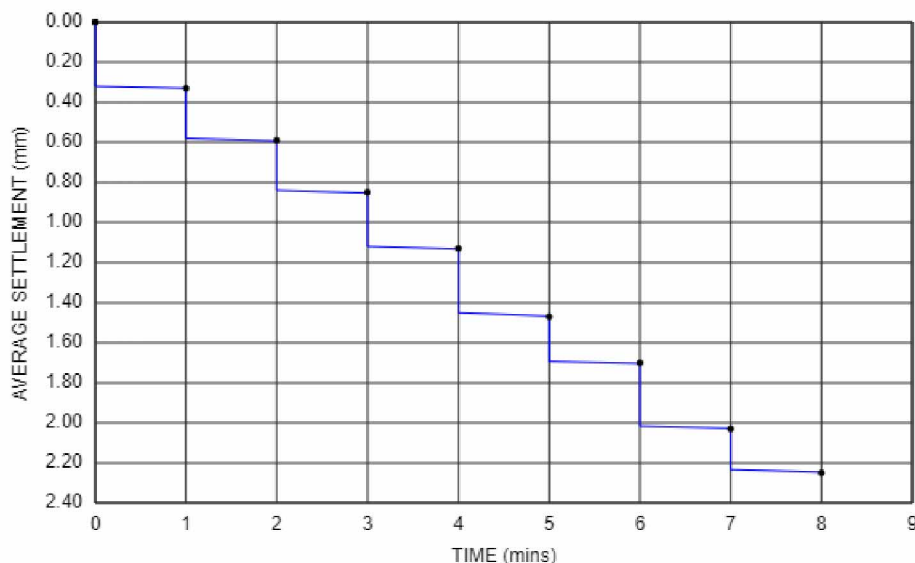
REPORT NUMBER:

C1055642 / 168578.1.1.3

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.29	-0.27	-0.43	0.29	0.27	0.43	0.33
9.9	34.9	-0.48	-0.55	-0.75	0.48	0.55	0.75	0.59
13.0	45.9	-0.73	-0.83	-1.00	0.73	0.83	1.00	0.85
17.7	62.5	-1.02	-1.11	-1.27	1.02	1.11	1.27	1.13
20.8	73.6	-1.33	-1.45	-1.62	1.33	1.45	1.62	1.47
23.9	84.6	-1.54	-1.73	-1.84	1.54	1.73	1.84	1.70
27.1	95.7	-1.81	-2.10	-2.17	1.81	2.10	2.17	2.03
30.2	106.8	-2.00	-2.25	-2.49	2.00	2.25	2.49	2.25

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G9 - Cut, Finished Formation	MATERIAL:	Clay/ballast.
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

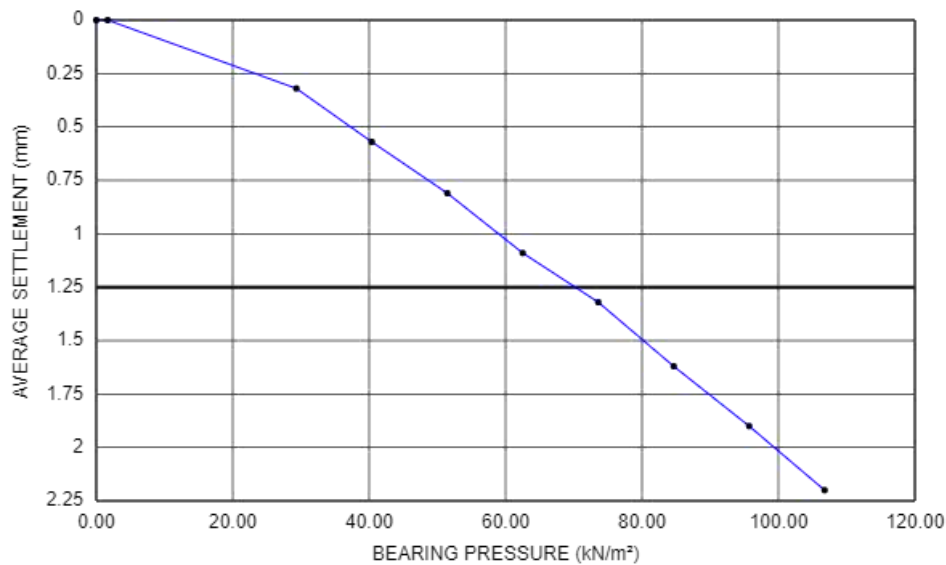
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.20 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 70 kN/m²
 Modulus of subgrade K762: 45 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

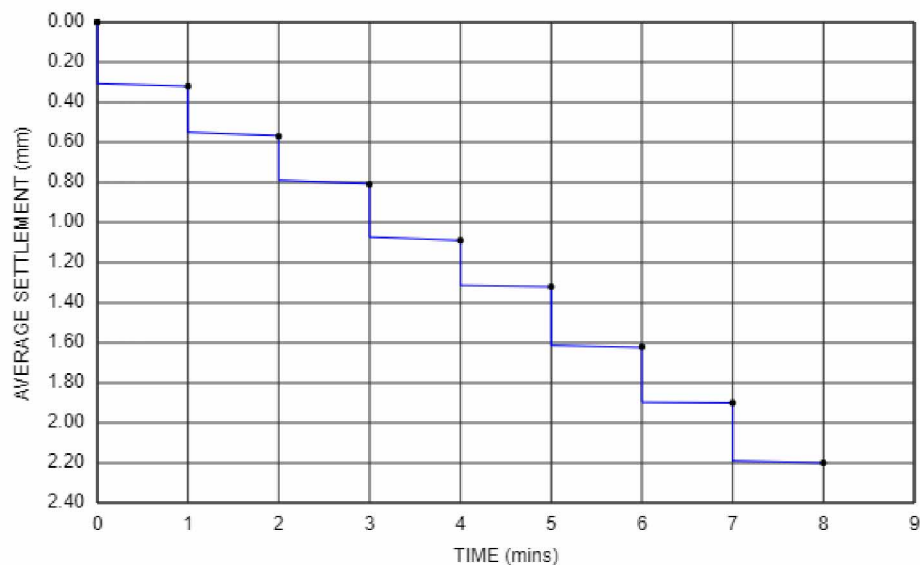
REPORT NUMBER:

C1055642 / 168578.1.1.4

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.3	-0.32	-0.35	-0.29	0.32	0.35	0.29	0.32
11.4	40.4	-0.54	-0.59	-0.57	0.54	0.59	0.57	0.57
14.5	51.5	-0.73	-0.86	-0.83	0.73	0.86	0.83	0.81
17.7	62.5	-1.02	-1.14	-1.11	1.02	1.14	1.11	1.09
20.8	73.6	-1.23	-1.38	-1.35	1.23	1.38	1.35	1.32
23.9	84.6	-1.52	-1.73	-1.62	1.52	1.73	1.62	1.62
27.1	95.7	-1.79	-2.03	-1.88	1.79	2.03	1.88	1.90
30.2	106.8	-2.05	-2.35	-2.20	2.05	2.35	2.20	2.20

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F9 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

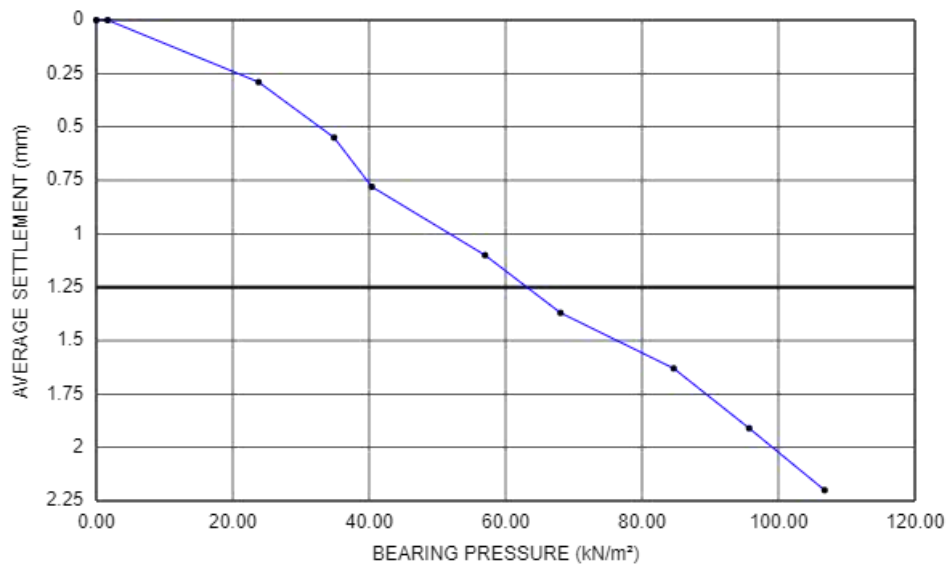
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.20 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 63 kN/m²
 Modulus of subgrade K762: 41 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.9 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

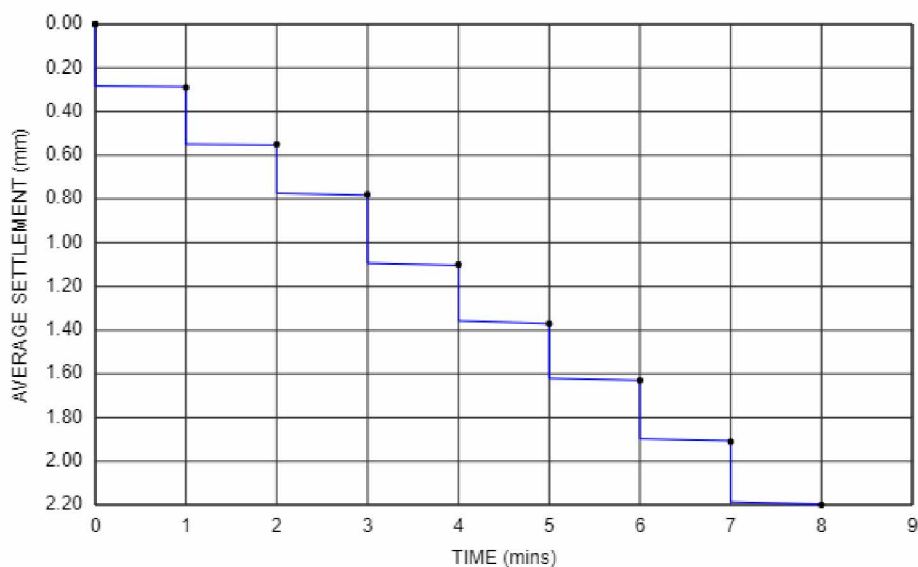
REPORT NUMBER:

C1055642 / 168578.1.1.5

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.46	-0.35	-0.05	0.46	0.35	0.05	0.29
9.9	34.9	-0.67	-0.77	-0.22	0.67	0.77	0.22	0.55
11.4	40.4	-0.92	-0.99	-0.44	0.92	0.99	0.44	0.78
16.1	57.0	-1.20	-1.32	-0.79	1.20	1.32	0.79	1.10
19.2	68.1	-1.50	-1.59	-1.02	1.50	1.59	1.02	1.37
23.9	84.6	-1.79	-1.83	-1.27	1.79	1.83	1.27	1.63
27.1	95.7	-2.04	-2.06	-1.62	2.04	2.06	1.62	1.91
30.2	106.8	-2.29	-2.39	-1.91	2.29	2.39	1.91	2.20

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K13 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

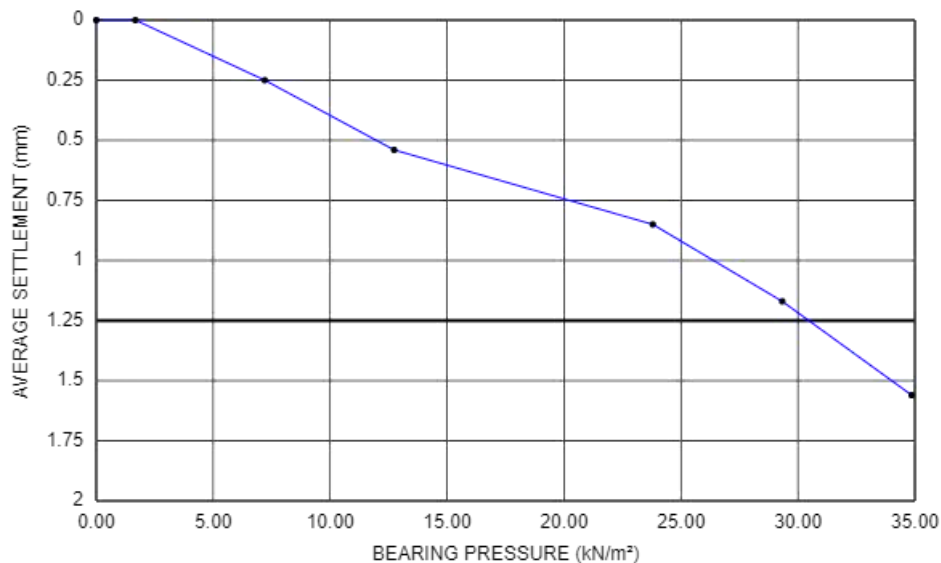
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 35 kN/m²
 Max settlement: 1.56 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 30 kN/m²
 Modulus of subgrade K762: 20 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 1.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 1.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Test failed so stopped before finished. To be retested another date.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

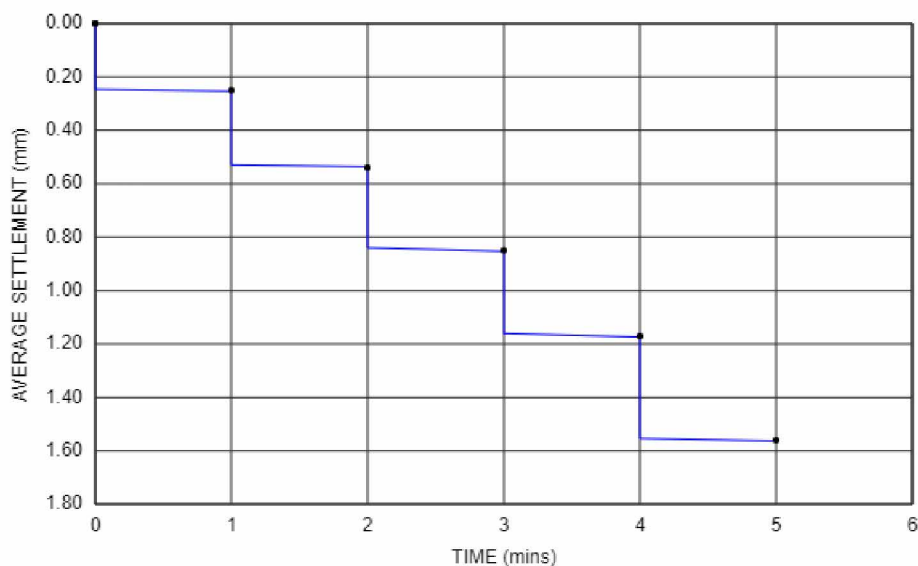
REPORT NUMBER:

C1055642 / 168578.1.1.6

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.0	7.2	-0.46	-0.22	-0.08	0.46	0.22	0.08	0.25
3.6	12.7	-0.83	-0.56	-0.22	0.83	0.56	0.22	0.54
6.7	23.8	-1.17	-0.89	-0.50	1.17	0.89	0.50	0.85
8.3	29.3	-1.50	-1.22	-0.80	1.50	1.22	0.80	1.17
9.9	34.9	-1.90	-1.60	-1.19	1.90	1.60	1.19	1.56

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.
Test failed so stopped before finished. To be retested another date.

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K12 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

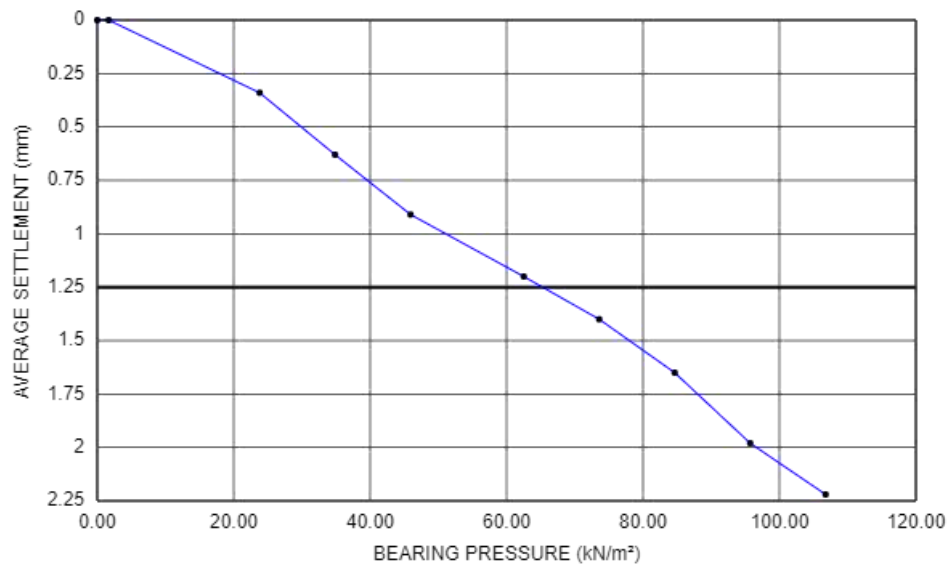
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.22 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 65 kN/m²
 Modulus of subgrade K762: 42 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.3 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

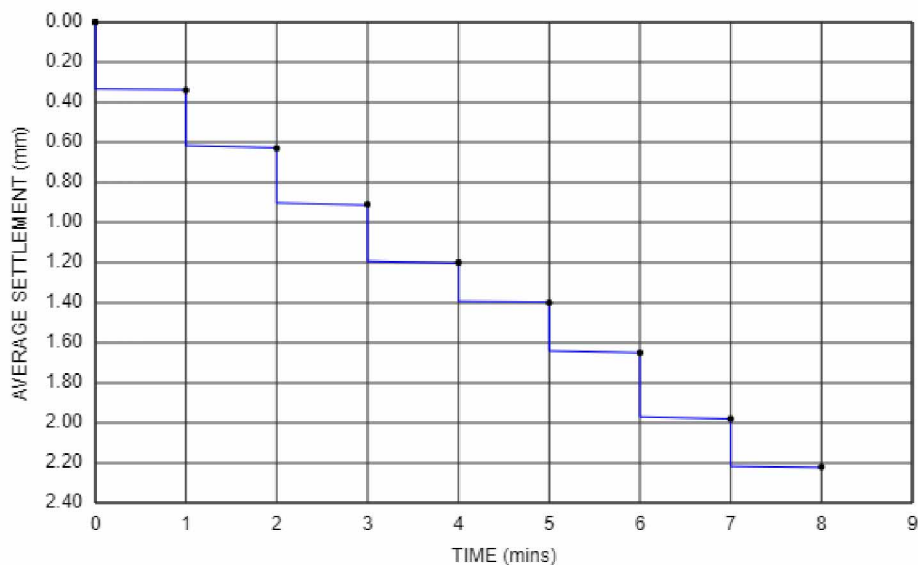
REPORT NUMBER:

C1055642 / 168578.1.1.7

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.64	-0.31	-0.06	0.64	0.31	0.06	0.34
9.9	34.9	-0.98	-0.57	-0.33	0.98	0.57	0.33	0.63
13.0	45.9	-1.33	-0.84	-0.57	1.33	0.84	0.57	0.91
17.7	62.5	-1.67	-1.15	-0.79	1.67	1.15	0.79	1.20
20.8	73.6	-1.83	-1.34	-1.02	1.83	1.34	1.02	1.40
23.9	84.6	-2.07	-1.59	-1.29	2.07	1.59	1.29	1.65
27.1	95.7	-2.38	-1.98	-1.58	2.38	1.98	1.58	1.98
30.2	106.8	-2.62	-2.26	-1.79	2.62	2.26	1.79	2.22

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K11 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

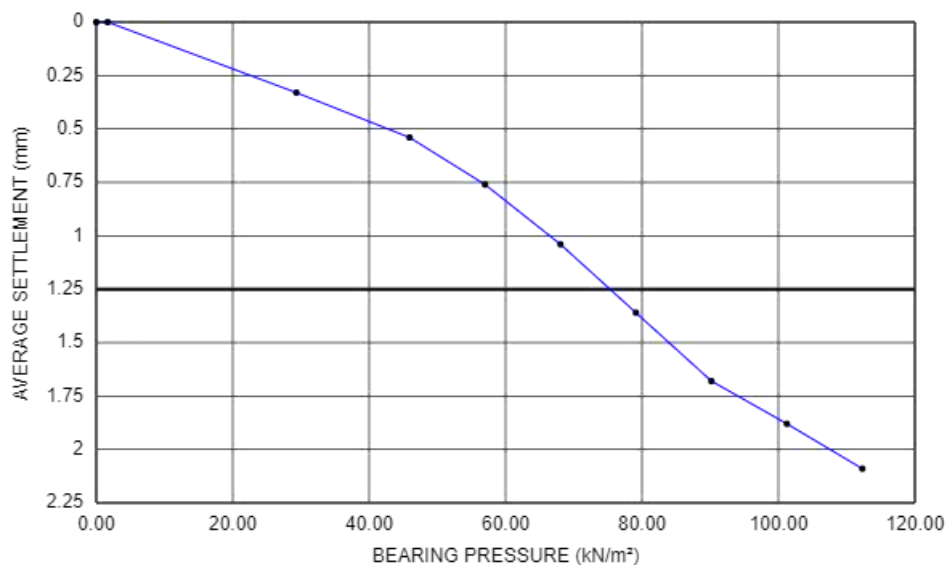
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 112 kN/m²
 Max settlement: 2.09 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 75 kN/m²
 Modulus of subgrade K762: 48 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.0 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

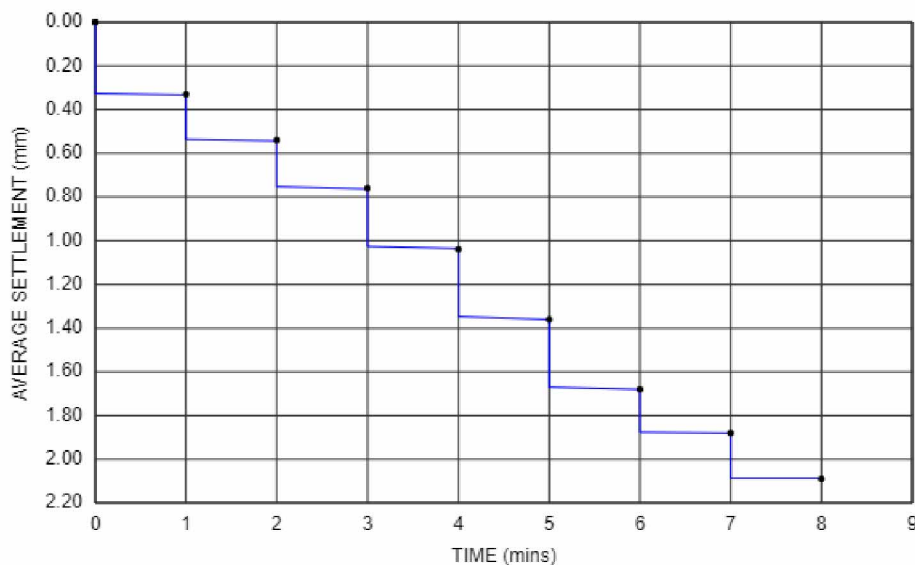
REPORT NUMBER:

C1055642 / 168578.1.1.8

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.3	-0.30	-0.41	-0.29	0.30	0.41	0.29	0.33
13.0	45.9	-0.52	-0.59	-0.52	0.52	0.59	0.52	0.54
16.1	57.0	-0.81	-0.77	-0.71	0.81	0.77	0.71	0.76
19.2	68.1	-1.06	-1.08	-0.97	1.06	1.08	0.97	1.04
22.4	79.1	-1.44	-1.40	-1.24	1.44	1.40	1.24	1.36
25.5	90.2	-1.69	-1.75	-1.60	1.69	1.75	1.60	1.68
28.6	101.2	-1.89	-1.97	-1.78	1.89	1.97	1.78	1.88
31.8	112.3	-2.06	-2.27	-1.93	2.06	2.27	1.93	2.09

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 25-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J12 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

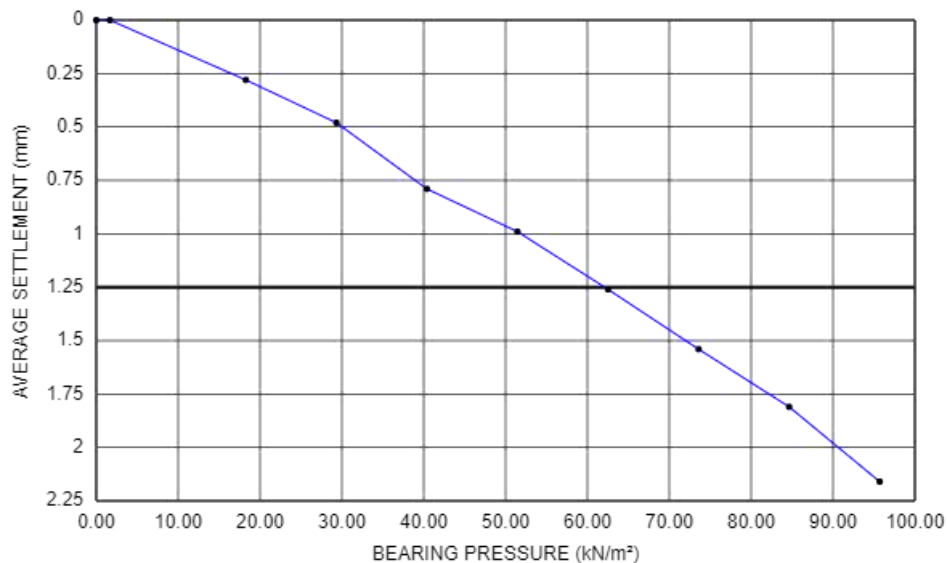
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 96 kN/m²
 Max settlement: 2.16 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Amended report. This test report supersedes test report version 1 - Typo correction

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

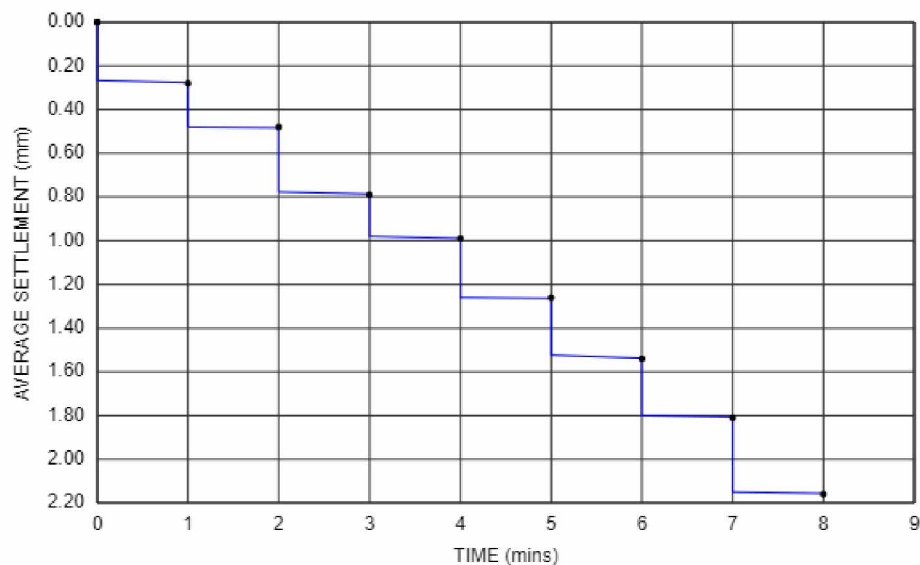
REPORT NUMBER:

C1055642 / 168578.1.1.9

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.3	-0.37	-0.31	-0.15	0.37	0.31	0.15	0.28
8.3	29.3	-0.61	-0.52	-0.32	0.61	0.52	0.32	0.48
11.4	40.4	-0.99	-0.79	-0.58	0.99	0.79	0.58	0.79
14.5	51.5	-1.24	-1.00	-0.73	1.24	1.00	0.73	0.99
17.7	62.5	-1.54	-1.27	-0.98	1.54	1.27	0.98	1.26
20.8	73.6	-1.79	-1.59	-1.23	1.79	1.59	1.23	1.54
23.9	84.6	-2.04	-1.84	-1.54	2.04	1.84	1.54	1.81
27.1	95.7	-2.49	-2.04	-1.94	2.49	2.04	1.94	2.16

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.
This report shall not be reproduced except in full without approval of the Laboratory.
Amended report. This test report supersedes test report version 1 - Typo correction

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168578.1.1.10		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	25/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J11 - Cut, Finished Formation	MATERIAL:	Clay/ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

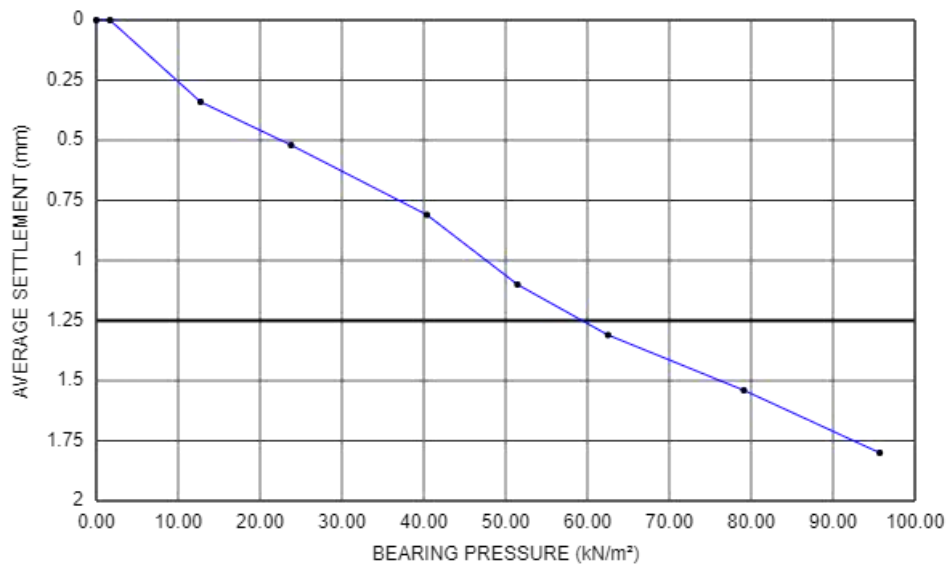
Equipment Details

Type of Kentledge: 16 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 96 kN/m²
 Max settlement: 1.80 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 59 kN/m²
 Modulus of subgrade K762: 38 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.3 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Amended report. This test report supersedes test report version 1 - Typo correction

TEST REPORT:
Determination of Equivalent CBR Value

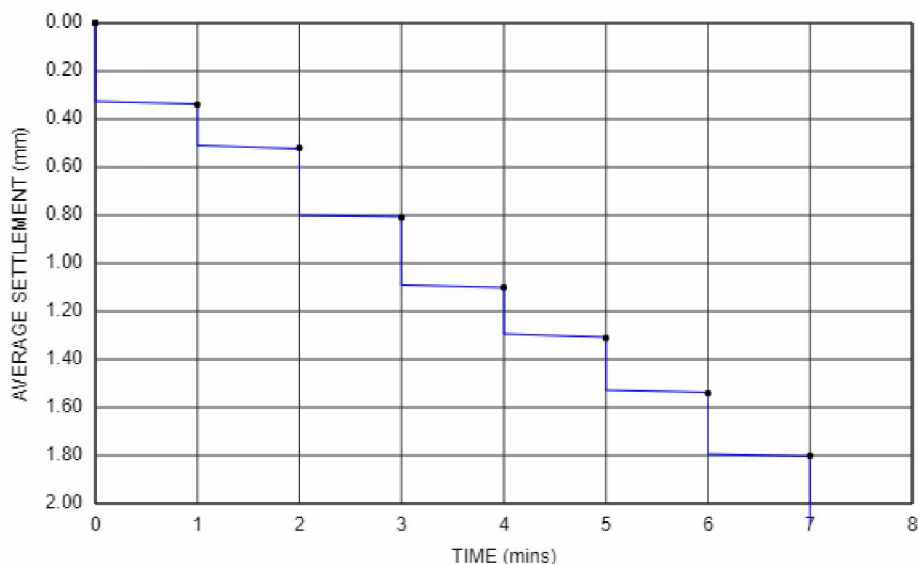
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 168578.1.1.10

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.7	-0.52	-0.37	-0.12	0.52	0.37	0.12	0.34
6.7	23.8	-0.73	-0.55	-0.29	0.73	0.55	0.29	0.52
11.4	40.4	-1.05	-0.81	-0.56	1.05	0.81	0.56	0.81
14.5	51.5	-1.38	-1.10	-0.82	1.38	1.10	0.82	1.10
17.7	62.5	-1.60	-1.33	-0.99	1.60	1.33	0.99	1.31
22.4	79.1	-1.79	-1.58	-1.24	1.79	1.58	1.24	1.54
27.1	95.7	-2.04	-1.79	-1.58	2.04	1.79	1.58	1.80

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

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 Amended report. This test report supersedes test report version 1 - Typo correction

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Approved Signatory
 Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 165623.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	18/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Mitchell Butler	SITE:	Havant, Portsmouth
LOCATION:	H13	MATERIAL:	Crushed stone/clay
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

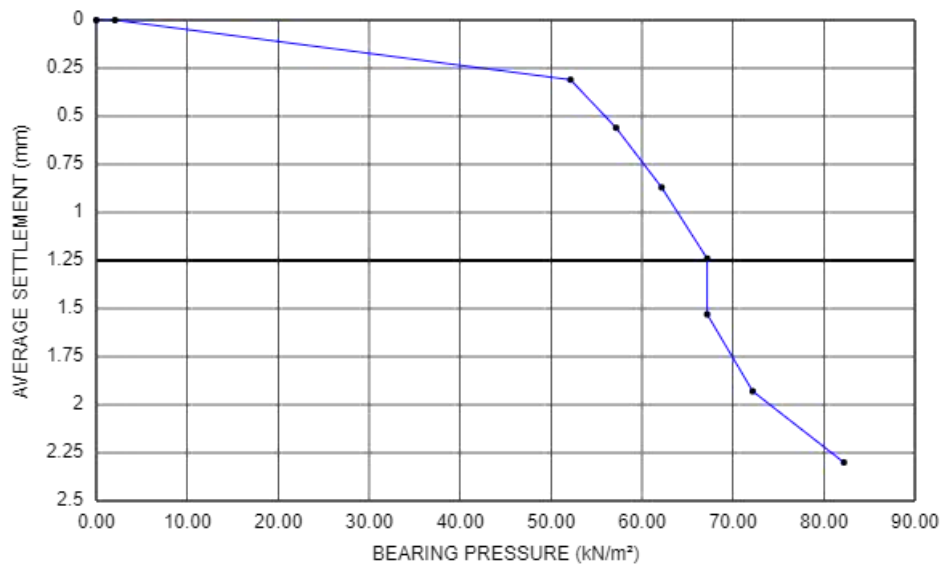
Equipment Details

Type of Kentledge: 25 Ton Excavator
 Plate Diameter: 605 mm
 Plate Area: 0.287475 m²
 Plate Correction: 0.81

Results

Max applied pressure: 82 kN/m²
 Max settlement: 2.30 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 67 kN/m²
 Modulus of subgrade K762: 44 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

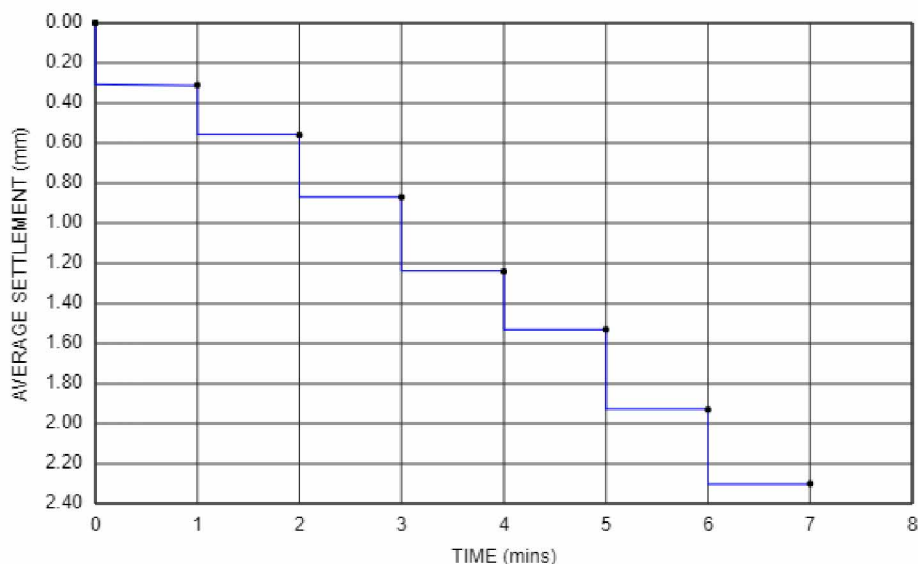
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 165623.1.1.3

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
0.6	2.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	52.1	-0.23	-0.54	-0.17	0.23	0.54	0.17	0.31
16.4	57.1	-0.38	-0.90	-0.39	0.38	0.90	0.39	0.56
17.9	62.2	-0.63	-1.27	-0.71	0.63	1.27	0.71	0.87
19.3	67.2	-0.94	-1.65	-1.12	0.94	1.65	1.12	1.24
19.3	67.2	-1.19	-1.97	-1.43	1.19	1.97	1.43	1.53
20.7	72.2	-1.57	-2.37	-1.84	1.57	2.37	1.84	1.93
23.6	82.2	-1.93	-2.75	-2.23	1.93	2.75	2.23	2.30

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Matthew Mills - Laboratory Manager


 Approved Signatory
18-Jan-22


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168918.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F8 - Formation Layer Retest	MATERIAL:	Ballast/clay mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

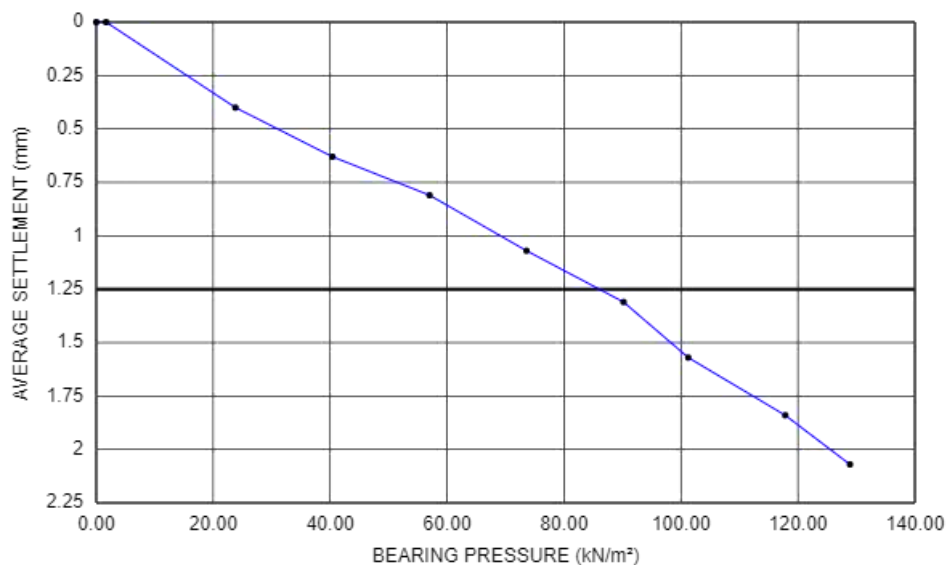
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 129 kN/m²
 Max settlement: 2.07 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 86 kN/m²
 Modulus of subgrade K762: 55 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.1 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

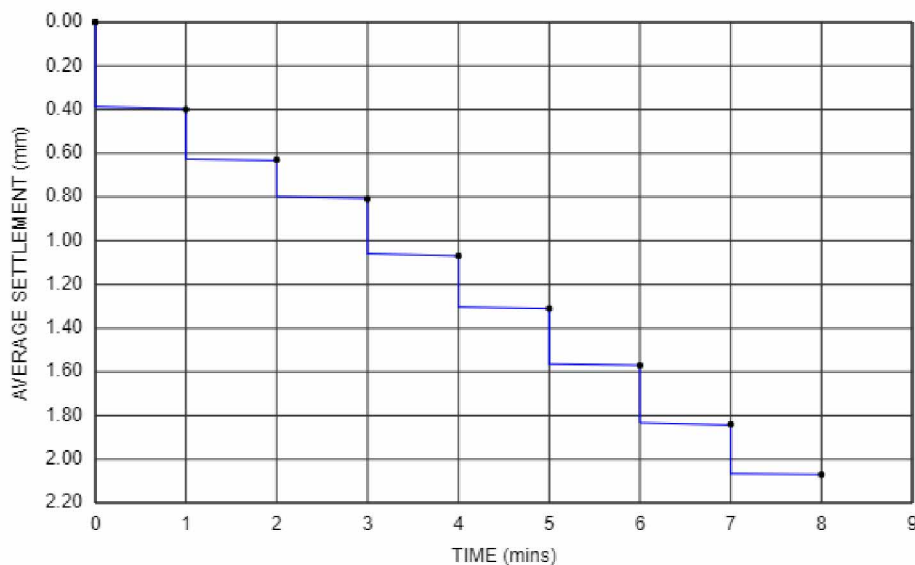
REPORT NUMBER:

C1055642 / 168918.1.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.50	-0.43	-0.26	0.50	0.43	0.26	0.40
11.4	40.4	-0.79	-0.62	-0.49	0.79	0.62	0.49	0.63
16.1	57.0	-0.94	-0.78	-0.70	0.94	0.78	0.70	0.81
20.8	73.6	-1.18	-1.04	-0.99	1.18	1.04	0.99	1.07
25.5	90.2	-1.42	-1.29	-1.22	1.42	1.29	1.22	1.31
28.6	101.2	-1.69	-1.55	-1.47	1.69	1.55	1.47	1.57
33.3	117.8	-1.97	-1.84	-1.72	1.97	1.84	1.72	1.84
36.4	128.9	-2.18	-2.06	-1.97	2.18	2.06	1.97	2.07

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168918.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H12 - Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

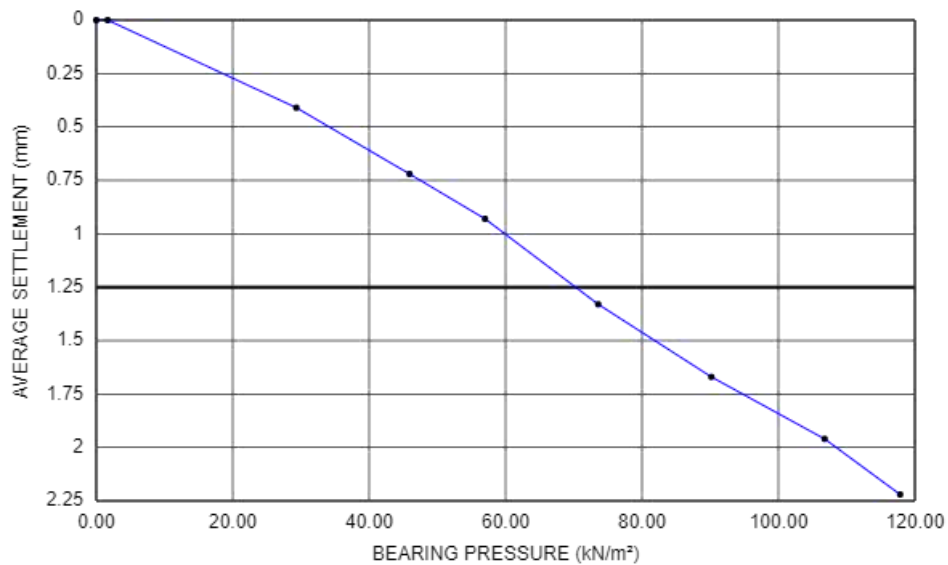
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 118 kN/m²
 Max settlement: 2.22 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 70 kN/m²
 Modulus of subgrade K762: 45 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

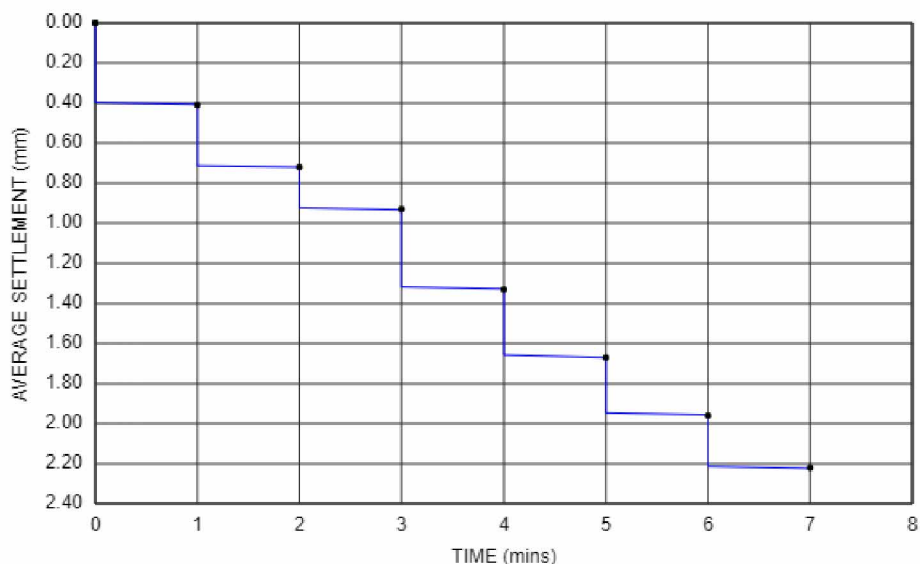
REPORT NUMBER:

C1055642 / 168918.1.1.2

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.3	-0.31	-0.35	-0.56	0.31	0.35	0.56	0.41
13.0	45.9	-0.56	-0.59	-1.01	0.56	0.59	1.01	0.72
16.1	57.0	-0.71	-0.75	-1.34	0.71	0.75	1.34	0.93
20.8	73.6	-1.04	-1.08	-1.86	1.04	1.08	1.86	1.33
25.5	90.2	-1.35	-1.37	-2.29	1.35	1.37	2.29	1.67
30.2	106.8	-1.65	-1.64	-2.58	1.65	1.64	2.58	1.96
33.3	117.8	-1.90	-1.97	-2.80	1.90	1.97	2.80	2.22

SETTLEMENT RELATIONSHIP vs TIME



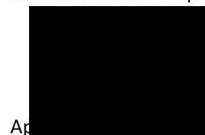
Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168918.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H11 - Formation Layer	MATERIAL:	Clay/Ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	Yes

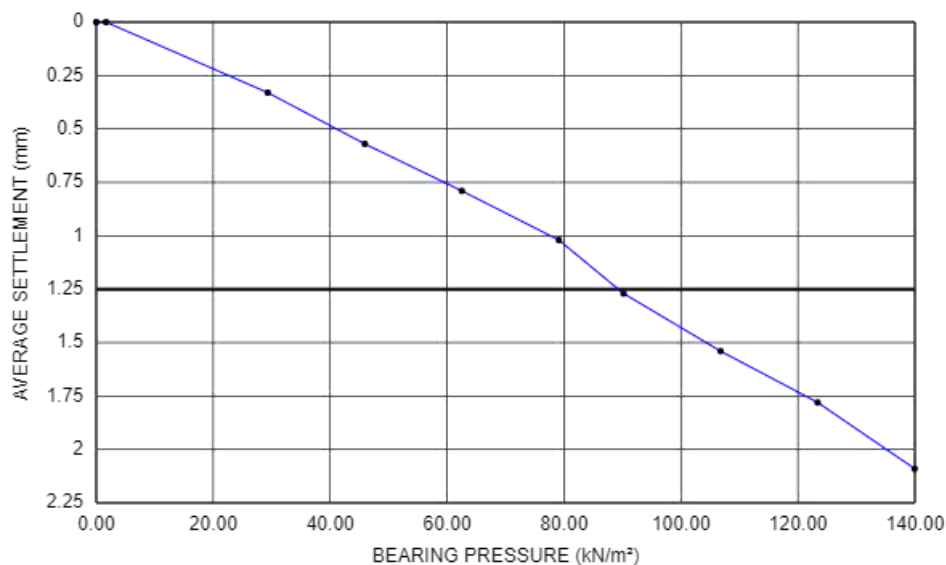
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 140 kN/m²
 Max settlement: 2.09 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 89 kN/m²
 Modulus of subgrade K762: 57 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.8 %

Remarks:

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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

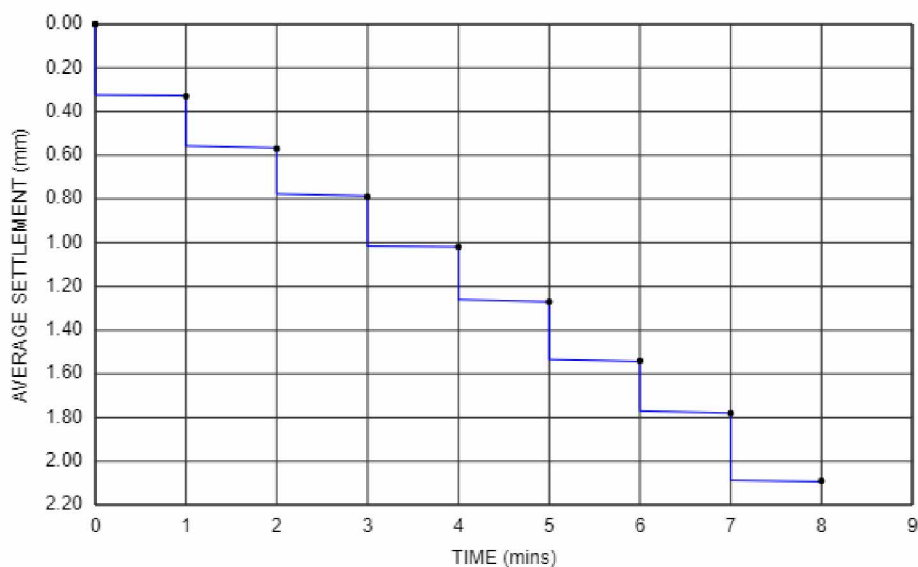
REPORT NUMBER:

C1055642 / 168918.1.1.3

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.3	-0.44	-0.38	-0.16	0.44	0.38	0.16	0.33
13.0	45.9	-0.74	-0.62	-0.34	0.74	0.62	0.34	0.57
17.7	62.5	-0.97	-0.85	-0.54	0.97	0.85	0.54	0.79
22.4	79.1	-1.23	-1.09	-0.74	1.23	1.09	0.74	1.02
25.5	90.2	-1.51	-1.34	-0.96	1.51	1.34	0.96	1.27
30.2	106.8	-1.78	-1.60	-1.25	1.78	1.60	1.25	1.54
34.9	123.4	-2.02	-1.80	-1.52	2.02	1.80	1.52	1.78
39.6	140.0	-2.39	-2.10	-1.79	2.39	2.10	1.79	2.09

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

[Redacted Signature] Operations Supervisor

Approved Signatory

Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168918.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J13 - Sub Formation Layer	MATERIAL:	Clay/Ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

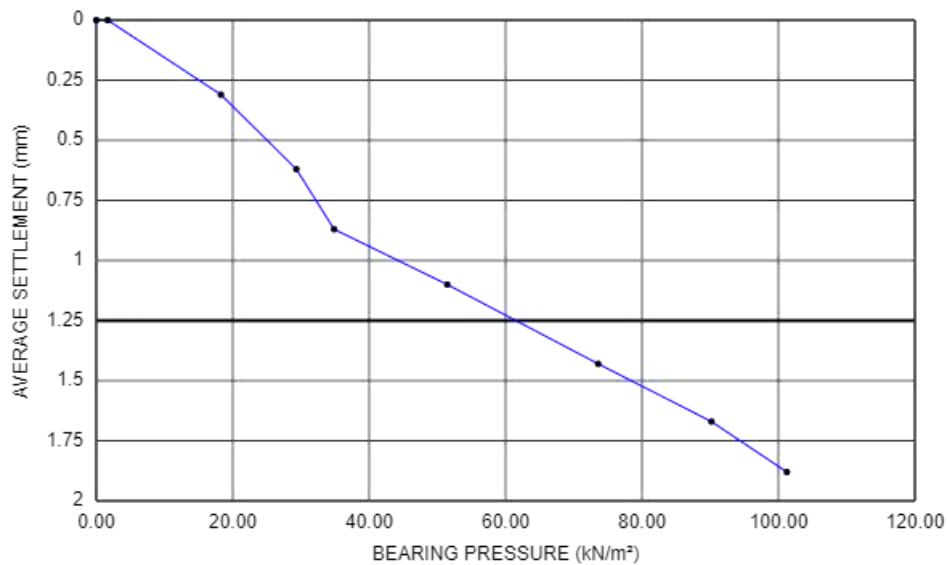
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 101 kN/m²
 Max settlement: 1.88 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

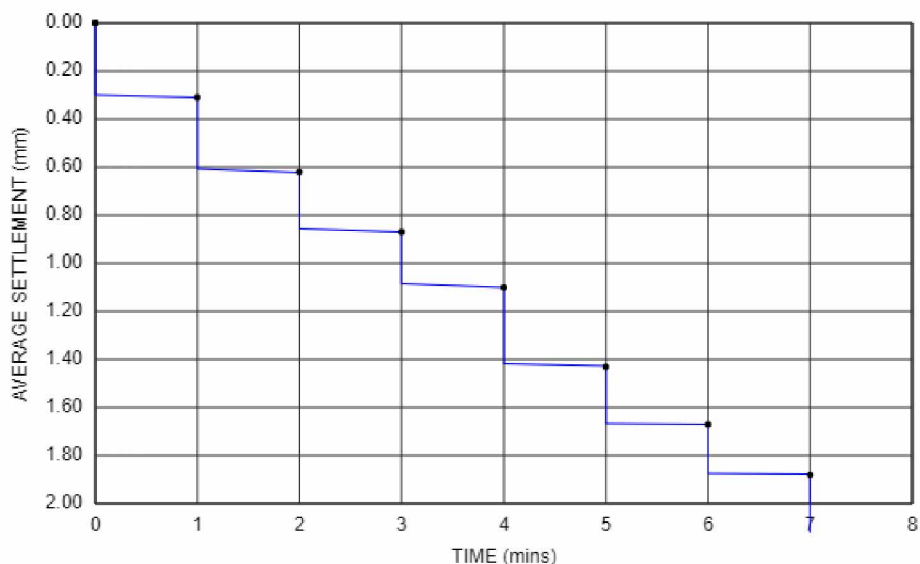
REPORT NUMBER:

C1055642 / 168918.1.1.4

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.3	-0.33	-0.35	-0.25	0.33	0.35	0.25	0.31
8.3	29.3	-0.66	-0.65	-0.56	0.66	0.65	0.56	0.62
9.9	34.9	-0.94	-0.87	-0.80	0.94	0.87	0.80	0.87
14.5	51.5	-1.16	-1.09	-1.05	1.16	1.09	1.05	1.10
20.8	73.6	-1.48	-1.42	-1.38	1.48	1.42	1.38	1.43
25.5	90.2	-1.76	-1.68	-1.57	1.76	1.68	1.57	1.67
28.6	101.2	-1.98	-1.86	-1.79	1.98	1.86	1.79	1.88

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 168918.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	27/01/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K13 - Formation Layer	MATERIAL:	Clay/Ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

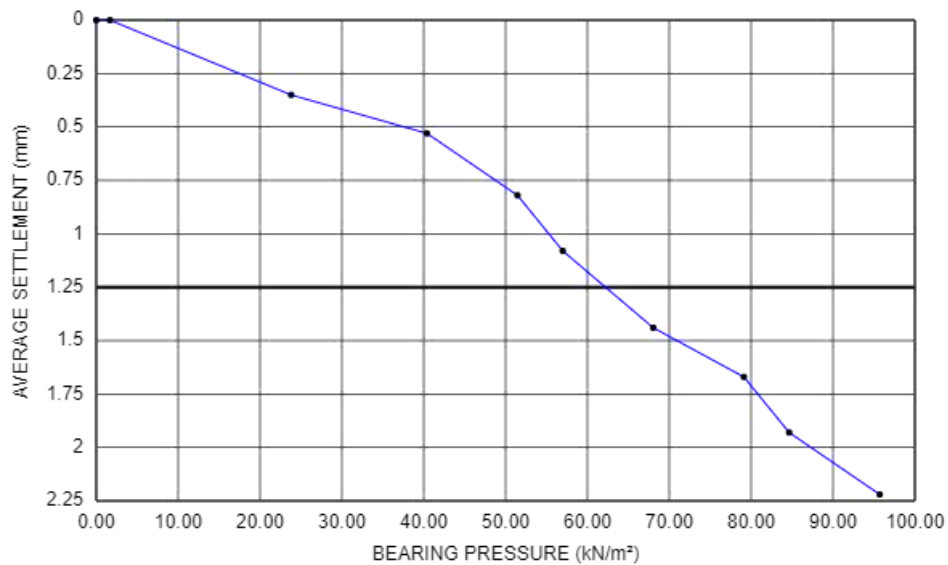
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 96 kN/m²
 Max settlement: 2.22 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

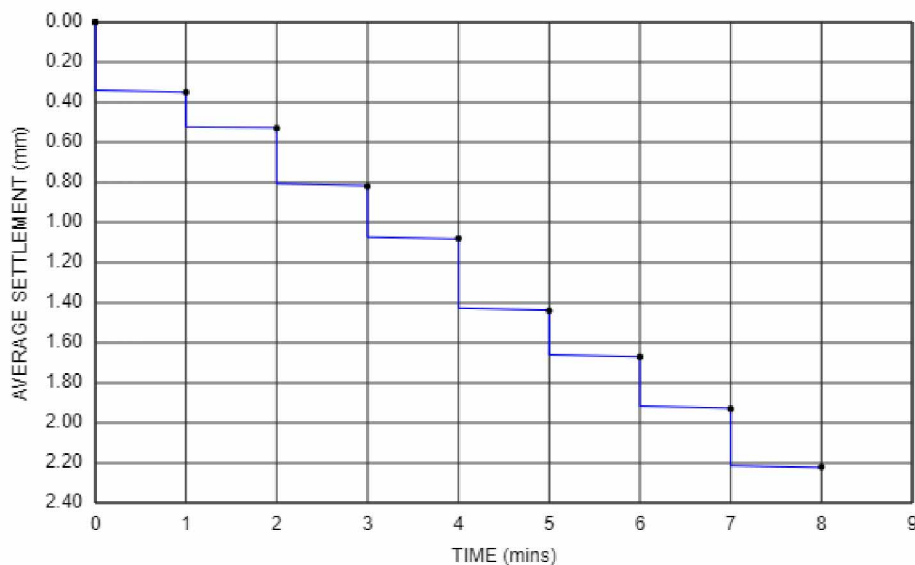
REPORT NUMBER:

C1055642 / 168918.1.1.5

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.32	-0.34	-0.39	0.32	0.34	0.39	0.35
11.4	40.4	-0.59	-0.48	-0.51	0.59	0.48	0.51	0.53
14.5	51.5	-0.87	-0.72	-0.86	0.87	0.72	0.86	0.82
16.1	57.0	-1.15	-1.00	-1.10	1.15	1.00	1.10	1.08
19.2	68.1	-1.49	-1.35	-1.47	1.49	1.35	1.47	1.44
22.4	79.1	-1.80	-1.57	-1.64	1.80	1.57	1.64	1.67
23.9	84.6	-2.10	-1.79	-1.89	2.10	1.79	1.89	1.93
27.1	95.7	-2.39	-2.10	-2.18	2.39	2.10	2.18	2.22

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 27-Jan-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 169623.3.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	01/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H10	MATERIAL:	Ballast/clay mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

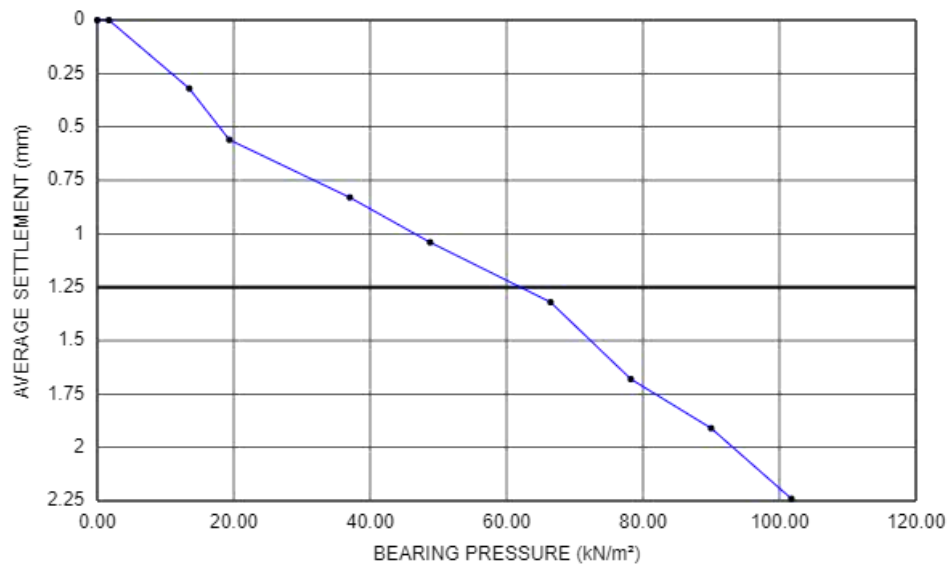
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 102 kN/m²
 Max settlement: 2.24 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

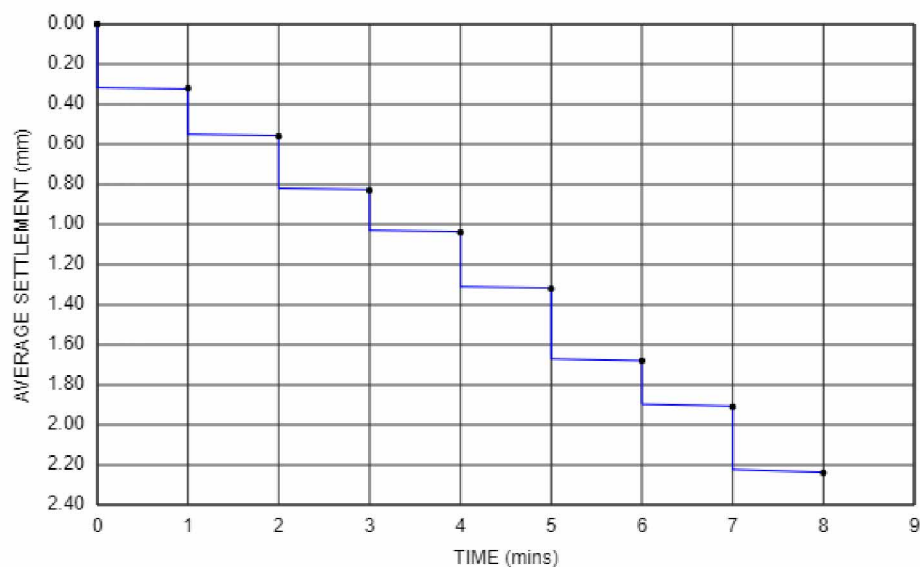
REPORT NUMBER:

C1055642 / 169623.3.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.8	13.5	-0.27	-0.33	-0.37	0.27	0.33	0.37	0.32
5.5	19.4	-0.62	-0.68	-0.37	0.62	0.68	0.37	0.56
10.5	37.0	-0.91	-0.99	-0.58	0.91	0.99	0.58	0.83
13.8	48.8	-1.20	-1.19	-0.72	1.20	1.19	0.72	1.04
18.8	66.4	-1.54	-1.47	-0.94	1.54	1.47	0.94	1.32
22.1	78.2	-1.94	-1.83	-1.27	1.94	1.83	1.27	1.68
25.4	90.0	-2.23	-2.05	-1.44	2.23	2.05	1.44	1.91
28.8	101.8	-2.62	-2.40	-1.69	2.62	2.40	1.69	2.24

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Matthew Mills - Laboratory Manager



Approved Signatory

Report date 01-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 169952.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	03/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G4 - Formation Layer	MATERIAL:	Clay/Ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

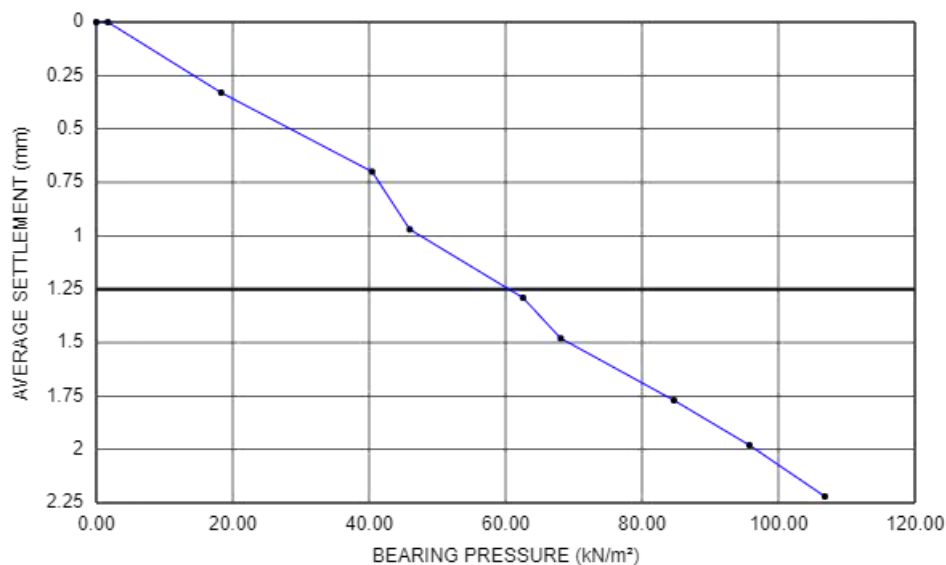
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.22 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 61 kN/m²
 Modulus of subgrade K762: 39 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.5 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

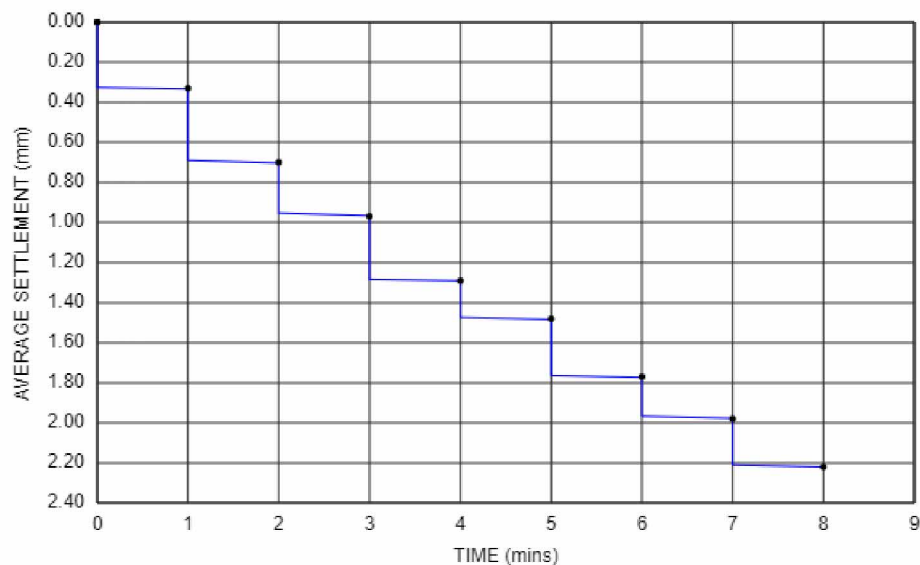
REPORT NUMBER:

C1055642 / 169952.1.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.3	-0.48	-0.33	-0.19	0.48	0.33	0.19	0.33
11.4	40.4	-0.86	-0.72	-0.53	0.86	0.72	0.53	0.70
13.0	46.0	-1.11	-0.95	-0.84	1.11	0.95	0.84	0.97
17.7	62.6	-1.43	-1.32	-1.12	1.43	1.32	1.12	1.29
19.3	68.1	-1.63	-1.49	-1.33	1.63	1.49	1.33	1.48
23.9	84.7	-1.90	-1.78	-1.64	1.90	1.78	1.64	1.77
27.1	95.7	-2.12	-1.98	-1.83	2.12	1.98	1.83	1.98
30.2	106.8	-2.40	-2.20	-2.06	2.40	2.20	2.06	2.22

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 03-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 169952.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	03/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F4 - Formation Layer	MATERIAL:	Clay/Ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

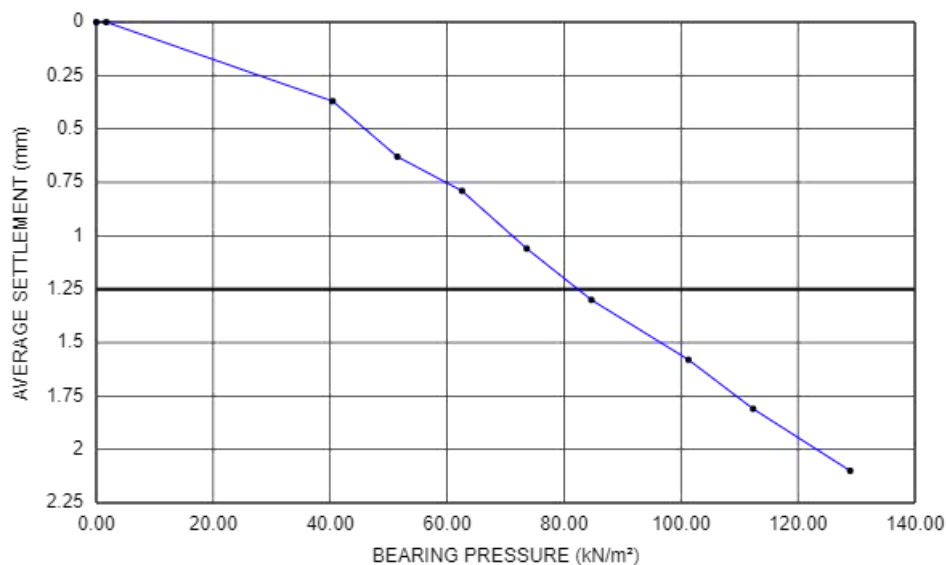
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 129 kN/m²
 Max settlement: 2.10 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 82 kN/m²
 Modulus of subgrade K762: 53 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.4 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

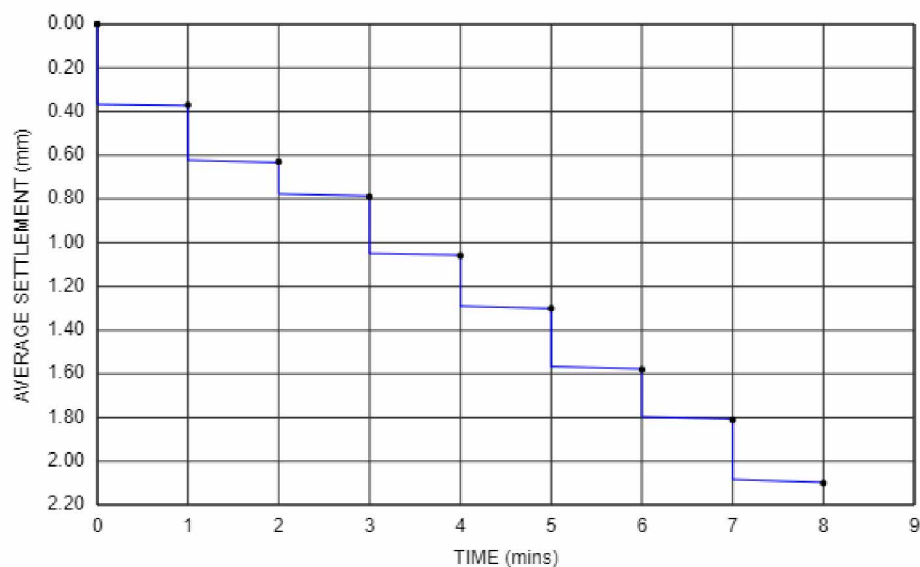
REPORT NUMBER:

C1055642 / 169952.1.1.2

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.4	40.4	-0.38	-0.50	-0.24	0.38	0.50	0.24	0.37
14.6	51.5	-0.70	-0.71	-0.49	0.70	0.71	0.49	0.63
17.7	62.6	-0.84	-0.90	-0.62	0.84	0.90	0.62	0.79
20.8	73.6	-1.12	-1.15	-0.90	1.12	1.15	0.90	1.06
23.9	84.7	-1.33	-1.36	-1.21	1.33	1.36	1.21	1.30
28.6	101.3	-1.58	-1.61	-1.54	1.58	1.61	1.54	1.58
31.8	112.3	-1.80	-1.86	-1.76	1.80	1.86	1.76	1.81
36.5	128.9	-2.08	-2.22	-1.99	2.08	2.22	1.99	2.10

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 03-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 169952.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	03/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F5 - Formation Layer	MATERIAL:	Clay/Ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

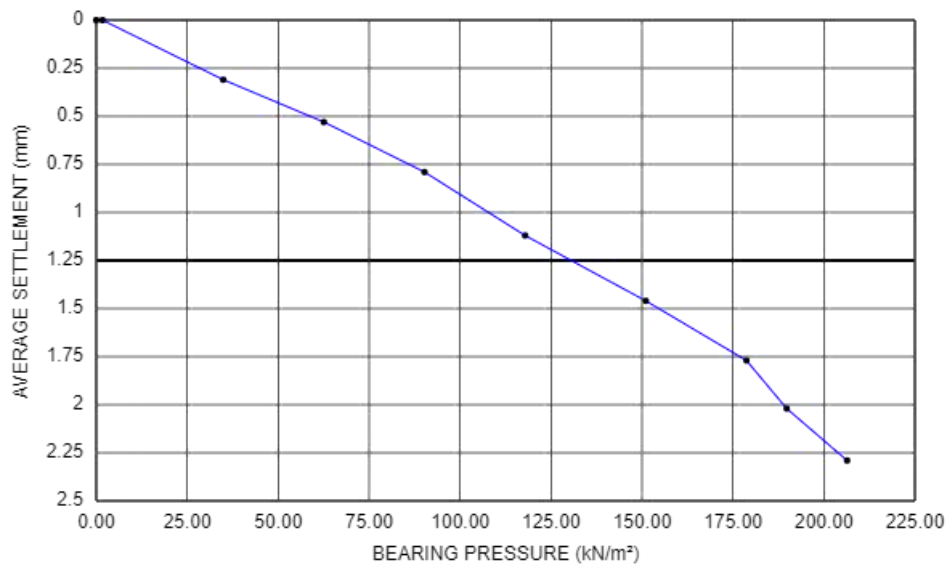
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 206 kN/m²
 Max settlement: 2.29 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 130 kN/m²
 Modulus of subgrade K762: 84 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 20.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 20.8 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

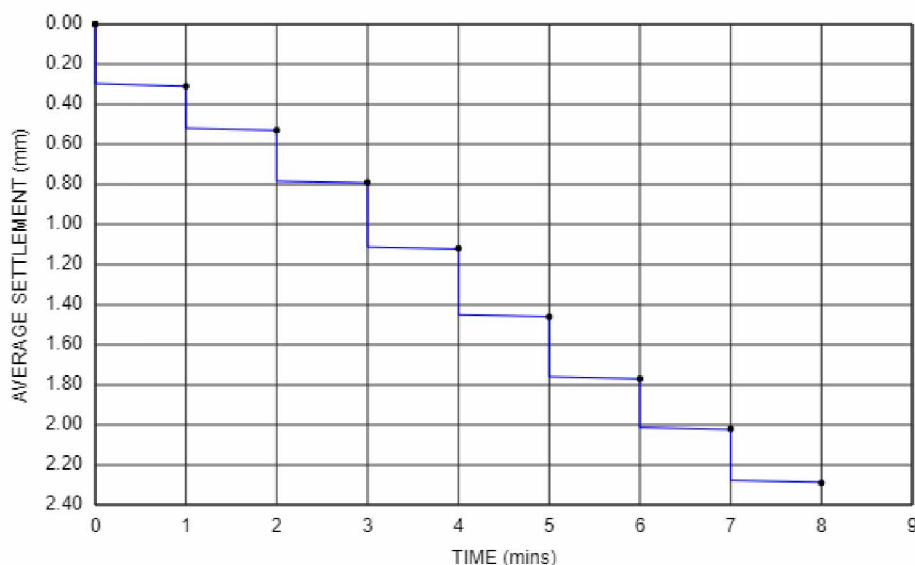
REPORT NUMBER:

C1055642 / 169952.1.1.3

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.9	34.9	-0.29	-0.32	-0.32	0.29	0.32	0.32	0.31
17.7	62.6	-0.49	-0.54	-0.56	0.49	0.54	0.56	0.53
25.5	90.2	-0.79	-0.76	-0.83	0.79	0.76	0.83	0.79
33.3	117.9	-1.11	-1.09	-1.17	1.11	1.09	1.17	1.12
42.7	151.1	-1.45	-1.40	-1.53	1.45	1.40	1.53	1.46
50.5	178.7	-1.72	-1.69	-1.90	1.72	1.69	1.90	1.77
53.7	189.8	-1.95	-1.93	-2.19	1.95	1.93	2.19	2.02
58.4	206.4	-2.30	-2.18	-2.38	2.30	2.18	2.38	2.29

SETTLEMENT RELATIONSHIP vs TIME



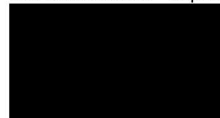
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 03-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 169952.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	03/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	G5 - Formation Layer	MATERIAL:	Clay/Ballast
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

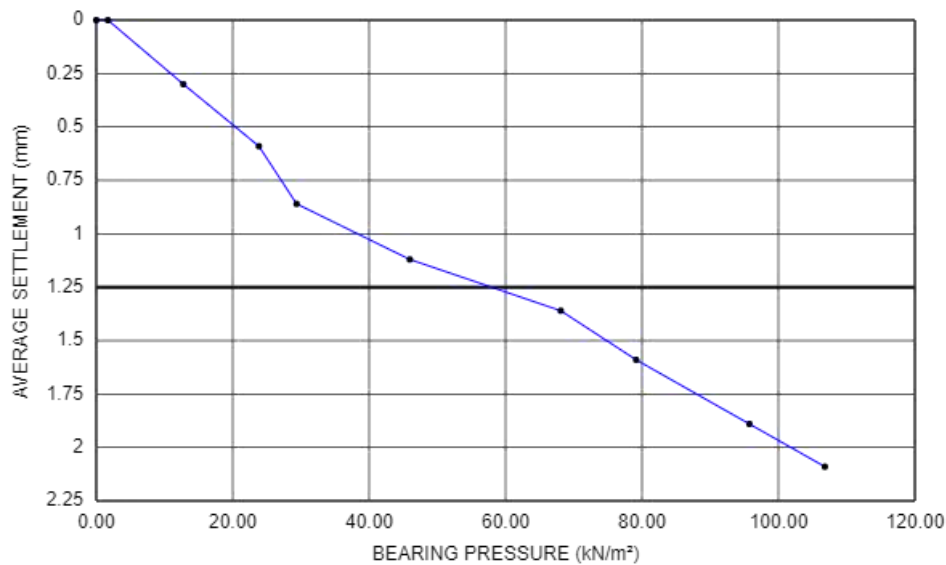
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.09 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 58 kN/m²
 Modulus of subgrade K762: 37 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.1 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

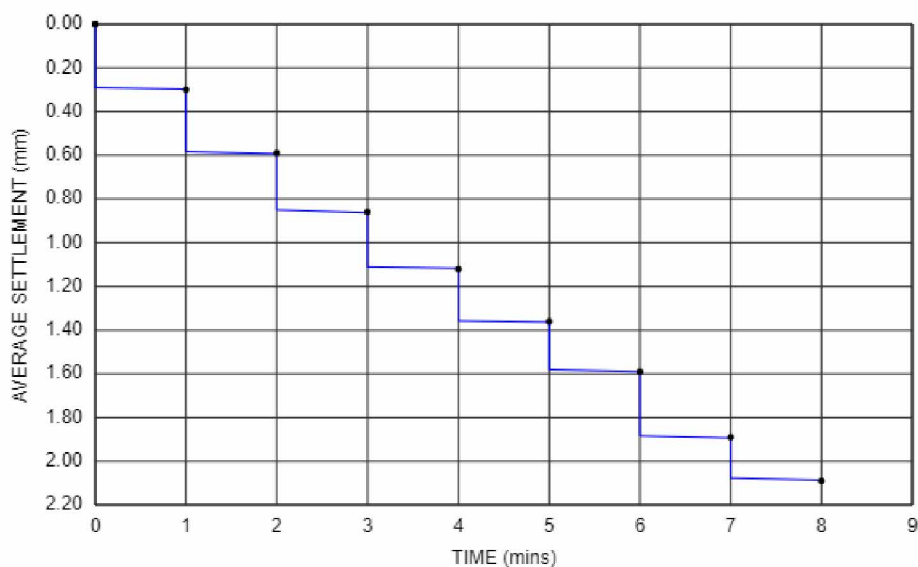
REPORT NUMBER:

C1055642 / 169952.1.1.4

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.8	-0.25	-0.36	-0.28	0.25	0.36	0.28	0.30
6.7	23.8	-0.50	-0.69	-0.59	0.50	0.69	0.59	0.59
8.3	29.4	-0.77	-1.01	-0.81	0.77	1.01	0.81	0.86
13.0	46.0	-1.03	-1.20	-1.12	1.03	1.20	1.12	1.12
19.3	68.1	-1.32	-1.44	-1.33	1.32	1.44	1.33	1.36
22.4	79.1	-1.53	-1.68	-1.56	1.53	1.68	1.56	1.59
27.1	95.7	-1.89	-1.95	-1.84	1.89	1.95	1.84	1.89
30.2	106.8	-2.05	-2.12	-2.09	2.05	2.12	2.09	2.09

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 03-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 171035.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	10/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F3 - Layer 1	MATERIAL:	Clay/ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

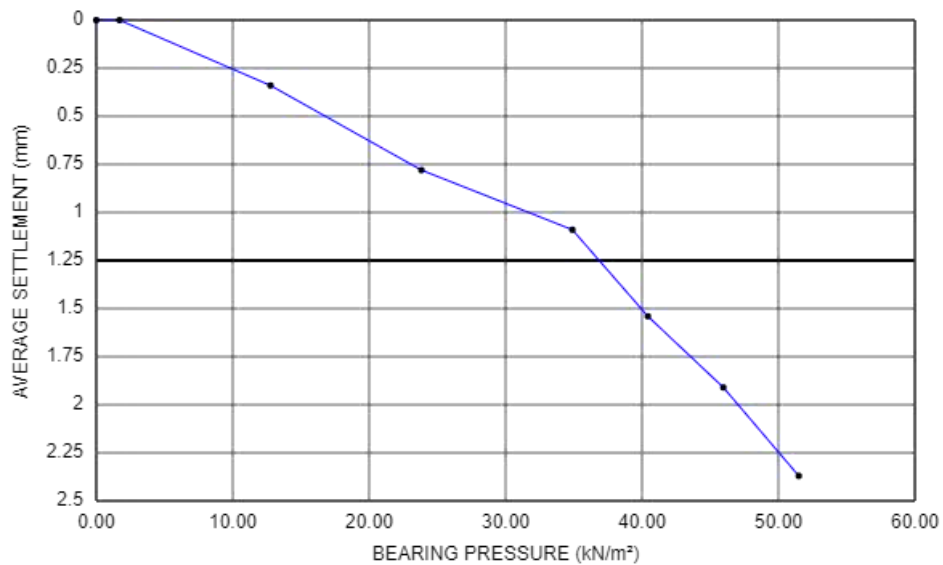
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 51 kN/m²
 Max settlement: 2.37 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 37 kN/m²
 Modulus of subgrade K762: 24 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 2.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 2.3 %

Remarks:

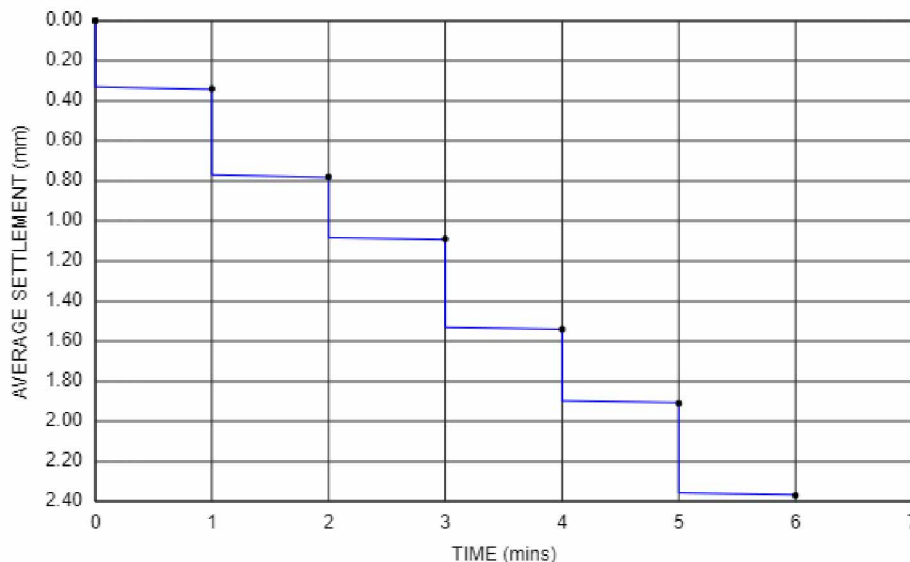
Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value
REPORT NUMBER:

 In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)
 C1055642 / 171035.1.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.8	-0.50	-0.38	-0.15	0.50	0.38	0.15	0.34
6.7	23.8	-1.00	-0.81	-0.54	1.00	0.81	0.54	0.78
9.9	34.9	-1.48	-1.16	-0.64	1.48	1.16	0.64	1.09
11.4	40.4	-2.05	-1.62	-0.95	2.05	1.62	0.95	1.54
13.0	46.0	-2.48	-2.00	-1.24	2.48	2.00	1.24	1.91
14.6	51.5	-3.00	-2.48	-1.62	3.00	2.48	1.62	2.37

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

 Test results reported relate only to the items tested.
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 For and on behalf of CTS
 Atif Mohammed - Supervisor

 Approved Signatory
 Report date 10-Feb-22


0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 171035.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	10/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F4 - Layer 1	MATERIAL:	Ballast/soil mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

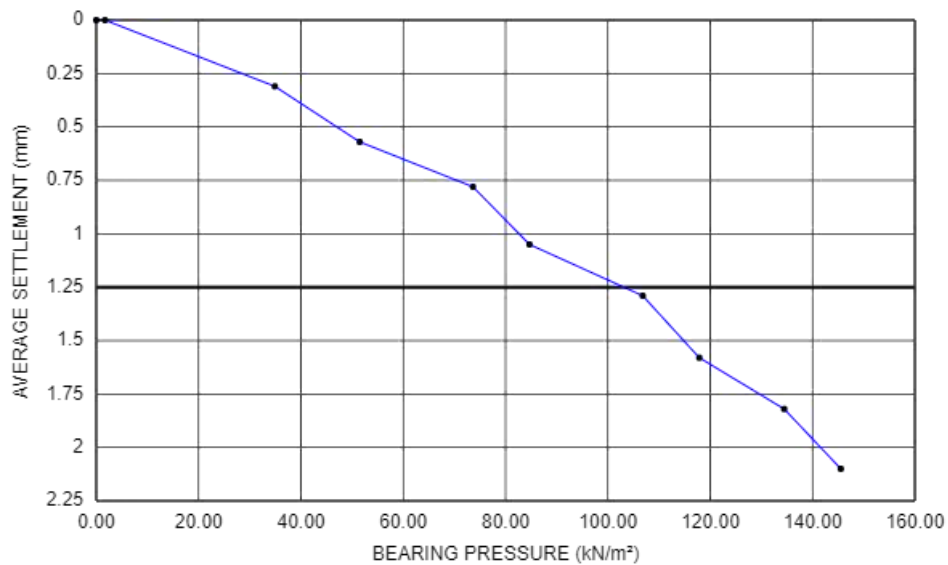
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 146 kN/m²
 Max settlement: 2.10 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 103 kN/m²
 Modulus of subgrade K762: 66 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 13.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 13.8 %

Remarks:

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 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

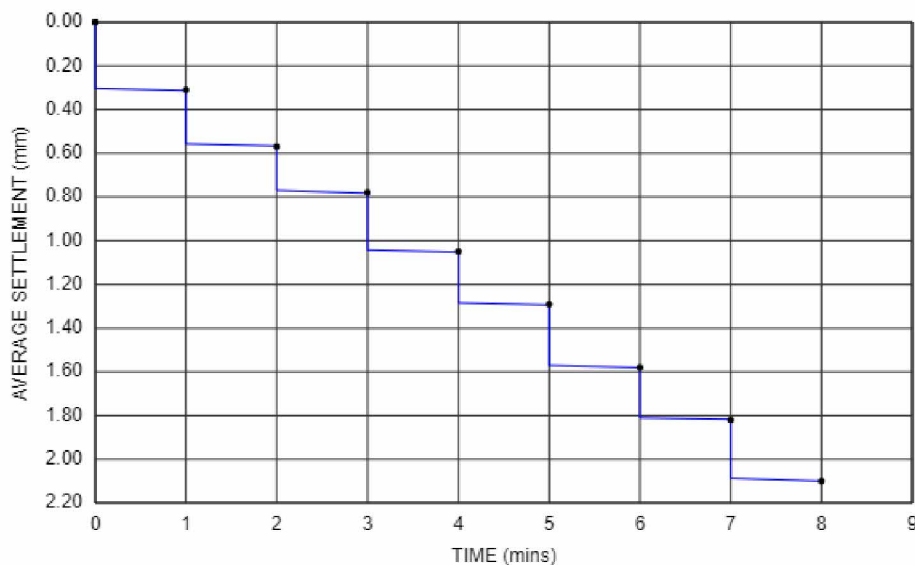
REPORT NUMBER:

C1055642 / 171035.1.1.2

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.9	34.9	-0.32	-0.39	-0.23	0.32	0.39	0.23	0.31
14.6	51.5	-0.63	-0.69	-0.38	0.63	0.69	0.38	0.57
20.8	73.6	-0.82	-1.00	-0.53	0.82	1.00	0.53	0.78
23.9	84.7	-1.12	-1.25	-0.79	1.12	1.25	0.79	1.05
30.2	106.8	-1.39	-1.47	-1.02	1.39	1.47	1.02	1.29
33.3	117.9	-1.62	-1.73	-1.39	1.62	1.73	1.39	1.58
38.0	134.5	-1.90	-1.98	-1.57	1.90	1.98	1.57	1.82
41.1	145.5	-2.18	-2.25	-1.87	2.18	2.25	1.87	2.10

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 14-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 171035.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	10/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	F5 - Layer 1	MATERIAL:	Soil/Ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

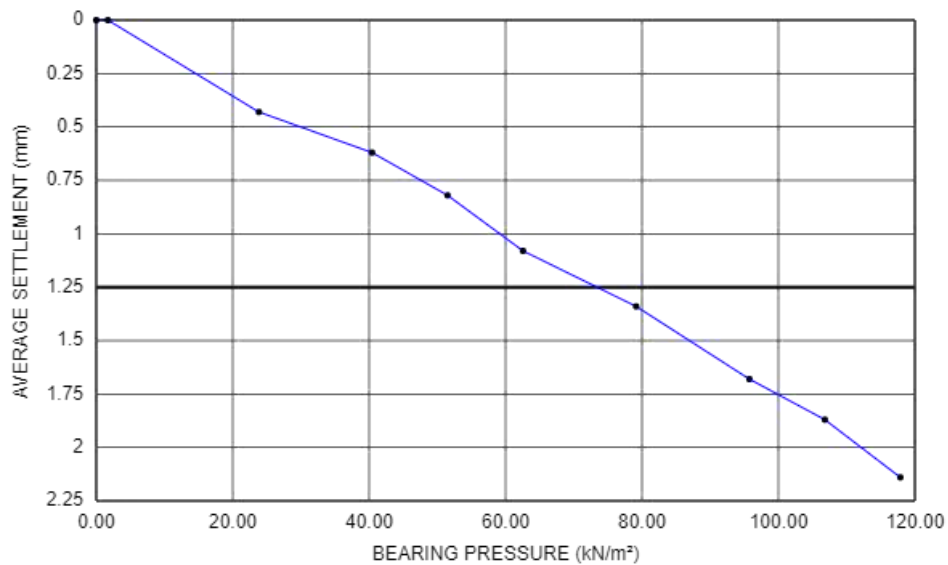
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 118 kN/m²
 Max settlement: 2.14 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 73 kN/m²
 Modulus of subgrade K762: 47 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.7 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

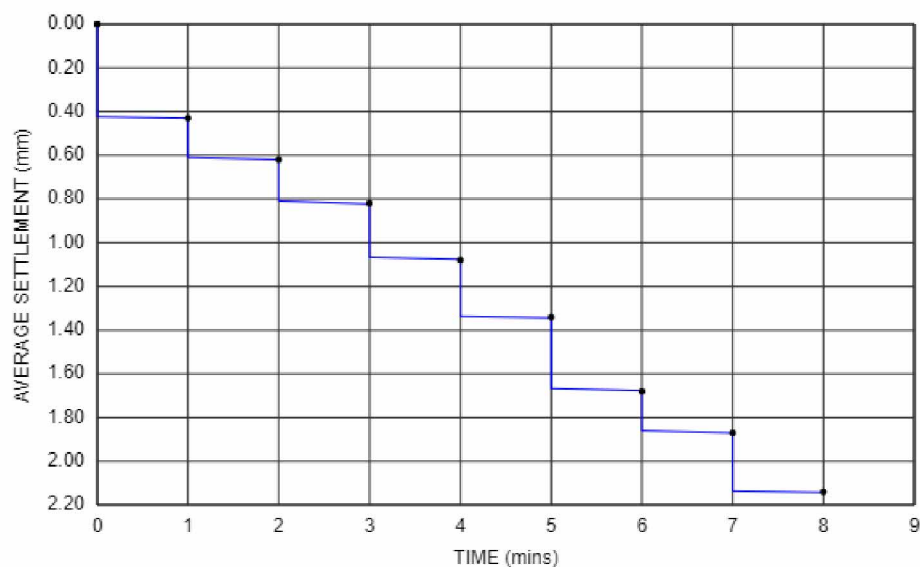
REPORT NUMBER:

C1055642 / 171035.1.1.3

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.45	-0.44	-0.40	0.45	0.44	0.40	0.43
11.4	40.4	-0.65	-0.61	-0.60	0.65	0.61	0.60	0.62
14.6	51.5	-0.85	-0.82	-0.80	0.85	0.82	0.80	0.82
17.7	62.6	-1.08	-1.05	-1.10	1.08	1.05	1.10	1.08
22.4	79.1	-1.30	-1.36	-1.37	1.30	1.36	1.37	1.34
27.1	95.7	-1.54	-1.68	-1.81	1.54	1.68	1.81	1.68
30.2	106.8	-1.79	-1.88	-1.94	1.79	1.88	1.94	1.87
33.3	117.9	-2.08	-2.14	-2.21	2.08	2.14	2.21	2.14

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Atif Mohammed - Supervisor



Approved Signatory

Report date 10-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	H2 Sub Formation	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

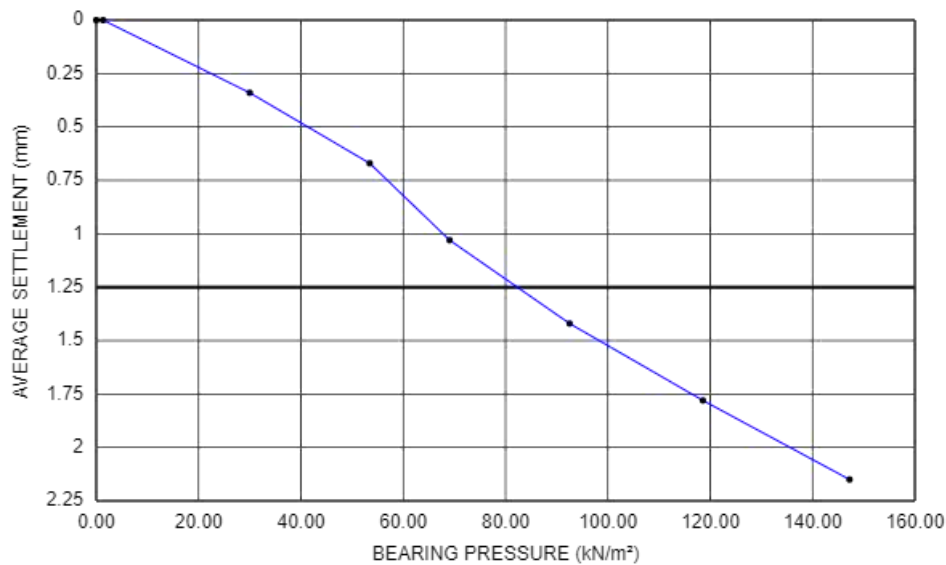
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 147 kN/m²
 Max settlement: 2.15 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 82 kN/m²
 Modulus of subgrade K762: 53 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 9.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 9.5 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

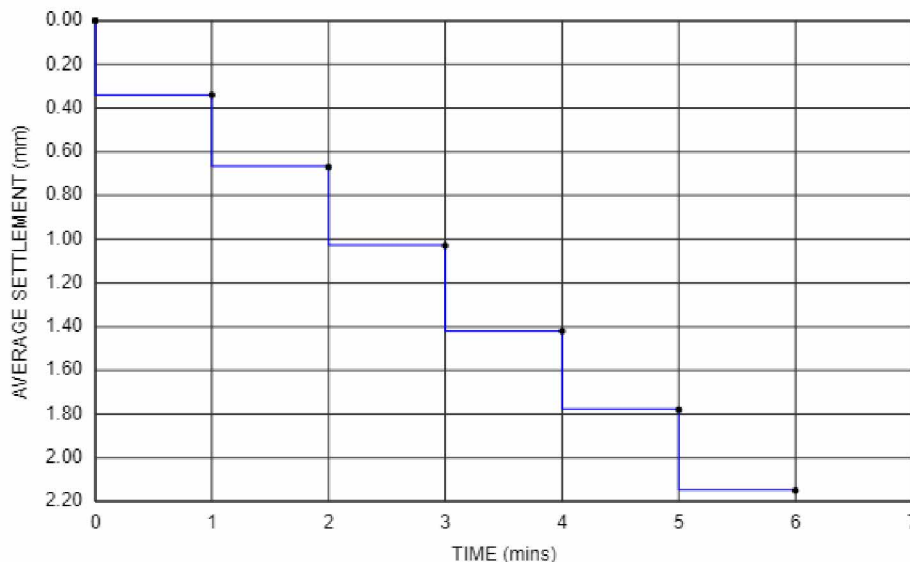
REPORT NUMBER:

C1055642 / 172034.1.1.1

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
0.4	1.3	20.32	18.60	20.77	0.00	0.00	0.00	0.00
8.6	30.0	19.64	18.32	20.71	0.68	0.28	0.06	0.34
15.3	53.4	19.14	17.96	20.59	1.18	0.64	0.18	0.67
19.8	69.1	18.58	17.65	20.38	1.74	0.95	0.39	1.03
26.5	92.5	18.02	17.31	20.10	2.30	1.29	0.67	1.42
34.0	118.6	17.49	17.00	19.87	2.83	1.60	0.90	1.78
42.2	147.2	16.98	16.74	19.53	3.34	1.86	1.24	2.15

SETTLEMENT RELATIONSHIP vs TIME



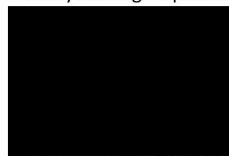
Remarks:

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For and on behalf of CTS

Harry Dorling - Operations Supervisor



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	J2 Sub formation	MATERIAL:	Type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

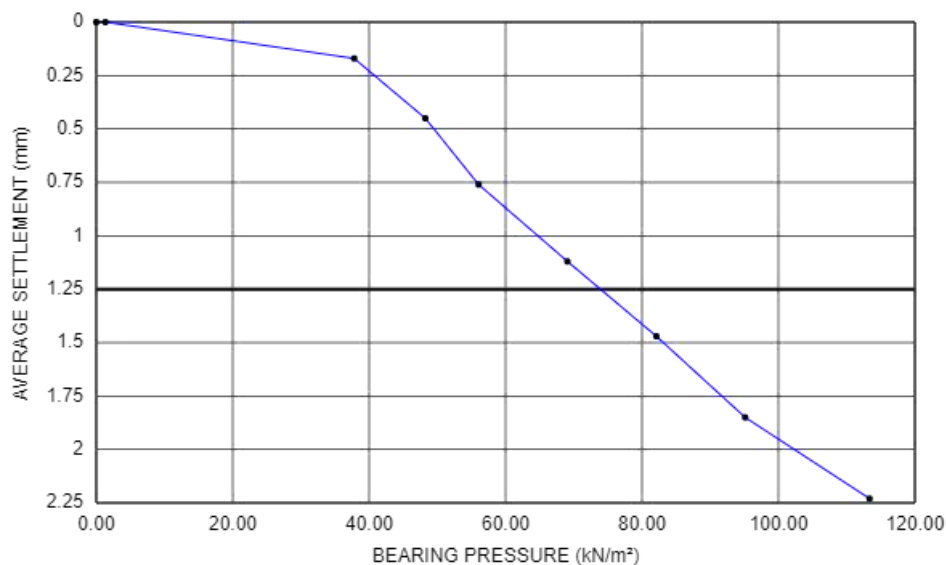
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 113 kN/m²
 Max settlement: 2.23 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 74 kN/m²
 Modulus of subgrade K762: 48 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.9 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

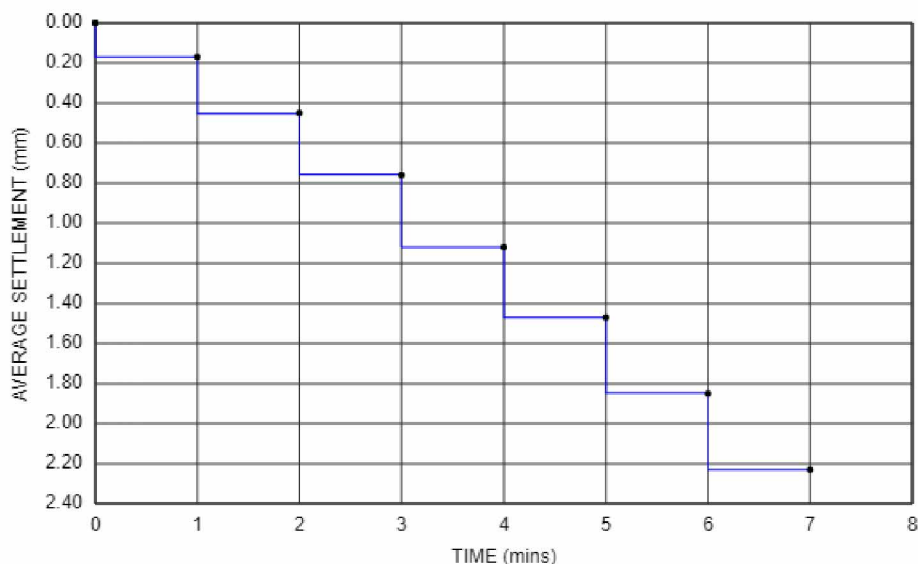
REPORT NUMBER:

C1055642 / 172034.1.1.2

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
0.4	1.3	17.69	18.29	18.88	0.00	0.00	0.00	0.00
10.8	37.8	17.60	17.98	18.77	0.09	0.31	0.11	0.17
13.8	48.2	17.26	17.69	18.55	0.43	0.60	0.33	0.45
16.1	56.0	16.90	17.38	18.31	0.79	0.91	0.57	0.76
19.8	69.1	16.43	17.01	18.06	1.26	1.28	0.82	1.12
23.5	82.1	16.05	16.67	17.73	1.64	1.62	1.15	1.47
27.3	95.1	15.55	16.32	17.45	2.14	1.97	1.43	1.85
32.5	113.4	15.07	15.93	17.17	2.62	2.36	1.71	2.23

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Harry Dorling - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	K2 Sub Formation	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

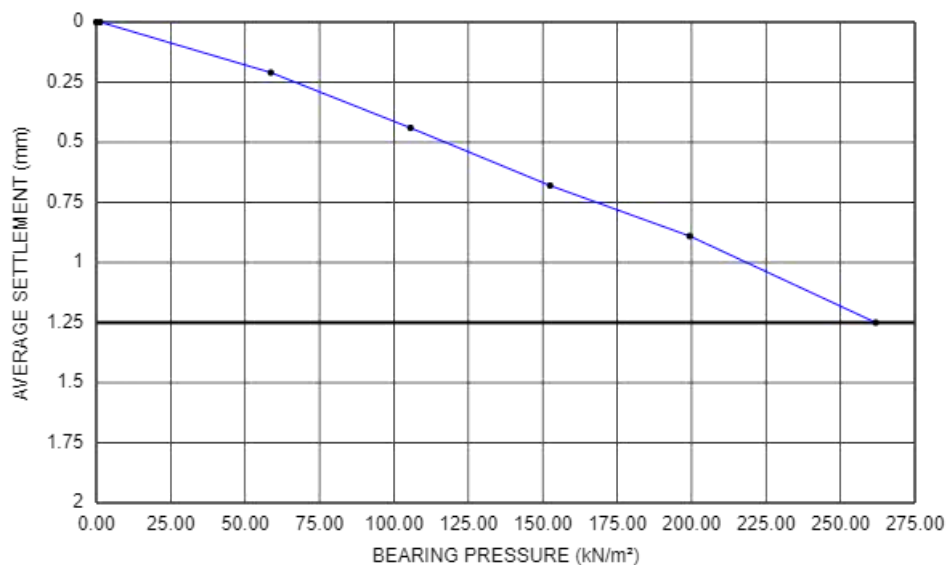
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 262 kN/m²
 Max settlement: 1.25 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: > 262 kN/m²
 Modulus of subgrade K762: > 170 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: > 70.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: > 70.4 %

Remarks:

Test results reported relate only to the items tested.
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 Jack maxed

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

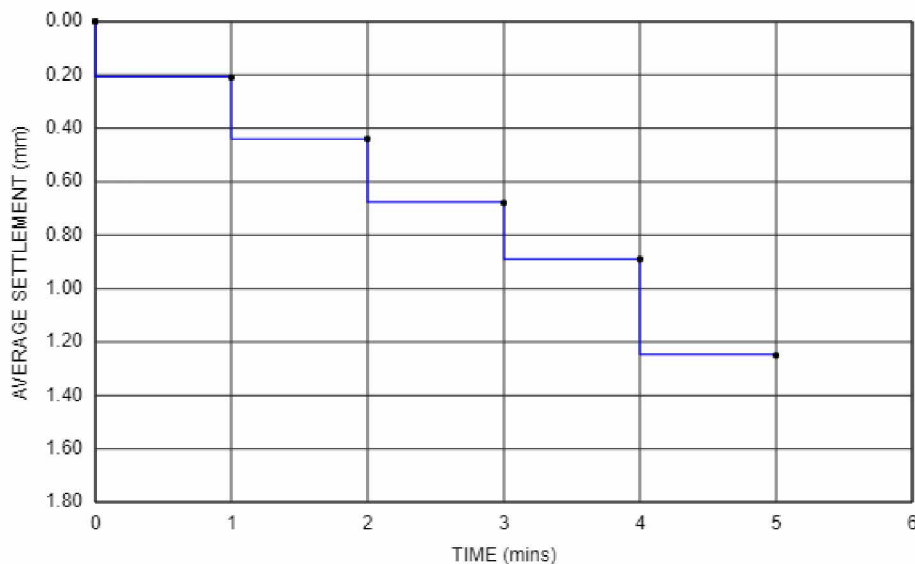
REPORT NUMBER:

C1055642 / 172034.1.1.3

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
0.4	1.3	21.74	20.82	20.72	0.00	0.00	0.00	0.00
16.8	58.6	21.50	20.58	20.58	0.24	0.24	0.14	0.21
30.2	105.5	21.14	20.30	20.52	0.60	0.52	0.20	0.44
43.7	152.4	20.81	20.03	20.41	0.93	0.79	0.31	0.68
57.1	199.3	20.56	19.78	20.27	1.18	1.04	0.45	0.89
75.0	261.9	20.06	19.45	20.03	1.68	1.37	0.69	1.25

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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Jack maxed

For and on behalf of CTS

Harry Dorling - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	H3 Sub Formation	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

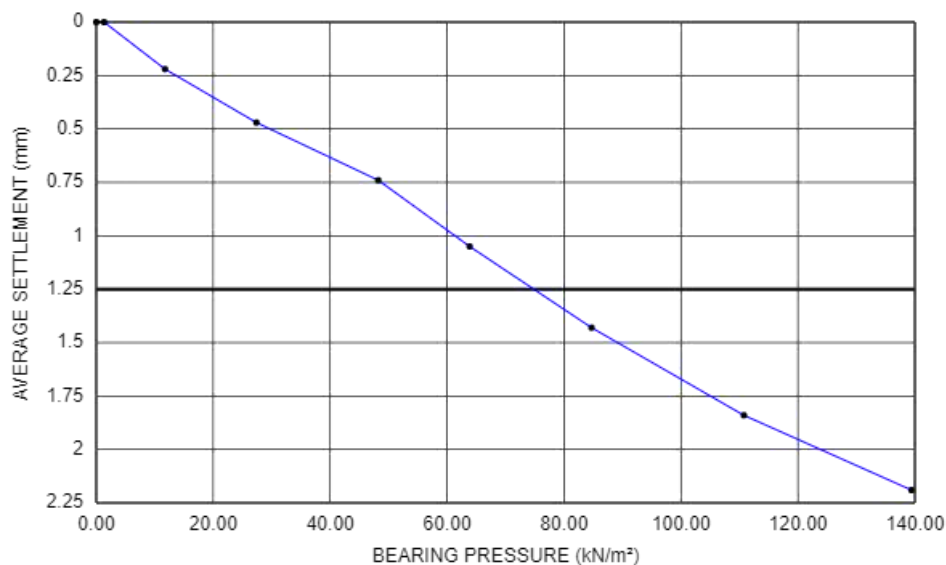
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 139 kN/m²
 Max settlement: 2.19 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 75 kN/m²
 Modulus of subgrade K762: 48 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.0 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.

TEST REPORT:
Determination of Equivalent CBR Value

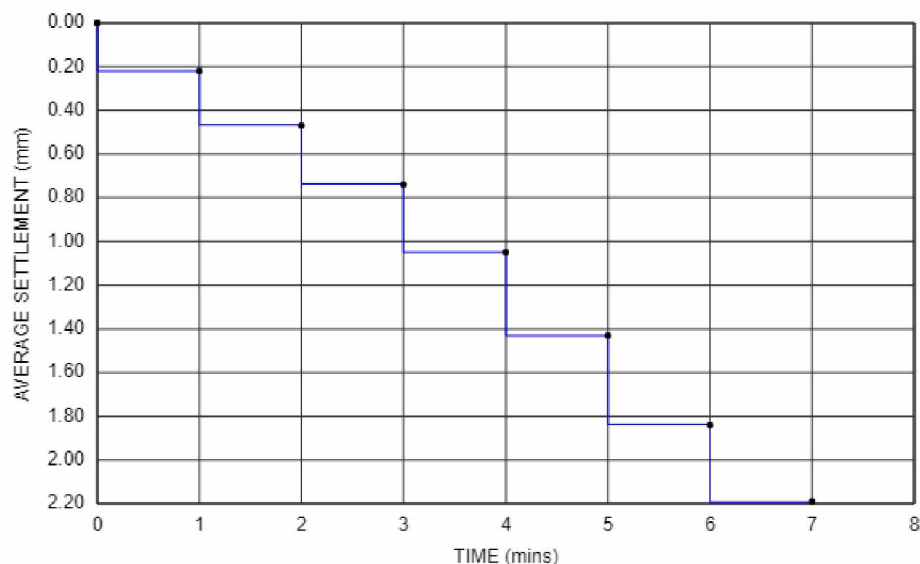
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER:

C1055642 / 172034.1.1.4

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
0.4	1.3	20.62	20.58	20.71	0.00	0.00	0.00	0.00
3.4	11.8	20.62	20.30	20.33	0.00	0.28	0.38	0.22
7.8	27.4	20.53	20.04	19.94	0.09	0.54	0.77	0.47
13.8	48.2	20.26	19.79	19.65	0.36	0.79	1.06	0.74
18.3	63.9	19.91	19.52	19.33	0.71	1.06	1.38	1.05
24.3	84.7	19.48	19.21	18.93	1.14	1.37	1.78	1.43
31.7	110.8	18.99	18.85	18.56	1.63	1.73	2.15	1.84
39.9	139.4	18.62	18.55	18.16	2.00	2.03	2.55	2.19

SETTLEMENT RELATIONSHIP vs TIME

Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Harry Dorling - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	J3 Sub Formation	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

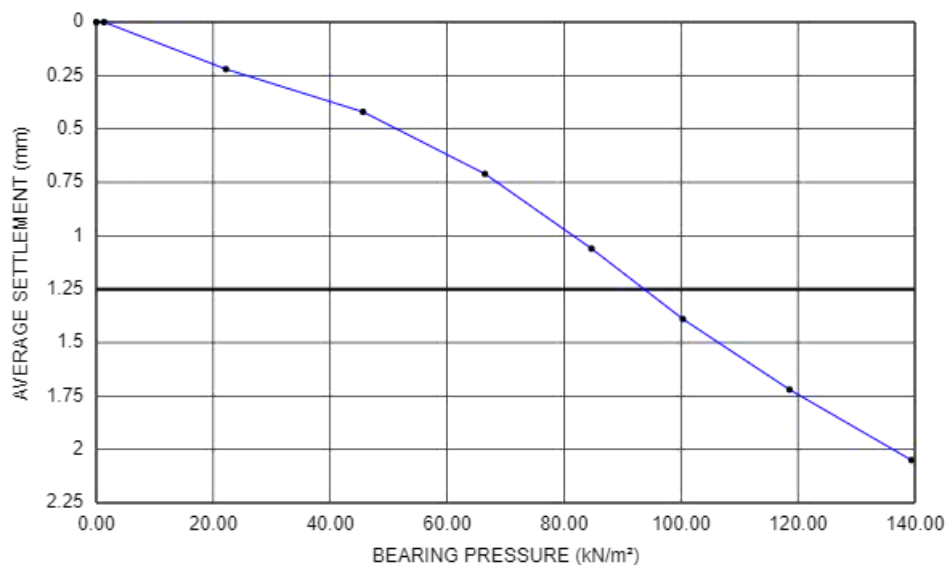
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 139 kN/m²
 Max settlement: 2.05 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 94 kN/m²
 Modulus of subgrade K762: 61 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 11.9%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 11.9 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

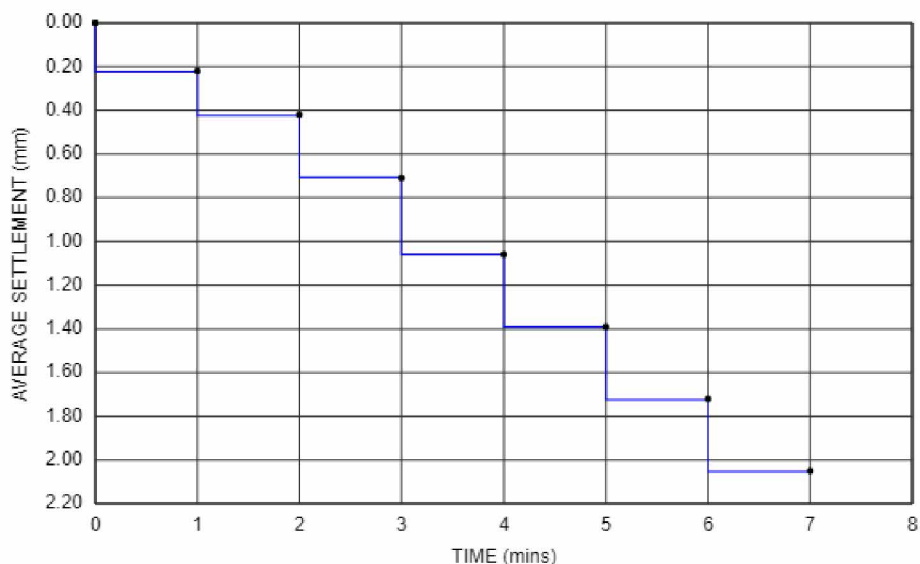
REPORT NUMBER:

C1055642 / 172034.1.1.5

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
0.4	1.3	19.58	20.40	17.16	0.00	0.00	0.00	0.00
6.4	22.2	19.58	20.10	16.79	0.00	0.30	0.37	0.22
13.1	45.6	19.54	19.84	16.49	0.04	0.56	0.67	0.42
19.0	66.5	19.40	19.57	16.05	0.18	0.83	1.11	0.71
24.3	84.7	19.08	19.25	15.63	0.50	1.15	1.53	1.06
28.7	100.3	18.74	18.92	15.31	0.84	1.48	1.85	1.39
34.0	118.6	18.42	18.60	14.95	1.16	1.80	2.21	1.72
39.9	139.4	18.04	18.28	14.66	1.54	2.12	2.50	2.05

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Harry Dorling - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	K3 Sub Formation	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

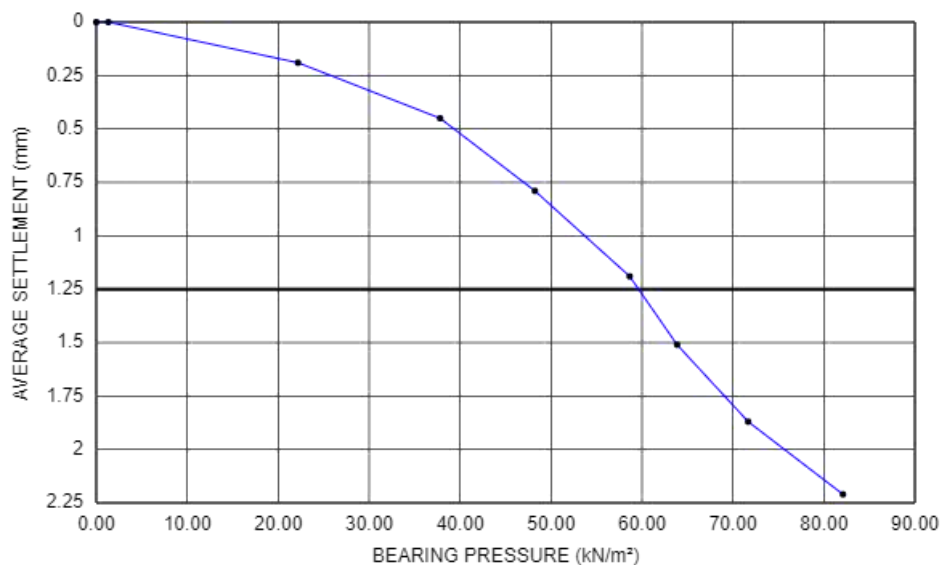
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 604 mm
 Plate Area: 0.286526 m²
 Plate Correction: 0.81

Results

Max applied pressure: 82 kN/m²
 Max settlement: 2.21 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 60 kN/m²
 Modulus of subgrade K762: 39 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.4 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

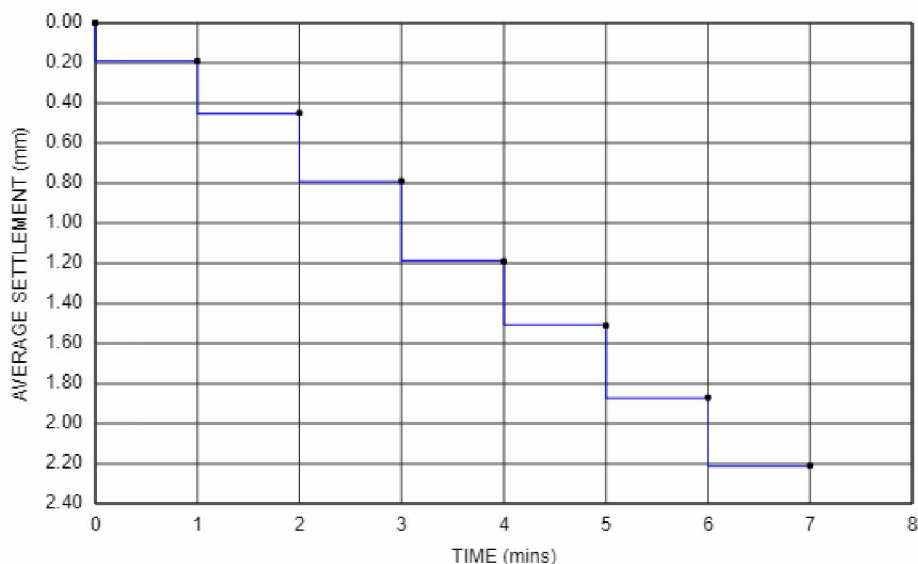
REPORT NUMBER:

C1055642 / 172034.1.1.6

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
0.4	1.3	19.73	17.30	20.51	0.00	0.00	0.00	0.00
6.4	22.2	19.52	17.04	20.41	0.21	0.26	0.10	0.19
10.8	37.8	19.16	16.74	20.28	0.57	0.56	0.23	0.45
13.8	48.2	18.56	16.36	20.24	1.17	0.94	0.27	0.79
16.8	58.6	17.93	15.95	20.10	1.80	1.35	0.41	1.19
18.3	63.9	17.40	15.60	20.02	2.33	1.70	0.49	1.51
20.5	71.7	16.85	15.24	19.83	2.88	2.06	0.68	1.87
23.5	82.1	16.35	14.85	19.70	3.38	2.45	0.81	2.21

SETTLEMENT RELATIONSHIP vs TIME



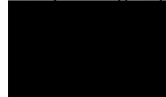
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Harry Dorling - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172034.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Marc Hawkins	SITE:	Havant, Portsmouth
LOCATION:	H4 Sub Base	MATERIAL:	Crushed aggregate
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Not Specified
TEST METHOD:	Incremental Plate Loading	SOURCE:	Not Specified
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

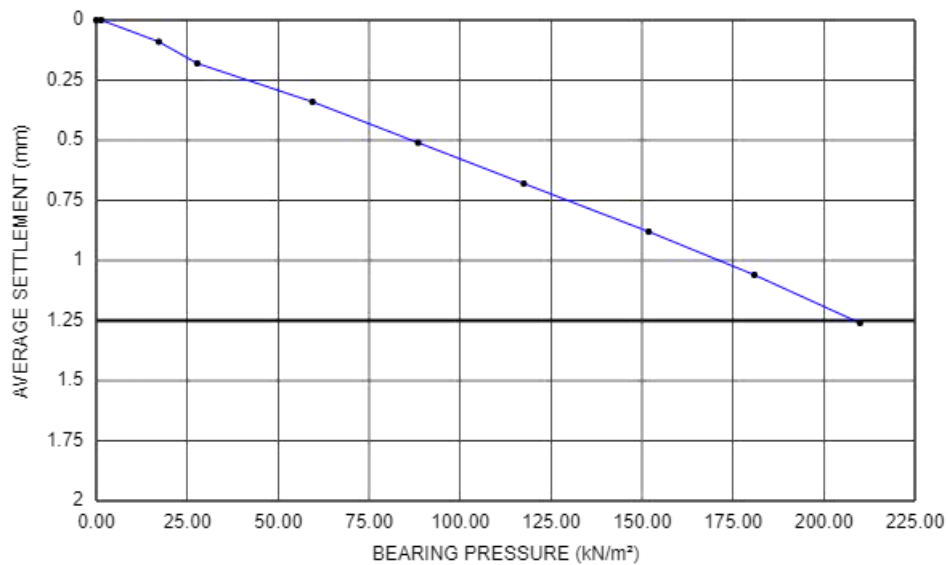
Equipment Details

Type of Kentledge: 22 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 210 kN/m²
 Max settlement: 1.26 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 208 kN/m²
 Modulus of subgrade K762: 134 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 46.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 46.7 %

Remarks:

Test results reported relate only to the items tested.
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 Lifted machine at 360 bar

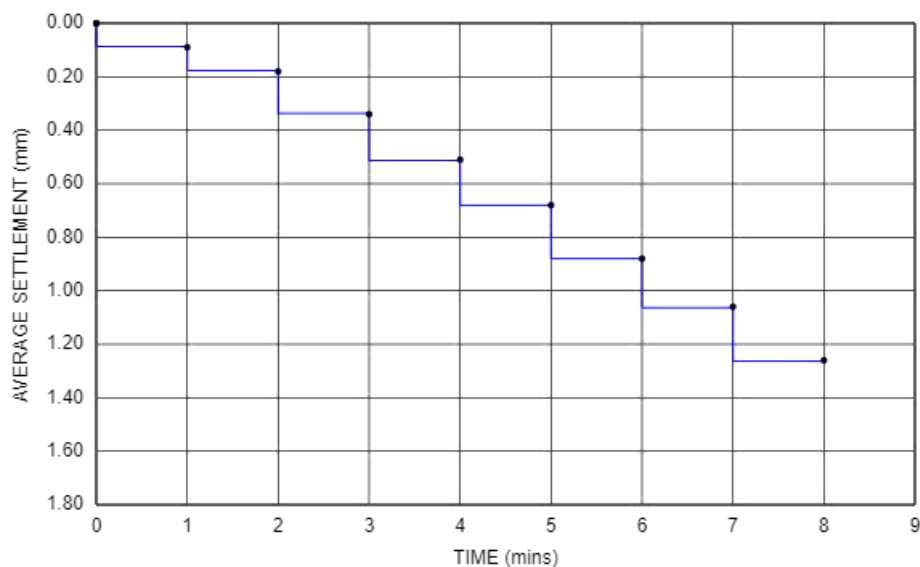
TEST REPORT: Determination of Equivalent CBR Value
In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER: C1055642 / 172034.1.1.7

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
0.4	1.3	20.43	21.80	20.74	0.00	0.00	0.00	0.00
4.9	17.2	20.43	21.54	20.74	0.00	0.26	0.00	0.09
7.8	27.8	20.40	21.30	20.74	0.03	0.50	0.00	0.18
16.8	59.4	20.32	21.03	20.61	0.11	0.77	0.13	0.34
25.0	88.5	20.14	20.75	20.54	0.29	1.05	0.20	0.51
33.2	117.5	19.96	20.48	20.49	0.47	1.32	0.25	0.68
42.9	151.8	19.75	20.17	20.41	0.68	1.63	0.33	0.88
51.1	180.9	19.62	19.84	20.32	0.81	1.96	0.42	1.06
59.4	209.9	19.46	19.52	20.20	0.97	2.28	0.54	1.26

SETTLEMENT RELATIONSHIP vs TIME



Remarks:
Test results reported relate only to the items tested.
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Lifted machine at 360 bar

For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J4 Sub Formation	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

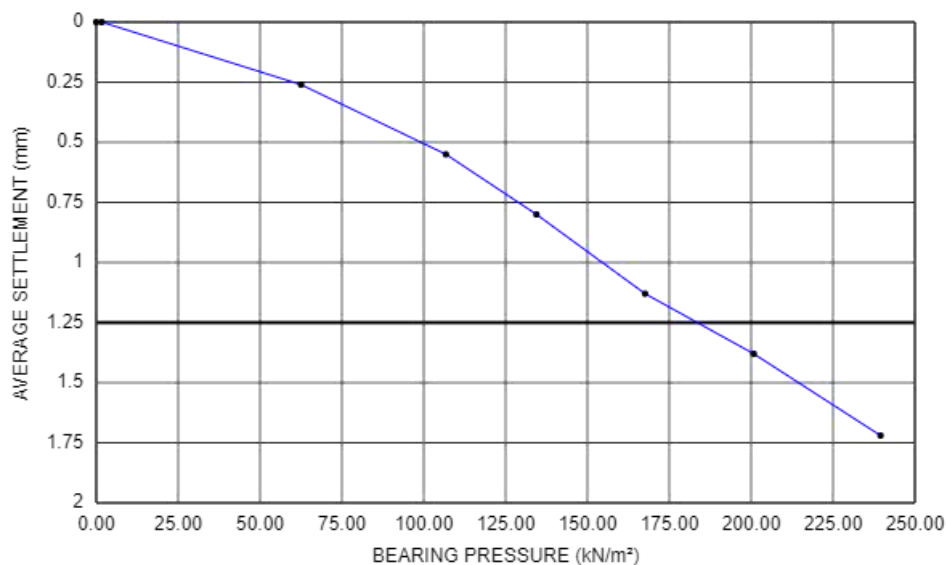
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 240 kN/m²
 Max settlement: 1.72 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 183 kN/m²
 Modulus of subgrade K762: 118 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 37.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 37.6 %

Remarks:

Test results reported relate only to the items tested.
 This report shall not be reproduced except in full without approval of the Laboratory.
 Jack could not push any further, test stopped at 430 bar.

TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

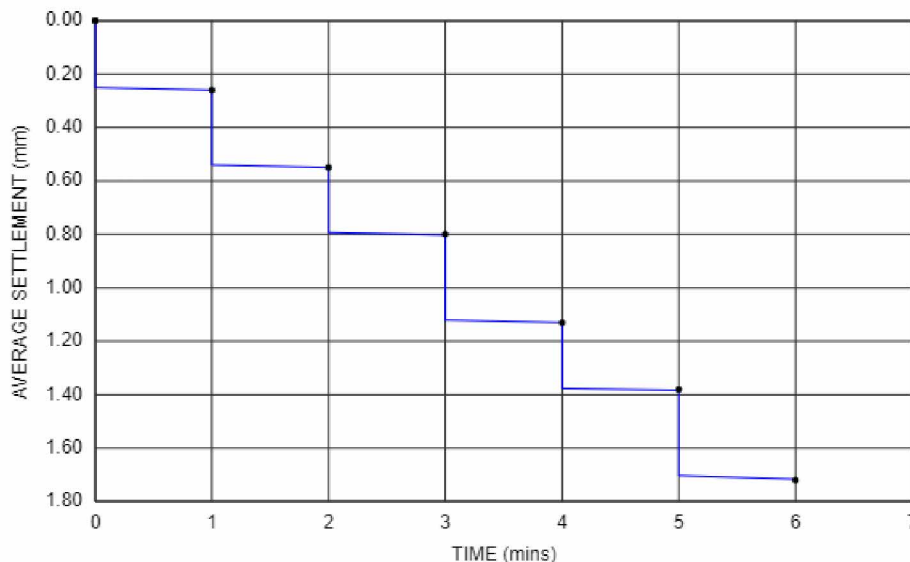
REPORT NUMBER:

C1055642 / 172110.1.1.1

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.7	62.5	-0.19	-0.30	-0.29	0.19	0.30	0.29	0.26
30.2	106.8	-0.50	-0.58	-0.57	0.50	0.58	0.57	0.55
38.0	134.4	-0.84	-0.80	-0.77	0.84	0.80	0.77	0.80
47.4	167.6	-1.19	-1.14	-1.06	1.19	1.14	1.06	1.13
56.8	200.8	-1.40	-1.39	-1.36	1.40	1.39	1.36	1.38
67.7	239.5	-1.74	-1.71	-1.70	1.74	1.71	1.70	1.72

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Jack could not push any further, test stopped at 430 bar.

For and on behalf of CTS

Vincent Faulkner - Operations Supervisor

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J5 Sub Formation Layer	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

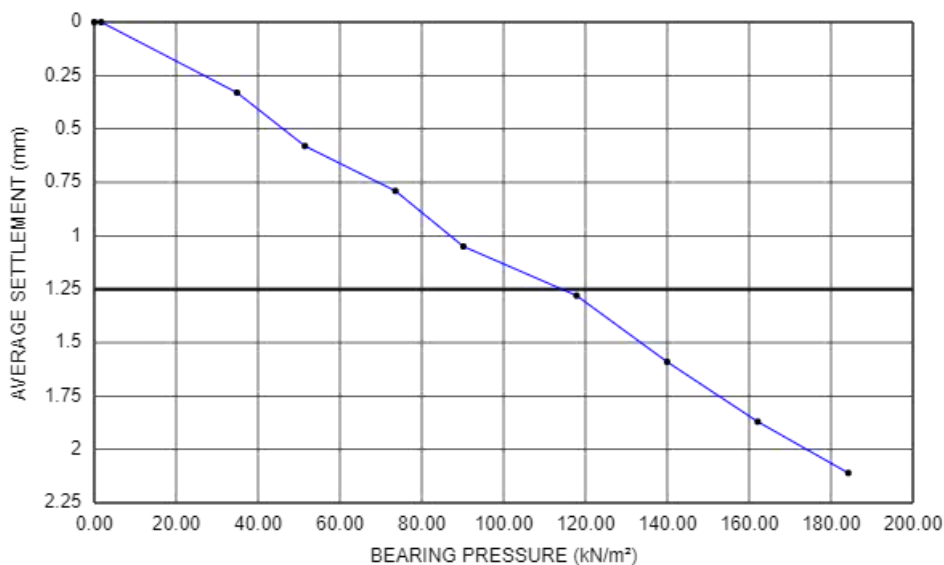
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 184 kN/m²
 Max settlement: 2.11 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 114 kN/m²
 Modulus of subgrade K762: 74 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 16.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 16.6 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

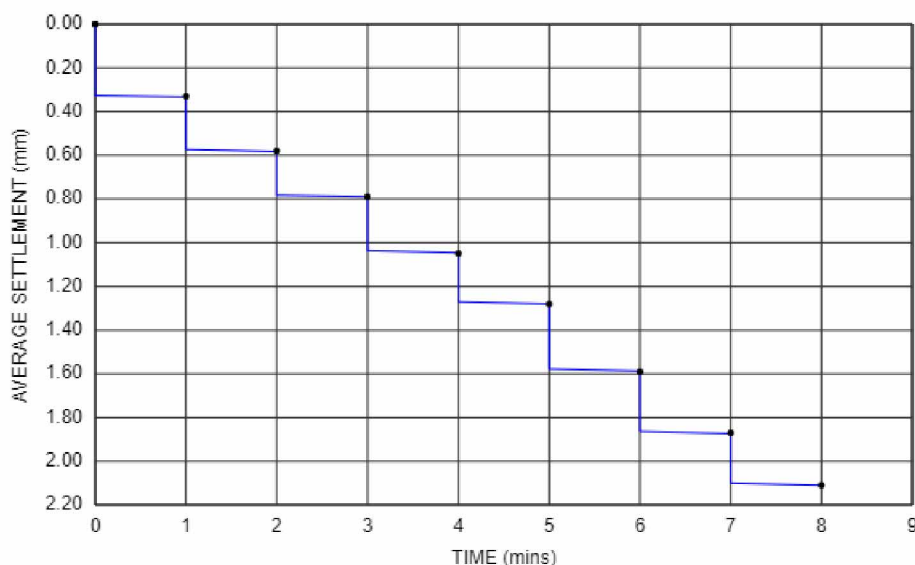
REPORT NUMBER:

C1055642 / 172110.1.1.2

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.9	34.9	-0.32	-0.38	-0.30	0.32	0.38	0.30	0.33
14.5	51.5	-0.59	-0.61	-0.55	0.59	0.61	0.55	0.58
20.8	73.6	-0.79	-0.81	-0.77	0.79	0.81	0.77	0.79
25.5	90.2	-1.12	-1.04	-0.98	1.12	1.04	0.98	1.05
33.3	117.8	-1.32	-1.30	-1.22	1.32	1.30	1.22	1.28
39.6	140.0	-1.61	-1.65	-1.50	1.61	1.65	1.50	1.59
45.8	162.1	-1.83	-1.92	-1.87	1.83	1.92	1.87	1.87
52.1	184.2	-2.09	-2.18	-2.06	2.09	2.18	2.06	2.11

SETTLEMENT RELATIONSHIP vs TIME



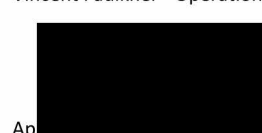
Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



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Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H5 Sub Formation Layer	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

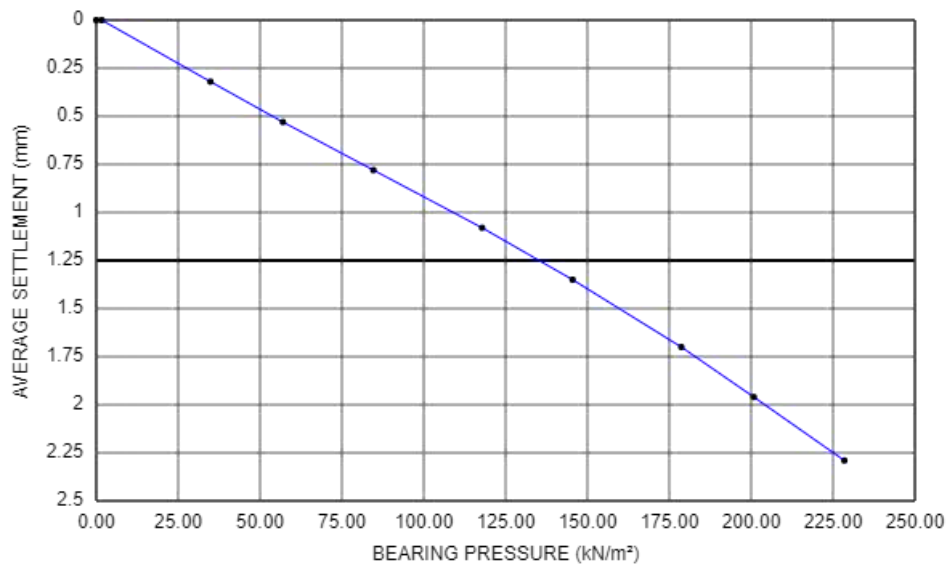
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 228 kN/m²
 Max settlement: 2.29 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 135 kN/m²
 Modulus of subgrade K762: 87 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 22.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 22.1 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

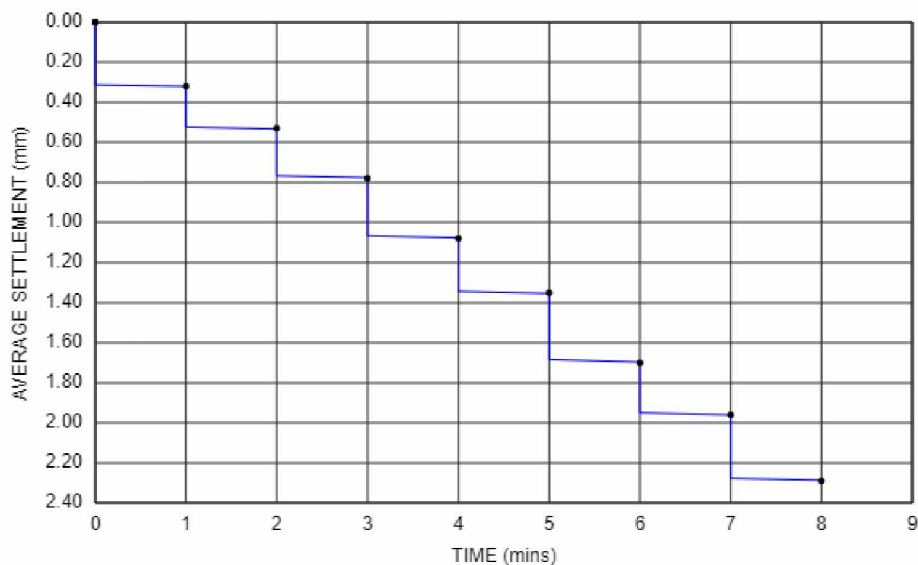
REPORT NUMBER:

C1055642 / 172110.1.1.3

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.9	34.9	-0.35	-0.33	-0.28	0.35	0.33	0.28	0.32
16.1	57.0	-0.59	-0.51	-0.50	0.59	0.51	0.50	0.53
23.9	84.6	-0.90	-0.74	-0.69	0.90	0.74	0.69	0.78
33.3	117.8	-1.28	-0.99	-0.96	1.28	0.99	0.96	1.08
41.1	145.5	-1.64	-1.22	-1.20	1.64	1.22	1.20	1.35
50.5	178.7	-1.95	-1.62	-1.52	1.95	1.62	1.52	1.70
56.8	200.8	-2.22	-1.87	-1.79	2.22	1.87	1.79	1.96
64.6	228.5	-2.60	-2.19	-2.07	2.60	2.19	2.07	2.29

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

Test results reported relate only to the items tested.

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H6 Sub Formation Layer	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

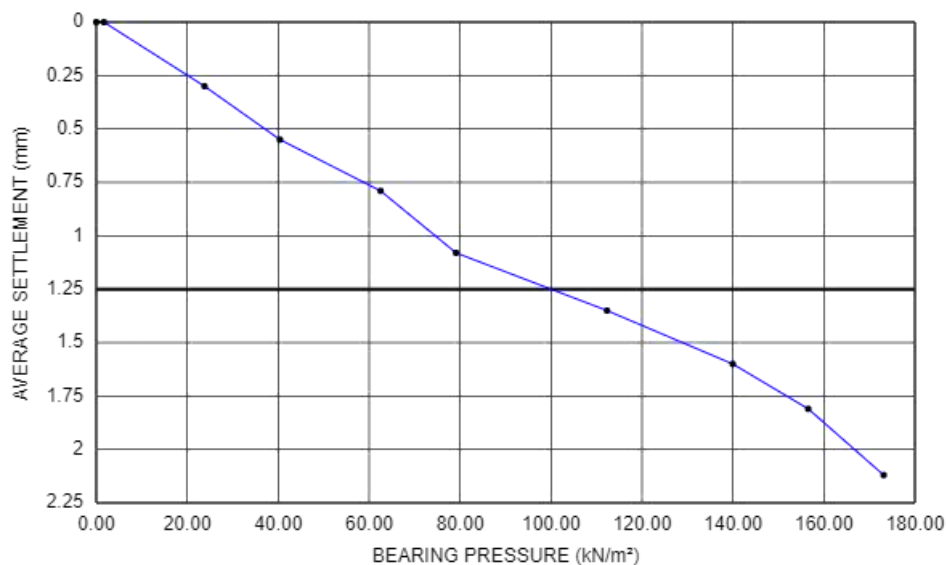
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 173 kN/m²
 Max settlement: 2.12 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 100 kN/m²
 Modulus of subgrade K762: 64 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 13.2%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 13.2 %

Remarks:

Test results reported relate only to the items tested.
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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

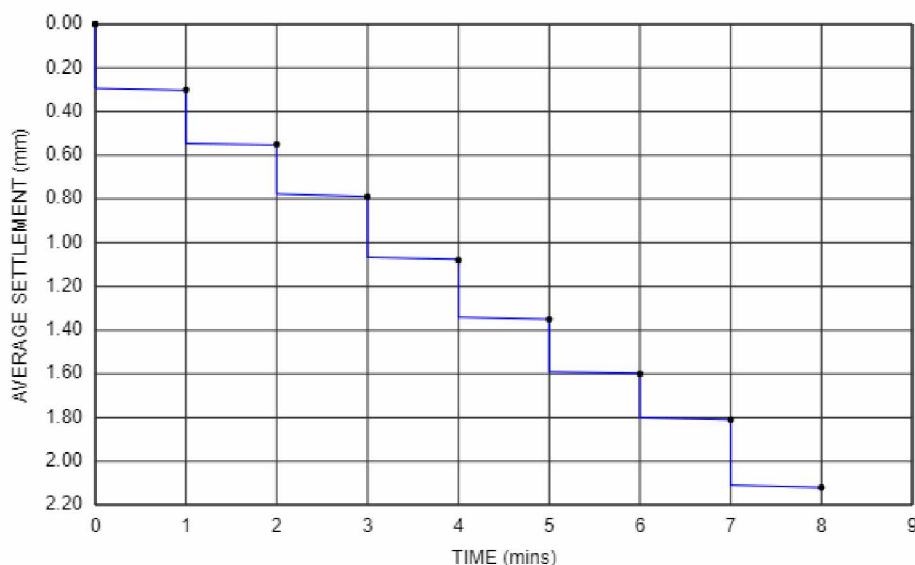
REPORT NUMBER:

C1055642 / 172110.1.1.4

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.28	-0.39	-0.24	0.28	0.39	0.24	0.30
11.4	40.4	-0.54	-0.64	-0.48	0.54	0.64	0.48	0.55
17.7	62.5	-0.81	-0.85	-0.71	0.81	0.85	0.71	0.79
22.4	79.1	-1.07	-1.17	-0.99	1.07	1.17	0.99	1.08
31.8	112.3	-1.34	-1.49	-1.22	1.34	1.49	1.22	1.35
39.6	140.0	-1.59	-1.72	-1.48	1.59	1.72	1.48	1.60
44.3	156.6	-1.80	-1.96	-1.67	1.80	1.96	1.67	1.81
49.0	173.1	-2.10	-2.28	-1.98	2.10	2.28	1.98	2.12

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

Test results reported relate only to the items tested.

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 17-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J6 Sub Formation Layer	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

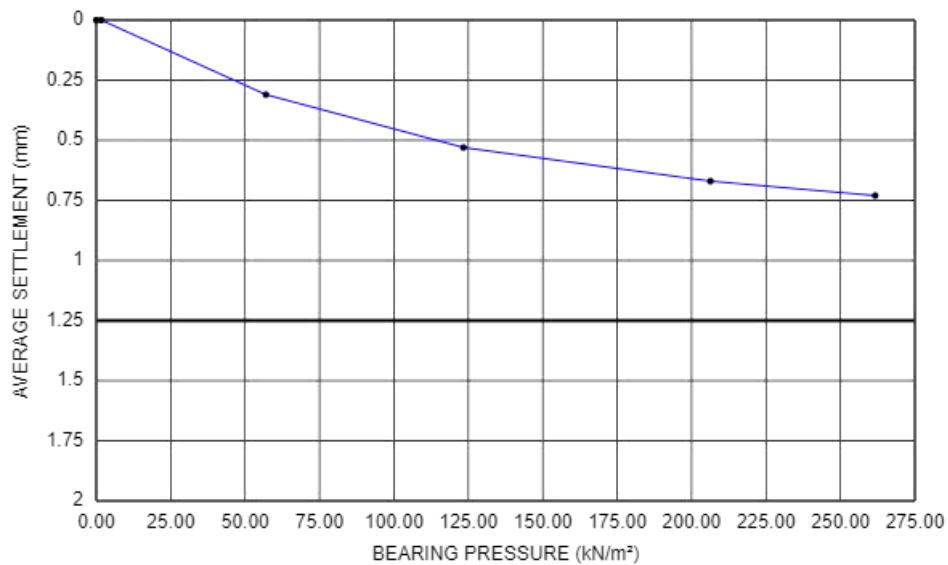
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 262 kN/m²
 Max settlement: 0.73 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: > 262 kN/m²
 Modulus of subgrade K762: > 168 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: > 69.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: > 69.6 %

Remarks:

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 Jack maxed out could not continue test at 470 bar.

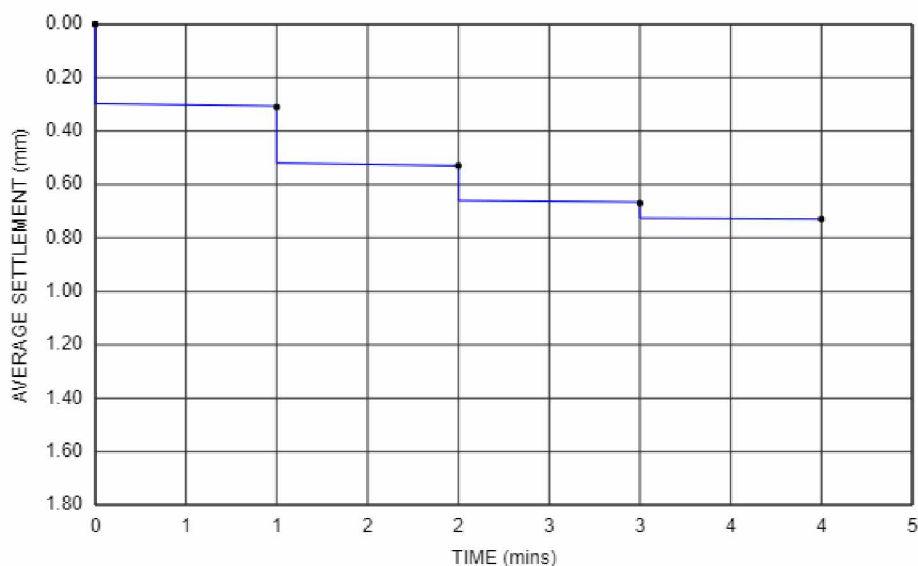
TEST REPORT: **Determination of Equivalent CBR Value**
 In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

REPORT NUMBER: C1055642 / 172110.1.1.5

TEST RESULTS

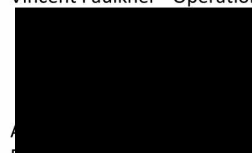
LOAD APPLIED TO PLATE	AVERAGE BEARING PRESSURE	GAUGE READING			GAUGE SETTLEMENT			AVERAGE SETTLEMENT
		1	2	3	1	2	3	
kN	kN/m ²	mm			mm			mm
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.1	57.0	-0.27	-0.36	-0.29	0.27	0.36	0.29	0.31
34.9	123.4	-0.42	-0.66	-0.51	0.42	0.66	0.51	0.53
58.3	206.3	-0.52	-0.79	-0.69	0.52	0.79	0.69	0.67
74.0	261.7	-0.59	-0.84	-0.76	0.59	0.84	0.76	0.73

SETTLEMENT RELATIONSHIP vs TIME



Remarks:
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 Jack maxed out could not continue test at 470 bar.

For and on behalf of CTS
 Vincent Faulkner - Operations Supervisor



Report date 17-Feb-22



0927

TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H7 Sub Formation layer	MATERIAL:	Ballast/clay Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

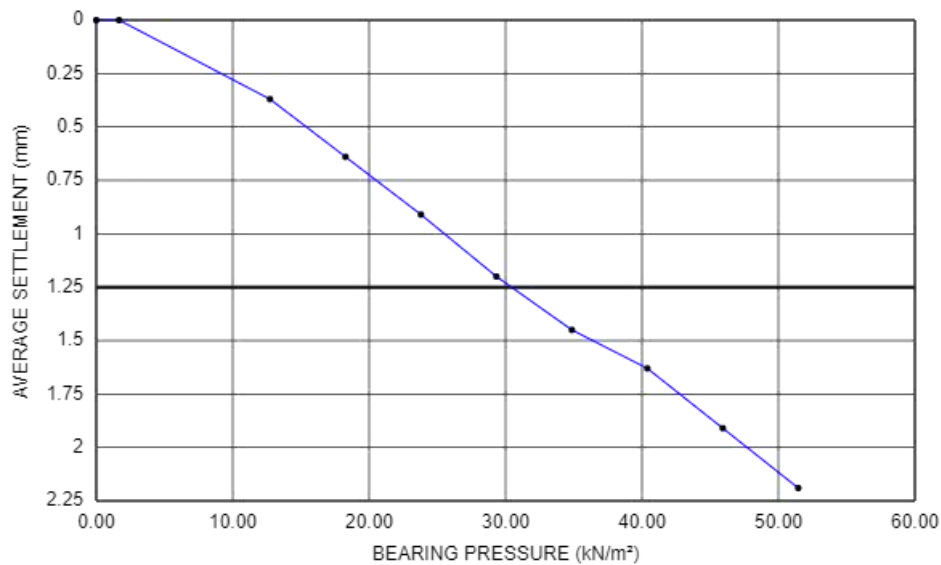
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 51 kN/m²
 Max settlement: 2.19 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 30 kN/m²
 Modulus of subgrade K762: 20 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 1.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 1.7 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

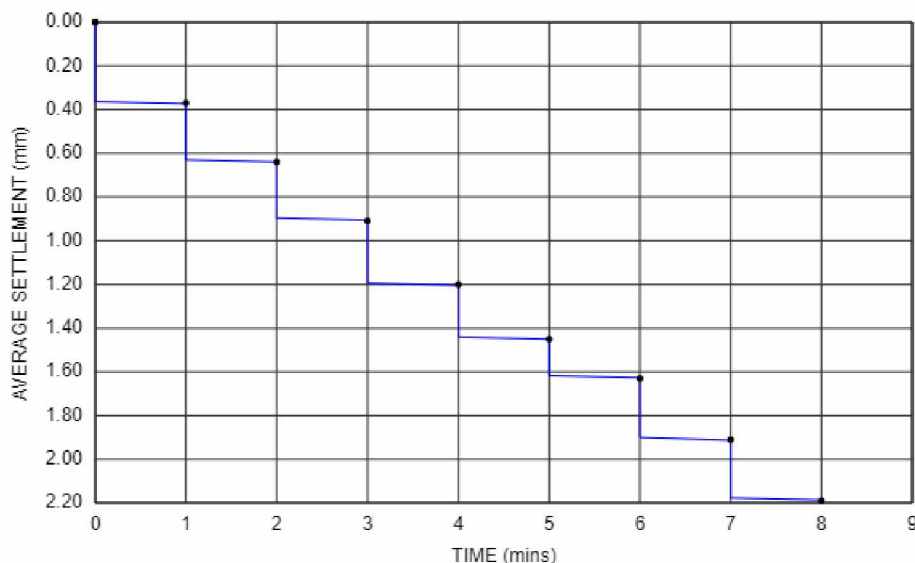
REPORT NUMBER:

C1055642 / 172110.1.1.6

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.7	-0.32	-0.43	-0.37	0.32	0.43	0.37	0.37
5.2	18.3	-0.60	-0.68	-0.64	0.60	0.68	0.64	0.64
6.7	23.8	-0.86	-0.94	-0.92	0.86	0.94	0.92	0.91
8.3	29.3	-1.17	-1.25	-1.19	1.17	1.25	1.19	1.20
9.9	34.9	-1.39	-1.50	-1.46	1.39	1.50	1.46	1.45
11.4	40.4	-1.54	-1.74	-1.60	1.54	1.74	1.60	1.63
13.0	45.9	-1.79	-2.05	-1.90	1.79	2.05	1.90	1.91
14.5	51.5	-2.13	-2.32	-2.11	2.13	2.32	2.11	2.19

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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Supervisor



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172110.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	17/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J9 Sub Formation Layer	MATERIAL:	Type 1 - Crushed rock
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

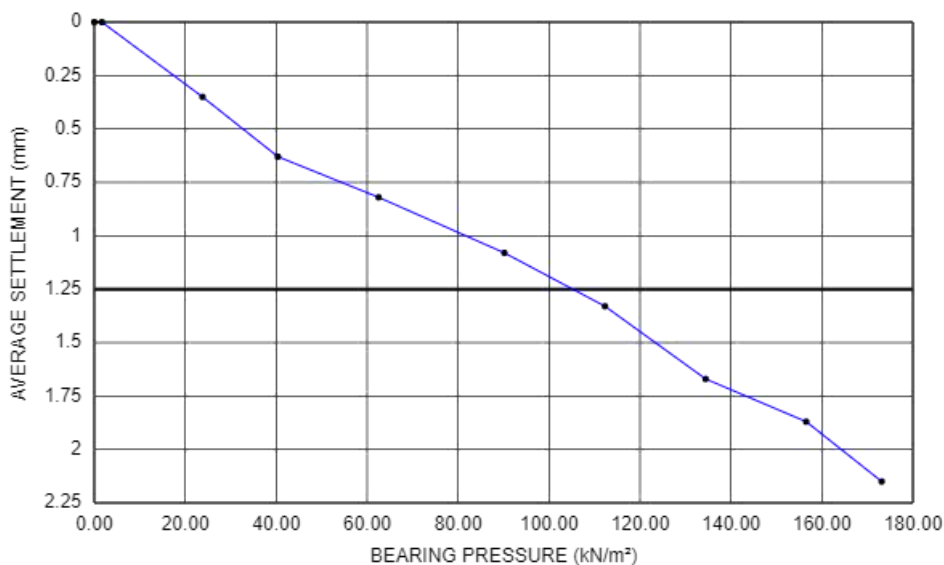
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 173 kN/m²
 Max settlement: 2.15 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 105 kN/m²
 Modulus of subgrade K762: 68 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 14.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 14.3 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

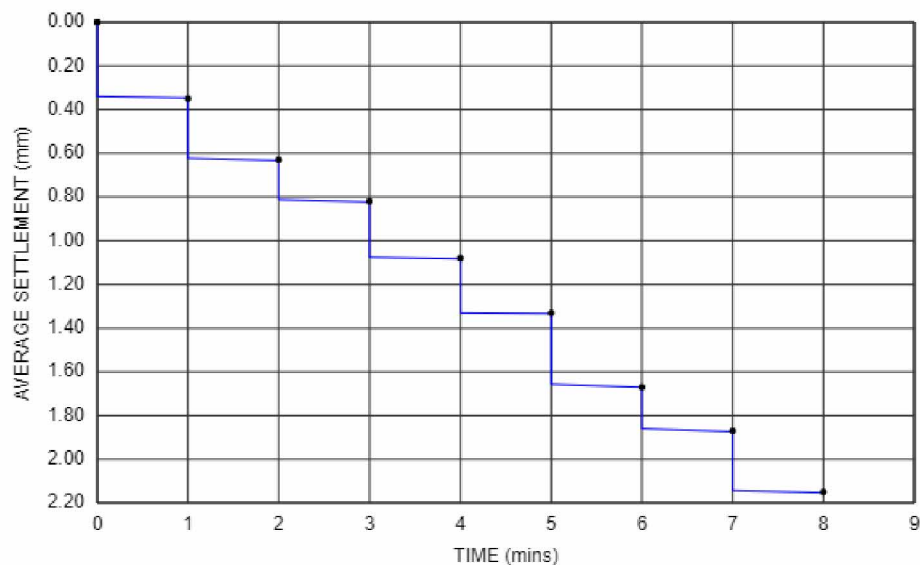
REPORT NUMBER:

C1055642 / 172110.1.1.7

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
0.5	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.7	23.8	-0.40	-0.38	-0.26	0.40	0.38	0.26	0.35
11.4	40.4	-0.64	-0.75	-0.51	0.64	0.75	0.51	0.63
17.7	62.5	-0.86	-0.91	-0.70	0.86	0.91	0.70	0.82
25.5	90.2	-1.12	-1.16	-0.97	1.12	1.16	0.97	1.08
31.8	112.3	-1.39	-1.40	-1.21	1.39	1.40	1.21	1.33
38.0	134.4	-1.69	-1.80	-1.52	1.69	1.80	1.52	1.67
44.3	156.6	-1.90	-1.99	-1.73	1.90	1.99	1.73	1.87
49.0	173.1	-2.21	-2.28	-1.97	2.21	2.28	1.97	2.15

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor

Ap
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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.1		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H7 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

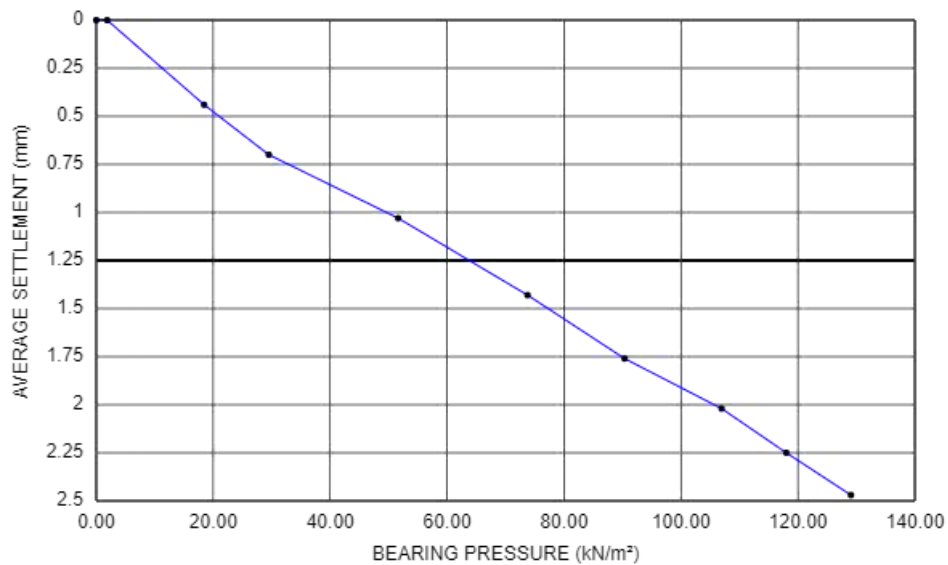
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 129 kN/m²
 Max settlement: 2.47 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 64 kN/m²
 Modulus of subgrade K762: 41 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.0%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.0 %

Remarks:

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TEST REPORT:
Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

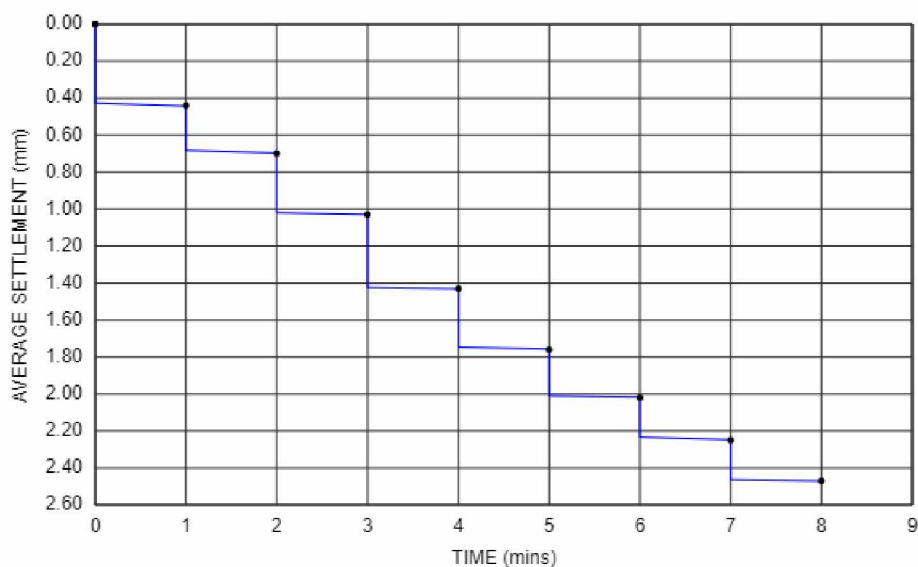
REPORT NUMBER:

C1055642 / 172549.1.1.1

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
0.5	1.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.4	-0.40	-0.38	-0.55	0.40	0.38	0.55	0.44
8.3	29.5	-0.63	-0.65	-0.81	0.63	0.65	0.81	0.70
14.6	51.6	-0.94	-0.96	-1.19	0.94	0.96	1.19	1.03
20.9	73.8	-1.29	-1.32	-1.68	1.29	1.32	1.68	1.43
25.5	90.4	-1.61	-1.68	-1.98	1.61	1.68	1.98	1.76
30.2	107.0	-1.89	-1.95	-2.21	1.89	1.95	2.21	2.02
33.4	118.0	-2.12	-2.19	-2.43	2.12	2.19	2.43	2.25
36.5	129.1	-2.30	-2.39	-2.72	2.30	2.39	2.72	2.47

SETTLEMENT RELATIONSHIP vs TIME


Remarks:

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For and on behalf of CTS

H. [Redacted] Supervisor

 Approved Signature
 Report date 22-Feb-22

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.2		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J7 Formation Layer	MATERIAL:	Clay/ballast Mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

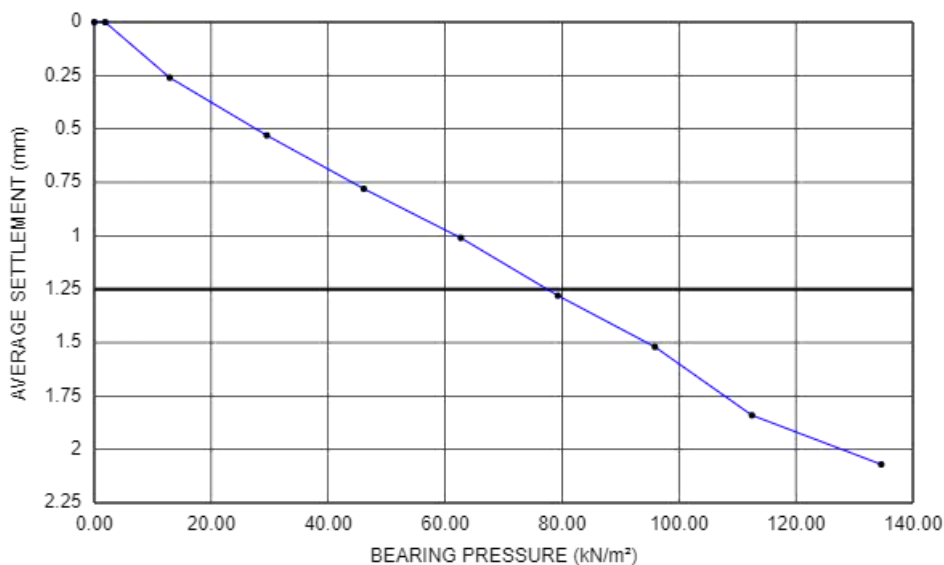
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 135 kN/m²
 Max settlement: 2.07 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 77 kN/m²
 Modulus of subgrade K762: 50 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 8.4%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 8.4 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

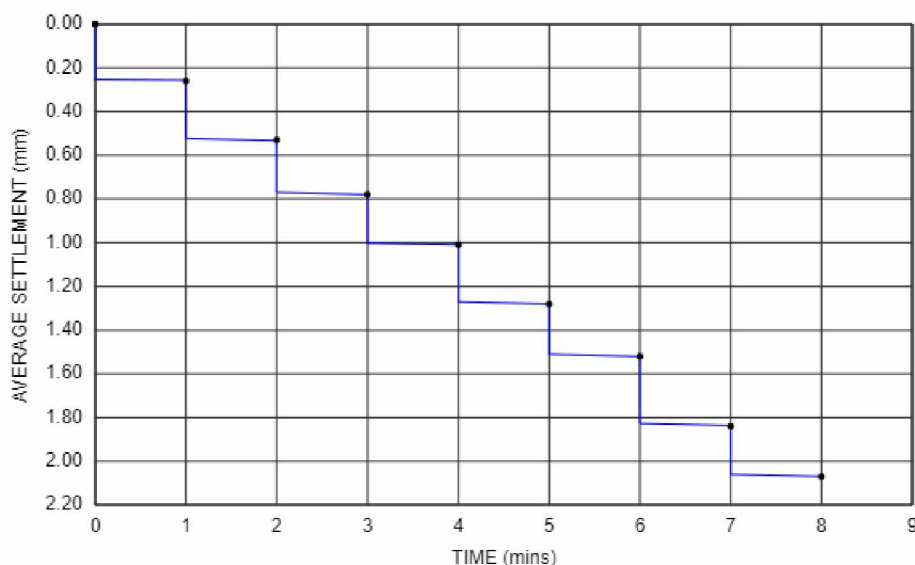
REPORT NUMBER:

C1055642 / 172549.1.1.2

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.9	-0.29	-0.31	-0.17	0.29	0.31	0.17	0.26
8.3	29.5	-0.59	-0.63	-0.38	0.59	0.63	0.38	0.53
13.0	46.1	-0.82	-0.90	-0.62	0.82	0.90	0.62	0.78
17.7	62.7	-1.04	-1.11	-0.88	1.04	1.11	0.88	1.01
22.4	79.3	-1.29	-1.37	-1.18	1.29	1.37	1.18	1.28
27.1	95.9	-1.59	-1.64	-1.33	1.59	1.64	1.33	1.52
31.8	112.5	-1.89	-1.94	-1.68	1.89	1.94	1.68	1.84
38.1	134.6	-2.12	-2.19	-1.90	2.12	2.19	1.90	2.07

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Vir [REDACTED] Operations Supervisor

Approved Signatory

Report date 22-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.3		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K5 Formation Layer	MATERIAL:	Crushed Type 1
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

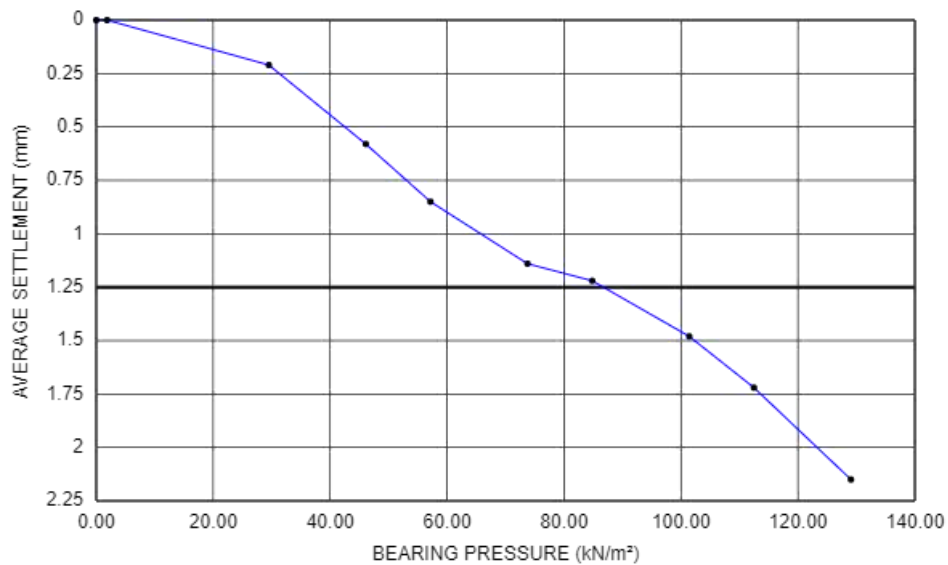
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 129 kN/m²
 Max settlement: 2.15 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 87 kN/m²
 Modulus of subgrade K762: 56 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 10.3%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 10.3 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

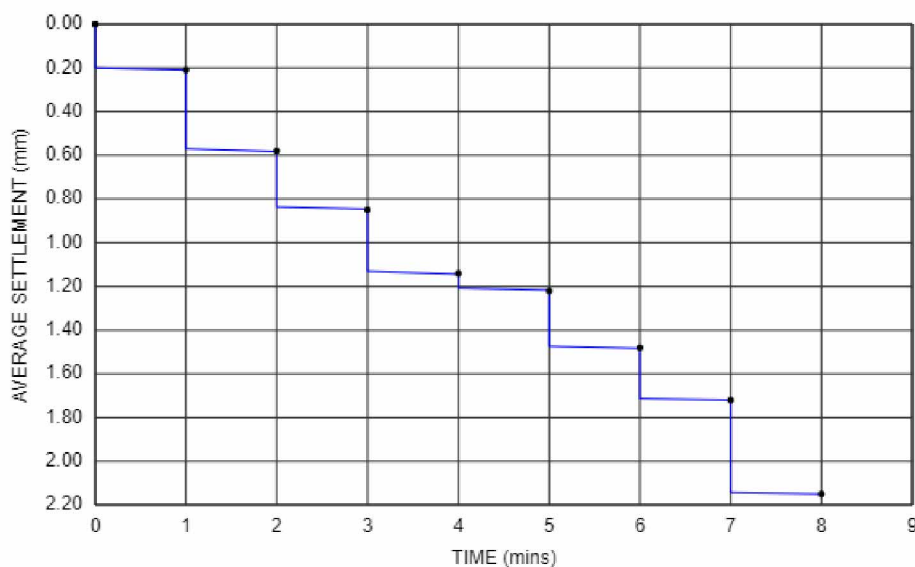
REPORT NUMBER:

C1055642 / 172549.1.1.3

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.5	-0.12	-0.33	-0.18	0.12	0.33	0.18	0.21
13.0	46.1	-0.27	-0.77	-0.71	0.27	0.77	0.71	0.58
16.2	57.2	-0.43	-0.99	-1.12	0.43	0.99	1.12	0.85
20.9	73.8	-0.66	-1.33	-1.44	0.66	1.33	1.44	1.14
24.0	84.8	-0.84	-1.35	-1.46	0.84	1.35	1.46	1.22
28.7	101.4	-1.14	-1.62	-1.69	1.14	1.62	1.69	1.48
31.8	112.5	-1.39	-1.83	-1.94	1.39	1.83	1.94	1.72
36.5	129.1	-1.70	-2.29	-2.46	1.70	2.29	2.46	2.15

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

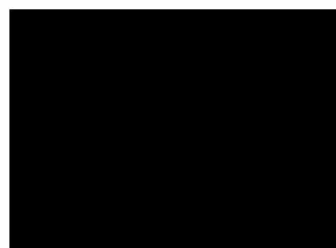
Test results reported relate only to the items tested.

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.4		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K6 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

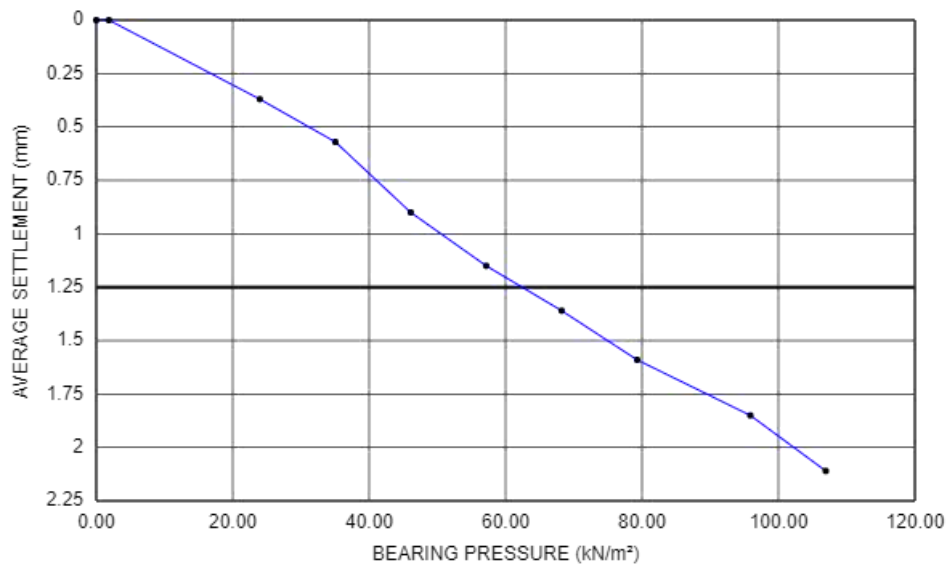
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.11 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 62 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.8%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.8 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

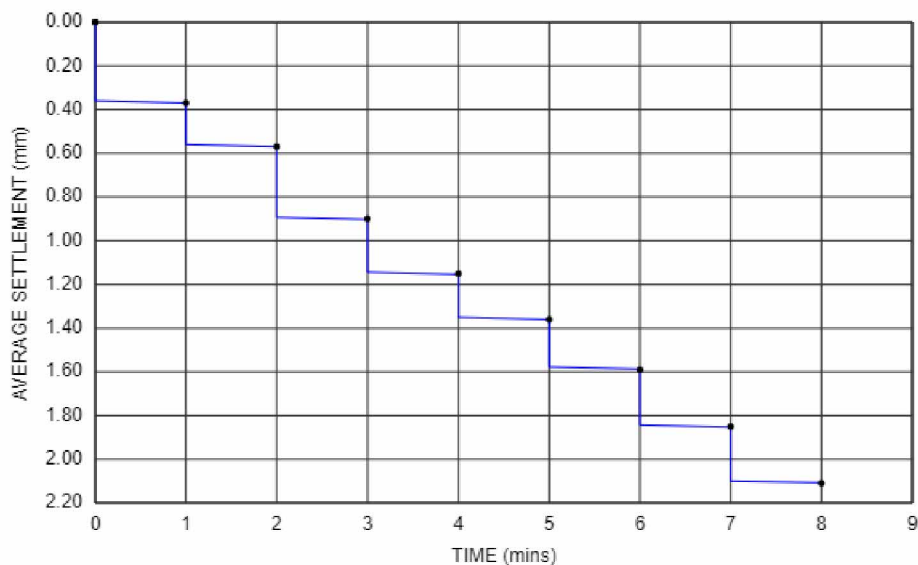
REPORT NUMBER:

C1055642 / 172549.1.1.4

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.8	24.0	-0.44	-0.39	-0.28	0.44	0.39	0.28	0.37
9.9	35.0	-0.60	-0.61	-0.50	0.60	0.61	0.50	0.57
13.0	46.1	-0.87	-0.98	-0.86	0.87	0.98	0.86	0.90
16.2	57.2	-1.05	-1.24	-1.17	1.05	1.24	1.17	1.15
19.3	68.2	-1.22	-1.48	-1.38	1.22	1.48	1.38	1.36
22.4	79.3	-1.48	-1.68	-1.60	1.48	1.68	1.60	1.59
27.1	95.9	-1.72	-1.95	-1.89	1.72	1.95	1.89	1.85
30.2	106.9	-1.98	-2.20	-2.14	1.98	2.20	2.14	2.11

SETTLEMENT RELATIONSHIP vs TIME



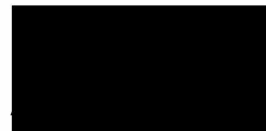
Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Report date 22-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.5		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K7 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

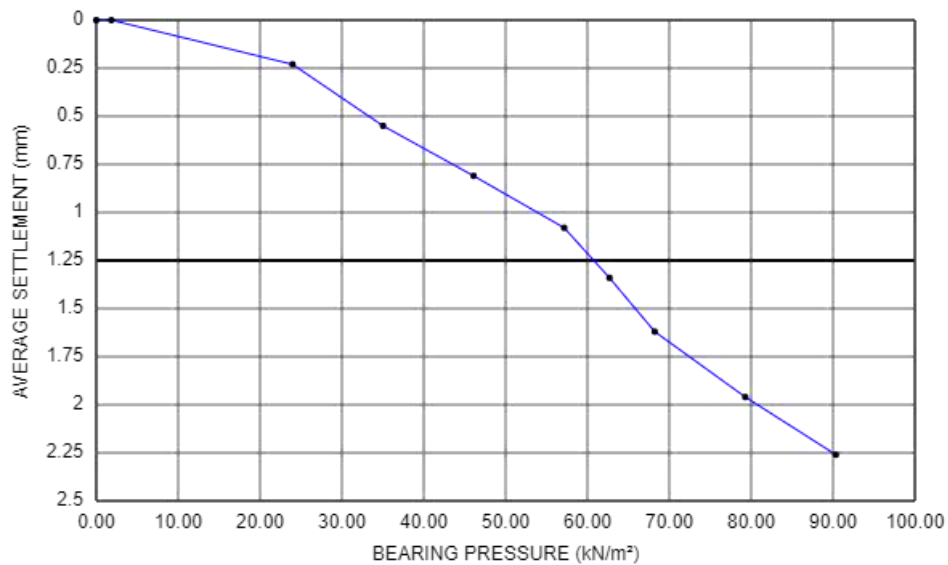
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 90 kN/m²
 Max settlement: 2.26 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 61 kN/m²
 Modulus of subgrade K762: 39 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.5%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.5 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

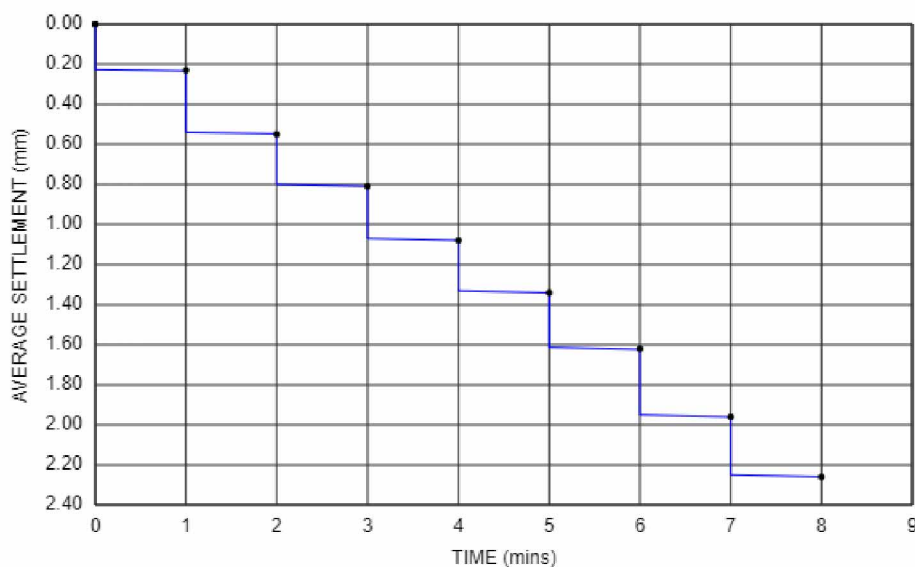
REPORT NUMBER:

C1055642 / 172549.1.1.5

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.8	24.0	-0.21	-0.22	-0.27	0.21	0.22	0.27	0.23
9.9	35.0	-0.42	-0.56	-0.66	0.42	0.56	0.66	0.55
13.0	46.1	-0.59	-0.88	-0.96	0.59	0.88	0.96	0.81
16.2	57.2	-0.73	-1.19	-1.32	0.73	1.19	1.32	1.08
17.7	62.7	-0.89	-1.49	-1.64	0.89	1.49	1.64	1.34
19.3	68.2	-1.07	-1.81	-1.99	1.07	1.81	1.99	1.62
22.4	79.3	-1.35	-2.21	-2.32	1.35	2.21	2.32	1.96
25.5	90.4	-1.59	-2.51	-2.68	1.59	2.51	2.68	2.26

SETTLEMENT RELATIONSHIP vs TIME



Remarks:

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For and on behalf of CTS

Construction Testing Solutions Supervisor

Approved Signatory
Report date 22-Feb-22

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.6		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K8 Formation Layer	MATERIAL:	Clay/Ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

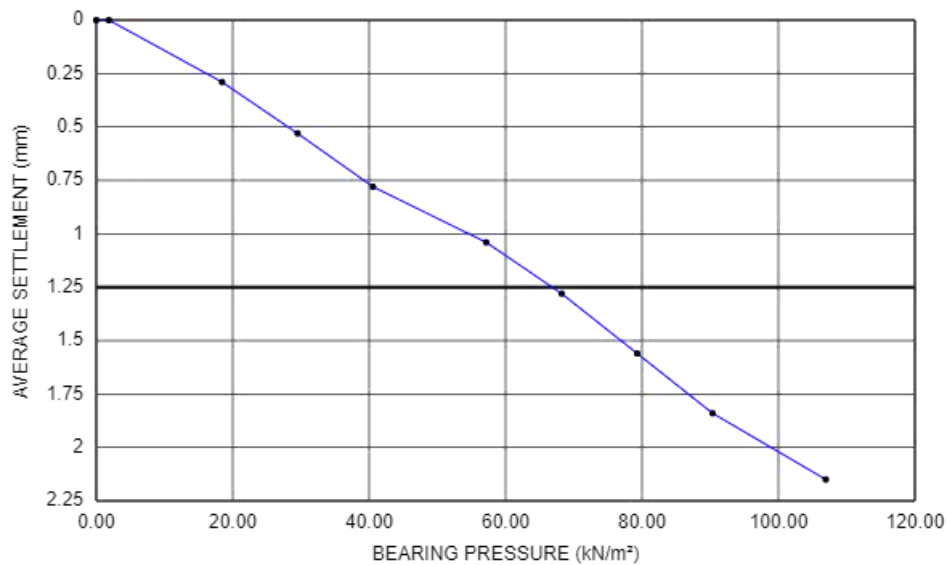
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 107 kN/m²
 Max settlement: 2.15 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 67 kN/m²
 Modulus of subgrade K762: 43 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 6.6%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 6.6 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

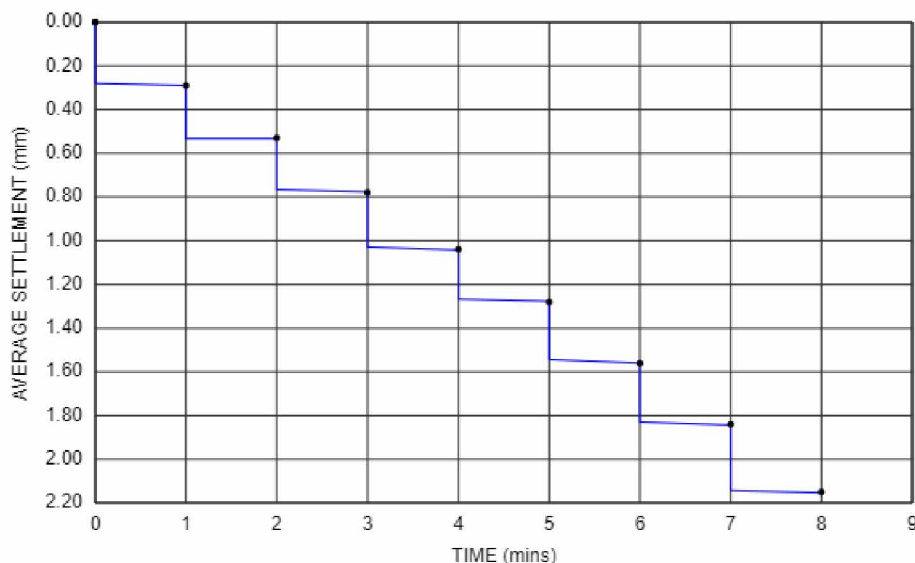
REPORT NUMBER:

C1055642 / 172549.1.1.6

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.2	18.4	-0.29	-0.33	-0.25	0.29	0.33	0.25	0.29
8.3	29.5	-0.53	-0.62	-0.45	0.53	0.62	0.45	0.53
11.5	40.6	-0.76	-0.91	-0.66	0.76	0.91	0.66	0.78
16.2	57.2	-1.01	-1.22	-0.90	1.01	1.22	0.90	1.04
19.3	68.2	-1.25	-1.49	-1.09	1.25	1.49	1.09	1.28
22.4	79.3	-1.51	-1.79	-1.38	1.51	1.79	1.38	1.56
25.5	90.4	-1.75	-2.13	-1.65	1.75	2.13	1.65	1.84
30.2	106.9	-2.05	-2.47	-1.94	2.05	2.47	1.94	2.15

SETTLEMENT RELATIONSHIP vs TIME



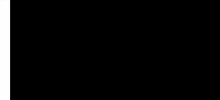
Remarks:

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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory

Report date 22-Feb-22



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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.7		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	K9 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

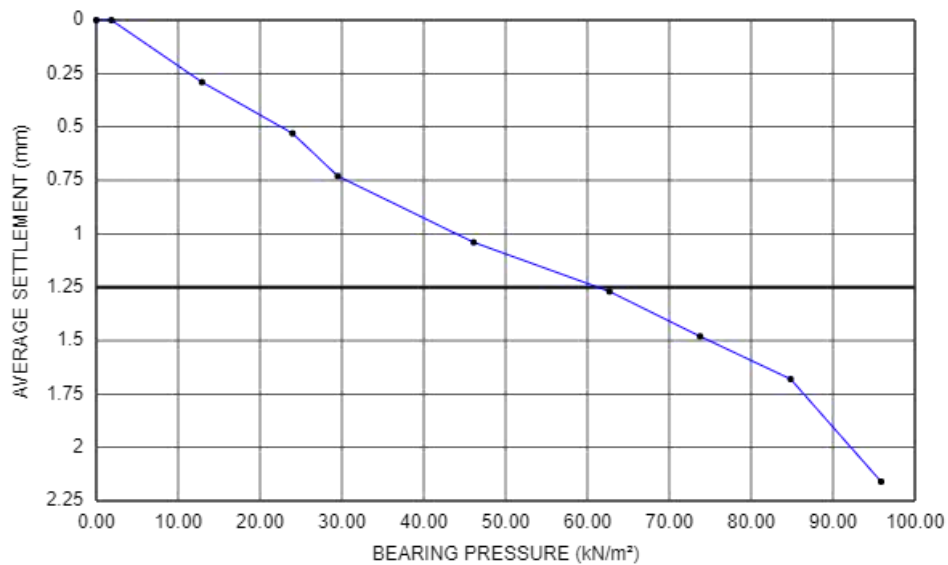
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 96 kN/m²
 Max settlement: 2.16 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 61 kN/m²
 Modulus of subgrade K762: 40 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 5.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 5.7 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

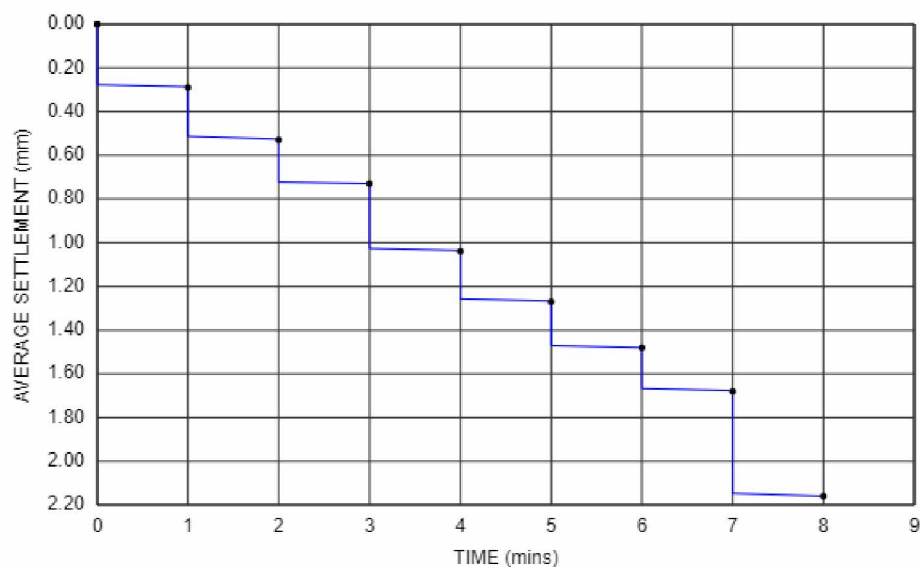
REPORT NUMBER:

C1055642 / 172549.1.1.7

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.9	-0.31	-0.40	-0.15	0.31	0.40	0.15	0.29
6.8	24.0	-0.55	-0.59	-0.44	0.55	0.59	0.44	0.53
8.3	29.5	-0.78	-0.78	-0.63	0.78	0.78	0.63	0.73
13.0	46.1	-1.10	-1.07	-0.94	1.10	1.07	0.94	1.04
17.7	62.7	-1.33	-1.31	-1.16	1.33	1.31	1.16	1.27
20.9	73.8	-1.57	-1.52	-1.35	1.57	1.52	1.35	1.48
24.0	84.8	-1.78	-1.72	-1.53	1.78	1.72	1.53	1.68
27.1	95.9	-2.30	-2.24	-1.94	2.30	2.24	1.94	2.16

SETTLEMENT RELATIONSHIP vs TIME



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For and on behalf of CTS
Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 22-Feb-22

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.8		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	J8 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

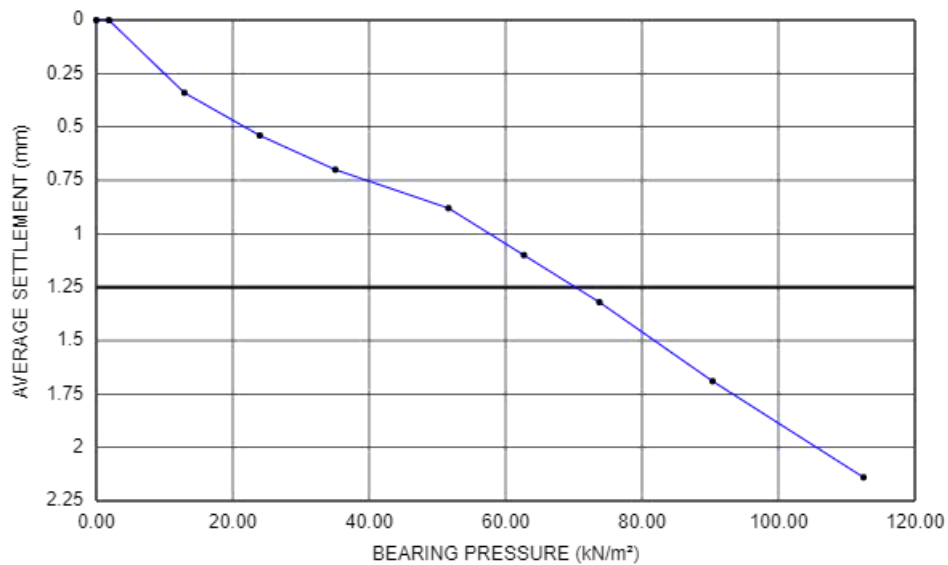
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 112 kN/m²
 Max settlement: 2.14 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 70 kN/m²
 Modulus of subgrade K762: 45 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.1%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.1 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)

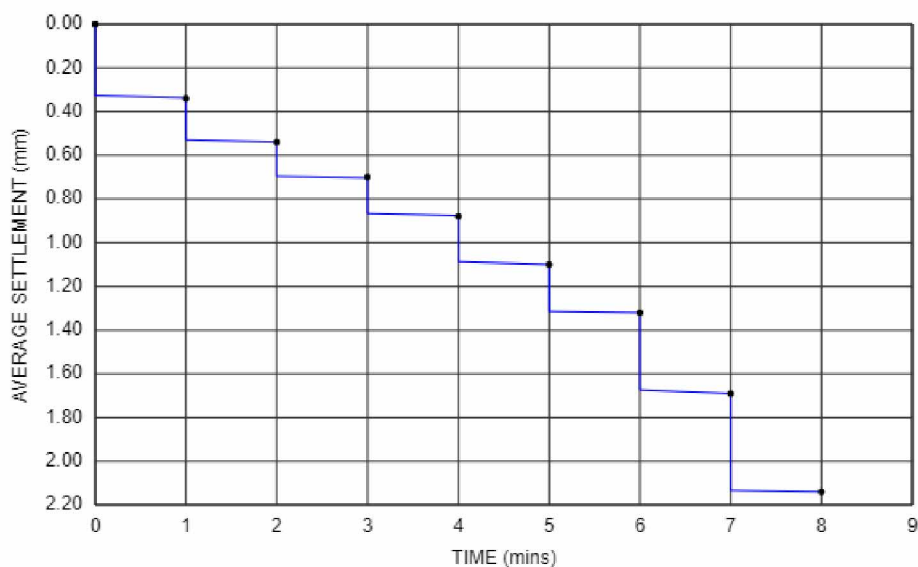
REPORT NUMBER:

C1055642 / 172549.1.1.8

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6	12.9	-0.38	-0.53	-0.10	0.38	0.53	0.10	0.34
6.8	24.0	-0.63	-0.80	-0.19	0.63	0.80	0.19	0.54
9.9	35.0	-0.84	-0.99	-0.28	0.84	0.99	0.28	0.70
14.6	51.6	-1.05	-1.23	-0.35	1.05	1.23	0.35	0.88
17.7	62.7	-1.33	-1.51	-0.46	1.33	1.51	0.46	1.10
20.9	73.8	-1.60	-1.78	-0.58	1.60	1.78	0.58	1.32
25.5	90.4	-2.05	-2.22	-0.80	2.05	2.22	0.80	1.69
31.8	112.5	-2.61	-2.82	-0.99	2.61	2.82	0.99	2.14

SETTLEMENT RELATIONSHIP vs TIME



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For and on behalf of CTS

Vincent Faulkner - Operations Supervisor



Approved Signatory
Report date 22-Feb-22

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TEST REPORT:	Determination of Equivalent CBR Value		
	In-house Test Procedure STP S8 & Interim Advice Note 73/06 Revision 1 (2009) Design Guidance for Road Pavement Foundations (DRAFT HD25)		
REPORT NUMBER:	C1055642 / 172549.1.1.9		
CLIENT REF:	1055642	CLIENT:	Collins Earthworks Limited
DATE COMPLETED:	22/02/2022	ADDRESS:	Whiteley Road, Ripley, Derbyshire, DE5 3QL
TESTED BY:	Thomas Cook	SITE:	Havant, Portsmouth
LOCATION:	H8 Formation Layer	MATERIAL:	Clay/ballast mix
DISTANCE FROM EDGE OF PLATE TO WALL:	N/A	SUPPLIER:	Site Won
TEST METHOD:	Incremental Plate Loading	SOURCE:	In-Situ
SAMPLING PLAN:	Client Specification	SAMPLE TAKEN:	No

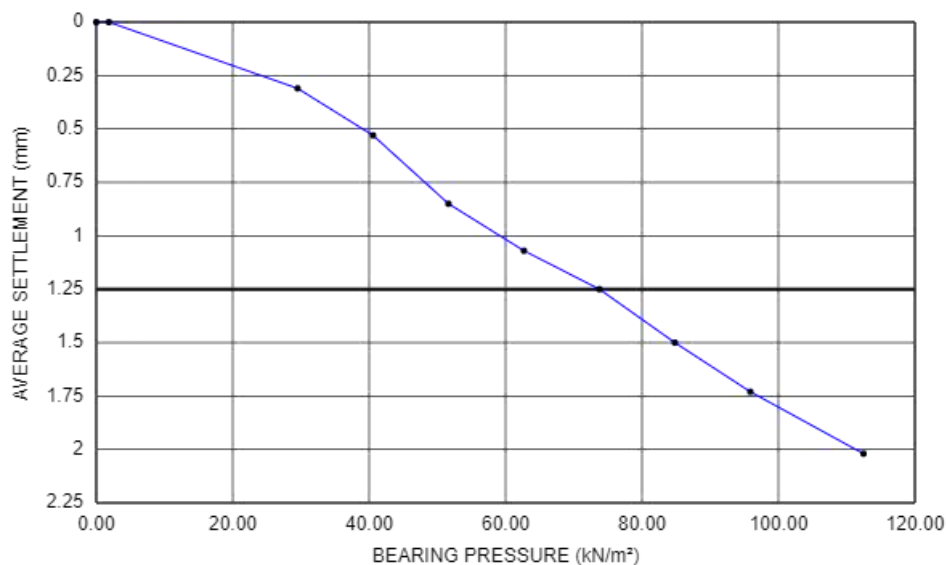
Equipment Details

Type of Kentledge: 18 Ton Excavator
 Plate Diameter: 600 mm
 Plate Area: 0.282743 m²
 Plate Correction: 0.80

Results

Max applied pressure: 112 kN/m²
 Max settlement: 2.02 mm
 Avg Bearing Pressure (P) at 1.25mm penetration: 74 kN/m²
 Modulus of subgrade K762: 47 kN/m²/mm
 Equivalent C.B.R Value at 1.25mm penetration: 7.7%

APPLIED LOAD vs SETTLEMENT RELATIONSHIP



Equivalent C.B.R Value: 7.7 %

Remarks:

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TEST REPORT:

Determination of Equivalent CBR Value

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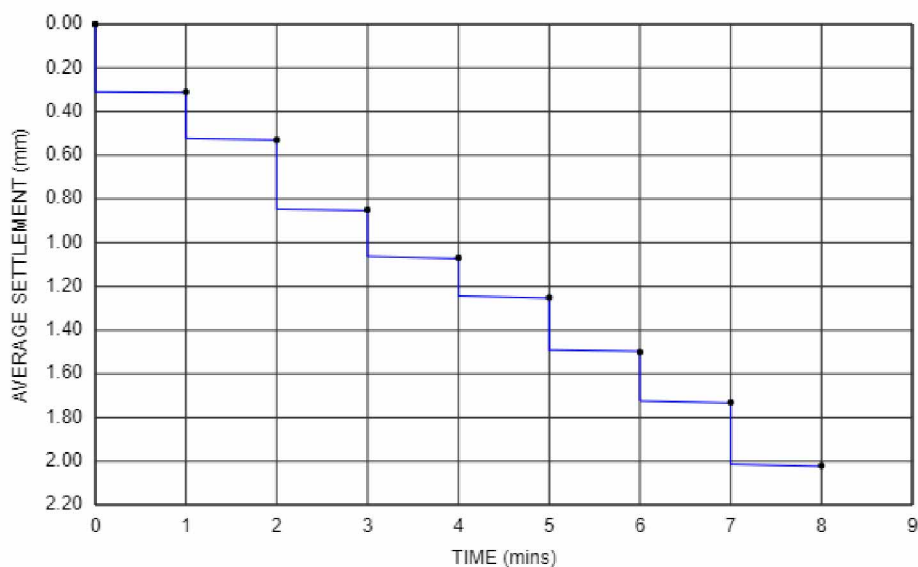
REPORT NUMBER:

C1055642 / 172549.1.1.9

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
0.5	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.3	29.5	-0.11	-0.52	-0.31	0.11	0.52	0.31	0.31
11.5	40.6	-0.28	-0.77	-0.54	0.28	0.77	0.54	0.53
14.6	51.6	-0.54	-1.12	-0.90	0.54	1.12	0.90	0.85
17.7	62.7	-0.70	-1.32	-1.20	0.70	1.32	1.20	1.07
20.9	73.8	-0.84	-1.50	-1.42	0.84	1.50	1.42	1.25
24.0	84.8	-1.04	-1.73	-1.72	1.04	1.73	1.72	1.50
27.1	95.9	-1.22	-1.97	-2.01	1.22	1.97	2.01	1.73
31.8	112.5	-1.49	-2.20	-2.38	1.49	2.20	2.38	2.02

SETTLEMENT RELATIONSHIP vs TIME



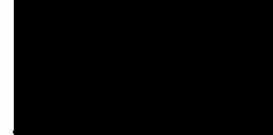
Remarks:

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For and on behalf of CTS

Supervisor



Report date 22-Feb-22



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