



LABORATORY
REPORT



4043

Contract Number: PSL21/2585

Report Date: 30 March 2021

Client’s Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 29/3/2021
Date Commenced: 29/3/2021
Date Completed: 30/3/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Checked and Approved Signatories:

A Watkins
(Director)

R Berriman
(Quality Manager)


S Royle
(Laboratory Manager)

L Knight
(Senior Technician)

S Eyre
(Senior Technician)

T Watkins
(Senior Technician)

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awatkins@prosoils.co.uk

APPENDIX E: PLATE LOAD TESTING LOGS

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:

29-Mar-21

Test Position:

TP OBC-03

Depth (m):

0.50

Plate Area (m2):

0.1625971

Type of Kentledge:

Tracked

Maximum Applied Pressure (kPa):

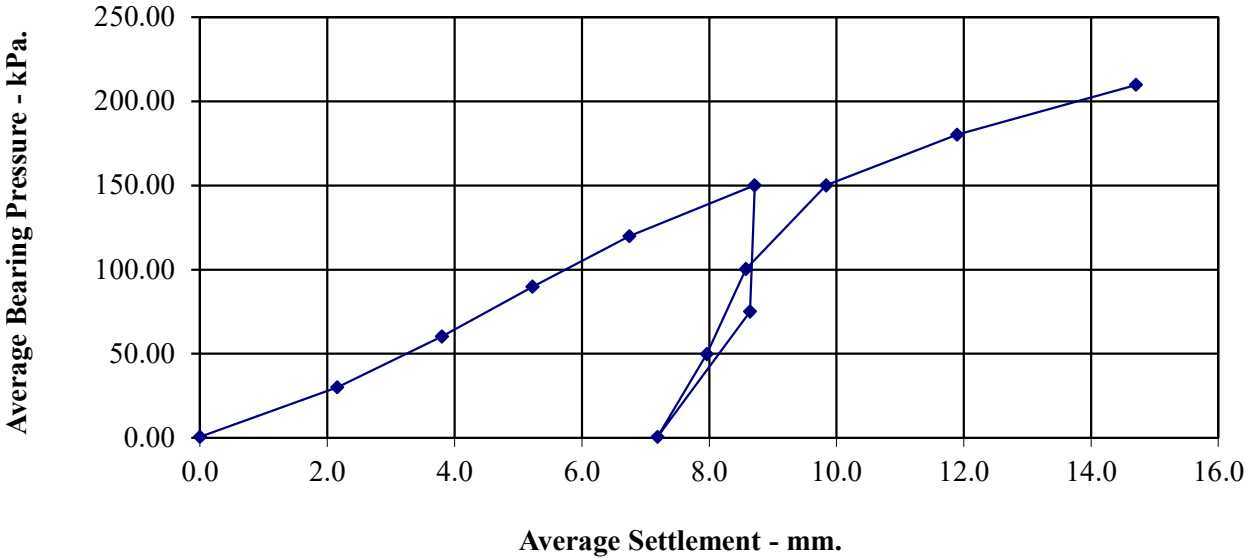
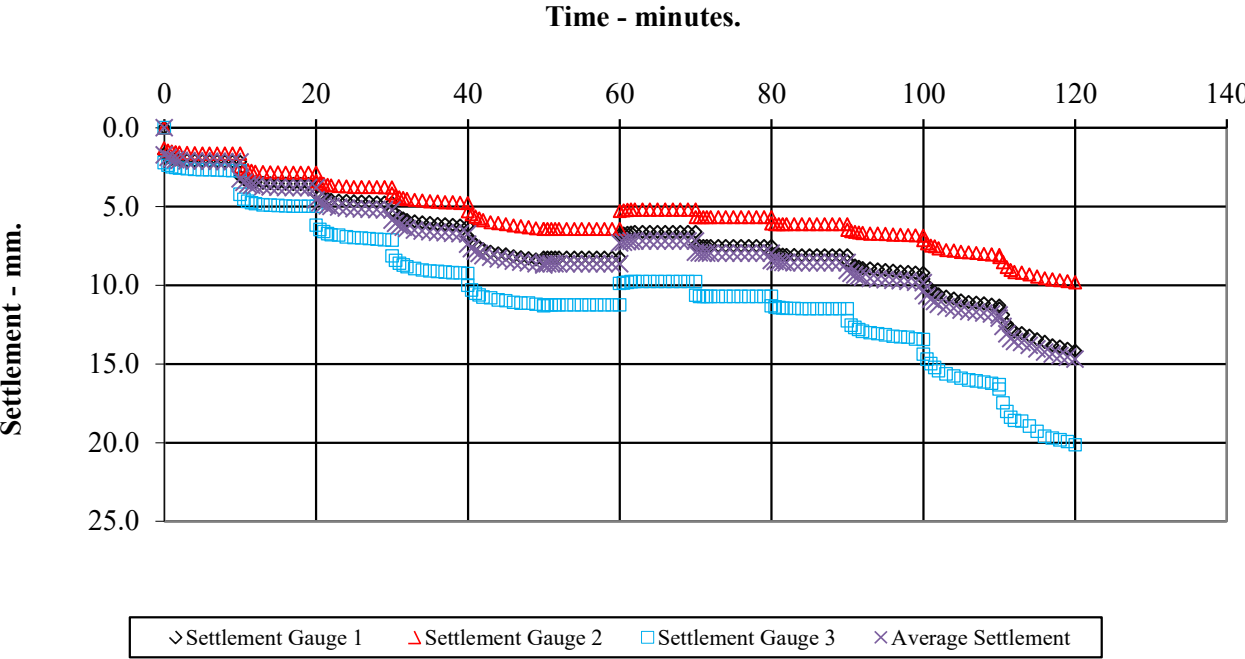
209.73

Maximum Deformation (mm):

14.71

Description:

Sub-Soil



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

29-Mar-21

Test Position

TP OBC-03

Depth (m)

0.50

Description

Sub-Soil

Maximum Deflection

14.71

mm

Deflection required for CBR value

1.25

mm

Load at 1.25mm

18

kN/m²

Plate diameter

455

mm

Conversion factor for plate diameter

0.629

K₇₆₂(modulus of subgrade reaction)
calculated using 1.25mm settlement

8.9

kN/m²/mm

CBR Value

0.4

%

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:29-Mar-21

Test Position:TP OBC-05

Plate Area (m2):0.1625971

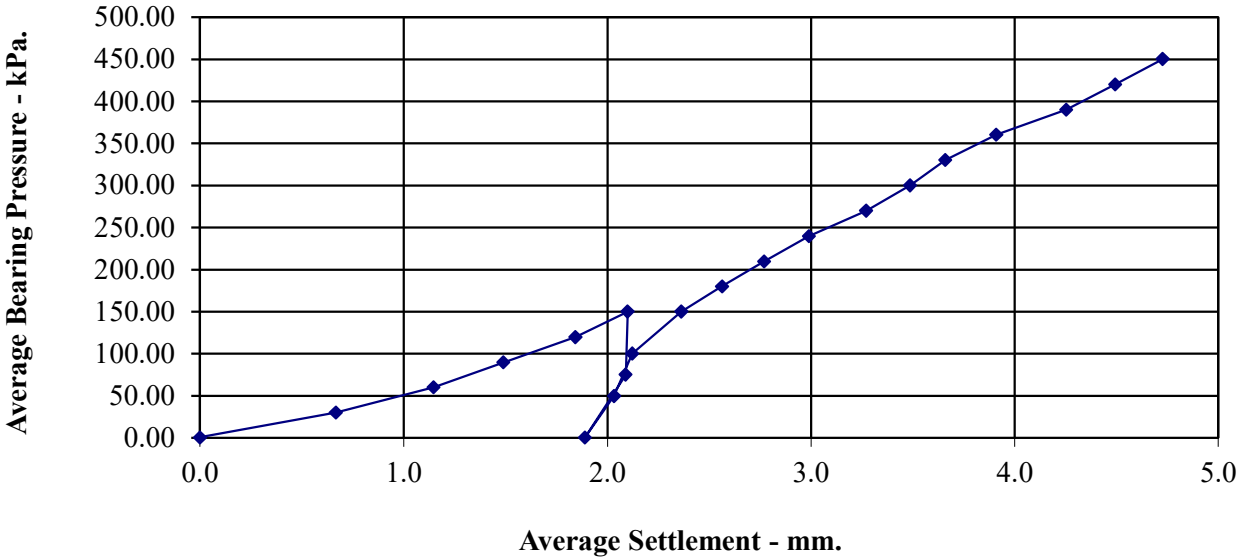
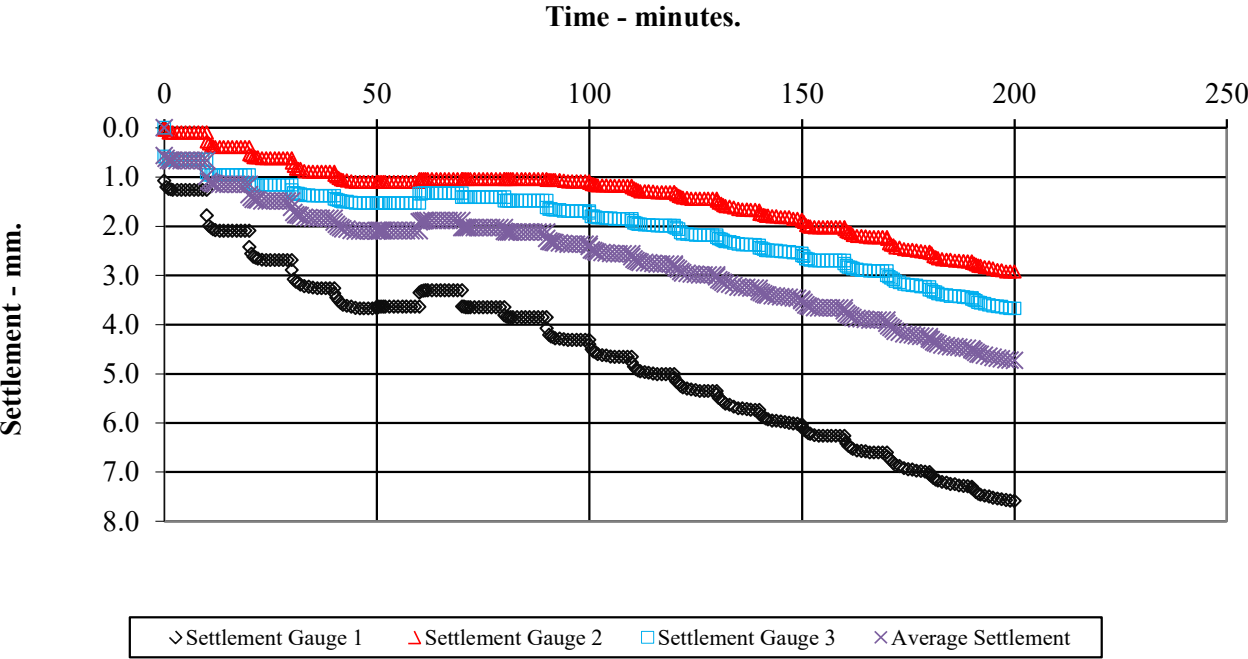
Maximum Applied Pressure (kPa):450.20

Maximum Deformation (mm):4.73

Description:Sub-Soil

Depth (m):0.45

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test29-Mar-21

Test PositionTP OBC-05

Depth (m)0.45

DescriptionSub-Soil

Maximum Deflection4.73mm

Deflection required for CBR value1.25mm

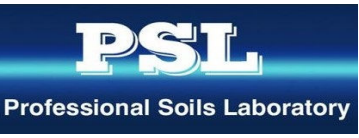
Load at 1.25mm69kN/m²

Plate diameter455mm

Conversion factor for plate diameter0.629

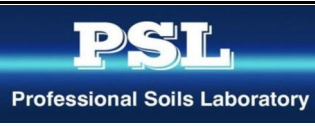
K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement34.8kN/m²/mm

CBR Value4.5%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/2585
Client Ref:



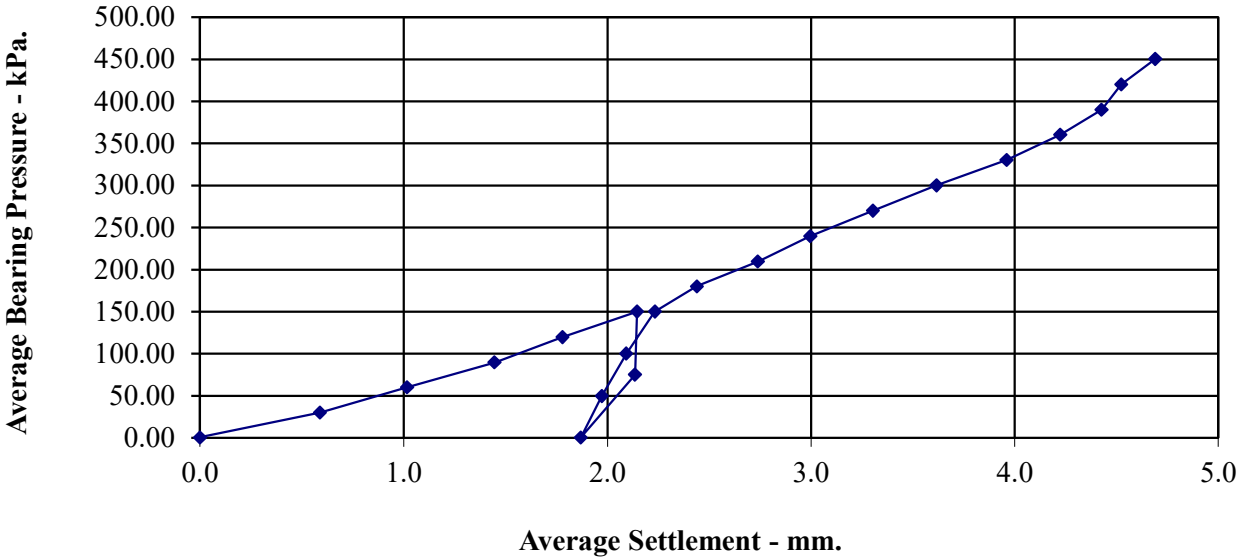
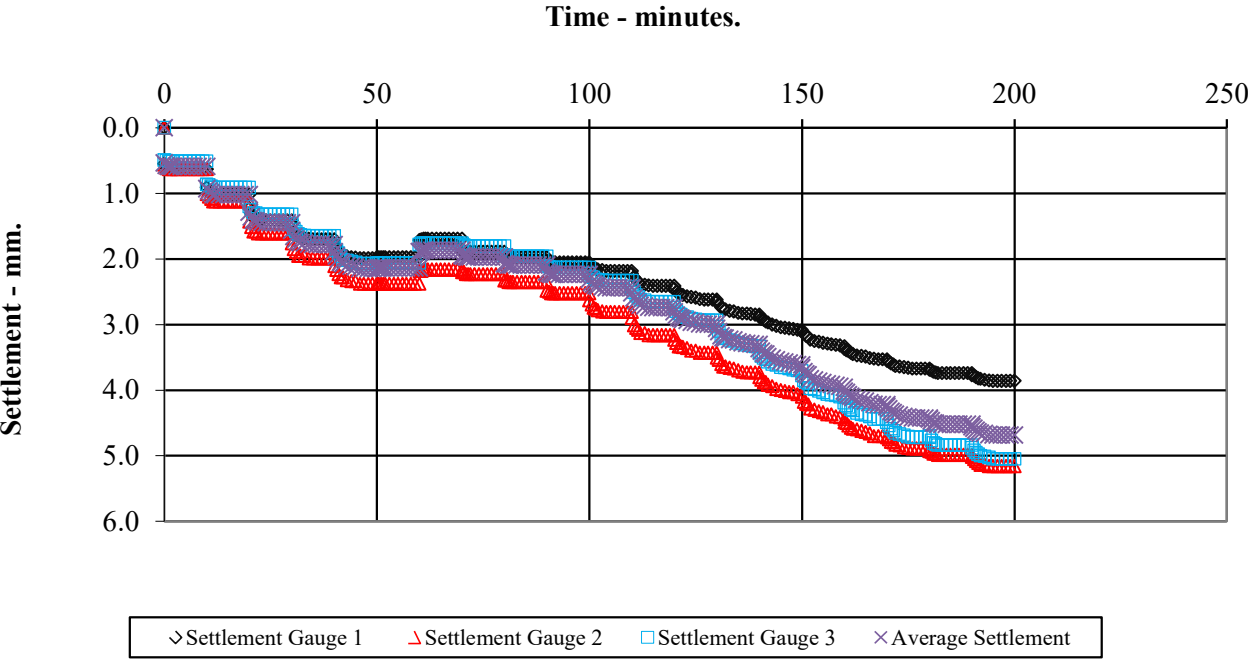
Home Farm, High Street, Cambridge

Contract No:
PSL21/2585
Client Ref:

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	29-Mar-21		
Test Position:	TP OBC-06	Depth (m):	0.50
Plate Area (m2):	0.1625971	Type of Kentledge:	Tracked
Maximum Applied Pressure (kPa):	450.20		
Maximum Deformation (mm):	4.69		
Description:	Sub-Soil		

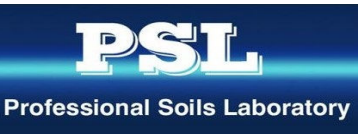


Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test	29-Mar-21	
Test Position	TP OBC-06	
Depth (m)	0.50	
Description	Sub-Soil	
Maximum Deflection	4.69	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	76	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	38.4	kN/m ² /mm
CBR Value	5.4	%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/2585
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/2585
Client Ref:



LABORATORY REPORT



4043

Contract Number: PSL21/2555

Report Date: 29 March 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/3/2021

Date Commenced: 26/3/2021

Date Completed: 29/3/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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awatkins@prosoils.co.uk

Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 26-Mar-21

Test Position: TP OBC-08

Depth (m): 0.50

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

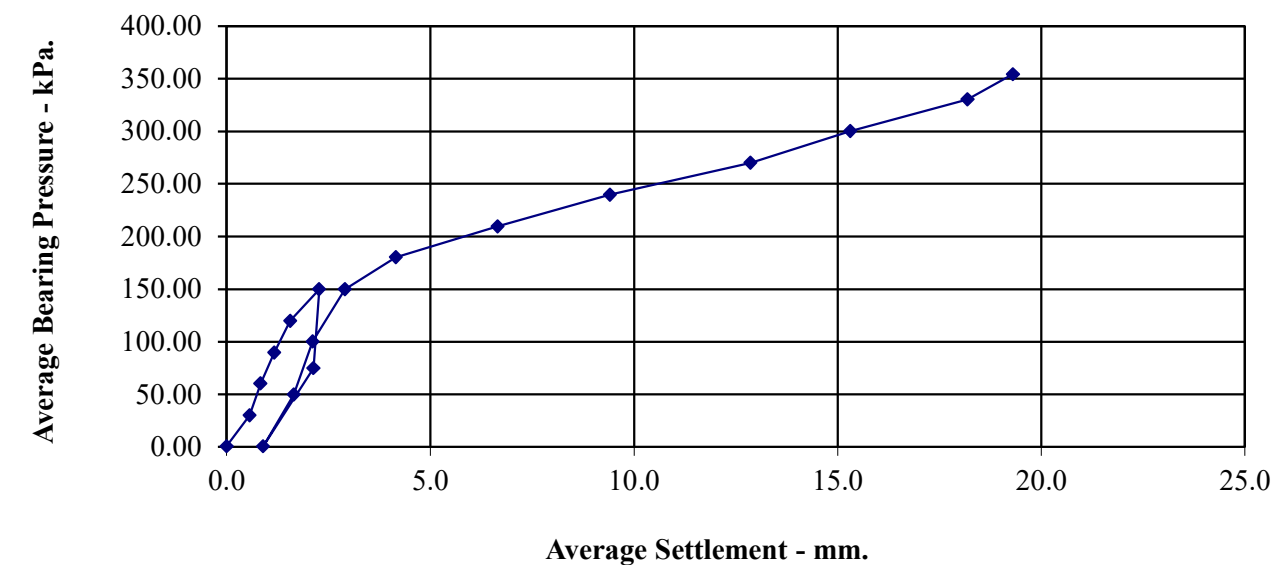
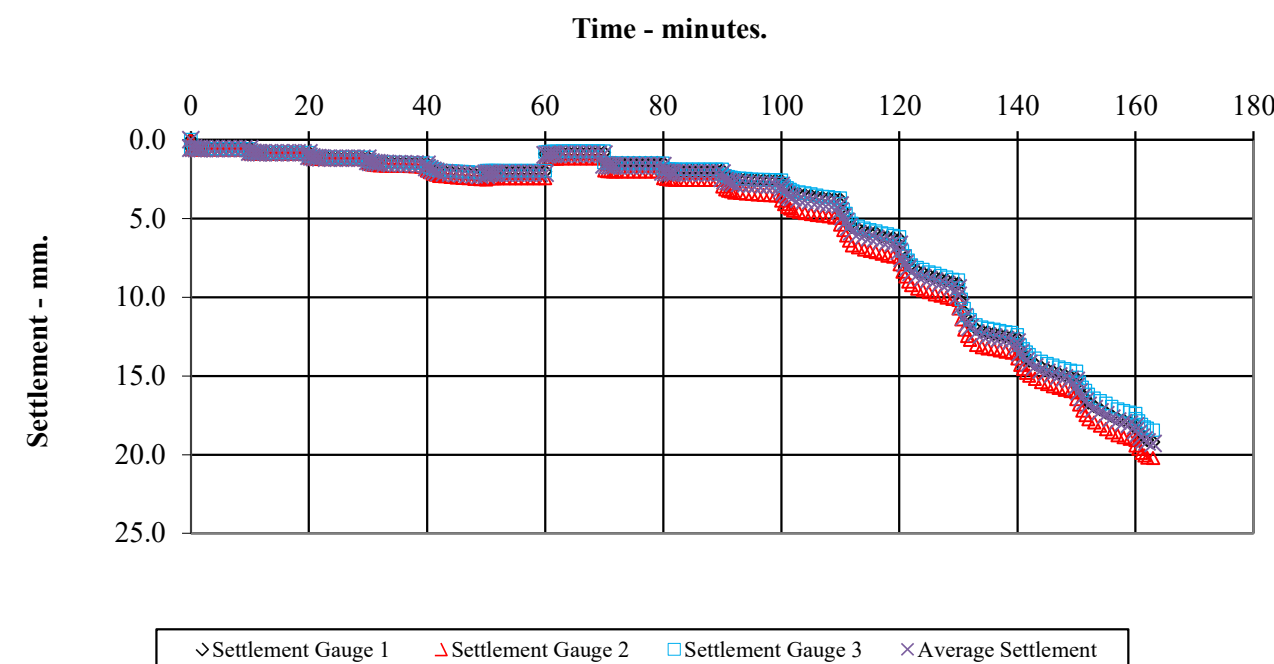
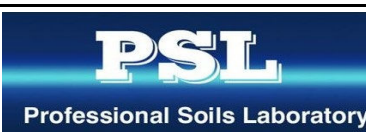
209.73

Maximum Deformation (mm):

19.30

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/2555

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test 26-Mar-21
Test Position TP OBC-08
Depth (m) 0.50

Contract Number: PSL21/3381

Description Sub-Soil

Maximum Deflection	19.30	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	153	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 77.0	 kN/m²/mm
 CBR Value	 17.9	 %

Report Date: 29 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/4/2021
 Date Commenced: 26/4/2021
 Date Completed: 27/4/2021

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 awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:29-Apr-21

Test Position:TP-OBC-09

Plate Area (m2):0.1625971

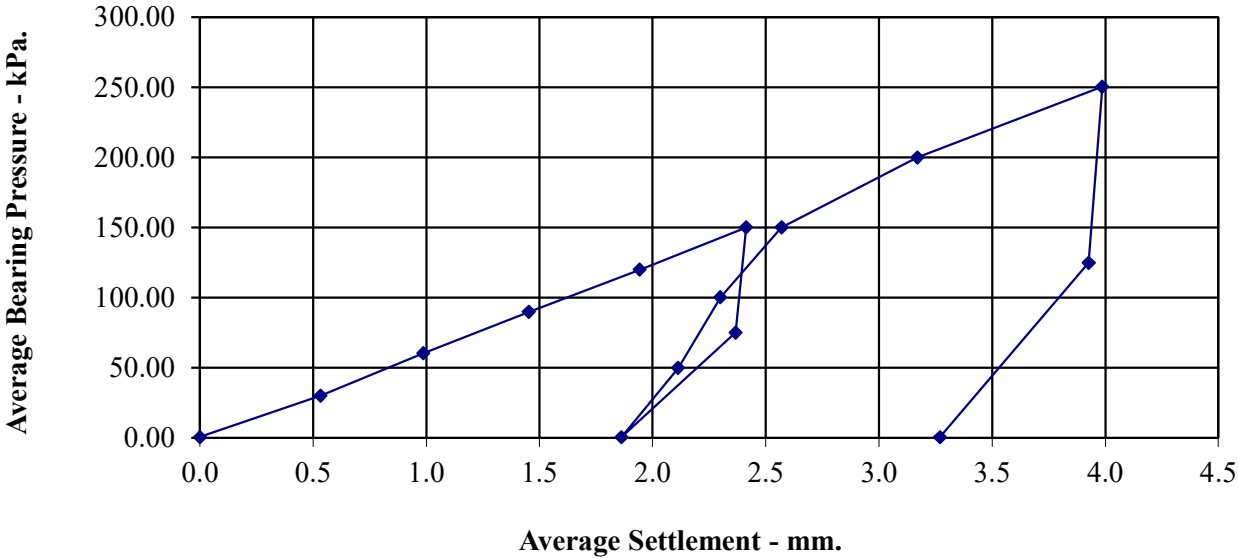
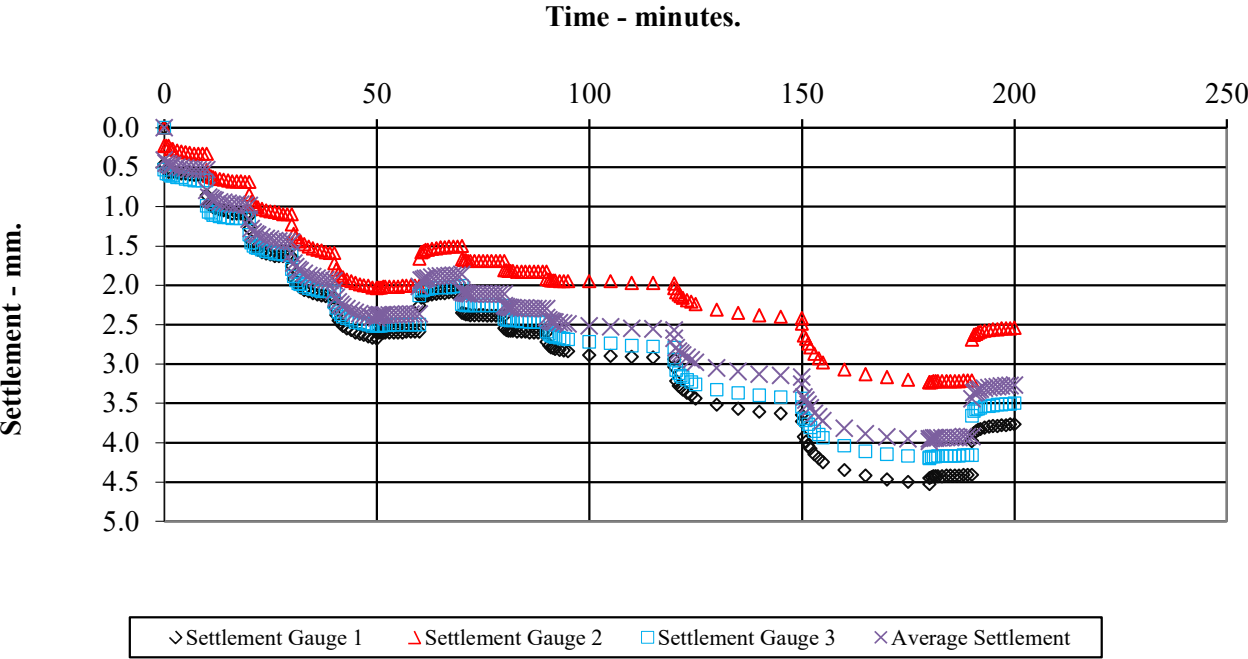
Maximum Applied Pressure (kPa):250.32

Maximum Deformation (mm):3.99

Description:Sub-Soil

Depth (m):0.40

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test29-Apr-21

Test PositionTP-OBC-09

Depth (m)0.40

DescriptionSub-Soil

Maximum Deflection3.99mm

Deflection required for CBR value1.25mm

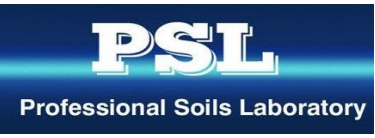
Load at 1.25mm77kN/m²

Plate diameter455mm

Conversion factor for plate diameter0.629

K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement38.7kN/m²/mm

CBR Value5.4%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/3381
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/3381
Client Ref:



LABORATORY REPORT



4043

Contract Number: PSL21/3381

Report Date: 29 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/4/2021

Date Commenced: 26/4/2021

Date Completed: 29/4/2021

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VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 28-Apr-21

Test Position: OBC-13

Depth (m): -

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

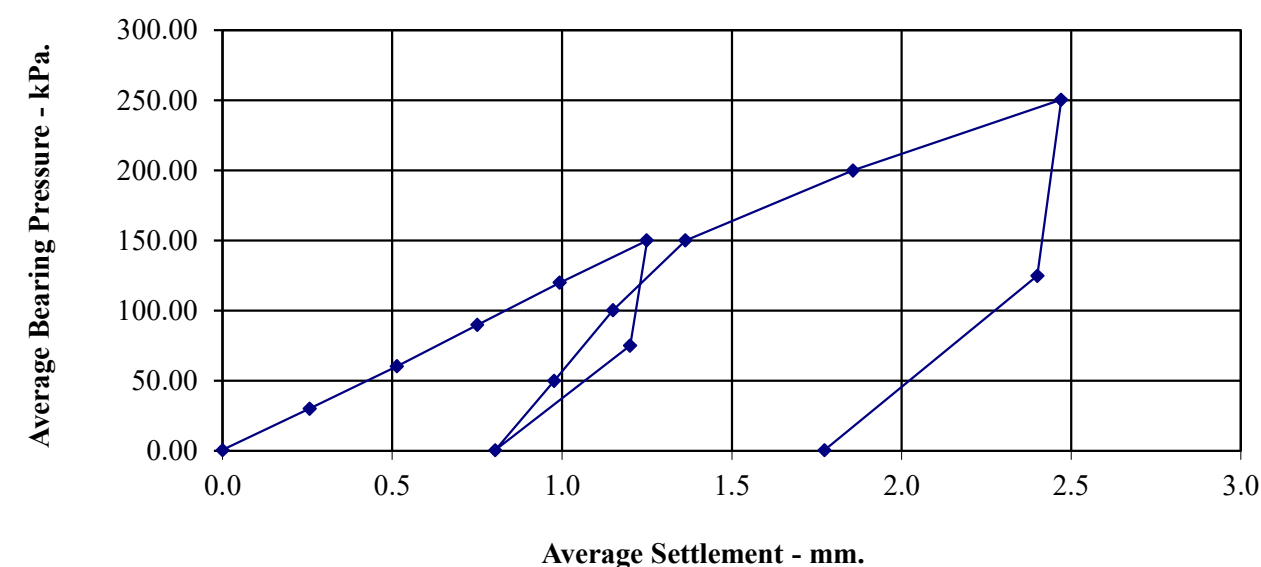
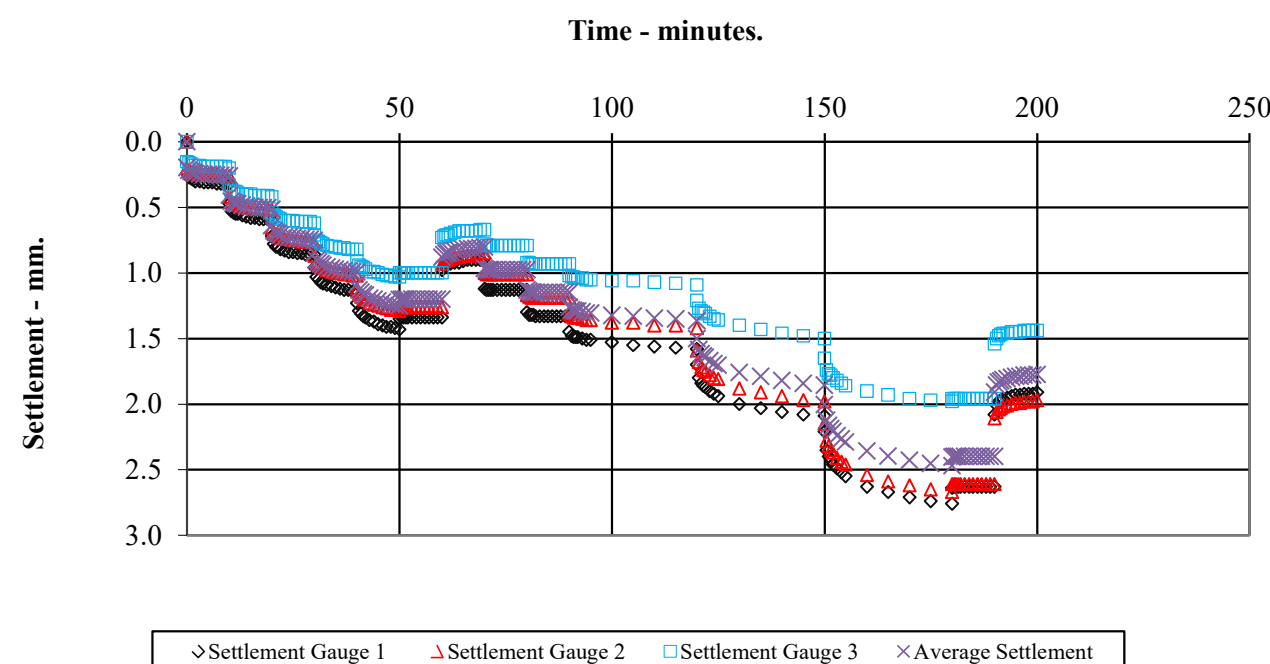
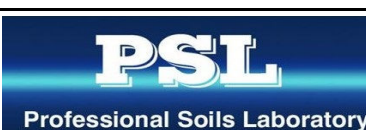
250.32

Maximum Deformation (mm):

2.47

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3381

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test **28-Apr-21**
Test Position **OBC-13**
Depth (m) **-**

Contract Number: PSL21/3381

Description **Sub-Soil**

Maximum Deflection	2.47	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	150	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 75.5	 kN/m²/mm
 CBR Value	 17.3	 %

Report Date: 27 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/4/2021
 Date Commenced: 26/4/2021
 Date Completed: 27/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:26-Apr-21

Test Position:TP PTR-02

Plate Area (m2):0.1625971

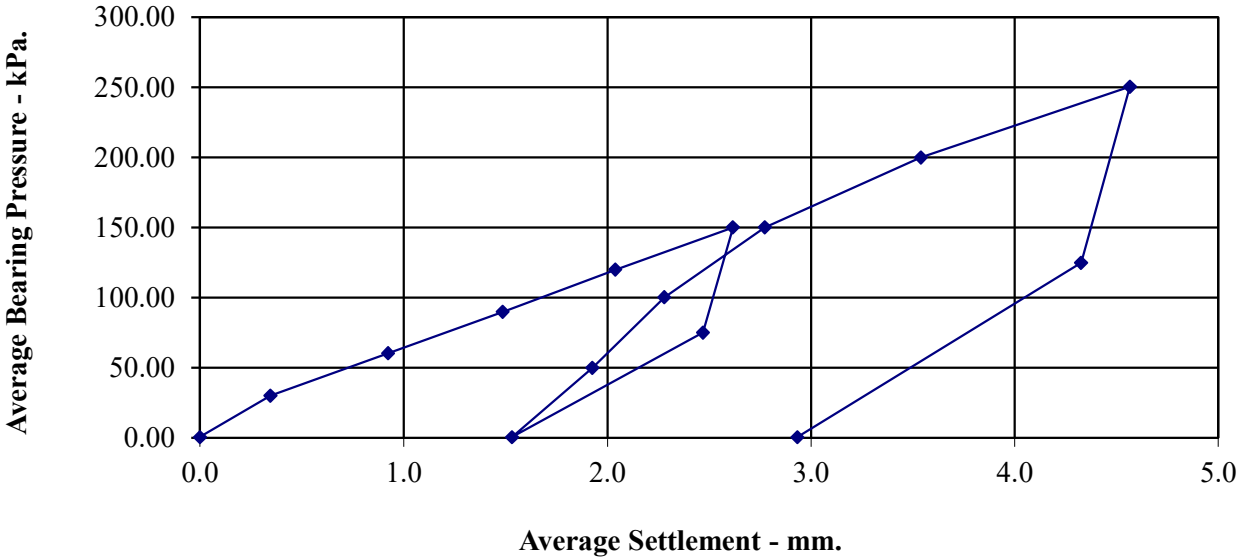
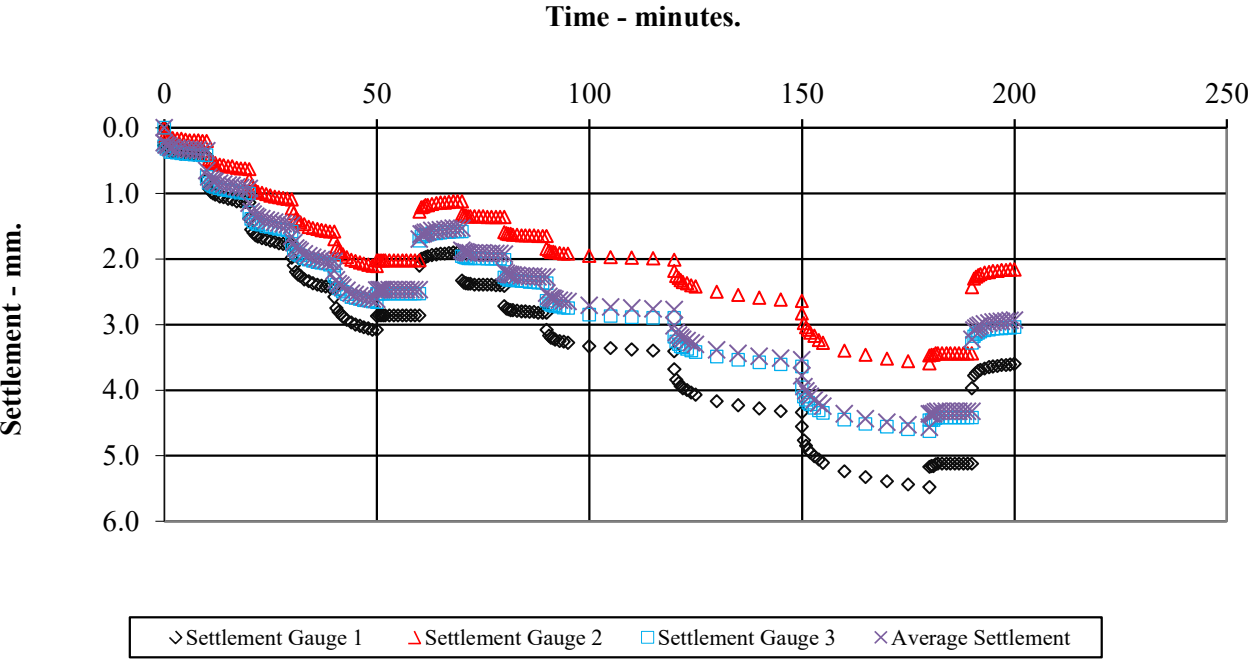
Maximum Applied Pressure (kPa):250.32

Maximum Deformation (mm):4.57

Description:Sub-Soil

Depth (m):-

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

Test Position

Depth (m)

Description

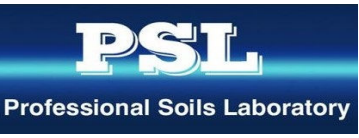
26-Apr-21

TP PTR-02

-

Sub-Soil

Maximum Deflection	4.57	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	77	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	39.0	kN/m ² /mm
CBR Value	5.5	%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/3381
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/3381
Client Ref:

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:26-Apr-21

Test Position:TP PTR-05

Plate Area (m2):0.1625971

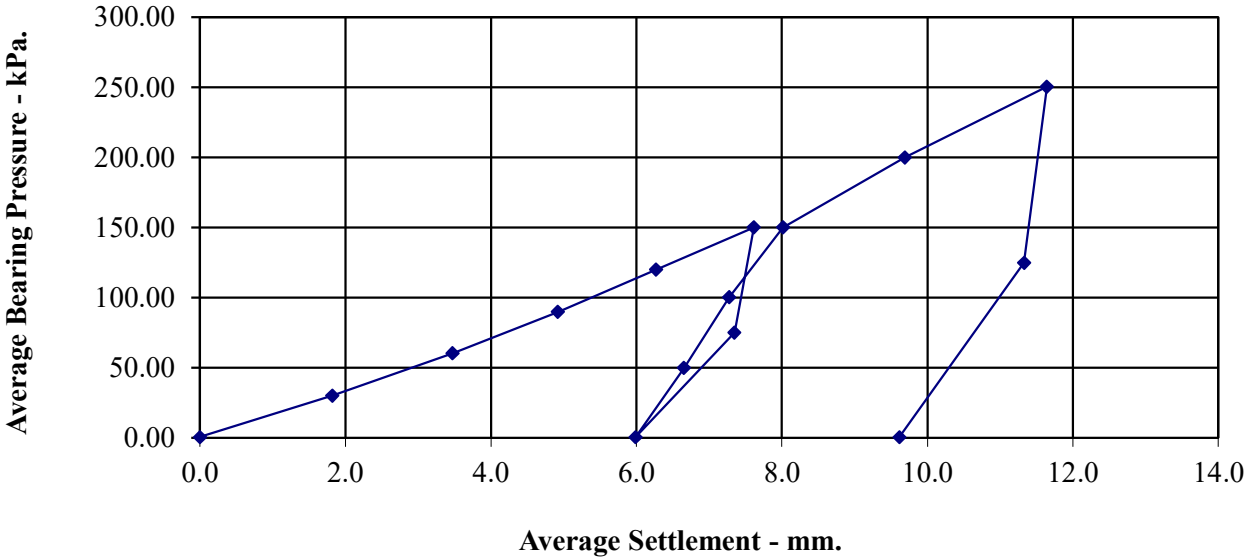
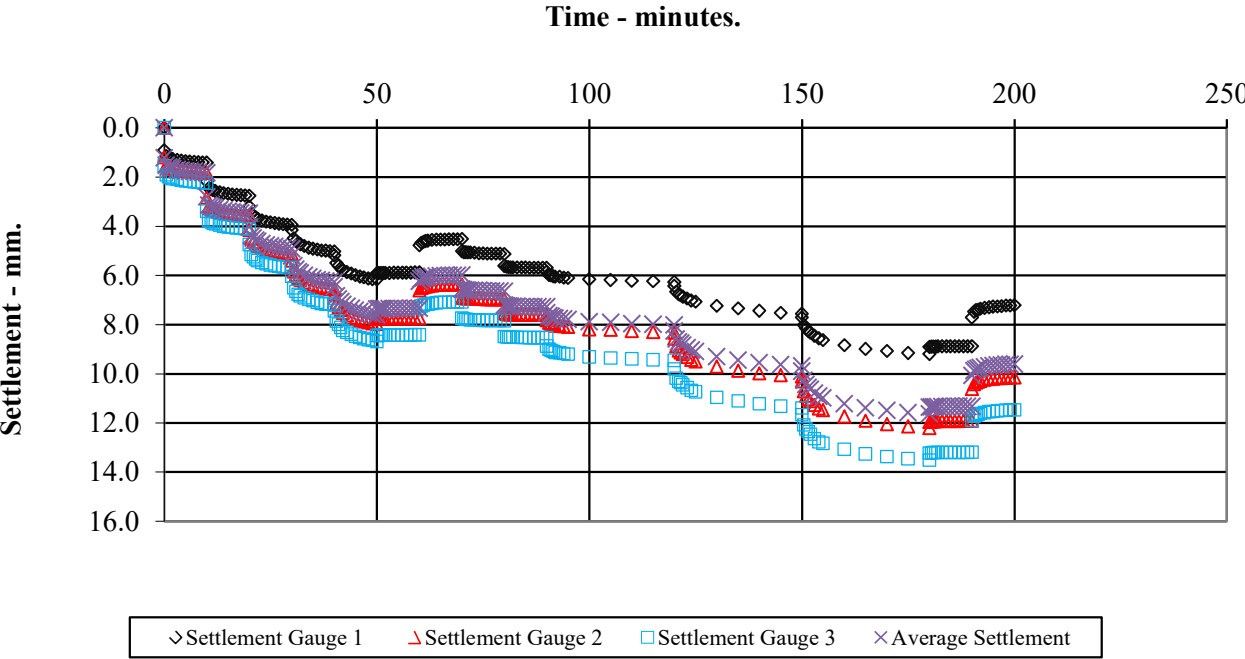
Maximum Applied Pressure (kPa):250.32

Maximum Deformation (mm):11.64

Description:Sub-Soil

Depth (m):0.30

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

Test Position

Depth (m)

Description

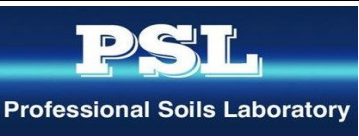
26-Apr-21

TP PTR-05

0.30

Sub-Soil

Maximum Deflection	11.64	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	21	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	10.5	kN/m ² /mm
CBR Value	0.6	%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/3381
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/3381
Client Ref:



LABORATORY REPORT



4043

Contract Number: PSL21/3174

Report Date: 23 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 19/4/2021

Date Commenced: 19/4/2021

Date Completed: 20/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 23-Apr-21

Test Position: TP PTR-06

Depth (m): 0.50

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

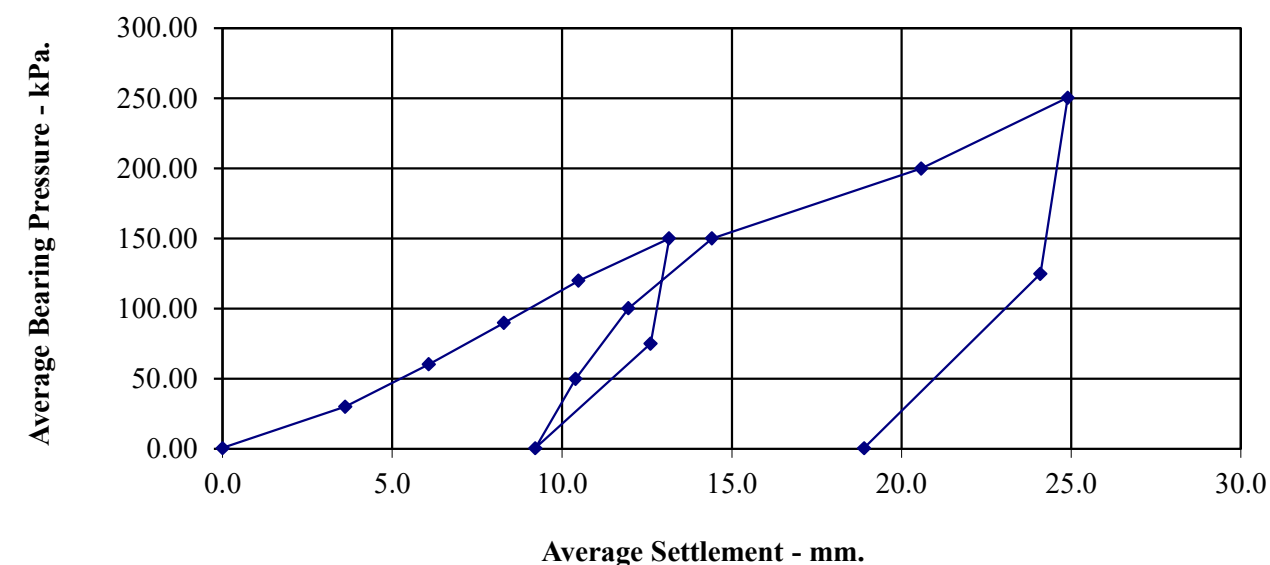
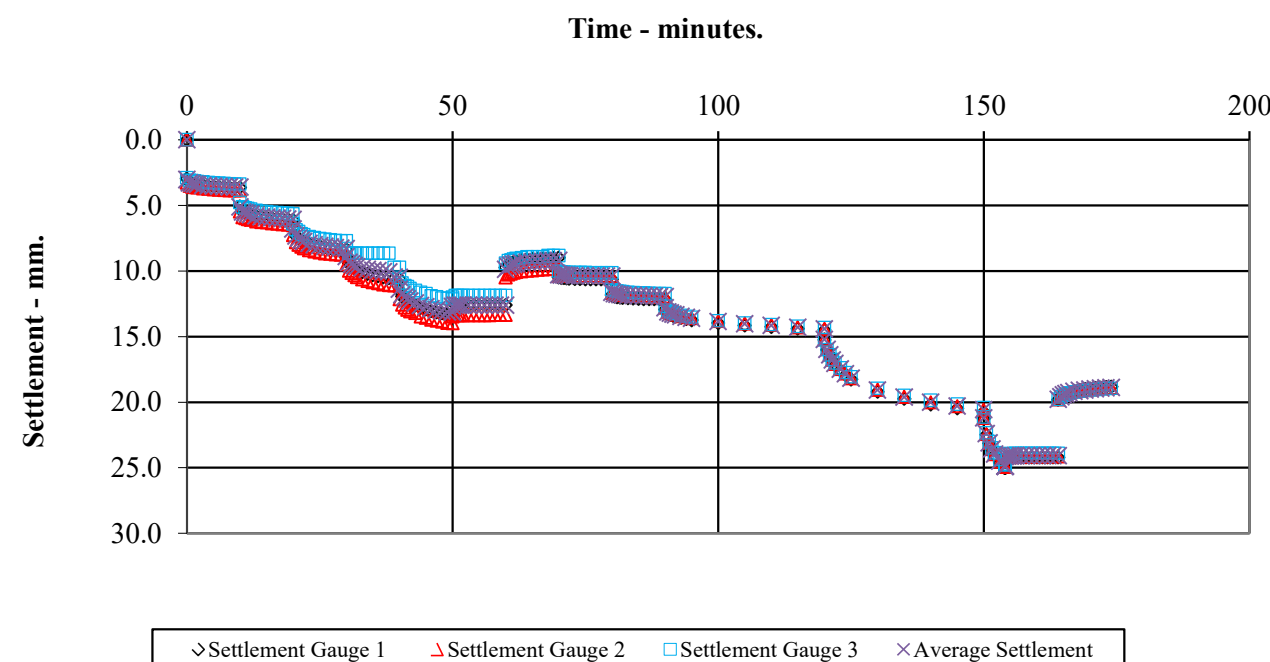
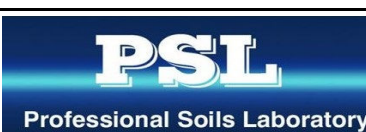
250.32

Maximum Deformation (mm):

24.90

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3174

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test **23-Apr-21**
Test Position **TP PTR-06**
Depth (m) **0.50**

Contract Number: PSL21/3174

Description **Sub-Soil**

Maximum Deflection	24.90	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	11	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 5.4	 kN/m²/mm
 CBR Value	 0.2	 %

Report Date: 22 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 19/4/2021
 Date Commenced: 19/4/2021
 Date Completed: 22/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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awatkins@prosoils.co.uk

 UKAS TESTING 4043	 PSL Professional Soils Laboratory	Home Farm, High Street, Cambridge	Contract No:
			PSL21/3174
			Client Ref:

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:21-Apr-21

Test Position:TP PTR-08

Plate Area (m2):0.1625971

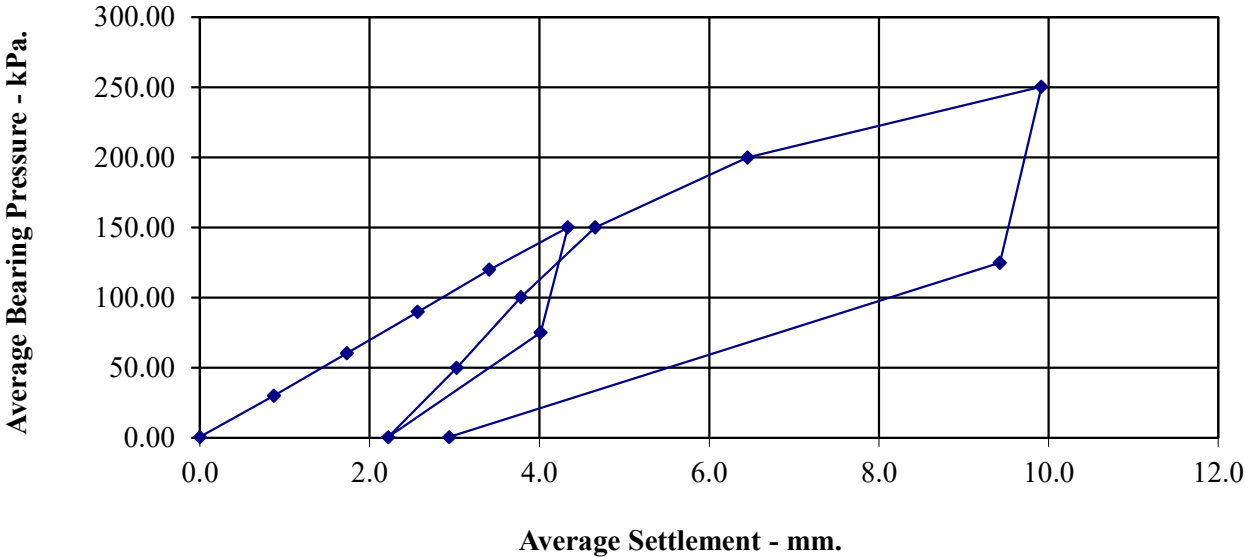
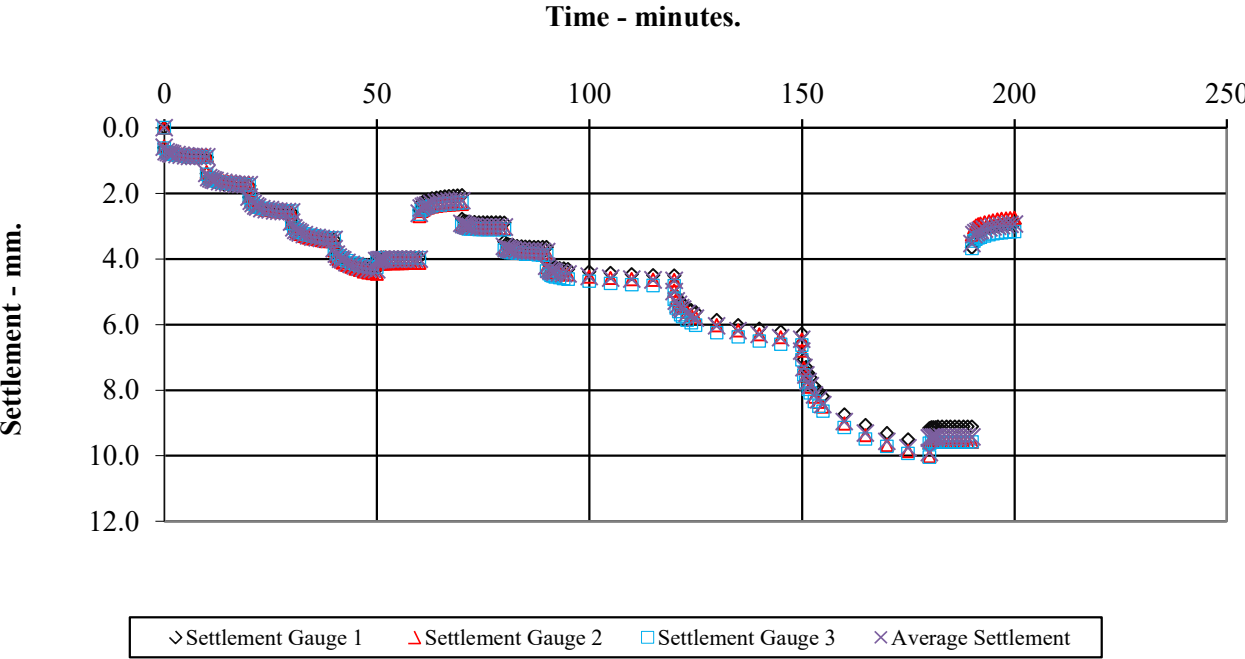
Maximum Applied Pressure (kPa):250.32

Maximum Deformation (mm):9.91

Description:Sub-Soil

Depth (m):0.40

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test21-Apr-21

Test PositionTP PTR-08

Depth (m)0.40

DescriptionSub-Soil

Maximum Deflection	9.91	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	43	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	21.8	kN/m ² /mm
CBR Value	2.0	%



LABORATORY REPORT



4043

Contract Number: PSL21/2745

Report Date: 09 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 6/4/2021

Date Commenced: 6/4/2021

Date Completed: 9/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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(Director)

R Berriman
(Quality Manager)


S Royle
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L Knight
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awatkins@prosoils.co.uk

Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 06-Apr-21

Test Position: TP PTR-12

Depth (m): 0.45

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

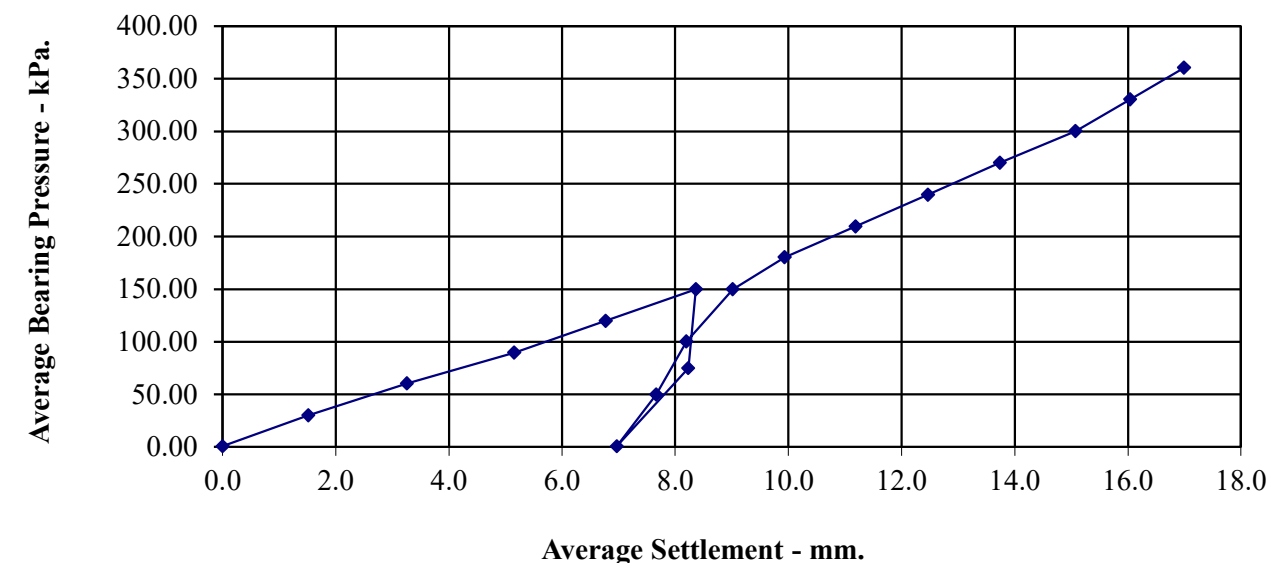
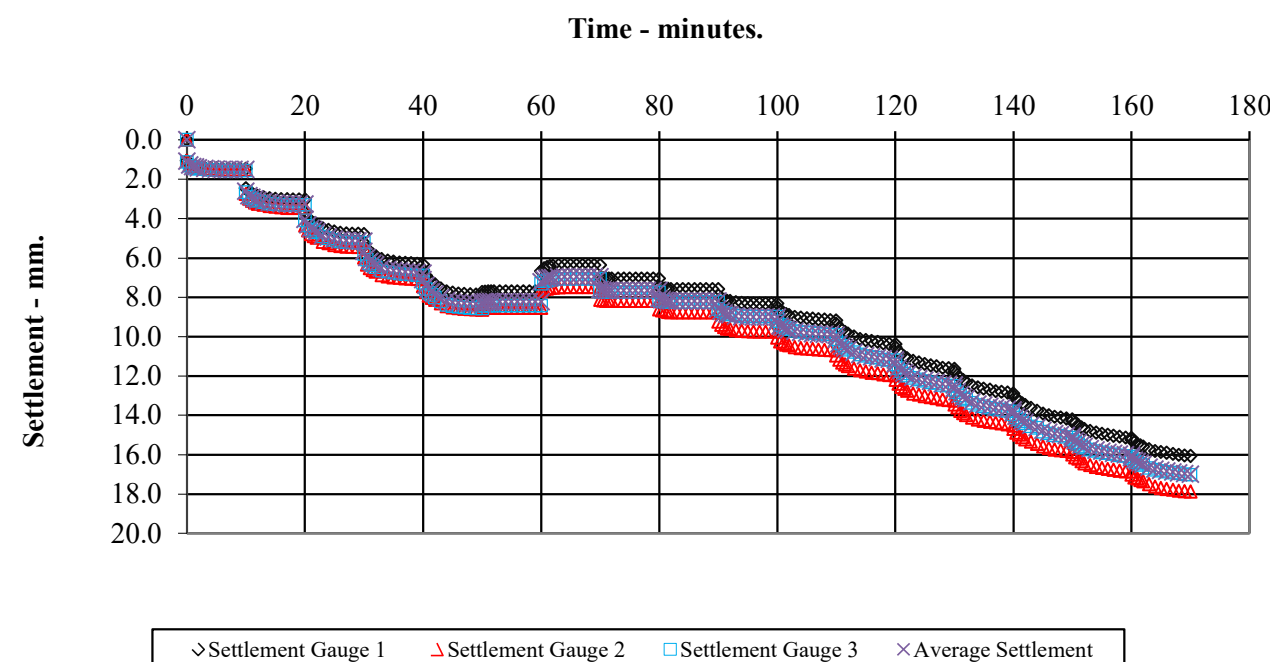
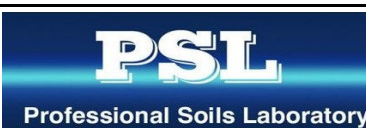
450.20

Maximum Deformation (mm):

16.99

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

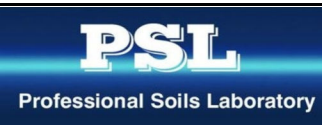
Contract No:

PSL21/2745

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

Date of Test	6-Apr-21	
Test Position	TP PTR-12	
Depth (m)	0.45	
Description	Sub-Soil	
Maximum Deflection	16.99	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	25	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	12.6	kN/m ² /mm
CBR Value	0.8	%

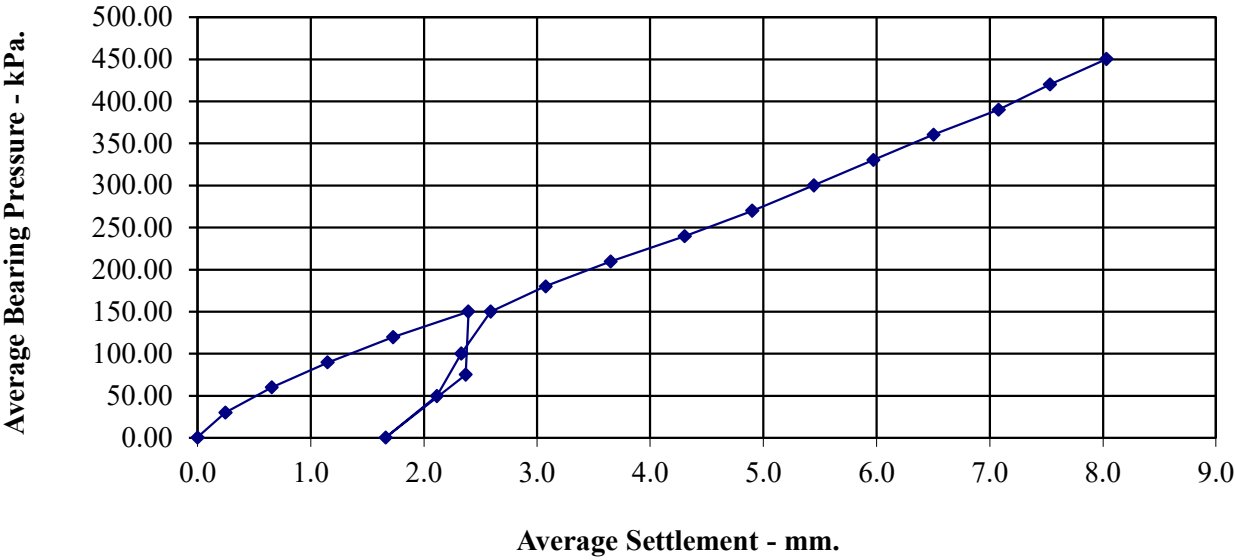
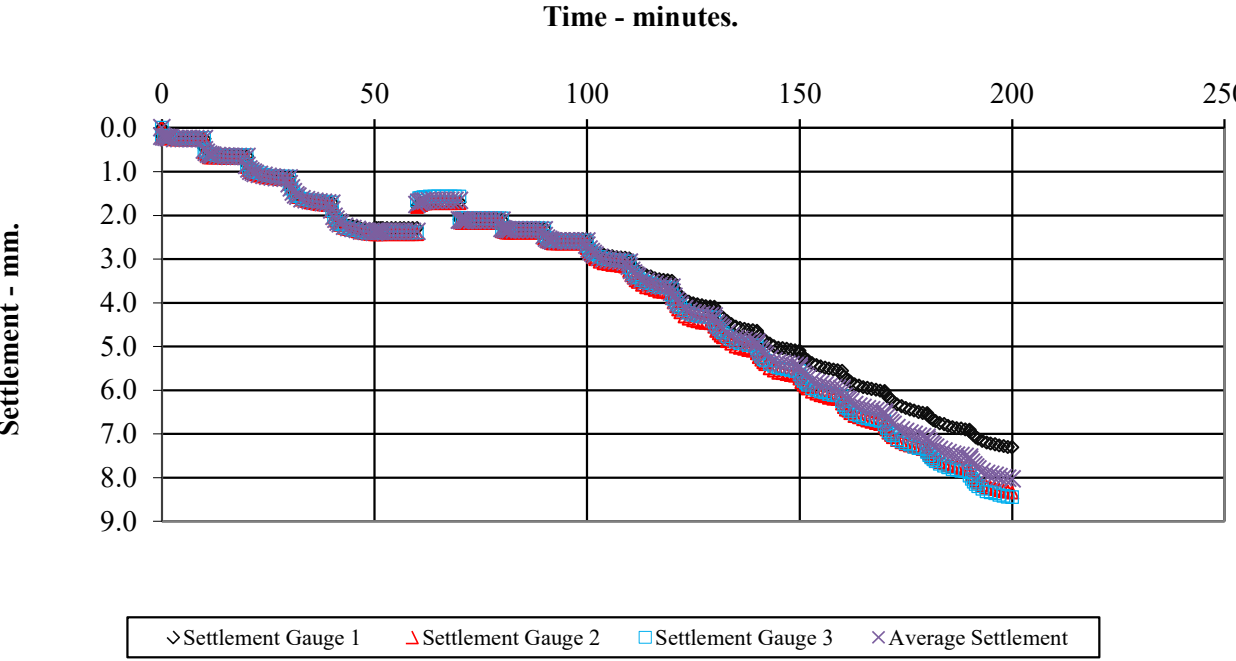
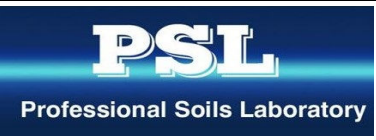


Home Farm, High Street, Cambridge

Contract No:
PSL21/2745
Client Ref:

VERTICAL DEFORMATION TESTS.
BS 1377 : Part 9 : 1990.

Date of Test:	06-Apr-21	
Test Position:	TP PTR-16	Depth (m): 0.40
Plate Area (m2):	0.1625971	Type of Kentledge: Tracked
Maximum Applied Pressure (kPa):	450.20	
Maximum Deformation (mm):	8.03	
Description:	Sub-Soil	



Home Farm, High Street,
Cambridge

Contract No:
PSL21/2745
Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test		
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4		
Incorporating IAN 73/06		
Date of Test	6-Apr-21	
Test Position	TP PTR-16	
Depth (m)	0.40	
Description	Sub-Soil	
Maximum Deflection	8.03	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	95	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	47.8	kN/m ² /mm
CBR Value	7.9	%



Report Date: 01 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 29/3/2021
Date Commenced: 29/3/2021
Date Completed: 1/4/2021

Notes: **Opinions and Interpretations are outside the UKAS Accreditation**

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awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:

31-Mar-21

Test Position:

TP PTR-17

Depth (m):

0.50

Plate Area (m2):

0.1625971

Type of Kentledge:

Tracked

Maximum Applied Pressure (kPa):

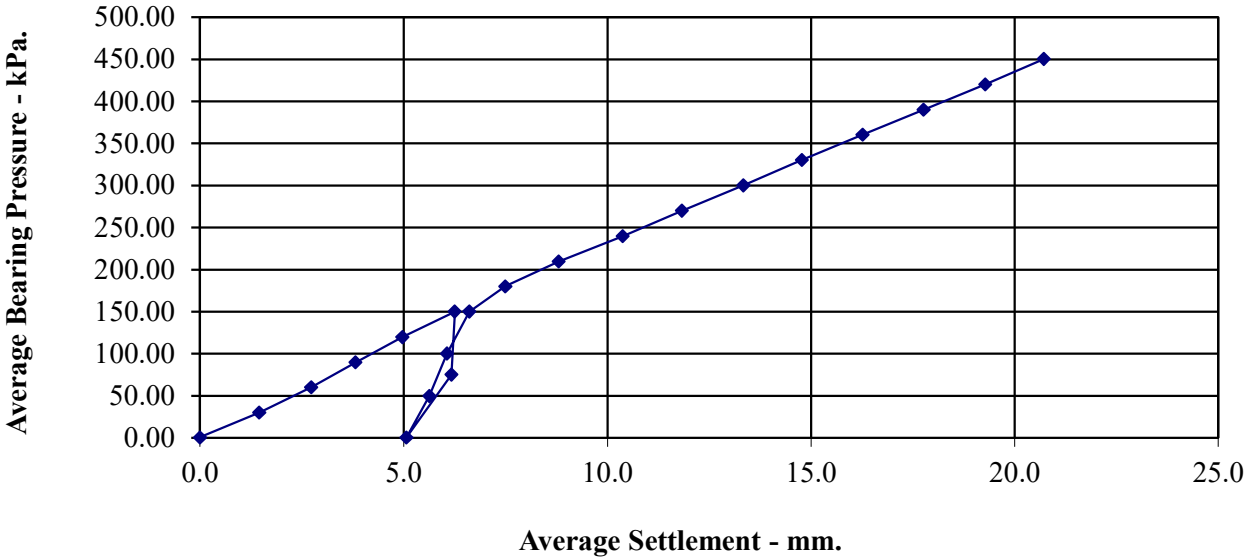
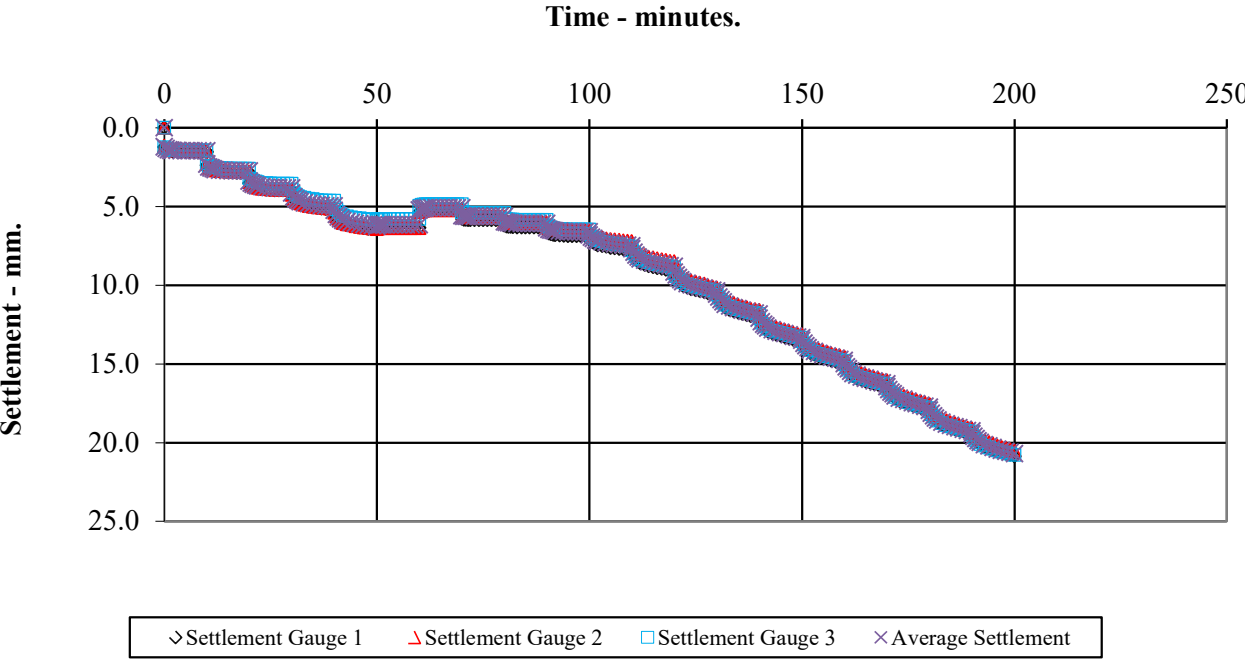
450.20

Maximum Deformation (mm):

20.72

Description:

Sub-Soil



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

31-Mar-21

Test Position

TP PTR-17

Depth (m)

0.50

Description

Sub-Soil

Maximum Deflection

20.72

mm

Deflection required for CBR value

1.25

mm

Load at 1.25mm

26

kN/m²

Plate diameter

455

mm

Conversion factor for plate diameter

0.629

K₇₆₂(modulus of subgrade reaction)
calculated using 1.25mm settlement

13.1

kN/m²/mm

CBR Value

0.8

%

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:

31-Mar-21

Test Position:

TP PTR-21

Depth (m):

0.50

Plate Area (m2):

0.1625971

Type of Kentledge:

Tracked

Maximum Applied Pressure (kPa):

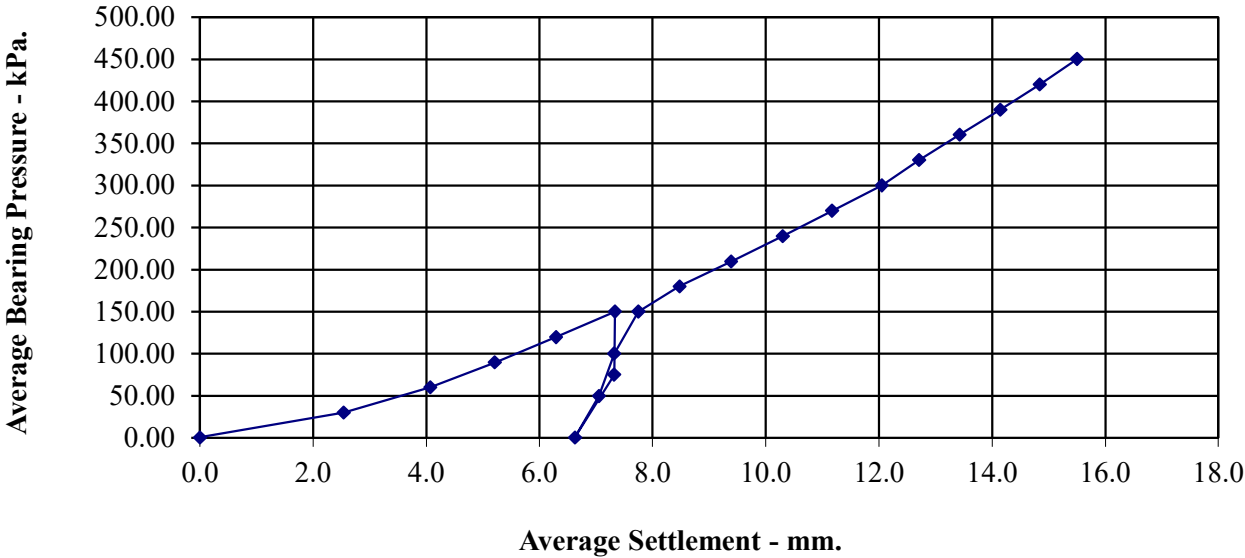
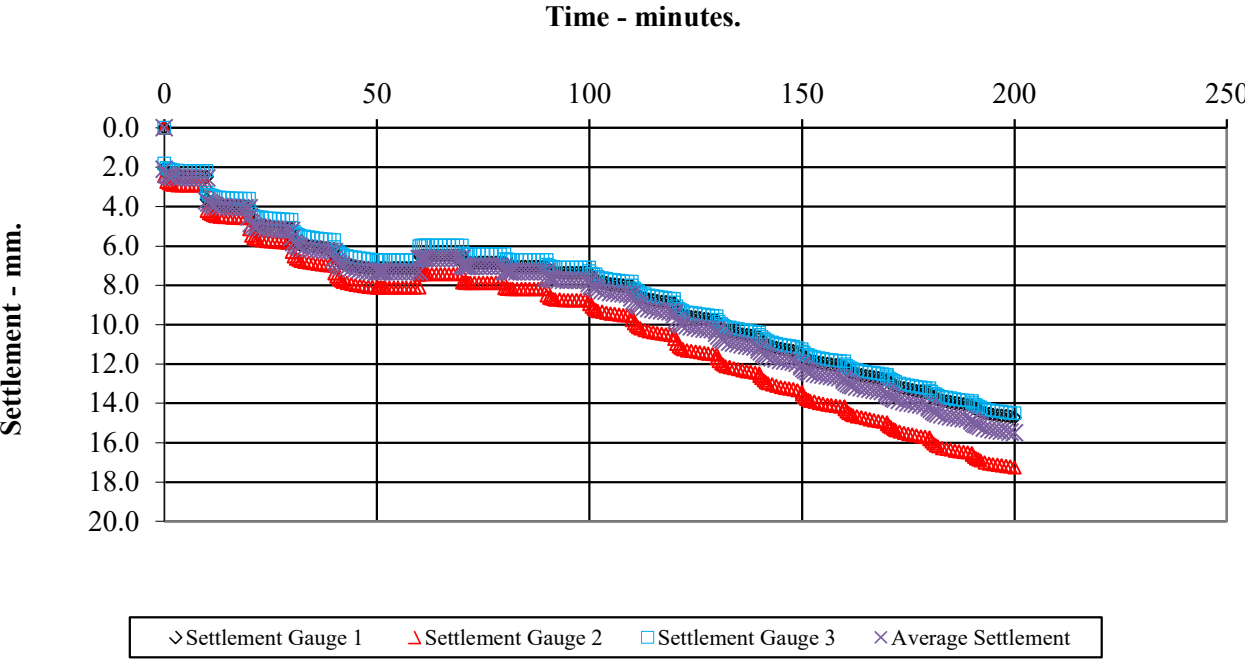
450.20

Maximum Deformation (mm):

15.50

Description:

Sub-Soil



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

31-Mar-21

Test Position

TP PTR-21

Depth (m)

0.50

Description

Sub-Soil

Maximum Deflection

15.50

mm

Deflection required for CBR value

1.25

mm

Load at 1.25mm

15

kN/m²

Plate diameter

455

mm

Conversion factor for plate diameter

0.629

K₇₆₂(modulus of subgrade reaction)
calculated using 1.25mm settlement

7.6

kN/m²/mm

CBR Value

0.3

%



LABORATORY REPORT



4043

Contract Number: PSL21/2585

Report Date: 31 March 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 29/3/2021

Date Commenced: 29/3/2021

Date Completed: 31/3/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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S Eyre
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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 30-Mar-21

Test Position: TP PTR-20

Depth (m): 0.30

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

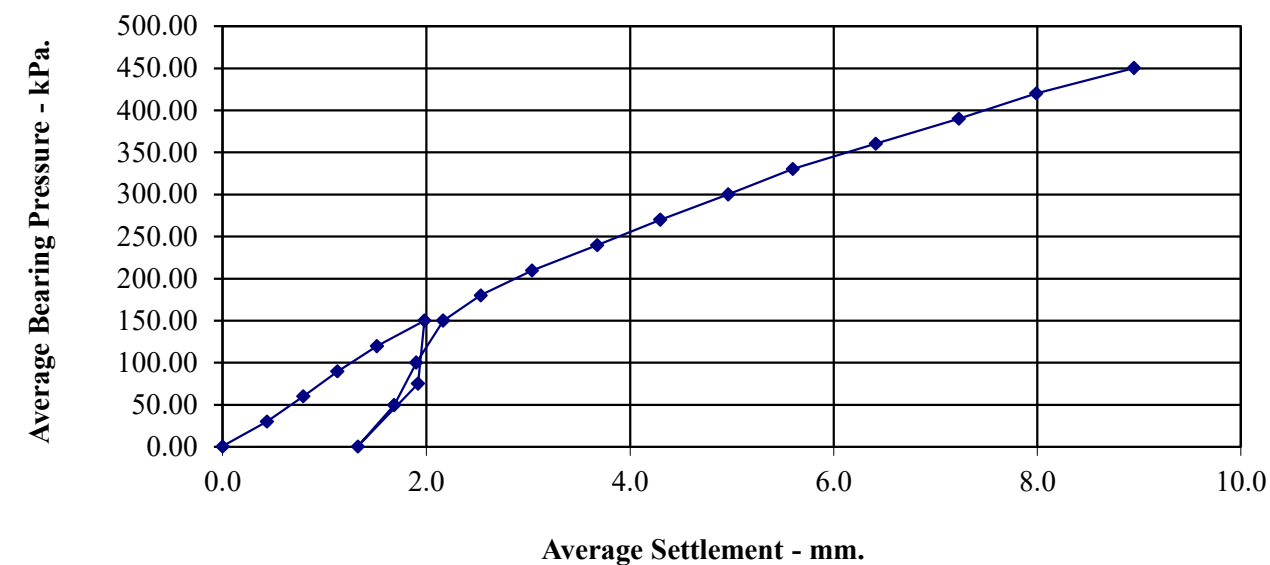
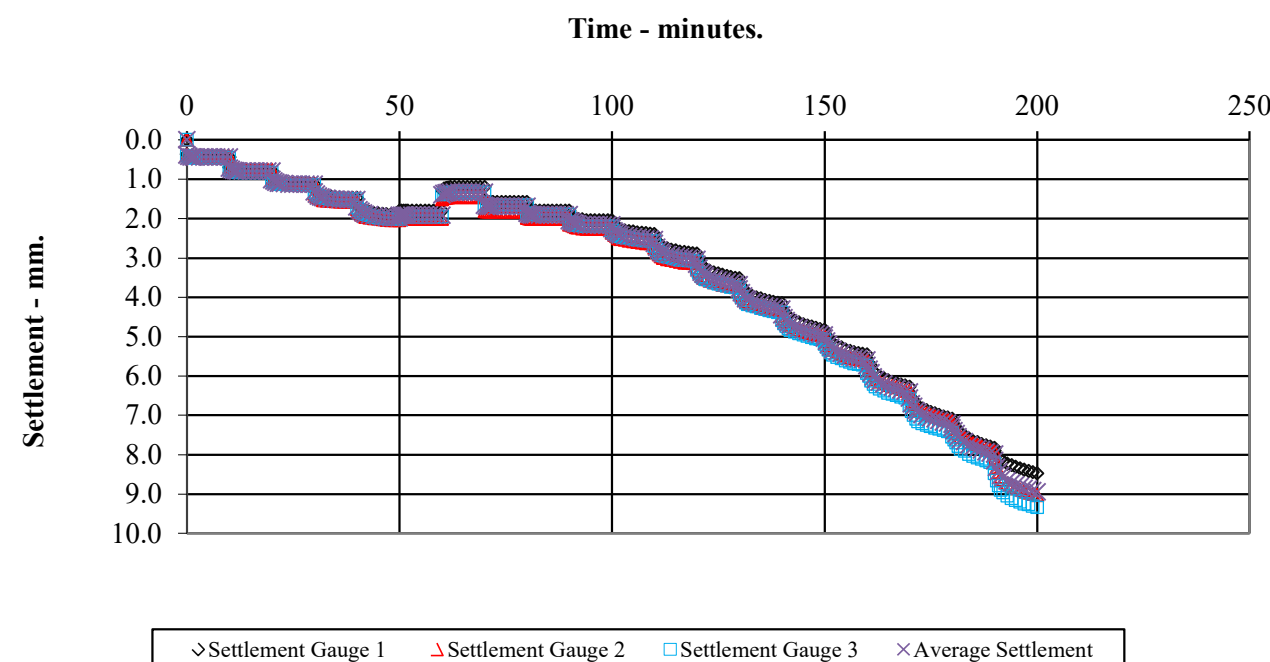
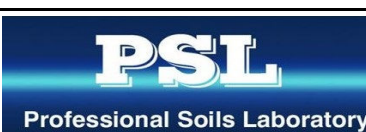
450.20

Maximum Deformation (mm):

8.95

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/2585

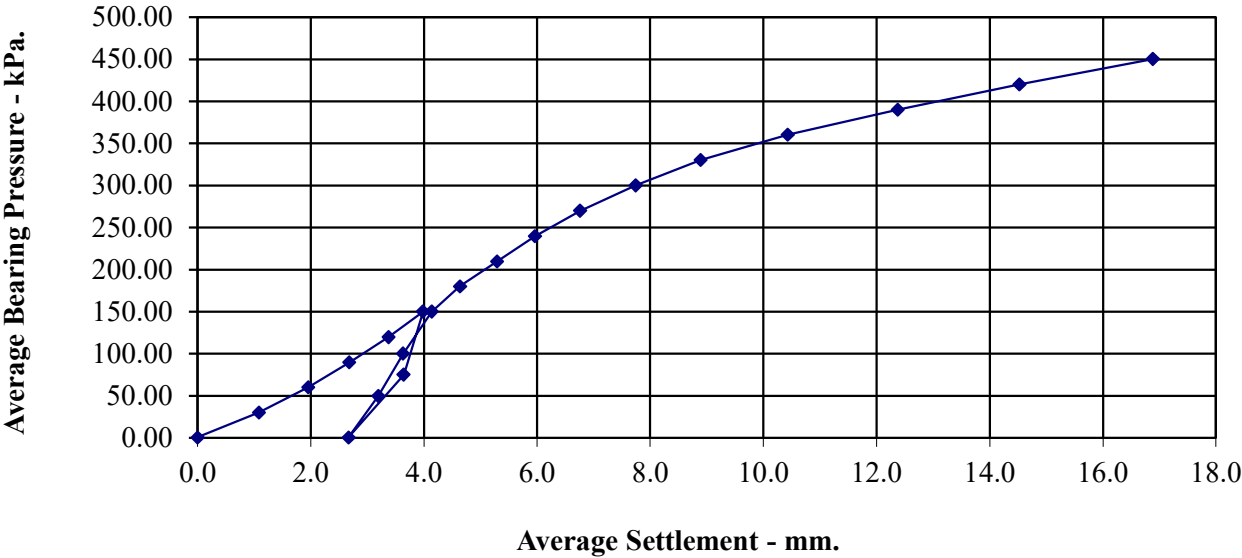
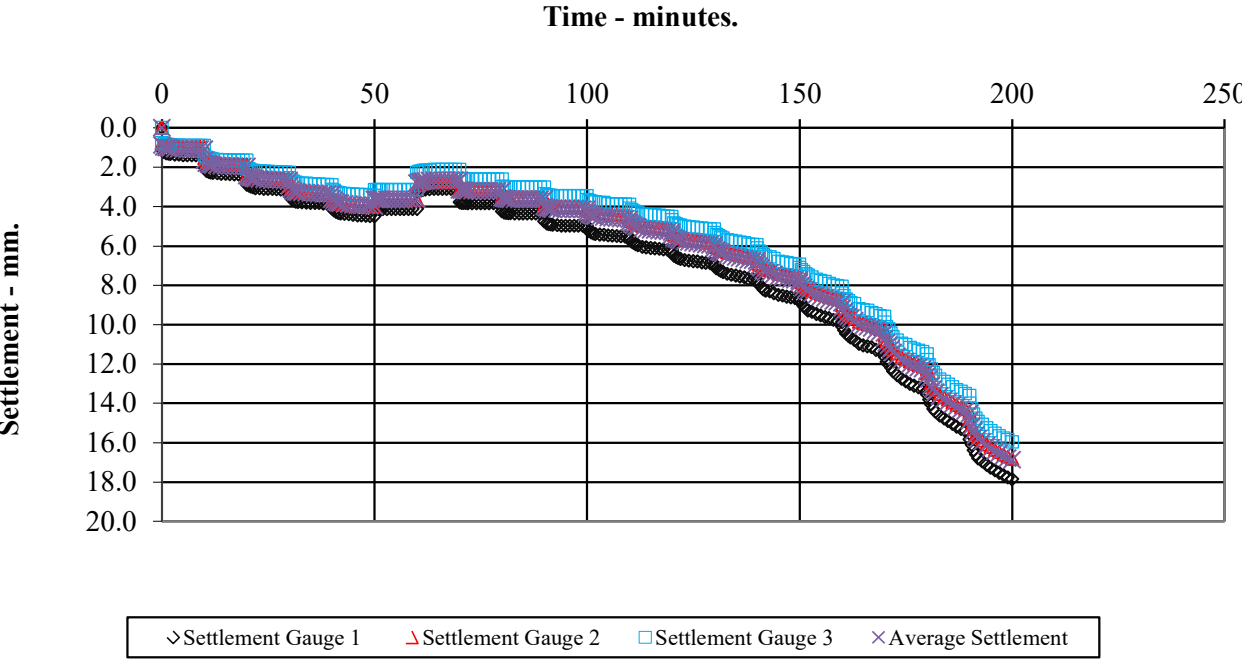
Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06

Date of Test	30-Mar-21	
Test Position	TP PTR-20	
Depth (m)	0.30	
Description	Sub-Soil	
Maximum Deflection	8.95	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	99	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	50.0	kN/m ² /mm
CBR Value	8.5	%

VERTICAL DEFORMATION TESTS.
 BS 1377 : Part 9 : 1990.

Date of Test:	30-Mar-21	Depth (m):	0.50
Test Position:	TP PTR-23	Type of Kentledge:	Tracked
Plate Area (m2):	0.1625971		
Maximum Applied Pressure (kPa):	450.20		
Maximum Deformation (mm):	16.88		
Description:	Sub-Soil		



Calculation of Equivalent CBR Value from Plate Bearing Test
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test **30-Mar-21**
Test Position **TP PTR-23**
Depth (m) **0.50**

Contract Number: PSL21/2745

Description **Sub-Soil**

Maximum Deflection	16.88	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	36	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 18.1	 kN/m²/mm
 CBR Value	 1.5	 %

Report Date: 08 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 6/4/2021
 Date Commenced: 6/4/2021
 Date Completed: 8/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:07-Apr-21

Test Position:TP PTR-24

Plate Area (m2):0.1625971

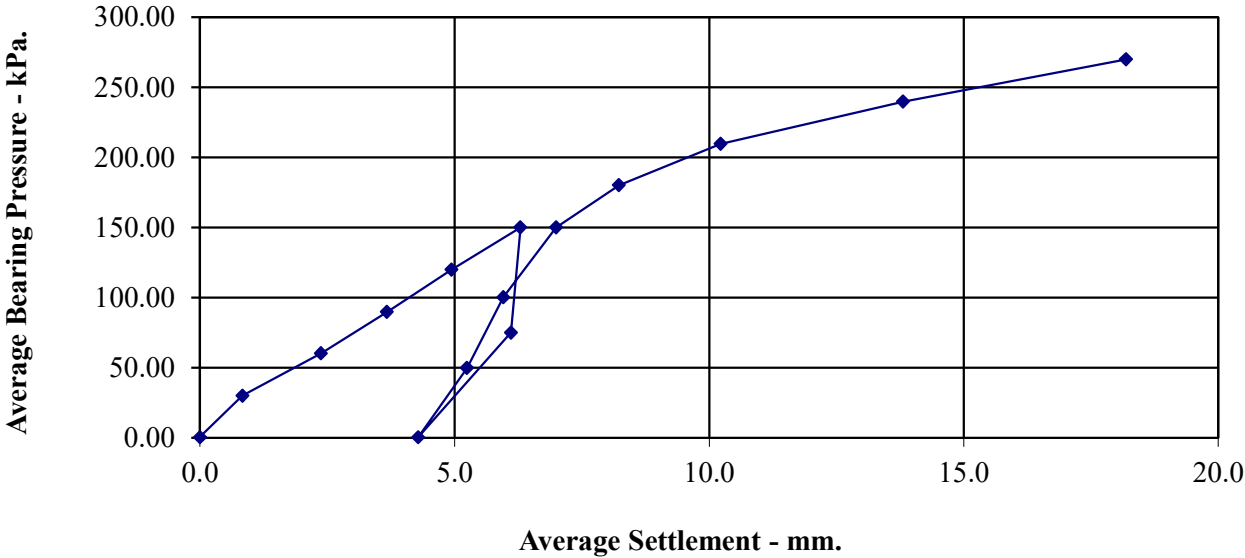
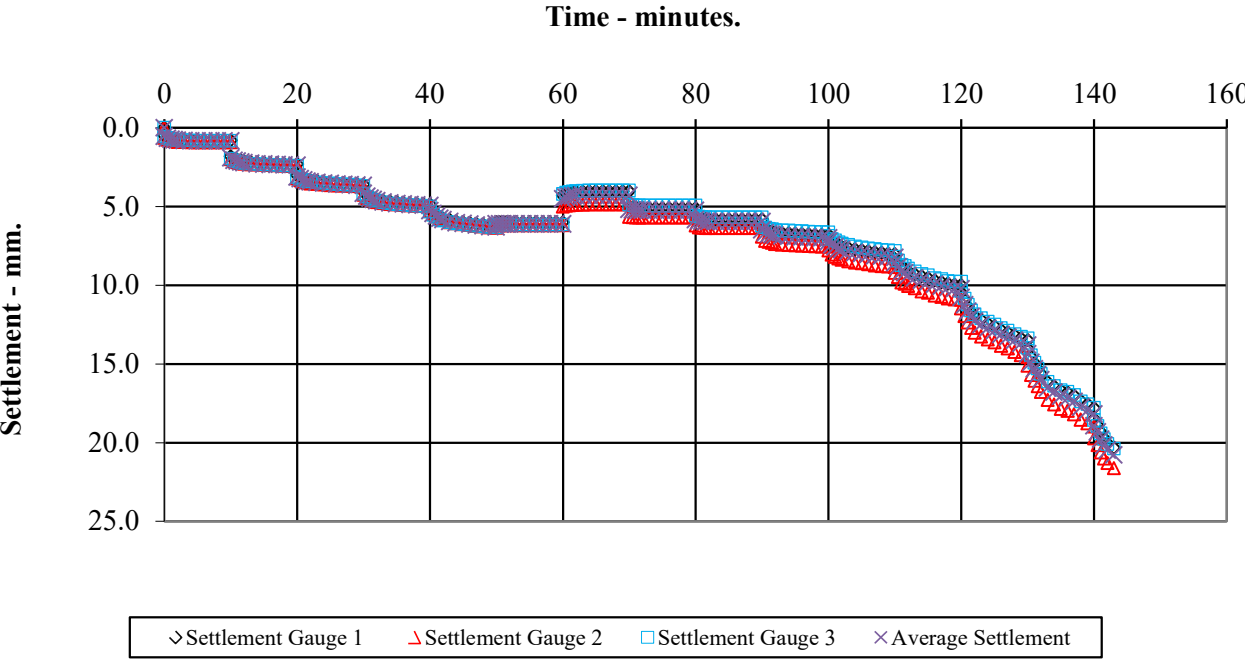
Maximum Applied Pressure (kPa):450.20

Maximum Deformation (mm):18.18

Description:Sub-Soil

Depth (m):0.45

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

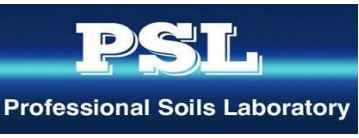
Date of Test7-Apr-21

Test PositionTP PTR-24

Depth (m)0.45

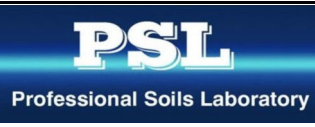
DescriptionSub-Soil

Maximum Deflection	18.18	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	38	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	19.2	kN/m ² /mm
CBR Value	1.6	%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/2745
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/2745
Client Ref:



LABORATORY REPORT



4043

Contract Number: PSL21/2745

Report Date: 07 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 6/4/2021

Date Commenced: 6/4/2021

Date Completed: 7/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 06-Apr-21

Test Position: TP PTR-28

Depth (m): 0.45

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

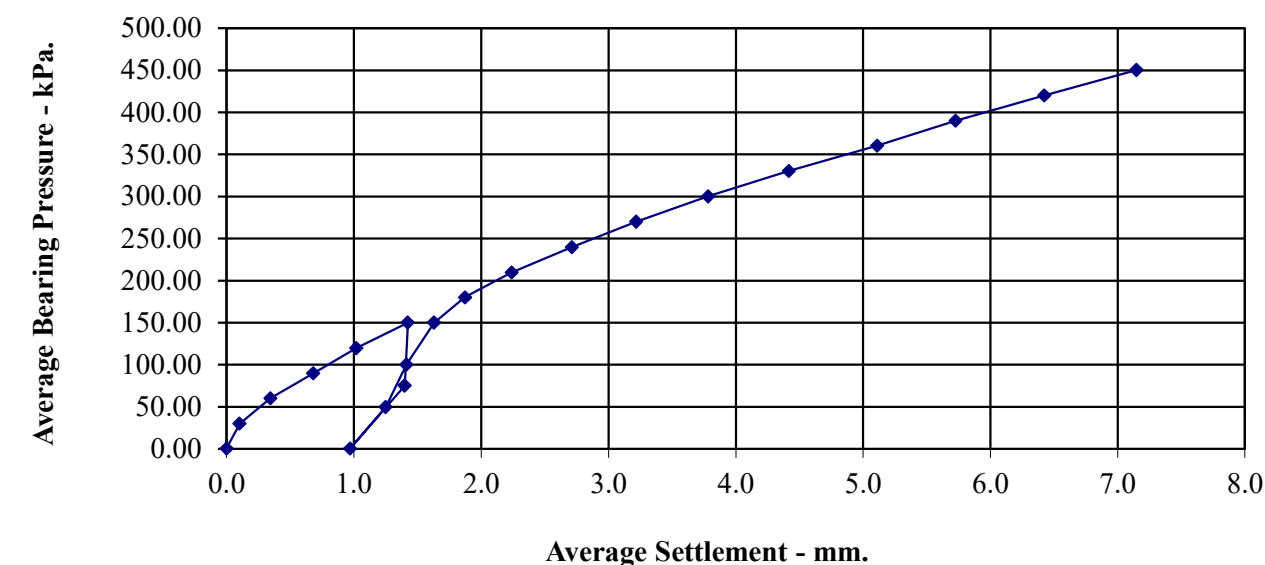
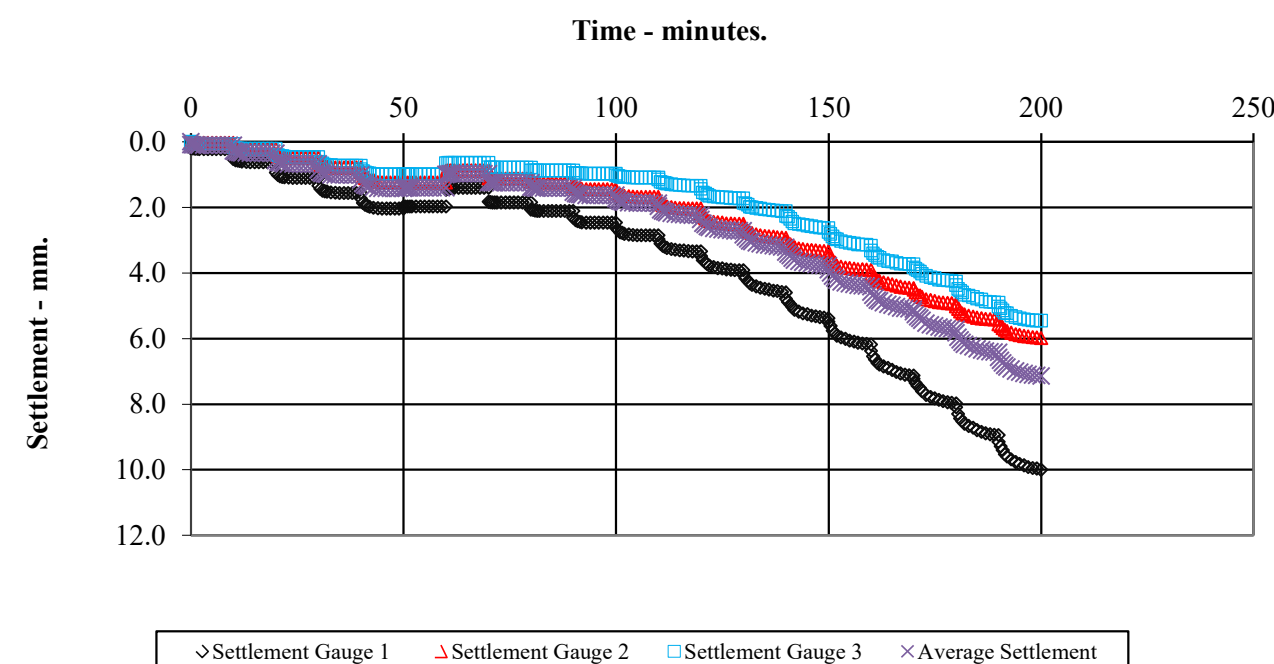
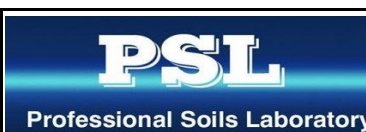
450.20

Maximum Deformation (mm):

7.15

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/2745

Client Ref:

PSL
Professional Soils Laboratory

Date of Test	6-Apr-21
Test Position	TP PTR-28
Depth (m)	0.45

Contract Number: PSL21/2585

Report Date: 06 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 29/3/2021
Date Commenced: 29/3/2021
Date Completed: 6/4/2021

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awatkins@prosoils.co.uk**



Home Farm, High Street, Cambridge

Contract No:
PSL21/2745
Client Ref:

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:01-Apr-21

Test Position:TP PTR-29

Plate Area (m2):0.1625971

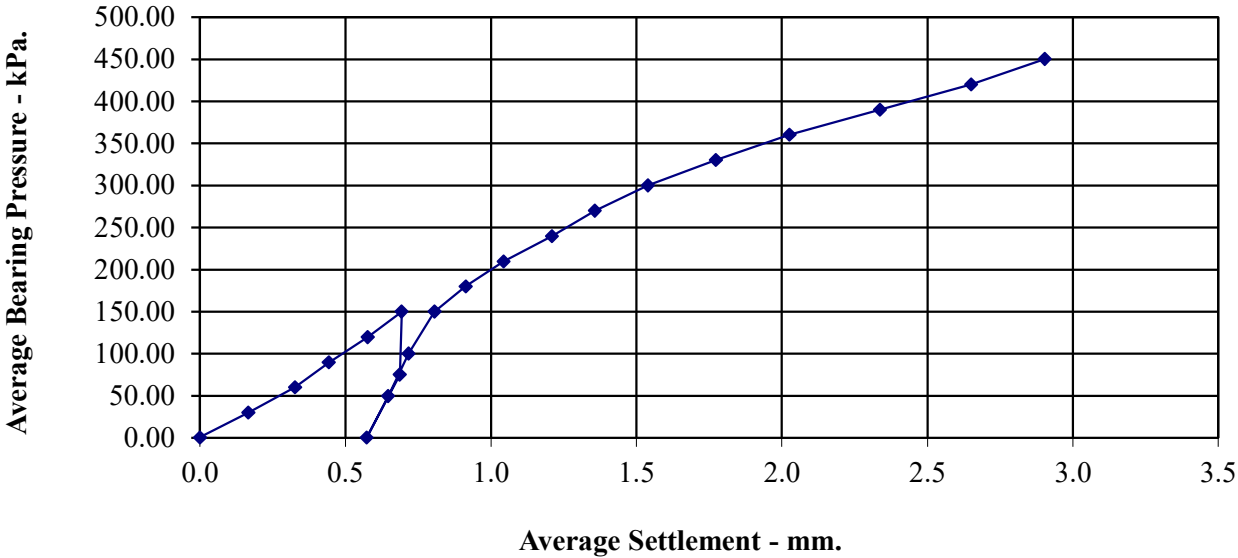
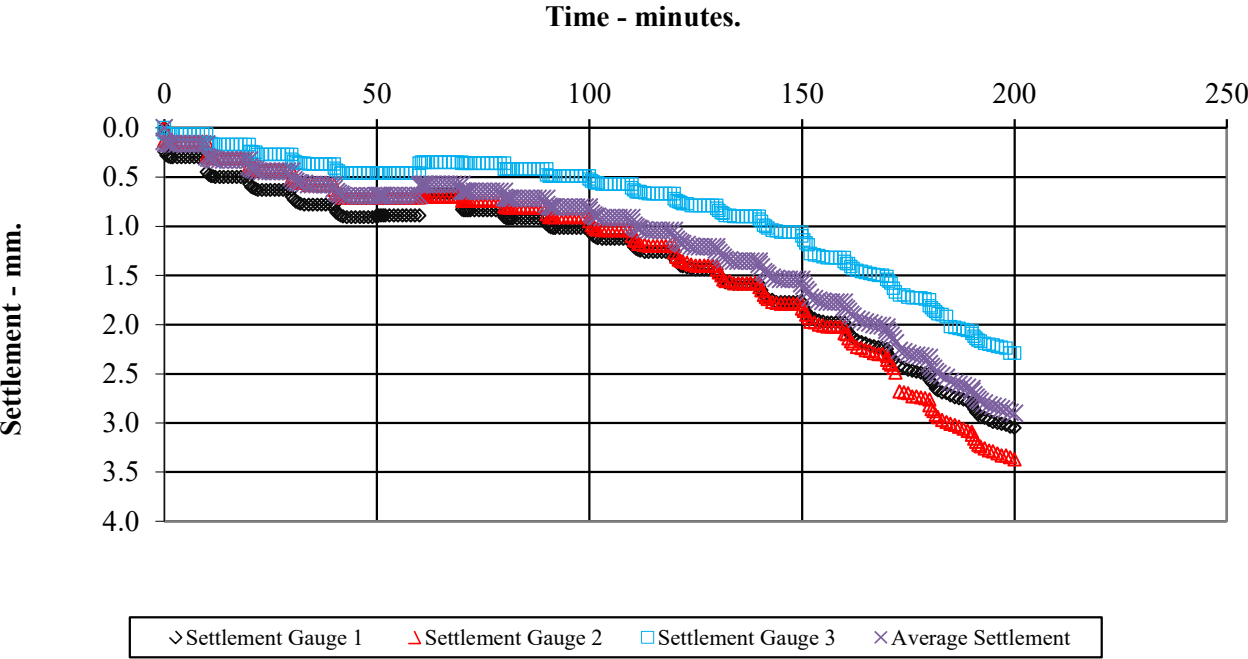
Maximum Applied Pressure (kPa):450.20

Maximum Deformation (mm):2.90

Description:Sub-Soil

Depth (m):0.40

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test1-Apr-21

Test PositionTP PTR-29

Depth (m)0.40

DescriptionSub-Soil

Maximum Deflection2.90mm

Deflection required for CBR value1.25mm

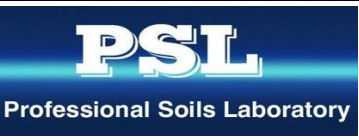
Load at 1.25mm248kN/m²

Plate diameter455mm

Conversion factor for plate diameter0.629

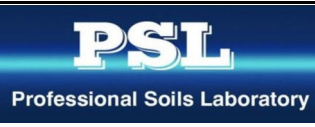
K₇₆₂(modulus of subgrade reaction)calculated using 1.25mm settlement124.9kN/m²/mm

CBR Value41.4%



Home Farm, High Street,
Cambridge

Contract No:
PSL21/2585
Client Ref:



Home Farm, High Street, Cambridge

Contract No:
PSL21/2585
Client Ref:



LABORATORY REPORT



4043

Contract Number: PSL21/3720

Report Date: 07 May 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 6/5/2021

Date Commenced: 6/5/2021

Date Completed: 7/5/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 07-May-21

Test Position: TP-PTR-31

Depth (m): 0.40

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

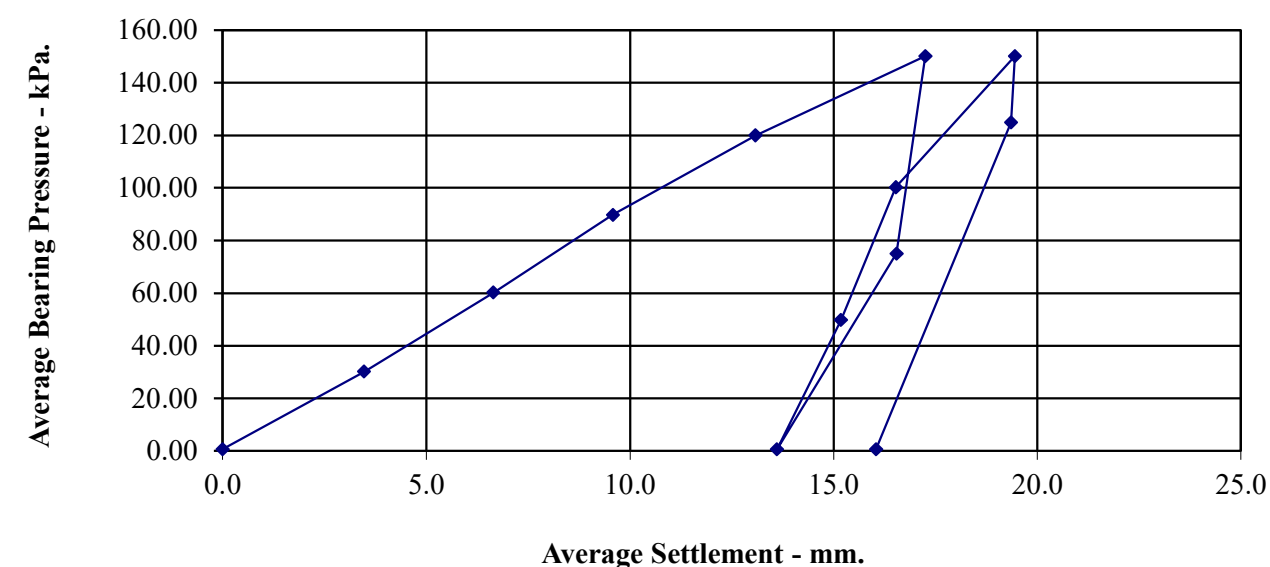
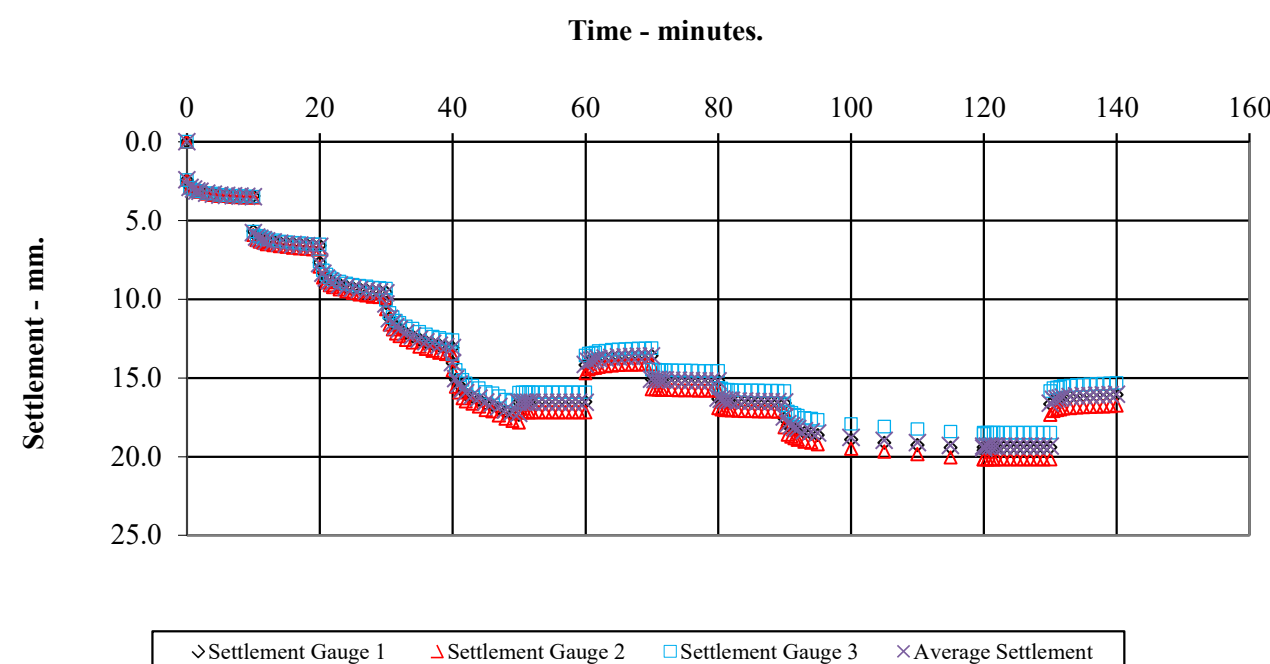
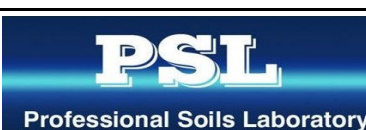
150.08

Maximum Deformation (mm):

19.45

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3720

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06



LABORATORY REPORT



4043

Date of Test 7-May-21
Test Position TP-PTR-31
Depth (m) 0.40

Contract Number: PSL21/3174

Description Sub-Soil

Maximum Deflection	19.45	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	11	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 5.6	 kN/m²/mm
 CBR Value	 0.2	 %

Report Date: 21 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 19/4/2021
 Date Commenced: 19/4/2021
 Date Completed: 20/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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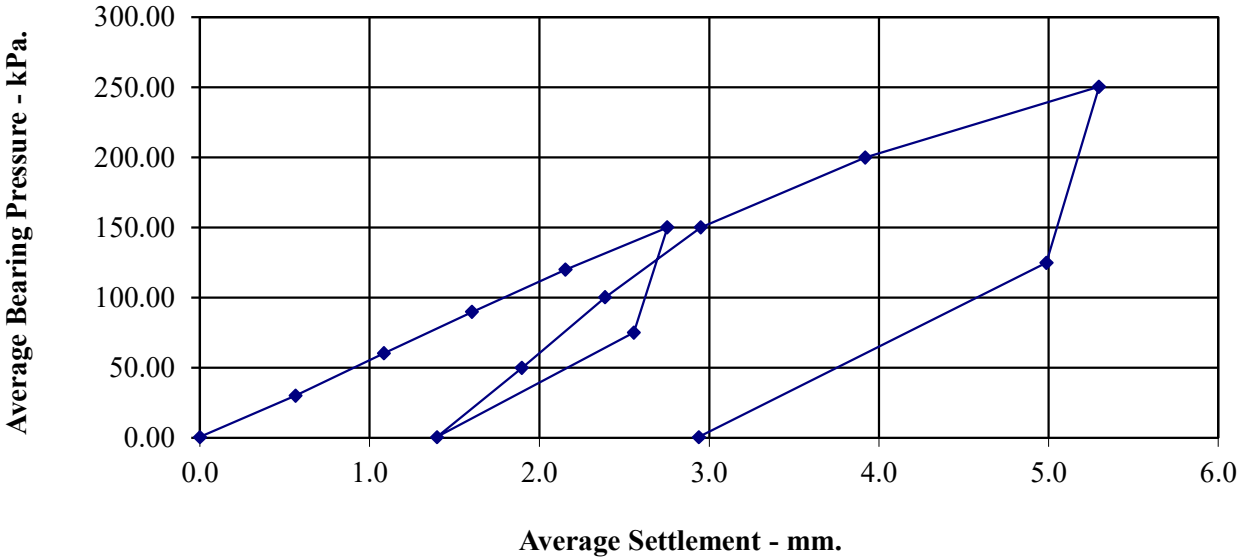
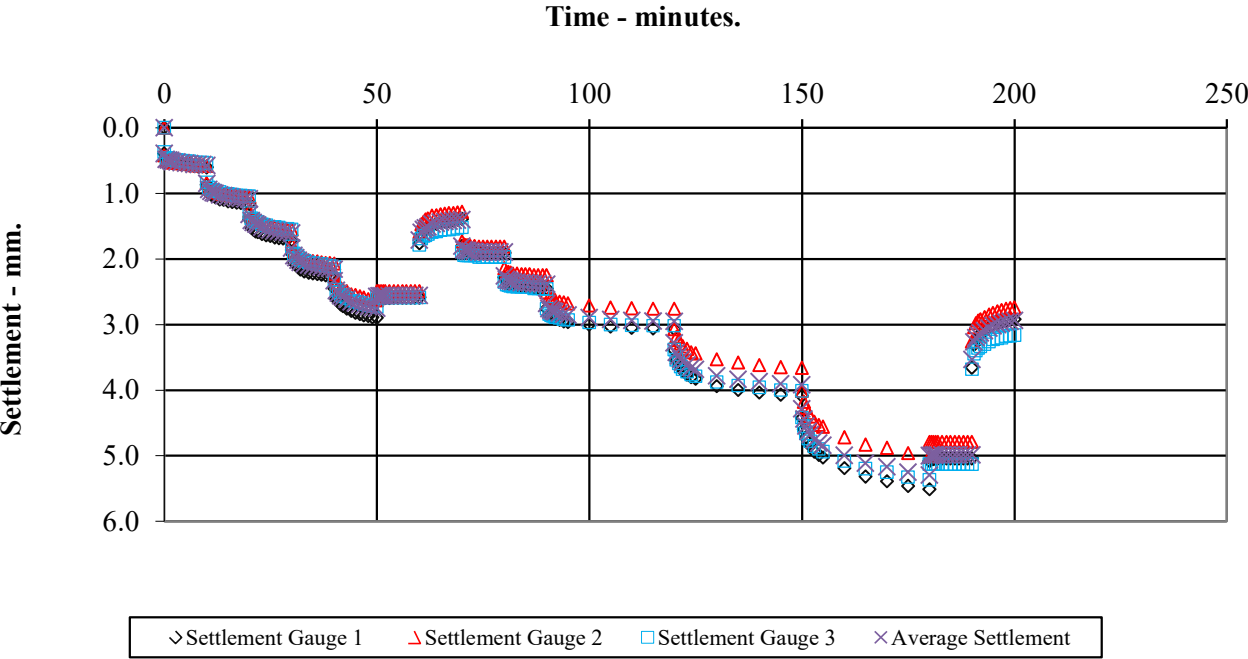
Page 1 of

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 awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 19-Apr-21
Test Position: TP PTR-32
Plate Area (m2): 0.1625971
Maximum Applied Pressure (kPa): 250.32
Maximum Deformation (mm): 5.30
Description: MADE GROUND



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test: 19-Apr-21
Test Position: TP PTR-32
Depth (m): 0.40
Description: MADE GROUND

Maximum Deflection: 5.30 mm
Deflection required for CBR value: 1.25 mm
Load at 1.25mm: 70 kN/m²
Plate diameter: 455 mm
Conversion factor for plate diameter: 0.629
K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement: 35.1 kN/m²/mm
CBR Value: 4.6 %



LABORATORY REPORT



4043

Contract Number: PSL21/3174

Report Date: 20 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 19/4/2021

Date Commenced: 19/4/2021

Date Completed: 20/4/2021

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awatkins@prosoils.co.uk

Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 19-Apr-21

Test Position: TP PTR-33

Depth (m): 0.00

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

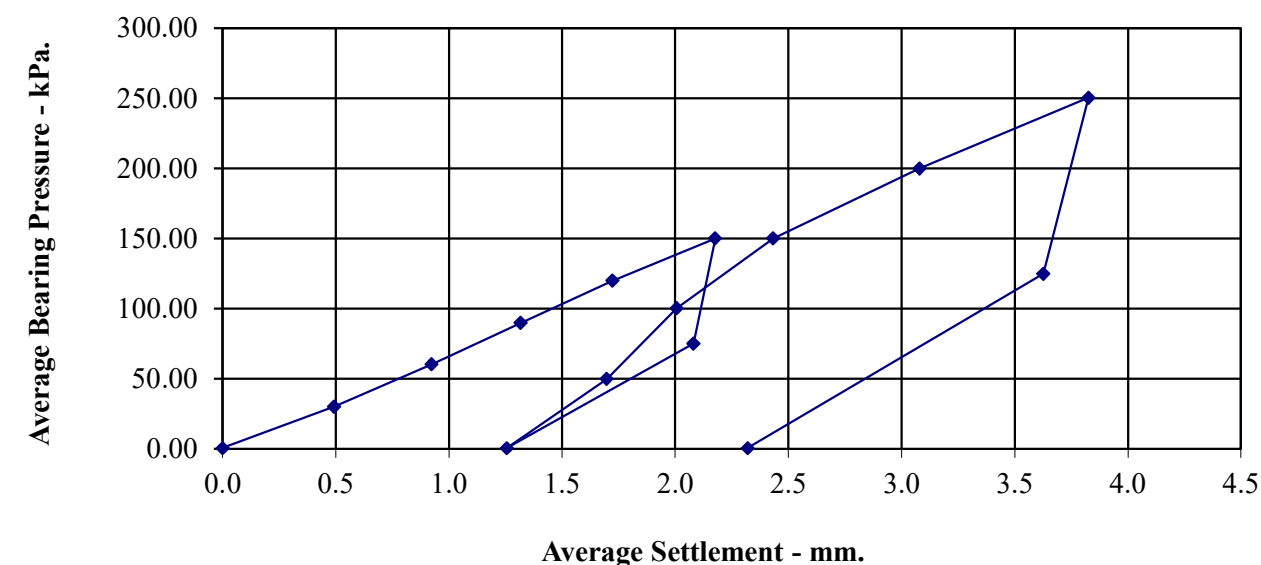
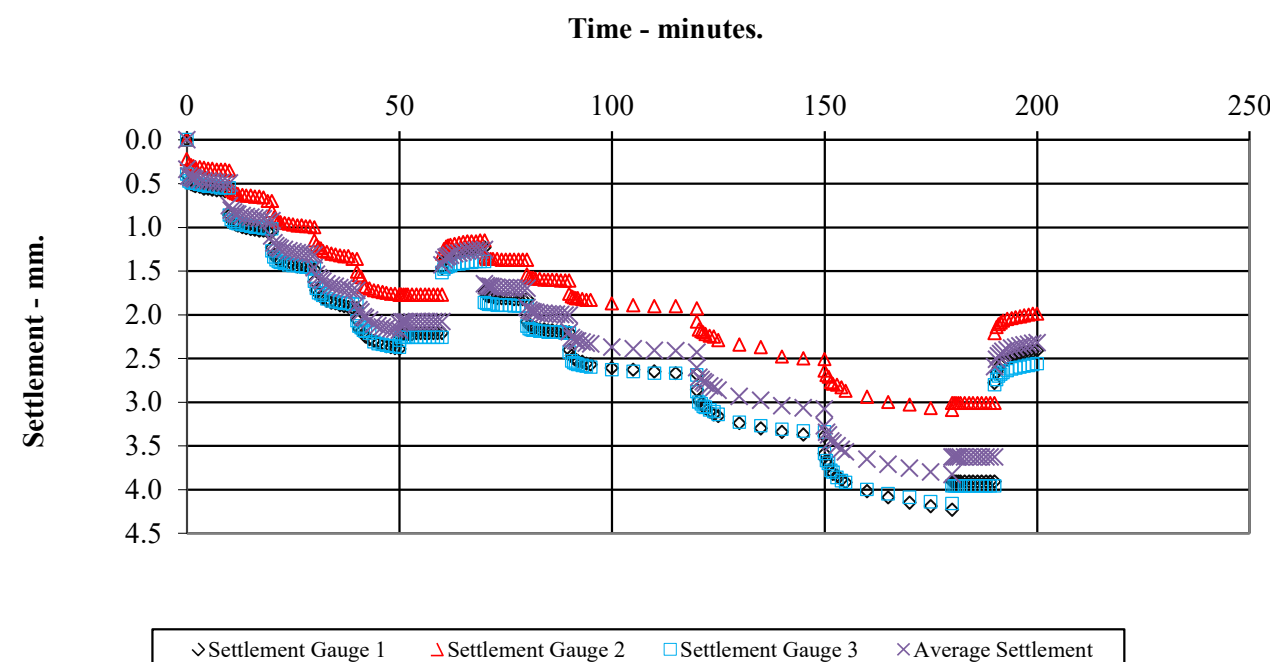
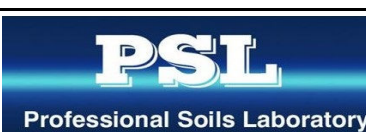
250.32

Maximum Deformation (mm):

3.83

Description:

MADE GROUND



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3174

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06



LABORATORY REPORT



4043

Date of Test 19-Apr-21
Test Position TP PTR-33
Depth (m) 0.00

Description MADE GROUND

Maximum Deflection	3.83	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	85	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 42.7	 kN/m²/mm
 CBR Value	 6.4	 %

Contract Number: PSL21/3016

Report Date: 19 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 12/4/2021
 Date Commenced: 12/4/2021
 Date Completed: 19/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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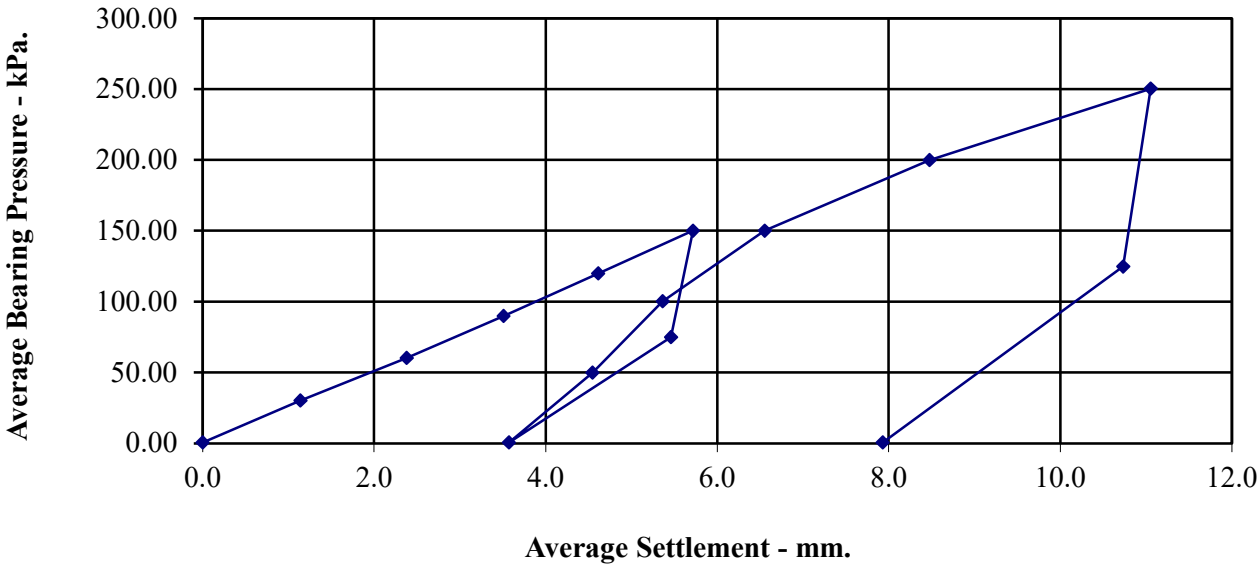
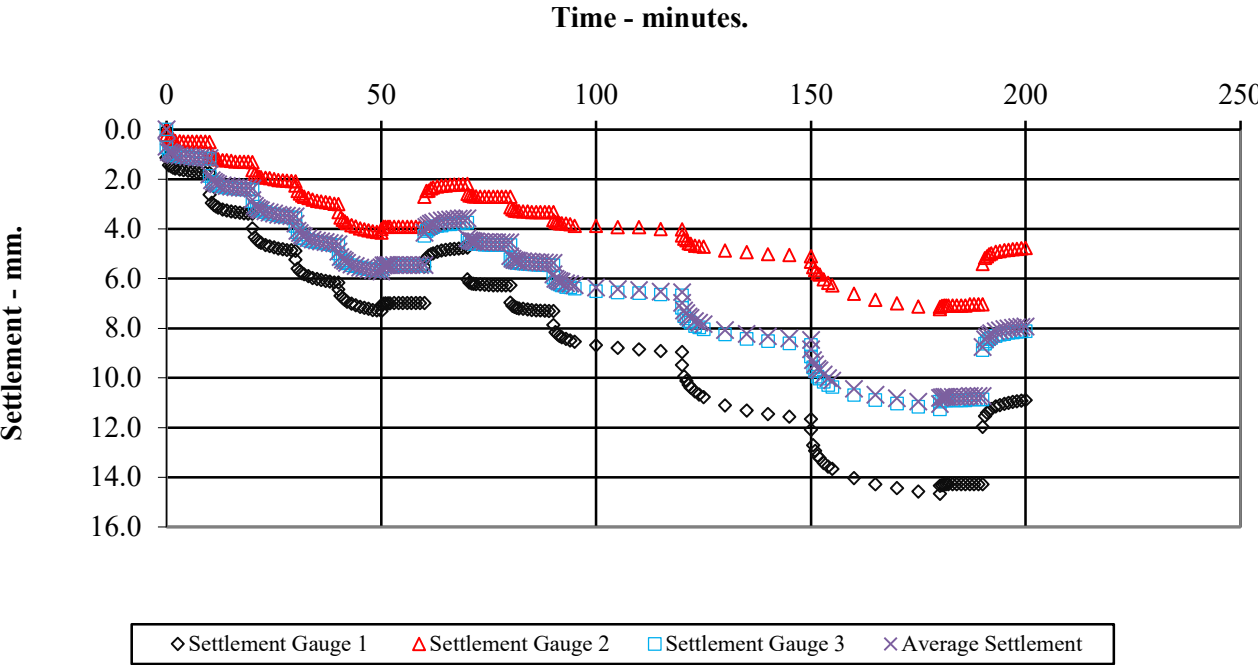
VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 16-Apr-21
Test Position: TP PTR-34
Plate Area (m2): 0.1625971
Maximum Applied Pressure (kPa): 250.32
Maximum Deformation (mm): 11.05
Description: MADE GROUND

Depth (m): 0.00

Type of Kentledge: Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test: 16-Apr-21
Test Position: TP PTR-34
Depth (m): 0.00
Description: MADE GROUND

Maximum Deflection: 11.05 mm
Deflection required for CBR value: 1.25 mm
Load at 1.25mm: 33 kN/m²
Plate diameter: 455 mm
Conversion factor for plate diameter: 0.629

K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement: 16.5 kN/m²/mm

CBR Value: 1.2 %



LABORATORY REPORT



4043

Contract Number: PSL21/3016

Report Date: 19 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 12/4/2021

Date Commenced: 12/4/2021

Date Completed: 19/4/2021

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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 15-Apr-21

Test Position: TP PTR-35

Depth (m): 0.40

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

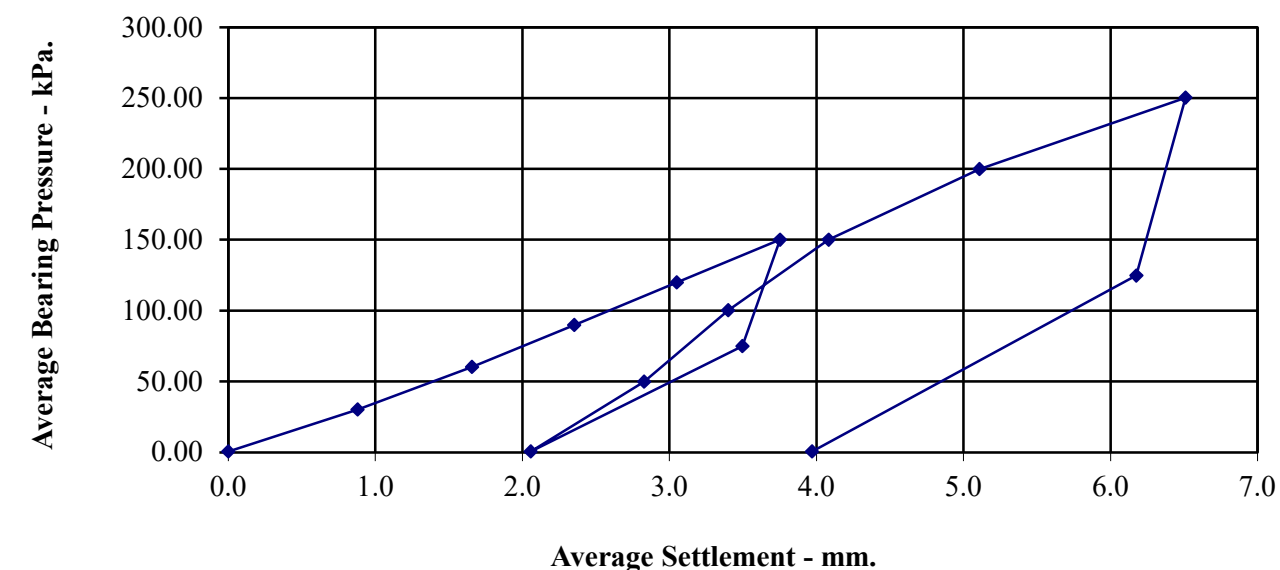
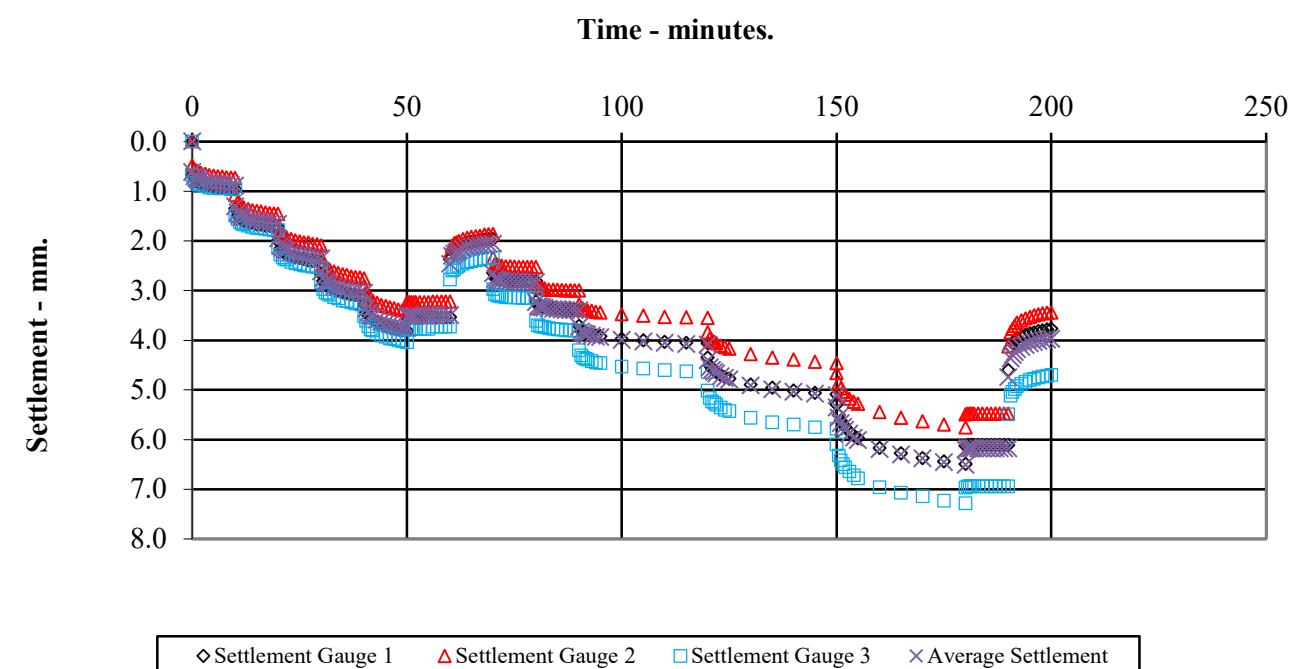
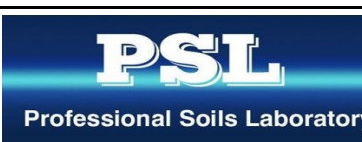
250.32

Maximum Deformation (mm):

6.51

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:
PSL21/3016
Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test	15-Apr-21	
Test Position	TP PTR-35	
Depth (m)	0.40	
Description	Sub-Soil	
Maximum Deflection	6.51	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	45	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	22.4	kN/m ² /mm
CBR Value	2.1	%

Contract Number: PSL21/3016

Report Date: 14 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 12/4/2021
 Date Commenced: 12/4/2021
 Date Completed: 14/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:12-Apr-21

Test Position:TP PTR-38

Plate Area (m2):0.1625971

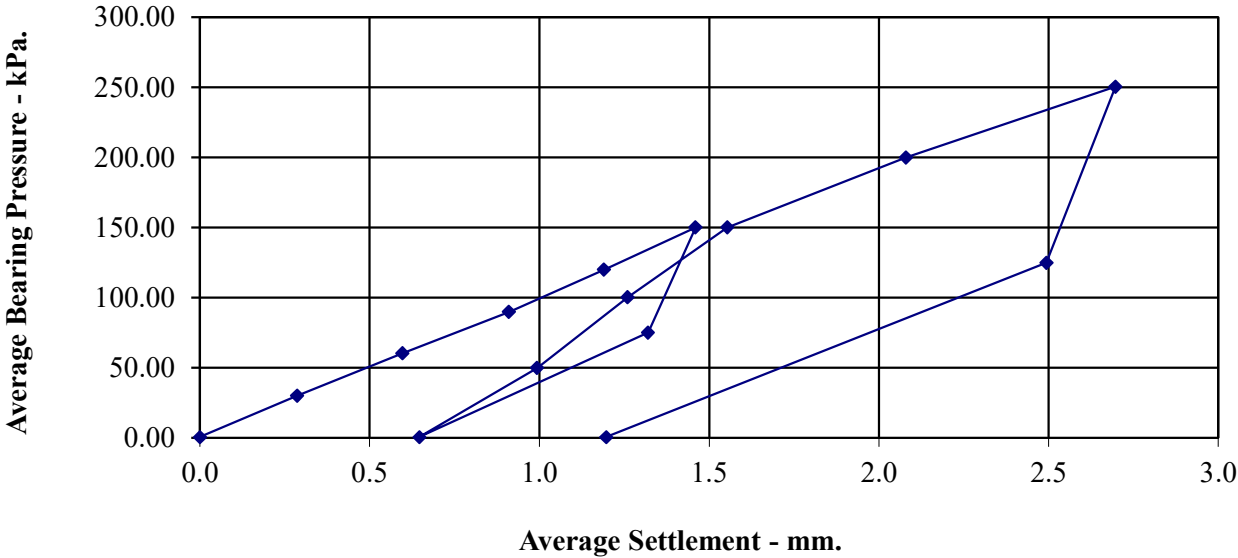
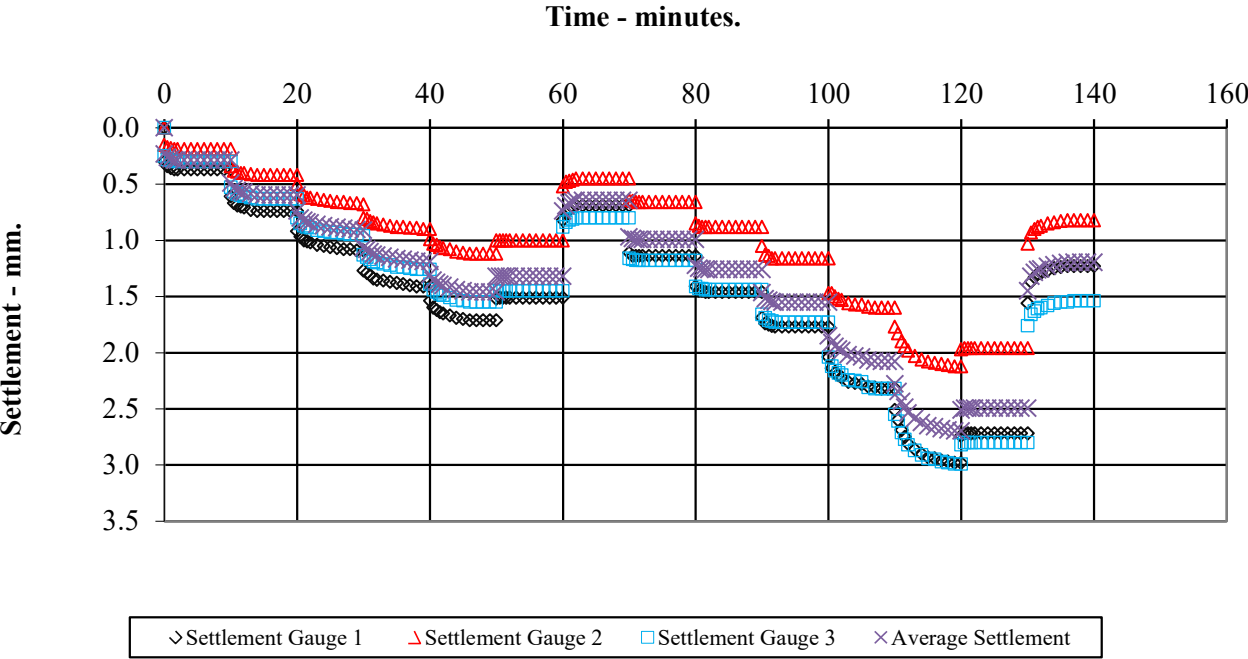
Maximum Applied Pressure (kPa):250.32

Maximum Deformation (mm):2.70

Description:Sub-Soil

Depth (m):0.30

Type of Kentledge:Tracked



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test12-Apr-21

Test PositionTP PTR-38

Depth (m)0.30

DescriptionSub-Soil

Maximum Deflection	2.70	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	127	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	63.7	kN/m ² /mm
CBR Value	12.9	%



LABORATORY REPORT



Contract Number: PSL21/3016

Report Date: 15 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 12/4/2021
Date Commenced: 12/4/2021
Date Completed: 15/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 14-Apr-21

Test Position: TP PTR-39

Depth (m): 0.40

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

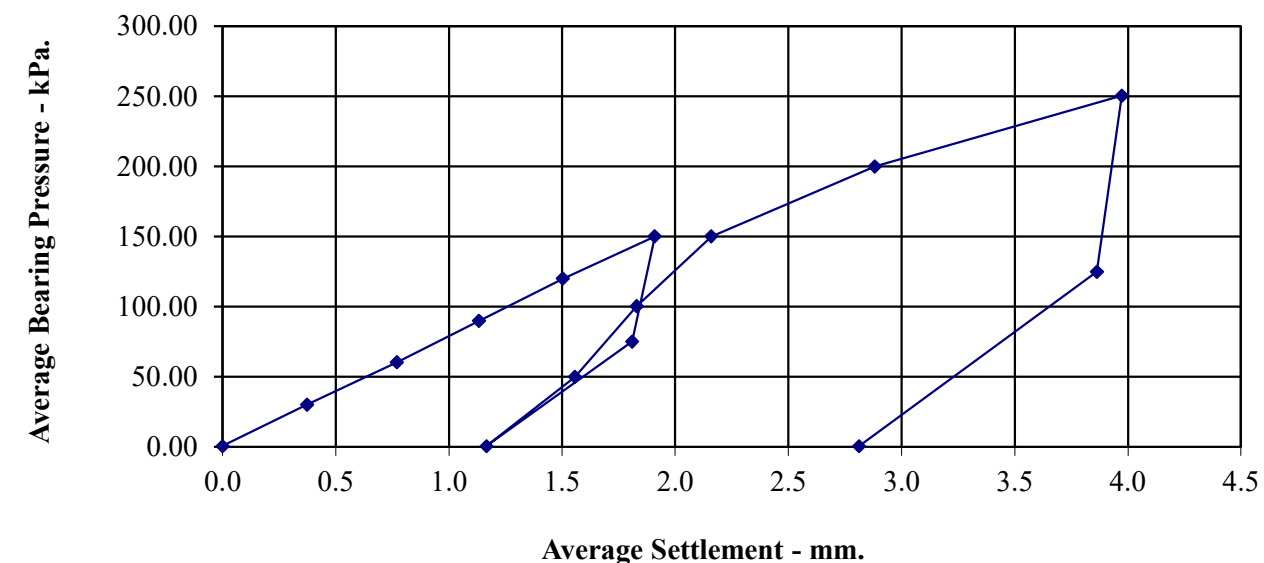
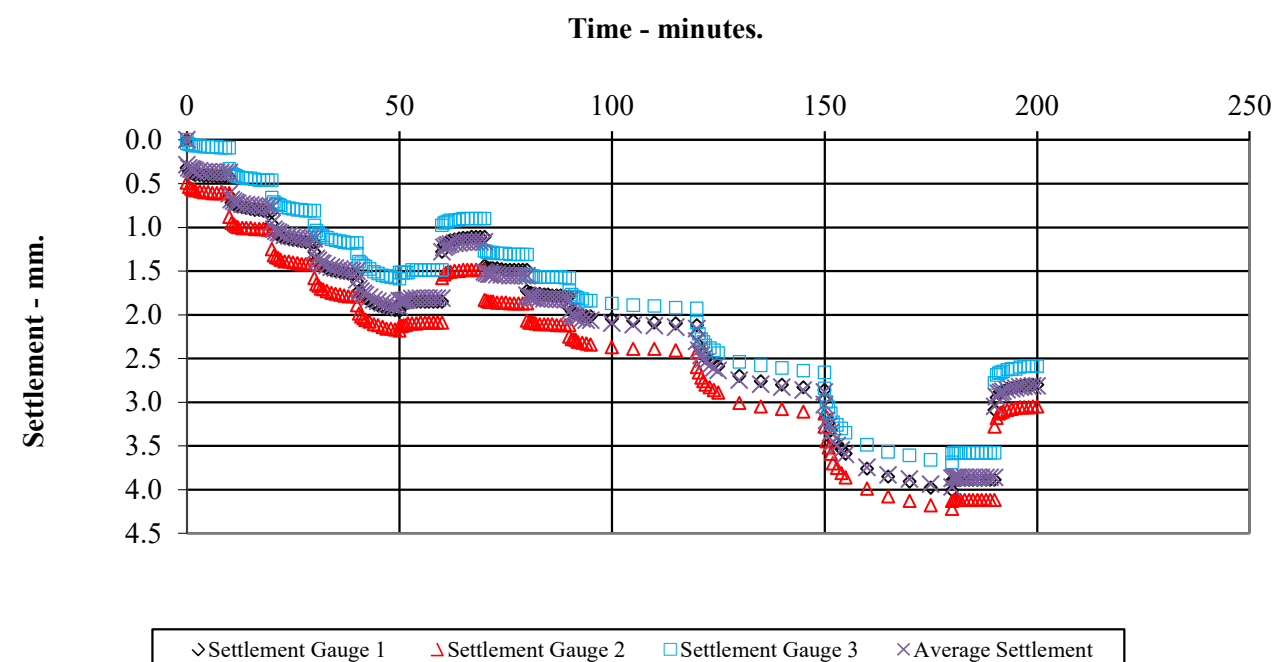
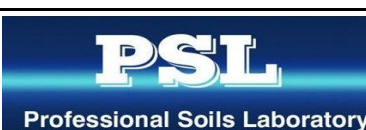
250.32

Maximum Deformation (mm):

3.97

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3016

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test 14-Apr-21
Test Position TP PTR-39
Depth (m) 0.40

Contract Number: PSL21/3016

Description Sub-Soil

Maximum Deflection	3.97	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	99	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 50.0	 kN/m²/mm
 CBR Value	 8.5	 %

Report Date: 14 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 12/4/2021
 Date Commenced: 12/4/2021
 Date Completed: 14/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:

13-Apr-21

Test Position:

TP PTR-40

Depth (m):

0.40

Plate Area (m2):

0.1625971

Type of Kentledge:

Tracked

Maximum Applied Pressure (kPa):

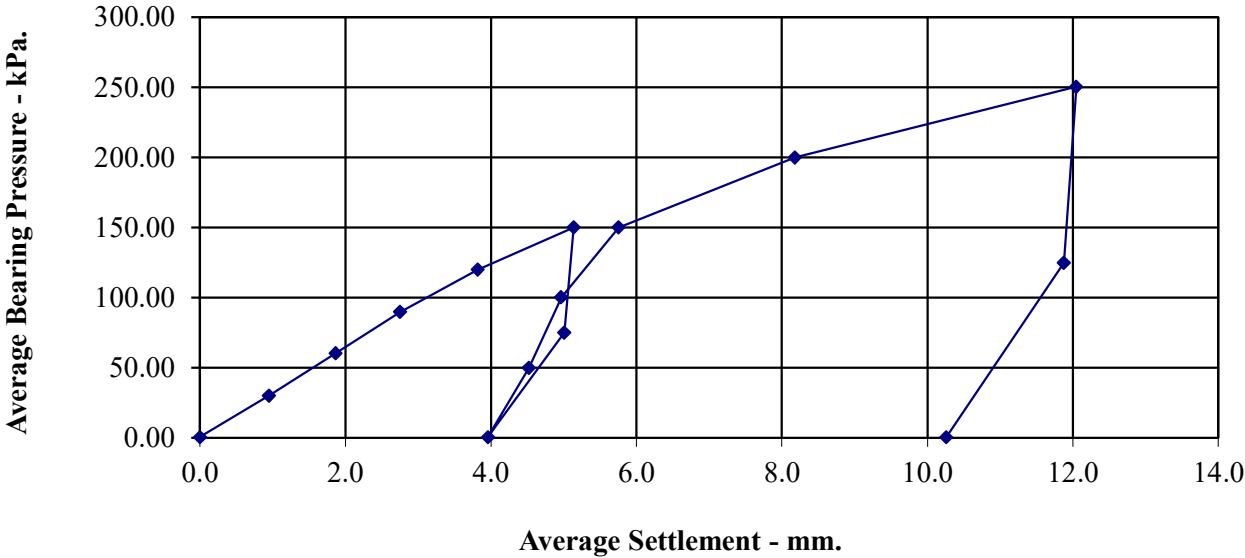
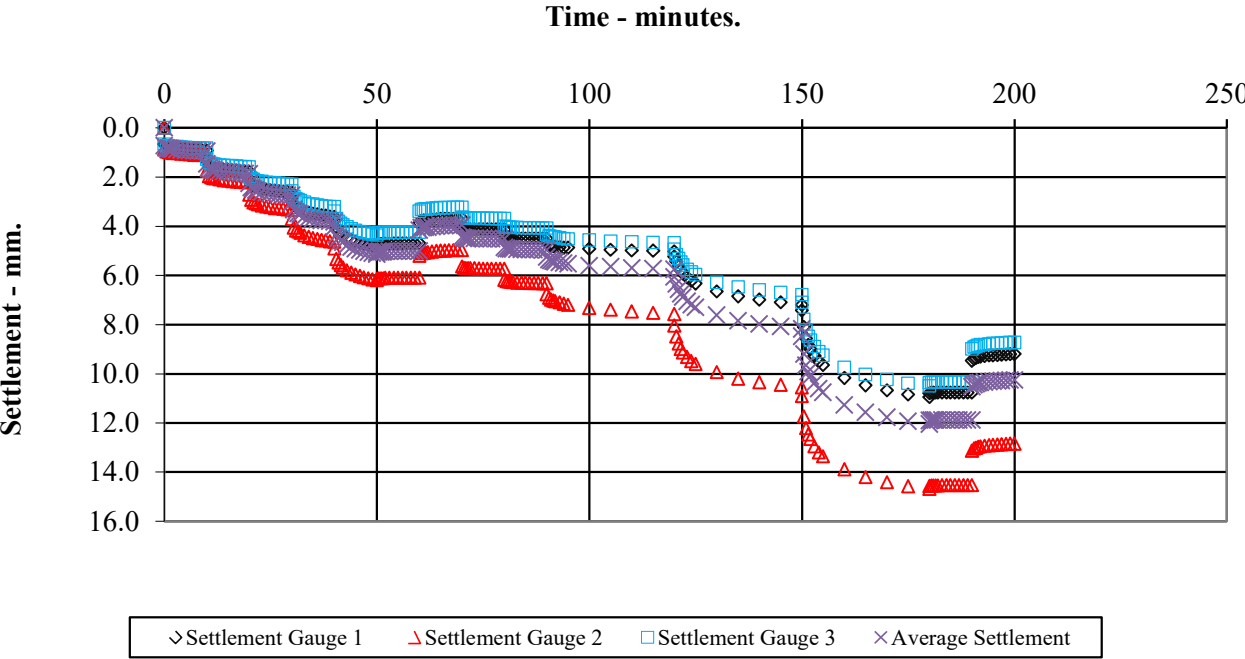
250.32

Maximum Deformation (mm):

12.05

Description:

Sub-Soil



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test

13-Apr-21

Test Position

TP PTR-40

Depth (m)

0.40

Description

Sub-Soil

Maximum Deflection

12.05

mm

Deflection required for CBR value

1.25

mm

Load at 1.25mm

40

kN/m²

Plate diameter

455

mm

Conversion factor for plate diameter

0.629

K₇₆₂(modulus of subgrade reaction)
calculated using 1.25mm settlement

20.2

kN/m²/mm

CBR Value

1.8

%



LABORATORY REPORT



4043

Contract Number: PSL21/3720

Report Date: 06 May 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 6/5/2021

Date Commenced: 6/5/2021

Date Completed: 6/5/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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S Eyre
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awatkins@prosoils.co.uk

Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 06-May-21

Test Position: TP-PTR-42

Depth (m): 0.40

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

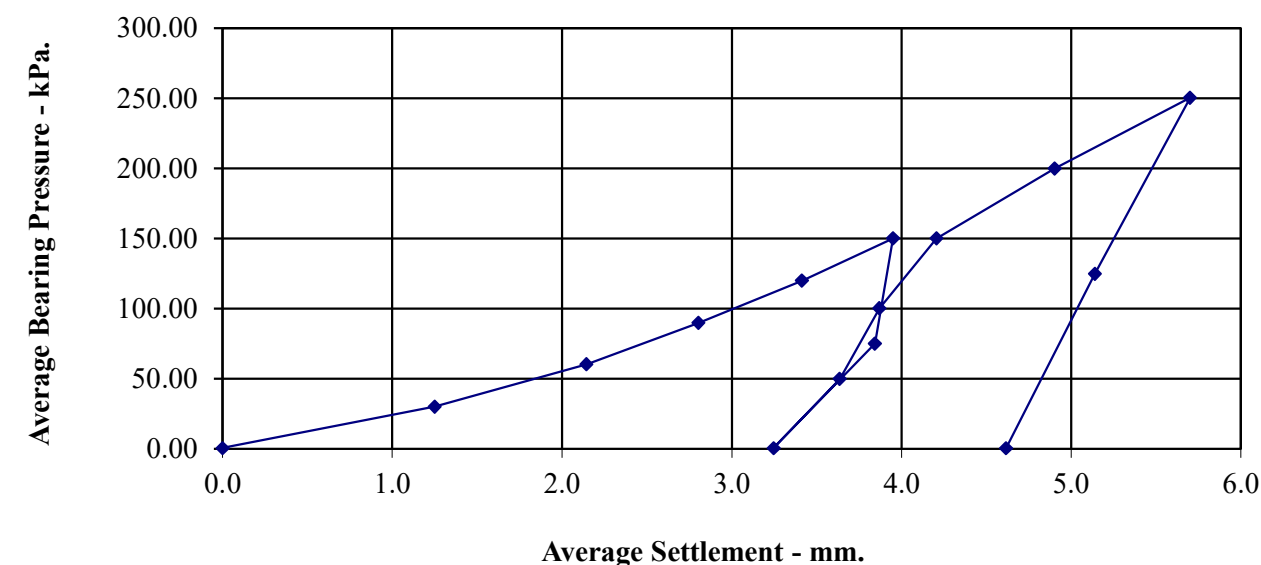
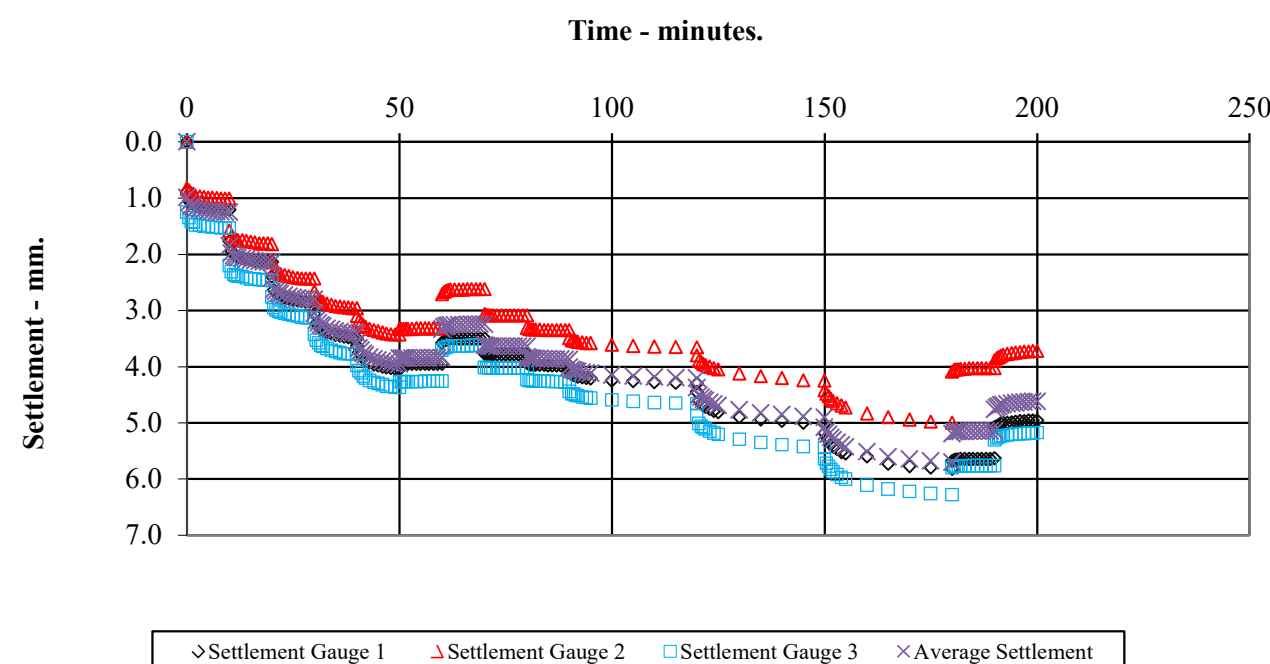
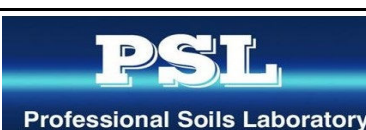
250.32

Maximum Deformation (mm):

5.70

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3720

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06



**LABORATORY
REPORT**



4043

Date of Test **6-May-21**
Test Position **TP-PTR-42**
Depth (m) **0.40**

Contract Number: PSL21/3381

Description **Sub-Soil**

Maximum Deflection	5.70	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	30	kN/m²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
 K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement	 15.2	 kN/m²/mm
 CBR Value	 1.1	 %

Report Date: 30 April 2021

Client's Reference:

Client Name: Tetra Tech
 11th Floor
 1 Angel Court
 London
 EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/4/2021
 Date Commenced: 26/4/2021
 Date Completed: 27/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 30-Apr-21

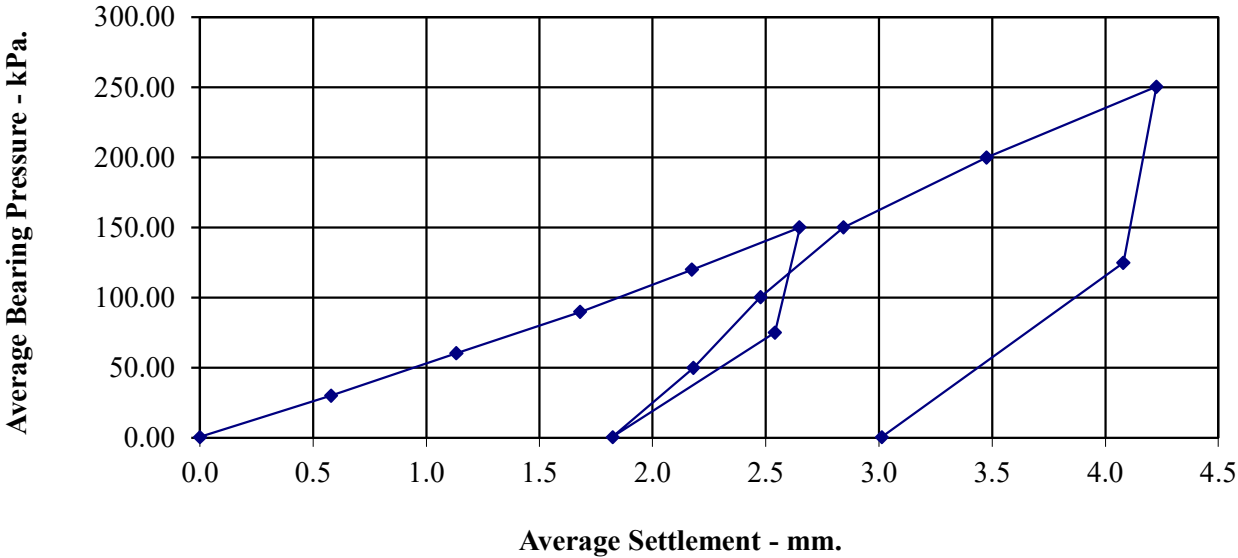
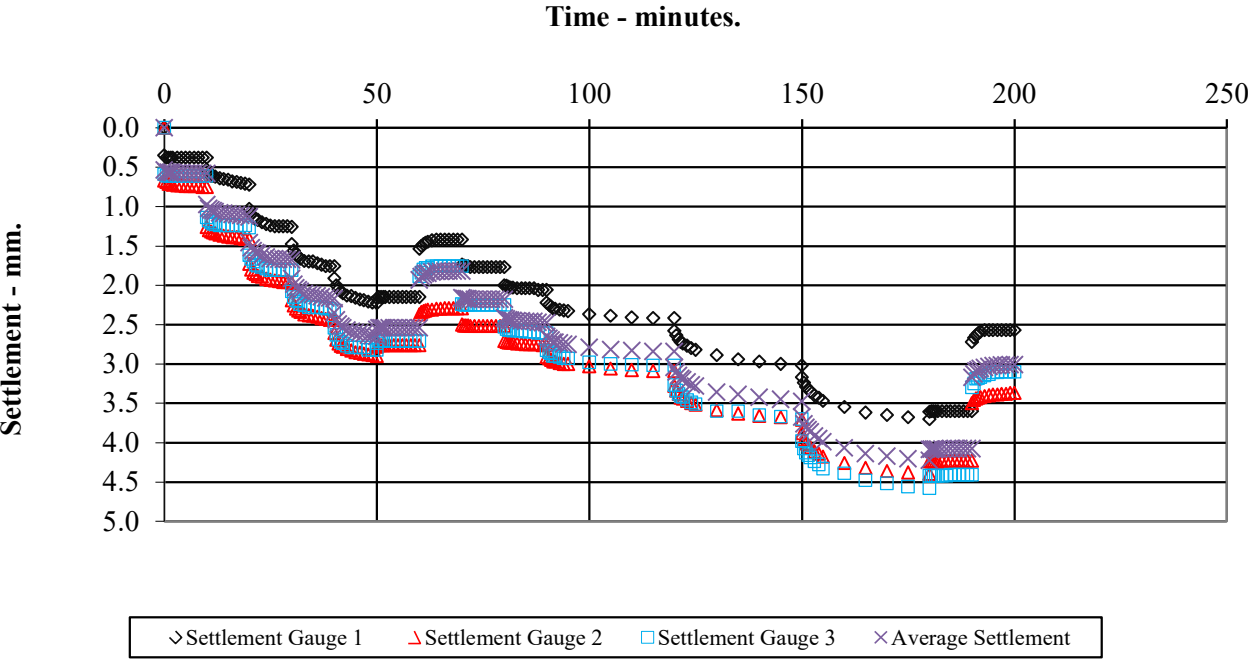
Test Position: TP-PTR-43 Depth (m): 0.32

Plate Area (m2): 0.1625971 Type of Kentledge: Tracked

Maximum Applied Pressure (kPa): 250.32

Maximum Deformation (mm): 4.23

Description: Sub-Soil



Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4

Incorporating IAN 73/06

Date of Test 30-Apr-21

Test Position TP-PTR-43

Depth (m) 0.32

Description Sub-Soil

Maximum Deflection 4.23 mm

Deflection required for CBR value 1.25 mm

Load at 1.25mm 67 kN/m²

Plate diameter 455 mm

Conversion factor for plate diameter 0.629

K₇₆₂(modulus of subgrade reaction) calculated using 1.25mm settlement 33.5 kN/m²/mm

CBR Value 4.2 %



LABORATORY REPORT



4043

Contract Number: PSL21/3381

Report Date: 28 April 2021

Client's Reference:

Client Name: Tetra Tech
11th Floor
1 Angel Court
London
EC2R 7HJ

For the attention of: Richard Tonge

Contract Title: Home Farm, High Street, Cambridge

Date Received: 26/4/2021

Date Commenced: 26/4/2021

Date Completed: 28/4/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

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

Checked and Approved Signatories:

A Watkins
(Director)

R Berriman
(Quality Manager)


S Royle
(Laboratory Manager)

L Knight
(Senior Technician)

S Eyre
(Senior Technician)

T Watkins
(Senior Technician)

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Page 1 of

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test: 27-Apr-21

Test Position: TP PTR-56

Depth (m): 0.30

Plate Area (m²): 0.1625971

Type of Kentledge: Tracked

Maximum Applied Pressure (kPa):

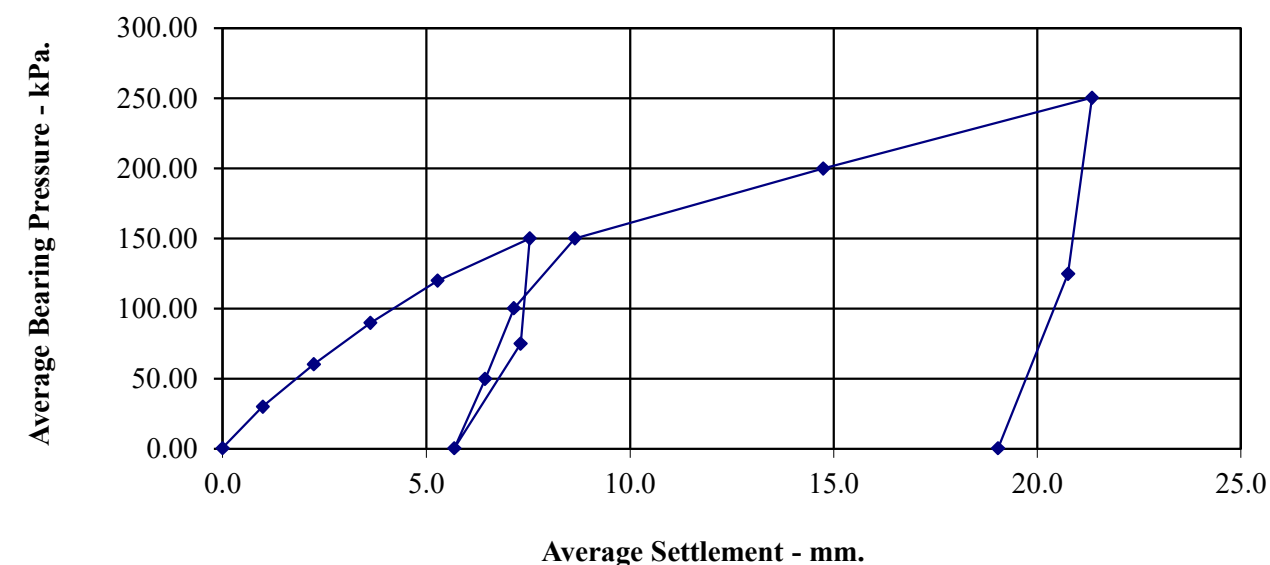
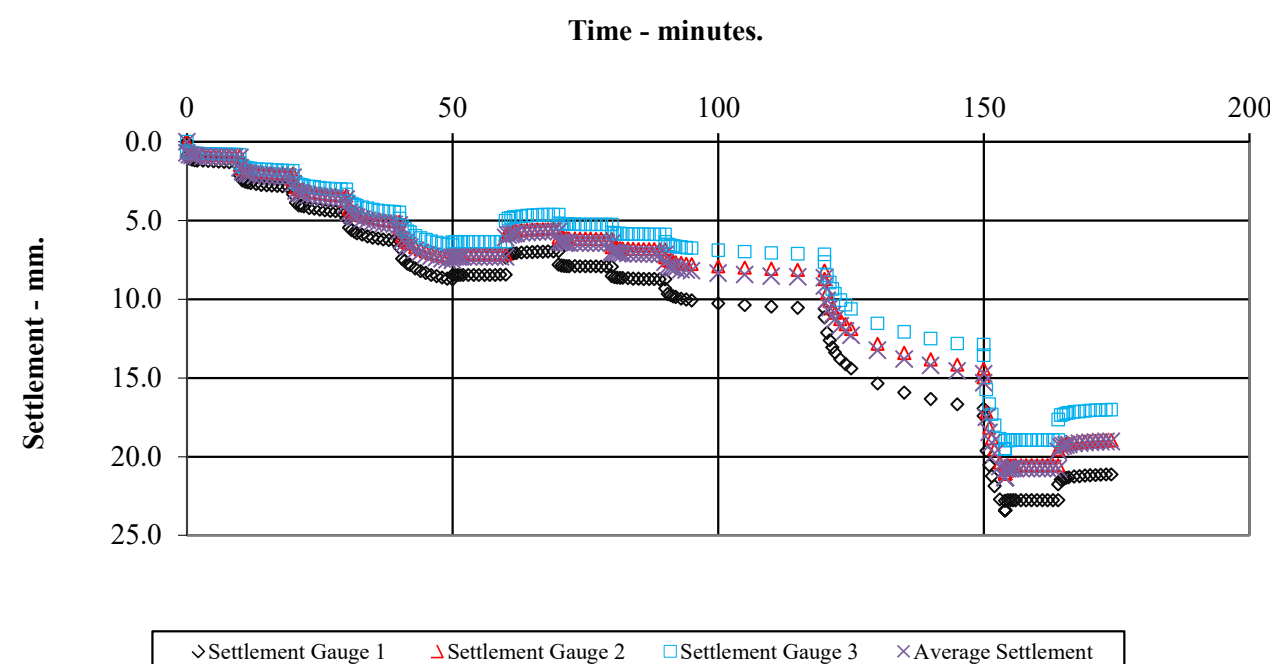
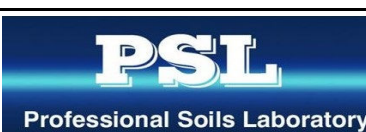
250.32

Maximum Deformation (mm):

21.34

Description:

Sub-Soil



Home Farm, High Street,
Cambridge

Contract No:

PSL21/3381

Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test
 Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
 Incorporating IAN 73/06

Date of Test	27-Apr-21	
Test Position	TP PTR-56	
Depth (m)	0.30	
Description	Sub-Soil	
Maximum Deflection	21.34	mm
Deflection required for CBR value	1.25	mm
Load at 1.25mm	36	kN/m ²
Plate diameter	455	mm
Conversion factor for plate diameter	0.629	
K ₇₆₂ (modulus of subgrade reaction) calculated using 1.25mm settlement	18.4	kN/m ² /mm
CBR Value	1.5	%

APPENDIX F: SOIL INFILTRATION TESTING LOGS