

APPENDIX 4
LABORATORY TEST RESULTS

APPENDIX 4.1
LABORATORY TEST RESULTS SUMMARY

Table 4.1. Laboratory Test Results Summary

Sample ID	Material	Moisture Content (%)	Plasticity Index Test Results				Particle Size Distribution				One Dimensional Consolidation Properties				pH
			LL	PL	PI	LS	Clay (%)	Silt (%)	Sand (%)	D ₃₀	$\rho_{d,i}$	e_0	e_f	m_v	
MH01-S1 1.9-2.4m	Fibrous PEAT														7.0
MH02-S1 0.9-1.5m	Fibrous PEAT														6.0
MH03-S2 3.8-4.0m	Pumiceous silty CLAY	102	106	49	57	20	51	49	0	<1.3 μ m					
MH05-S4 26.4-27.0m	Silty SAND	52.1	Not suitable for testing				11	71	18	<14.2 μ m					
MH07-PT2 1.3-1.35m	Organic clayey SILT	71									0.88	1.888	1.487	0.34	
MH07-S1 2.3-2.8m	Organic silty CLAY	48.9	81	41	40	19	61	37	2	<1.4 μ m					
MH07-PT3 3.8-3.85m	Organic clayey SILT	51.9									1.08	1.361	0.963	0.43	
MH08-S1 4.1-4.4m	Fibrous PEAT														6.0
MH10-PT2 1.4-1.45m	Fibrous PEAT	278									0.30	5.270	3.317	2.6	
MH10-S1 1.5-2.0m	Fibrous PEAT														7.5
MH10-PT3 7.8-7.85m	Fibrous PEAT	228									0.35	4.746	3.283	1.4	
MH10-S4 20.6-21.0m	Pumiceous SILT	45.8	Not suitable for testing			4	8	61.5	30.5	<19.7 μ m					
MH11-S1 2.35-2.8m	Pumiceous silty CLAY	105	127	52	75	26	51	48	1	<1.4 μ m					

Sample ID	Material	Moisture Content (%)	Plasticity Index Test Results				Particle Size Distribution				One Dimensional Consolidation Properties				pH
			LL	PL	PI	LS	Clay (%)	Silt (%)	Sand (%)	D ₃₀	$\rho_{d,i}$	e_0	e_f	m_v	
MH12-S1 4.8-5.3m	Fibrous PEAT														7.5
MH13-PT1 1.3-1.35m	Fibrous PEAT	203									0.38	4.254	3.741	0.50	
MH13-S1 3.5-4.0m	Fibrous PEAT														7.0
MH13-PT2 13.7-13.75m	Fibrous PEAT	71.4									0.89	1.880	1.277	0.65	

Note: Grey cells were not selected for testing.

APPENDIX 4.2
PLASTICITY INDEX TEST RESULTS



Our Ref: 1009521.1159.0.0/Rep1A
 Customer Ref: J01627
 15 July 2021

Lander Geotechnical Consultants Limited
 Level 3, 3 Osterley way
 Manukau
 Auckland 2104

Attention: Kyle Meffan

Dear Kyle

Sunfields (Winton) Ardmore Laboratory Test Report

Samples from the above mentioned site have been tested as received according to your instructions and the results are included in this report. Results apply only to the sample(s) tested. This report supersedes the original report 1009521.1159.0.0/Rep1 dated 14/07/2021 due to a client request to change a sample reference from MH05-S4 to MH-05-S4.

Descriptions are enclosed for your information, but are not covered under the IANZ endorsement of this report.

This report has been prepared for the benefit of Lander Geotechnical Consultants Limited, with respect to the particular brief given to us and it cannot be relied upon in other contexts or for any other purpose without our prior review and agreement.

This report may be reproduced only in full.

Samples not destroyed during testing will be retained for one month from the date of this report before being discarded. If we can be of any further assistance, feel free to get in touch. Contact details are provided at the bottom of this page.

GEOTECHNICS LTD

Report prepared by:



 Tylah Wardrope
 Laboratory Technician

Authorised for Geotechnics by:



 Corey Papu-Gread
 Project Director

Digitally signed by Corey Papu-Gread
 DN: cn=Corey Papu-Gread, o=NZ,
 o=Geotechnics, email=cpapu-gread@geotechnics.co.nz
 Date: 2021.07.15 11:44:39 +1200

Report checked by:



 Ryan Milligan
 Project Manager
 Approved Signatory
 15-July-21



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

t:\geotechnicsgroup\projects\1009521\1009521.1159\workingmaterial\20200608.sunfields (winton) ardmore.docx



15C Amber Crescent
 Judea
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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of Liquid & Plastic Limit, Plasticity Index - NZS 4402: 1986 Tests 2.2 (4 Point), 2.3 & 2.4

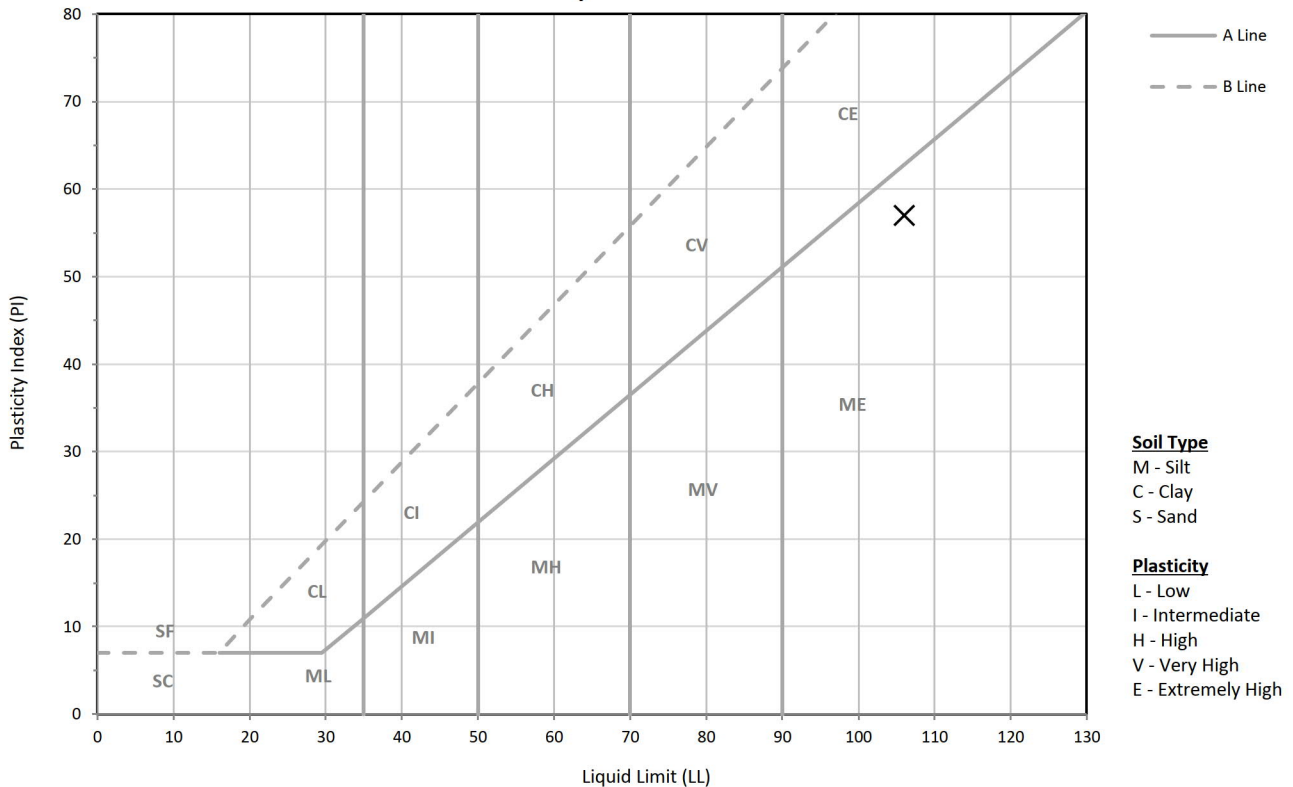
TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000123		
	Reference	HA03-S2	Top Depth	3.8m
	Sampled By	Others, Tested As Received	Bottom Depth	4.0m
	Description	Silty CLAY, brown. Wet. extremely high plasticity.		
SPECIMEN	Reference	N/A	Depth	N/A
	Description	N/A		

TEST RESULTS

Liquid Limit 106
Plastic Limit 49
Plasticity Index 57

Plasticity Chart - BS 5930:1999



Soil Type
 M - Silt
 C - Clay
 S - Sand

Plasticity
 L - Low
 I - Intermediate
 H - High
 V - Very High
 E - Extremely High

TEST REMARKS

• The material used for testing was natural, fraction passing a 425um sieve. • This test result is IANZ accredited. • Date tested 01/07/2021

Approved Signatory Ryan Milligan
Date 14/07/2021



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of the Linear Shrinkage - NZS 4402:1986 Test 2.6

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000123		
	Reference	HA03-S2	Top Depth	3.8m
	Sampled By	Others, Tested As Received	Bottom Depth	4.0m
	Description	Silty CLAY, brown. Wet. extremely high plasticity.		
SPECIMEN	Reference	Depth		
	Description			

Linear Shrinkage **20%**

TEST REMARKS

• This test result is IANZ accredited. •Date tested 04/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Report No: MAT:S21TG000123

Material Test Report

Customer: Lander Geotechnical
Address: Level 3, 3 Osterley Way
 Manukau, 2104
Project: Sunfields (Winton) Ardmore
Project No.: 1009521.1159.0.0
Customer Reference No.: J01627
Report Authorised By : Ryan Milligan 14/07/2021

Please reproduce this report in full when transmitting to others or including in internal reports.

Sample Details

Location Sunfields (Winton) Ardmore
Geotechnics ID S21TG000123
Sample Reference HA03-S2
Sample Description Silty CLAY, brown. Wet,
 extremely high plasticity.
Sample Depth 3.8m
Bottom Depth 4.0m

Test Results

Description	Method	Result	Limits
Moisture Content [NZS 4402:1986 Test 2.1]			
Moisture Content (%)		102	
Date Tested		1/06/2021	

Comments

This test result is IANZ accredited.

If samples have been taken, and were not destroyed during testing, they will be retained for one month from the date of this report before being discarded.



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of Liquid & Plastic Limit, Plasticity Index - NZS 4402: 1986 Tests 2.2 (4 Point), 2.3 & 2.4

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000124		
	Reference	MH-05 - S4	Top Depth	26.4m
	Sampled By	Others, Tested As Received	Bottom Depth	27m
	Description	SILT with some sand and minor clay, light grey. Moist. Dilatant.		
SPECIMEN	Reference	N/A	Depth	N/A
	Description	N/A		

TEST RESULTS

Liquid Limit	Not Suitable
Plastic Limit	Not Suitable
Plasticity Index	Not Obtainable

TEST REMARKS

• The material was unsuitable for testing both the Liquid Limit and the Plastic Limit. • Too Sandy, Dilatant • This test result is IANZ accredited. • Date tested 03/04/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of the Linear Shrinkage - NZS 4402:1986 Test 2.6

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000124		
	Reference	MH-05 - S4	Top	26.4m
	Sampled By	Depth Others, Tested As Received	Bottom Depth	27m
	Description	SILT with some sand and minor clay, light grey. Moist. Dilatant.		
SPECIMEN	Reference	Depth		
	Description			

Linear Shrinkage **Not Suitable**

TEST REMARKS

• This test result is IANZ accredited. •Date tested 03/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Report No: MAT:S21TG000124

Material Test Report

Customer: Lander Geotechnical
Address: Level 3, 3 Osterley Way
Manukau, 2104
Project: Sunfields (Winton) Ardmore
Project No.: 1009521.1159.0.0
Customer Reference No.: J01627
Report Authorised By : Ryan Milligan 14/07/2021

Please reproduce this report in full when transmitting to others or including in internal reports.

Sample Details

Location Sunfields (Winton) Ardmore
Geotechnics ID S21TG000124
Sample Reference MH-05 - S4
Sample Description SILT with some sand and minor clay,
light grey. Moist. Dilatant.
Sample Depth 26.4m
Bottom Depth 27m

Test Results

Description	Method	Result	Limits
Moisture Content [NZS 4402:1986 Test 2.1]			
Moisture Content (%)		52.1	
Date Tested		3/06/2021	

Comments

This test result is IANZ accredited.

If samples have been taken, and were not destroyed during testing, they will be retained for one month from the date of this report before being discarded.



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of Liquid & Plastic Limit, Plasticity Index - NZS 4402: 1986 Tests 2.2 (4 Point), 2.3 & 2.4

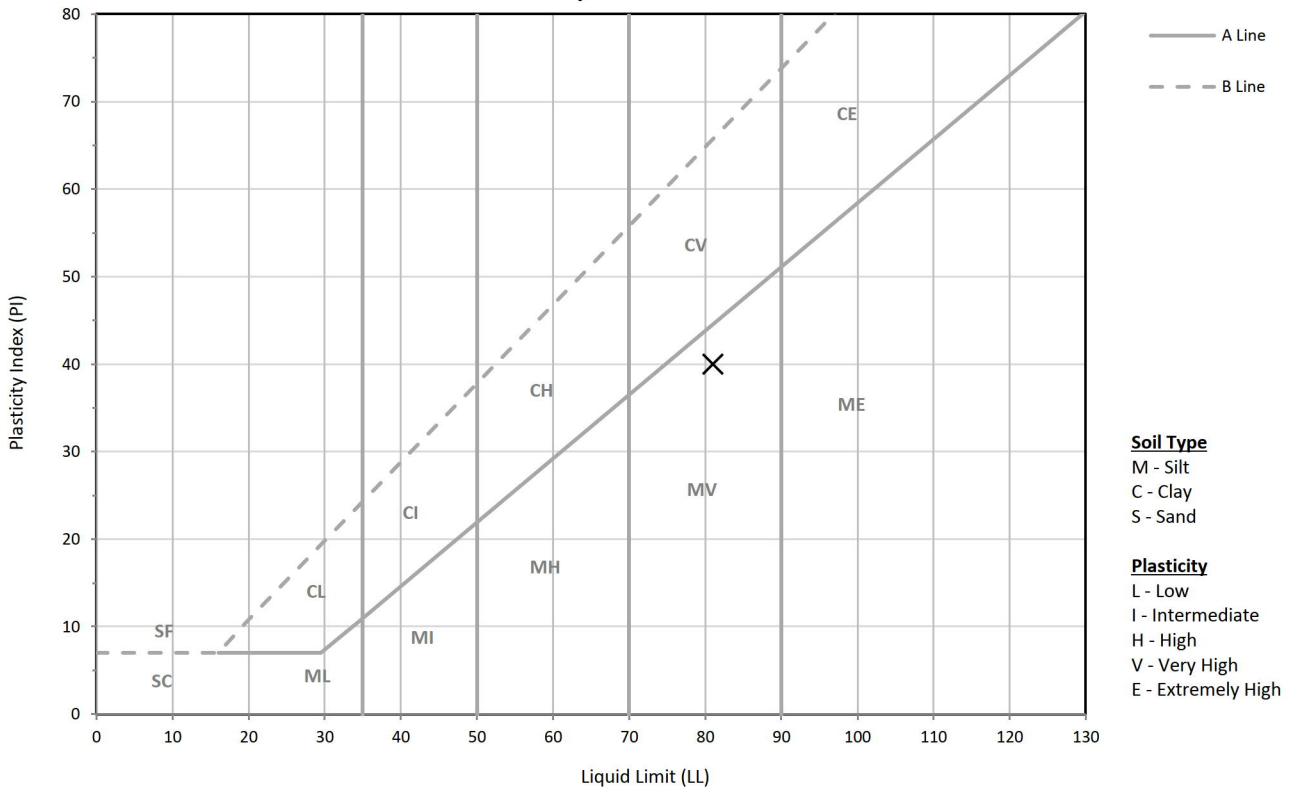
TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000125		
	Reference	MH07- S1	Top Depth	2.3m
	Sampled By	Others, Tested As Received	Bottom Depth	2.8m
	Description	Silty CLAY with trace sand, dark brown. Moist, very high plasticity.		
SPECIMEN	Reference	N/A	Depth	N/A
	Description	N/A		

TEST RESULTS

Liquid Limit 81
Plastic Limit 41
Plasticity Index 40

Plasticity Chart - BS 5930:1999



TEST REMARKS

• The material used for testing was natural, fraction passing a 425um sieve. • This test result is IANZ accredited. • Date tested 02/06/2021

Approved Signatory Ryan Milligan
Date 14/07/2021



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of the Linear Shrinkage - NZS 4402:1986 Test 2.6

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000125		
	Reference	MH07- S1	Top Depth	2.3m
	Sampled By	Others, Tested As Received	Bottom Depth	2.8m
	Description	Silty CLAY with trace sand, dark brown. Moist, very high plasticity.		
SPECIMEN	Reference	Depth		
	Description			

Linear Shrinkage **19%**

TEST REMARKS

- This test result is IANZ accredited. • Date tested 04/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Report No: MAT:S21TG000125

Material Test Report

Customer: Lander Geotechnical
Address: Level 3, 3 Osterley Way
Manukau, 2104
Project: Sunfields (Winton) Ardmore
Project No.: 1009521.1159.0.0
Customer Reference No.: J01627
Report Authorised By : Ryan Milligan 14/07/2021

Please reproduce this report in full when transmitting to others or including in internal reports.

Sample Details

Location Sunfields (Winton) Ardmore
Geotechnics ID S21TG000125
Sample Reference MH07- S1
Sample Description Silty CLAY with trace sand, dark brown.
Moist, very high plasticity.
Sample Depth 2.3m
Bottom Depth 2.8m

Test Results

Description	Method	Result	Limits
Moisture Content [NZS 4402:1986 Test 2.1]			
Moisture Content (%)		48.9	
Date Tested		4/06/2021	

Comments

This test result is IANZ accredited.

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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of Liquid & Plastic Limit, Plasticity Index - NZS 4402: 1986 Tests 2.2 (4 Point), 2.3 & 2.4

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000126		
	Reference	M10 - S4	Top Depth	20.6m
	Sampled By	Others, Tested As Received	Bottom Depth	21m
	Description	Sandy SILT with trace clay, light grey. Moist. Dilatant.		
SPECIMEN	Reference	N/A	Depth	N/A
	Description	N/A		

TEST RESULTS

Liquid Limit	Not Suitable
Plastic Limit	Not Suitable
Plasticity Index	Not Obtainable

TEST REMARKS

• The material was unsuitable for testing both the Liquid Limit and the Plastic Limit. • Too Sandy, Dilatant • This test result is IANZ accredited. •
 Date tested 01/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of the Linear Shrinkage - NZS 4402:1986 Test 2.6

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000126		
	Reference	M10 - S4	Top Depth	20.6m
	Sampled By	Others, Tested As Received	Bottom Depth	21m
	Description	Sandy SILT with trace clay, light grey. Moist. Diatant.		
SPECIMEN	Reference	Depth		
	Description			

Linear Shrinkage **4%**

TEST REMARKS

- This test result is IANZ accredited. • Date tested 03/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Report No: MAT:S21TG000126

Material Test Report

Customer: Lander Geotechnical
Address: Level 3, 3 Osterley Way
Manukau, 2104
Project: Sunfields (Winton) Ardmore
Project No.: 1009521.1159.0.0
Customer Reference No.: J01627
Report Authorised By : Ryan Milligan 14/07/2021

Please reproduce this report in full when transmitting to others or including in internal reports.

Sample Details

Location Sunfields (Winton) Ardmore
Geotechnics ID S21TG000126
Sample Reference M10 - S4
Sample Description Sandy SILT with trace clay,
light grey. Moist. Diatant.
Sample Depth 20.6m
Bottom Depth 21m

Test Results

Description	Method	Result	Limits
Moisture Content [NZS 4402:1986 Test 2.1]			
Moisture Content (%)		45.8	
Date Tested		2/06/2021	

Comments

This test result is IANZ accredited.

If samples have been taken, and were not destroyed during testing, they will be retained for one month from the date of this report before being discarded.



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Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of Liquid & Plastic Limit, Plasticity Index - NZS 4402: 1986 Tests 2.2 (4 Point), 2.3 & 2.4

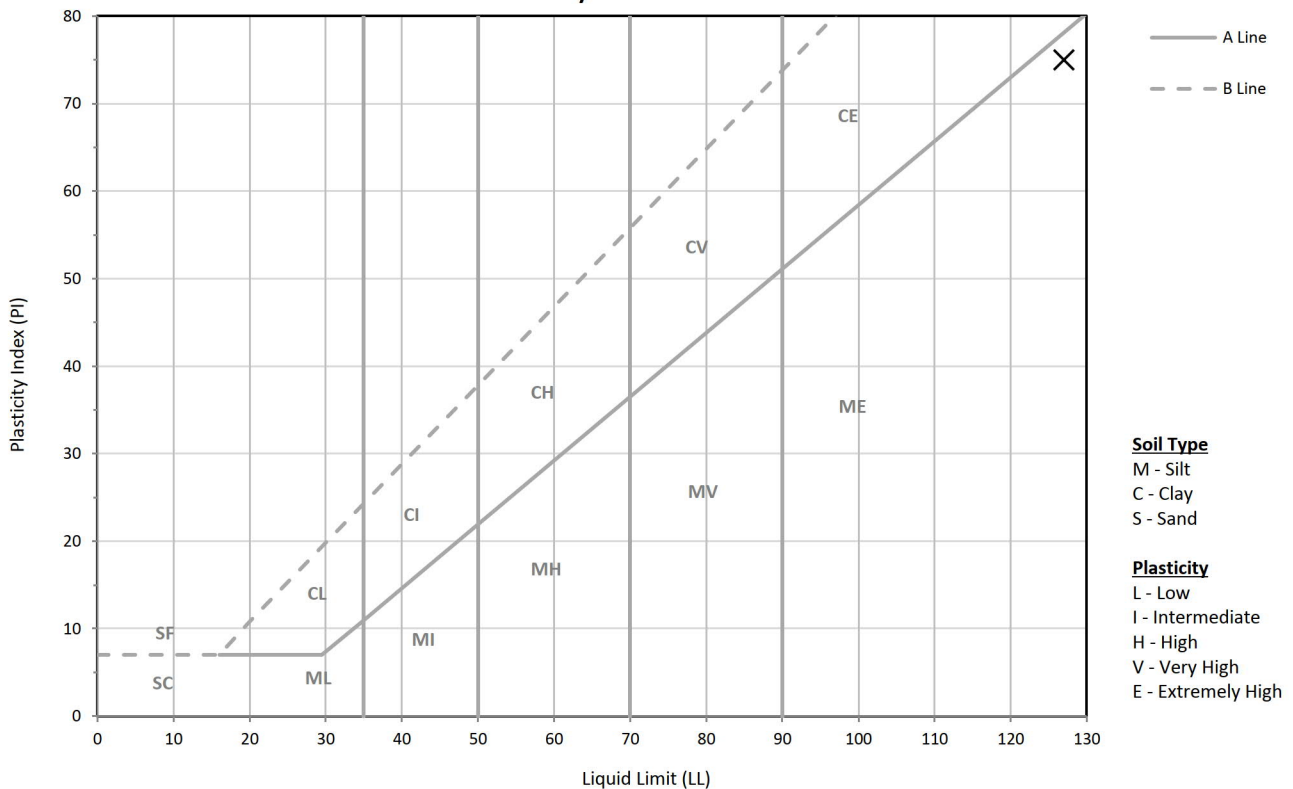
TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000128		
	Reference	HA11-S1	Top Depth	2.3m
	Sampled By	Others, Tested As Received	Bottom Depth	2.8m
	Description	Clayey SILT with trace sand, light grey. Wet, Extremely high plasticity.		
SPECIMEN	Reference	N/A	Depth	N/A
	Description	N/A		

TEST RESULTS

Liquid Limit 127
Plastic Limit 52
Plasticity Index 75

Plasticity Chart - BS 5930:1999



TEST REMARKS

• The material used for testing was natural, fraction passing a 425um sieve. • This test result is IANZ accredited. • Date tested 1/06/201

Approved Signatory Ryan Milligan

Date 14/07/2021



15C Amber Crescent
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15 of 16

Geotechnics Project Number 1009521.1159.0.0
QESTLab Work Order ID W21TG-0075
Customer Project ID J01627

Determination of the Linear Shrinkage - NZS 4402:1986 Test 2.6

TEST DETAILS

LOCATION	Description	Sunfields (Winton) Ardmore		
	Data	N/A		
SAMPLE	Geotechnics ID	S21TG000128		
	Reference	HA11-S1	Top Depth	2.3m
	Sampled By	Others, Tested As Received	Bottom Depth	2.8m
	Description	Clayey SILT with trace sand, light grey. Wet, Extremely high plasticity.		
SPECIMEN	Reference	Depth		
	Description			

Linear Shrinkage **26%**

TEST REMARKS

• This test result is IANZ accredited. • Date tested 04/06/2021

Approved Signatory Ryan Milligan

Date 14/07/2021



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Report No: MAT:S21TG000128

Material Test Report

Customer: Lander Geotechnical
Address: Level 3, 3 Osterley Way
 Manukau, 2104
Project: Sunfields (Winton) Ardmore
Project No.: 1009521.1159.0.0
Customer Reference No.: J01627
Report Authorised By : Ryan Milligan 14/07/2021

Please reproduce this report in full when transmitting to others or including in internal reports.

Sample Details

Location Sunfields (Winton) Ardmore
Geotechnics ID S21TG000128
Sample Reference HA11-S1
Sample Description Clayey SILT with trace sand, light grey.
 Wet, Extremely high plasticity.
Sample Depth 2.3m
Bottom Depth 2.8m

Test Results

Description	Method	Result	Limits
Moisture Content [NZS 4402:1986 Test 2.1]			
Moisture Content (%)		105	
Date Tested		8/06/2021	

Comments

This test result is IANZ accredited.

If samples have been taken, and were not destroyed during testing, they will be retained for one month from the date of this report before being discarded.

APPENDIX 4.3
PARTICLE SIZE DISTRIBUTION TEST RESULTS



Our Ref: 1009479.1011.0.0/Rep1
Customer Ref: J01627
25 June 2021

Lander Geotechnical Ltd.
PO Box 97385, Manukau 2241

Attention: Kyle Meffan

Dear Kyle

Sunfield Winton Laboratory Test Report

The samples we collected from the above mentioned site have been tested according to your instructions and the results are included in this report. Results apply only to the sample(s) tested.

Descriptions are enclosed for your information, but are not covered under the IANZ endorsement of this report.

This report has been prepared for the benefit of Lander Geotechnical Ltd., with respect to the particular brief given to us and it cannot be relied upon in other contexts or for any other purpose without our prior review and agreement.

This report may be reproduced only in full.

Samples not destroyed during testing will be retained for one month from the date of this report before being discarded. If we can be of any further assistance, feel free to get in touch. Contact details are provided at the bottom of this page.

GEOTECHNICS LTD

Report prepared by:

.....
Jack Singh
Laboratory Technician
Approved Signatory

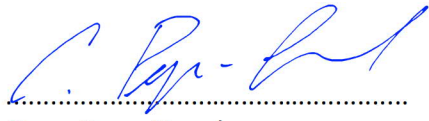
Authorised for Geotechnics by:

.....
Vic O'Connor
Project Director



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

Report checked by:



Corey Papu-Gread
Christchurch Manager

25-Jun-21

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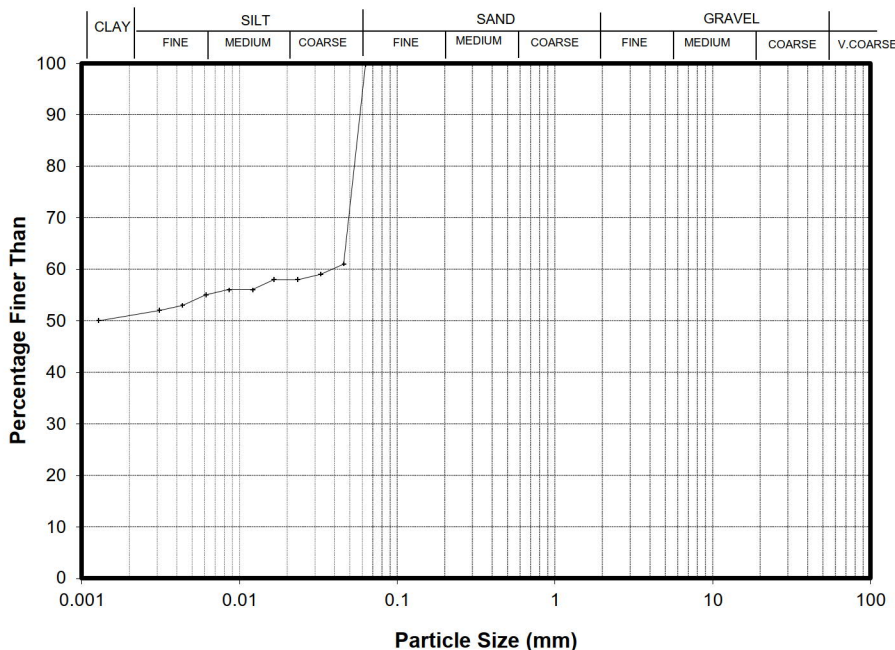
45a Parkhouse Road, Christchurch
 New Zealand
 P 64 09 356 3510
 www.geotechnics.co.nz

Work order ID: W21CH-0124

Site: Sunfield Winton
 BH No.: **MH3** Sample ID: S21CH000425
 Test Method Used : NZS 4402:1986 Test 2.8.4 Hydrometer

Your Job No.: J01677
 Our Job No.: 1009479.1011.0.0
 Depth: **3.8m - 4.0m**

PARTICLE SIZE ANALYSIS



Sieve (mm)	Total % Passing	Sieve (mm)	Total % Passing	Equivalent Particle Diameter D (mm)	% of Particles Finer than D
4.75	100			0.0458	61
3.35	100			0.0327	59
2.00	100			0.0233	58
0.600	100			0.0165	58
0.212	100			0.0121	56
0.063	100			0.0086	56
				0.0061	55
				0.0044	53
				0.0031	52
				0.0013	50

Sample history : Natural, whole soil
 Description: Silty CLAY, brown. Moist, extremely high plasticity.

Solid Density (Assumed) : 2.65t/m³

Remarks : A sub sample was split from the original sample for hydrometer analysis. This sample was soaked with a dispersing agent (~2 hrs), then the mechanical shaker was used, until the material was brought into suspension, before proceeding with the test.
 Suspension pH 8.0. Use of assumed values in calculation is at customers discretion and risk.
 The classification of sand-silt-clay components were described on the basis of particle size analysis.
 Sample description is not IANZ accredited.

Entered by : JASI Date : 16/06/2021 Checked by : CXPG Date :25/6/2021



GEOTECHNICS

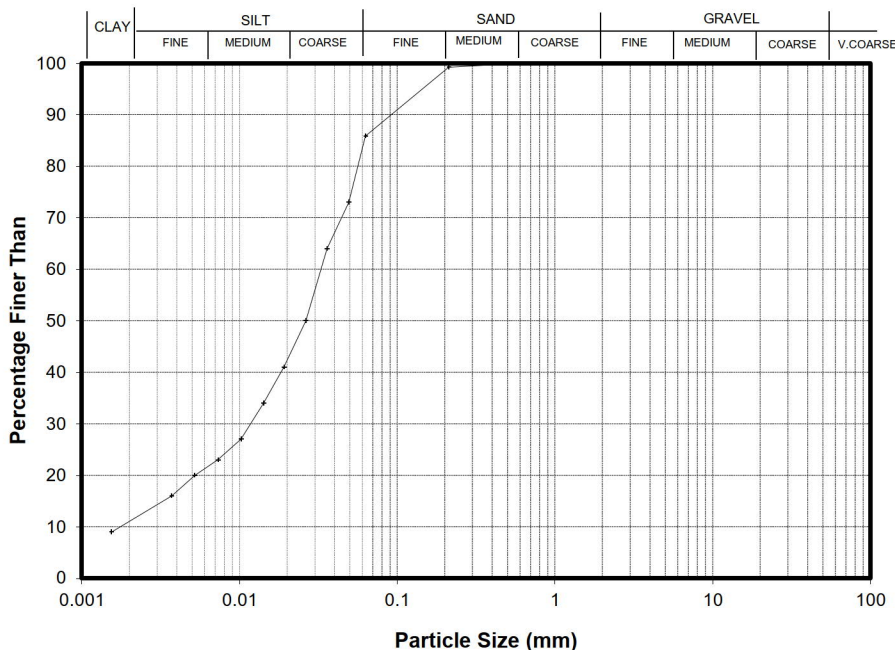
45a Parkhouse Road, Christchurch
 New Zealand
 P 64 09 356 3510
 www.geotechnics.co.nz

Work order ID: W21CH-0124

Site: Sunfield Winton
 BH No.: **MH5** Sample ID: S21CH000426
 Test Method Used : NZS 4402:1986 Test 2.8.4 Hydrometer

Your Job No.: J01677
 Our Job No.: 1009479.1011.0.0
 Depth: **26.4m - 27.0m**

PARTICLE SIZE ANALYSIS



Sieve (mm)	Total % Passing	Sieve (mm)	Total % Passing
4.75	100		
3.35	100		
2.00	100		
0.600	100		
0.212	99		
0.063	86		

Equivalent Particle Diameter D (mm)	% of Particles Finer than D
0.0492	73
0.0358	64
0.0264	50
0.0191	41
0.0142	34
0.0102	27
0.0073	23
0.0052	20
0.0037	16
0.0015	9

Sample history : Natural, whole soil
 Description: SILT with some sand and minor clay, light grey. Moist.

Solid Density (Assumed) : 2.65t/m³

Remarks : A sub sample was split from the original sample for hydrometer analysis. This sample was soaked with a dispersing agent (~2 hrs), then the mechanical shaker was used, until the material was brought into suspension, before proceeding with the test.
 Suspension pH 8.0. Use of assumed values in calculation is at customers discretion and risk.
 The classification of sand-silt-clay components were described on the basis of particle size analysis.
 Sample description is not IANZ accredited.

Entered by : JASI Date : 16/06/2021 Checked by : CXPG Date :25/6/2021



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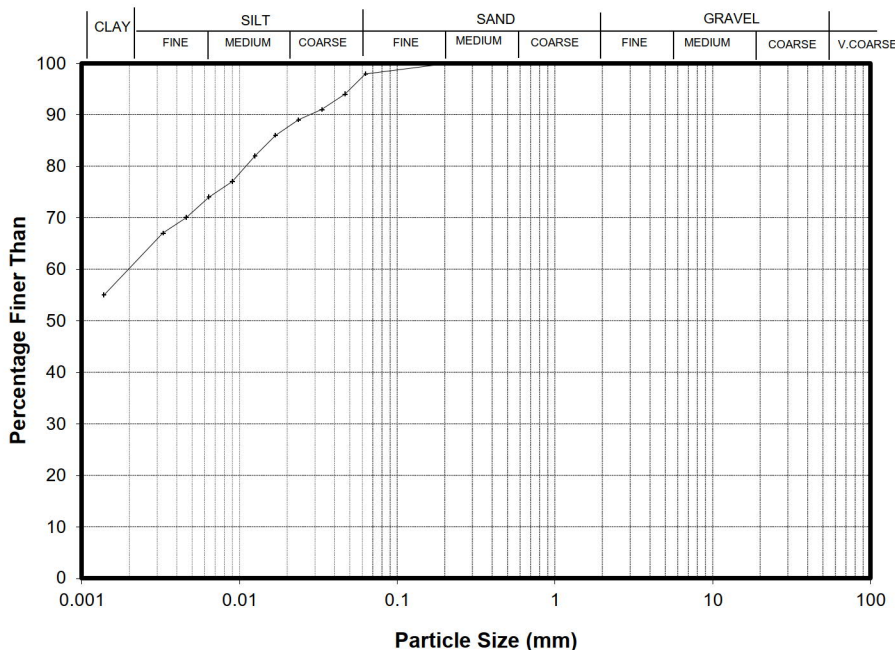
45a Parkhouse Road, Christchurch
 New Zealand
 P 64 09 356 3510
 www.geotechnics.co.nz

Work order ID: W21CH-0124

Site: Sunfield Winton
 BH No.: **MH7** Sample ID: S21CH000427
 Test Method Used : NZS 4402:1986 Test 2.8.4 Hydrometer

Your Job No.: J01677
 Our Job No.: 1009479.1011.0.0
 Depth: **2.3m - 2.8m**

PARTICLE SIZE ANALYSIS



Sieve (mm)	Total % Passing	Sieve (mm)	Total % Passing
4.75	100		
3.35	100		
2.00	100		
0.600	100		
0.212	100		
0.063	98		

Equivalent Particle Diameter D (mm)	% of Particles Finer than D
0.0466	94
0.0332	91
0.0237	89
0.0169	86
0.0125	82
0.0090	77
0.0064	74
0.0046	70
0.0033	67
0.0014	55

Sample history : Natural, whole soil
 Description: Silty CLAY with trace sand, dark brown. Moist, very high plasticity.

Solid Density (Assumed) : 2.65t/m³

Remarks : A sub sample was split from the original sample for hydrometer analysis. This sample was soaked with a dispersing agent (~2 hrs), then the mechanical shaker was used, until the material was brought into suspension, before proceeding with the test.
 Suspension pH 8.0. Use of assumed values in calculation is at customers discretion and risk.
 The classification of sand-silt-clay components were described on the basis of particle size analysis.
 Sample description is not IANZ accredited.

Entered by : JASI Date : 16/06/2021 Checked by : JASI Date : 25/06/2021



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Work order ID: W21CH-0124

Site: Sunfield Winton

BH No.: **MH10**

Sample ID: S21CH000428

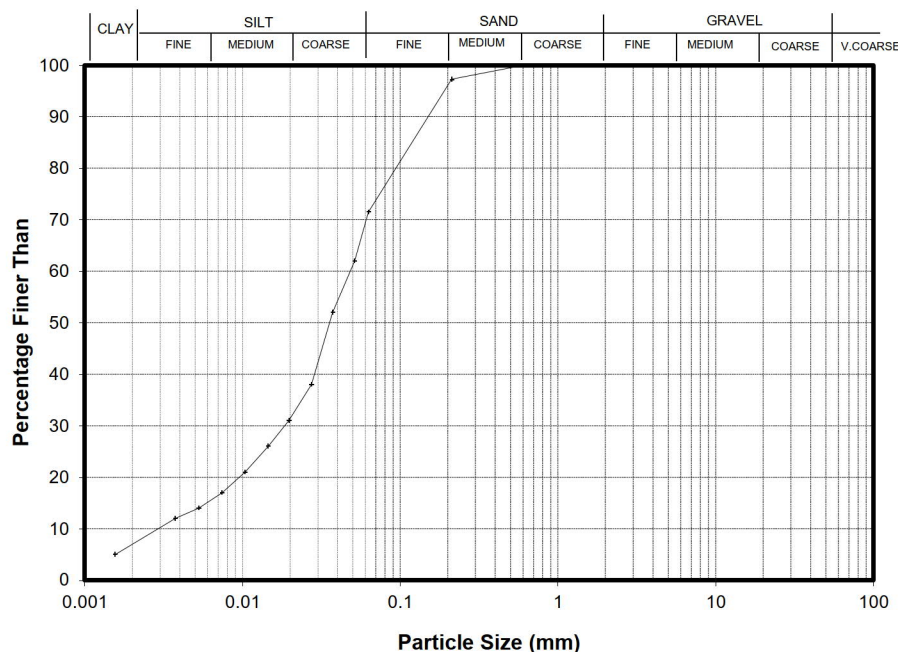
Test Method Used : NZS 4402:1986 Test 2.8.4 Hydrometer

Your Job No.: J01677

Our Job No.: 1009479.1011.0.0

Depth: **20.6m - 21.0m**

PARTICLE SIZE ANALYSIS



Sieve (mm)	Total % Passing	Sieve (mm)	Total % Passing	Equivalent Particle Diameter D (mm)	% of Particles Finer than D
4.75	100			0.0513	62
3.35	100			0.0373	52
2.00	100			0.0273	38
0.600	100			0.0197	31
0.212	97			0.0145	26
0.063	72			0.0104	21
				0.0074	17
				0.0053	14
				0.0038	12
				0.0016	5

Sample history : Natural, whole soil

Description: Sandy SILT with trace clay, light grey. Moist.

Solid Density (Assumed) : 2.65t/m³

Remarks : A sub sample was split from the original sample for hydrometer analysis. This sample was soaked with a dispersing agent (~2 hrs), then the mechanical shaker was used, until the material was brought into suspension, before proceeding with the test.

Suspension pH 8.0. Use of assumed values in calculation is at customers discretion and risk.

The classification of sand-silt-clay components were described on the basis of particle size analysis.

Sample description is not IANZ accredited.

Entered by : JASI

Date : 16/06/2021

Checked by :

CXPG

Date :25/6/2021



GEOTECHNICS

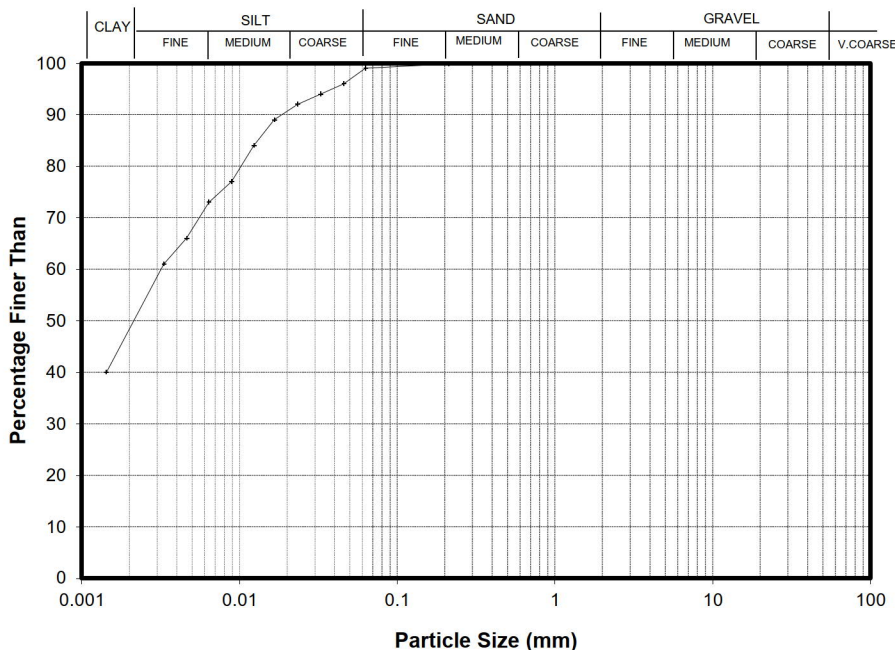
45a Parkhouse Road, Christchurch
 New Zealand
 P 64 09 356 3510
 www.geotechnics.co.nz

Work order ID: W21CH-0124

Site: Sunfield Winton
 BH No.: **MH11** Sample ID: S21CH000429
 Test Method Used : NZS 4402:1986 Test 2.8.4 Hydrometer

Your Job No.: J01677
 Our Job No.: 1009479.1011.0.0
 Depth: **2.35m - 2.8m**

PARTICLE SIZE ANALYSIS



Sieve (mm)	Total % Passing	Sieve (mm)	Total % Passing
4.75	100		
3.35	100		
2.00	100		
0.600	100		
0.212	100		
0.063	99		

Equivalent Particle Diameter D (mm)	% of Particles Finer than D
0.0458	96
0.0327	94
0.0233	92
0.0166	89
0.0123	84
0.0089	77
0.0064	73
0.0046	66
0.0033	61
0.0014	40

Sample history : Natural, whole soil
 Description: Clayey SILT with trace sand, light grey. Moist.

Solid Density (Assumed) : 2.65t/m³

Remarks : A sub sample was split from the original sample for hydrometer analysis. This sample was soaked with a dispersing agent (~2 hrs), then the mechanical shaker was used, until the material was brought into suspension, before proceeding with the test.
 Suspension pH 8.0. Use of assumed values in calculation is at customers discretion and risk.
 The classification of sand-silt-clay components were described on the basis of particle size analysis.
 Sample description is not IANZ accredited.

Entered by : JASI Date : 16/06/2021 Checked by : CXPG Date :25/6/2021

APPENDIX 4.4
1D-CONSOLIDATION TEST RESULTS



Our Ref: 1100842.0000/Rep 1
 Customer Ref: J01627
 10 June 2021

Lander Geotechnical Consultants Limited
 Level 3
 3 Osterley Way
 Manukau
 Auckland 2104

Attention: Kyle Meffan

Dear Kyle

Sunfields, Ardmore Laboratory Test Report

Samples from the above mentioned site have been tested as received according to your instructions and the results are included in this report. Results apply only to the sample tested.

Descriptions are enclosed for your information, but are not covered under the IANZ endorsement of this report.

This report has been prepared for the benefit of Lander Geotechnical Consultants Limited, with respect to the particular brief given to us and it cannot be relied upon in other contexts or for any other purpose without our prior review and agreement.

This report may be reproduced only in full.

Samples were destroyed during testing. If we can be of any further assistance, feel free to get in touch. Contact details are provided at the bottom of this page.

GEOTECHNICS LTD

Report prepared by:

Sim Tirunahari
 I am the author of this
 document
 2021.06.10 09:07:40 +12'00'

.....
 Sim Tirunahari
 Soils Laboratory Manager
 Approved Signatory

Authorised for Geotechnics by:

.....
 Steven Anderson
 Project Director

Report checked by:

.....
 Steven Anderson
 Operations and Technical Manager



All tests reported herein
 have been performed in
 accordance with the
 laboratory's scope of
 accreditation

10-Jun-21

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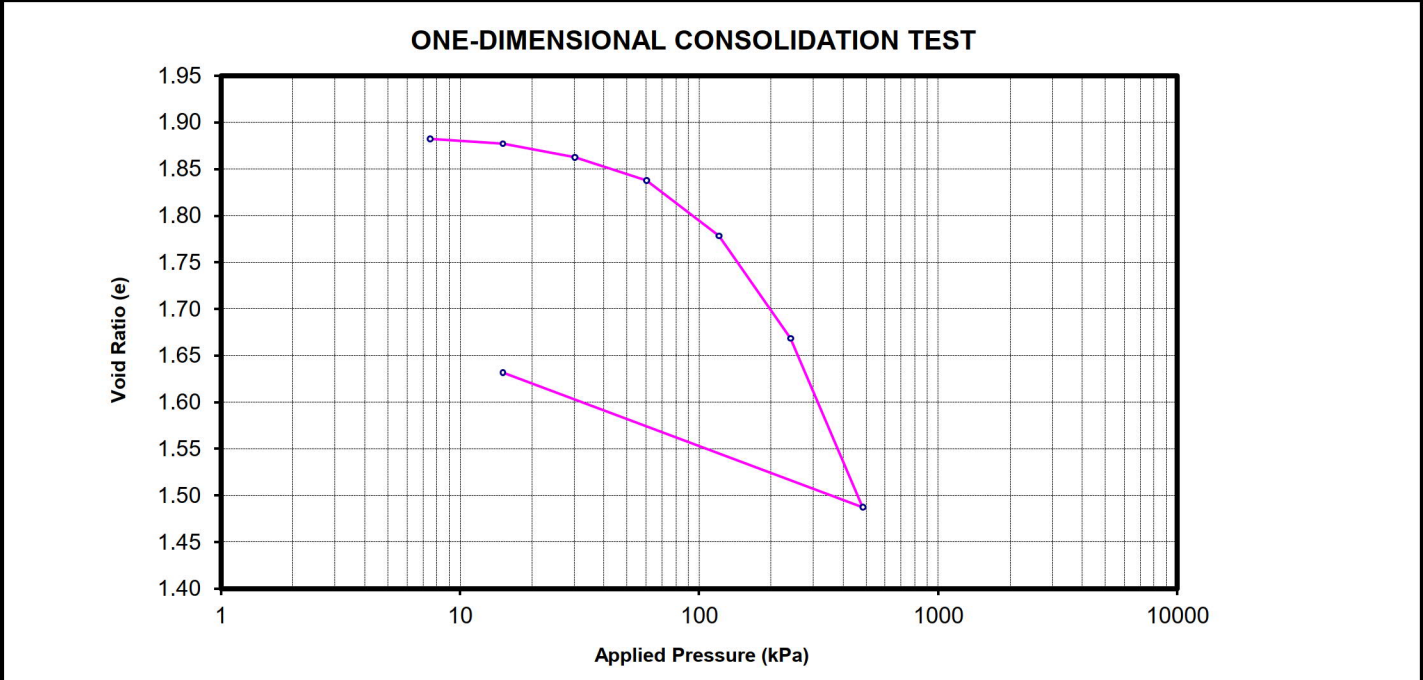
1 Hill Street, Onehunga, Auckland 1061

p 64 9 356 3510

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Site: **Sunfields, Ardmore** Your Job No.: **J01627**
 MH No.: **MH 7** Our Job No.: **1100842.0000**
 Sample ID.: **PT2** Depth: **1.30-1.35 (m)**
 Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation**



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0			
Preload	7.5	0 to 7.5	NA	0.25
	15.1	7.5 to 15.1	2.9	0.23
	30.2	15.1 to 30.2	2.5	0.34
	60.3	30.2 to 60.3	2.4	0.29
	121	60.3 to 121	2.0	0.35
	241	121 to 241	1.4	0.33
	483	241 to 483	1.2	0.28
Unload	15.1	483 to 15.1	NA	NA

Sample History: Undisturbed core trimmed at NWC.

Description: Organic SILT with minor clay and trace sand, firm, dark brown, mottled black.

Initial Dry Density (t/m³): 0.88 Initial Water Content: 71%

Solid Density (t/m³): 2.55 (Assumed) Initial Saturation: 96%

Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 2.55 t/m³. The calculations of void ratio are affected by the solid density value.

The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory Sim Tirunahari

Date 9/06/2021



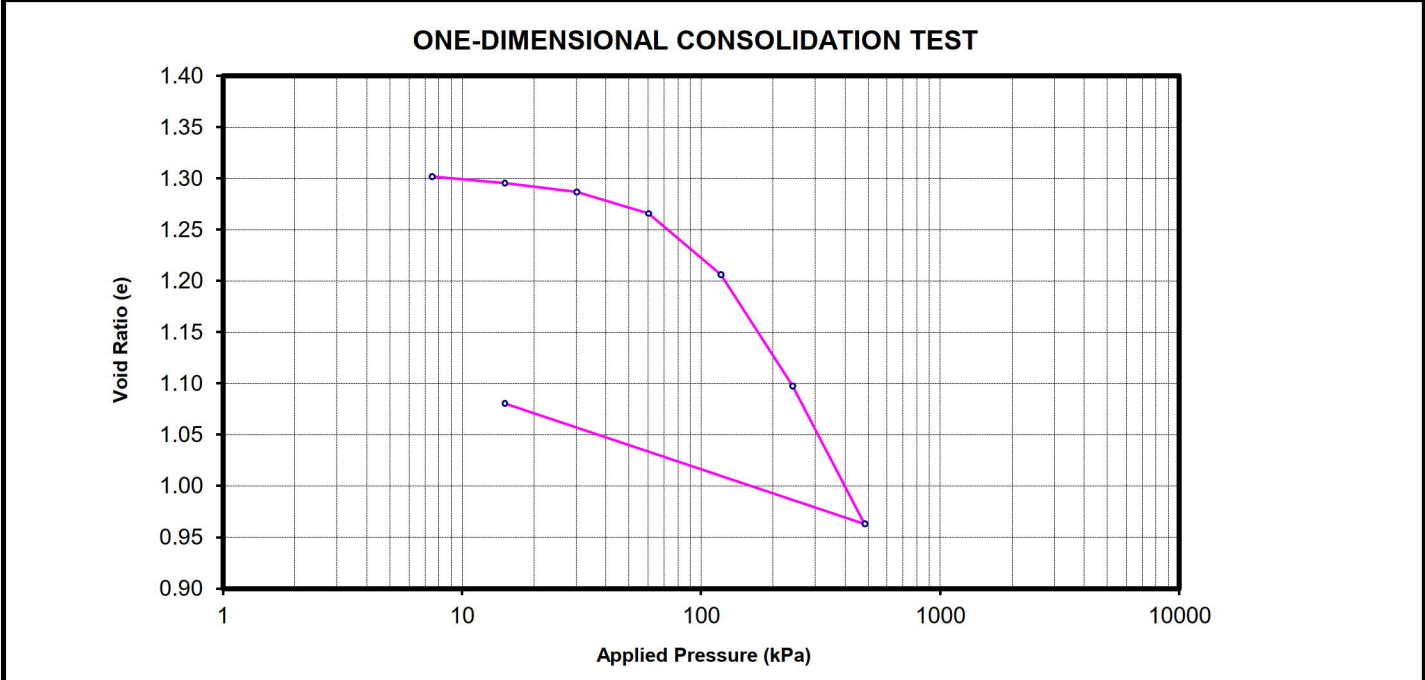
1 Hill Street, Onehunga, Auckland 1061

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Site: **Sunfields, Ardmore** Your Job No.: **J01627**
 MH No.: **MH 7** Sample ID.: **PT3** Our Job No.: **1100842.0000**
 Depth: **3.80-3.85 (m)**
 Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation**



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0			
Preload	7.5	0 to 7.5	NA	3.3
	15.1	7.5 to 15.1	4.4	0.37
	30.2	15.1 to 30.2	2.6	0.24
	60.3	30.2 to 60.3	2.4	0.31
	121	60.3 to 121	2.0	0.43
	241	121 to 241	1.2	0.41
	483	241 to 483	1.1	0.27
Unload	15.1	483 to 15.1	NA	NA

Sample History: Undisturbed core trimmed at NWC.

Description: Organic SILT with minor clay and trace sand, firm, dark brown, mottled black.

Initial Dry Density (t/m³): 1.08 Initial Water Content: 51.9%

Solid Density (t/m³): 2.55 (Assumed) Initial Saturation: 97%

Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 2.55 t/m³. The calculations of void ratio are affected by the solid density value.

The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory: Sim Tirunahari

Date: 9/06/2021



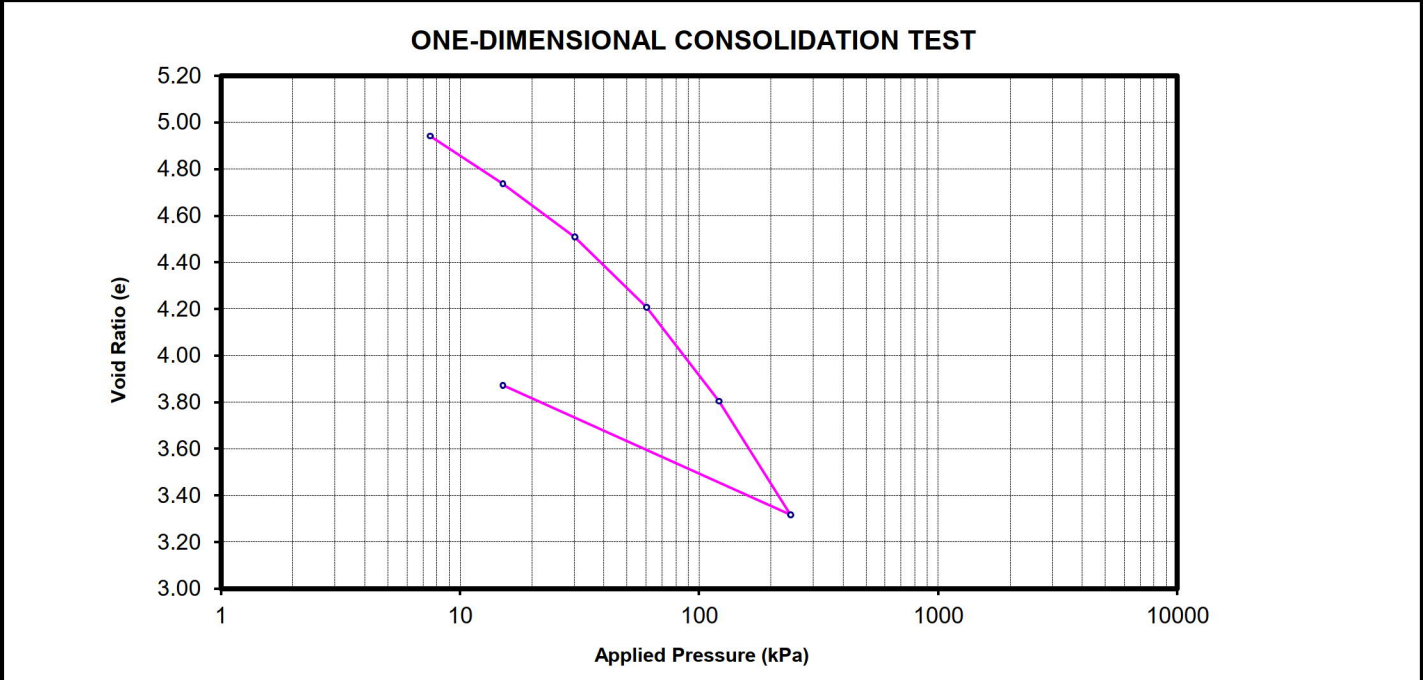
1 Hill Street, Onehunga, Auckland 1061

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Site: **Sunfields, Ardmore** Your Job No.: **J01627**
 MH No.: **MH 10** Sample ID.: **PT2** Our Job No.: **1100842.0000**
 Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation** Depth: **1.40-1.45 (m)**



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0			
Preload	7.5	0 to 7.5	NA	7.0
	15.1	7.5 to 15.1	0.88	4.5
	30.2	15.1 to 30.2	1.6	2.6
	60.3	30.2 to 60.3	1.8	1.8
	121	60.3 to 121	1.9	1.3
	241	121 to 241	2.0	0.85
Unload	15.1	241 to 15.1	NA	NA

Sample History: Undisturbed core trimmed at NWC.

Description: Fibrous PEAT, soft, dark brown with black.

Initial Dry Density (t/m³): 0.30 Initial Water Content: 278%

Solid Density (t/m³): 1.85 (Assumed) Initial Saturation: 97%

Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 1.85 t/m³. The calculations of void ratio are affected by the solid density value.

The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory Sim Tirunahari

Date 9/06/2021

1100842.0000/Rep 1



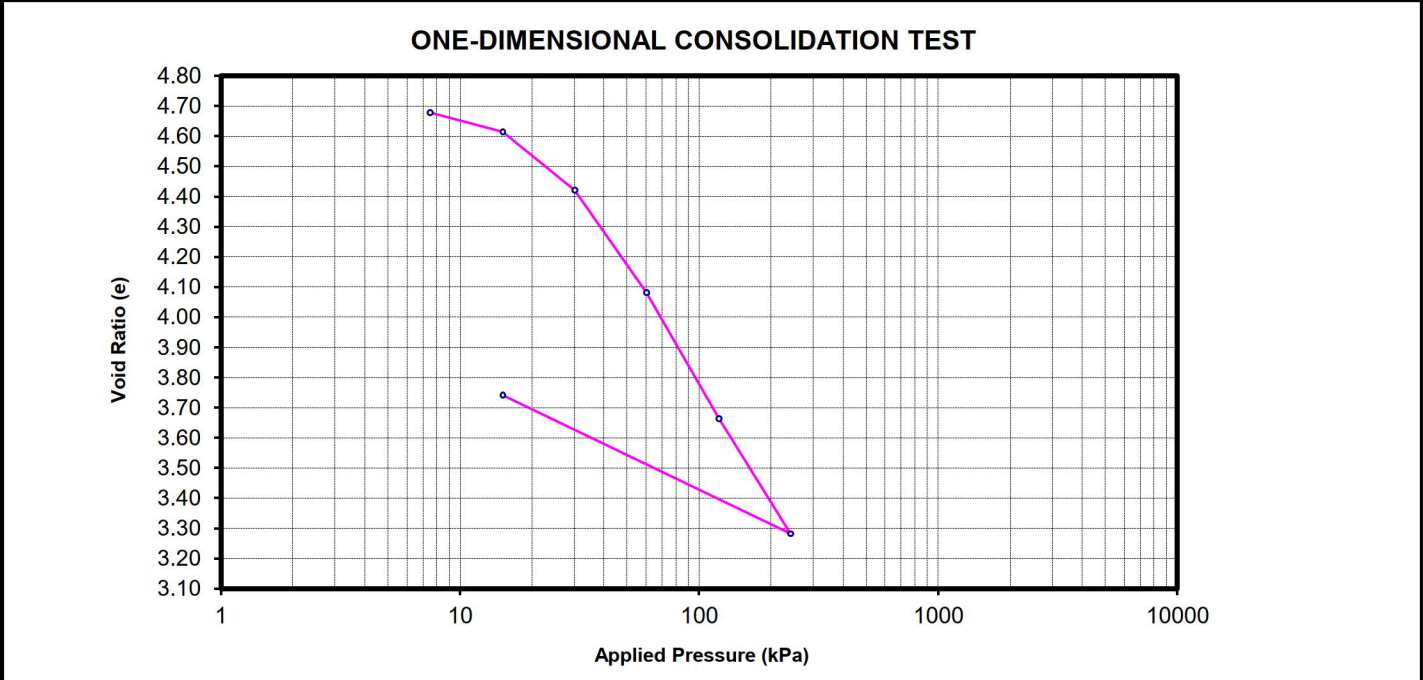
1 Hill Street, Onehunga, Auckland 1061

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Site: **Sunfields, Ardmore** Your Job No.: **J01627**
 MH No.: **MH 10** Sample ID.: **PT3** Our Job No.: **1100842.0000**
 Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation** Depth: **7.80-7.85 (m)**



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0			
Preload	7.5	0 to 7.5	NA	1.6
	15.1	7.5 to 15.1	3.1	1.5
	30.2	15.1 to 30.2	2.9	2.3
	60.3	30.2 to 60.3	1.9	2.1
	121	60.3 to 121	1.7	1.4
	241	121 to 241	1.5	0.68
Unload	15.1	241 to 15.1	NA	NA

Sample History: Undisturbed core trimmed at NWC.
 Description: PEAT, few rootlets, soft, dark brown with black.

Initial Dry Density (t/m³): 0.35 Initial Water Content: 228%
 Solid Density (t/m³): 2.00 (Assumed) Initial Saturation: 96%
 Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 2.00 t/m³. The calculations of void ratio are affected by the solid density value.
 The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory: Sim Tirunahari
 Date: 9/06/2021

1100842.0000/Rep 1



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Your Job No.: **J01627**

Site: **Sunfields, Ardmore**

Our Job No.: **1100842.0000**

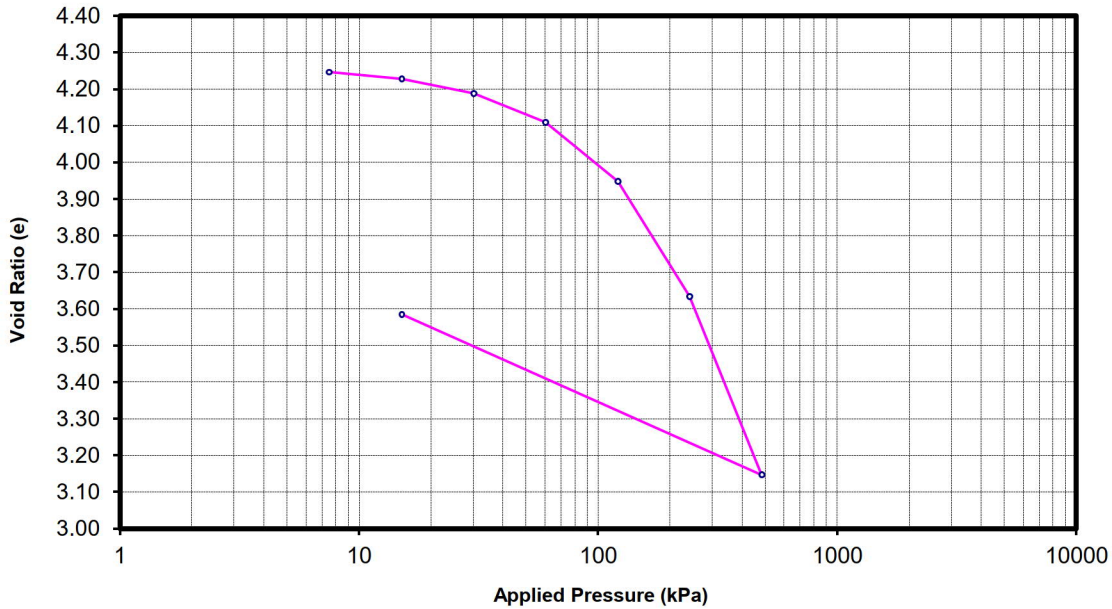
MH No.: **MH 13**

Sample ID.: **PT1**

Depth: **1.30-1.35 (m)**

Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation**

ONE-DIMENSIONAL CONSOLIDATION TEST



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0	4.254		
Preload	7.5	4.247	0 to 7.5	NA
	15.1	4.228	7.5 to 15.1	11
	30.2	4.189	15.1 to 30.2	8.6
	60.3	4.110	30.2 to 60.3	7.4
	121	3.948	60.3 to 121	6.4
	241	3.635	121 to 241	5.5
	483	3.147	241 to 483	3.9
Unload	15.1	3.585	483 to 15.1	NA

Sample History: Undisturbed core trimmed at NWC.

Description: PEAT, few rootlets, firm, black.

Initial Dry Density (t/m³): 0.38 Initial Water Content: 203%

Solid Density (t/m³): 2.00 (Assumed) Initial Saturation: 95%

Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 2.00 t/m³. The calculations of void ratio are affected by the solid density value.

The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory Sim Tirunahari

Date 9/06/2021



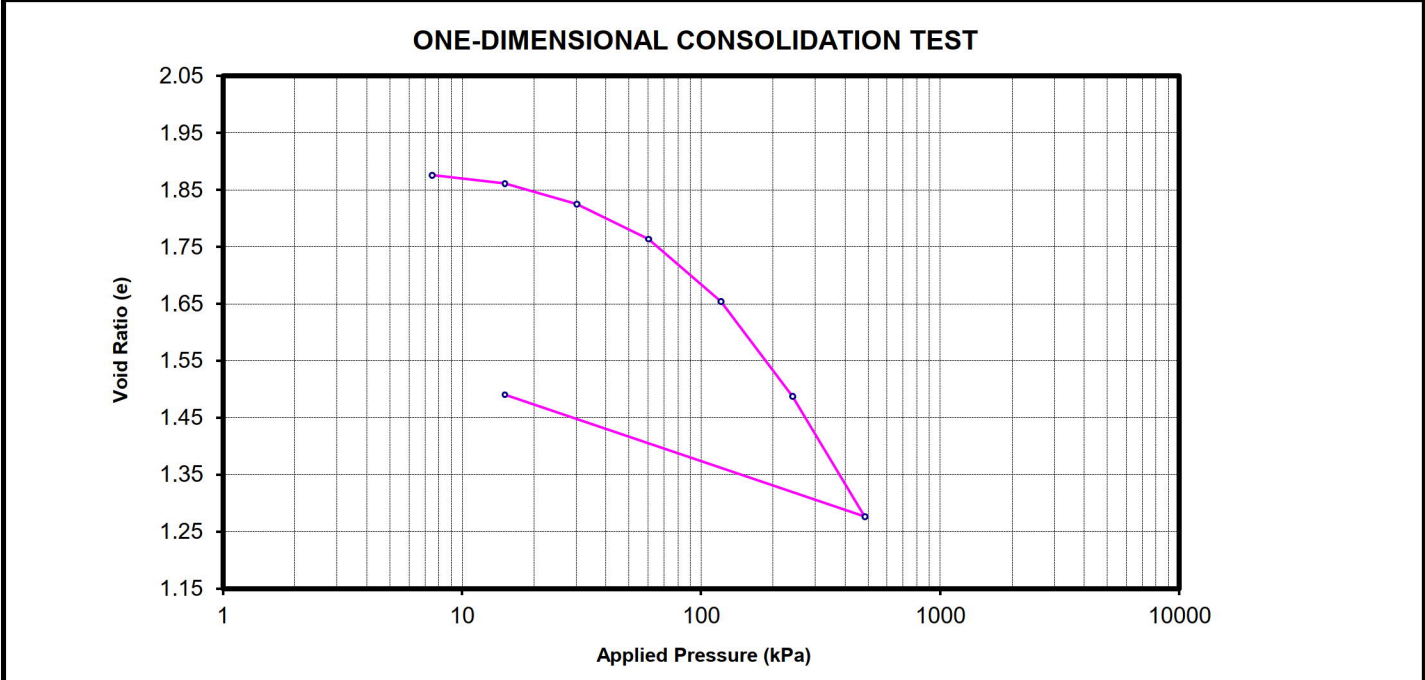
1 Hill Street, Onehunga, Auckland 1061

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Site: **Sunfields, Ardmore** Your Job No.: **J01627**
 MH No.: **MH 13** Sample ID.: **PT2** Our Job No.: **1100842.0000**
 Depth: **13.70-13.75 (m)**
 Test Method Used: **NZS 4402:1986 Test 7.1 One-Dimensional Consolidation**



Pressure (kPa)	Void Ratio (e)	Pressure Increment (kPa)	Coefficient of Consolidation Cv (m ² /yr)	Coefficient of Volume Compressibility Mv (m ² /MN)
As received	0			
Preload	7.5	0 to 7.5	NA	0.20
	15.1	7.5 to 15.1	0.82	0.66
	30.2	15.1 to 30.2	0.88	0.84
	60.3	30.2 to 60.3	0.93	0.72
	121	60.3 to 121	0.94	0.65
	241	121 to 241	0.95	0.52
	483	241 to 483	0.96	0.35
Unload	15.1	483 to 15.1	NA	NA

Sample History: Undisturbed core trimmed at NWC.

Description: Organic SILT with minor clay and trace sand, firm, dark brown, mottled black.

Initial Dry Density (t/m³): 0.89 Initial Water Content: 71.4%

Solid Density (t/m³): 2.55 (Assumed) Initial Saturation: 97%

Temperature During Testing: Max = 20 °C Min = 19 °C

Remarks: SQR of time fitting method was used. We have assumed a value of 2.55 t/m³. The calculations of void ratio are affected by the solid density value.

The test results are IANZ accredited but the sample description is not IANZ accredited.

Approved Signatory Sim Tirunahari

Date 9/06/2021

APPENDIX 4.5
PH TEST RESULTS



Our Ref: 1100861.0.0.0/REP1
 Customer Ref: J01627
 14 June 2021

Lander Geotechnical Consultants Limited
 Level 3, 3 Osterly Way
 Manukau
 Auckland 2104

Attention: Kyle Meffan

Dear Kyle

Sunfields (Winton) Ardmore Laboratory Test Report

Samples from the above mentioned site have been tested as received according to your instructions and the results are included in this report. Results apply only to the sample(s) tested.

Descriptions are enclosed for your information, but are not covered under the IANZ endorsement of this report.

This report has been prepared for the benefit of Lander Geotechnical Consultants Limited, with respect to the particular brief given to us and it cannot be relied upon in other contexts or for any other purpose without our prior review and agreement.

This report may be reproduced only in full.

Samples not destroyed during testing will be retained for one month from the date of this report before being discarded. If we can be of any further assistance, feel free to get in touch. Contact details are provided at the bottom of this page.

GEOTECHNICS LTD

Report prepared by:

Authorised for Geotechnics by:

.....

 James Green
 Construction Materials Technician
 Approved Signatory

.....
 Vic O'Connor
 Project Director

Report checked by:

.....

 Alan Benton
 Wellington Manager



All tests reported herein
 have been performed in
 accordance with the
 laboratory's scope of
 accreditation

14-Jun-21

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Test Results

Determination of the pH Value – NZS4402 1986 Test 3.3.2 Colorimetric

Sample	Date of Test	pH Value
MH1 1.9-2.4m S1	11/06/2021	7.0
MH2 0.9-1.5m S1	11/06/2021	6.0
MH8 4.1-4.4m S1	11/06/2021	6.0
MH10 1.5-2.0m S1	11/06/2021	7.5
MH12 4.8-5.3m S1	11/06/2021	7.5
MH13 3.5-4.0m S1	11/06/2021	7.0

APPENDIX 5

SLOPE STABILITY

APPENDIX 5.1
SLOPE STABILITY SUMMARY

1 SEISMIC DESIGN PARAMETERS FOR SLOPE STABILITY

The PGA for the study area has been determined in accordance with MBIE Module 1¹ using the following formula:

$$a_{\max} = C_{0,1000} \times \frac{R}{1.3} \times f$$

Where:

Site Subsoil Class	Class C, shallow soil site (NZS 1170.5:2004, Table 3.2)
Subdivision design life	50 years, NZS 1170.0:2002, Tables 3.1 & 3.2
Return period PGA coefficient, $C_{0,1000}$	0.17, Site Subsoil Class C, Manukau (NZTA Bridge Manual Table 6.1A)
Return period factor, R	0.65 (NZS 1170.0:2002, Table 3.5)
Site subsoil class factor, f	1.33, Site Subsoil Class C (MBIE Module 1, Section 5.1)
Magnitude, M_{eff}	6.5 (NZTA Bridge Manual Table 6.1A)

Based on this formula, the following PGA for various annual exceedance probabilities (AEP) are summarised in Table 5.1 below for Importance Level 2 structures and a 50-year design life given the expected future land use. This importance levels is consistent with developments of a similar nature in the surrounding Takanini area (i.e. the Takanini Stormwater Conveyance Channel).

Table 5.1. Summary of Design Peak Ground Acceleration (PGA)

Design Case	M_{eff}	AEP	R	PGA
1-150 year seismic condition	6.5	1:150	0.65	0.11
Newmark Rigid-Block assessment (lateral spread)	6.5	N/A	N/A	0.09

2 COMPUTER SLOPE STABILITY ASSESSMENT

To assess the prevailing and long-term stability of the proposed stormwater channel, a slope stability assessment has been completed using a typical channel profile.

The slope stability assessment was carried out using Slide 2 (2018) software from Roc-Science, using the Morgenstern-Price method for circular slips, which is considered to be the governing mode of failure for our geotechnical model for this site.

In accordance with the Auckland Council Code of Practice (ACCoP), the slope stability analysis was assessed under three cases:

¹ New Zealand Geotechnical Society (NZGS) and Ministry of Business Innovation & Employment (MBIE) guidelines for Earthquake Geotechnical Practice in New Zealand. "Module 1: Overview of the guidelines" Rev. 0, Issue Date March 2016.

- Normal groundwater condition (minimum FOS >1.5 required)
- Extreme (worst credible) groundwater condition (minimum FOS >1.3 required)
- Seismic condition with 150-year event (minimum FOS >1.2 required)

Additionally, a Newmark Rigid-Block Assessment has been completed to assess the potential for lateral spread to occur, which is recommended in MBIE Module 3². For this assessment, the seismic parameters provided in Table 5.1 were adopted using the Friuli, Italy 1976 earthquake which has both a similar magnitude and PGA to that assessed for this site.

As the proposed channels are located in areas containing extensive fibrous peat deposits, this assessment has modelled only fibrous peat materials based on the geotechnical investigations completed by Lander Geotechnical as well as applicable data from nearby developments. Stiff crustal materials have been excluded from the analysis as they are variable, and it is more conservative to exclude these materials.

The material parameter properties used here are consistent with those adopted by GHD³ in their assessment of the Takanini Stormwater Conveyance Channel which were derived from triaxial test results to determine lower bound design effective stress parameters. The materials encountered by GHD are generally similar to those encountered in the current boreholes and therefore we have adopted their parameter for fibrous peat as outlined in Table 5.2 below.

A summary of the results is given in Table 5.3. Full stability outputs included in Appendix 5.2 and these results are discussed in Section 7.2 of this report.

Table 5.2. Soil Properties

Geological Unit	γ	c'	ϕ'	S_u
Fibrous Peat (Stratum S1b)	11	2	25	15

Table 5.3: Slope Stability Assessment Results

Case Number	Analysis Description	Required FoS	Resulting FoS
1	Existing Groundwater Level (Static)	1.5	1.6
2	Elevated Groundwater Level	1.3	1.3

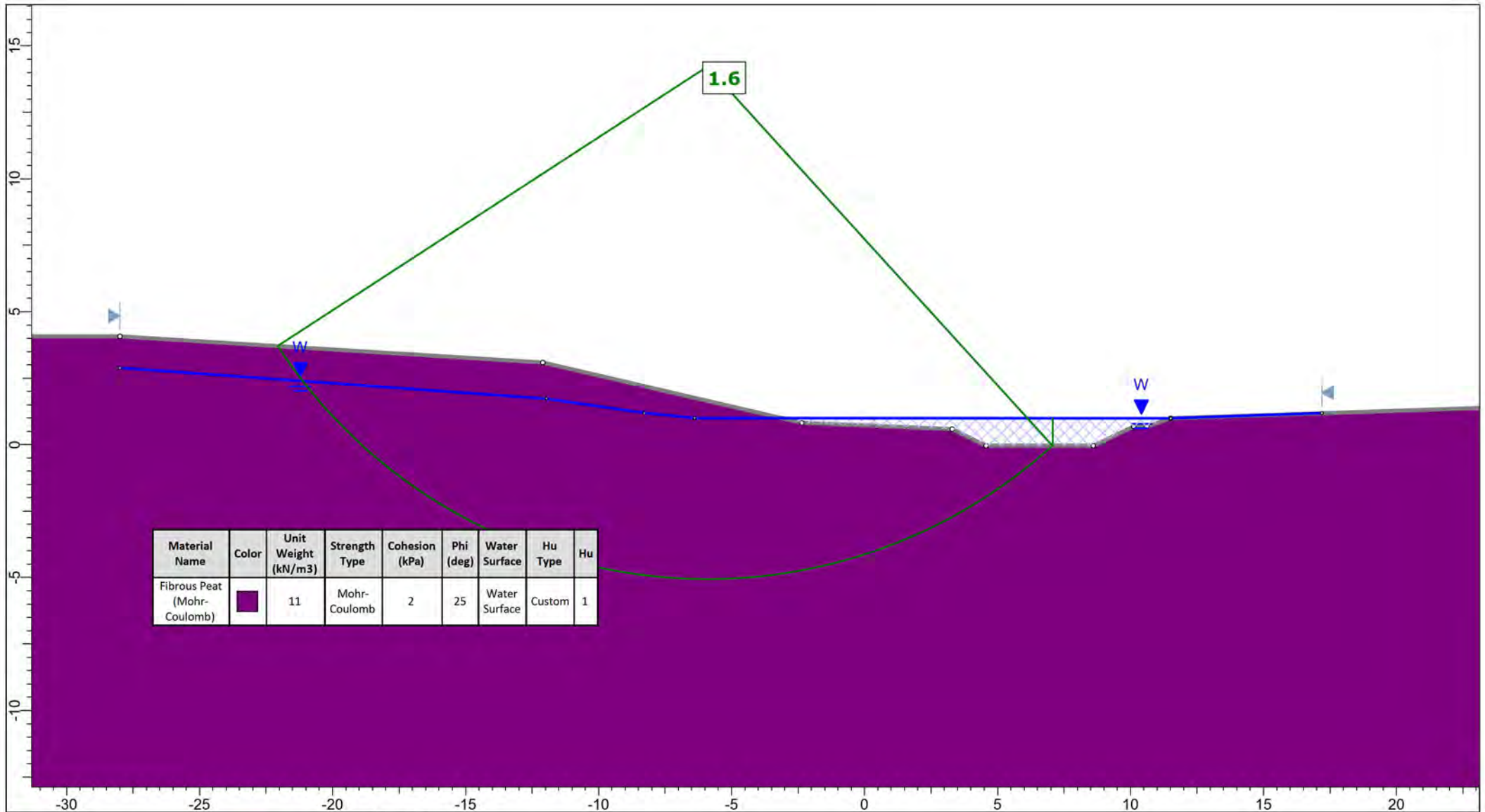
² New Zealand Geotechnical Society (NZGS) and Ministry of Business Innovation & Employment (MBIE) guidelines for Earthquake Geotechnical Practice in New Zealand. "Module 3: Identification, assessment and mitigation of liquefaction hazards" Rev. 0, Issue Date May 2016.


³ Takanini Stormwater Conveyance Channel – Geotechnical and Ground Settlements Effects Report; Technical Report E. Reference 51/32174, dated April 2016.

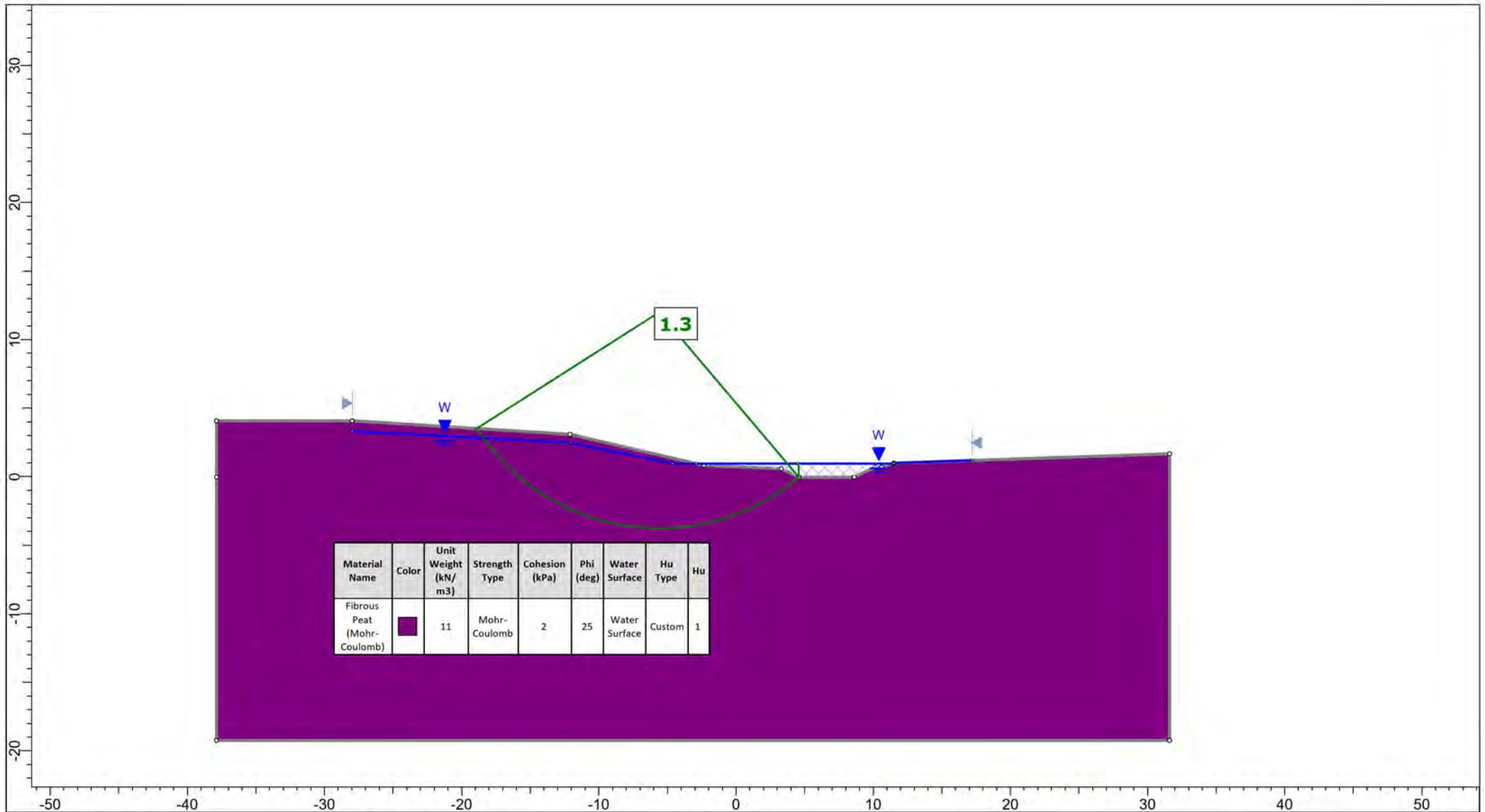
Case Number	Analysis Description	Required FoS	Resulting FoS
3	1/150-yr Seismic Event	1.2	1.2
4	Newmark Rigid-Block (lateral spread)	1.0	>1.0

APPENDIX 5.2

SLOPE STABILITY OUTPUTS



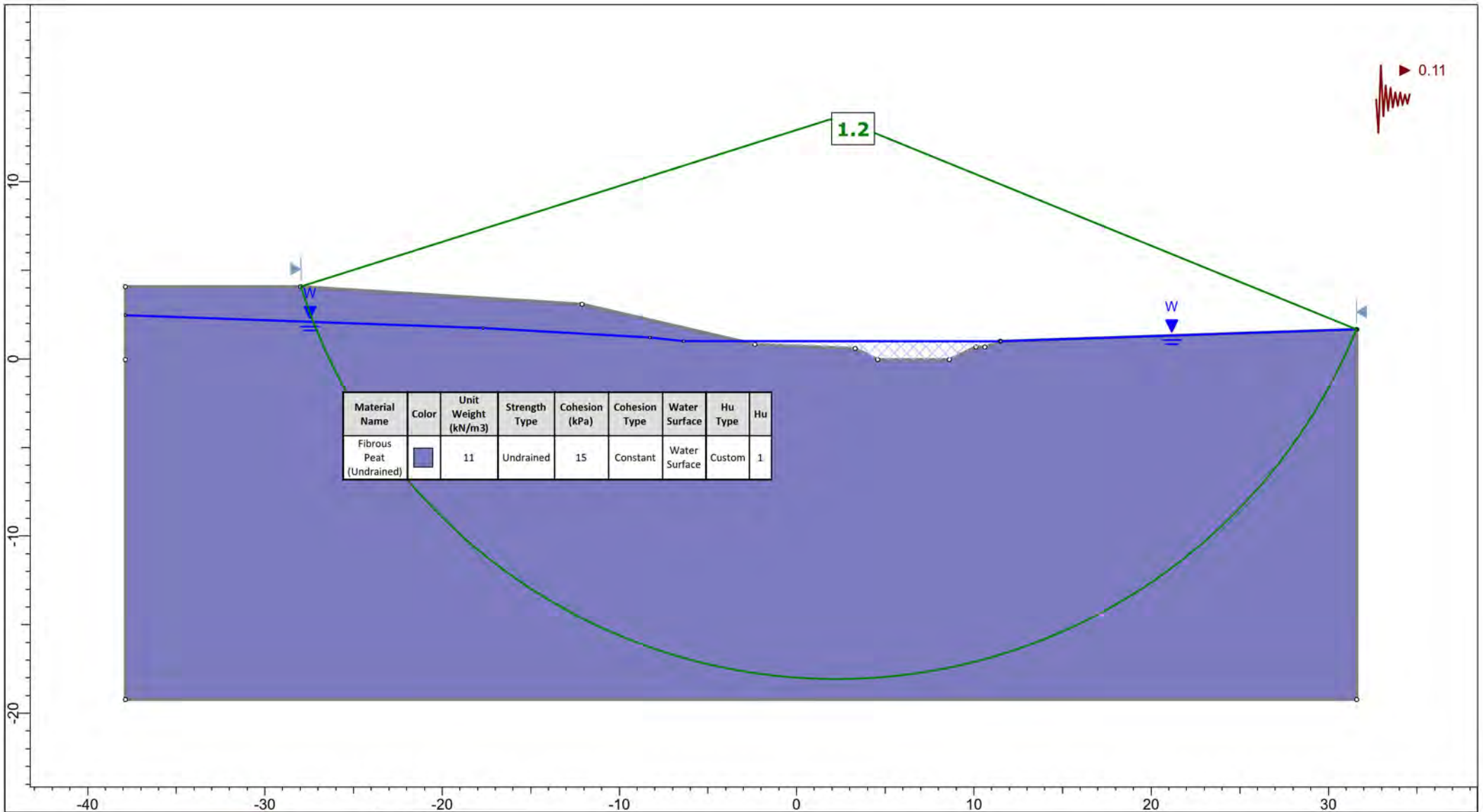
	Analysis Description				
	Existing Groundwater				
	Cross Section	Typical Channel Section	Case No.	1	
	Project	J01627 - Sunfields Development, Ardmore			
Drawn By	KM	F.O.S Filter	<1.5	Company	Lander Geotechnical Consultants Limited
Date	10/08/2021	Scale	1:200	File Name	J01627_210629_TypicalChannel.sldm



Analysis Description

High Groundwater

Cross Section	Typical Channel Section	Case No.	2	Project	J01627 - Sunfields Development, Ardmore
Drawn By	KM	F.O.S Filter	<1.3	Company	Lander Geotechnical Consultants Limited
Date	10/08/2021	Scale	1:388	File Name	J01627_210629_TypicalChannel.sldm

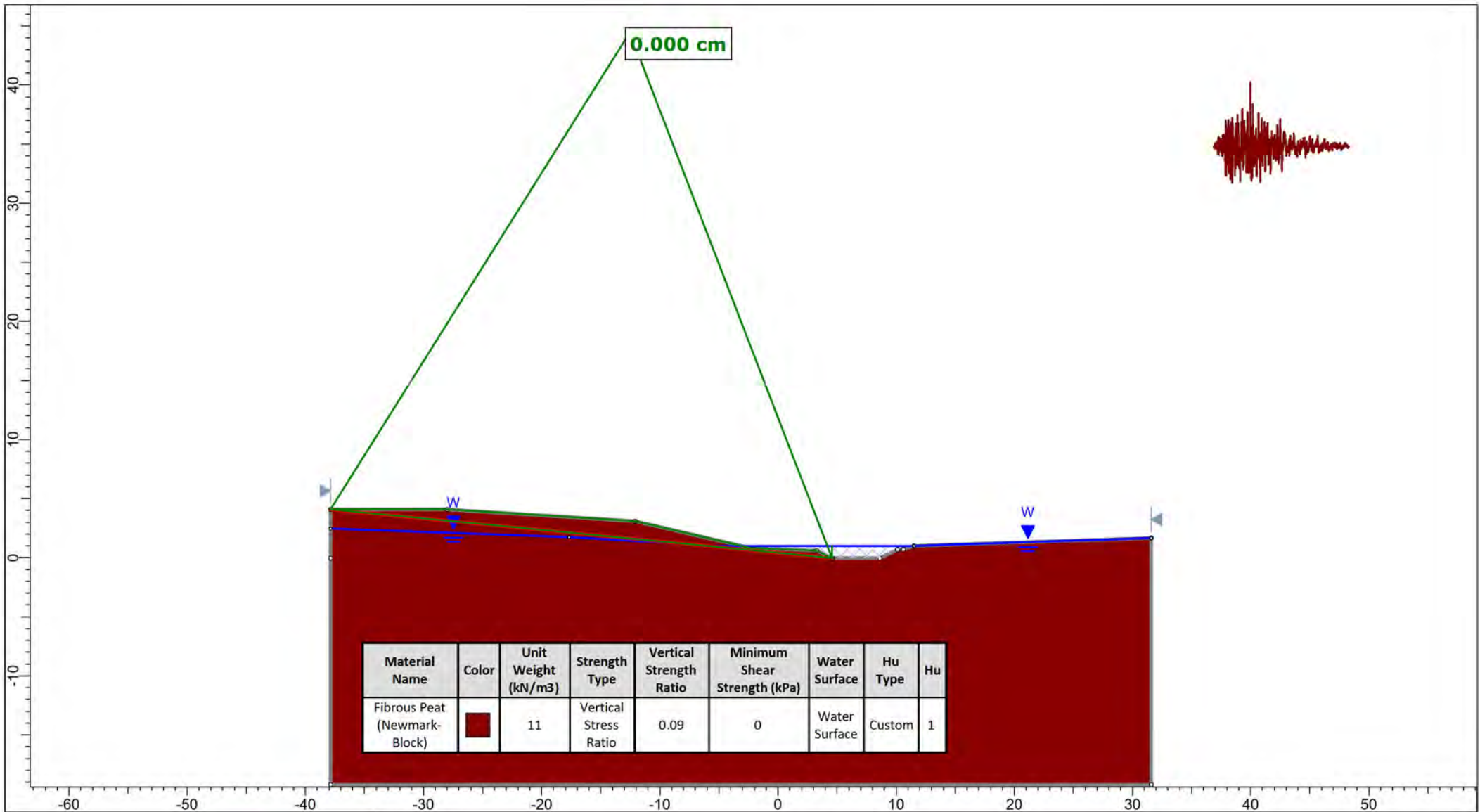


Material Name	Color	Unit Weight (kN/m ³)	Strength Type	Cohesion (kPa)	Cohesion Type	Water Surface	Hu Type	Hu
Fibrous Peat (Undrained)		11	Undrained	15	Constant	Water Surface	Custom	1



SLIDEINTERPRET 9.018

<i>Analysis Description</i>		1/150-year Seismic Event	
<i>Cross Section</i>	Typical Channel Section	Case No.	3
<i>Drawn By</i>	KM	F.O.S Filter	<1.2
<i>Date</i>	10/08/2021	Scale	1:300
		Project	J01627 - Sunfields Development, Ardmore
		Company	Lander Geotechnical Consultants Limited
		File Name	J01627_210629_TypicalChannel.slmd



Analysis Description

Newmark-Block Assessment (Lateral Spread)

Cross Section	Typical Channel Section	Case No.	4	Project	J01627 - Sunfields Development, Ardmore
Drawn By	KM	F.O.S Filter	<1.0	Company	Lander Geotechnical Consultants Limited
Date	10/08/2021	Scale	1:450	File Name	J01627_210629_TypicalChannel.slmd

APPENDIX 6
CONSOLIDATION SETTLEMENT

APPENDIX 6.1
CONSOLIDATION SETTLEMENT SUMMARY AND
FOUNDATION DESIGN SOLUTION

1 COMPUTER SETTLEMENT ANALYSIS

To assess the settlement caused by the proposed earthworks fills and building loads, a settlement analysis was completed using two separate methods to provide a range of likely settlement outcomes. These methods are outlined below:

- a) Using CPeT-IT version 2 software on existing CPT data and applying the Bousinessq settlement calculation to the CPT data;
- b) Using DMT Settlements version 1 software (Marchetti).

For both settlement assessments the following assumptions were made:

- A nominal 10m x 20m rectangular building footprint was used.
- A rigid footing (i.e. stiffened pod-raft) is used.
- A conservative footing depth / embedment depth of 0.0m has been used.
- Building loads were calculated using an anticipated total uniformly distributed load (UDL, G + Q) of 5.5kPa per storey. The below typical loads for lightweight-residential dwellings in Takanini peat soils have previously been provided to us (i.e. 5.5kPa per storey is conservative):

1 Level units		
○ Dead load		3.5kPa
○ Live load		1.5kPa
2 Level units		
○ Dead load		5.0kPa
○ Live load		3.0kPa

For each CPT and DMT trace, the following cases were assessed:

- Case 1 – one-storey building load (5.5kPa).
- Case 2 – two-storey building load (11kPa).
- Case 3 – three-storey building load (16.5kPa).

A summary of the calculated settlements are given in Table 6.1. Full CPeT-IT records are presented in Appendices 6.2 and 6.3 and these results are discussed in Section 7.3.1 of this report.

Table 6.1. Settlement Analysis Summary table

Test ID	Case 1 (mm)	Case 2 (mm)	Case 3 (mm)
ZONE 1 – TAURANGA GROUP			
CPT02	47.6	70.4	93.3
CPT04A	211.2	316.8	422.3
CPT06	153.4	234.0	314.5
CPT11	59.6	90.2	120.9
CPT13A	121.1	192.6	264.1
CPT14	145.9	214.3	282.8
CPT15	131.8	223.9	315.9
CPT18	136.8	228.7	320.6
CPT19A	145.2	239.3	333.5
CPT21A	82.7	136.4	190.1
CPT22	14.3	26.2	38.0
CPT403	14.7	28.1	41.4
CPT407	7.1	13.2	19.2
CPT410	9.5	17.2	24.8
CPT413	44.2	76.2	108.2
CPT414	53.6	96.8	139.9
CPT415A	55.6	97.5	139.4
DMT02	96.7	155.8	214.9
DMT03	N/A	N/A	N/A
DMT05	163.7	209.9	256.1
DMT07	182.5	234.0	285.5
ZONE 2 - PUKETOCA FORMATION / EAST COAST BAYS FORMATION			
CPT01	3.4	6.4	9.4
CPT03	6.4	11.8	17.2
CPT03A	5.0	9.1	13.2
CPT05	4.4	8.2	12.0
CPT07	7.3	12.6	17.8
CPT08	2.5	4.7	6.8
CPT09	3.0	5.3	7.6
CPT09A	3.3	6.0	8.8
CPT10	3.5	6.1	8.8
CPT12	8.0	14.3	20.7
CPT16	11.4	21.3	31.2
CPT17	1.7	3.2	4.7
CPT20	4.7	9.0	13.2
CPT401	4.3	7.6	11.0
CPT402	4.0	7.6	11.2
CPT404	9.8	18.1	26.4
CPT405	2.6	4.8	6.9
CPT406	3.1	5.7	8.3
CPT408	7.8	14.8	21.8
CPT409	2.8	5.1	7.4
CPT411	6.4	11.5	16.5
CPT412	16.0	28.0	40.1
DMT01	1.9	3.0	4.0
DMT04	5.3	10.6	15.9
DMT06	9.0	17.9	26.9

Table 6.2. Ground Improvement and Foundation Solutions Summary

Typology	Preload		Preload / Localised Ground Improvement		Specific Foundation Design	
	Zone 1	Zone 2	Zone 1	Zone 2	Zone 1	Zone 2
NZS3604 Lightweight standalone 2-level , no IT walls, all timber framed / 1 st level timber floor, ground floor pod-raft (or similar on-grade slab), light weight cladding (incl. brick veneer) and roofing (Up to 11 kPa)	●	N/A	●	N/A	●	NZS3604 ⁽¹⁾
NZS3604 Lightweight terraced or duplexes were (> 1:2 aspect); 2-level , no concrete IT walls, all timber framed / 1 st level timber floor, ground floor pod-raft (or similar on-grade slab), light weight cladding (incl. brick veneer) and roofing (Up to 11 kPa)	●	N/A	●	N/A	●	NZS3604
Lightweight 3-level , no concrete IT walls, all timber framed / 1 st and 2 nd level timber floors, ground floor pod-raft (or similar on-grade slab), light weight cladding (incl. brick veneer ground level only) and roofing (> 11 kPa)	N/A	●	●	N/A	●	NZS3604 or ●
Heavy Weight Building standalone, with concrete IT walls, 1 st (plus) levels suspended concrete floors, ground floor concrete slab on grade, light weight cladding (incl. brick veneer) and roofing (> 11kPa)	N/A	N/A	N/A	N/A	●	●
Commercial and/ or industrial buildings (> 11kPa)	N/A	N/A	N/A	N/A	●	●

(1) Foundation solutions not requiring specific design per NZS3604. Definition of NZS3604 “good ground” are soils having a geotechnical ultimate bearing capacity of 300 kPa, with no ground stability issues. Provision for expansive site class will be guided by MBIE (B1 Structure, Amendment 19) and/ or AS2870:2011.

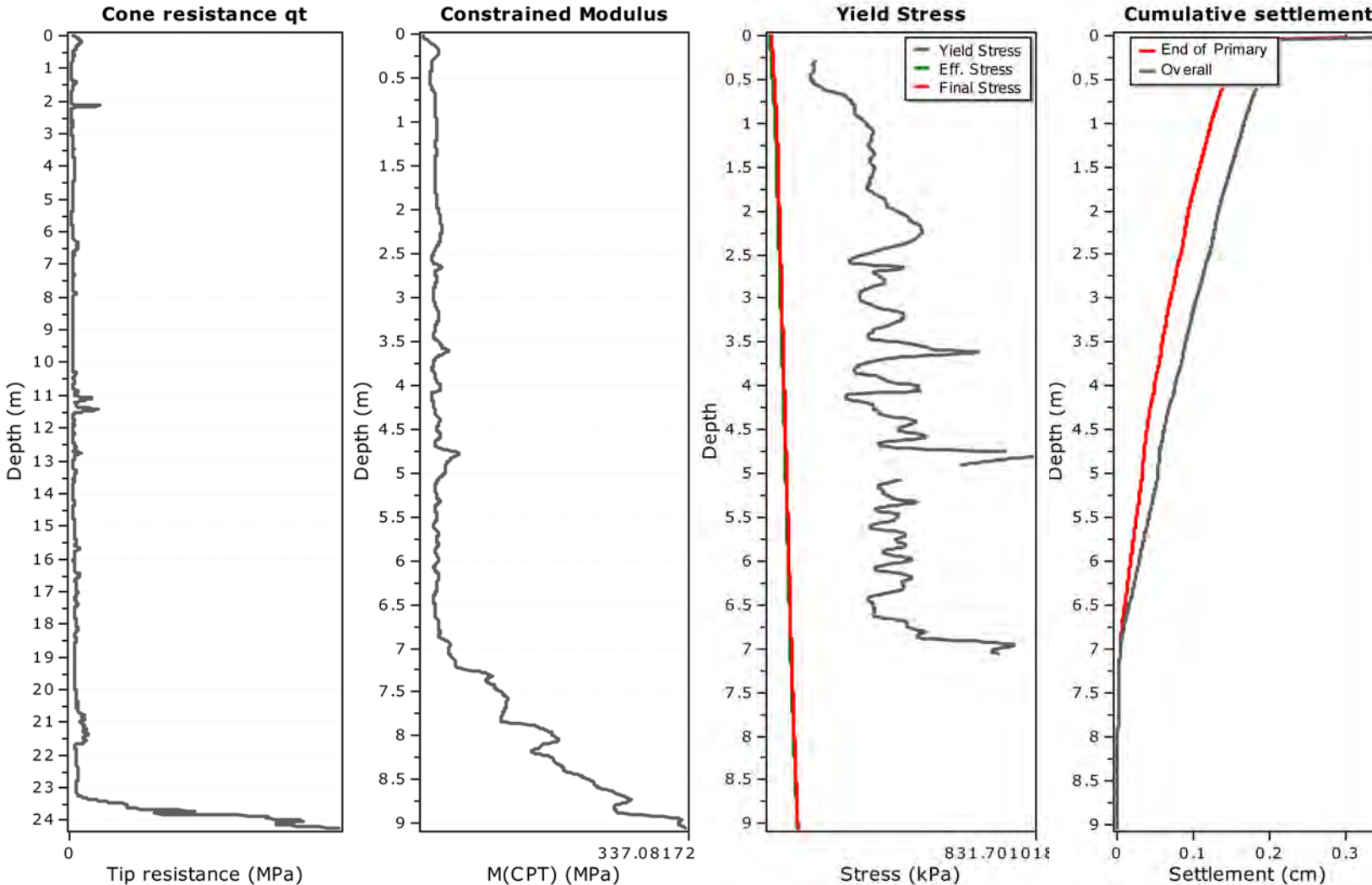
Table 6.3. Commercial / Industrial Ground Improvement and Foundation Solution Case Studies (for Zone 1 areas).

Location / Building	Building Working Load	Ground Improvement	Foundation Solution
Sikh Temple, 70 Takanini School Road	20kPa	N/A	8m deep piled foundations (to relatively shallow ECBF bedrock)
Gymnasium and Multi-Sports Centre, Bruce Pulman Park, Walters Road	Unconfirmed, typically 'lightweight'	Stage 1 (single storey) - 1400mm high preloading, average settlement of 142mm recorded Stage 2 (two-storey) - 1700mm high preloading, average settlement of 500mm recorded	foundation pads and floor slab thickenings
Mitre 10 Centre, 238 Great South Road	10kPa	500mm thick hardfill raft	Timber driven piles (for column loads) Strip footings (for external tilt slab walls)

APPENDIX 6.2
CPT CONSOLIDATION SETTLEMENT ANALYSIS RESULTS

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 5.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta \sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_s = S_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.74	8.75	0.01	8.75	1.89	262.00	0.34	0.000	0.000	0.000
876	8.75	8.76	0.01	8.76	1.89	259.60	0.34	0.000	0.000	0.000
877	8.76	8.77	0.01	8.77	1.88	256.69	0.34	0.000	0.000	0.000
878	8.77	8.78	0.01	8.78	1.88	253.54	0.34	0.000	0.000	0.000
879	8.78	8.79	0.01	8.79	1.88	249.78	0.34	0.000	0.000	0.000
880	8.79	8.80	0.01	8.80	1.88	245.61	0.34	0.000	0.000	0.000
881	8.80	8.81	0.01	8.81	1.88	242.47	0.34	0.000	0.000	0.000
882	8.81	8.82	0.01	8.82	1.88	241.59	0.34	0.000	0.000	0.000
883	8.82	8.83	0.01	8.83	1.87	242.35	0.34	0.000	0.000	0.000
884	8.83	8.84	0.01	8.84	1.87	243.24	0.34	0.000	0.000	0.000
885	8.84	8.85	0.01	8.85	1.87	243.79	0.34	0.000	0.000	0.000
886	8.85	8.86	0.01	8.86	1.87	244.23	0.34	0.000	0.000	0.000
887	8.86	8.87	0.01	8.87	1.87	244.92	0.34	0.000	0.000	0.000
888	8.87	8.88	0.01	8.88	1.87	247.52	0.34	0.000	0.000	0.000
889	8.88	8.89	0.01	8.89	1.86	253.28	0.34	0.000	0.000	0.000
890	8.89	8.90	0.01	8.90	1.86	264.58	0.34	0.000	0.000	0.000
891	8.90	8.91	0.01	8.91	1.86	277.86	0.34	0.000	0.000	0.000
892	8.91	8.92	0.01	8.92	1.86	291.96	0.34	0.000	0.000	0.000
893	8.92	8.93	0.01	8.93	1.86	304.74	0.34	0.000	0.000	0.000
894	8.93	8.94	0.01	8.94	1.86	315.50	0.34	0.000	0.000	0.000
895	8.94	8.95	0.01	8.95	1.85	323.47	0.34	0.000	0.000	0.000
896	8.95	8.96	0.01	8.96	1.85	326.89	0.34	0.000	0.000	0.000
897	8.96	8.97	0.01	8.97	1.85	327.76	0.34	0.000	0.000	0.000
898	8.97	8.98	0.01	8.98	1.85	326.00	0.34	0.000	0.000	0.000
899	8.98	8.99	0.01	8.99	1.85	324.76	0.34	0.000	0.000	0.000
900	8.99	9.00	0.01	9.00	1.85	323.85	0.34	0.000	0.000	0.000
901	9.00	9.01	0.01	9.01	1.85	324.30	0.34	0.000	0.000	0.000
902	9.01	9.02	0.01	9.02	1.84	324.31	0.34	0.000	0.000	0.000
903	9.02	9.03	0.01	9.03	1.84	326.03	0.33	0.000	0.000	0.000
904	9.03	9.04	0.01	9.04	1.84	328.46	0.33	0.000	0.000	0.000
905	9.04	9.05	0.01	9.05	1.84	331.47	0.33	0.000	0.000	0.000

Total primary settlement: 0.30
Total secondary settlement: 0.05

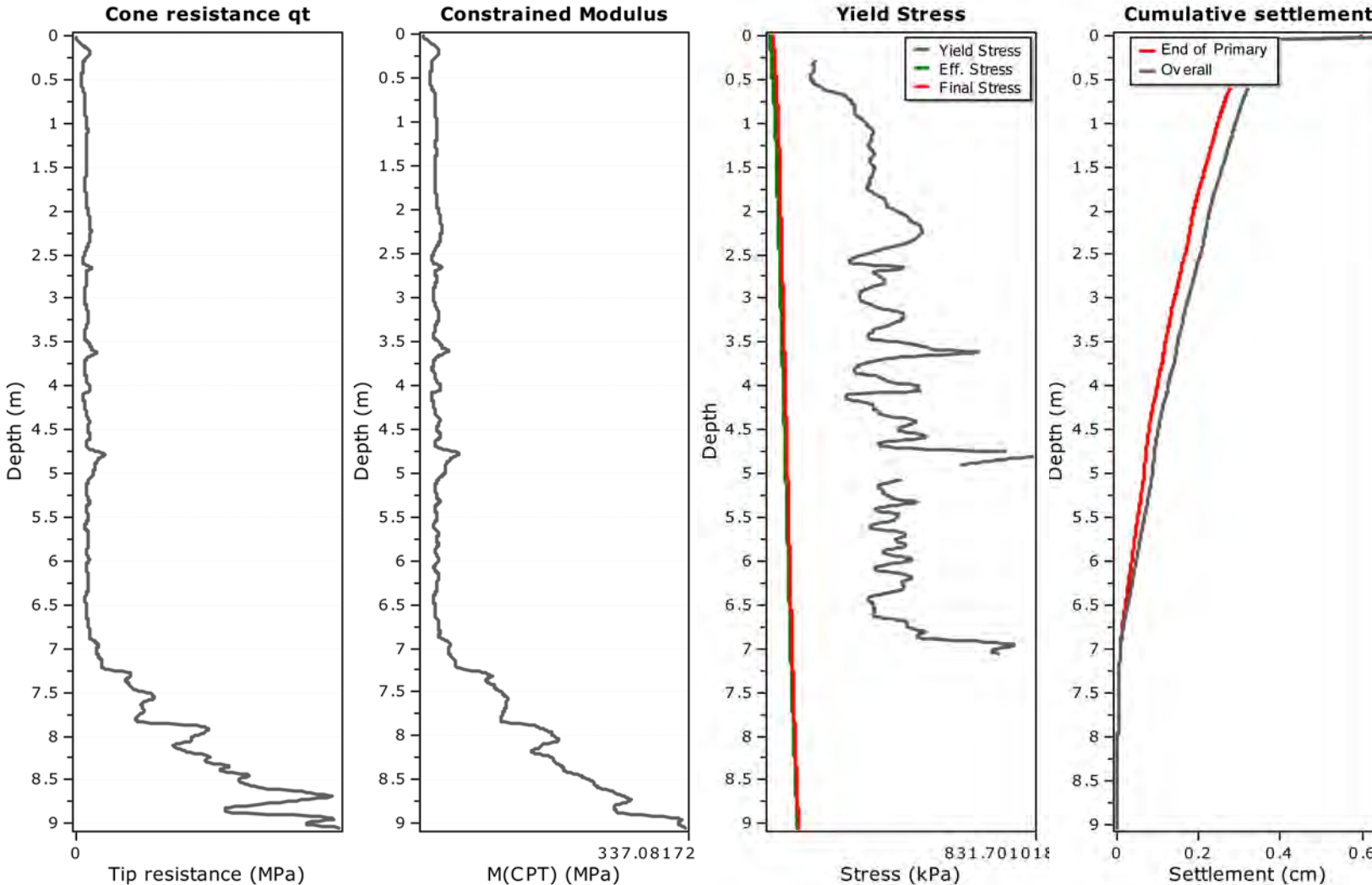
Total calculated settlement: 0.34

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.74	8.75	0.01	8.75	3.78	262.00	0.34	0.000	0.000	0.000
876	8.75	8.76	0.01	8.76	3.77	259.60	0.34	0.000	0.000	0.000
877	8.76	8.77	0.01	8.77	3.77	256.69	0.34	0.000	0.000	0.000
878	8.77	8.78	0.01	8.78	3.77	253.54	0.34	0.000	0.000	0.000
879	8.78	8.79	0.01	8.79	3.76	249.78	0.34	0.000	0.000	0.000
880	8.79	8.80	0.01	8.80	3.76	245.61	0.34	0.000	0.000	0.000
881	8.80	8.81	0.01	8.81	3.76	242.47	0.34	0.000	0.000	0.000
882	8.81	8.82	0.01	8.82	3.75	241.59	0.34	0.000	0.000	0.000
883	8.82	8.83	0.01	8.83	3.75	242.35	0.34	0.000	0.000	0.000
884	8.83	8.84	0.01	8.84	3.75	243.24	0.34	0.000	0.000	0.000
885	8.84	8.85	0.01	8.85	3.74	243.79	0.34	0.000	0.000	0.000
886	8.85	8.86	0.01	8.86	3.74	244.23	0.34	0.000	0.000	0.000
887	8.86	8.87	0.01	8.87	3.74	244.92	0.34	0.000	0.000	0.000
888	8.87	8.88	0.01	8.88	3.73	247.52	0.34	0.000	0.000	0.000
889	8.88	8.89	0.01	8.89	3.73	253.28	0.34	0.000	0.000	0.000
890	8.89	8.90	0.01	8.90	3.73	264.58	0.34	0.000	0.000	0.000
891	8.90	8.91	0.01	8.91	3.72	277.86	0.34	0.000	0.000	0.000
892	8.91	8.92	0.01	8.92	3.72	291.96	0.34	0.000	0.000	0.000
893	8.92	8.93	0.01	8.93	3.72	304.74	0.34	0.000	0.000	0.000
894	8.93	8.94	0.01	8.94	3.71	315.50	0.34	0.000	0.000	0.000
895	8.94	8.95	0.01	8.95	3.71	323.47	0.34	0.000	0.000	0.000
896	8.95	8.96	0.01	8.96	3.71	326.89	0.34	0.000	0.000	0.000
897	8.96	8.97	0.01	8.97	3.70	327.76	0.34	0.000	0.000	0.000
898	8.97	8.98	0.01	8.98	3.70	326.00	0.34	0.000	0.000	0.000
899	8.98	8.99	0.01	8.99	3.70	324.76	0.34	0.000	0.000	0.000
900	8.99	9.00	0.01	9.00	3.69	323.85	0.34	0.000	0.000	0.000
901	9.00	9.01	0.01	9.01	3.69	324.30	0.34	0.000	0.000	0.000
902	9.01	9.02	0.01	9.02	3.69	324.31	0.34	0.000	0.000	0.000
903	9.02	9.03	0.01	9.03	3.68	326.03	0.33	0.000	0.000	0.000
904	9.03	9.04	0.01	9.04	3.68	328.46	0.33	0.000	0.000	0.000
905	9.04	9.05	0.01	9.05	3.68	331.47	0.33	0.000	0.000	0.000

Total primary settlement: 0.60
Total secondary settlement: 0.05

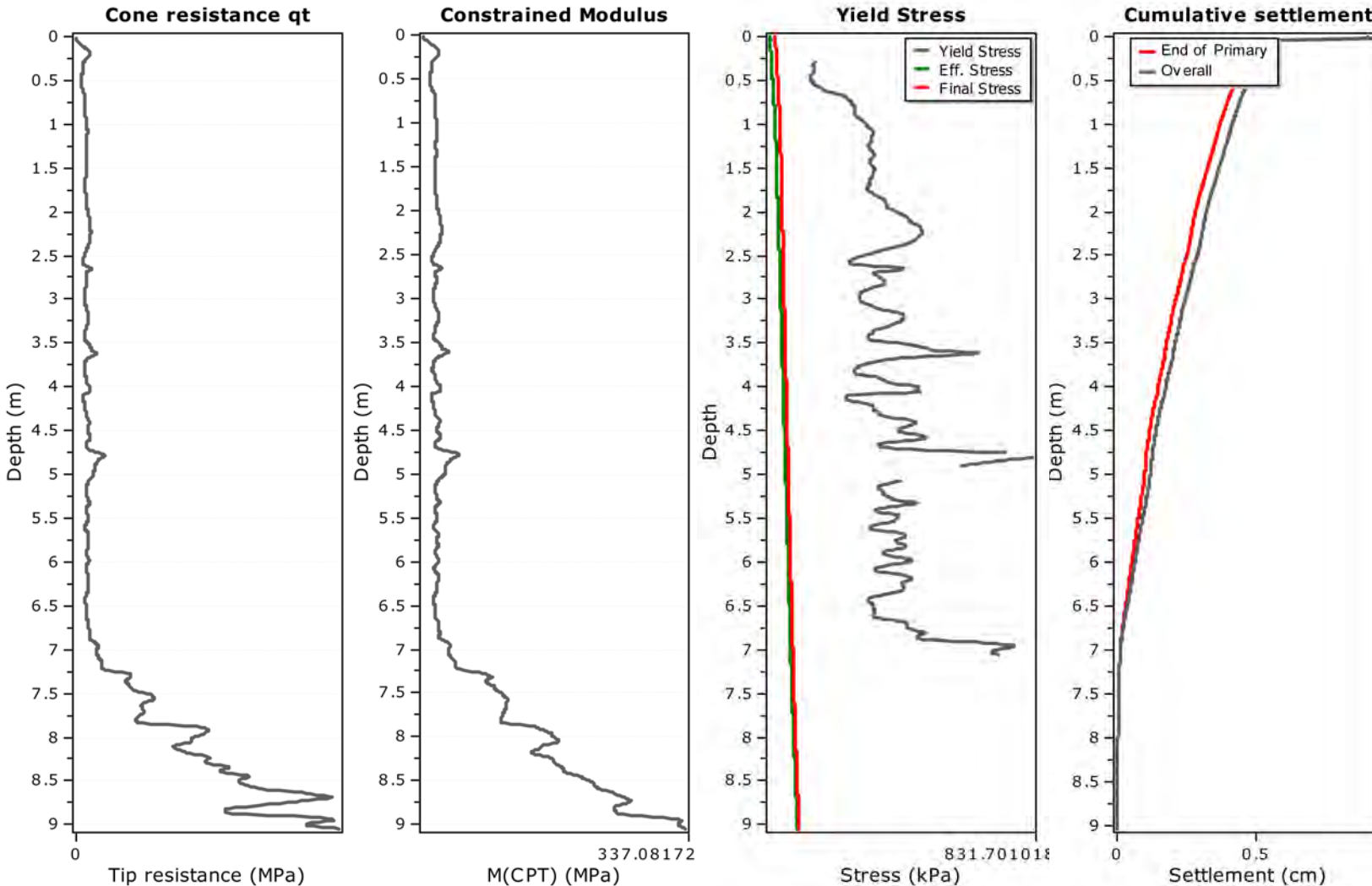
Total calculated settlement: 0.64

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_s = S_p \left(1 - \frac{t}{t_p} \right)^{-1}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.74	8.75	0.01	8.75	5.66	262.00	0.34	0.000	0.000	0.000
876	8.75	8.76	0.01	8.76	5.66	259.60	0.34	0.000	0.000	0.000
877	8.76	8.77	0.01	8.77	5.65	256.69	0.34	0.000	0.000	0.000
878	8.77	8.78	0.01	8.78	5.65	253.54	0.34	0.000	0.000	0.000
879	8.78	8.79	0.01	8.79	5.64	249.78	0.34	0.000	0.000	0.000
880	8.79	8.80	0.01	8.80	5.64	245.61	0.34	0.000	0.000	0.000
881	8.80	8.81	0.01	8.81	5.63	242.47	0.34	0.000	0.000	0.000
882	8.81	8.82	0.01	8.82	5.63	241.59	0.34	0.000	0.000	0.000
883	8.82	8.83	0.01	8.83	5.62	242.35	0.34	0.000	0.000	0.000
884	8.83	8.84	0.01	8.84	5.62	243.24	0.34	0.000	0.000	0.000
885	8.84	8.85	0.01	8.85	5.61	243.79	0.34	0.000	0.000	0.000
886	8.85	8.86	0.01	8.86	5.61	244.23	0.34	0.000	0.000	0.000
887	8.86	8.87	0.01	8.87	5.60	244.92	0.34	0.000	0.000	0.000
888	8.87	8.88	0.01	8.88	5.60	247.52	0.34	0.000	0.000	0.000
889	8.88	8.89	0.01	8.89	5.59	253.28	0.34	0.000	0.000	0.000
890	8.89	8.90	0.01	8.90	5.59	264.58	0.34	0.000	0.000	0.000
891	8.90	8.91	0.01	8.91	5.58	277.86	0.34	0.000	0.000	0.000
892	8.91	8.92	0.01	8.92	5.58	291.96	0.34	0.000	0.000	0.000
893	8.92	8.93	0.01	8.93	5.57	304.74	0.34	0.000	0.000	0.000
894	8.93	8.94	0.01	8.94	5.57	315.50	0.34	0.000	0.000	0.000
895	8.94	8.95	0.01	8.95	5.56	323.47	0.34	0.000	0.000	0.000
896	8.95	8.96	0.01	8.96	5.56	326.89	0.34	0.000	0.000	0.000
897	8.96	8.97	0.01	8.97	5.55	327.76	0.34	0.000	0.000	0.000
898	8.97	8.98	0.01	8.98	5.55	326.00	0.34	0.000	0.000	0.000
899	8.98	8.99	0.01	8.99	5.55	324.76	0.34	0.000	0.000	0.000
900	8.99	9.00	0.01	9.00	5.54	323.85	0.34	0.000	0.000	0.000
901	9.00	9.01	0.01	9.01	5.54	324.30	0.34	0.000	0.000	0.000
902	9.01	9.02	0.01	9.02	5.53	324.31	0.34	0.000	0.000	0.000
903	9.02	9.03	0.01	9.03	5.53	326.03	0.33	0.000	0.000	0.000
904	9.03	9.04	0.01	9.04	5.52	328.46	0.33	0.000	0.000	0.000
905	9.04	9.05	0.01	9.05	5.52	331.47	0.33	0.000	0.000	0.000

Total primary settlement: 0.90
Total secondary settlement: 0.05

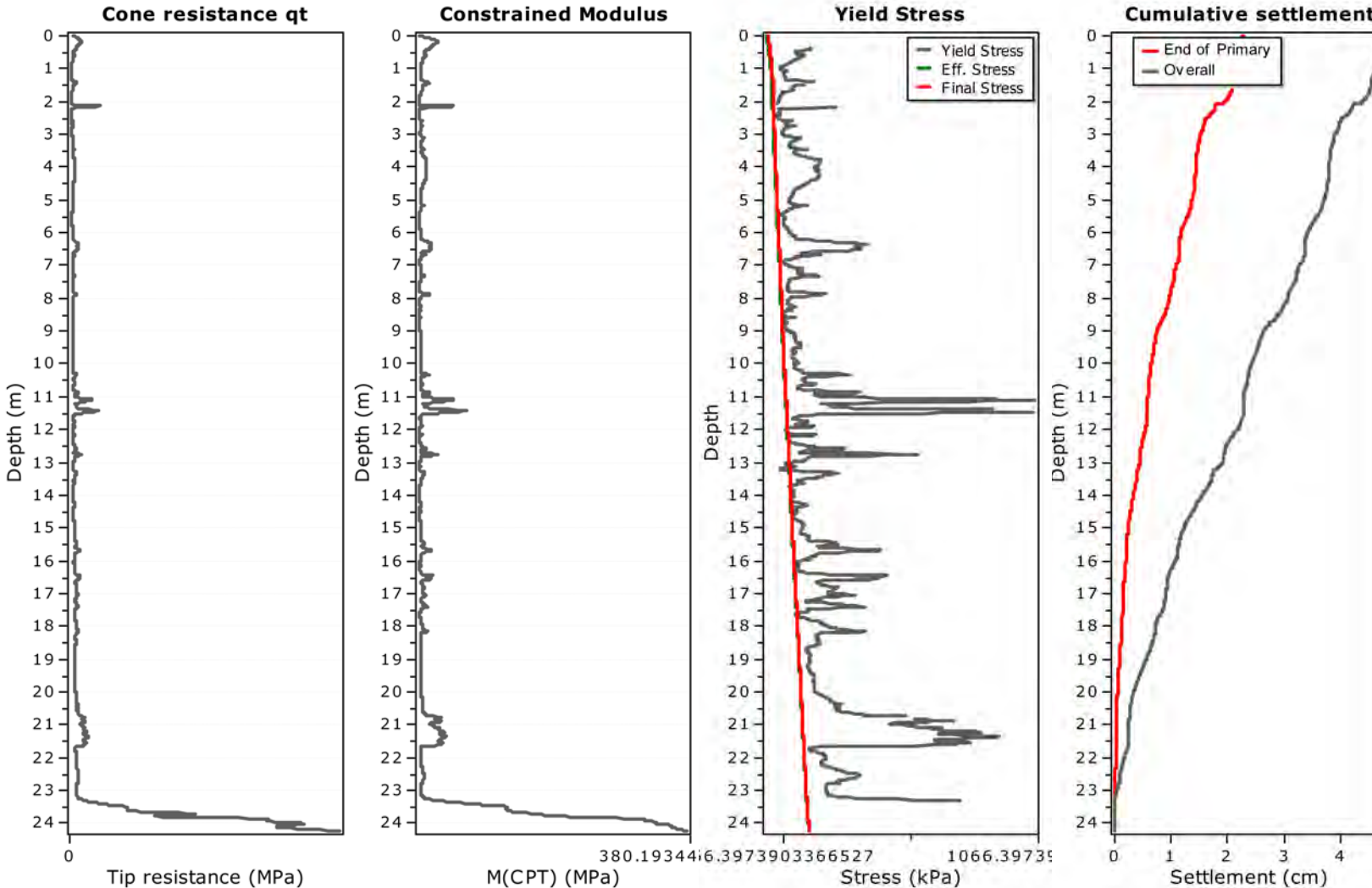
Total calculated settlement: 0.94

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

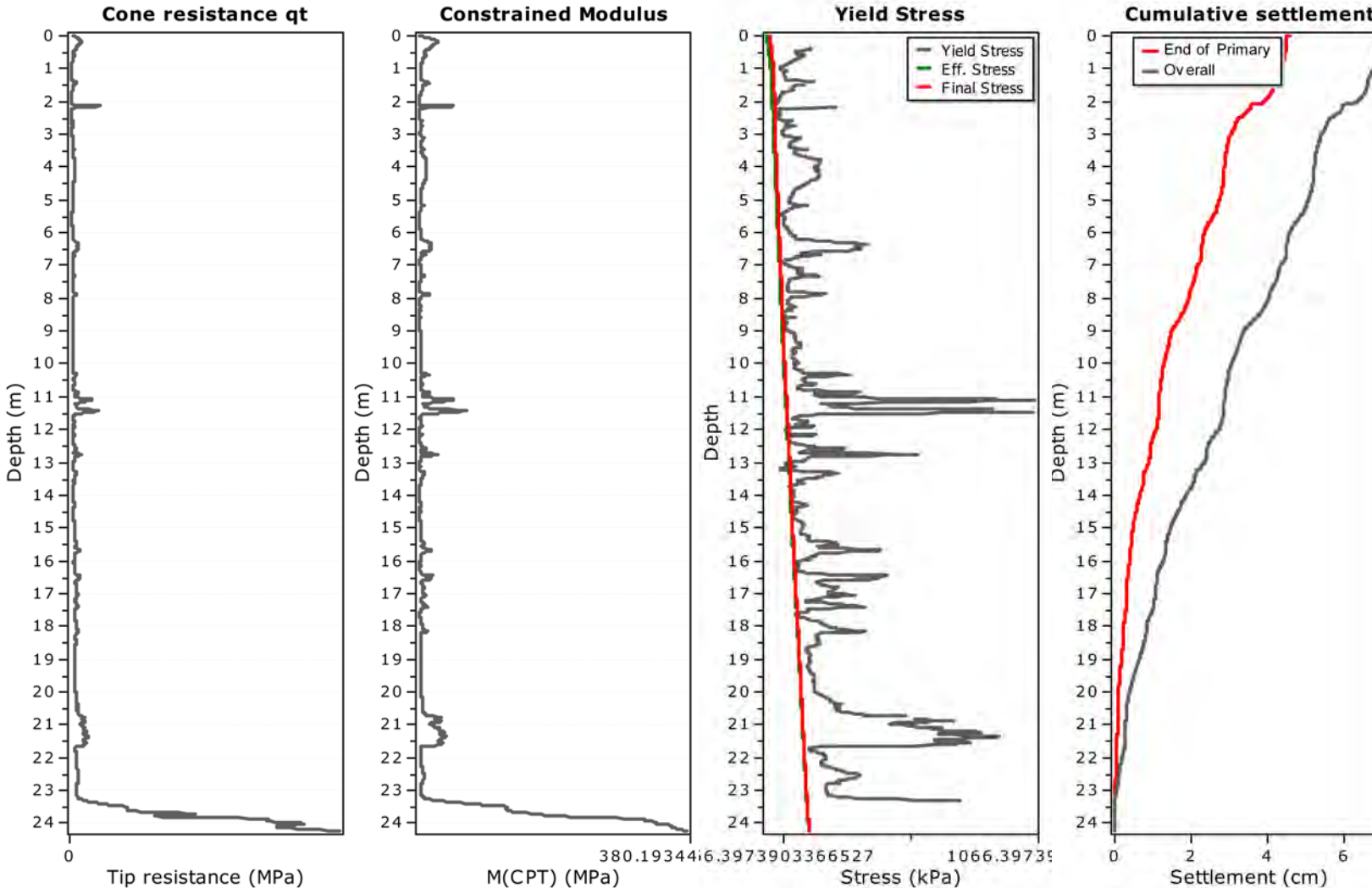
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2393	23.92	23.93	0.01	23.93	0.64	317.73	0.12	0.000	0.000	0.000
2394	23.93	23.94	0.01	23.94	0.64	319.02	0.12	0.000	0.000	0.000
2395	23.94	23.95	0.01	23.95	0.63	321.97	0.12	0.000	0.000	0.000
2396	23.95	23.96	0.01	23.96	0.63	325.86	0.12	0.000	0.000	0.000
2397	23.96	23.97	0.01	23.97	0.63	329.47	0.12	0.000	0.000	0.000
2398	23.97	23.98	0.01	23.98	0.63	331.46	0.12	0.000	0.000	0.000
2399	23.98	23.99	0.01	23.99	0.63	331.74	0.12	0.000	0.000	0.000
2400	23.99	24.00	0.01	24.00	0.63	330.88	0.12	0.000	0.000	0.000
2401	24.00	24.01	0.01	24.01	0.63	331.03	0.11	0.000	0.000	0.000
2402	24.01	24.02	0.01	24.02	0.63	331.75	0.11	0.000	0.000	0.000
2403	24.02	24.03	0.01	24.03	0.63	335.17	0.11	0.000	0.000	0.000
2404	24.03	24.04	0.01	24.04	0.63	340.35	0.11	0.000	0.000	0.000
2405	24.04	24.05	0.01	24.05	0.63	345.89	0.11	0.000	0.000	0.000
2406	24.05	24.06	0.01	24.06	0.63	349.24	0.11	0.000	0.000	0.000
2407	24.06	24.07	0.01	24.07	0.63	351.20	0.11	0.000	0.000	0.000
2408	24.07	24.08	0.01	24.08	0.63	352.86	0.11	0.000	0.000	0.000
2409	24.08	24.09	0.01	24.09	0.63	354.11	0.11	0.000	0.000	0.000
2410	24.09	24.10	0.01	24.10	0.63	354.23	0.11	0.000	0.000	0.000
2411	24.10	24.11	0.01	24.11	0.63	353.96	0.11	0.000	0.000	0.000
2412	24.11	24.12	0.01	24.12	0.63	353.59	0.11	0.000	0.000	0.000
2413	24.12	24.13	0.01	24.13	0.63	353.32	0.11	0.000	0.000	0.000
2414	24.13	24.14	0.01	24.14	0.63	353.52	0.11	0.000	0.000	0.000
2415	24.14	24.15	0.01	24.15	0.63	354.61	0.11	0.000	0.000	0.000
2416	24.15	24.16	0.01	24.16	0.63	356.44	0.11	0.000	0.000	0.000
2417	24.16	24.17	0.01	24.17	0.63	358.71	0.11	0.000	0.000	0.000
2418	24.17	24.18	0.01	24.18	0.63	361.07	0.11	0.000	0.000	0.000
2419	24.18	24.19	0.01	24.19	0.63	363.19	0.11	0.000	0.000	0.000
2420	24.19	24.20	0.01	24.20	0.63	364.68	0.11	0.000	0.000	0.000
2421	24.20	24.21	0.01	24.21	0.63	366.06	0.11	0.000	0.000	0.000
2422	24.21	24.22	0.01	24.22	0.62	367.71	0.11	0.000	0.000	0.000
2423	24.22	24.23	0.01	24.23	0.62	369.66	0.11	0.000	0.000	0.000
2424	24.23	24.24	0.01	24.24	0.62	372.93	0.11	0.000	0.000	0.000

Total primary settlement: 2.29**Total secondary settlement: 2.47****Total calculated settlement: 4.76****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

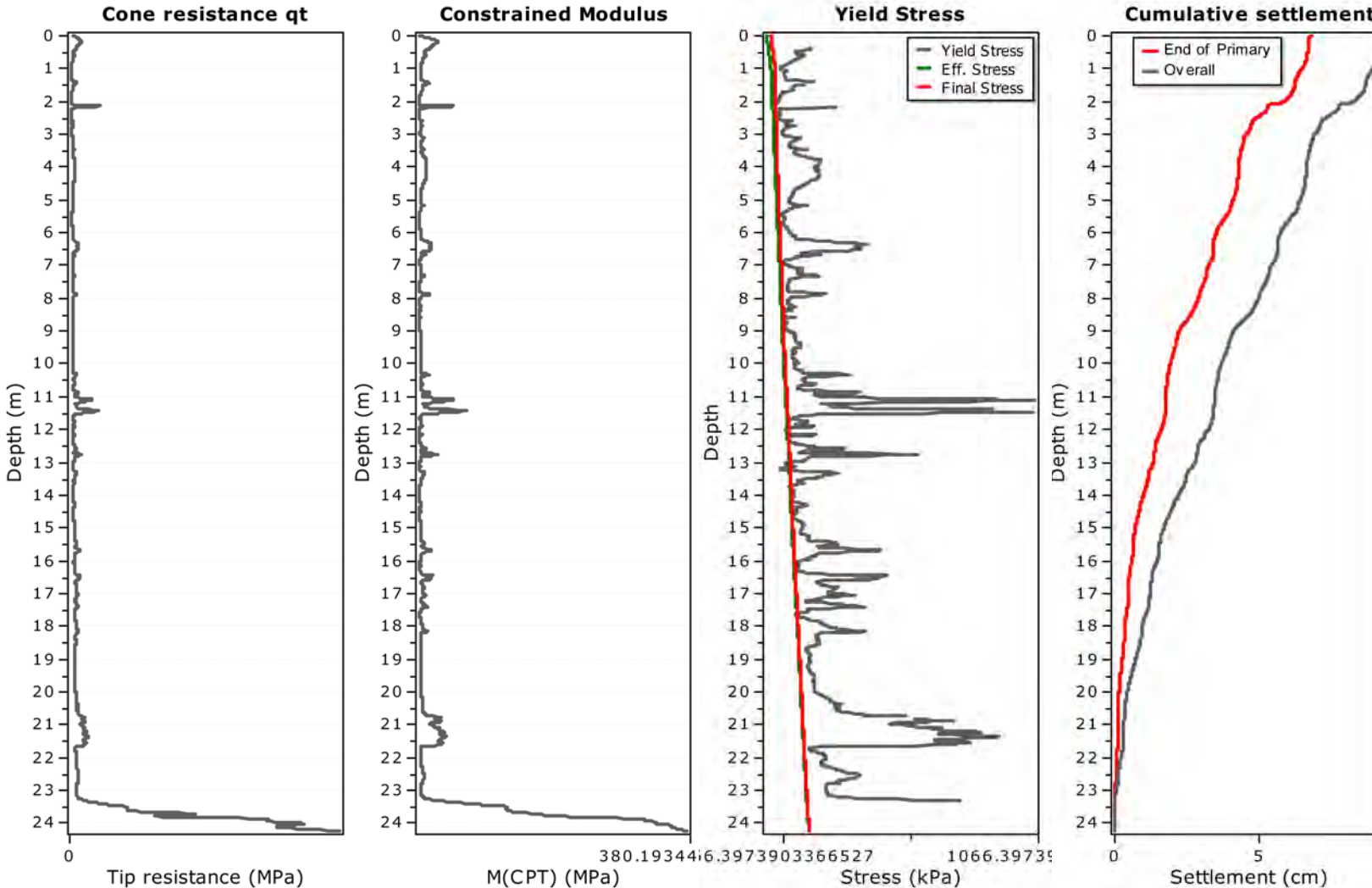
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2393	23.92	23.93	0.01	23.93	1.27	317.73	0.12	0.000	0.000	0.000
2394	23.93	23.94	0.01	23.94	1.27	319.02	0.12	0.000	0.000	0.000
2395	23.94	23.95	0.01	23.95	1.27	321.97	0.12	0.000	0.000	0.000
2396	23.95	23.96	0.01	23.96	1.27	325.86	0.12	0.000	0.000	0.000
2397	23.96	23.97	0.01	23.97	1.27	329.47	0.12	0.000	0.000	0.000
2398	23.97	23.98	0.01	23.98	1.27	331.46	0.12	0.000	0.000	0.000
2399	23.98	23.99	0.01	23.99	1.27	331.74	0.12	0.000	0.000	0.000
2400	23.99	24.00	0.01	24.00	1.27	330.88	0.12	0.000	0.000	0.000
2401	24.00	24.01	0.01	24.01	1.26	331.03	0.11	0.000	0.000	0.000
2402	24.01	24.02	0.01	24.02	1.26	331.75	0.11	0.000	0.000	0.000
2403	24.02	24.03	0.01	24.03	1.26	335.17	0.11	0.000	0.000	0.000
2404	24.03	24.04	0.01	24.04	1.26	340.35	0.11	0.000	0.000	0.000
2405	24.04	24.05	0.01	24.05	1.26	345.89	0.11	0.000	0.000	0.000
2406	24.05	24.06	0.01	24.06	1.26	349.24	0.11	0.000	0.000	0.000
2407	24.06	24.07	0.01	24.07	1.26	351.20	0.11	0.000	0.000	0.000
2408	24.07	24.08	0.01	24.08	1.26	352.86	0.11	0.000	0.000	0.000
2409	24.08	24.09	0.01	24.09	1.26	354.11	0.11	0.000	0.000	0.000
2410	24.09	24.10	0.01	24.10	1.26	354.23	0.11	0.000	0.000	0.000
2411	24.10	24.11	0.01	24.11	1.26	353.96	0.11	0.000	0.000	0.000
2412	24.11	24.12	0.01	24.12	1.26	353.59	0.11	0.000	0.000	0.000
2413	24.12	24.13	0.01	24.13	1.26	353.32	0.11	0.000	0.000	0.000
2414	24.13	24.14	0.01	24.14	1.26	353.52	0.11	0.000	0.000	0.000
2415	24.14	24.15	0.01	24.15	1.25	354.61	0.11	0.000	0.000	0.000
2416	24.15	24.16	0.01	24.16	1.25	356.44	0.11	0.000	0.000	0.000
2417	24.16	24.17	0.01	24.17	1.25	358.71	0.11	0.000	0.000	0.000
2418	24.17	24.18	0.01	24.18	1.25	361.07	0.11	0.000	0.000	0.000
2419	24.18	24.19	0.01	24.19	1.25	363.19	0.11	0.000	0.000	0.000
2420	24.19	24.20	0.01	24.20	1.25	364.68	0.11	0.000	0.000	0.000
2421	24.20	24.21	0.01	24.21	1.25	366.06	0.11	0.000	0.000	0.000
2422	24.21	24.22	0.01	24.22	1.25	367.71	0.11	0.000	0.000	0.000
2423	24.22	24.23	0.01	24.23	1.25	369.66	0.11	0.000	0.000	0.000
2424	24.23	24.24	0.01	24.24	1.25	372.93	0.11	0.000	0.000	0.000

Total primary settlement: 4.57**Total secondary settlement: 2.47****Total calculated settlement: 7.04****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

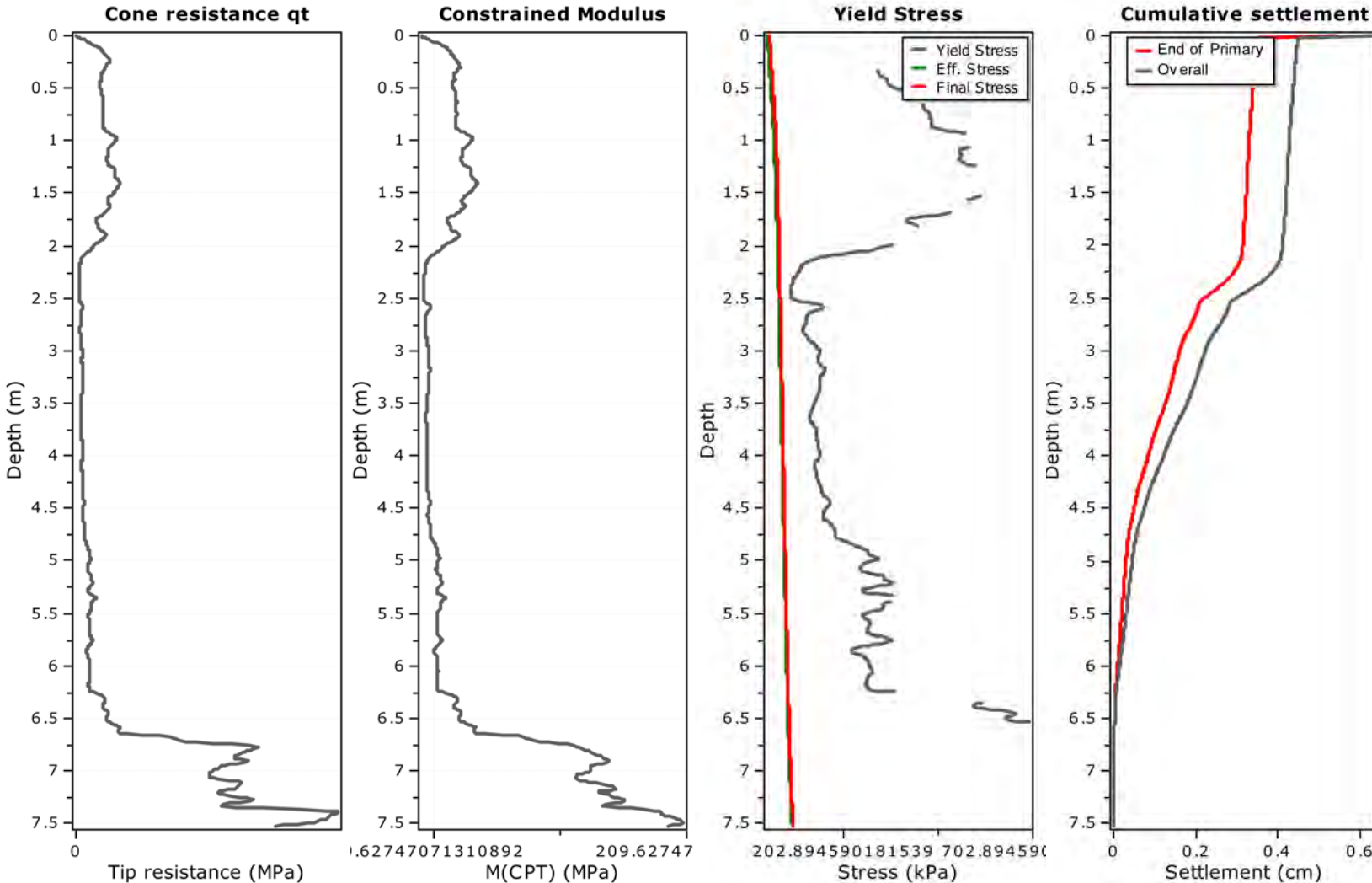
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2393	23.92	23.93	0.01	23.93	1.91	317.73	0.12	0.000	0.000	0.000
2394	23.93	23.94	0.01	23.94	1.91	319.02	0.12	0.000	0.000	0.000
2395	23.94	23.95	0.01	23.95	1.90	321.97	0.12	0.000	0.000	0.000
2396	23.95	23.96	0.01	23.96	1.90	325.86	0.12	0.000	0.000	0.000
2397	23.96	23.97	0.01	23.97	1.90	329.47	0.12	0.000	0.000	0.000
2398	23.97	23.98	0.01	23.98	1.90	331.46	0.12	0.000	0.000	0.000
2399	23.98	23.99	0.01	23.99	1.90	331.74	0.12	0.000	0.000	0.000
2400	23.99	24.00	0.01	24.00	1.90	330.88	0.12	0.000	0.000	0.000
2401	24.00	24.01	0.01	24.01	1.90	331.03	0.11	0.000	0.000	0.000
2402	24.01	24.02	0.01	24.02	1.90	331.75	0.11	0.000	0.000	0.000
2403	24.02	24.03	0.01	24.03	1.90	335.17	0.11	0.000	0.000	0.000
2404	24.03	24.04	0.01	24.04	1.89	340.35	0.11	0.000	0.000	0.000
2405	24.04	24.05	0.01	24.05	1.89	345.89	0.11	0.000	0.000	0.000
2406	24.05	24.06	0.01	24.06	1.89	349.24	0.11	0.000	0.000	0.000
2407	24.06	24.07	0.01	24.07	1.89	351.20	0.11	0.000	0.000	0.000
2408	24.07	24.08	0.01	24.08	1.89	352.86	0.11	0.000	0.000	0.000
2409	24.08	24.09	0.01	24.09	1.89	354.11	0.11	0.000	0.000	0.000
2410	24.09	24.10	0.01	24.10	1.89	354.23	0.11	0.000	0.000	0.000
2411	24.10	24.11	0.01	24.11	1.89	353.96	0.11	0.000	0.000	0.000
2412	24.11	24.12	0.01	24.12	1.89	353.59	0.11	0.000	0.000	0.000
2413	24.12	24.13	0.01	24.13	1.88	353.32	0.11	0.000	0.000	0.000
2414	24.13	24.14	0.01	24.14	1.88	353.52	0.11	0.000	0.000	0.000
2415	24.14	24.15	0.01	24.15	1.88	354.61	0.11	0.000	0.000	0.000
2416	24.15	24.16	0.01	24.16	1.88	356.44	0.11	0.000	0.000	0.000
2417	24.16	24.17	0.01	24.17	1.88	358.71	0.11	0.000	0.000	0.000
2418	24.17	24.18	0.01	24.18	1.88	361.07	0.11	0.000	0.000	0.000
2419	24.18	24.19	0.01	24.19	1.88	363.19	0.11	0.000	0.000	0.000
2420	24.19	24.20	0.01	24.20	1.88	364.68	0.11	0.000	0.000	0.000
2421	24.20	24.21	0.01	24.21	1.88	366.06	0.11	0.000	0.000	0.000
2422	24.21	24.22	0.01	24.22	1.87	367.71	0.11	0.000	0.000	0.000
2423	24.22	24.23	0.01	24.23	1.87	369.66	0.11	0.000	0.000	0.000
2424	24.23	24.24	0.01	24.24	1.87	372.93	0.11	0.000	0.000	0.000

Total primary settlement: 6.86**Total secondary settlement: 2.47****Total calculated settlement: 9.33****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	2.15	165.67	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	2.14	176.56	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	2.14	184.24	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	2.14	188.57	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	2.14	189.72	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	2.13	190.09	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	2.13	190.40	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	2.13	192.42	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	2.13	196.70	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	2.13	200.64	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	2.12	203.55	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	2.12	204.76	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	2.12	206.20	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	2.12	206.96	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	2.12	206.37	0.38	0.000	0.000	0.000
752	7.51	7.52	0.01	7.52	2.11	203.98	0.38	0.000	0.000	0.000
753	7.52	7.53	0.01	7.53	2.11	198.89	0.38	0.000	0.000	0.000

Total primary settlement: 0.54
Total secondary settlement: 0.10

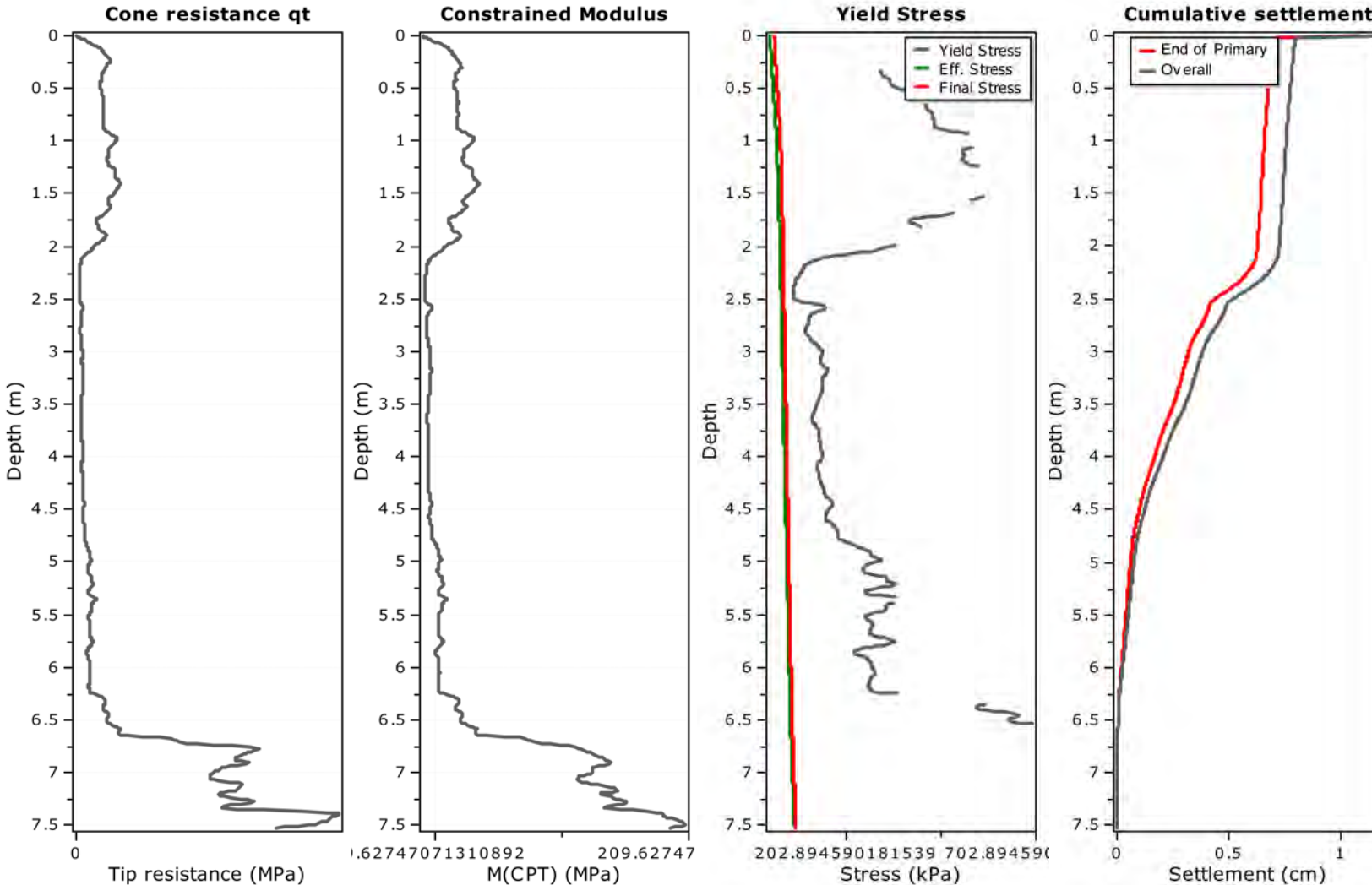
Total calculated settlement: 0.64

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	4.29	165.67	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	4.29	176.56	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	4.28	184.24	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	4.28	188.57	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	4.27	189.72	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	4.27	190.09	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	4.27	190.40	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	4.26	192.42	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	4.26	196.70	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	4.25	200.64	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	4.25	203.55	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	4.25	204.76	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	4.24	206.20	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	4.24	206.96	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	4.23	206.37	0.38	0.000	0.000	0.000
752	7.51	7.52	0.01	7.52	4.23	203.98	0.38	0.000	0.000	0.000
753	7.52	7.53	0.01	7.53	4.22	198.89	0.38	0.000	0.000	0.000

Total primary settlement: 1.08
Total secondary settlement: 0.10

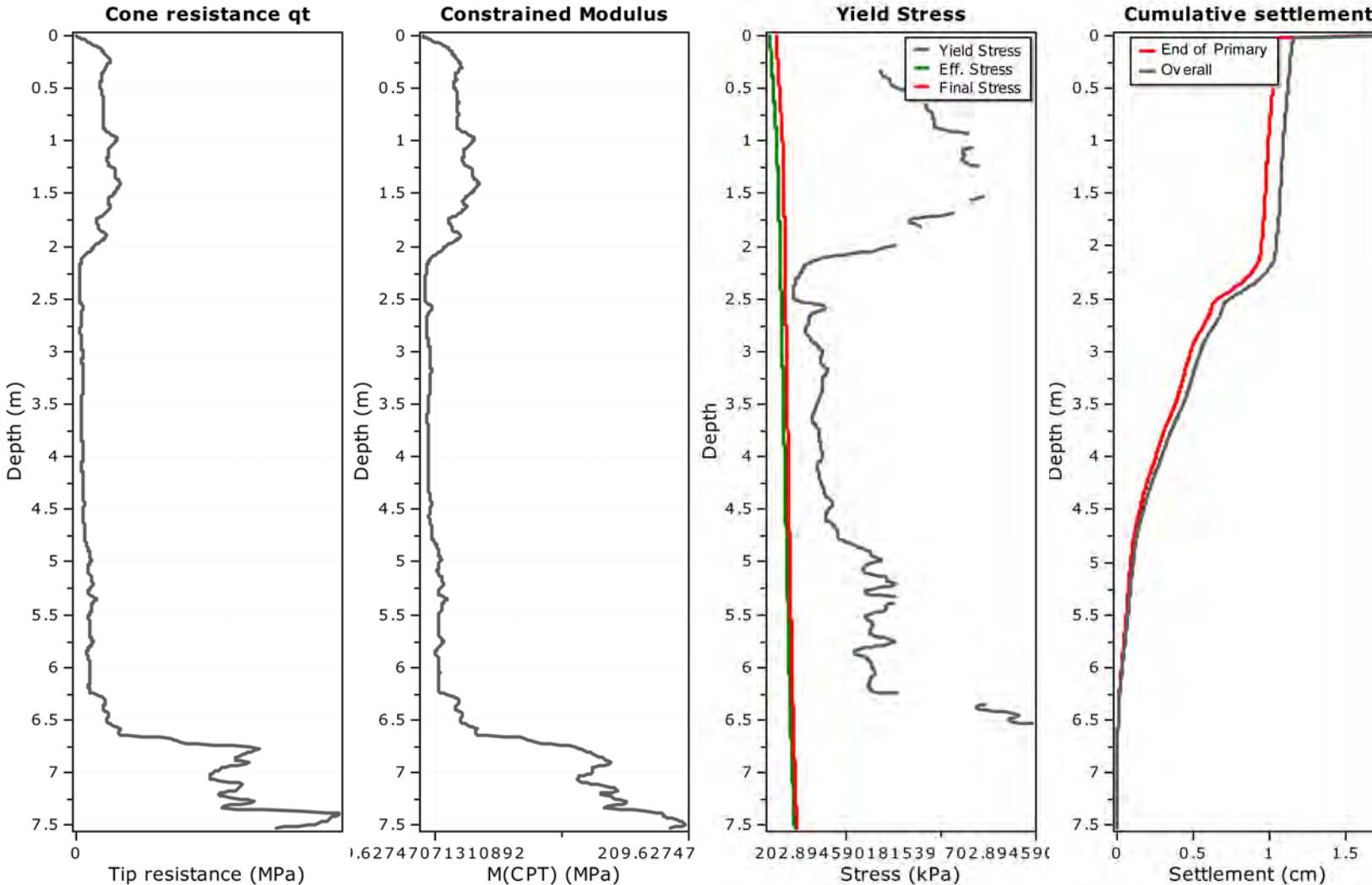
Total calculated settlement: 1.18

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	6.44	165.67	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	6.43	176.56	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	6.42	184.24	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	6.42	188.57	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	6.41	189.72	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	6.40	190.09	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	6.40	190.40	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	6.39	192.42	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	6.39	196.70	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	6.38	200.64	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	6.37	203.55	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	6.37	204.76	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	6.36	206.20	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	6.36	206.96	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	6.35	206.37	0.38	0.000	0.000	0.000
752	7.51	7.52	0.01	7.52	6.34	203.98	0.38	0.000	0.000	0.000
753	7.52	7.53	0.01	7.53	6.34	198.89	0.38	0.000	0.000	0.000

Total primary settlement: 1.62
Total secondary settlement: 0.10

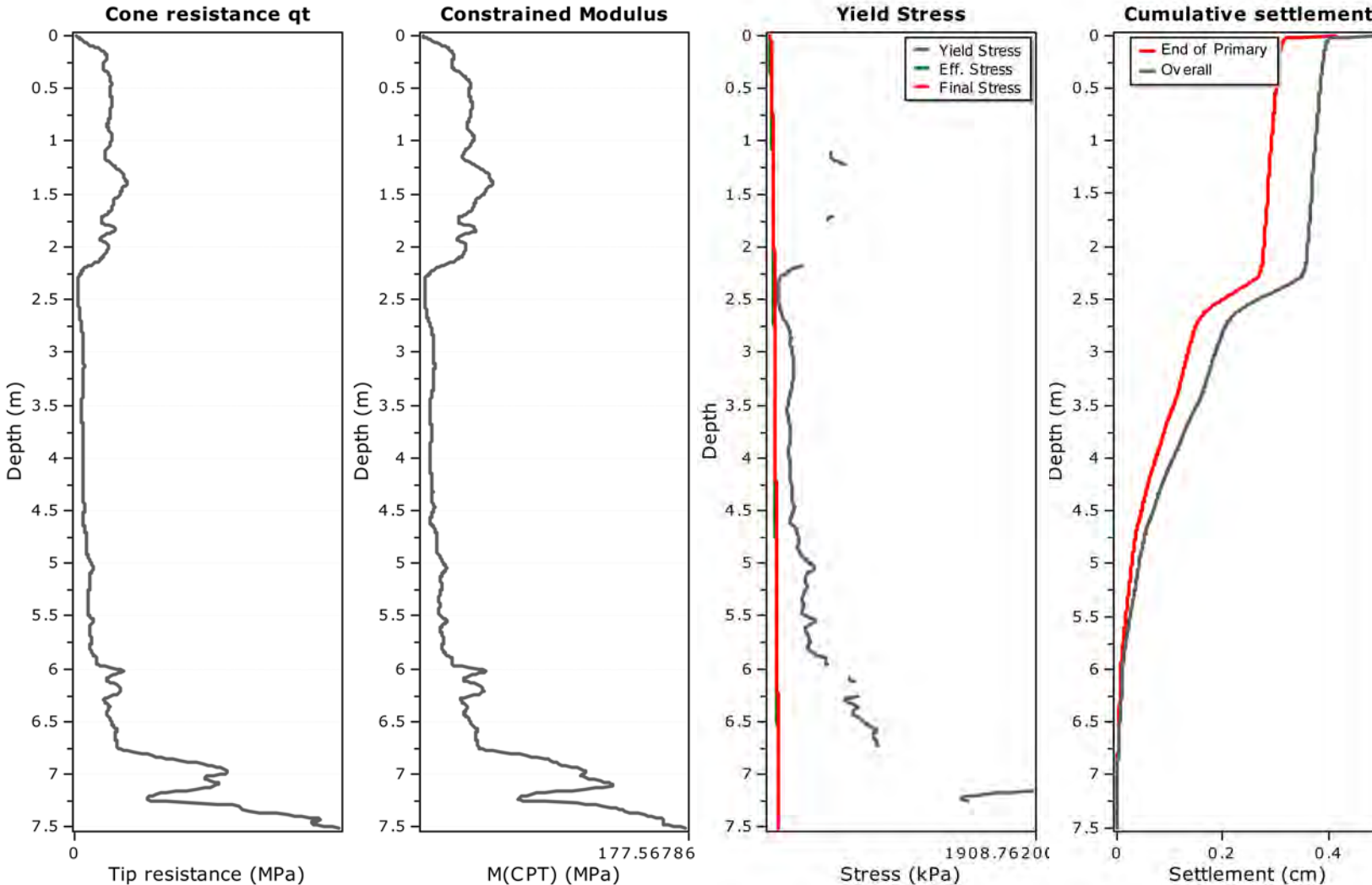
Total calculated settlement: 1.72

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-0.5}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

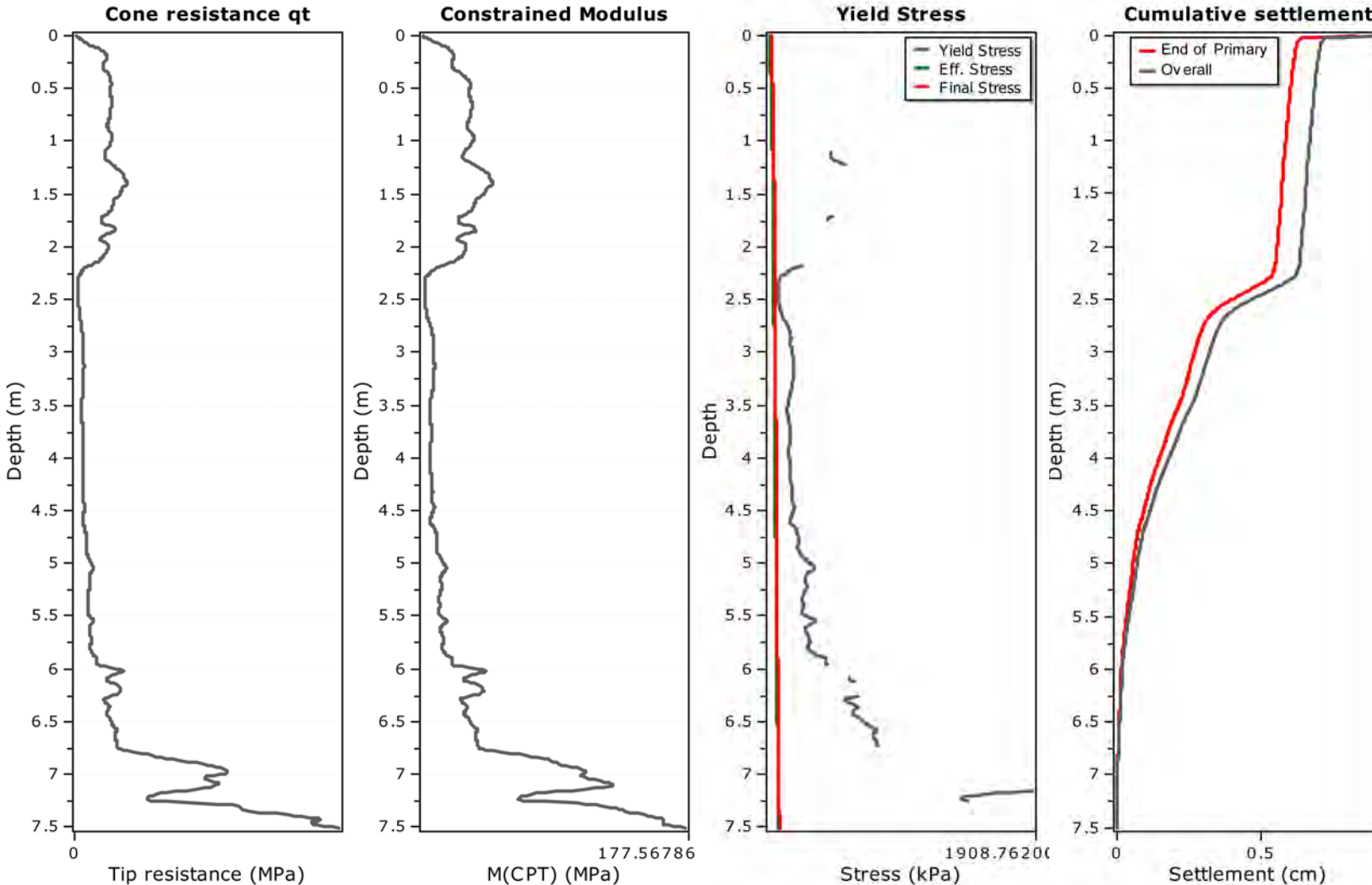
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	2.15	138.51	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	2.14	143.54	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	2.14	147.77	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	2.14	150.25	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	2.14	152.28	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	2.13	155.59	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	2.13	159.12	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	2.13	160.82	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	2.13	160.74	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	2.13	160.21	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	2.12	160.32	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	2.12	161.09	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	2.12	163.66	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	2.12	167.52	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	2.12	172.38	0.38	0.000	0.000	0.000

Total primary settlement: 0.41**Total secondary settlement: 0.08****Total calculated settlement: 0.50****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_c = S_p \left(\frac{t - t_p}{t_p} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

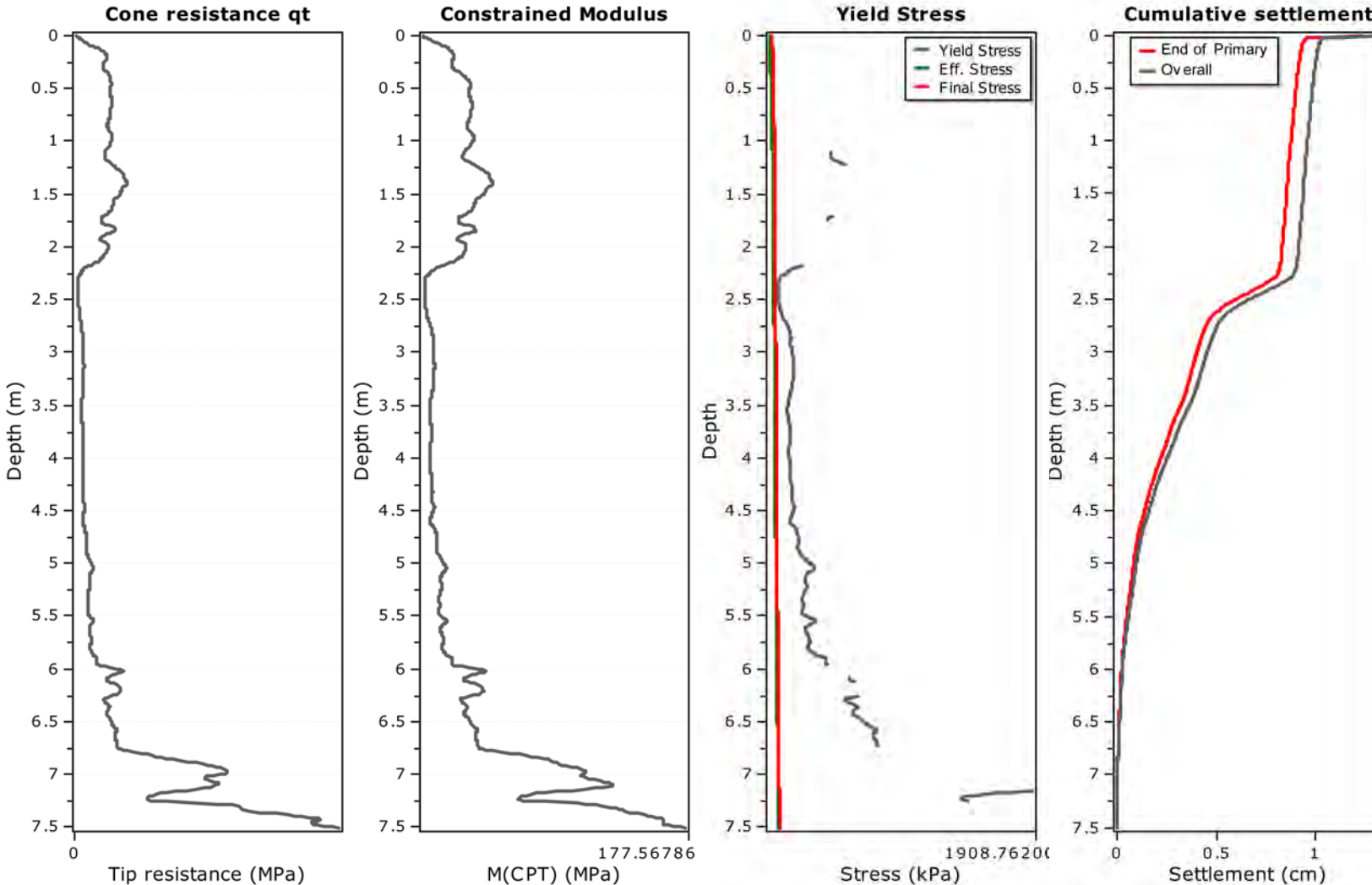
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	4.29	138.51	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	4.29	143.54	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	4.28	147.77	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	4.28	150.25	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	4.27	152.28	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	4.27	155.59	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	4.27	159.12	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	4.26	160.82	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	4.26	160.74	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	4.25	160.21	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	4.25	160.32	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	4.25	161.09	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	4.24	163.66	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	4.24	167.52	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	4.23	172.38	0.38	0.000	0.000	0.000

Total primary settlement: 0.83**Total secondary settlement: 0.08****Total calculated settlement: 0.91****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

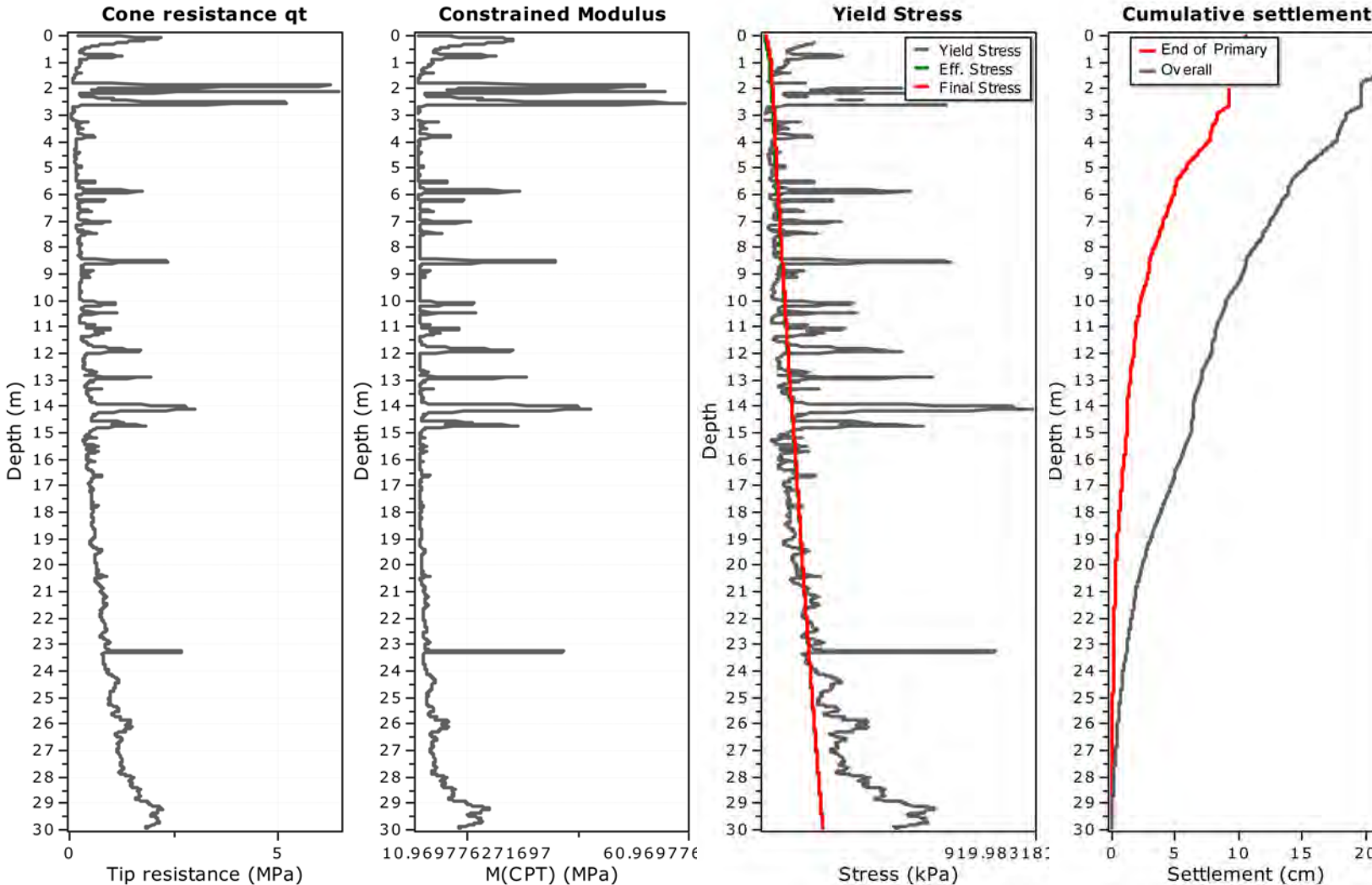
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
737	7.36	7.37	0.01	7.37	6.44	138.51	0.39	0.000	0.000	0.000
738	7.37	7.38	0.01	7.38	6.43	143.54	0.39	0.000	0.000	0.000
739	7.38	7.39	0.01	7.39	6.42	147.77	0.39	0.000	0.000	0.000
740	7.39	7.40	0.01	7.40	6.42	150.25	0.39	0.000	0.000	0.000
741	7.40	7.41	0.01	7.41	6.41	152.28	0.39	0.000	0.000	0.000
742	7.41	7.42	0.01	7.42	6.40	155.59	0.39	0.000	0.000	0.000
743	7.42	7.43	0.01	7.43	6.40	159.12	0.39	0.000	0.000	0.000
744	7.43	7.44	0.01	7.44	6.39	160.82	0.39	0.000	0.000	0.000
745	7.44	7.45	0.01	7.45	6.39	160.74	0.39	0.000	0.000	0.000
746	7.45	7.46	0.01	7.46	6.38	160.21	0.39	0.000	0.000	0.000
747	7.46	7.47	0.01	7.47	6.37	160.32	0.39	0.000	0.000	0.000
748	7.47	7.48	0.01	7.48	6.37	161.09	0.39	0.000	0.000	0.000
749	7.48	7.49	0.01	7.49	6.36	163.66	0.39	0.000	0.000	0.000
750	7.49	7.50	0.01	7.50	6.36	167.52	0.39	0.000	0.000	0.000
751	7.50	7.51	0.01	7.51	6.35	172.38	0.38	0.000	0.000	0.000

Total primary settlement: 1.24**Total secondary settlement: 0.08****Total calculated settlement: 1.32****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_s = S_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.45	9.21	0.08	0.000	0.001	0.001
2992	29.91	29.92	0.01	29.92	0.45	9.30	0.08	0.000	0.001	0.001
2993	29.92	29.93	0.01	29.93	0.45	9.48	0.08	0.000	0.001	0.001

Total primary settlement: 10.56
Total secondary settlement: 10.56

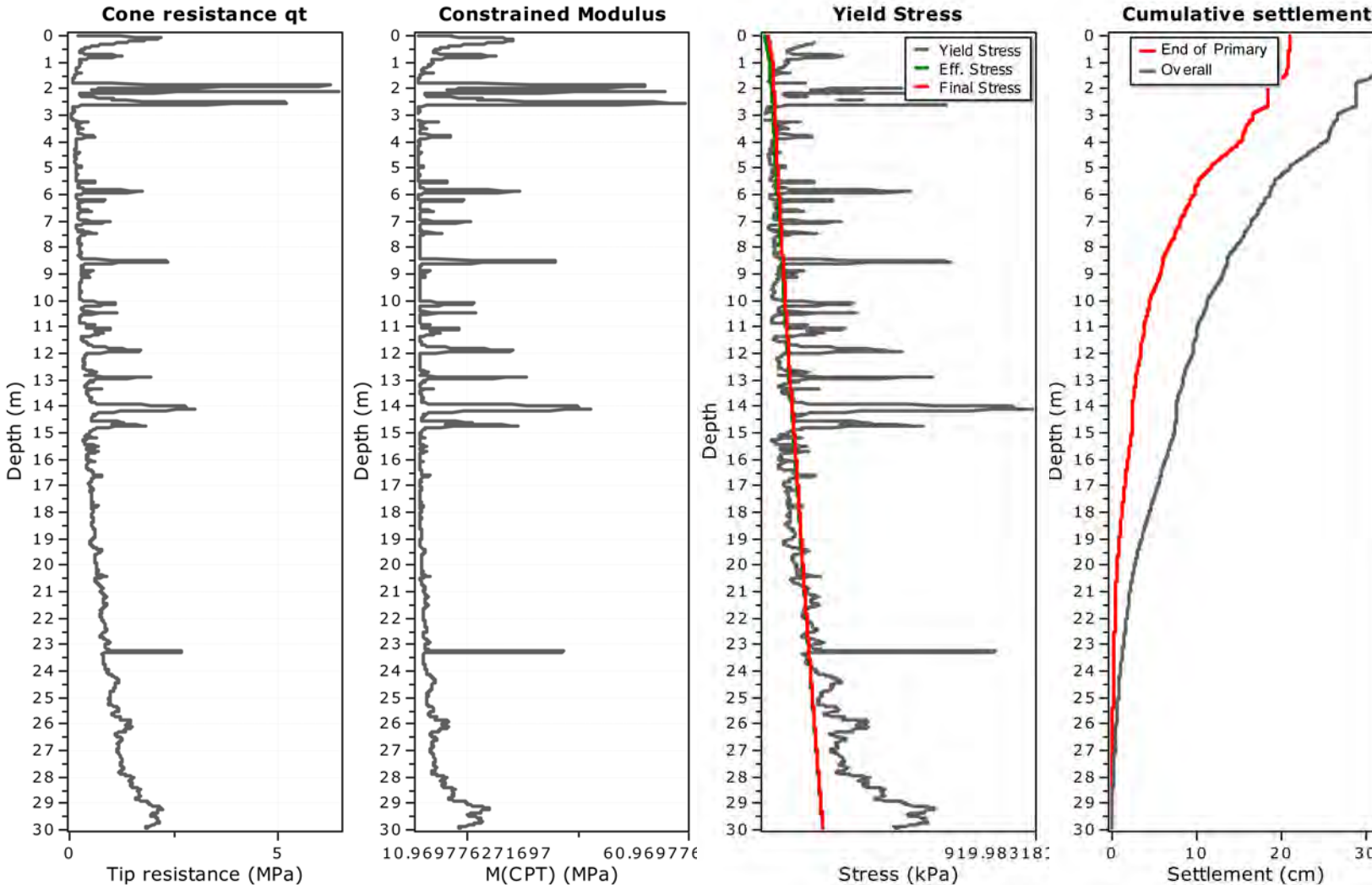
Total calculated settlement: 21.12

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

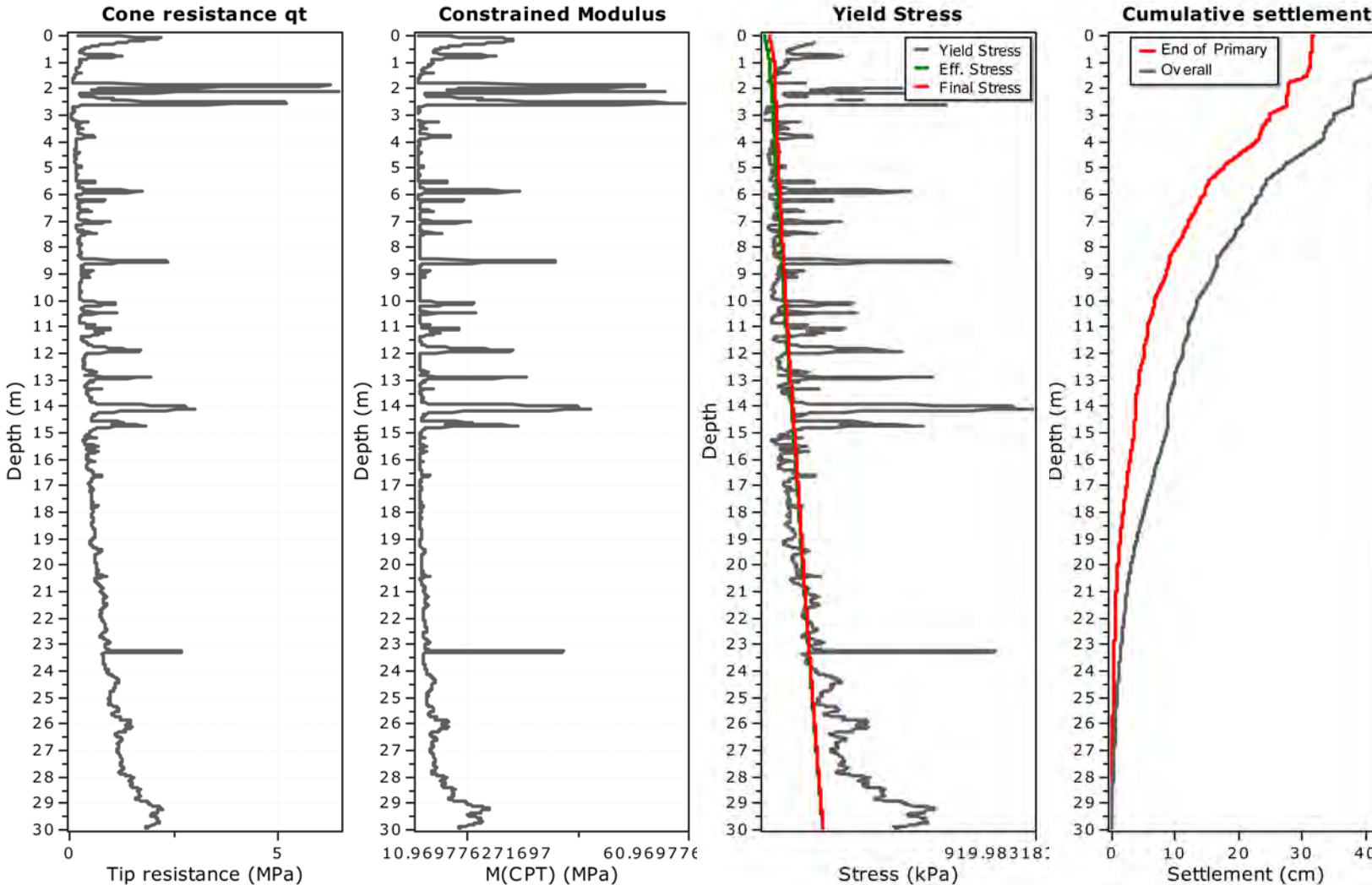
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.91	9.21	0.08	0.000	0.001	0.001
2992	29.91	29.92	0.01	29.92	0.91	9.30	0.08	0.000	0.001	0.001
2993	29.92	29.93	0.01	29.93	0.91	9.48	0.08	0.000	0.001	0.001

Total primary settlement: 21.12**Total secondary settlement: 10.56****Total calculated settlement: 31.68****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_s = S_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	1.36	9.21	0.08	0.000	0.001	0.001
2992	29.91	29.92	0.01	29.92	1.36	9.30	0.08	0.000	0.001	0.001
2993	29.92	29.93	0.01	29.93	1.36	9.48	0.08	0.000	0.001	0.001

Total primary settlement: 31.68

Total secondary settlement: 10.56

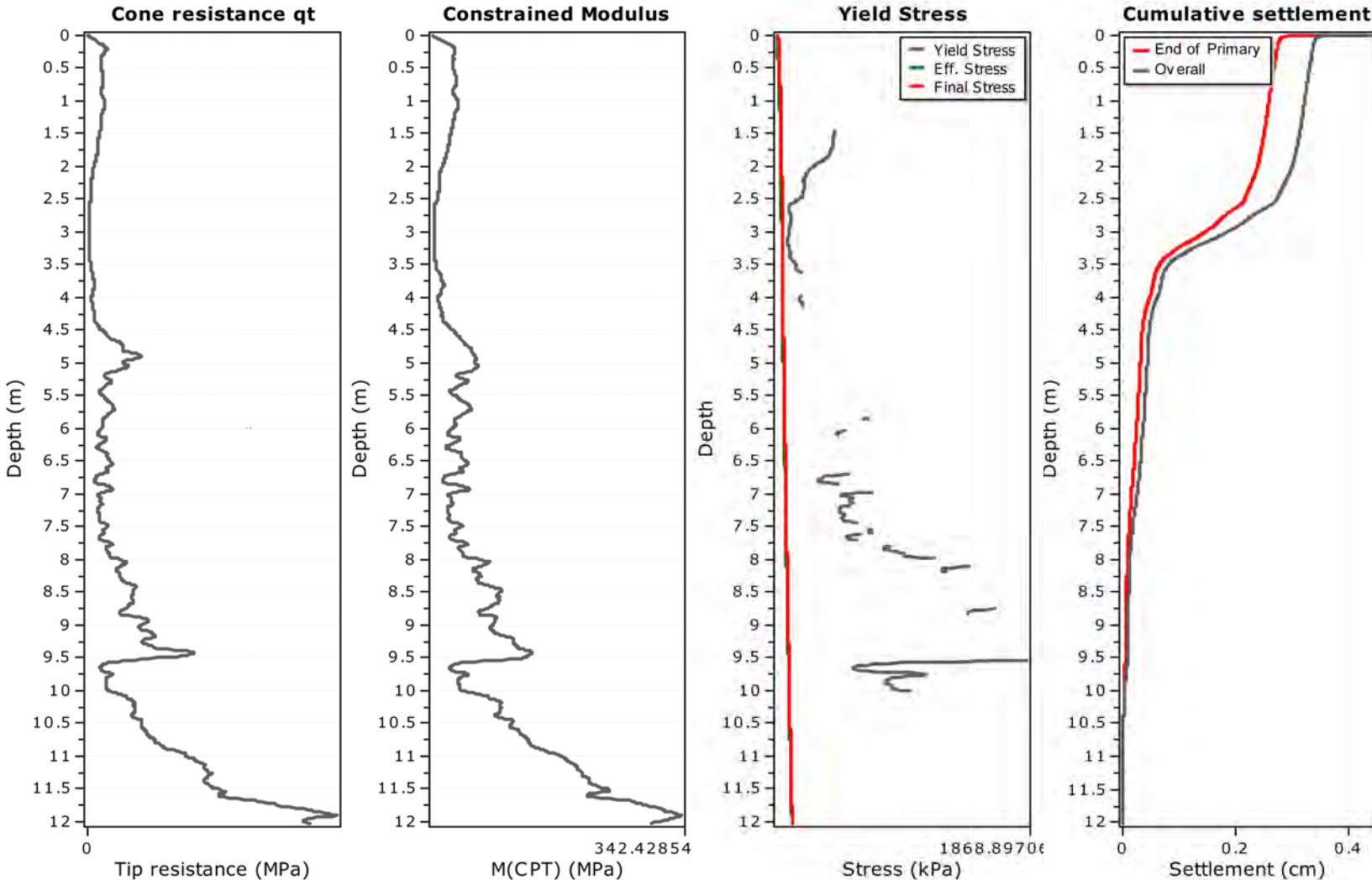
Total calculated settlement: 42.23

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	1.44	322.35	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	1.44	319.12	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	1.44	316.94	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	1.44	314.27	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	1.44	309.27	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	1.44	301.83	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	1.44	297.76	0.26	0.000	0.000	0.000

Total primary settlement: 0.38
Total secondary settlement: 0.06

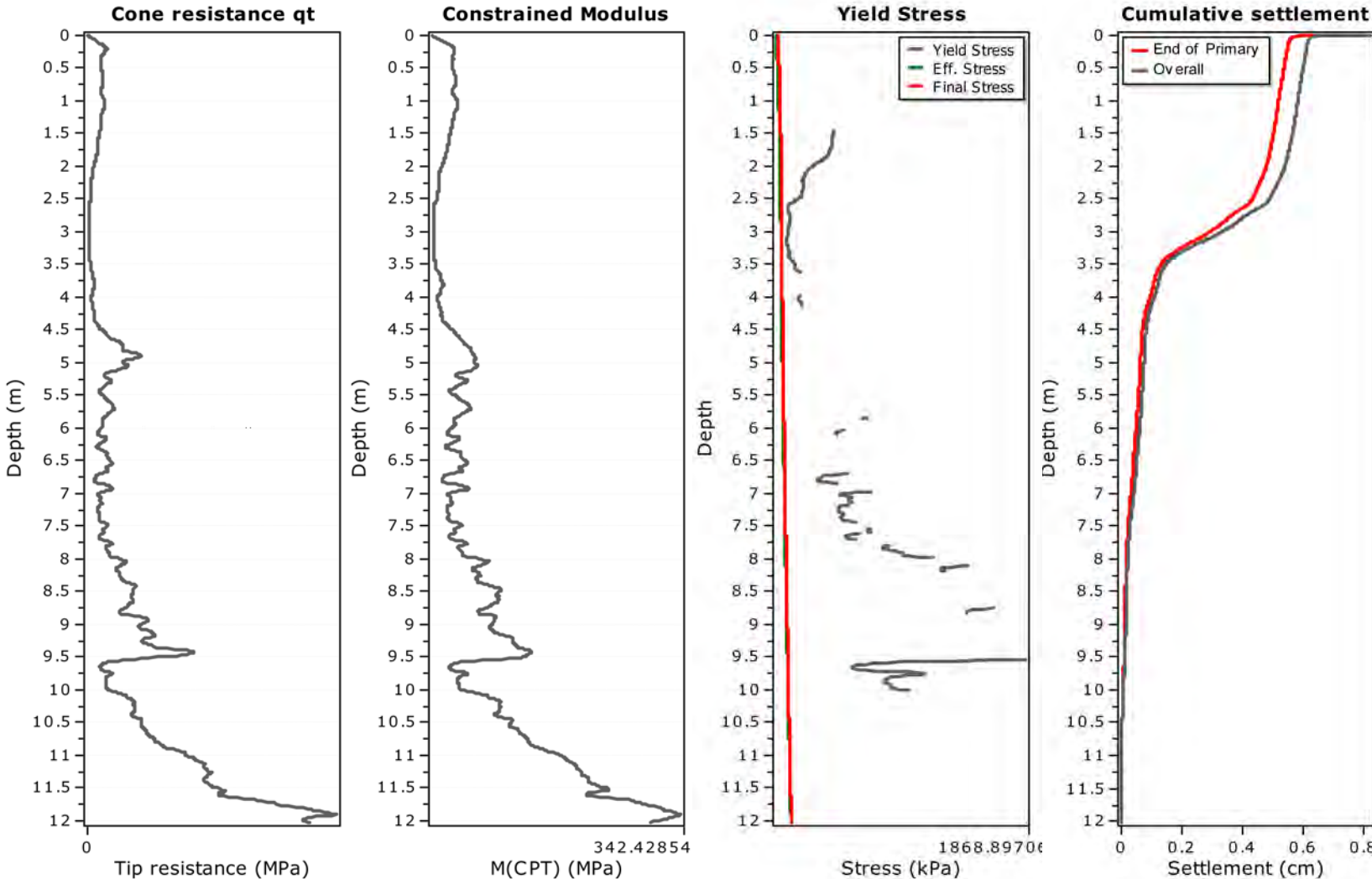
Total calculated settlement: 0.44

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 11.00 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	2.88	322.35	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	2.88	319.12	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	2.88	316.94	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	2.88	314.27	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	2.88	309.27	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	2.87	301.83	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	2.87	297.76	0.26	0.000	0.000	0.000

Total primary settlement: 0.76
Total secondary settlement: 0.06

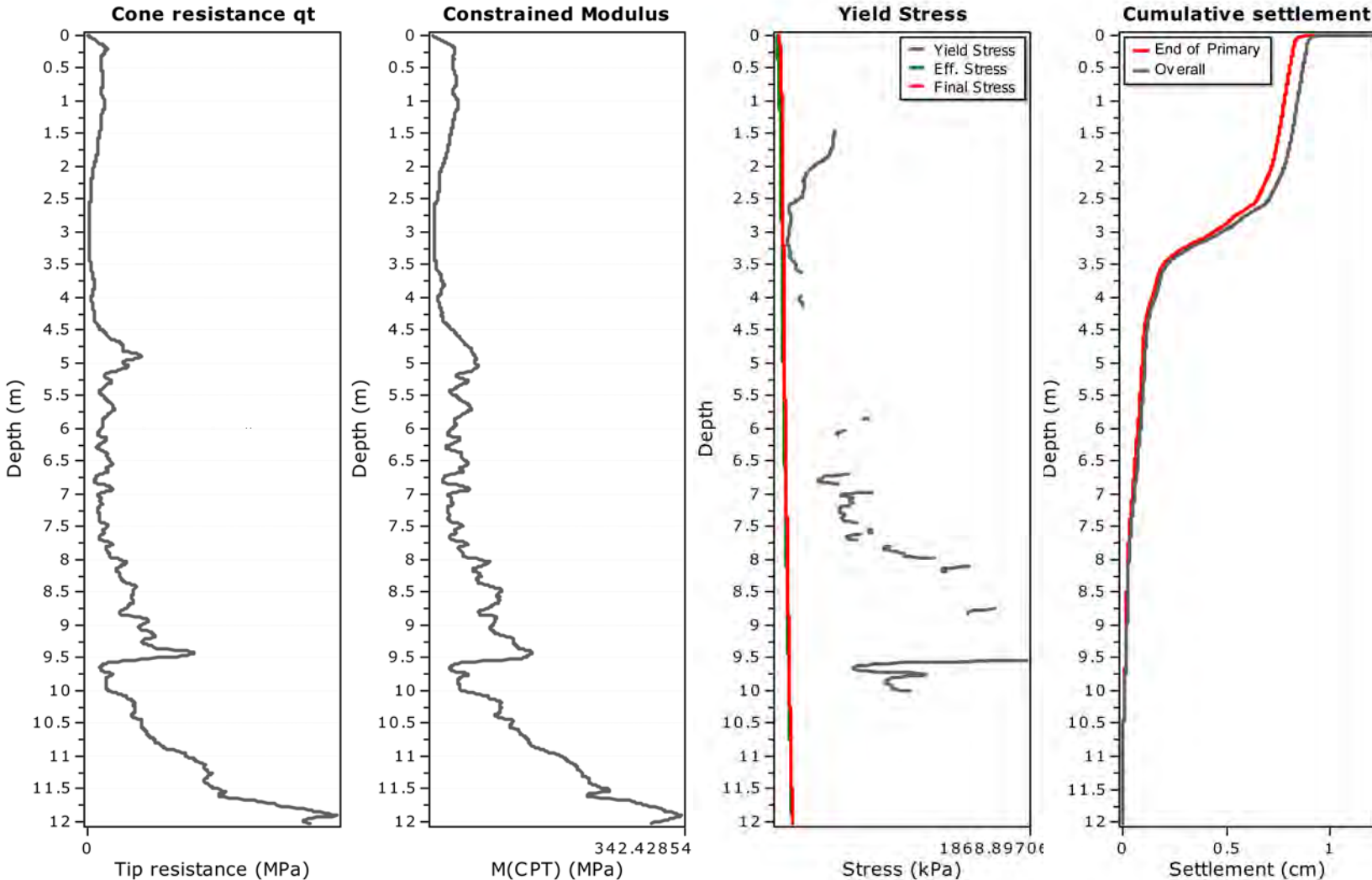
Total calculated settlement: 0.82

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	4.33	322.35	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	4.32	319.12	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	4.32	316.94	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	4.32	314.27	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	4.31	309.27	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	4.31	301.83	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	4.31	297.76	0.26	0.000	0.000	0.000

Total primary settlement: 1.14
Total secondary settlement: 0.06

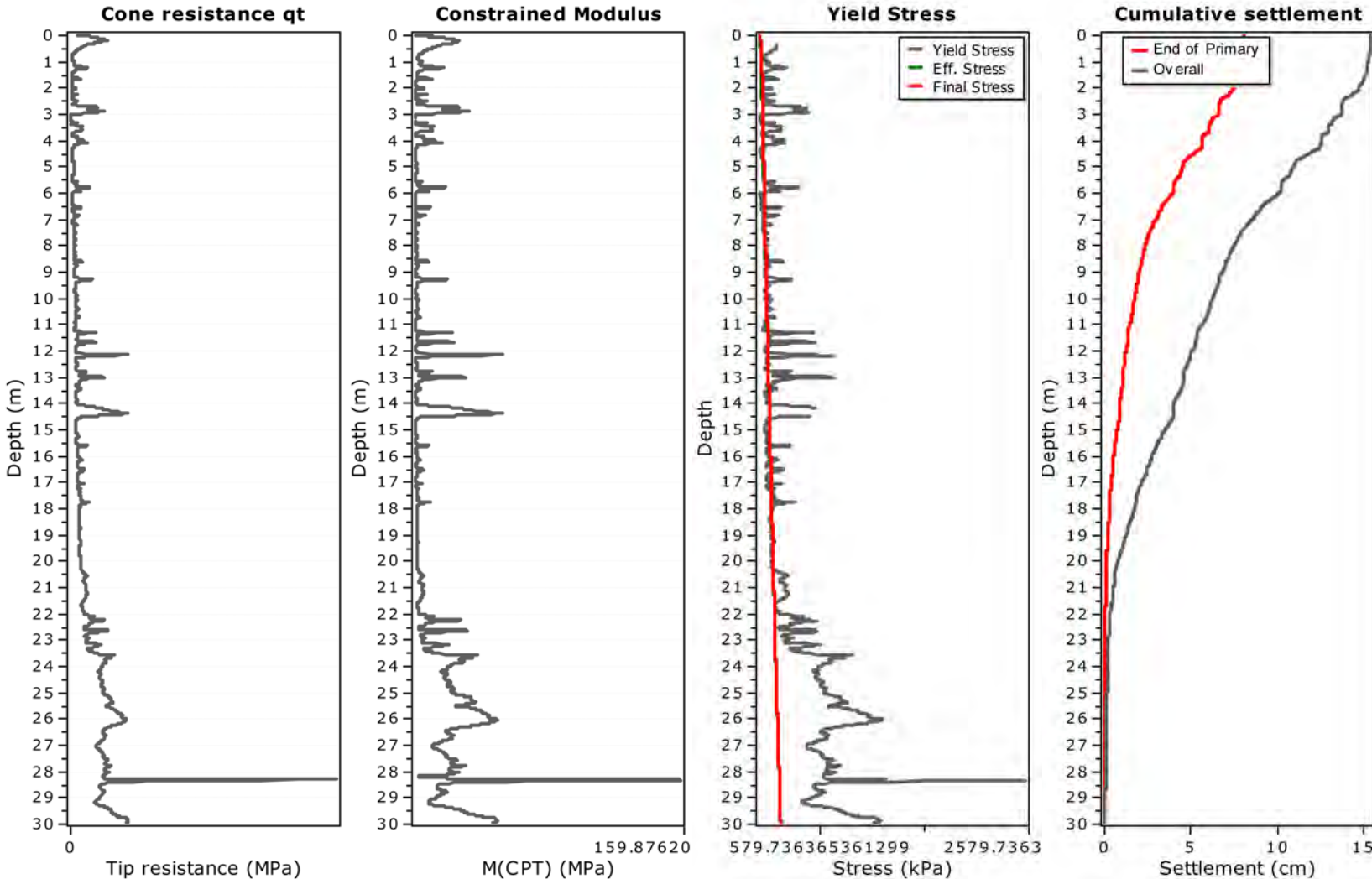
Total calculated settlement: 1.20

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

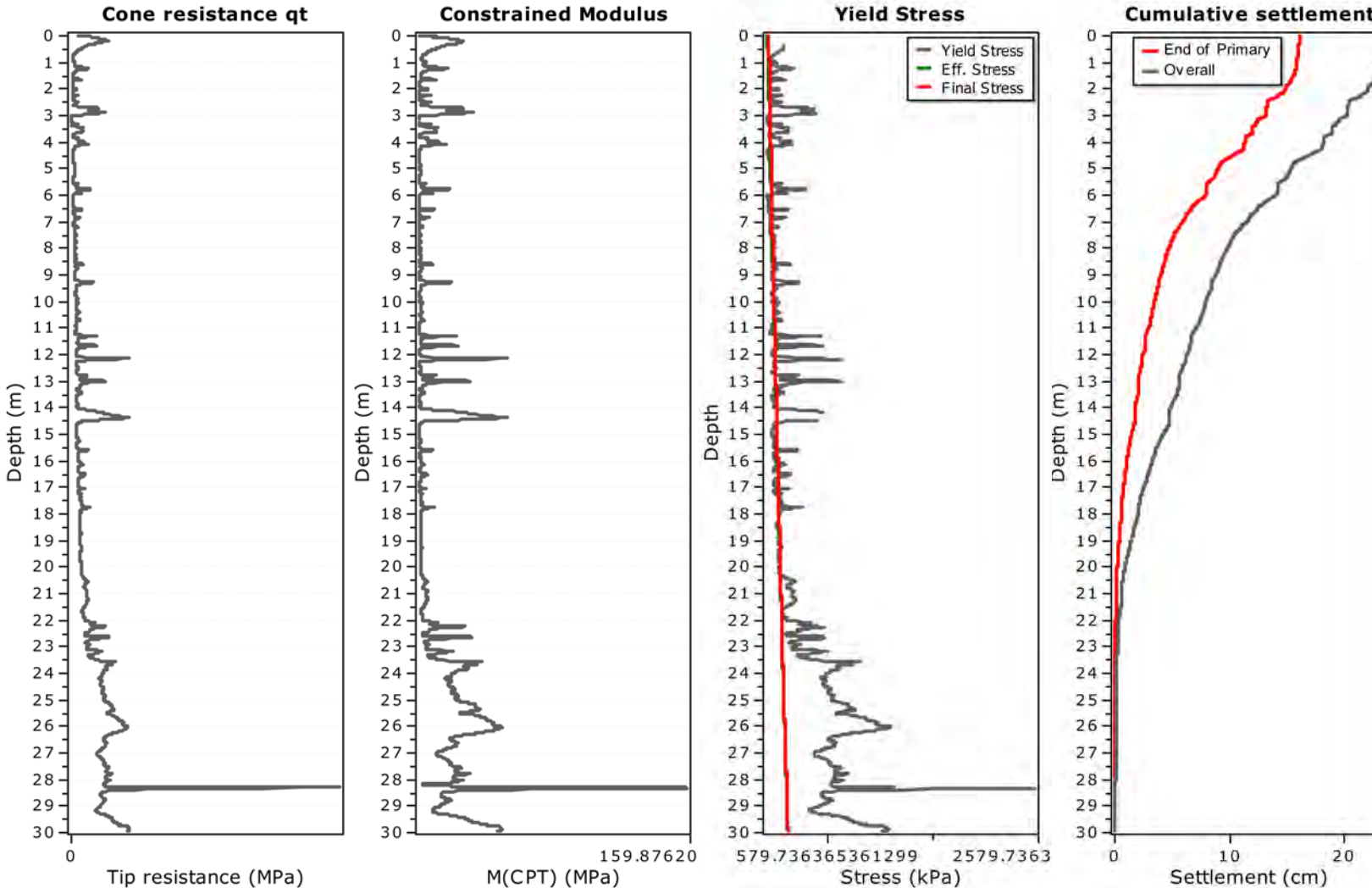
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.45	48.40	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	0.45	47.75	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	0.45	46.91	0.08	0.000	0.000	0.000

Total primary settlement: 8.06**Total secondary settlement: 7.29****Total calculated settlement: 15.34****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

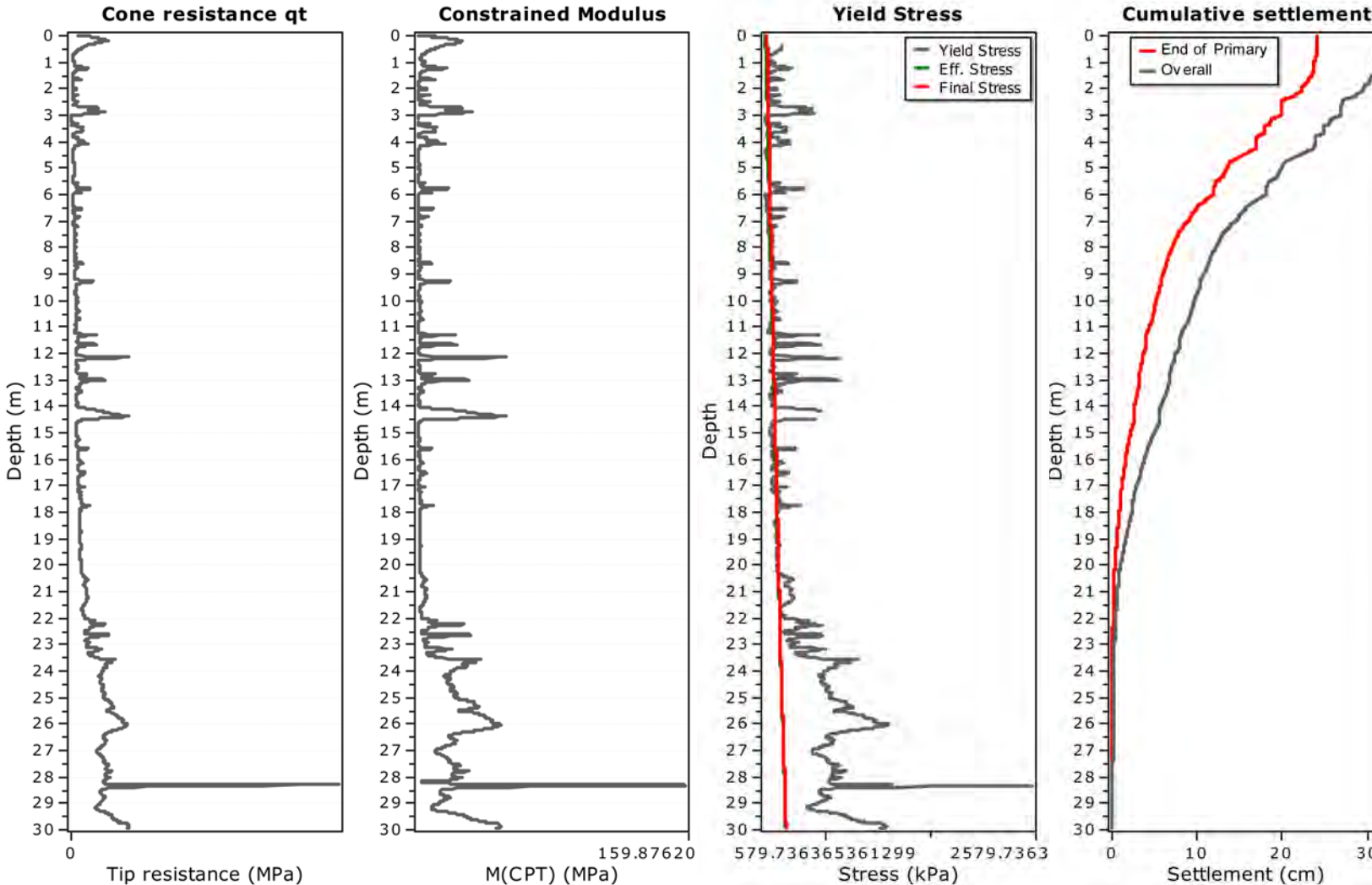
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.91	48.40	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	0.91	47.75	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	0.91	46.91	0.08	0.000	0.000	0.000

Total primary settlement: 16.11**Total secondary settlement: 7.29****Total calculated settlement: 23.40****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_s = S_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

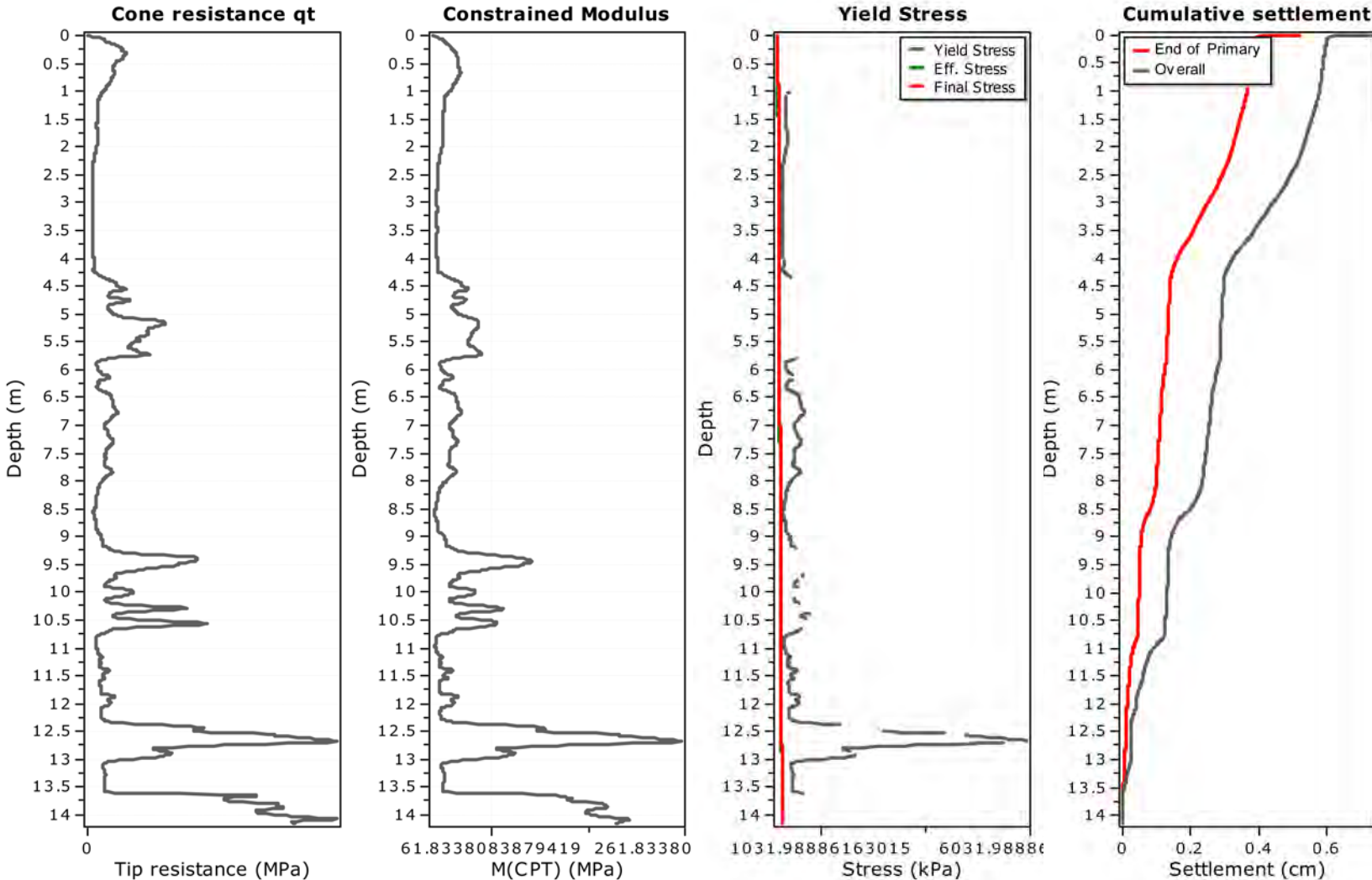
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	1.36	48.40	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	1.36	47.75	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	1.36	46.91	0.08	0.000	0.000	0.000

Total primary settlement: 24.17**Total secondary settlement: 7.29****Total calculated settlement: 31.45****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1381	13.80	13.81	0.01	13.81	1.25	176.91	0.23	0.000	0.000	0.000
1382	13.81	13.82	0.01	13.82	1.25	178.19	0.23	0.000	0.000	0.000
1383	13.82	13.83	0.01	13.83	1.25	178.97	0.23	0.000	0.000	0.000
1384	13.83	13.84	0.01	13.84	1.25	180.33	0.23	0.000	0.000	0.000
1385	13.84	13.85	0.01	13.85	1.25	180.62	0.23	0.000	0.000	0.000
1386	13.85	13.86	0.01	13.86	1.25	181.28	0.23	0.000	0.000	0.000
1387	13.86	13.87	0.01	13.87	1.25	180.77	0.23	0.000	0.000	0.000
1388	13.87	13.88	0.01	13.88	1.24	179.14	0.23	0.000	0.000	0.000
1389	13.88	13.89	0.01	13.89	1.24	174.83	0.23	0.000	0.000	0.000
1390	13.89	13.90	0.01	13.90	1.24	169.92	0.23	0.000	0.000	0.000
1391	13.90	13.91	0.01	13.91	1.24	165.00	0.23	0.000	0.000	0.000
1392	13.91	13.92	0.01	13.92	1.24	161.66	0.23	0.000	0.000	0.000
1393	13.92	13.93	0.01	13.93	1.24	159.81	0.23	0.000	0.000	0.000
1394	13.93	13.94	0.01	13.94	1.24	158.90	0.23	0.000	0.000	0.000
1395	13.94	13.95	0.01	13.95	1.24	158.69	0.23	0.000	0.000	0.000
1396	13.95	13.96	0.01	13.96	1.24	158.74	0.22	0.000	0.000	0.000
1397	13.96	13.97	0.01	13.97	1.24	158.96	0.22	0.000	0.000	0.000
1398	13.97	13.98	0.01	13.98	1.24	159.70	0.22	0.000	0.000	0.000
1399	13.98	13.99	0.01	13.99	1.23	161.51	0.22	0.000	0.000	0.000
1400	13.99	14.00	0.01	14.00	1.23	164.07	0.22	0.000	0.000	0.000
1401	14.00	14.01	0.01	14.01	1.23	166.63	0.22	0.000	0.000	0.000
1402	14.01	14.02	0.01	14.02	1.23	169.72	0.22	0.000	0.000	0.000
1403	14.02	14.03	0.01	14.03	1.23	172.93	0.22	0.000	0.000	0.000
1404	14.03	14.04	0.01	14.04	1.23	177.49	0.22	0.000	0.000	0.000
1405	14.04	14.05	0.01	14.05	1.23	182.70	0.22	0.000	0.000	0.000
1406	14.05	14.06	0.01	14.06	1.23	189.56	0.22	0.000	0.000	0.000
1407	14.06	14.07	0.01	14.07	1.23	197.72	0.22	0.000	0.000	0.000
1408	14.07	14.08	0.01	14.08	1.23	203.05	0.22	0.000	0.000	0.000
1409	14.08	14.09	0.01	14.09	1.23	204.67	0.22	0.000	0.000	0.000
1410	14.09	14.10	0.01	14.10	1.22	202.12	0.22	0.000	0.000	0.000
1411	14.10	14.11	0.01	14.11	1.22	199.63	0.22	0.000	0.000	0.000
1412	14.11	14.12	0.01	14.12	1.22	197.42	0.22	0.000	0.000	0.000
1413	14.12	14.13	0.01	14.13	1.22	195.64	0.22	0.000	0.000	0.000
1414	14.13	14.14	0.01	14.14	1.22	193.35	0.22	0.000	0.000	0.000
1415	14.14	14.15	0.01	14.15	1.22	191.43	0.22	0.000	0.000	0.000

Total primary settlement: 0.52
Total secondary settlement: 0.21

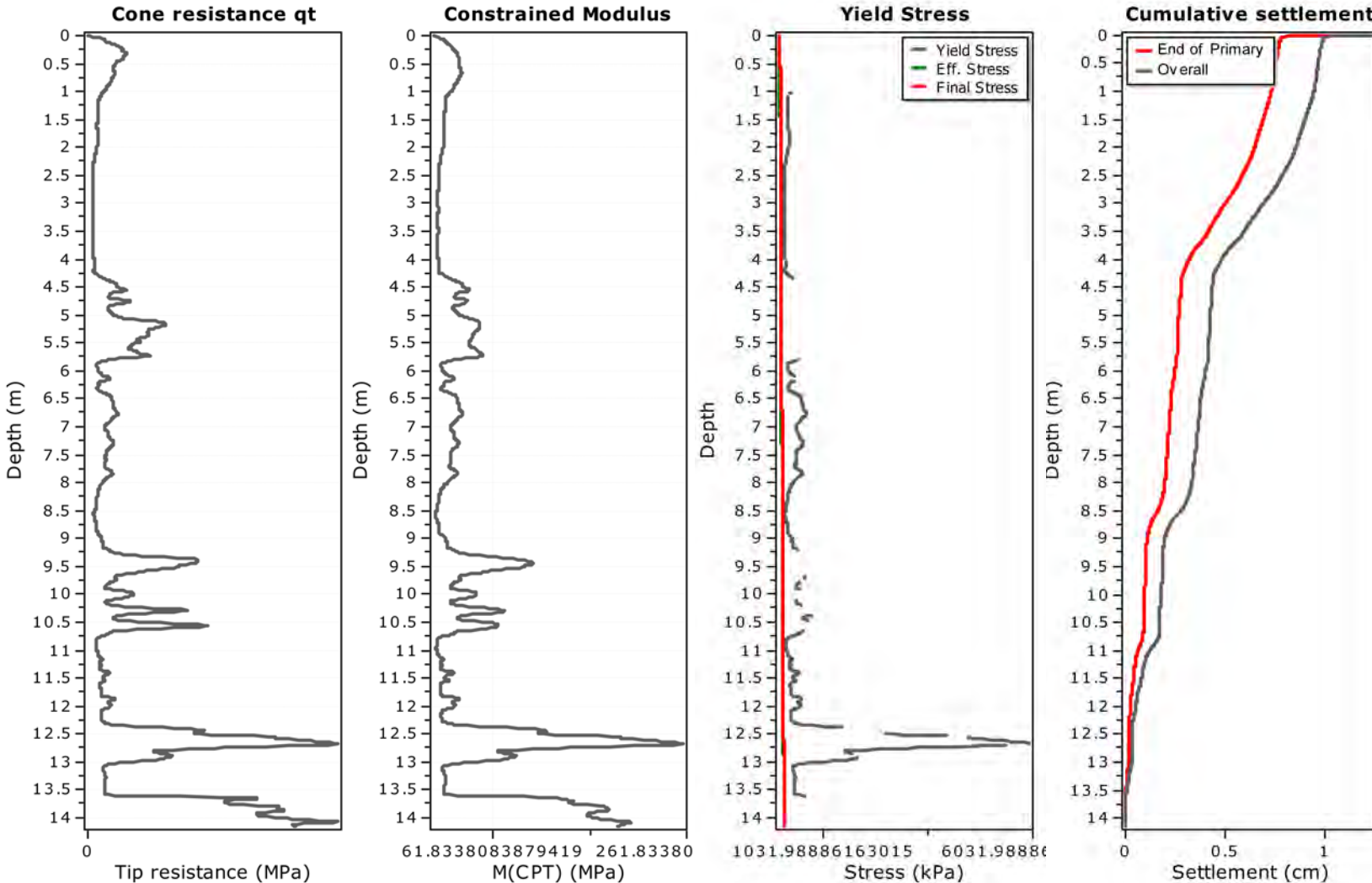
Total calculated settlement: 0.73

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1381	13.80	13.81	0.01	13.81	2.50	176.91	0.23	0.000	0.000	0.000
1382	13.81	13.82	0.01	13.82	2.50	178.19	0.23	0.000	0.000	0.000
1383	13.82	13.83	0.01	13.83	2.50	178.97	0.23	0.000	0.000	0.000
1384	13.83	13.84	0.01	13.84	2.50	180.33	0.23	0.000	0.000	0.000
1385	13.84	13.85	0.01	13.85	2.49	180.62	0.23	0.000	0.000	0.000
1386	13.85	13.86	0.01	13.86	2.49	181.28	0.23	0.000	0.000	0.000
1387	13.86	13.87	0.01	13.87	2.49	180.77	0.23	0.000	0.000	0.000
1388	13.87	13.88	0.01	13.88	2.49	179.14	0.23	0.000	0.000	0.000
1389	13.88	13.89	0.01	13.89	2.49	174.83	0.23	0.000	0.000	0.000
1390	13.89	13.90	0.01	13.90	2.49	169.92	0.23	0.000	0.000	0.000
1391	13.90	13.91	0.01	13.91	2.48	165.00	0.23	0.000	0.000	0.000
1392	13.91	13.92	0.01	13.92	2.48	161.66	0.23	0.000	0.000	0.000
1393	13.92	13.93	0.01	13.93	2.48	159.81	0.23	0.000	0.000	0.000
1394	13.93	13.94	0.01	13.94	2.48	158.90	0.23	0.000	0.000	0.000
1395	13.94	13.95	0.01	13.95	2.48	158.69	0.23	0.000	0.000	0.000
1396	13.95	13.96	0.01	13.96	2.47	158.74	0.22	0.000	0.000	0.000
1397	13.96	13.97	0.01	13.97	2.47	158.96	0.22	0.000	0.000	0.000
1398	13.97	13.98	0.01	13.98	2.47	159.70	0.22	0.000	0.000	0.000
1399	13.98	13.99	0.01	13.99	2.47	161.51	0.22	0.000	0.000	0.000
1400	13.99	14.00	0.01	14.00	2.47	164.07	0.22	0.000	0.000	0.000
1401	14.00	14.01	0.01	14.01	2.47	166.63	0.22	0.000	0.000	0.000
1402	14.01	14.02	0.01	14.02	2.46	169.72	0.22	0.000	0.000	0.000
1403	14.02	14.03	0.01	14.03	2.46	172.93	0.22	0.000	0.000	0.000
1404	14.03	14.04	0.01	14.04	2.46	177.49	0.22	0.000	0.000	0.000
1405	14.04	14.05	0.01	14.05	2.46	182.70	0.22	0.000	0.000	0.000
1406	14.05	14.06	0.01	14.06	2.46	189.56	0.22	0.000	0.000	0.000
1407	14.06	14.07	0.01	14.07	2.45	197.72	0.22	0.000	0.000	0.000
1408	14.07	14.08	0.01	14.08	2.45	203.05	0.22	0.000	0.000	0.000
1409	14.08	14.09	0.01	14.09	2.45	204.67	0.22	0.000	0.000	0.000
1410	14.09	14.10	0.01	14.10	2.45	202.12	0.22	0.000	0.000	0.000
1411	14.10	14.11	0.01	14.11	2.45	199.63	0.22	0.000	0.000	0.000
1412	14.11	14.12	0.01	14.12	2.44	197.42	0.22	0.000	0.000	0.000
1413	14.12	14.13	0.01	14.13	2.44	195.64	0.22	0.000	0.000	0.000
1414	14.13	14.14	0.01	14.14	2.44	193.35	0.22	0.000	0.000	0.000
1415	14.14	14.15	0.01	14.15	2.44	191.43	0.22	0.000	0.000	0.000

Total primary settlement: 1.04
Total secondary settlement: 0.21

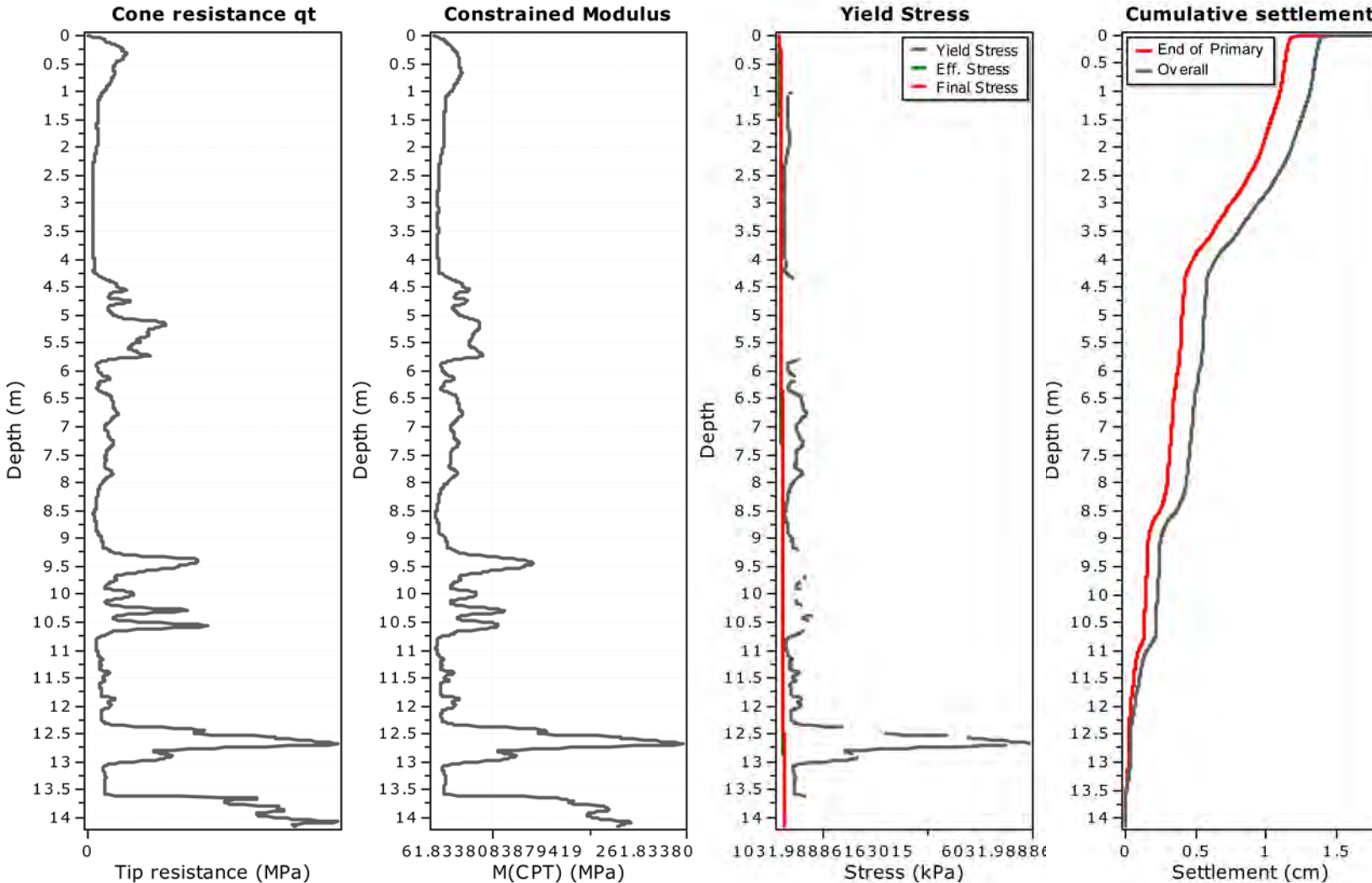
Total calculated settlement: 1.26

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 16.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1381	13.80	13.81	0.01	13.81	3.75	176.91	0.23	0.000	0.000	0.000
1382	13.81	13.82	0.01	13.82	3.75	178.19	0.23	0.000	0.000	0.000
1383	13.82	13.83	0.01	13.83	3.75	178.97	0.23	0.000	0.000	0.000
1384	13.83	13.84	0.01	13.84	3.74	180.33	0.23	0.000	0.000	0.000
1385	13.84	13.85	0.01	13.85	3.74	180.62	0.23	0.000	0.000	0.000
1386	13.85	13.86	0.01	13.86	3.74	181.28	0.23	0.000	0.000	0.000
1387	13.86	13.87	0.01	13.87	3.74	180.77	0.23	0.000	0.000	0.000
1388	13.87	13.88	0.01	13.88	3.73	179.14	0.23	0.000	0.000	0.000
1389	13.88	13.89	0.01	13.89	3.73	174.83	0.23	0.000	0.000	0.000
1390	13.89	13.90	0.01	13.90	3.73	169.92	0.23	0.000	0.000	0.000
1391	13.90	13.91	0.01	13.91	3.73	165.00	0.23	0.000	0.000	0.000
1392	13.91	13.92	0.01	13.92	3.72	161.66	0.23	0.000	0.000	0.000
1393	13.92	13.93	0.01	13.93	3.72	159.81	0.23	0.000	0.000	0.000
1394	13.93	13.94	0.01	13.94	3.72	158.90	0.23	0.000	0.000	0.000
1395	13.94	13.95	0.01	13.95	3.71	158.69	0.23	0.000	0.000	0.000
1396	13.95	13.96	0.01	13.96	3.71	158.74	0.22	0.000	0.000	0.000
1397	13.96	13.97	0.01	13.97	3.71	158.96	0.22	0.000	0.000	0.000
1398	13.97	13.98	0.01	13.98	3.71	159.70	0.22	0.000	0.000	0.000
1399	13.98	13.99	0.01	13.99	3.70	161.51	0.22	0.000	0.000	0.000
1400	13.99	14.00	0.01	14.00	3.70	164.07	0.22	0.000	0.000	0.000
1401	14.00	14.01	0.01	14.01	3.70	166.63	0.22	0.000	0.000	0.000
1402	14.01	14.02	0.01	14.02	3.69	169.72	0.22	0.000	0.000	0.000
1403	14.02	14.03	0.01	14.03	3.69	172.93	0.22	0.000	0.000	0.000
1404	14.03	14.04	0.01	14.04	3.69	177.49	0.22	0.000	0.000	0.000
1405	14.04	14.05	0.01	14.05	3.69	182.70	0.22	0.000	0.000	0.000
1406	14.05	14.06	0.01	14.06	3.68	189.56	0.22	0.000	0.000	0.000
1407	14.06	14.07	0.01	14.07	3.68	197.72	0.22	0.000	0.000	0.000
1408	14.07	14.08	0.01	14.08	3.68	203.05	0.22	0.000	0.000	0.000
1409	14.08	14.09	0.01	14.09	3.68	204.67	0.22	0.000	0.000	0.000
1410	14.09	14.10	0.01	14.10	3.67	202.12	0.22	0.000	0.000	0.000
1411	14.10	14.11	0.01	14.11	3.67	199.63	0.22	0.000	0.000	0.000
1412	14.11	14.12	0.01	14.12	3.67	197.42	0.22	0.000	0.000	0.000
1413	14.12	14.13	0.01	14.13	3.66	195.64	0.22	0.000	0.000	0.000
1414	14.13	14.14	0.01	14.14	3.66	193.35	0.22	0.000	0.000	0.000
1415	14.14	14.15	0.01	14.15	3.66	191.43	0.22	0.000	0.000	0.000

Total primary settlement: 1.56
Total secondary settlement: 0.21

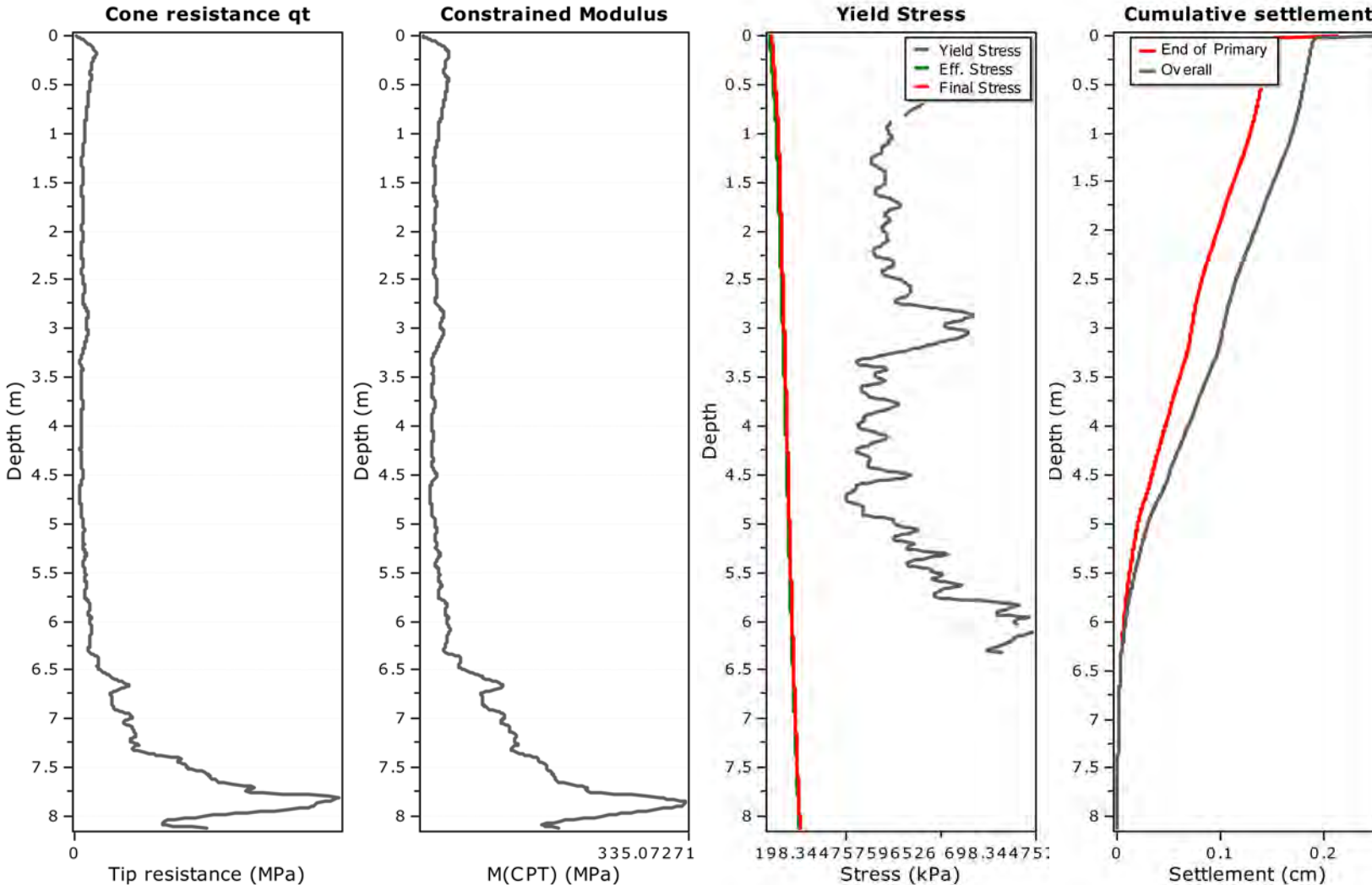
Total calculated settlement: 1.78

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S = \dots$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
783	7.82	7.83	0.01	7.83	2.05	307.35	0.37	0.000	0.000	0.000
784	7.83	7.84	0.01	7.84	2.05	315.90	0.37	0.000	0.000	0.000
785	7.84	7.85	0.01	7.85	2.05	325.04	0.37	0.000	0.000	0.000
786	7.85	7.86	0.01	7.86	2.05	330.81	0.37	0.000	0.000	0.000
787	7.86	7.87	0.01	7.87	2.05	330.04	0.37	0.000	0.000	0.000
788	7.87	7.88	0.01	7.88	2.04	329.00	0.37	0.000	0.000	0.000
789	7.88	7.89	0.01	7.89	2.04	328.68	0.37	0.000	0.000	0.000
790	7.89	7.90	0.01	7.90	2.04	326.35	0.37	0.000	0.000	0.000
791	7.90	7.91	0.01	7.91	2.04	321.13	0.37	0.000	0.000	0.000
792	7.91	7.92	0.01	7.92	2.04	313.11	0.37	0.000	0.000	0.000
793	7.92	7.93	0.01	7.93	2.03	302.81	0.37	0.000	0.000	0.000
794	7.93	7.94	0.01	7.94	2.03	292.07	0.37	0.000	0.000	0.000
795	7.94	7.95	0.01	7.95	2.03	281.66	0.37	0.000	0.000	0.000
796	7.95	7.96	0.01	7.96	2.03	271.81	0.37	0.000	0.000	0.000
797	7.96	7.97	0.01	7.97	2.03	261.94	0.37	0.000	0.000	0.000
798	7.97	7.98	0.01	7.98	2.02	250.80	0.37	0.000	0.000	0.000
799	7.98	7.99	0.01	7.99	2.02	242.31	0.37	0.000	0.000	0.000
800	7.99	8.00	0.01	8.00	2.02	234.09	0.37	0.000	0.000	0.000
801	8.00	8.01	0.01	8.01	2.02	226.18	0.37	0.000	0.000	0.000
802	8.01	8.02	0.01	8.02	2.02	215.36	0.37	0.000	0.000	0.000
803	8.02	8.03	0.01	8.03	2.02	202.60	0.37	0.000	0.000	0.000
804	8.03	8.04	0.01	8.04	2.01	190.56	0.37	0.000	0.000	0.000
805	8.04	8.05	0.01	8.05	2.01	180.40	0.37	0.000	0.000	0.000
806	8.05	8.06	0.01	8.06	2.01	173.39	0.37	0.000	0.000	0.000
807	8.06	8.07	0.01	8.07	2.01	164.06	0.37	0.000	0.000	0.000
808	8.07	8.08	0.01	8.08	2.01	155.93	0.36	0.000	0.000	0.000
809	8.08	8.09	0.01	8.09	2.00	150.11	0.36	0.000	0.000	0.000
810	8.09	8.10	0.01	8.10	2.00	150.72	0.36	0.000	0.000	0.000
811	8.10	8.11	0.01	8.11	2.00	154.31	0.36	0.000	0.000	0.000
812	8.11	8.12	0.01	8.12	2.00	162.96	0.36	0.000	0.000	0.000

Total primary settlement: 0.21
Total secondary settlement: 0.04

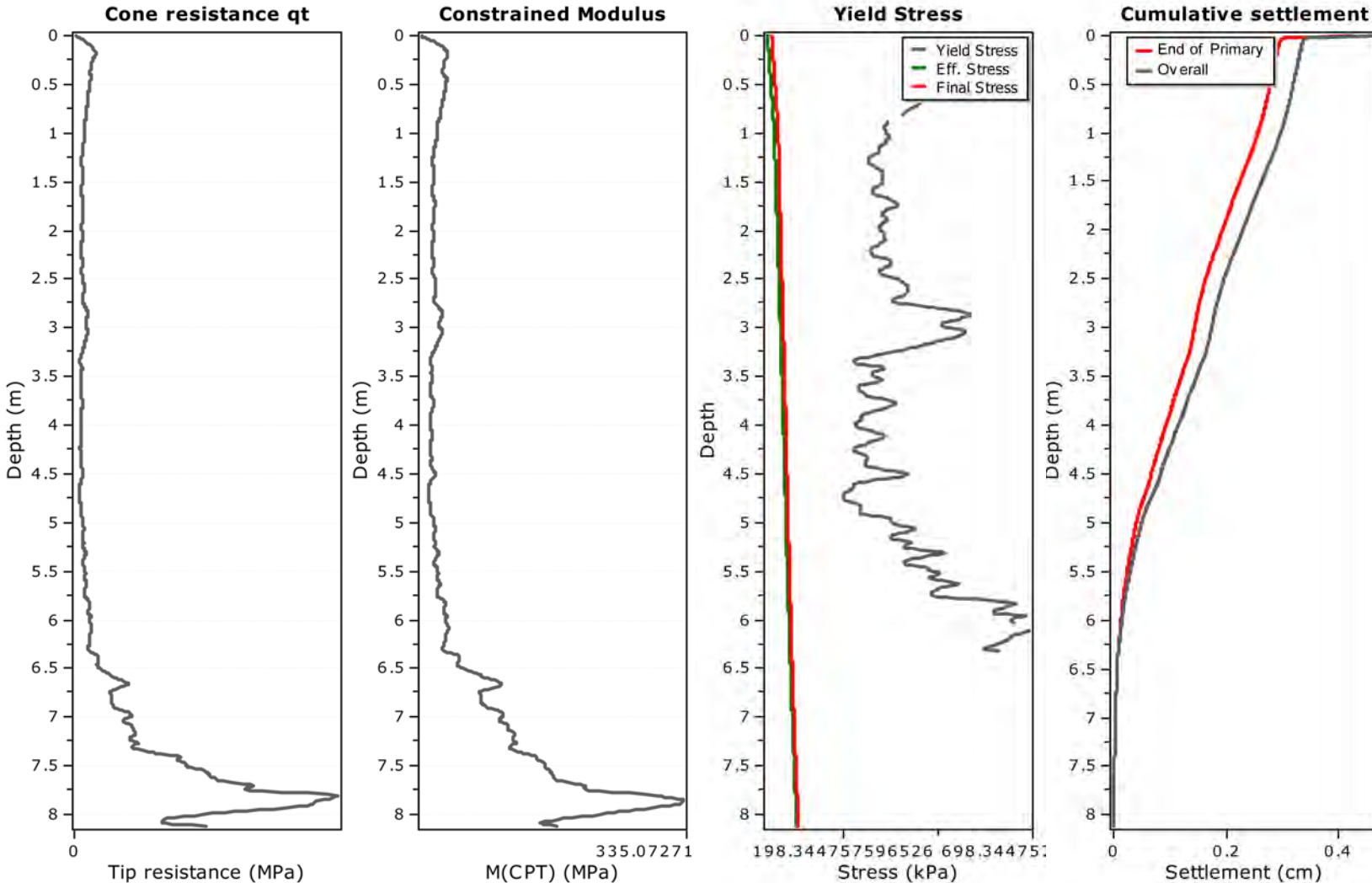
Total calculated settlement: 0.25

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
783	7.82	7.83	0.01	7.83	4.11	307.35	0.37	0.000	0.000	0.000
784	7.83	7.84	0.01	7.84	4.10	315.90	0.37	0.000	0.000	0.000
785	7.84	7.85	0.01	7.85	4.10	325.04	0.37	0.000	0.000	0.000
786	7.85	7.86	0.01	7.86	4.10	330.81	0.37	0.000	0.000	0.000
787	7.86	7.87	0.01	7.87	4.09	330.04	0.37	0.000	0.000	0.000
788	7.87	7.88	0.01	7.88	4.09	329.00	0.37	0.000	0.000	0.000
789	7.88	7.89	0.01	7.89	4.08	328.68	0.37	0.000	0.000	0.000
790	7.89	7.90	0.01	7.90	4.08	326.35	0.37	0.000	0.000	0.000
791	7.90	7.91	0.01	7.91	4.08	321.13	0.37	0.000	0.000	0.000
792	7.91	7.92	0.01	7.92	4.07	313.11	0.37	0.000	0.000	0.000
793	7.92	7.93	0.01	7.93	4.07	302.81	0.37	0.000	0.000	0.000
794	7.93	7.94	0.01	7.94	4.06	292.07	0.37	0.000	0.000	0.000
795	7.94	7.95	0.01	7.95	4.06	281.66	0.37	0.000	0.000	0.000
796	7.95	7.96	0.01	7.96	4.06	271.81	0.37	0.000	0.000	0.000
797	7.96	7.97	0.01	7.97	4.05	261.94	0.37	0.000	0.000	0.000
798	7.97	7.98	0.01	7.98	4.05	250.80	0.37	0.000	0.000	0.000
799	7.98	7.99	0.01	7.99	4.05	242.31	0.37	0.000	0.000	0.000
800	7.99	8.00	0.01	8.00	4.04	234.09	0.37	0.000	0.000	0.000
801	8.00	8.01	0.01	8.01	4.04	226.18	0.37	0.000	0.000	0.000
802	8.01	8.02	0.01	8.02	4.03	215.36	0.37	0.000	0.000	0.000
803	8.02	8.03	0.01	8.03	4.03	202.60	0.37	0.000	0.000	0.000
804	8.03	8.04	0.01	8.04	4.03	190.56	0.37	0.000	0.000	0.000
805	8.04	8.05	0.01	8.05	4.02	180.40	0.37	0.000	0.000	0.000
806	8.05	8.06	0.01	8.06	4.02	173.39	0.37	0.000	0.000	0.000
807	8.06	8.07	0.01	8.07	4.02	164.06	0.37	0.000	0.000	0.000
808	8.07	8.08	0.01	8.08	4.01	155.93	0.36	0.000	0.000	0.000
809	8.08	8.09	0.01	8.09	4.01	150.11	0.36	0.000	0.000	0.000
810	8.09	8.10	0.01	8.10	4.01	150.72	0.36	0.000	0.000	0.000
811	8.10	8.11	0.01	8.11	4.00	154.31	0.36	0.000	0.000	0.000
812	8.11	8.12	0.01	8.12	4.00	162.96	0.36	0.000	0.000	0.000

Total primary settlement: 0.42
Total secondary settlement: 0.04

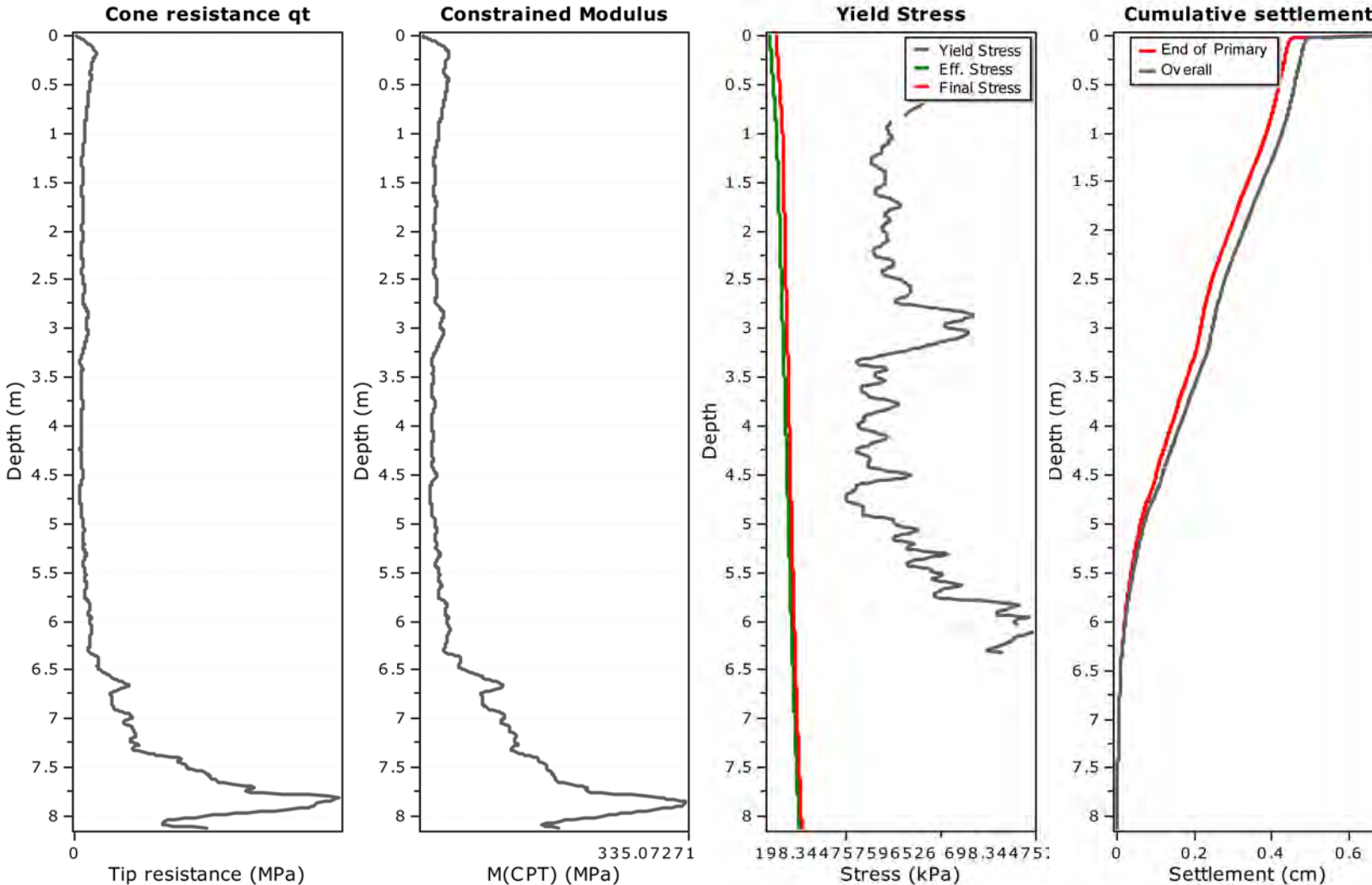
Total calculated settlement: 0.47

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

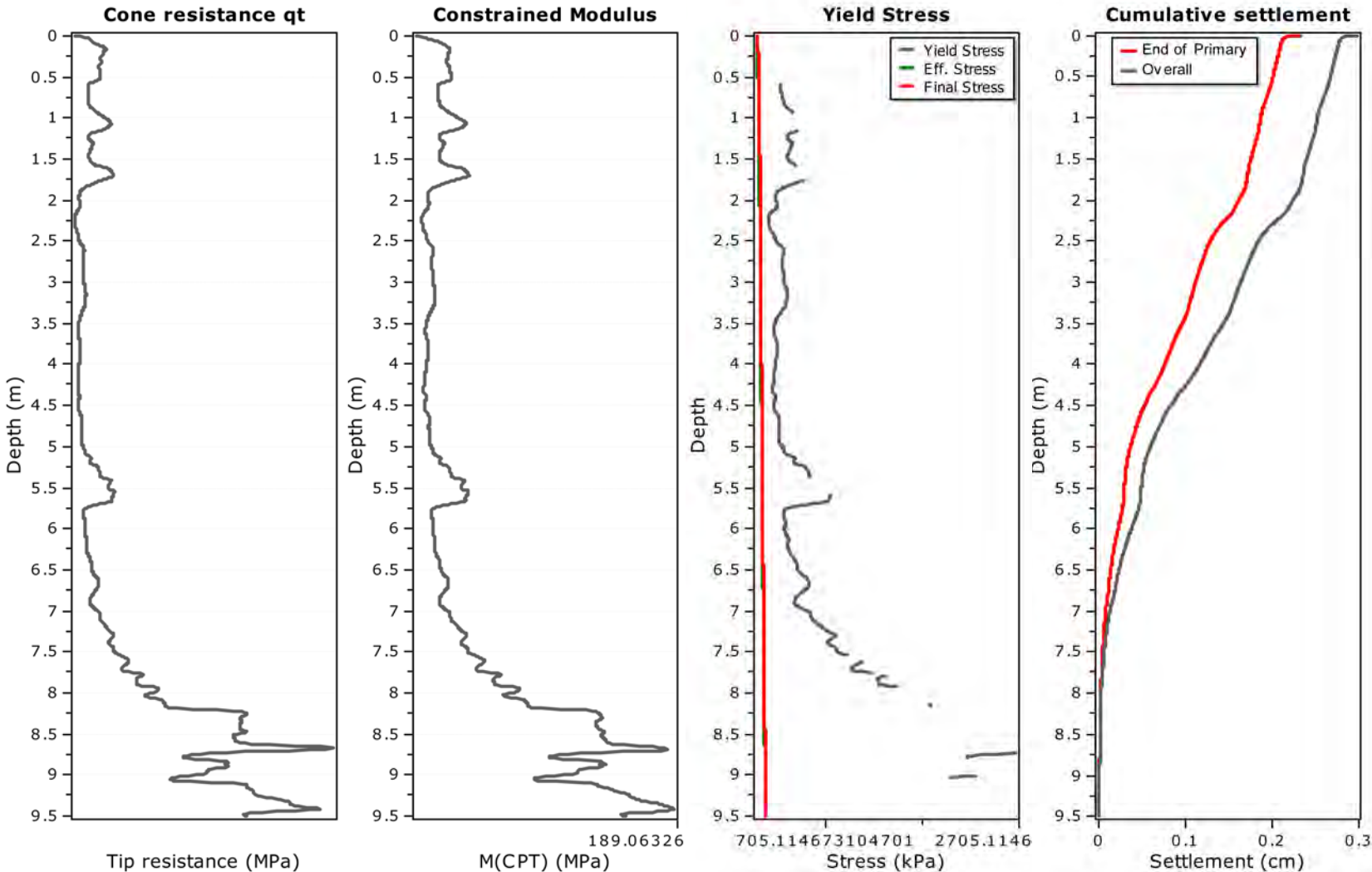
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
783	7.82	7.83	0.01	7.83	6.16	307.35	0.37	0.000	0.000	0.000
784	7.83	7.84	0.01	7.84	6.15	315.90	0.37	0.000	0.000	0.000
785	7.84	7.85	0.01	7.85	6.15	325.04	0.37	0.000	0.000	0.000
786	7.85	7.86	0.01	7.86	6.14	330.81	0.37	0.000	0.000	0.000
787	7.86	7.87	0.01	7.87	6.14	330.04	0.37	0.000	0.000	0.000
788	7.87	7.88	0.01	7.88	6.13	329.00	0.37	0.000	0.000	0.000
789	7.88	7.89	0.01	7.89	6.13	328.68	0.37	0.000	0.000	0.000
790	7.89	7.90	0.01	7.90	6.12	326.35	0.37	0.000	0.000	0.000
791	7.90	7.91	0.01	7.91	6.11	321.13	0.37	0.000	0.000	0.000
792	7.91	7.92	0.01	7.92	6.11	313.11	0.37	0.000	0.000	0.000
793	7.92	7.93	0.01	7.93	6.10	302.81	0.37	0.000	0.000	0.000
794	7.93	7.94	0.01	7.94	6.10	292.07	0.37	0.000	0.000	0.000
795	7.94	7.95	0.01	7.95	6.09	281.66	0.37	0.000	0.000	0.000
796	7.95	7.96	0.01	7.96	6.09	271.81	0.37	0.000	0.000	0.000
797	7.96	7.97	0.01	7.97	6.08	261.94	0.37	0.000	0.000	0.000
798	7.97	7.98	0.01	7.98	6.07	250.80	0.37	0.000	0.000	0.000
799	7.98	7.99	0.01	7.99	6.07	242.31	0.37	0.000	0.000	0.000
800	7.99	8.00	0.01	8.00	6.06	234.09	0.37	0.000	0.000	0.000
801	8.00	8.01	0.01	8.01	6.06	226.18	0.37	0.000	0.000	0.000
802	8.01	8.02	0.01	8.02	6.05	215.36	0.37	0.000	0.000	0.000
803	8.02	8.03	0.01	8.03	6.05	202.60	0.37	0.000	0.000	0.000
804	8.03	8.04	0.01	8.04	6.04	190.56	0.37	0.000	0.000	0.000
805	8.04	8.05	0.01	8.05	6.04	180.40	0.37	0.000	0.000	0.000
806	8.05	8.06	0.01	8.06	6.03	173.39	0.37	0.000	0.000	0.000
807	8.06	8.07	0.01	8.07	6.02	164.06	0.37	0.000	0.000	0.000
808	8.07	8.08	0.01	8.08	6.02	155.93	0.36	0.000	0.000	0.000
809	8.08	8.09	0.01	8.09	6.01	150.11	0.36	0.000	0.000	0.000
810	8.09	8.10	0.01	8.10	6.01	150.72	0.36	0.000	0.000	0.000
811	8.10	8.11	0.01	8.11	6.00	154.31	0.36	0.000	0.000	0.000
812	8.11	8.12	0.01	8.12	6.00	162.96	0.36	0.000	0.000	0.000

Total primary settlement: 0.64**Total secondary settlement: 0.04****Total calculated settlement: 0.68****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

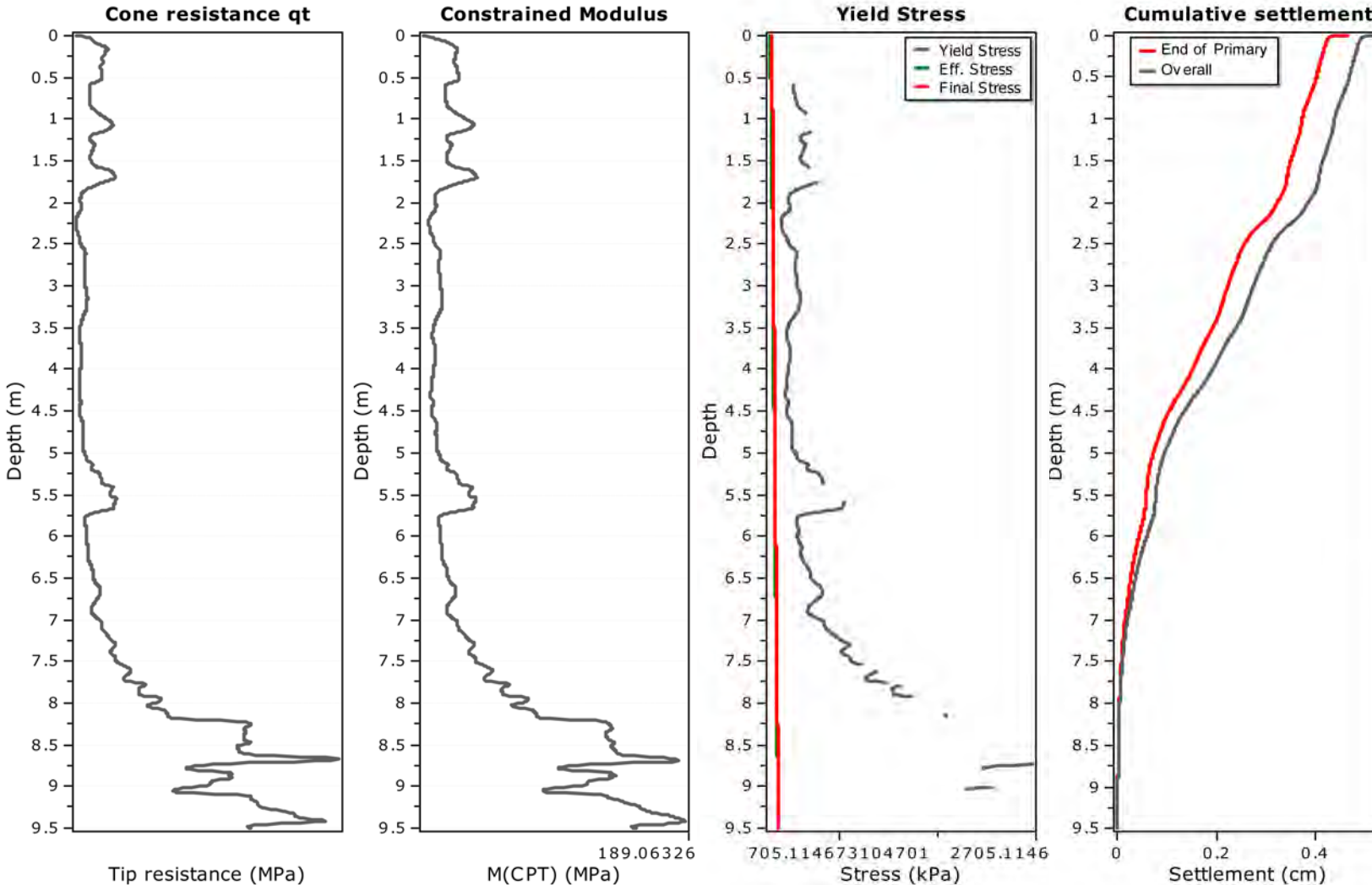
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
921	9.20	9.21	0.01	9.21	1.81	144.54	0.33	0.000	0.000	0.000
922	9.21	9.22	0.01	9.22	1.81	147.96	0.33	0.000	0.000	0.000
923	9.22	9.23	0.01	9.23	1.81	150.48	0.33	0.000	0.000	0.000
924	9.23	9.24	0.01	9.24	1.81	153.31	0.33	0.000	0.000	0.000
925	9.24	9.25	0.01	9.25	1.81	153.67	0.33	0.000	0.000	0.000
926	9.25	9.26	0.01	9.26	1.81	154.20	0.33	0.000	0.000	0.000
927	9.26	9.27	0.01	9.27	1.80	154.79	0.33	0.000	0.000	0.000
928	9.27	9.28	0.01	9.28	1.80	156.14	0.33	0.000	0.000	0.000
929	9.28	9.29	0.01	9.29	1.80	157.38	0.33	0.000	0.000	0.000
930	9.29	9.30	0.01	9.30	1.80	159.27	0.33	0.000	0.000	0.000
931	9.30	9.31	0.01	9.31	1.80	161.25	0.33	0.000	0.000	0.000
932	9.31	9.32	0.01	9.32	1.80	163.17	0.33	0.000	0.000	0.000
933	9.32	9.33	0.01	9.33	1.79	166.32	0.33	0.000	0.000	0.000
934	9.33	9.34	0.01	9.34	1.79	170.25	0.33	0.000	0.000	0.000
935	9.34	9.35	0.01	9.35	1.79	174.11	0.33	0.000	0.000	0.000
936	9.35	9.36	0.01	9.36	1.79	176.35	0.33	0.000	0.000	0.000
937	9.36	9.37	0.01	9.37	1.79	177.94	0.33	0.000	0.000	0.000
938	9.37	9.38	0.01	9.38	1.79	179.85	0.32	0.000	0.000	0.000
939	9.38	9.39	0.01	9.39	1.78	181.75	0.32	0.000	0.000	0.000
940	9.39	9.40	0.01	9.40	1.78	183.88	0.32	0.000	0.000	0.000
941	9.40	9.41	0.01	9.41	1.78	185.88	0.32	0.000	0.000	0.000
942	9.41	9.42	0.01	9.42	1.78	186.66	0.32	0.000	0.000	0.000
943	9.42	9.43	0.01	9.43	1.78	184.82	0.32	0.000	0.000	0.000
944	9.43	9.44	0.01	9.44	1.78	181.26	0.32	0.000	0.000	0.000
945	9.44	9.45	0.01	9.45	1.78	175.13	0.32	0.000	0.000	0.000
946	9.45	9.46	0.01	9.46	1.77	170.58	0.32	0.000	0.000	0.000
947	9.46	9.47	0.01	9.47	1.77	153.64	0.32	0.000	0.000	0.000
948	9.47	9.48	0.01	9.48	1.77	149.11	0.32	0.000	0.000	0.000
949	9.48	9.49	0.01	9.49	1.77	148.57	0.32	0.000	0.000	0.000
950	9.49	9.50	0.01	9.50	1.77	152.34	0.32	0.000	0.000	0.000

Total primary settlement: 0.23**Total secondary settlement: 0.07****Total calculated settlement: 0.30****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

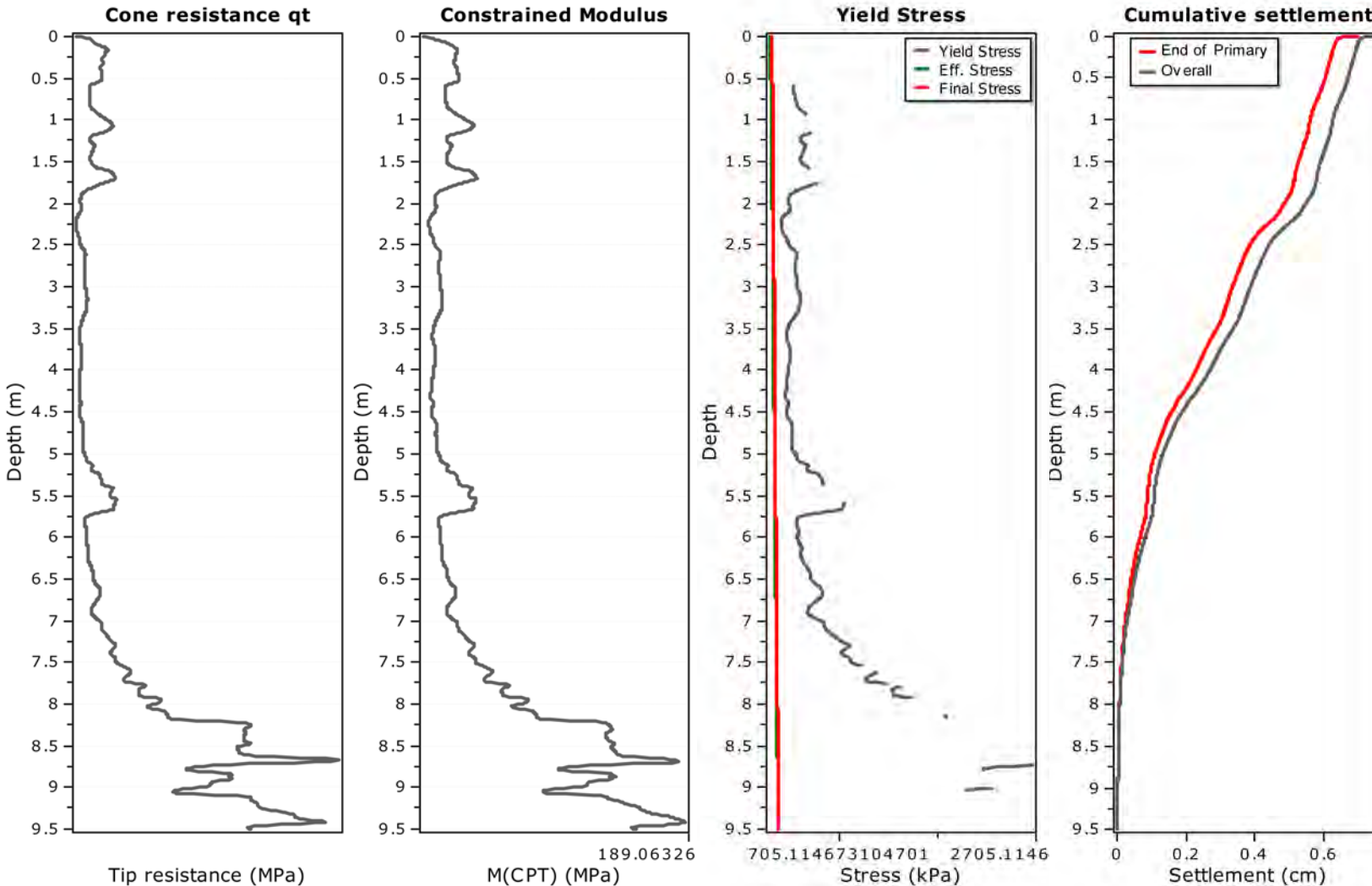
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
921	9.20	9.21	0.01	9.21	3.63	144.54	0.33	0.000	0.000	0.000
922	9.21	9.22	0.01	9.22	3.62	147.96	0.33	0.000	0.000	0.000
923	9.22	9.23	0.01	9.23	3.62	150.48	0.33	0.000	0.000	0.000
924	9.23	9.24	0.01	9.24	3.62	153.31	0.33	0.000	0.000	0.000
925	9.24	9.25	0.01	9.25	3.61	153.67	0.33	0.000	0.000	0.000
926	9.25	9.26	0.01	9.26	3.61	154.20	0.33	0.000	0.000	0.000
927	9.26	9.27	0.01	9.27	3.61	154.79	0.33	0.000	0.000	0.000
928	9.27	9.28	0.01	9.28	3.60	156.14	0.33	0.000	0.000	0.000
929	9.28	9.29	0.01	9.29	3.60	157.38	0.33	0.000	0.000	0.000
930	9.29	9.30	0.01	9.30	3.60	159.27	0.33	0.000	0.000	0.000
931	9.30	9.31	0.01	9.31	3.59	161.25	0.33	0.000	0.000	0.000
932	9.31	9.32	0.01	9.32	3.59	163.17	0.33	0.000	0.000	0.000
933	9.32	9.33	0.01	9.33	3.59	166.32	0.33	0.000	0.000	0.000
934	9.33	9.34	0.01	9.34	3.59	170.25	0.33	0.000	0.000	0.000
935	9.34	9.35	0.01	9.35	3.58	174.11	0.33	0.000	0.000	0.000
936	9.35	9.36	0.01	9.36	3.58	176.35	0.33	0.000	0.000	0.000
937	9.36	9.37	0.01	9.37	3.58	177.94	0.33	0.000	0.000	0.000
938	9.37	9.38	0.01	9.38	3.57	179.85	0.32	0.000	0.000	0.000
939	9.38	9.39	0.01	9.39	3.57	181.75	0.32	0.000	0.000	0.000
940	9.39	9.40	0.01	9.40	3.57	183.88	0.32	0.000	0.000	0.000
941	9.40	9.41	0.01	9.41	3.56	185.88	0.32	0.000	0.000	0.000
942	9.41	9.42	0.01	9.42	3.56	186.66	0.32	0.000	0.000	0.000
943	9.42	9.43	0.01	9.43	3.56	184.82	0.32	0.000	0.000	0.000
944	9.43	9.44	0.01	9.44	3.55	181.26	0.32	0.000	0.000	0.000
945	9.44	9.45	0.01	9.45	3.55	175.13	0.32	0.000	0.000	0.000
946	9.45	9.46	0.01	9.46	3.55	170.58	0.32	0.000	0.000	0.000
947	9.46	9.47	0.01	9.47	3.55	153.64	0.32	0.000	0.000	0.000
948	9.47	9.48	0.01	9.48	3.54	149.11	0.32	0.000	0.000	0.000
949	9.48	9.49	0.01	9.49	3.54	148.57	0.32	0.000	0.000	0.000
950	9.49	9.50	0.01	9.50	3.54	152.34	0.32	0.000	0.000	0.000

Total primary settlement: 0.46**Total secondary settlement: 0.07****Total calculated settlement: 0.53****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

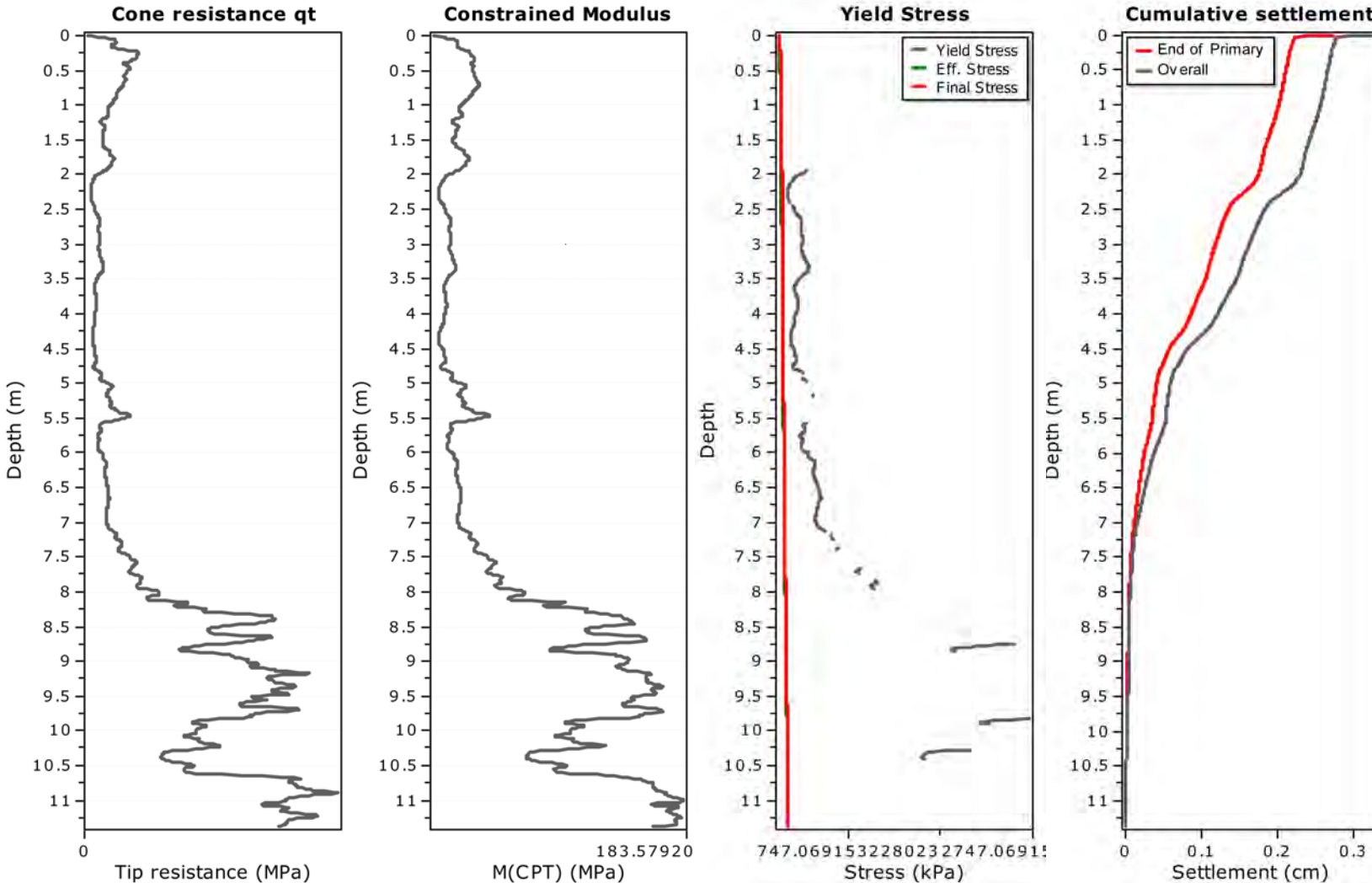
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
921	9.20	9.21	0.01	9.21	5.44	144.54	0.33	0.000	0.000	0.000
922	9.21	9.22	0.01	9.22	5.43	147.96	0.33	0.000	0.000	0.000
923	9.22	9.23	0.01	9.23	5.43	150.48	0.33	0.000	0.000	0.000
924	9.23	9.24	0.01	9.24	5.42	153.31	0.33	0.000	0.000	0.000
925	9.24	9.25	0.01	9.25	5.42	153.67	0.33	0.000	0.000	0.000
926	9.25	9.26	0.01	9.26	5.42	154.20	0.33	0.000	0.000	0.000
927	9.26	9.27	0.01	9.27	5.41	154.79	0.33	0.000	0.000	0.000
928	9.27	9.28	0.01	9.28	5.41	156.14	0.33	0.000	0.000	0.000
929	9.28	9.29	0.01	9.29	5.40	157.38	0.33	0.000	0.000	0.000
930	9.29	9.30	0.01	9.30	5.40	159.27	0.33	0.000	0.000	0.000
931	9.30	9.31	0.01	9.31	5.39	161.25	0.33	0.000	0.000	0.000
932	9.31	9.32	0.01	9.32	5.39	163.17	0.33	0.000	0.000	0.000
933	9.32	9.33	0.01	9.33	5.38	166.32	0.33	0.000	0.000	0.000
934	9.33	9.34	0.01	9.34	5.38	170.25	0.33	0.000	0.000	0.000
935	9.34	9.35	0.01	9.35	5.37	174.11	0.33	0.000	0.000	0.000
936	9.35	9.36	0.01	9.36	5.37	176.35	0.33	0.000	0.000	0.000
937	9.36	9.37	0.01	9.37	5.36	177.94	0.33	0.000	0.000	0.000
938	9.37	9.38	0.01	9.38	5.36	179.85	0.32	0.000	0.000	0.000
939	9.38	9.39	0.01	9.39	5.35	181.75	0.32	0.000	0.000	0.000
940	9.39	9.40	0.01	9.40	5.35	183.88	0.32	0.000	0.000	0.000
941	9.40	9.41	0.01	9.41	5.35	185.88	0.32	0.000	0.000	0.000
942	9.41	9.42	0.01	9.42	5.34	186.66	0.32	0.000	0.000	0.000
943	9.42	9.43	0.01	9.43	5.34	184.82	0.32	0.000	0.000	0.000
944	9.43	9.44	0.01	9.44	5.33	181.26	0.32	0.000	0.000	0.000
945	9.44	9.45	0.01	9.45	5.33	175.13	0.32	0.000	0.000	0.000
946	9.45	9.46	0.01	9.46	5.32	170.58	0.32	0.000	0.000	0.000
947	9.46	9.47	0.01	9.47	5.32	153.64	0.32	0.000	0.000	0.000
948	9.47	9.48	0.01	9.48	5.31	149.11	0.32	0.000	0.000	0.000
949	9.48	9.49	0.01	9.49	5.31	148.57	0.32	0.000	0.000	0.000
950	9.49	9.50	0.01	9.50	5.30	152.34	0.32	0.000	0.000	0.000

Total primary settlement: 0.69**Total secondary settlement: 0.07****Total calculated settlement: 0.76****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

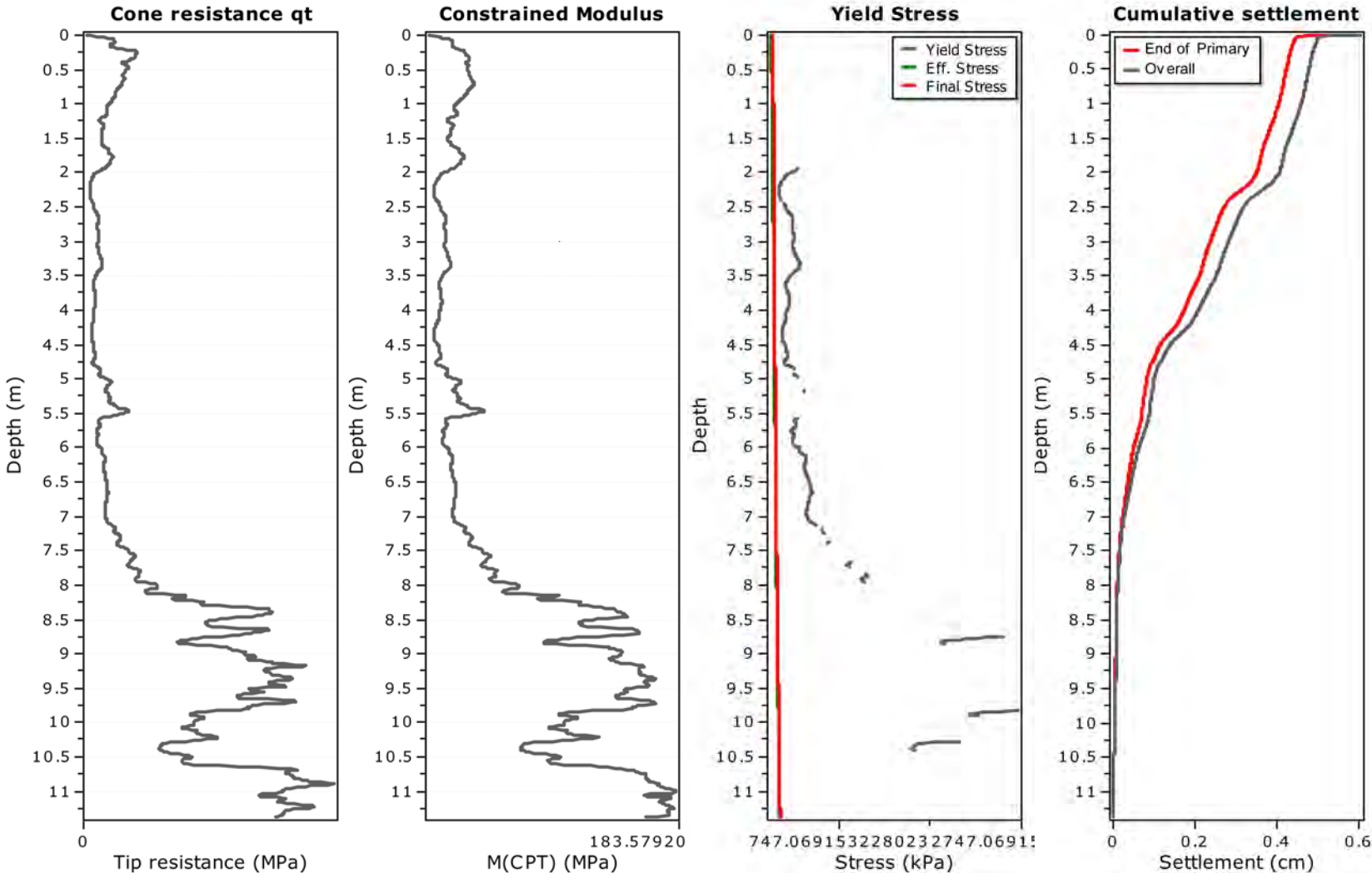
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.04	11.05	0.01	11.05	1.55	162.25	0.28	0.000	0.000	0.000
1106	11.05	11.06	0.01	11.06	1.55	158.38	0.28	0.000	0.000	0.000
1107	11.06	11.07	0.01	11.07	1.55	158.85	0.28	0.000	0.000	0.000
1108	11.07	11.08	0.01	11.08	1.55	160.43	0.28	0.000	0.000	0.000
1109	11.08	11.09	0.01	11.09	1.55	167.47	0.28	0.000	0.000	0.000
1110	11.09	11.10	0.01	11.10	1.55	177.09	0.28	0.000	0.000	0.000
1111	11.10	11.11	0.01	11.11	1.55	177.91	0.28	0.000	0.000	0.000
1112	11.11	11.12	0.01	11.12	1.54	176.34	0.28	0.000	0.000	0.000
1113	11.12	11.13	0.01	11.13	1.54	173.01	0.28	0.000	0.000	0.000
1114	11.13	11.14	0.01	11.14	1.54	170.23	0.28	0.000	0.000	0.000
1115	11.14	11.15	0.01	11.15	1.54	168.82	0.28	0.000	0.000	0.000
1116	11.15	11.16	0.01	11.16	1.54	168.94	0.28	0.000	0.000	0.000
1117	11.16	11.17	0.01	11.17	1.54	169.74	0.28	0.000	0.000	0.000
1118	11.17	11.18	0.01	11.18	1.54	170.83	0.28	0.000	0.000	0.000
1119	11.18	11.19	0.01	11.19	1.54	172.28	0.28	0.000	0.000	0.000
1120	11.19	11.20	0.01	11.20	1.53	173.98	0.28	0.000	0.000	0.000
1121	11.20	11.21	0.01	11.21	1.53	175.44	0.28	0.000	0.000	0.000
1122	11.21	11.22	0.01	11.22	1.53	176.47	0.28	0.000	0.000	0.000
1123	11.22	11.23	0.01	11.23	1.53	178.02	0.28	0.000	0.000	0.000
1124	11.23	11.24	0.01	11.24	1.53	178.98	0.28	0.000	0.000	0.000
1125	11.24	11.25	0.01	11.25	1.53	179.32	0.28	0.000	0.000	0.000
1126	11.25	11.26	0.01	11.26	1.53	178.03	0.28	0.000	0.000	0.000
1127	11.26	11.27	0.01	11.27	1.53	176.61	0.28	0.000	0.000	0.000
1128	11.27	11.28	0.01	11.28	1.52	175.75	0.28	0.000	0.000	0.000
1129	11.28	11.29	0.01	11.29	1.52	175.41	0.28	0.000	0.000	0.000
1130	11.29	11.30	0.01	11.30	1.52	175.61	0.28	0.000	0.000	0.000
1131	11.30	11.31	0.01	11.31	1.52	175.72	0.28	0.000	0.000	0.000
1132	11.31	11.32	0.01	11.32	1.52	175.69	0.28	0.000	0.000	0.000
1133	11.32	11.33	0.01	11.33	1.52	175.65	0.28	0.000	0.000	0.000
1134	11.33	11.34	0.01	11.34	1.52	175.89	0.28	0.000	0.000	0.000
1135	11.34	11.35	0.01	11.35	1.52	176.04	0.28	0.000	0.000	0.000
1136	11.35	11.36	0.01	11.36	1.51	175.90	0.28	0.000	0.000	0.000
1137	11.36	11.37	0.01	11.37	1.51	167.64	0.28	0.000	0.000	0.000

Total primary settlement: 0.27**Total secondary settlement: 0.05****Total calculated settlement: 0.33****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

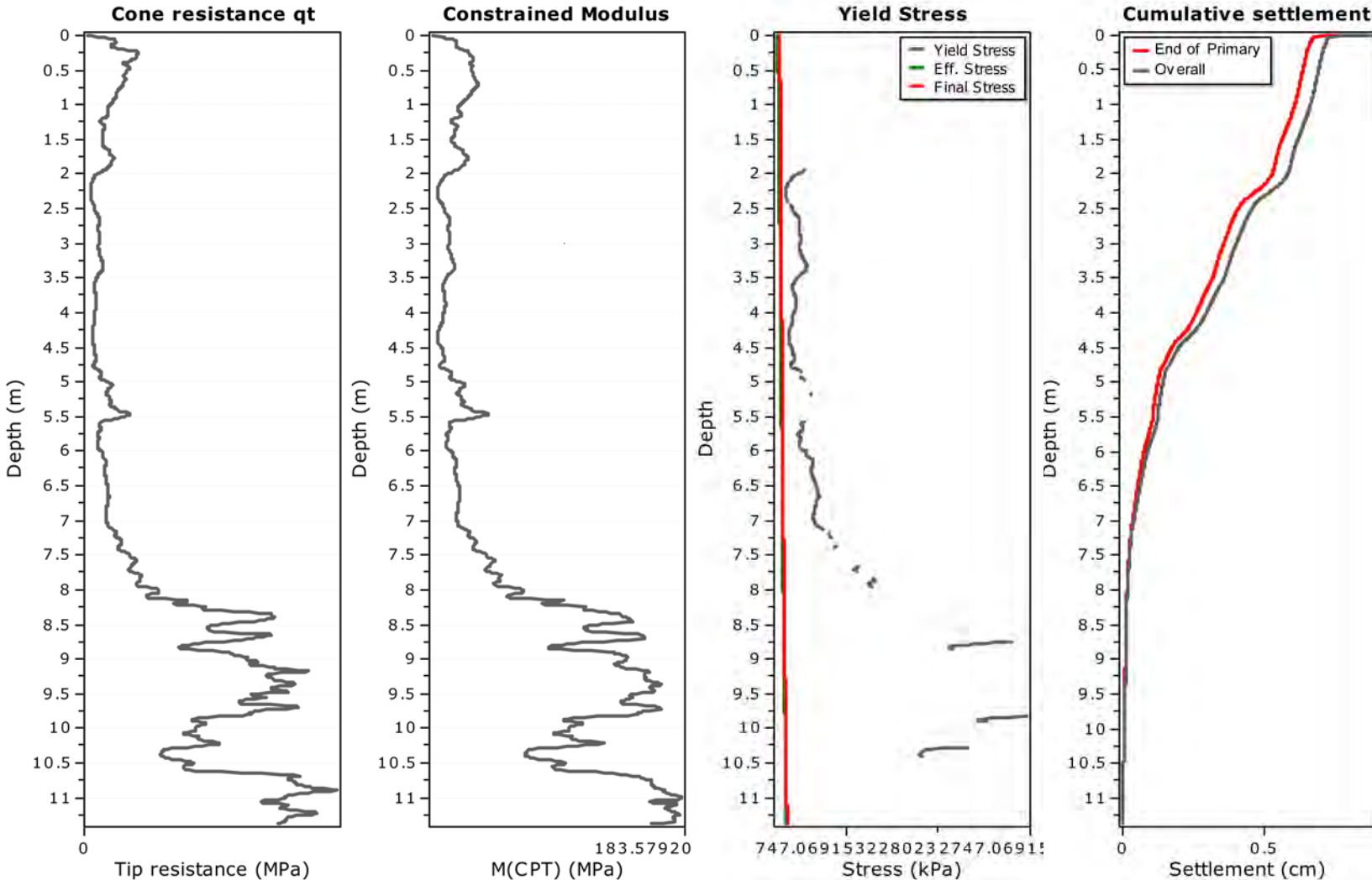
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.04	11.05	0.01	11.05	3.11	162.25	0.28	0.000	0.000	0.000
1106	11.05	11.06	0.01	11.06	3.10	158.38	0.28	0.000	0.000	0.000
1107	11.06	11.07	0.01	11.07	3.10	158.85	0.28	0.000	0.000	0.000
1108	11.07	11.08	0.01	11.08	3.10	160.43	0.28	0.000	0.000	0.000
1109	11.08	11.09	0.01	11.09	3.10	167.47	0.28	0.000	0.000	0.000
1110	11.09	11.10	0.01	11.10	3.09	177.09	0.28	0.000	0.000	0.000
1111	11.10	11.11	0.01	11.11	3.09	177.91	0.28	0.000	0.000	0.000
1112	11.11	11.12	0.01	11.12	3.09	176.34	0.28	0.000	0.000	0.000
1113	11.12	11.13	0.01	11.13	3.09	173.01	0.28	0.000	0.000	0.000
1114	11.13	11.14	0.01	11.14	3.08	170.23	0.28	0.000	0.000	0.000
1115	11.14	11.15	0.01	11.15	3.08	168.82	0.28	0.000	0.000	0.000
1116	11.15	11.16	0.01	11.16	3.08	168.94	0.28	0.000	0.000	0.000
1117	11.16	11.17	0.01	11.17	3.08	169.74	0.28	0.000	0.000	0.000
1118	11.17	11.18	0.01	11.18	3.07	170.83	0.28	0.000	0.000	0.000
1119	11.18	11.19	0.01	11.19	3.07	172.28	0.28	0.000	0.000	0.000
1120	11.19	11.20	0.01	11.20	3.07	173.98	0.28	0.000	0.000	0.000
1121	11.20	11.21	0.01	11.21	3.07	175.44	0.28	0.000	0.000	0.000
1122	11.21	11.22	0.01	11.22	3.06	176.47	0.28	0.000	0.000	0.000
1123	11.22	11.23	0.01	11.23	3.06	178.02	0.28	0.000	0.000	0.000
1124	11.23	11.24	0.01	11.24	3.06	178.98	0.28	0.000	0.000	0.000
1125	11.24	11.25	0.01	11.25	3.06	179.32	0.28	0.000	0.000	0.000
1126	11.25	11.26	0.01	11.26	3.05	178.03	0.28	0.000	0.000	0.000
1127	11.26	11.27	0.01	11.27	3.05	176.61	0.28	0.000	0.000	0.000
1128	11.27	11.28	0.01	11.28	3.05	175.75	0.28	0.000	0.000	0.000
1129	11.28	11.29	0.01	11.29	3.05	175.41	0.28	0.000	0.000	0.000
1130	11.29	11.30	0.01	11.30	3.04	175.61	0.28	0.000	0.000	0.000
1131	11.30	11.31	0.01	11.31	3.04	175.72	0.28	0.000	0.000	0.000
1132	11.31	11.32	0.01	11.32	3.04	175.69	0.28	0.000	0.000	0.000
1133	11.32	11.33	0.01	11.33	3.04	175.65	0.28	0.000	0.000	0.000
1134	11.33	11.34	0.01	11.34	3.03	175.89	0.28	0.000	0.000	0.000
1135	11.34	11.35	0.01	11.35	3.03	176.04	0.28	0.000	0.000	0.000
1136	11.35	11.36	0.01	11.36	3.03	175.90	0.28	0.000	0.000	0.000
1137	11.36	11.37	0.01	11.37	3.03	167.64	0.28	0.000	0.000	0.000

Total primary settlement: 0.55**Total secondary settlement: 0.05****Total calculated settlement: 0.60****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

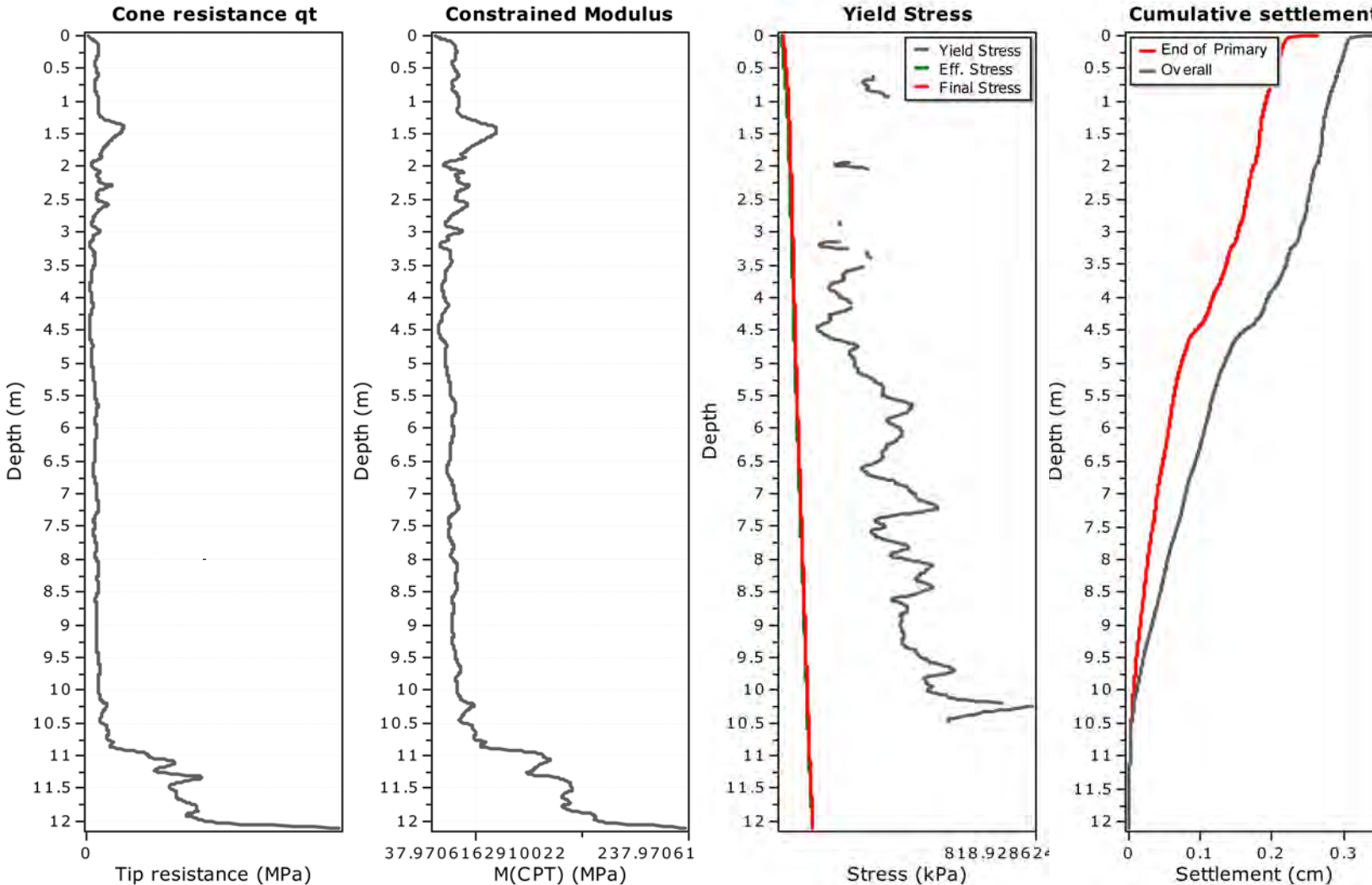
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.04	11.05	0.01	11.05	4.66	162.25	0.28	0.000	0.000	0.000
1106	11.05	11.06	0.01	11.06	4.65	158.38	0.28	0.000	0.000	0.000
1107	11.06	11.07	0.01	11.07	4.65	158.85	0.28	0.000	0.000	0.000
1108	11.07	11.08	0.01	11.08	4.65	160.43	0.28	0.000	0.000	0.000
1109	11.08	11.09	0.01	11.09	4.64	167.47	0.28	0.000	0.000	0.000
1110	11.09	11.10	0.01	11.10	4.64	177.09	0.28	0.000	0.000	0.000
1111	11.10	11.11	0.01	11.11	4.64	177.91	0.28	0.000	0.000	0.000
1112	11.11	11.12	0.01	11.12	4.63	176.34	0.28	0.000	0.000	0.000
1113	11.12	11.13	0.01	11.13	4.63	173.01	0.28	0.000	0.000	0.000
1114	11.13	11.14	0.01	11.14	4.62	170.23	0.28	0.000	0.000	0.000
1115	11.14	11.15	0.01	11.15	4.62	168.82	0.28	0.000	0.000	0.000
1116	11.15	11.16	0.01	11.16	4.62	168.94	0.28	0.000	0.000	0.000
1117	11.16	11.17	0.01	11.17	4.61	169.74	0.28	0.000	0.000	0.000
1118	11.17	11.18	0.01	11.18	4.61	170.83	0.28	0.000	0.000	0.000
1119	11.18	11.19	0.01	11.19	4.61	172.28	0.28	0.000	0.000	0.000
1120	11.19	11.20	0.01	11.20	4.60	173.98	0.28	0.000	0.000	0.000
1121	11.20	11.21	0.01	11.21	4.60	175.44	0.28	0.000	0.000	0.000
1122	11.21	11.22	0.01	11.22	4.59	176.47	0.28	0.000	0.000	0.000
1123	11.22	11.23	0.01	11.23	4.59	178.02	0.28	0.000	0.000	0.000
1124	11.23	11.24	0.01	11.24	4.59	178.98	0.28	0.000	0.000	0.000
1125	11.24	11.25	0.01	11.25	4.58	179.32	0.28	0.000	0.000	0.000
1126	11.25	11.26	0.01	11.26	4.58	178.03	0.28	0.000	0.000	0.000
1127	11.26	11.27	0.01	11.27	4.58	176.61	0.28	0.000	0.000	0.000
1128	11.27	11.28	0.01	11.28	4.57	175.75	0.28	0.000	0.000	0.000
1129	11.28	11.29	0.01	11.29	4.57	175.41	0.28	0.000	0.000	0.000
1130	11.29	11.30	0.01	11.30	4.56	175.61	0.28	0.000	0.000	0.000
1131	11.30	11.31	0.01	11.31	4.56	175.72	0.28	0.000	0.000	0.000
1132	11.31	11.32	0.01	11.32	4.56	175.69	0.28	0.000	0.000	0.000
1133	11.32	11.33	0.01	11.33	4.55	175.65	0.28	0.000	0.000	0.000
1134	11.33	11.34	0.01	11.34	4.55	175.89	0.28	0.000	0.000	0.000
1135	11.34	11.35	0.01	11.35	4.55	176.04	0.28	0.000	0.000	0.000
1136	11.35	11.36	0.01	11.36	4.54	175.90	0.28	0.000	0.000	0.000
1137	11.36	11.37	0.01	11.37	4.54	167.64	0.28	0.000	0.000	0.000

Total primary settlement: 0.82**Total secondary settlement: 0.05****Total calculated settlement: 0.88****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

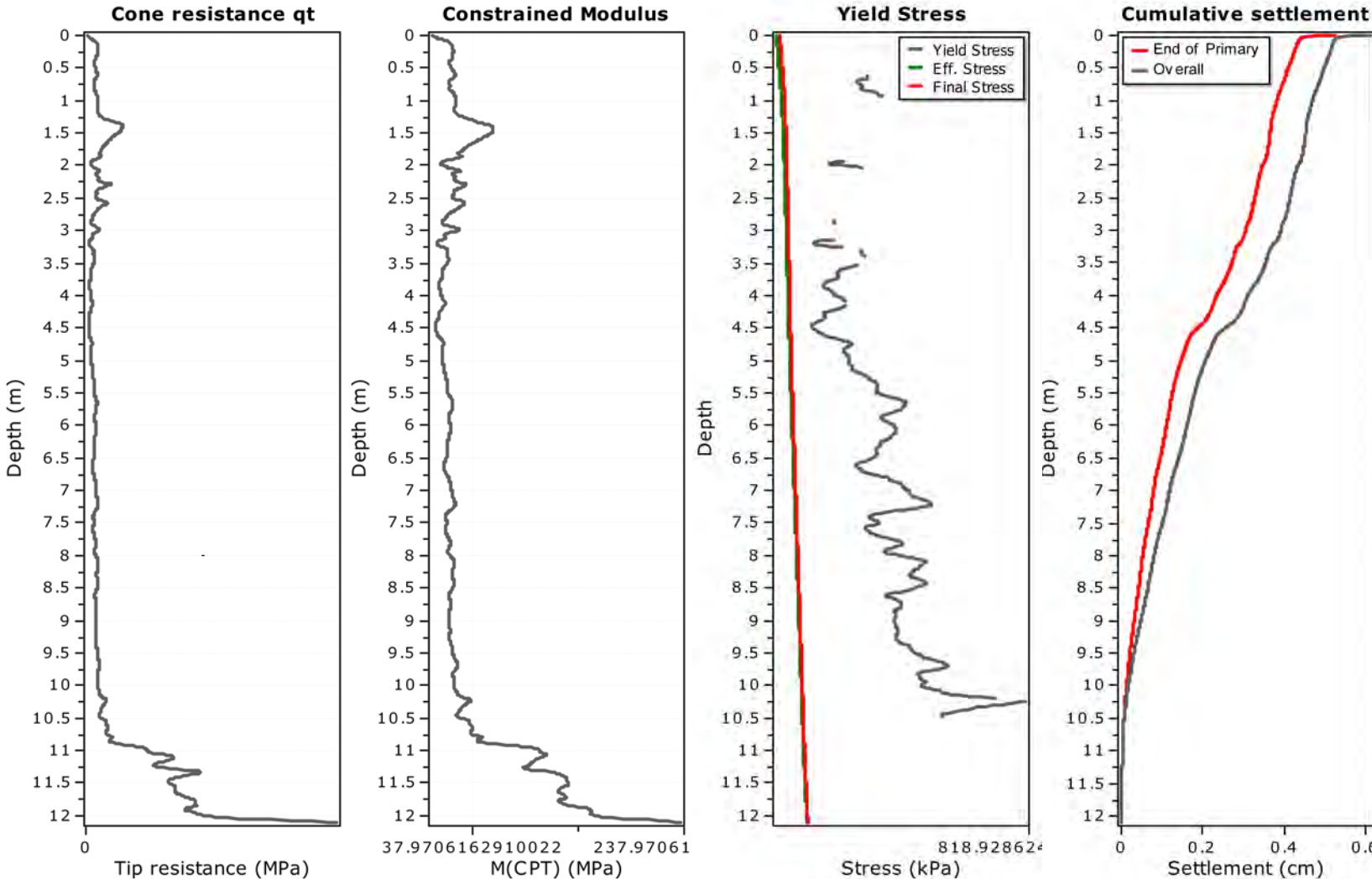
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	1.44	150.67	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	1.44	149.48	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	1.44	149.57	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	1.44	150.87	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	1.44	153.30	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	1.44	157.44	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	1.44	160.60	0.26	0.000	0.000	0.000
1204	12.03	12.04	0.01	12.04	1.43	164.04	0.26	0.000	0.000	0.000
1205	12.04	12.05	0.01	12.05	1.43	170.34	0.26	0.000	0.000	0.000
1206	12.05	12.06	0.01	12.06	1.43	180.63	0.26	0.000	0.000	0.000
1207	12.06	12.07	0.01	12.07	1.43	193.70	0.26	0.000	0.000	0.000
1208	12.07	12.08	0.01	12.08	1.43	204.73	0.26	0.000	0.000	0.000
1209	12.08	12.09	0.01	12.09	1.43	214.17	0.26	0.000	0.000	0.000
1210	12.09	12.10	0.01	12.10	1.43	222.33	0.26	0.000	0.000	0.000
1211	12.10	12.11	0.01	12.11	1.43	229.61	0.26	0.000	0.000	0.000

Total primary settlement: 0.26**Total secondary settlement: 0.09****Total calculated settlement: 0.35****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_{sec} = S_{p} \left(1 - \frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

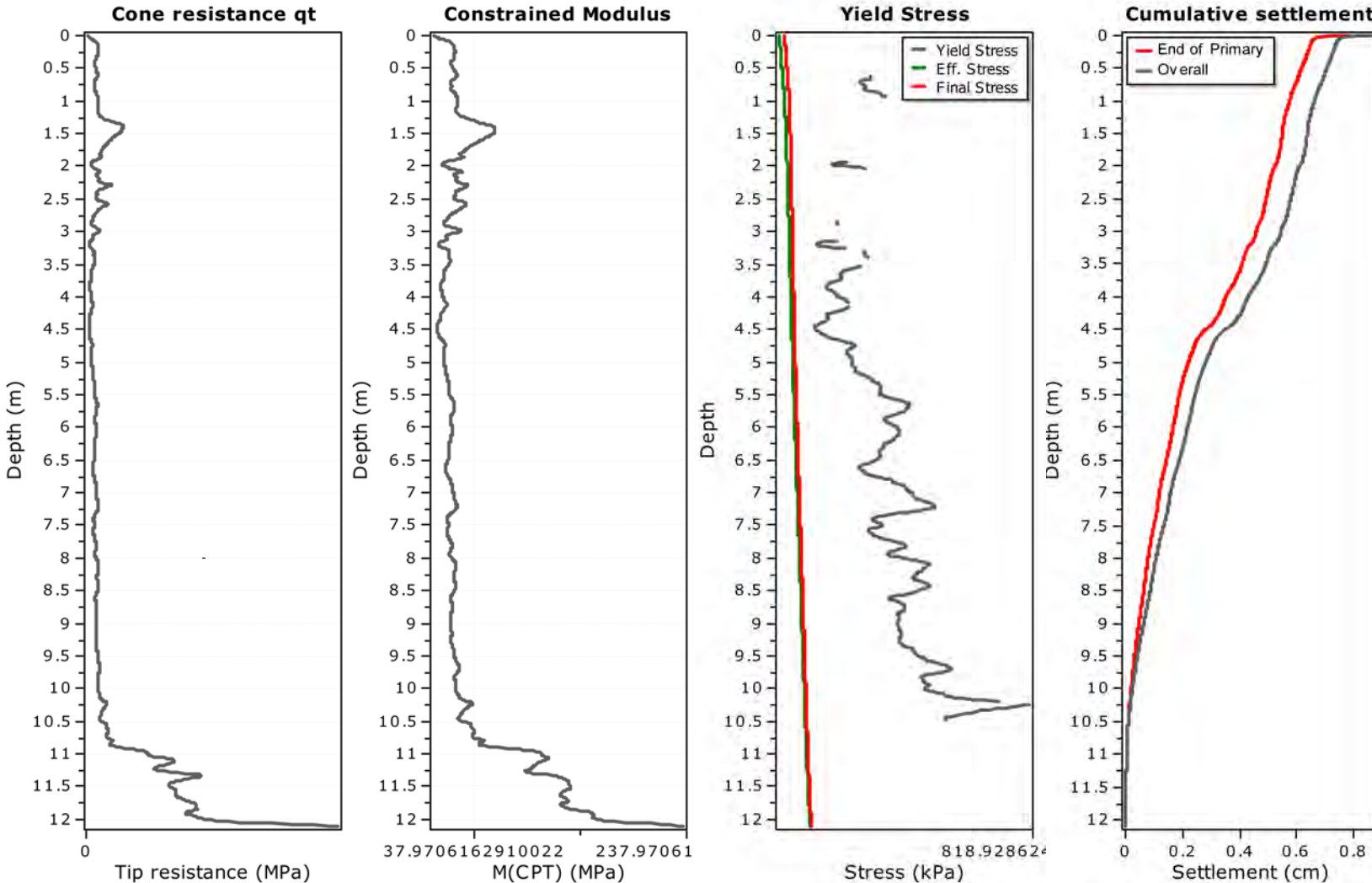
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	2.88	150.67	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	2.88	149.48	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	2.88	149.57	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	2.88	150.87	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	2.88	153.30	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	2.87	157.44	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	2.87	160.60	0.26	0.000	0.000	0.000
1204	12.03	12.04	0.01	12.04	2.87	164.04	0.26	0.000	0.000	0.000
1205	12.04	12.05	0.01	12.05	2.87	170.34	0.26	0.000	0.000	0.000
1206	12.05	12.06	0.01	12.06	2.86	180.63	0.26	0.000	0.000	0.000
1207	12.06	12.07	0.01	12.07	2.86	193.70	0.26	0.000	0.000	0.000
1208	12.07	12.08	0.01	12.08	2.86	204.73	0.26	0.000	0.000	0.000
1209	12.08	12.09	0.01	12.09	2.86	214.17	0.26	0.000	0.000	0.000
1210	12.09	12.10	0.01	12.10	2.85	222.33	0.26	0.000	0.000	0.000
1211	12.10	12.11	0.01	12.11	2.85	229.61	0.26	0.000	0.000	0.000

Total primary settlement: 0.53**Total secondary settlement: 0.09****Total calculated settlement: 0.61****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S = \dots$$

where t_p is the duration of primary consolidation

:: Tabular results ::

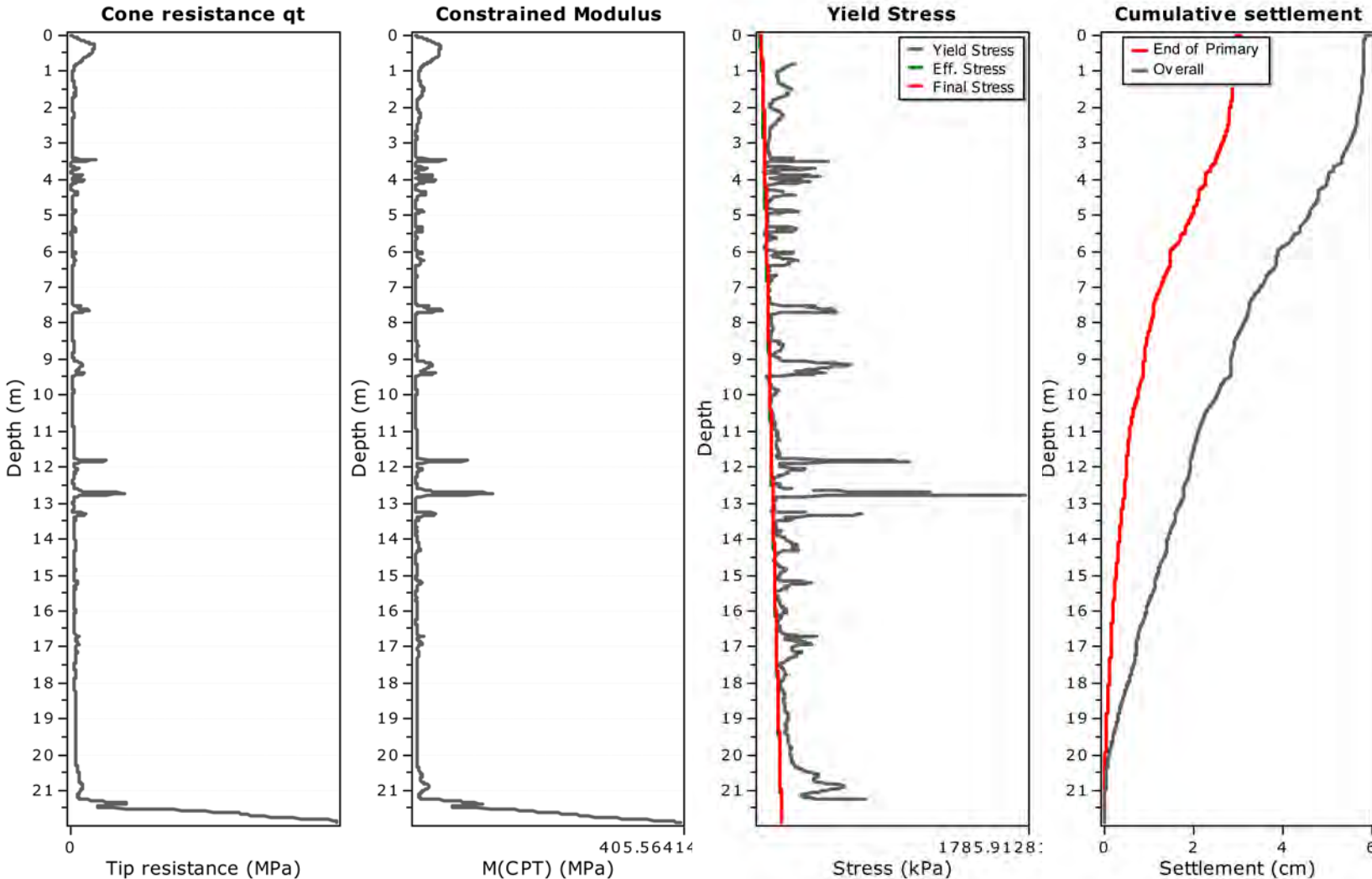
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.96	11.97	0.01	11.97	4.33	150.67	0.26	0.000	0.000	0.000
1198	11.97	11.98	0.01	11.98	4.32	149.48	0.26	0.000	0.000	0.000
1199	11.98	11.99	0.01	11.99	4.32	149.57	0.26	0.000	0.000	0.000
1200	11.99	12.00	0.01	12.00	4.32	150.87	0.26	0.000	0.000	0.000
1201	12.00	12.01	0.01	12.01	4.31	153.30	0.26	0.000	0.000	0.000
1202	12.01	12.02	0.01	12.02	4.31	157.44	0.26	0.000	0.000	0.000
1203	12.02	12.03	0.01	12.03	4.31	160.60	0.26	0.000	0.000	0.000
1204	12.03	12.04	0.01	12.04	4.30	164.04	0.26	0.000	0.000	0.000
1205	12.04	12.05	0.01	12.05	4.30	170.34	0.26	0.000	0.000	0.000
1206	12.05	12.06	0.01	12.06	4.30	180.63	0.26	0.000	0.000	0.000
1207	12.06	12.07	0.01	12.07	4.29	193.70	0.26	0.000	0.000	0.000
1208	12.07	12.08	0.01	12.08	4.29	204.73	0.26	0.000	0.000	0.000
1209	12.08	12.09	0.01	12.09	4.29	214.17	0.26	0.000	0.000	0.000
1210	12.09	12.10	0.01	12.10	4.28	222.33	0.26	0.000	0.000	0.000
1211	12.10	12.11	0.01	12.11	4.28	229.61	0.26	0.000	0.000	0.000

Total primary settlement: 0.79**Total secondary settlement: 0.09****Total calculated settlement: 0.88****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

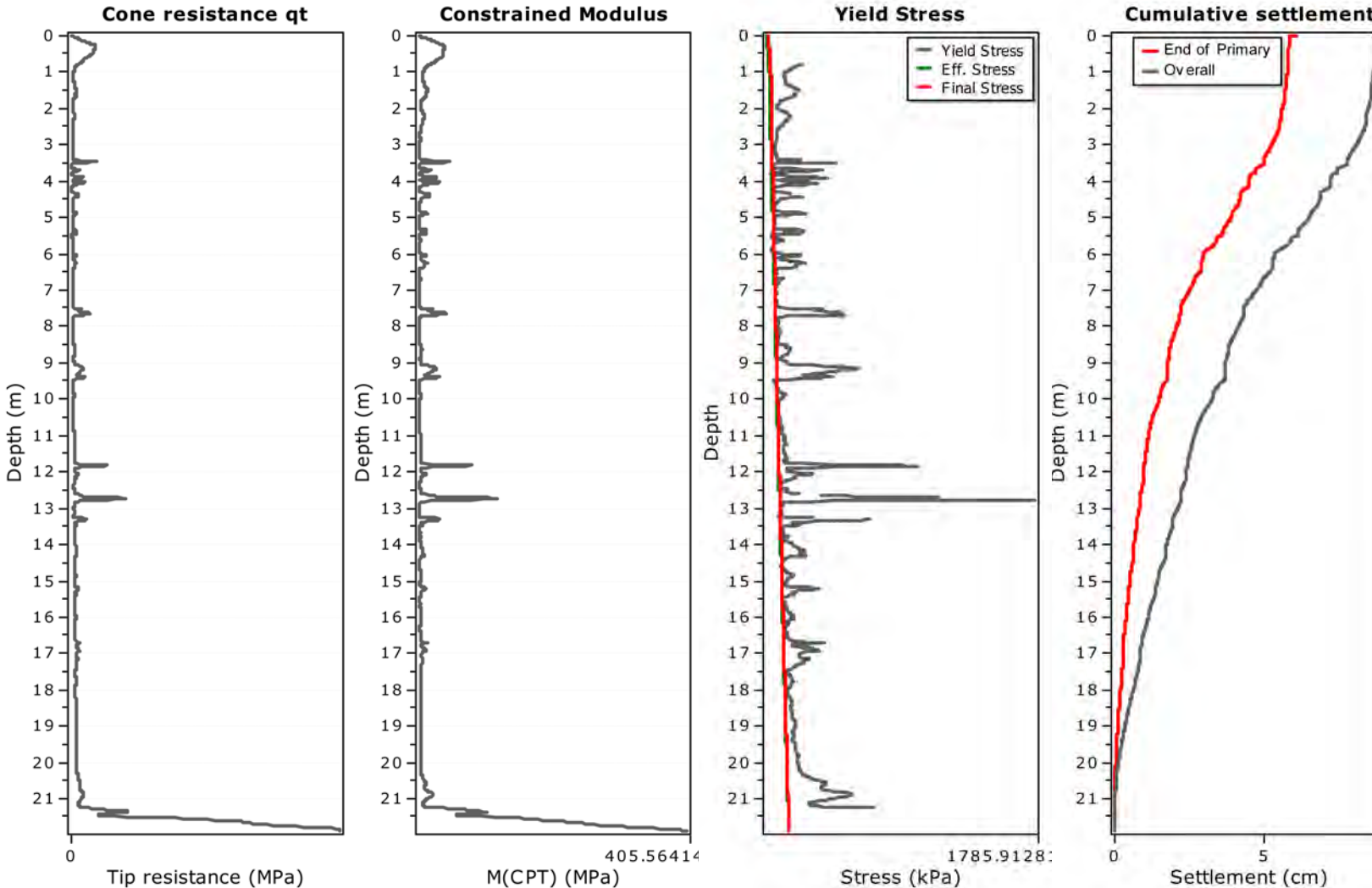
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2163	21.62	21.63	0.01	21.63	0.73	215.25	0.13	0.000	0.000	0.000
2164	21.63	21.64	0.01	21.64	0.73	221.48	0.13	0.000	0.000	0.000
2165	21.64	21.65	0.01	21.65	0.73	227.15	0.13	0.000	0.000	0.000
2166	21.65	21.66	0.01	21.66	0.73	232.57	0.13	0.000	0.000	0.000
2167	21.66	21.67	0.01	21.67	0.73	237.72	0.13	0.000	0.000	0.000
2168	21.67	21.68	0.01	21.68	0.73	244.21	0.13	0.000	0.000	0.000
2169	21.68	21.69	0.01	21.69	0.73	248.47	0.13	0.000	0.000	0.000
2170	21.69	21.70	0.01	21.70	0.73	251.97	0.13	0.000	0.000	0.000
2171	21.70	21.71	0.01	21.71	0.73	256.04	0.13	0.000	0.000	0.000
2172	21.71	21.72	0.01	21.72	0.73	262.29	0.13	0.000	0.000	0.000
2173	21.72	21.73	0.01	21.73	0.73	270.03	0.13	0.000	0.000	0.000
2174	21.73	21.74	0.01	21.74	0.73	277.85	0.13	0.000	0.000	0.000
2175	21.74	21.75	0.01	21.75	0.73	286.55	0.13	0.000	0.000	0.000
2176	21.75	21.76	0.01	21.76	0.73	295.75	0.13	0.000	0.000	0.000
2177	21.76	21.77	0.01	21.77	0.73	304.24	0.13	0.000	0.000	0.000
2178	21.77	21.78	0.01	21.78	0.72	312.72	0.13	0.000	0.000	0.000
2179	21.78	21.79	0.01	21.79	0.72	321.12	0.13	0.000	0.000	0.000
2180	21.79	21.80	0.01	21.80	0.72	329.89	0.13	0.000	0.000	0.000
2181	21.80	21.81	0.01	21.81	0.72	339.27	0.13	0.000	0.000	0.000
2182	21.81	21.82	0.01	21.82	0.72	349.90	0.13	0.000	0.000	0.000
2183	21.82	21.83	0.01	21.83	0.72	359.83	0.13	0.000	0.000	0.000
2184	21.83	21.84	0.01	21.84	0.72	374.44	0.13	0.000	0.000	0.000
2185	21.84	21.85	0.01	21.85	0.72	383.26	0.13	0.000	0.000	0.000
2186	21.85	21.86	0.01	21.86	0.72	390.91	0.13	0.000	0.000	0.000
2187	21.86	21.87	0.01	21.87	0.72	394.16	0.13	0.000	0.000	0.000
2188	21.87	21.88	0.01	21.88	0.72	397.86	0.13	0.000	0.000	0.000

Total primary settlement: 3.06**Total secondary settlement: 2.90****Total calculated settlement: 5.96****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_{sec} = S_{p} \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

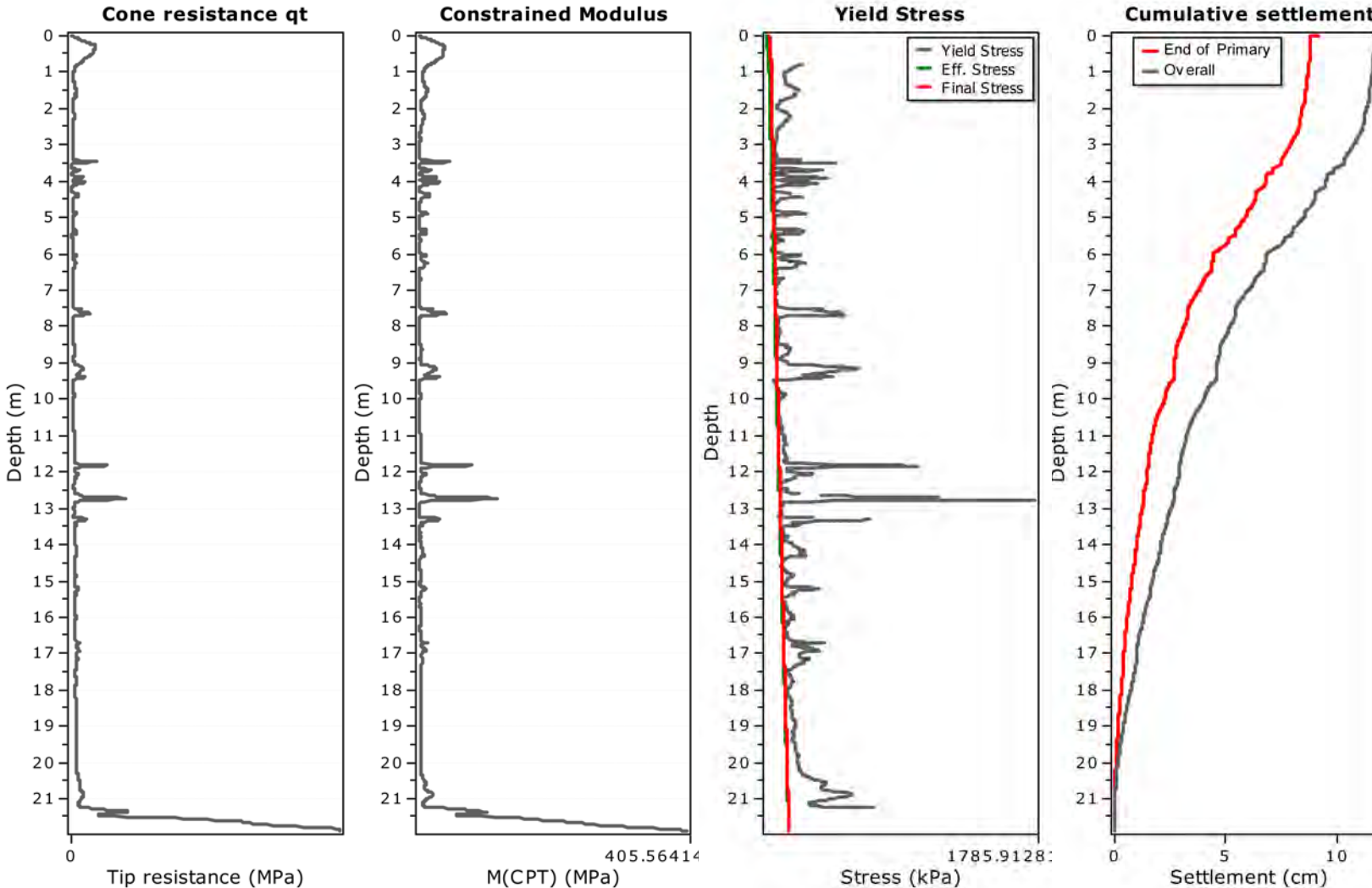
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2163	21.62	21.63	0.01	21.63	1.46	215.25	0.13	0.000	0.000	0.000
2164	21.63	21.64	0.01	21.64	1.46	221.48	0.13	0.000	0.000	0.000
2165	21.64	21.65	0.01	21.65	1.46	227.15	0.13	0.000	0.000	0.000
2166	21.65	21.66	0.01	21.66	1.46	232.57	0.13	0.000	0.000	0.000
2167	21.66	21.67	0.01	21.67	1.46	237.72	0.13	0.000	0.000	0.000
2168	21.67	21.68	0.01	21.68	1.46	244.21	0.13	0.000	0.000	0.000
2169	21.68	21.69	0.01	21.69	1.46	248.47	0.13	0.000	0.000	0.000
2170	21.69	21.70	0.01	21.70	1.46	251.97	0.13	0.000	0.000	0.000
2171	21.70	21.71	0.01	21.71	1.46	256.04	0.13	0.000	0.000	0.000
2172	21.71	21.72	0.01	21.72	1.45	262.29	0.13	0.000	0.000	0.000
2173	21.72	21.73	0.01	21.73	1.45	270.03	0.13	0.000	0.000	0.000
2174	21.73	21.74	0.01	21.74	1.45	277.85	0.13	0.000	0.000	0.000
2175	21.74	21.75	0.01	21.75	1.45	286.55	0.13	0.000	0.000	0.000
2176	21.75	21.76	0.01	21.76	1.45	295.75	0.13	0.000	0.000	0.000
2177	21.76	21.77	0.01	21.77	1.45	304.24	0.13	0.000	0.000	0.000
2178	21.77	21.78	0.01	21.78	1.45	312.72	0.13	0.000	0.000	0.000
2179	21.78	21.79	0.01	21.79	1.45	321.12	0.13	0.000	0.000	0.000
2180	21.79	21.80	0.01	21.80	1.45	329.89	0.13	0.000	0.000	0.000
2181	21.80	21.81	0.01	21.81	1.45	339.27	0.13	0.000	0.000	0.000
2182	21.81	21.82	0.01	21.82	1.45	349.90	0.13	0.000	0.000	0.000
2183	21.82	21.83	0.01	21.83	1.44	359.83	0.13	0.000	0.000	0.000
2184	21.83	21.84	0.01	21.84	1.44	374.44	0.13	0.000	0.000	0.000
2185	21.84	21.85	0.01	21.85	1.44	383.26	0.13	0.000	0.000	0.000
2186	21.85	21.86	0.01	21.86	1.44	390.91	0.13	0.000	0.000	0.000
2187	21.86	21.87	0.01	21.87	1.44	394.16	0.13	0.000	0.000	0.000
2188	21.87	21.88	0.01	21.88	1.44	397.86	0.13	0.000	0.000	0.000

Total primary settlement: 6.13**Total secondary settlement: 2.90****Total calculated settlement: 9.02****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
Footing width: 10.00 (m)
L/B: 2.0
Footing pressure: 16.50 (kPa)
Embedment depth: 0.00 (m)
Footing is rigid: Yes
Remove excavation load: Yes
Apply 20% rule: No
Calculate secondary settlements: Yes
Time period for primary consolidation: 6 months
Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

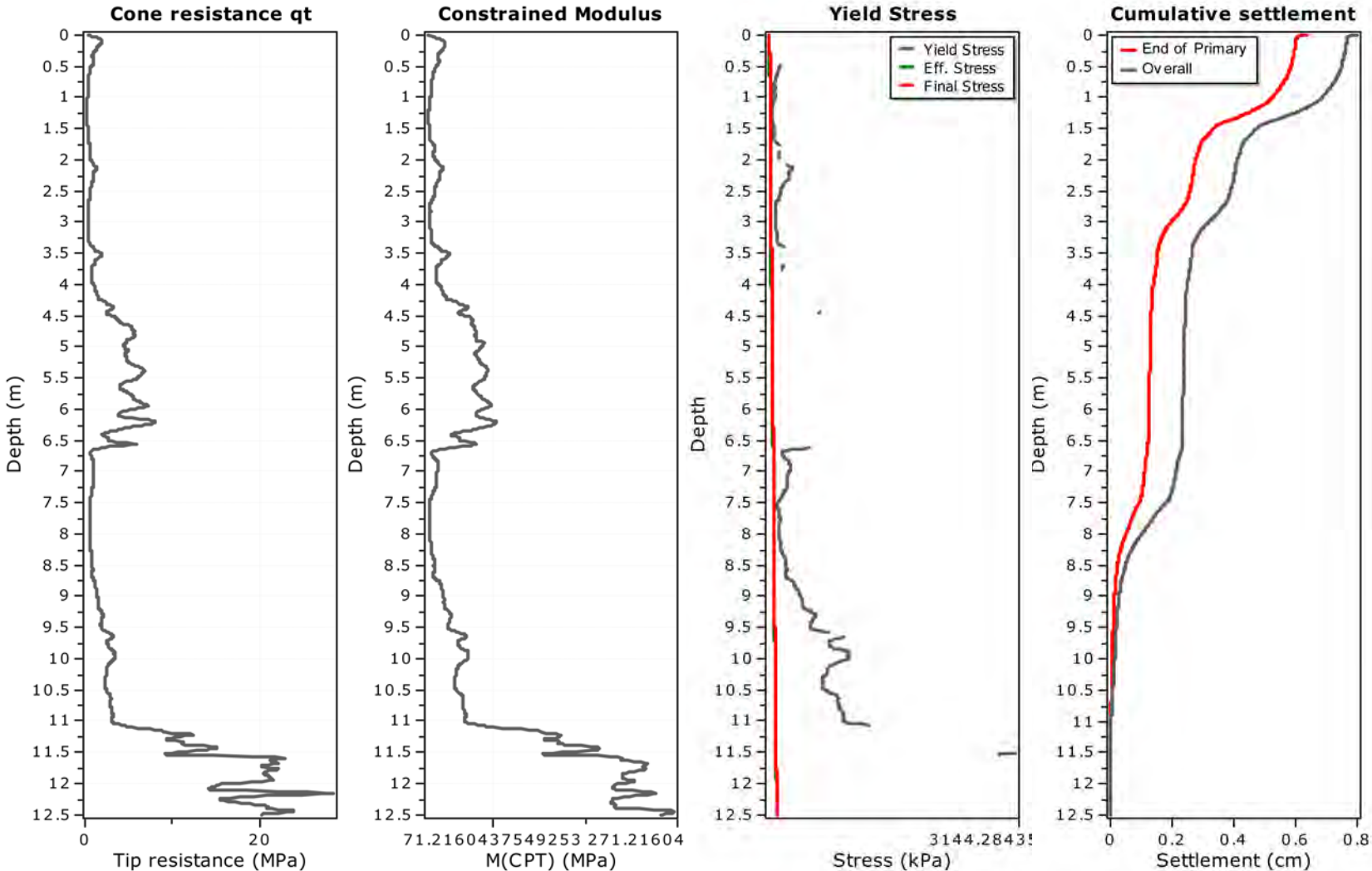
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2163	21.62	21.63	0.01	21.63	2.19	215.25	0.13	0.000	0.000	0.000
2164	21.63	21.64	0.01	21.64	2.19	221.48	0.13	0.000	0.000	0.000
2165	21.64	21.65	0.01	21.65	2.19	227.15	0.13	0.000	0.000	0.000
2166	21.65	21.66	0.01	21.66	2.19	232.57	0.13	0.000	0.000	0.000
2167	21.66	21.67	0.01	21.67	2.19	237.72	0.13	0.000	0.000	0.000
2168	21.67	21.68	0.01	21.68	2.19	244.21	0.13	0.000	0.000	0.000
2169	21.68	21.69	0.01	21.69	2.19	248.47	0.13	0.000	0.000	0.000
2170	21.69	21.70	0.01	21.70	2.18	251.97	0.13	0.000	0.000	0.000
2171	21.70	21.71	0.01	21.71	2.18	256.04	0.13	0.000	0.000	0.000
2172	21.71	21.72	0.01	21.72	2.18	262.29	0.13	0.000	0.000	0.000
2173	21.72	21.73	0.01	21.73	2.18	270.03	0.13	0.000	0.000	0.000
2174	21.73	21.74	0.01	21.74	2.18	277.85	0.13	0.000	0.000	0.000
2175	21.74	21.75	0.01	21.75	2.18	286.55	0.13	0.000	0.000	0.000
2176	21.75	21.76	0.01	21.76	2.18	295.75	0.13	0.000	0.000	0.000
2177	21.76	21.77	0.01	21.77	2.18	304.24	0.13	0.000	0.000	0.000
2178	21.77	21.78	0.01	21.78	2.17	312.72	0.13	0.000	0.000	0.000
2179	21.78	21.79	0.01	21.79	2.17	321.12	0.13	0.000	0.000	0.000
2180	21.79	21.80	0.01	21.80	2.17	329.89	0.13	0.000	0.000	0.000
2181	21.80	21.81	0.01	21.81	2.17	339.27	0.13	0.000	0.000	0.000
2182	21.81	21.82	0.01	21.82	2.17	349.90	0.13	0.000	0.000	0.000
2183	21.82	21.83	0.01	21.83	2.17	359.83	0.13	0.000	0.000	0.000
2184	21.83	21.84	0.01	21.84	2.17	374.44	0.13	0.000	0.000	0.000
2185	21.84	21.85	0.01	21.85	2.16	383.26	0.13	0.000	0.000	0.000
2186	21.85	21.86	0.01	21.86	2.16	390.91	0.13	0.000	0.000	0.000
2187	21.86	21.87	0.01	21.87	2.16	394.16	0.13	0.000	0.000	0.000
2188	21.87	21.88	0.01	21.88	2.16	397.86	0.13	0.000	0.000	0.000

Total primary settlement: 9.19**Total secondary settlement: 2.90****Total calculated settlement: 12.09****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

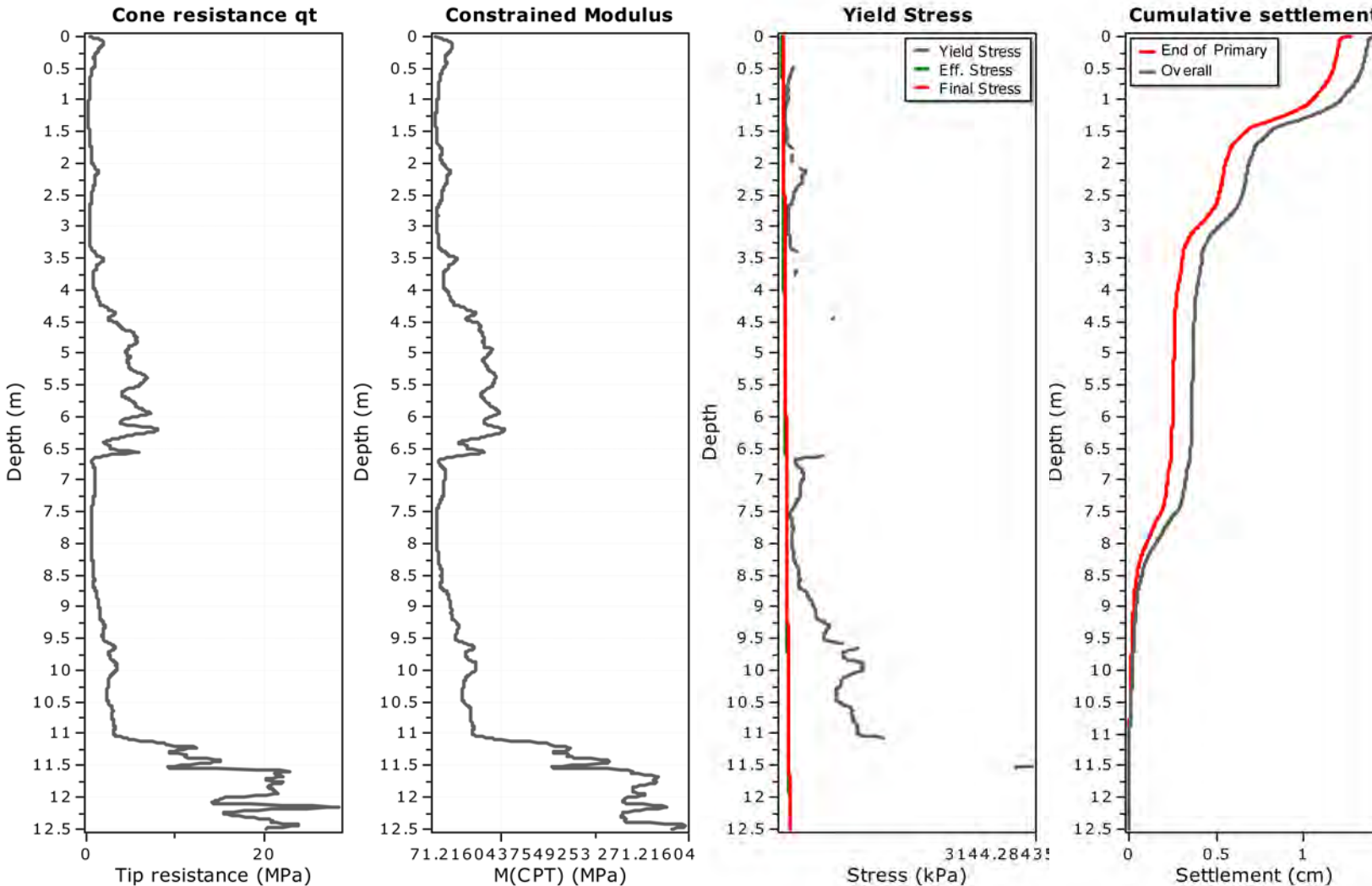
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1243	12.42	12.43	0.01	12.43	1.39	245.94	0.25	0.000	0.000	0.000
1244	12.43	12.44	0.01	12.44	1.39	257.57	0.25	0.000	0.000	0.000
1245	12.44	12.45	0.01	12.45	1.39	264.59	0.25	0.000	0.000	0.000
1246	12.45	12.46	0.01	12.46	1.39	267.60	0.25	0.000	0.000	0.000
1247	12.46	12.47	0.01	12.47	1.39	267.12	0.25	0.000	0.000	0.000
1248	12.47	12.48	0.01	12.48	1.39	265.24	0.25	0.000	0.000	0.000
1249	12.48	12.49	0.01	12.49	1.38	260.94	0.25	0.000	0.000	0.000
1250	12.49	12.50	0.01	12.50	1.38	258.77	0.25	0.000	0.000	0.000
1251	12.50	12.51	0.01	12.51	1.38	255.08	0.25	0.000	0.000	0.000

Total primary settlement: 0.63**Total secondary settlement: 0.16****Total calculated settlement: 0.80****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

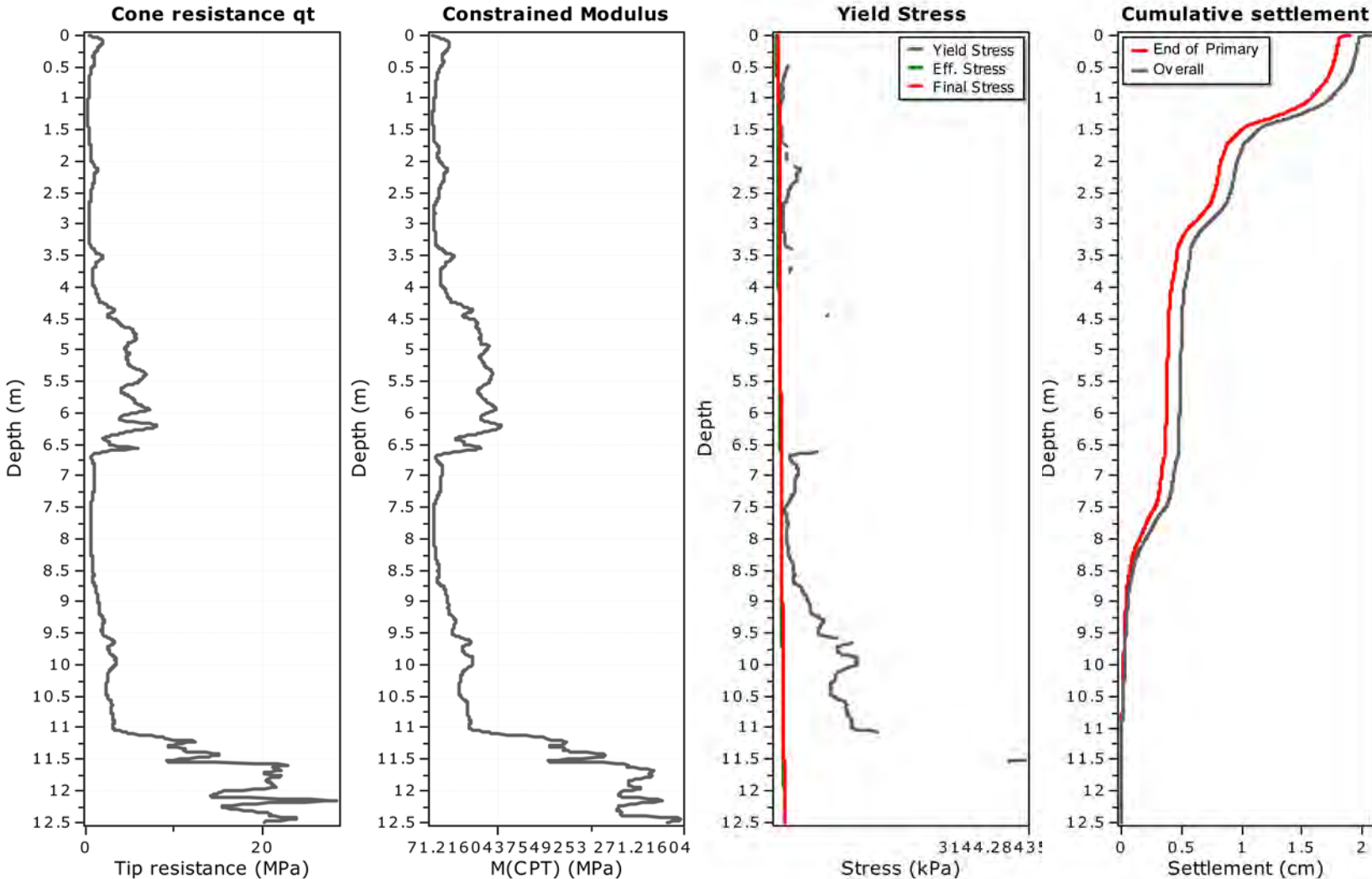
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1243	12.42	12.43	0.01	12.43	2.78	245.94	0.25	0.000	0.000	0.000
1244	12.43	12.44	0.01	12.44	2.78	257.57	0.25	0.000	0.000	0.000
1245	12.44	12.45	0.01	12.45	2.78	264.59	0.25	0.000	0.000	0.000
1246	12.45	12.46	0.01	12.46	2.78	267.60	0.25	0.000	0.000	0.000
1247	12.46	12.47	0.01	12.47	2.77	267.12	0.25	0.000	0.000	0.000
1248	12.47	12.48	0.01	12.48	2.77	265.24	0.25	0.000	0.000	0.000
1249	12.48	12.49	0.01	12.49	2.77	260.94	0.25	0.000	0.000	0.000
1250	12.49	12.50	0.01	12.50	2.77	258.77	0.25	0.000	0.000	0.000
1251	12.50	12.51	0.01	12.51	2.76	255.08	0.25	0.000	0.000	0.000

Total primary settlement: 1.27**Total secondary settlement: 0.16****Total calculated settlement: 1.43****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

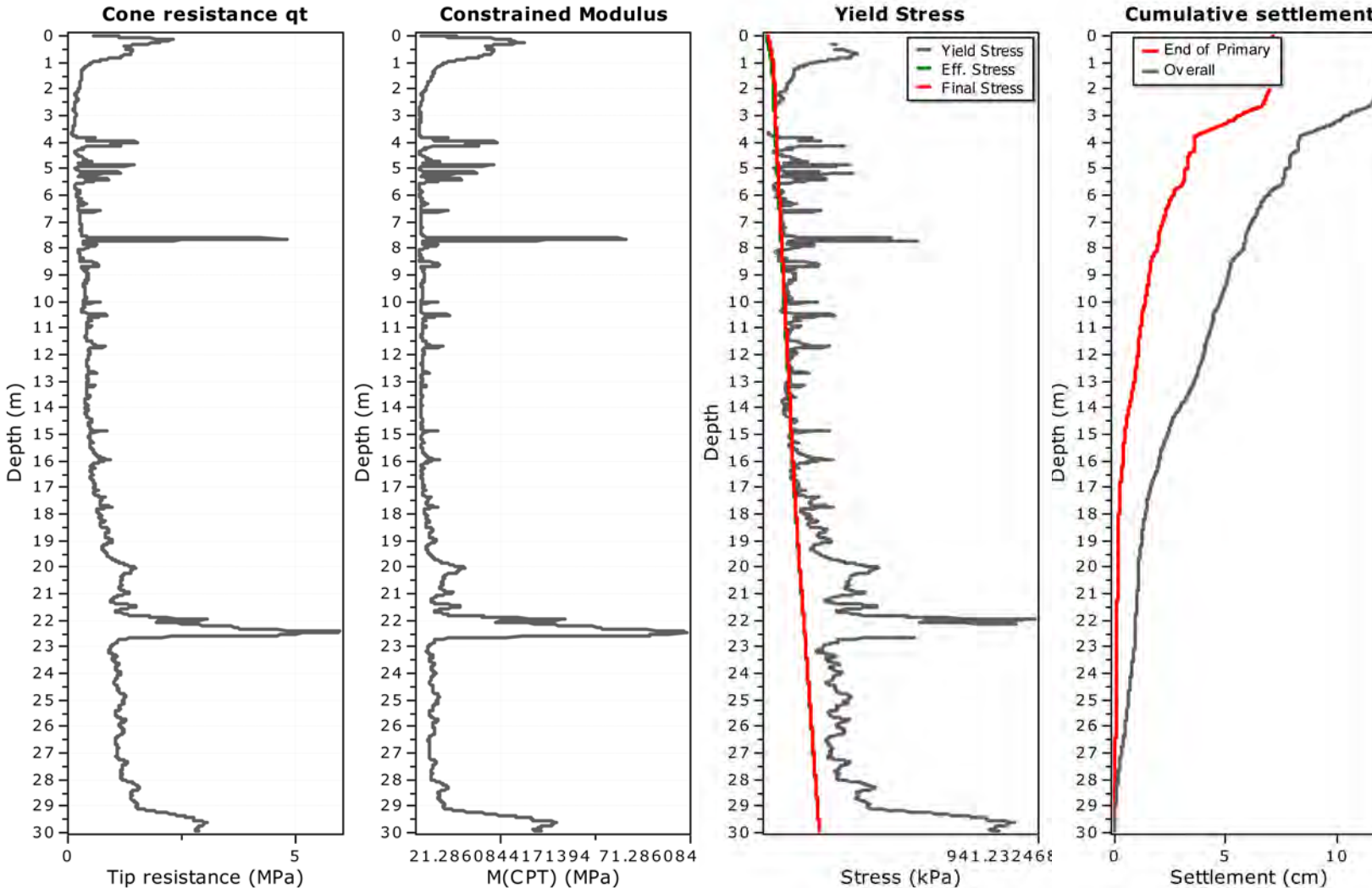
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1243	12.42	12.43	0.01	12.43	4.17	245.94	0.25	0.000	0.000	0.000
1244	12.43	12.44	0.01	12.44	4.17	257.57	0.25	0.000	0.000	0.000
1245	12.44	12.45	0.01	12.45	4.17	264.59	0.25	0.000	0.000	0.000
1246	12.45	12.46	0.01	12.46	4.16	267.60	0.25	0.000	0.000	0.000
1247	12.46	12.47	0.01	12.47	4.16	267.12	0.25	0.000	0.000	0.000
1248	12.47	12.48	0.01	12.48	4.16	265.24	0.25	0.000	0.000	0.000
1249	12.48	12.49	0.01	12.49	4.15	260.94	0.25	0.000	0.000	0.000
1250	12.49	12.50	0.01	12.50	4.15	258.77	0.25	0.000	0.000	0.000
1251	12.50	12.51	0.01	12.51	4.15	255.08	0.25	0.000	0.000	0.000

Total primary settlement: 1.90**Total secondary settlement: 0.16****Total calculated settlement: 2.07****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

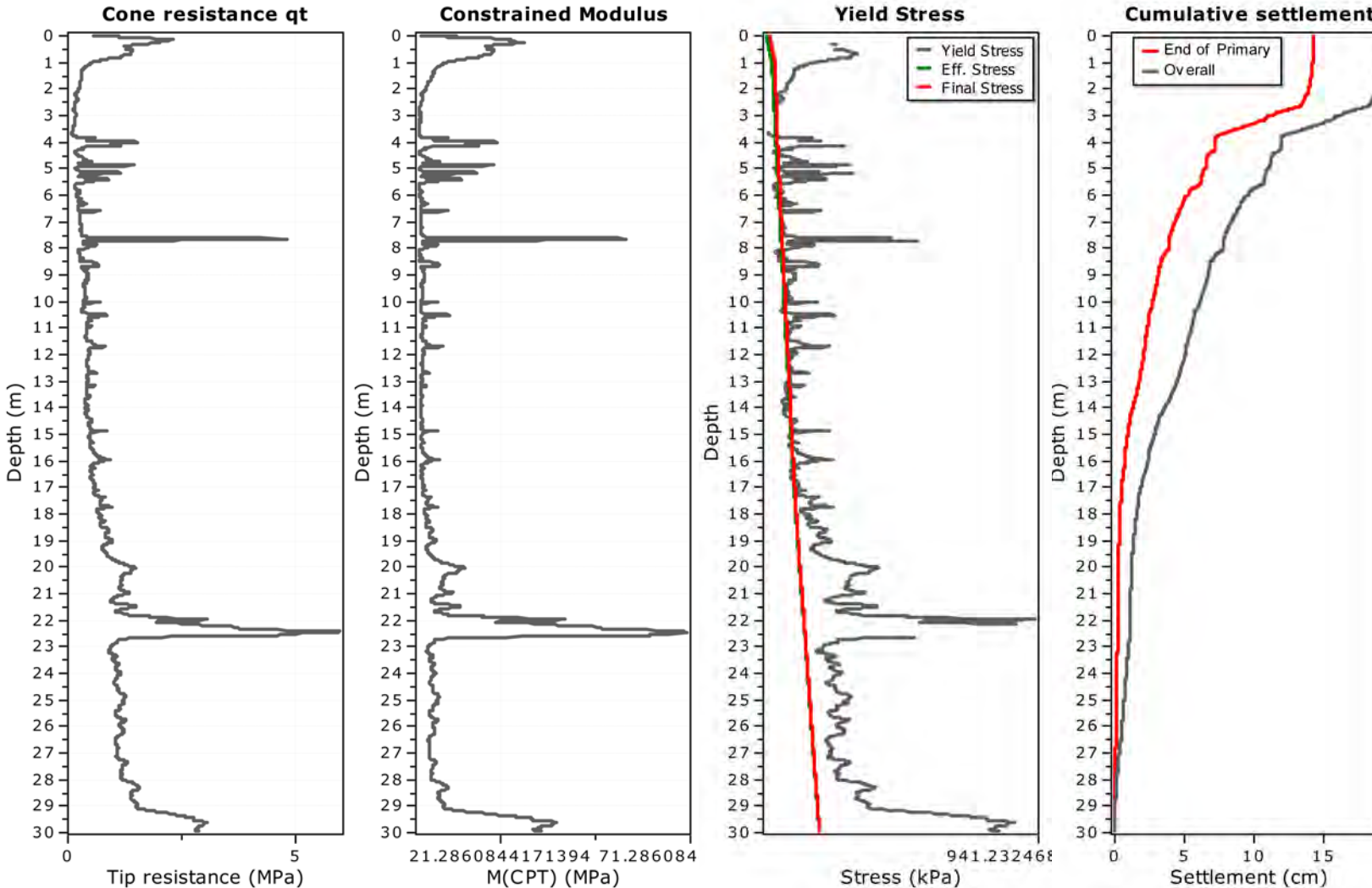
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.45	30.19	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	0.45	30.64	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	0.45	31.51	0.08	0.000	0.000	0.000

Total primary settlement: 7.15**Total secondary settlement: 4.95****Total calculated settlement: 12.11****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

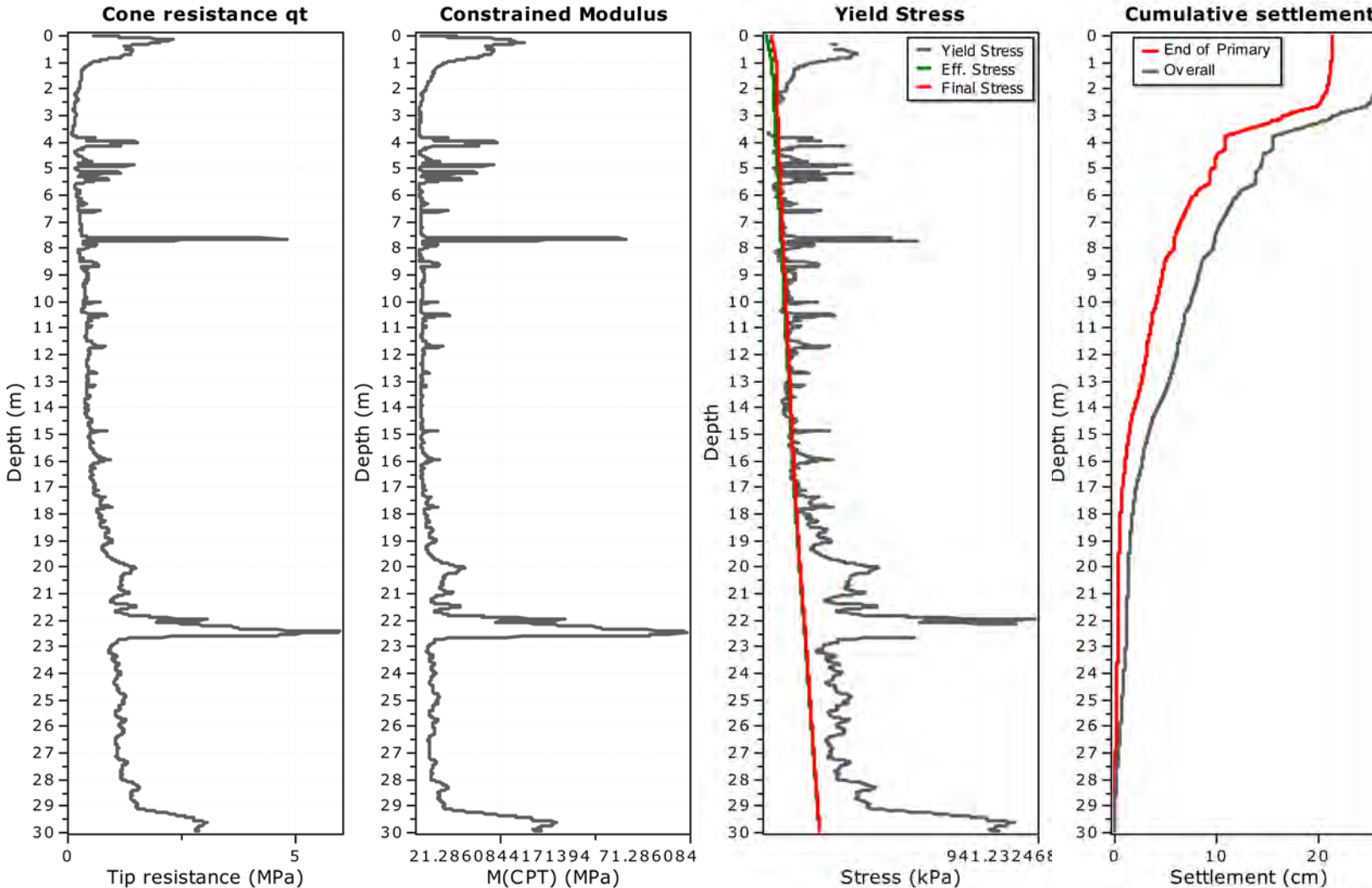
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	0.91	30.19	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	0.91	30.64	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	0.91	31.51	0.08	0.000	0.000	0.000

Total primary settlement: 14.31**Total secondary settlement: 4.95****Total calculated settlement: 19.26****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

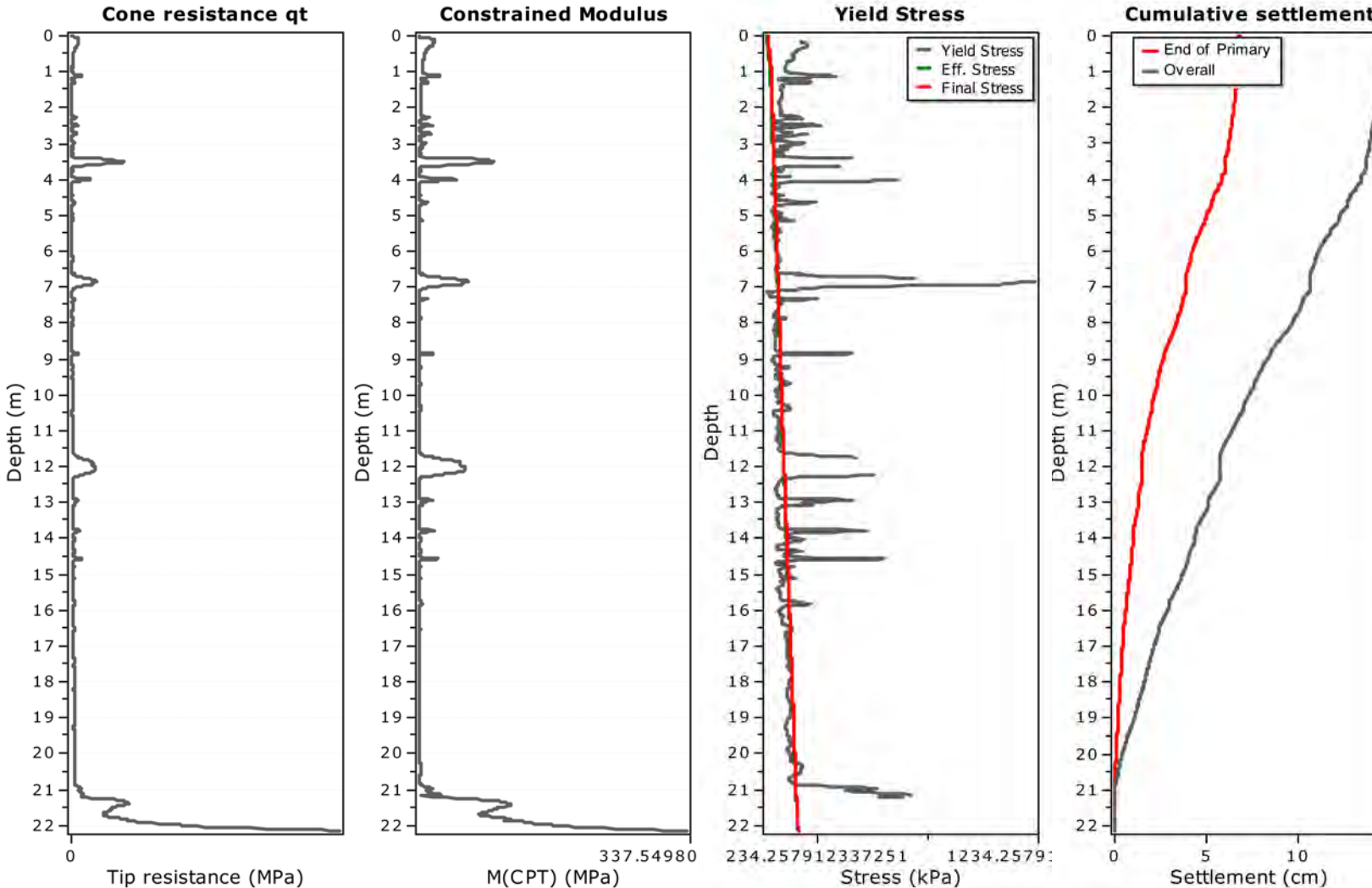
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2991	29.90	29.91	0.01	29.91	1.36	30.19	0.08	0.000	0.000	0.000
2992	29.91	29.92	0.01	29.92	1.36	30.64	0.08	0.000	0.000	0.000
2993	29.92	29.93	0.01	29.93	1.36	31.51	0.08	0.000	0.000	0.000

Total primary settlement: 21.46**Total secondary settlement: 4.95****Total calculated settlement: 26.41****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2209	22.08	22.09	0.01	22.09	0.71	244.32	0.13	0.000	0.000	0.000
2210	22.09	22.10	0.01	22.10	0.71	256.76	0.13	0.000	0.000	0.000
2211	22.10	22.11	0.01	22.11	0.71	270.67	0.13	0.000	0.000	0.000
2212	22.11	22.12	0.01	22.12	0.71	276.51	0.13	0.000	0.000	0.000
2213	22.12	22.13	0.01	22.13	0.71	291.07	0.13	0.000	0.000	0.000
2214	22.13	22.14	0.01	22.14	0.71	304.62	0.13	0.000	0.000	0.000
2215	22.14	22.15	0.01	22.15	0.71	324.64	0.13	0.000	0.000	0.000

Total primary settlement: 6.84
Total secondary settlement: 7.75

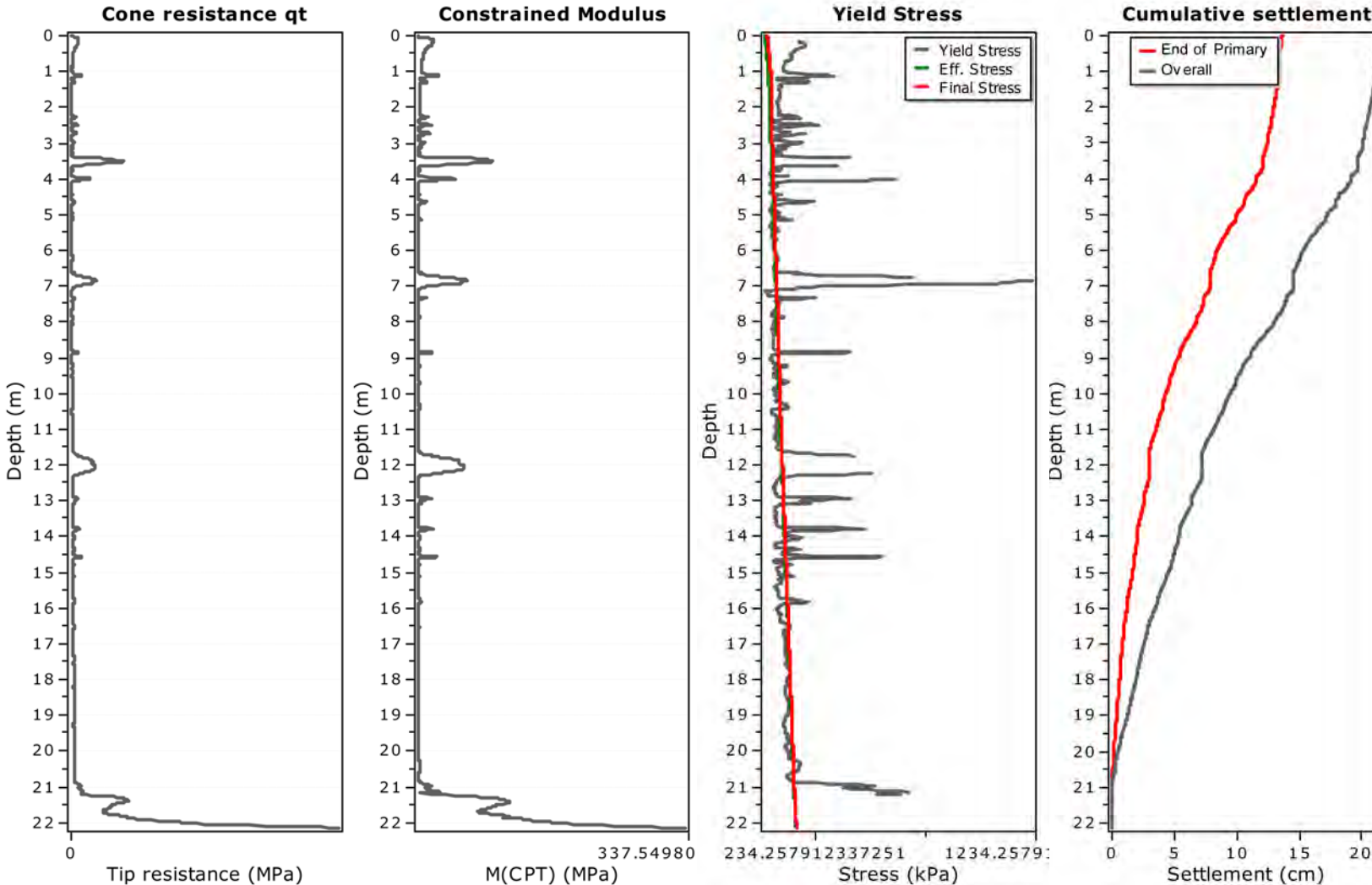
Total calculated settlement: 14.59

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2209	22.08	22.09	0.01	22.09	1.42	244.32	0.13	0.000	0.000	0.000
2210	22.09	22.10	0.01	22.10	1.42	256.76	0.13	0.000	0.000	0.000
2211	22.10	22.11	0.01	22.11	1.42	270.67	0.13	0.000	0.000	0.000
2212	22.11	22.12	0.01	22.12	1.42	276.51	0.13	0.000	0.000	0.000
2213	22.12	22.13	0.01	22.13	1.42	291.07	0.13	0.000	0.000	0.000
2214	22.13	22.14	0.01	22.14	1.42	304.62	0.13	0.000	0.000	0.000
2215	22.14	22.15	0.01	22.15	1.42	324.64	0.13	0.000	0.000	0.000

Total primary settlement: 13.68
Total secondary settlement: 7.75

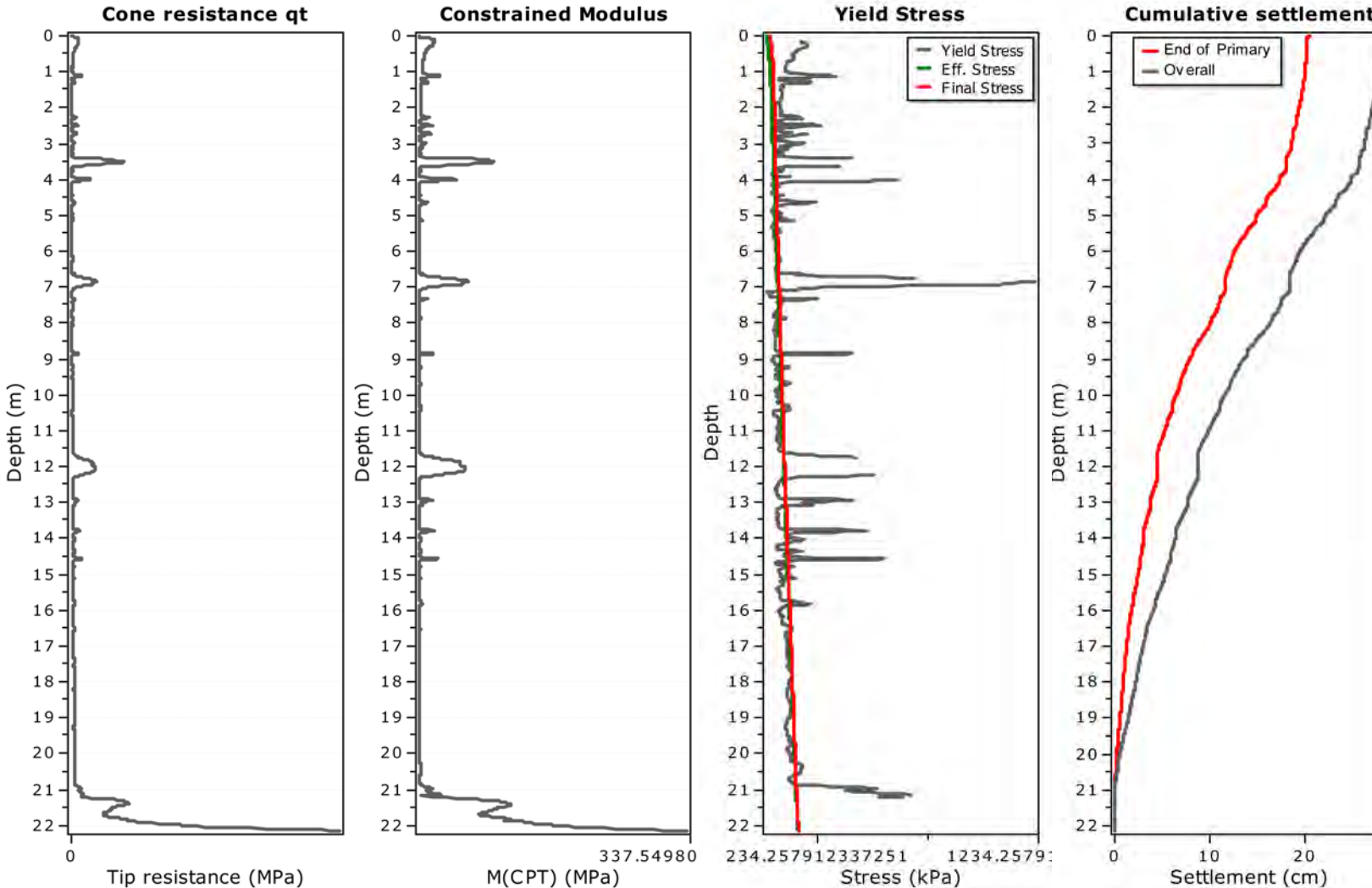
Total calculated settlement: 21.43

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2209	22.08	22.09	0.01	22.09	2.13	244.32	0.13	0.000	0.000	0.000
2210	22.09	22.10	0.01	22.10	2.13	256.76	0.13	0.000	0.000	0.000
2211	22.10	22.11	0.01	22.11	2.13	270.67	0.13	0.000	0.000	0.000
2212	22.11	22.12	0.01	22.12	2.13	276.51	0.13	0.000	0.000	0.000
2213	22.12	22.13	0.01	22.13	2.13	291.07	0.13	0.000	0.000	0.000
2214	22.13	22.14	0.01	22.14	2.13	304.62	0.13	0.000	0.000	0.000
2215	22.14	22.15	0.01	22.15	2.12	324.64	0.13	0.000	0.000	0.000

Total primary settlement: 20.53
Total secondary settlement: 7.75

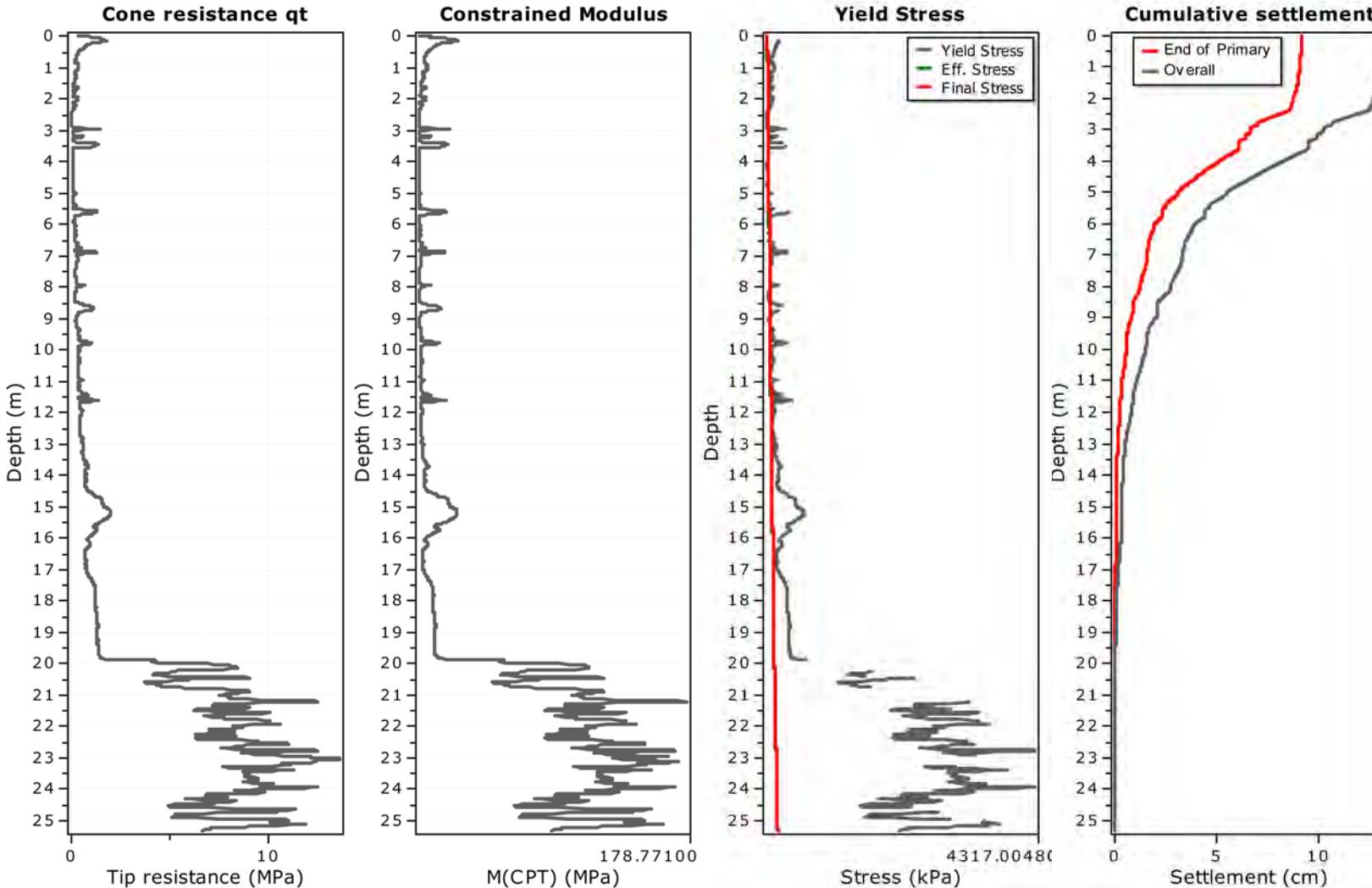
Total calculated settlement: 28.28

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

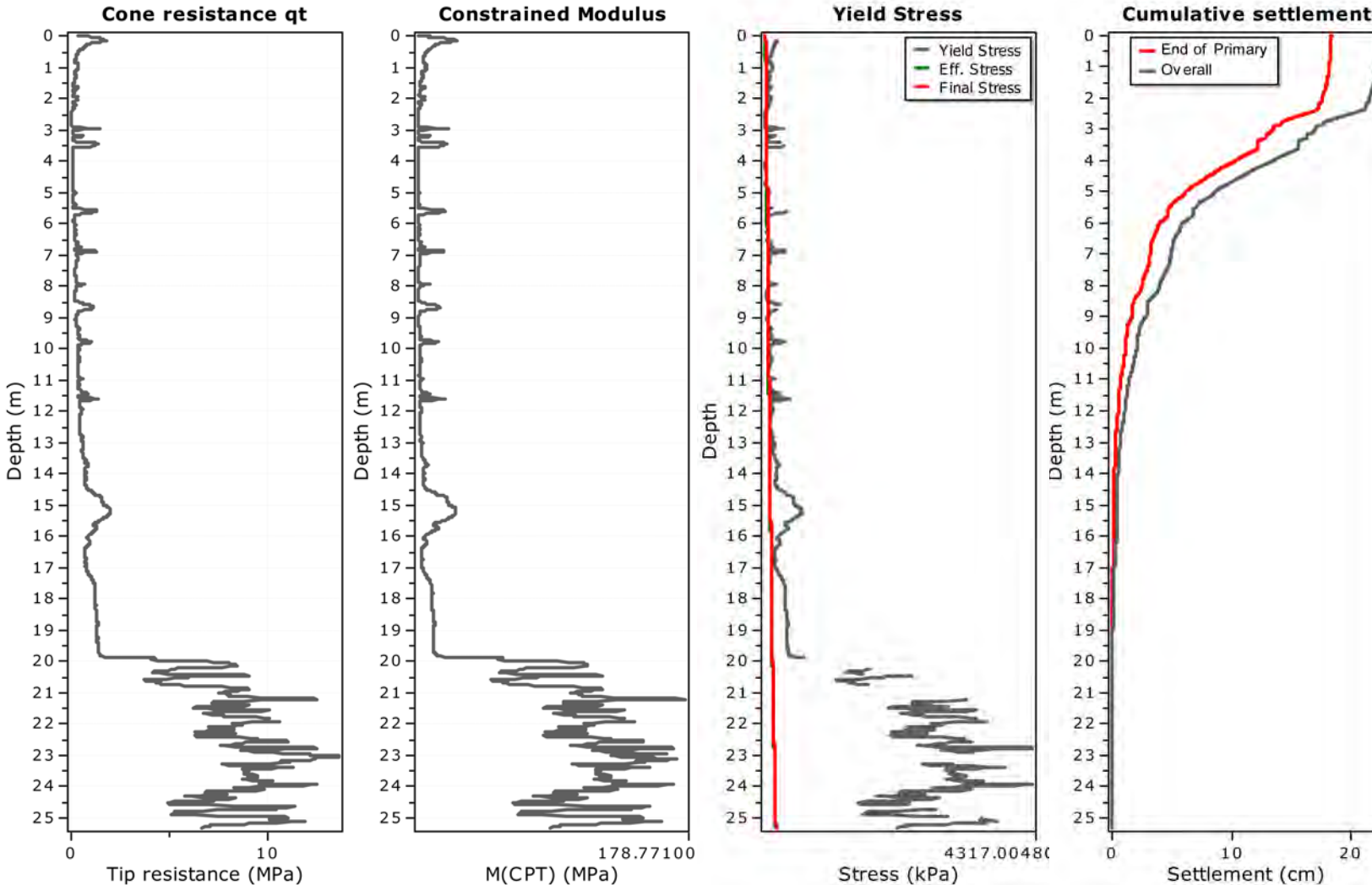
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2531	25.30	25.31	0.01	25.31	0.59	92.92	0.11	0.000	0.000	0.000
2532	25.31	25.32	0.01	25.32	0.59	91.53	0.11	0.000	0.000	0.000
2533	25.32	25.33	0.01	25.33	0.59	89.01	0.11	0.000	0.000	0.000
2534	25.33	25.34	0.01	25.34	0.59	87.49	0.11	0.000	0.000	0.000
2535	25.34	25.35	0.01	25.35	0.58	86.68	0.11	0.000	0.000	0.000

Total primary settlement: 9.20**Total secondary settlement: 3.98****Total calculated settlement: 13.18****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_{sec} = S_{p} \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

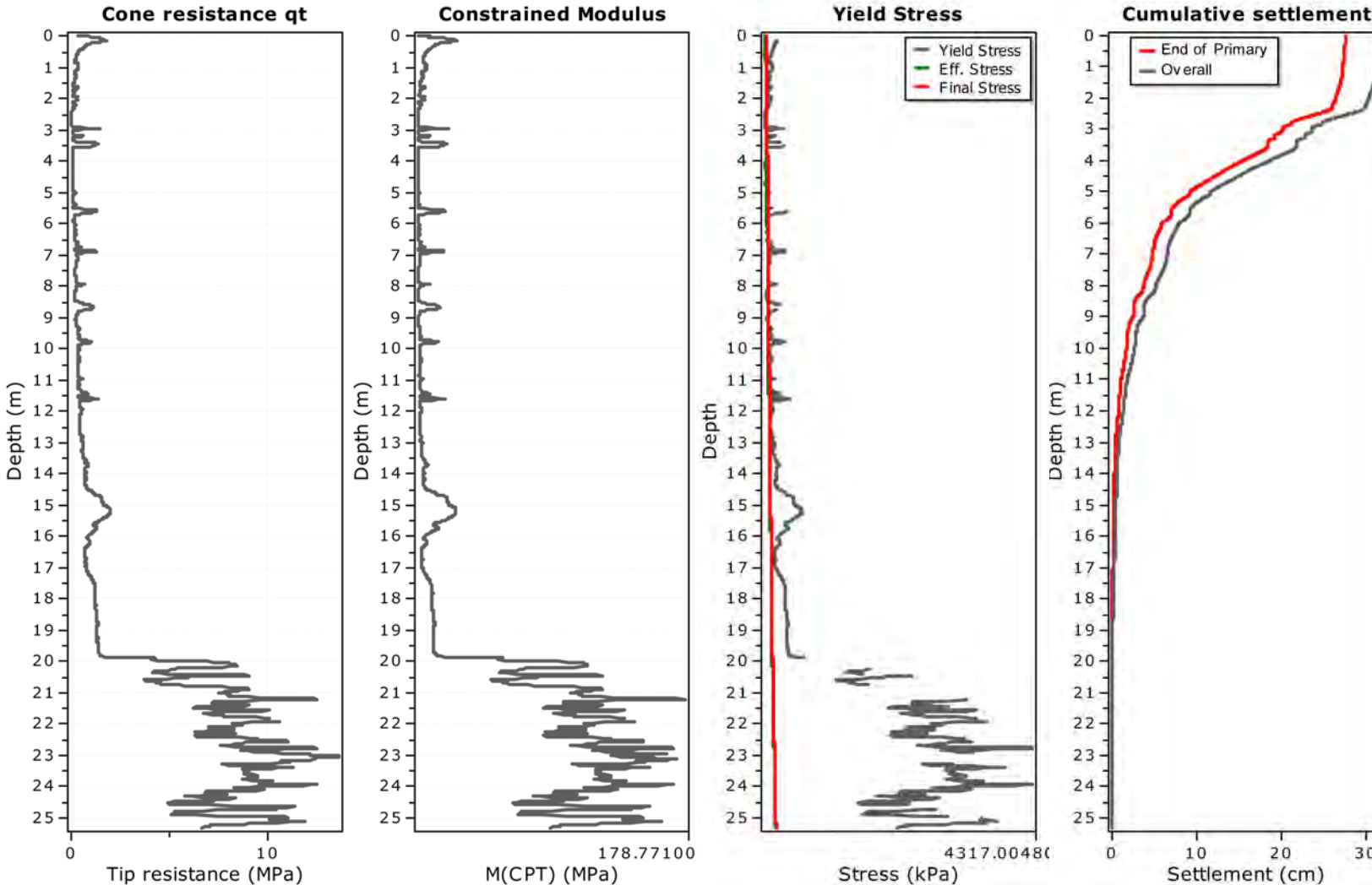
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2531	25.30	25.31	0.01	25.31	1.17	92.92	0.11	0.000	0.000	0.000
2532	25.31	25.32	0.01	25.32	1.17	91.53	0.11	0.000	0.000	0.000
2533	25.32	25.33	0.01	25.33	1.17	89.01	0.11	0.000	0.000	0.000
2534	25.33	25.34	0.01	25.34	1.17	87.49	0.11	0.000	0.000	0.000
2535	25.34	25.35	0.01	25.35	1.17	86.68	0.11	0.000	0.000	0.000

Total primary settlement: 18.40**Total secondary settlement: 3.98****Total calculated settlement: 22.39****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

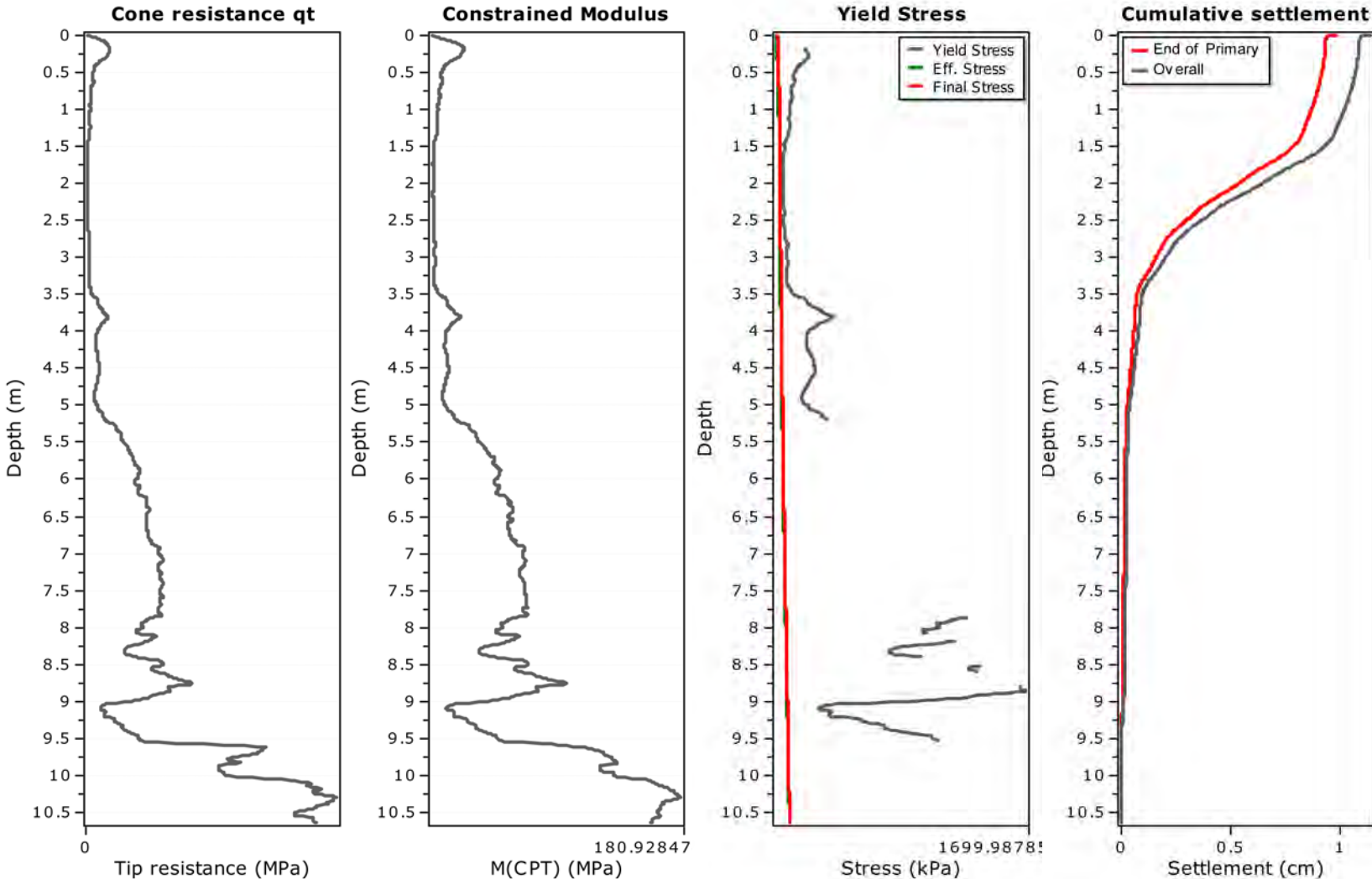
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2531	25.30	25.31	0.01	25.31	1.76	92.92	0.11	0.000	0.000	0.000
2532	25.31	25.32	0.01	25.32	1.76	91.53	0.11	0.000	0.000	0.000
2533	25.32	25.33	0.01	25.33	1.76	89.01	0.11	0.000	0.000	0.000
2534	25.33	25.34	0.01	25.34	1.76	87.49	0.11	0.000	0.000	0.000
2535	25.34	25.35	0.01	25.35	1.75	86.68	0.11	0.000	0.000	0.000

Total primary settlement: 27.61**Total secondary settlement: 3.98****Total calculated settlement: 31.59****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.58	10.59	0.01	10.59	1.61	160.94	0.29	0.000	0.000	0.000
1060	10.59	10.60	0.01	10.60	1.61	158.10	0.29	0.000	0.000	0.000
1061	10.60	10.61	0.01	10.61	1.61	157.55	0.29	0.000	0.000	0.000
1062	10.61	10.62	0.01	10.62	1.61	157.61	0.29	0.000	0.000	0.000
1063	10.62	10.63	0.01	10.63	1.61	157.71	0.29	0.000	0.000	0.000
1064	10.63	10.64	0.01	10.64	1.61	157.57	0.29	0.000	0.000	0.000

Total primary settlement: 0.99
Total secondary settlement: 0.15

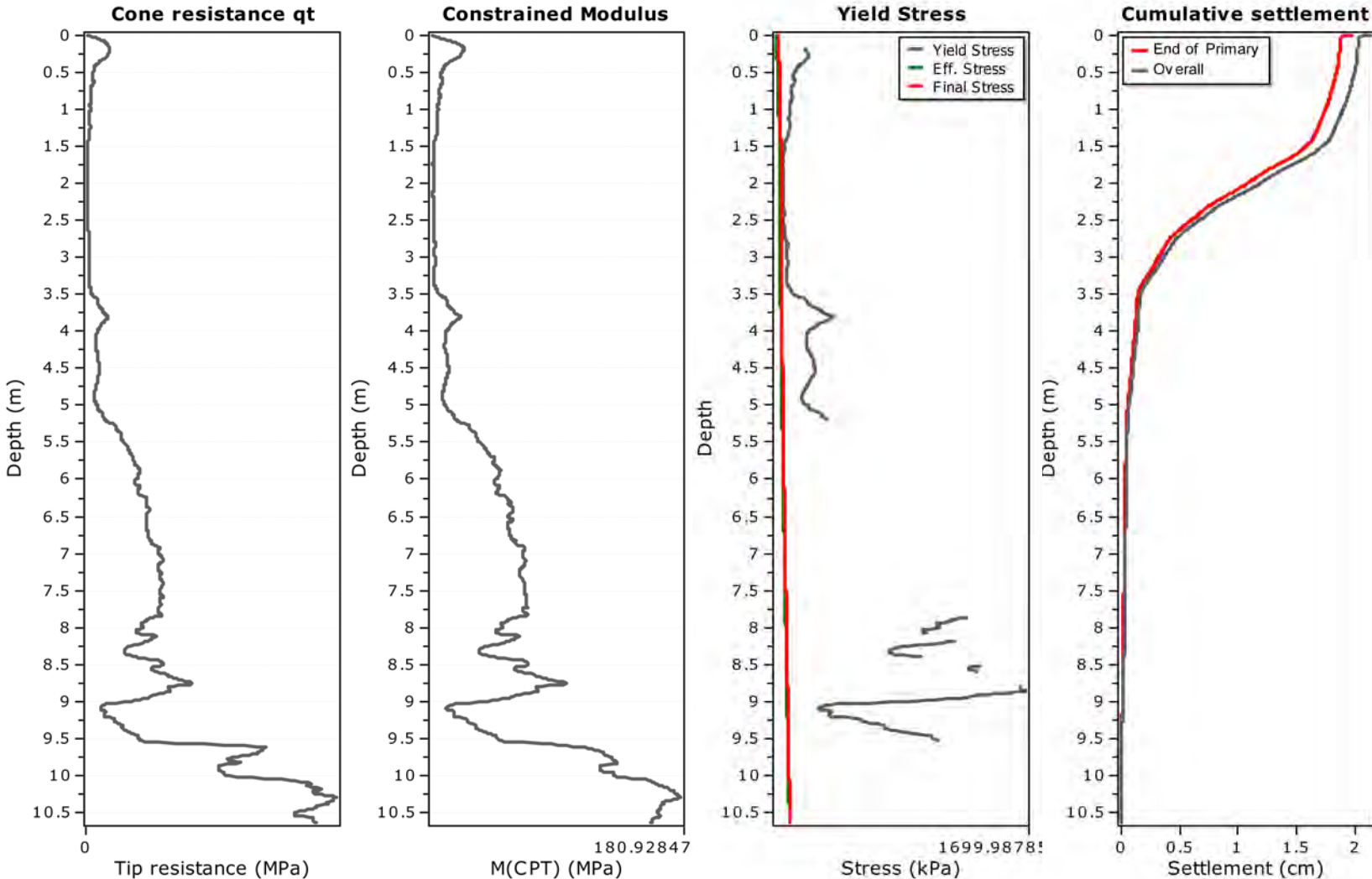
Total calculated settlement: 1.14

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.58	10.59	0.01	10.59	3.23	160.94	0.29	0.000	0.000	0.000
1060	10.59	10.60	0.01	10.60	3.22	158.10	0.29	0.000	0.000	0.000
1061	10.60	10.61	0.01	10.61	3.22	157.55	0.29	0.000	0.000	0.000
1062	10.61	10.62	0.01	10.62	3.22	157.61	0.29	0.000	0.000	0.000
1063	10.62	10.63	0.01	10.63	3.21	157.71	0.29	0.000	0.000	0.000
1064	10.63	10.64	0.01	10.64	3.21	157.57	0.29	0.000	0.000	0.000

Total primary settlement: 1.98
Total secondary settlement: 0.15

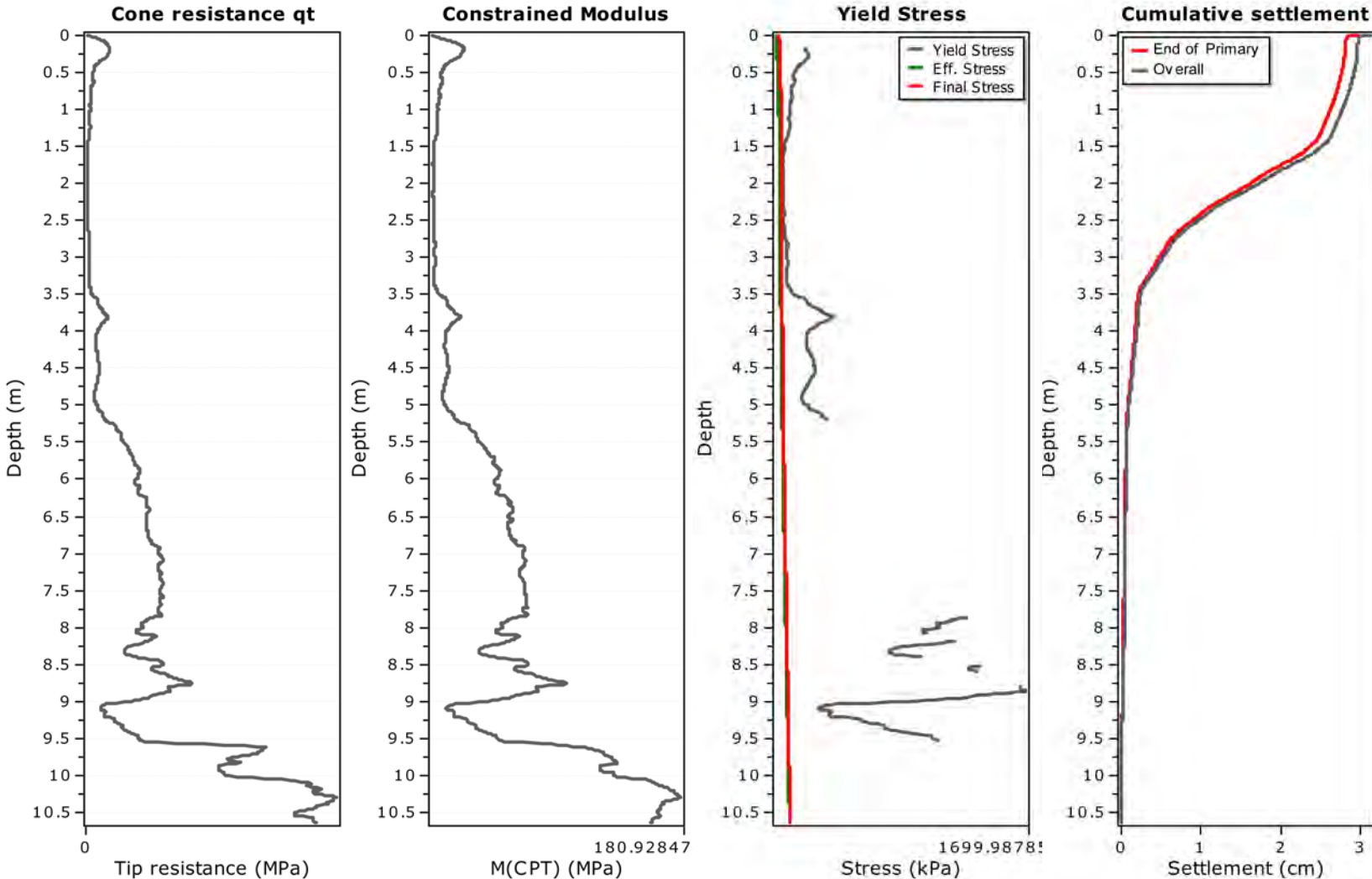
Total calculated settlement: 2.13

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.58	10.59	0.01	10.59	4.84	160.94	0.29	0.000	0.000	0.000
1060	10.59	10.60	0.01	10.60	4.83	158.10	0.29	0.000	0.000	0.000
1061	10.60	10.61	0.01	10.61	4.83	157.55	0.29	0.000	0.000	0.000
1062	10.61	10.62	0.01	10.62	4.83	157.61	0.29	0.000	0.000	0.000
1063	10.62	10.63	0.01	10.63	4.82	157.71	0.29	0.000	0.000	0.000
1064	10.63	10.64	0.01	10.64	4.82	157.57	0.29	0.000	0.000	0.000

Total primary settlement: 2.96
Total secondary settlement: 0.15

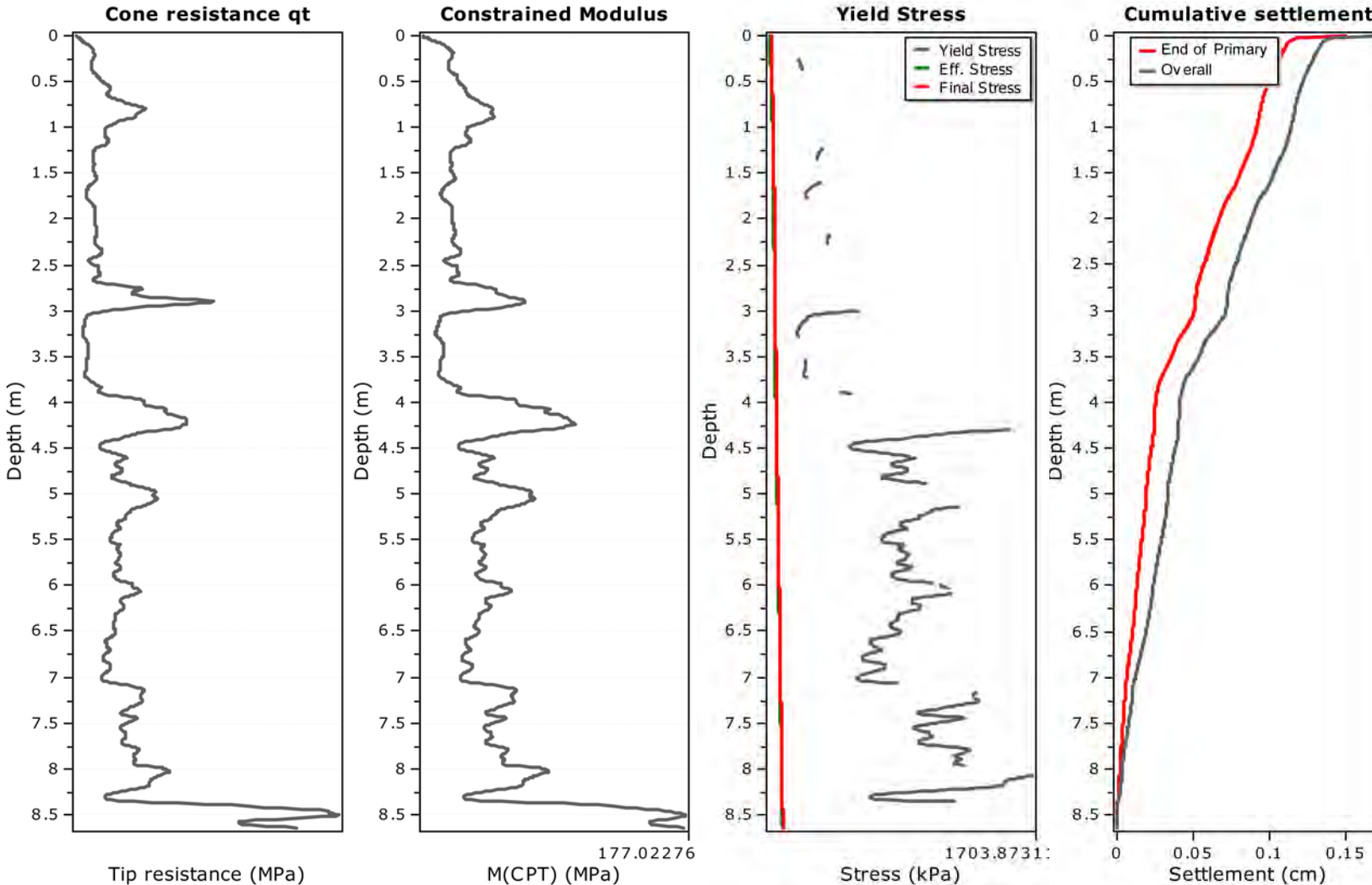
Total calculated settlement: 3.12

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_c = S_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
829	8.28	8.29	0.01	8.29	1.97	31.34	0.36	0.000	0.000	0.000
830	8.29	8.30	0.01	8.29	1.97	29.12	0.36	0.000	0.000	0.000
831	8.30	8.31	0.01	8.30	1.96	27.82	0.36	0.000	0.000	0.000
832	8.31	8.32	0.01	8.31	1.96	27.51	0.36	0.000	0.000	0.000
833	8.32	8.33	0.01	8.32	1.96	27.80	0.36	0.000	0.000	0.000
834	8.33	8.34	0.01	8.34	1.96	28.44	0.36	0.000	0.000	0.000
835	8.34	8.35	0.01	8.35	1.96	32.05	0.36	0.000	0.000	0.000
836	8.35	8.36	0.01	8.36	1.96	38.61	0.36	0.000	0.000	0.000
837	8.36	8.37	0.01	8.37	1.95	52.60	0.36	0.000	0.000	0.000
838	8.37	8.38	0.01	8.38	1.95	69.91	0.35	0.000	0.000	0.000
839	8.38	8.39	0.01	8.38	1.95	93.74	0.35	0.000	0.000	0.000
840	8.39	8.40	0.01	8.39	1.95	104.92	0.35	0.000	0.000	0.000
841	8.40	8.41	0.01	8.40	1.95	116.47	0.35	0.000	0.000	0.000
842	8.41	8.42	0.01	8.41	1.94	127.86	0.35	0.000	0.000	0.000
843	8.42	8.43	0.01	8.43	1.94	134.98	0.35	0.000	0.000	0.000
844	8.43	8.44	0.01	8.44	1.94	142.29	0.35	0.000	0.000	0.000
845	8.44	8.45	0.01	8.45	1.94	149.41	0.35	0.000	0.000	0.000
846	8.45	8.46	0.01	8.46	1.94	156.63	0.35	0.000	0.000	0.000
847	8.46	8.47	0.01	8.46	1.94	161.19	0.35	0.000	0.000	0.000
848	8.47	8.48	0.01	8.47	1.93	164.78	0.35	0.000	0.000	0.000
849	8.48	8.49	0.01	8.48	1.93	167.72	0.35	0.000	0.000	0.000
850	8.49	8.50	0.01	8.49	1.93	171.20	0.35	0.000	0.000	0.000
851	8.50	8.51	0.01	8.51	1.93	173.64	0.35	0.000	0.000	0.000
852	8.51	8.52	0.01	8.52	1.93	174.77	0.35	0.000	0.000	0.000
853	8.52	8.53	0.01	8.53	1.93	174.23	0.35	0.000	0.000	0.000
854	8.53	8.54	0.01	8.54	1.92	172.09	0.35	0.000	0.000	0.000
855	8.54	8.55	0.01	8.54	1.92	168.02	0.35	0.000	0.000	0.000
856	8.55	8.56	0.01	8.55	1.92	162.09	0.35	0.000	0.000	0.000
857	8.56	8.57	0.01	8.56	1.92	156.30	0.35	0.000	0.000	0.000
858	8.57	8.58	0.01	8.57	1.92	152.53	0.35	0.000	0.000	0.000
859	8.58	8.59	0.01	8.59	1.92	151.18	0.35	0.000	0.000	0.000
860	8.59	8.60	0.01	8.60	1.91	151.07	0.35	0.000	0.000	0.000
861	8.60	8.61	0.01	8.61	1.91	151.30	0.35	0.000	0.000	0.000
862	8.61	8.62	0.01	8.62	1.91	151.89	0.35	0.000	0.000	0.000
863	8.62	8.63	0.01	8.63	1.91	153.97	0.35	0.000	0.000	0.000
864	8.63	8.64	0.01	8.63	1.91	163.16	0.35	0.000	0.000	0.000
865	8.64	8.65	0.01	8.64	1.91	168.94	0.35	0.000	0.000	0.000

Total primary settlement: 0.15
Total secondary settlement: 0.02

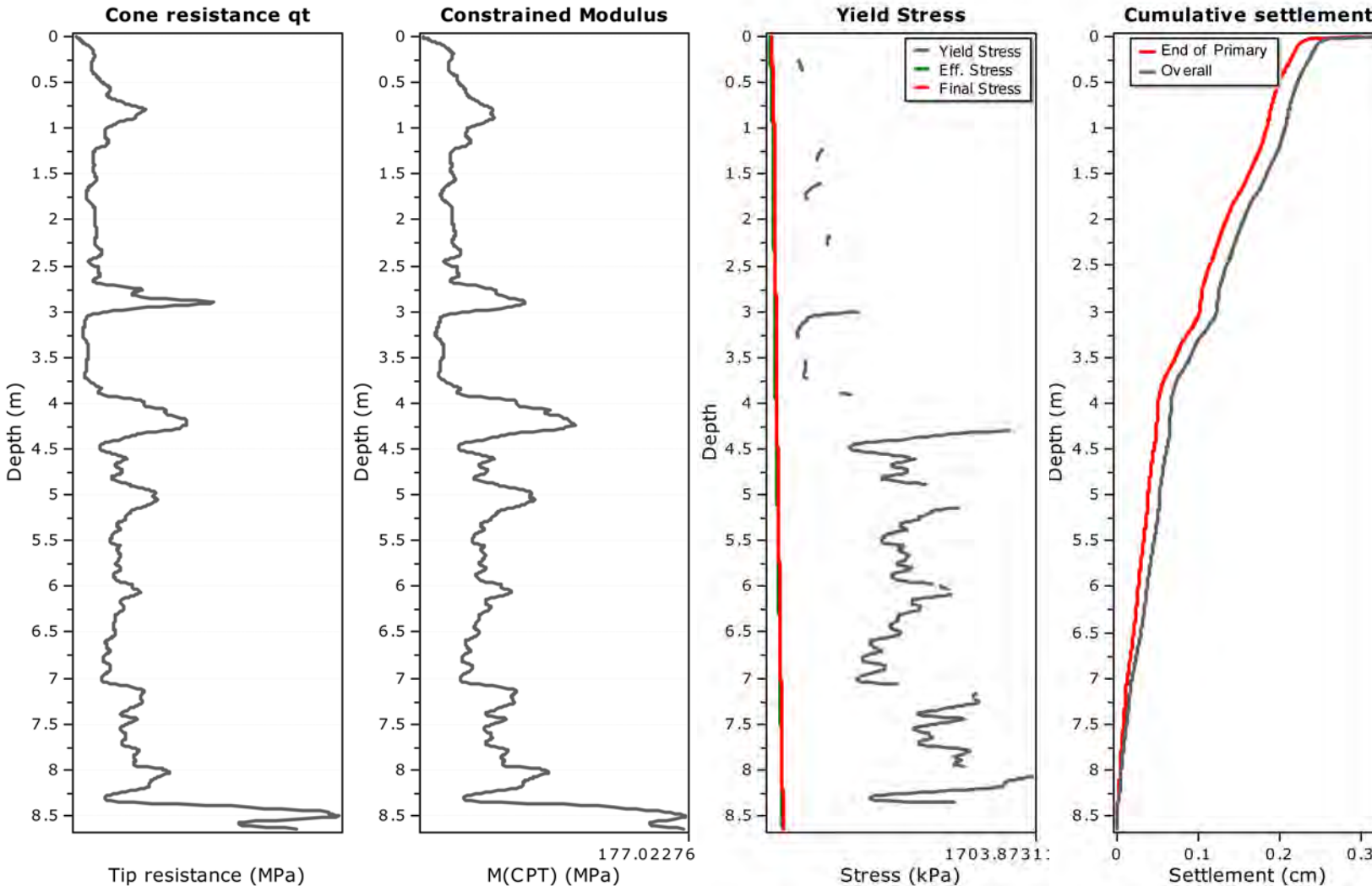
Total calculated settlement: 0.17

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
829	8.28	8.29	0.01	8.29	3.94	31.34	0.36	0.000	0.000	0.000
830	8.29	8.30	0.01	8.29	3.93	29.12	0.36	0.000	0.000	0.000
831	8.30	8.31	0.01	8.30	3.93	27.82	0.36	0.000	0.000	0.000
832	8.31	8.32	0.01	8.31	3.93	27.51	0.36	0.000	0.000	0.000
833	8.32	8.33	0.01	8.32	3.92	27.80	0.36	0.000	0.000	0.000
834	8.33	8.34	0.01	8.34	3.92	28.44	0.36	0.000	0.000	0.000
835	8.34	8.35	0.01	8.35	3.91	32.05	0.36	0.000	0.000	0.000
836	8.35	8.36	0.01	8.36	3.91	38.61	0.36	0.000	0.000	0.000
837	8.36	8.37	0.01	8.37	3.91	52.60	0.36	0.000	0.000	0.000
838	8.37	8.38	0.01	8.38	3.90	69.91	0.35	0.000	0.000	0.000
839	8.38	8.39	0.01	8.38	3.90	93.74	0.35	0.000	0.000	0.000
840	8.39	8.40	0.01	8.39	3.90	104.92	0.35	0.000	0.000	0.000
841	8.40	8.41	0.01	8.40	3.89	116.47	0.35	0.000	0.000	0.000
842	8.41	8.42	0.01	8.41	3.89	127.86	0.35	0.000	0.000	0.000
843	8.42	8.43	0.01	8.43	3.89	134.98	0.35	0.000	0.000	0.000
844	8.43	8.44	0.01	8.44	3.88	142.29	0.35	0.000	0.000	0.000
845	8.44	8.45	0.01	8.45	3.88	149.41	0.35	0.000	0.000	0.000
846	8.45	8.46	0.01	8.46	3.88	156.63	0.35	0.000	0.000	0.000
847	8.46	8.47	0.01	8.46	3.87	161.19	0.35	0.000	0.000	0.000
848	8.47	8.48	0.01	8.47	3.87	164.78	0.35	0.000	0.000	0.000
849	8.48	8.49	0.01	8.48	3.87	167.72	0.35	0.000	0.000	0.000
850	8.49	8.50	0.01	8.49	3.86	171.20	0.35	0.000	0.000	0.000
851	8.50	8.51	0.01	8.51	3.86	173.64	0.35	0.000	0.000	0.000
852	8.51	8.52	0.01	8.52	3.85	174.77	0.35	0.000	0.000	0.000
853	8.52	8.53	0.01	8.53	3.85	174.23	0.35	0.000	0.000	0.000
854	8.53	8.54	0.01	8.54	3.85	172.09	0.35	0.000	0.000	0.000
855	8.54	8.55	0.01	8.54	3.84	168.02	0.35	0.000	0.000	0.000
856	8.55	8.56	0.01	8.55	3.84	162.09	0.35	0.000	0.000	0.000
857	8.56	8.57	0.01	8.56	3.84	156.30	0.35	0.000	0.000	0.000
858	8.57	8.58	0.01	8.57	3.83	152.53	0.35	0.000	0.000	0.000
859	8.58	8.59	0.01	8.59	3.83	151.18	0.35	0.000	0.000	0.000
860	8.59	8.60	0.01	8.60	3.83	151.07	0.35	0.000	0.000	0.000
861	8.60	8.61	0.01	8.61	3.82	151.30	0.35	0.000	0.000	0.000
862	8.61	8.62	0.01	8.62	3.82	151.89	0.35	0.000	0.000	0.000
863	8.62	8.63	0.01	8.63	3.82	153.97	0.35	0.000	0.000	0.000
864	8.63	8.64	0.01	8.63	3.81	163.16	0.35	0.000	0.000	0.000
865	8.64	8.65	0.01	8.64	3.81	168.94	0.35	0.000	0.000	0.000

Total primary settlement: 0.30
Total secondary settlement: 0.02

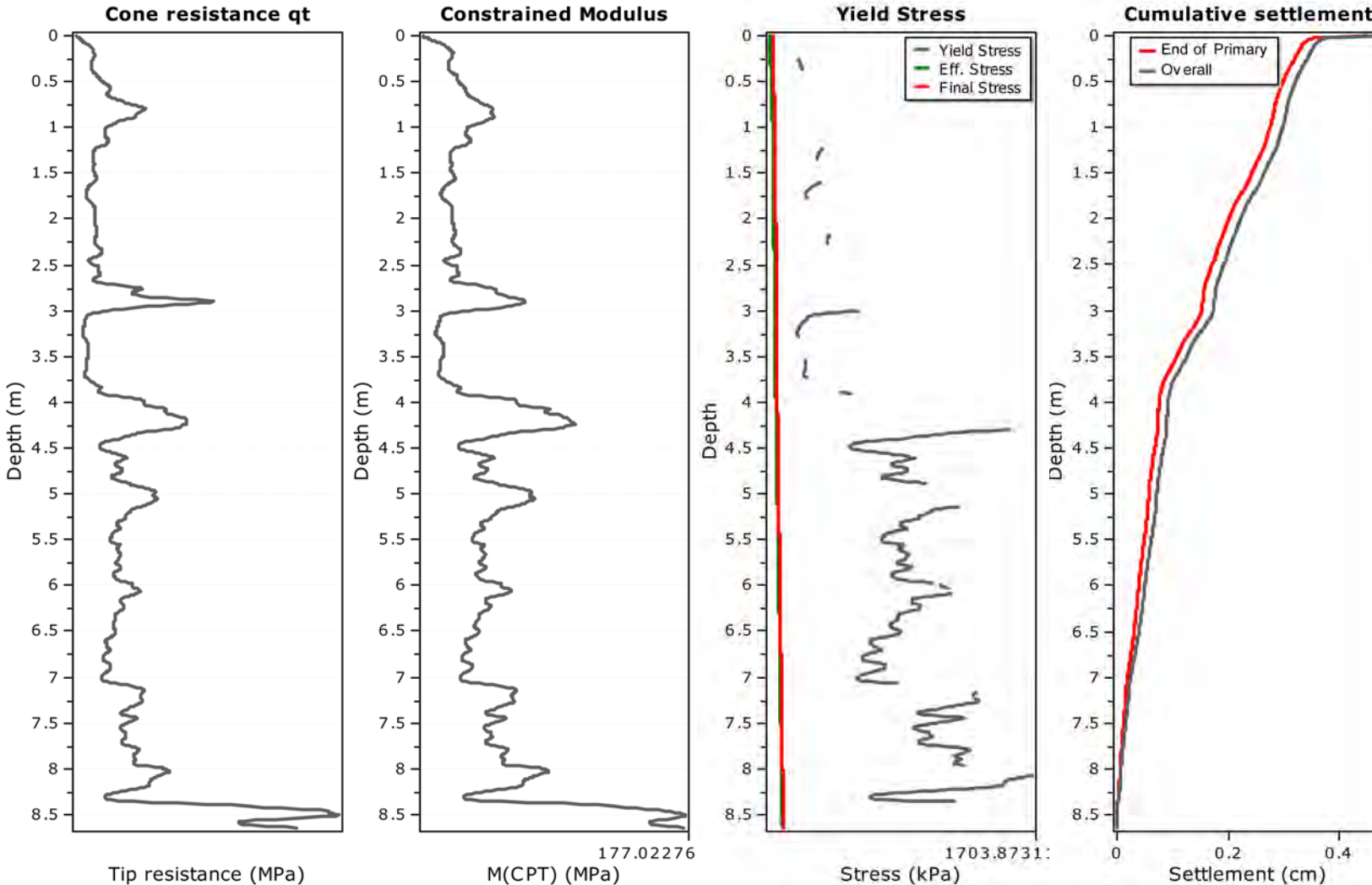
Total calculated settlement: 0.32

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
829	8.28	8.29	0.01	8.29	5.90	31.34	0.36	0.000	0.000	0.000
830	8.29	8.30	0.01	8.29	5.90	29.12	0.36	0.000	0.000	0.000
831	8.30	8.31	0.01	8.30	5.89	27.82	0.36	0.000	0.000	0.000
832	8.31	8.32	0.01	8.31	5.89	27.51	0.36	0.000	0.000	0.000
833	8.32	8.33	0.01	8.32	5.88	27.80	0.36	0.000	0.000	0.000
834	8.33	8.34	0.01	8.34	5.88	28.44	0.36	0.000	0.000	0.000
835	8.34	8.35	0.01	8.35	5.87	32.05	0.36	0.000	0.000	0.000
836	8.35	8.36	0.01	8.36	5.87	38.61	0.36	0.000	0.000	0.000
837	8.36	8.37	0.01	8.37	5.86	52.60	0.36	0.000	0.000	0.000
838	8.37	8.38	0.01	8.38	5.86	69.91	0.35	0.000	0.000	0.000
839	8.38	8.39	0.01	8.38	5.85	93.74	0.35	0.000	0.000	0.000
840	8.39	8.40	0.01	8.39	5.85	104.92	0.35	0.000	0.000	0.000
841	8.40	8.41	0.01	8.40	5.84	116.47	0.35	0.000	0.000	0.000
842	8.41	8.42	0.01	8.41	5.83	127.86	0.35	0.000	0.000	0.000
843	8.42	8.43	0.01	8.43	5.83	134.98	0.35	0.000	0.000	0.000
844	8.43	8.44	0.01	8.44	5.82	142.29	0.35	0.000	0.000	0.000
845	8.44	8.45	0.01	8.45	5.82	149.41	0.35	0.000	0.000	0.000
846	8.45	8.46	0.01	8.46	5.81	156.63	0.35	0.000	0.000	0.000
847	8.46	8.47	0.01	8.46	5.81	161.19	0.35	0.000	0.000	0.000
848	8.47	8.48	0.01	8.47	5.80	164.78	0.35	0.000	0.000	0.000
849	8.48	8.49	0.01	8.48	5.80	167.72	0.35	0.000	0.000	0.000
850	8.49	8.50	0.01	8.49	5.79	171.20	0.35	0.000	0.000	0.000
851	8.50	8.51	0.01	8.51	5.79	173.64	0.35	0.000	0.000	0.000
852	8.51	8.52	0.01	8.52	5.78	174.77	0.35	0.000	0.000	0.000
853	8.52	8.53	0.01	8.53	5.78	174.23	0.35	0.000	0.000	0.000
854	8.53	8.54	0.01	8.54	5.77	172.09	0.35	0.000	0.000	0.000
855	8.54	8.55	0.01	8.54	5.77	168.02	0.35	0.000	0.000	0.000
856	8.55	8.56	0.01	8.55	5.76	162.09	0.35	0.000	0.000	0.000
857	8.56	8.57	0.01	8.56	5.76	156.30	0.35	0.000	0.000	0.000
858	8.57	8.58	0.01	8.57	5.75	152.53	0.35	0.000	0.000	0.000
859	8.58	8.59	0.01	8.59	5.75	151.18	0.35	0.000	0.000	0.000
860	8.59	8.60	0.01	8.60	5.74	151.07	0.35	0.000	0.000	0.000
861	8.60	8.61	0.01	8.61	5.74	151.30	0.35	0.000	0.000	0.000
862	8.61	8.62	0.01	8.62	5.73	151.89	0.35	0.000	0.000	0.000
863	8.62	8.63	0.01	8.63	5.73	153.97	0.35	0.000	0.000	0.000
864	8.63	8.64	0.01	8.63	5.72	163.16	0.35	0.000	0.000	0.000
865	8.64	8.65	0.01	8.64	5.72	168.94	0.35	0.000	0.000	0.000

Total primary settlement: 0.45
Total secondary settlement: 0.02

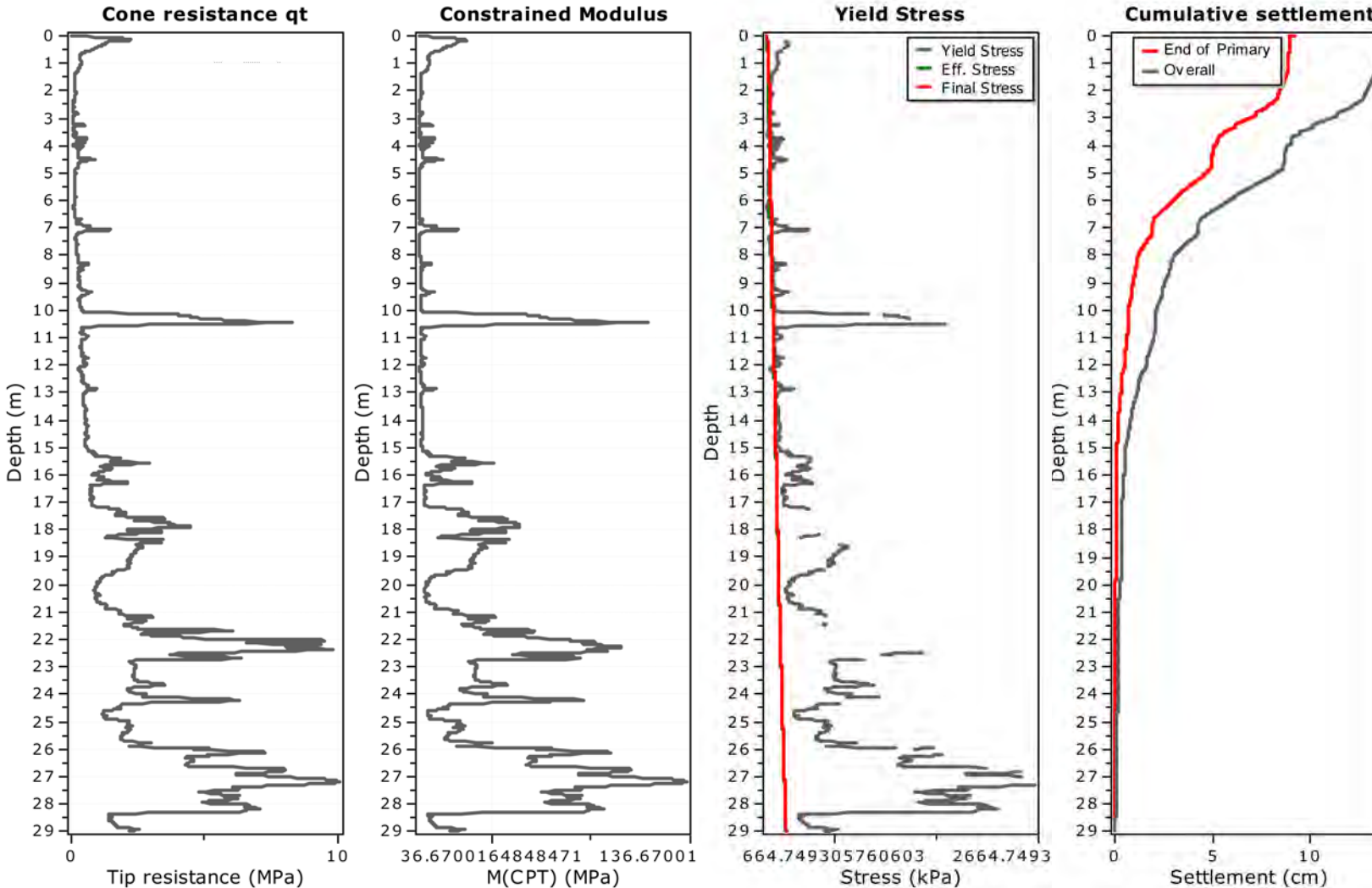
Total calculated settlement: 0.47

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 9.19
Total secondary settlement: 4.50

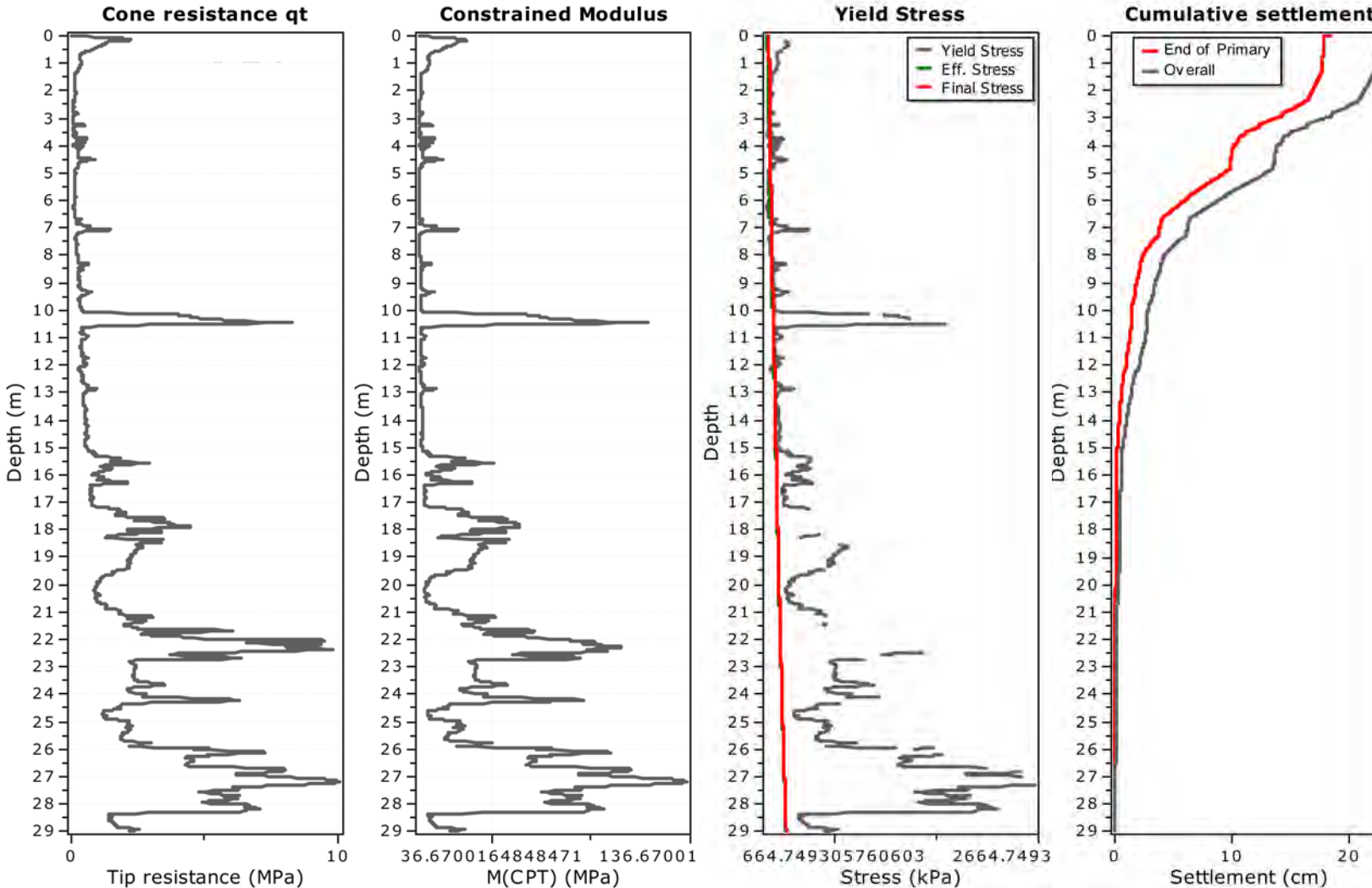
Total calculated settlement: 13.68

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 18.38

Total secondary settlement: 4.50

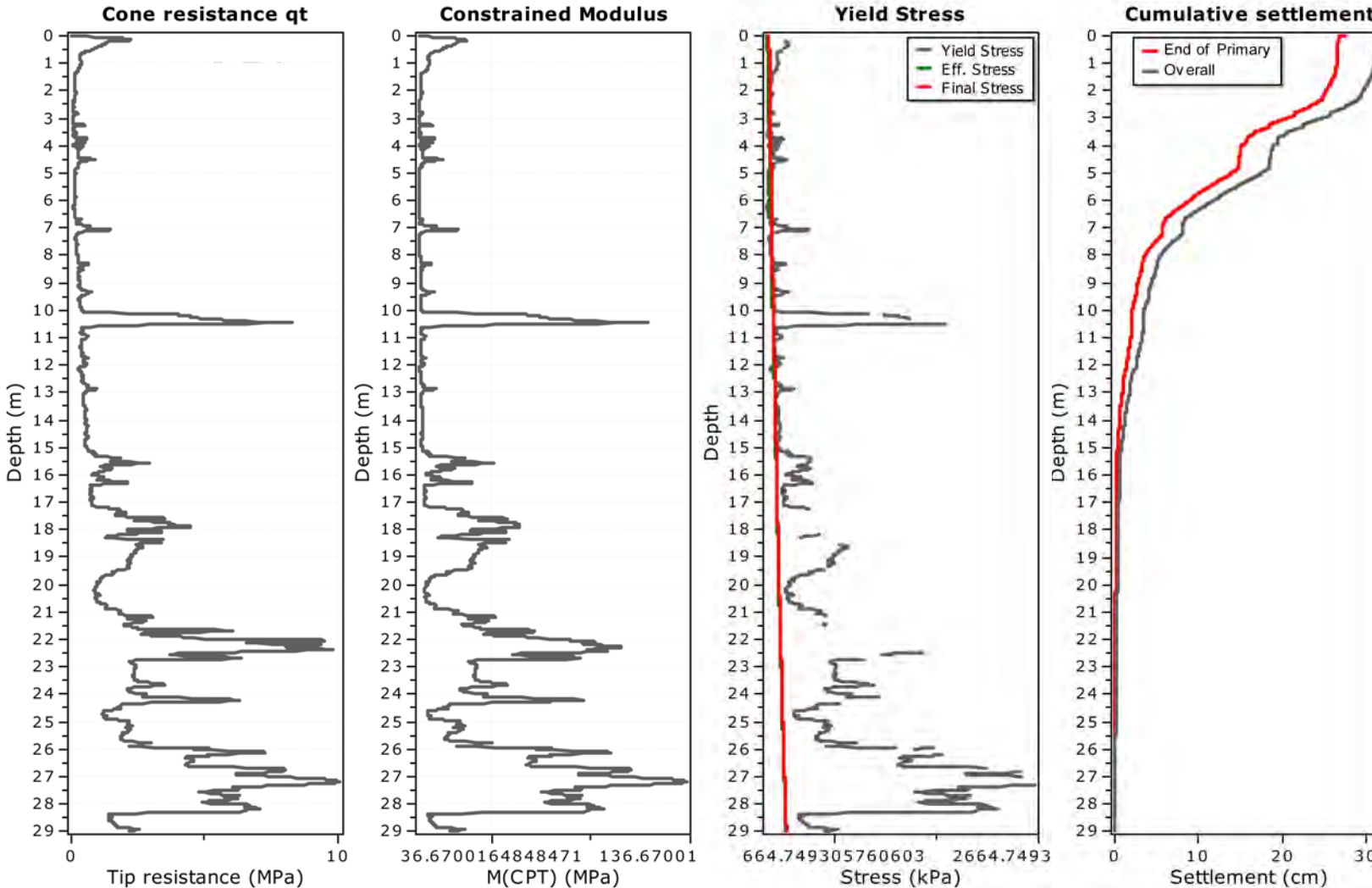
Total calculated settlement: 22.87

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 27.56

Total secondary settlement: 4.50

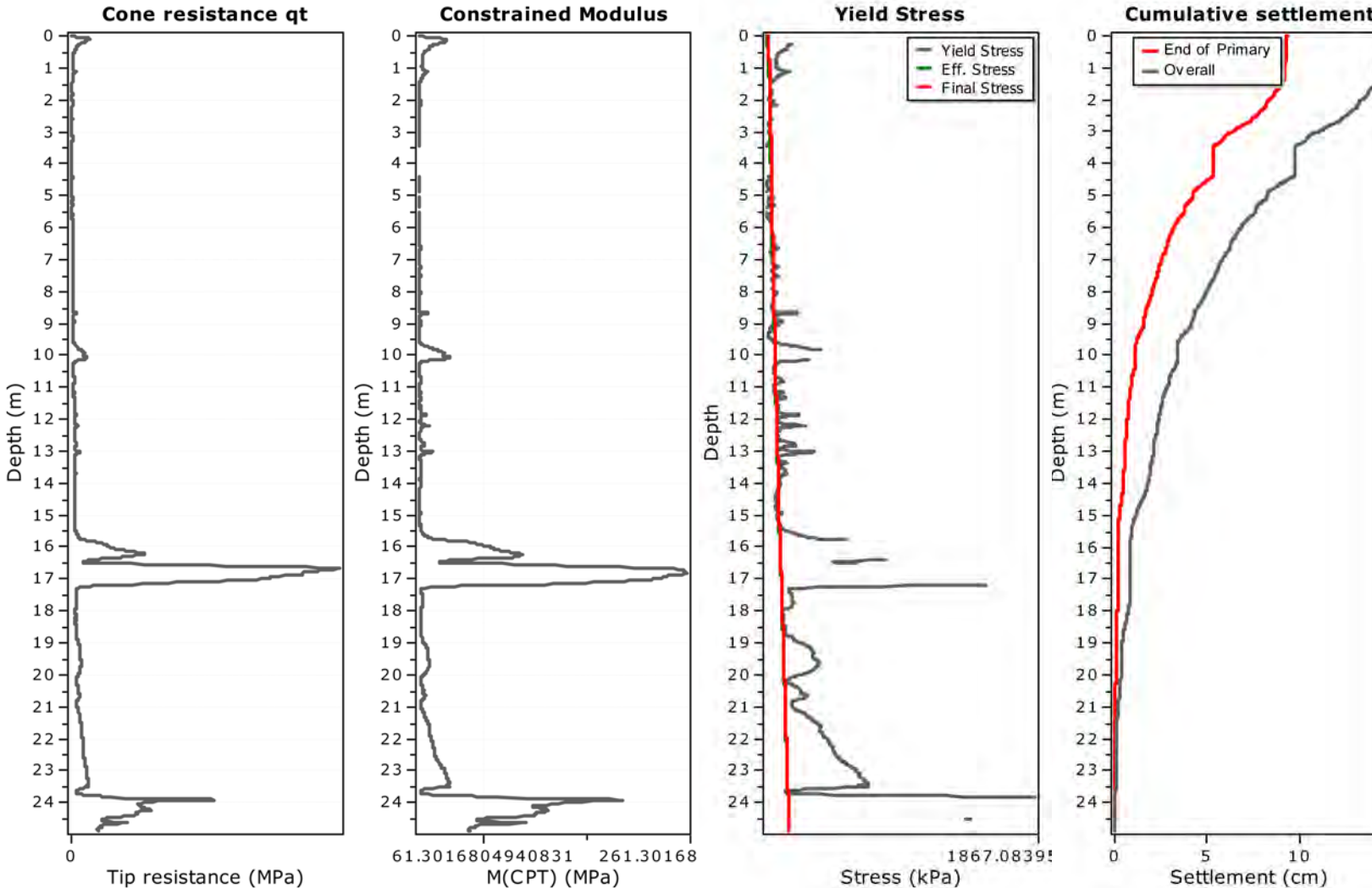
Total calculated settlement: 32.06

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

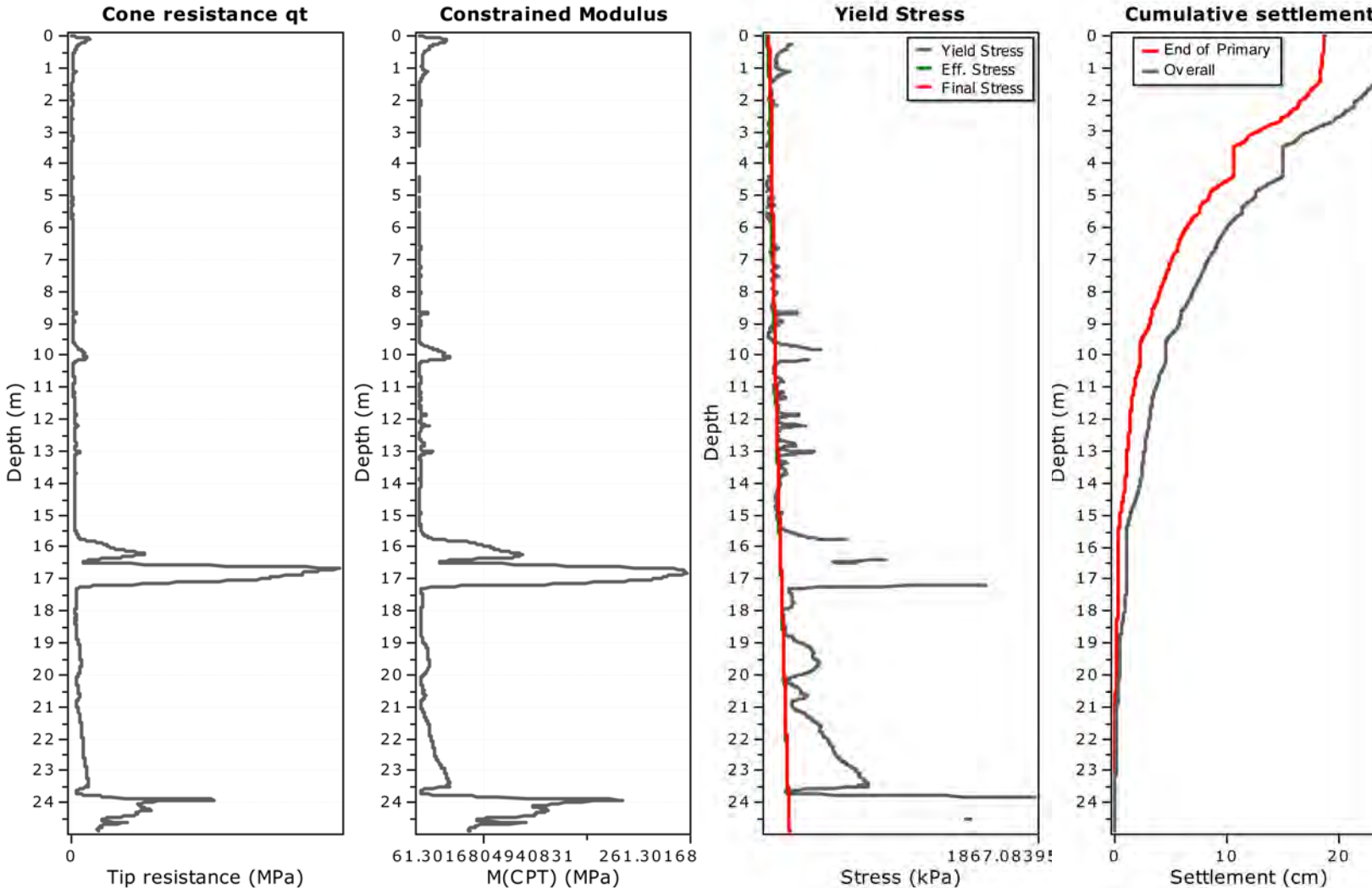
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2485	24.84	24.85	0.01	24.85	0.60	47.00	0.11	0.000	0.000	0.000
2486	24.85	24.86	0.01	24.86	0.60	47.05	0.11	0.000	0.000	0.000
2487	24.86	24.87	0.01	24.87	0.60	47.38	0.11	0.000	0.000	0.000
2488	24.87	24.88	0.01	24.88	0.60	48.06	0.11	0.000	0.000	0.000
2489	24.88	24.89	0.01	24.89	0.60	48.94	0.11	0.000	0.000	0.000

Total primary settlement: 9.41**Total secondary settlement: 5.11****Total calculated settlement: 14.52****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

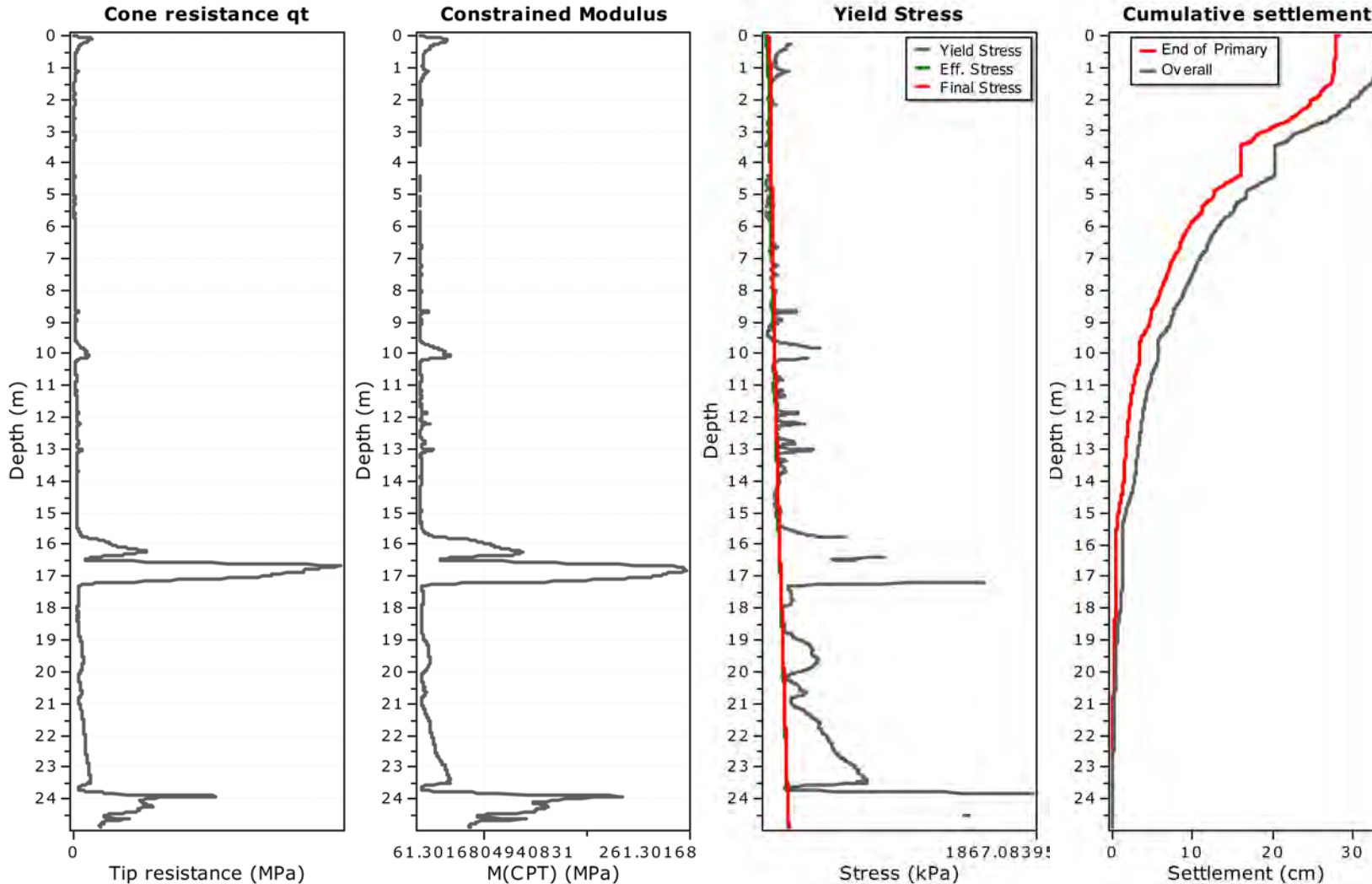
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2485	24.84	24.85	0.01	24.85	1.20	47.00	0.11	0.000	0.000	0.000
2486	24.85	24.86	0.01	24.86	1.20	47.05	0.11	0.000	0.000	0.000
2487	24.86	24.87	0.01	24.87	1.20	47.38	0.11	0.000	0.000	0.000
2488	24.87	24.88	0.01	24.88	1.20	48.06	0.11	0.000	0.000	0.000
2489	24.88	24.89	0.01	24.89	1.20	48.94	0.11	0.000	0.000	0.000

Total primary settlement: 18.83**Total secondary settlement: 5.11****Total calculated settlement: 23.93****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

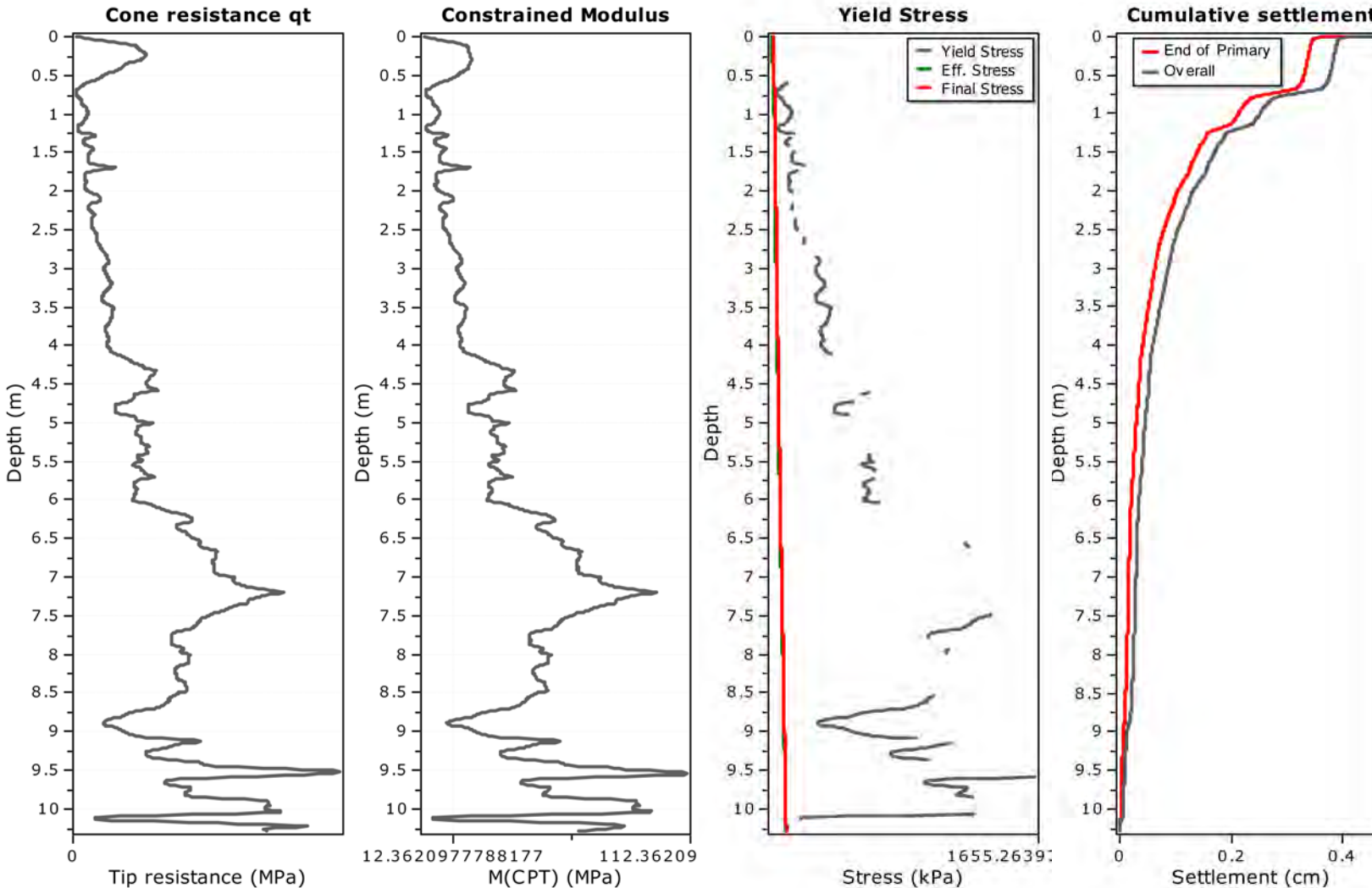
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
2485	24.84	24.85	0.01	24.85	1.81	47.00	0.11	0.000	0.000	0.000
2486	24.85	24.86	0.01	24.86	1.80	47.05	0.11	0.000	0.000	0.000
2487	24.86	24.87	0.01	24.87	1.80	47.38	0.11	0.000	0.000	0.000
2488	24.87	24.88	0.01	24.88	1.80	48.06	0.11	0.000	0.000	0.000
2489	24.88	24.89	0.01	24.89	1.80	48.94	0.11	0.000	0.000	0.000

Total primary settlement: 28.24**Total secondary settlement: 5.11****Total calculated settlement: 33.35****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 5.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: No
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.12	10.13	0.01	10.13	1.68	3.40	0.30	0.000	0.001	0.001
1014	10.13	10.14	0.01	10.13	1.67	3.38	0.30	0.000	0.001	0.001
1015	10.14	10.15	0.01	10.14	1.67	3.38	0.30	0.000	0.001	0.001
1016	10.15	10.16	0.01	10.15	1.67	14.80	0.30	0.000	0.000	0.000
1017	10.16	10.17	0.01	10.16	1.67	36.58	0.30	0.000	0.000	0.000
1018	10.17	10.18	0.01	10.18	1.67	48.58	0.30	0.000	0.000	0.000
1019	10.18	10.19	0.01	10.19	1.67	62.36	0.30	0.000	0.000	0.000
1020	10.19	10.20	0.01	10.20	1.67	65.39	0.30	0.000	0.000	0.000
1021	10.20	10.21	0.01	10.21	1.66	77.24	0.30	0.000	0.000	0.000
1022	10.21	10.22	0.01	10.21	1.66	80.37	0.30	0.000	0.000	0.000
1023	10.22	10.23	0.01	10.22	1.66	83.48	0.30	0.000	0.000	0.000
1024	10.23	10.24	0.01	10.23	1.66	84.52	0.30	0.000	0.000	0.000
1025	10.24	10.25	0.01	10.24	1.66	83.18	0.30	0.000	0.000	0.000
1026	10.25	10.26	0.01	10.26	1.66	80.41	0.30	0.000	0.000	0.000
1027	10.26	10.27	0.01	10.27	1.66	76.76	0.30	0.000	0.000	0.000
1028	10.27	10.28	0.01	10.28	1.65	72.89	0.30	0.000	0.000	0.000
1029	10.28	10.29	0.01	10.29	1.65	68.33	0.30	0.000	0.000	0.000

Total primary settlement: 0.43
Total secondary settlement: 0.05

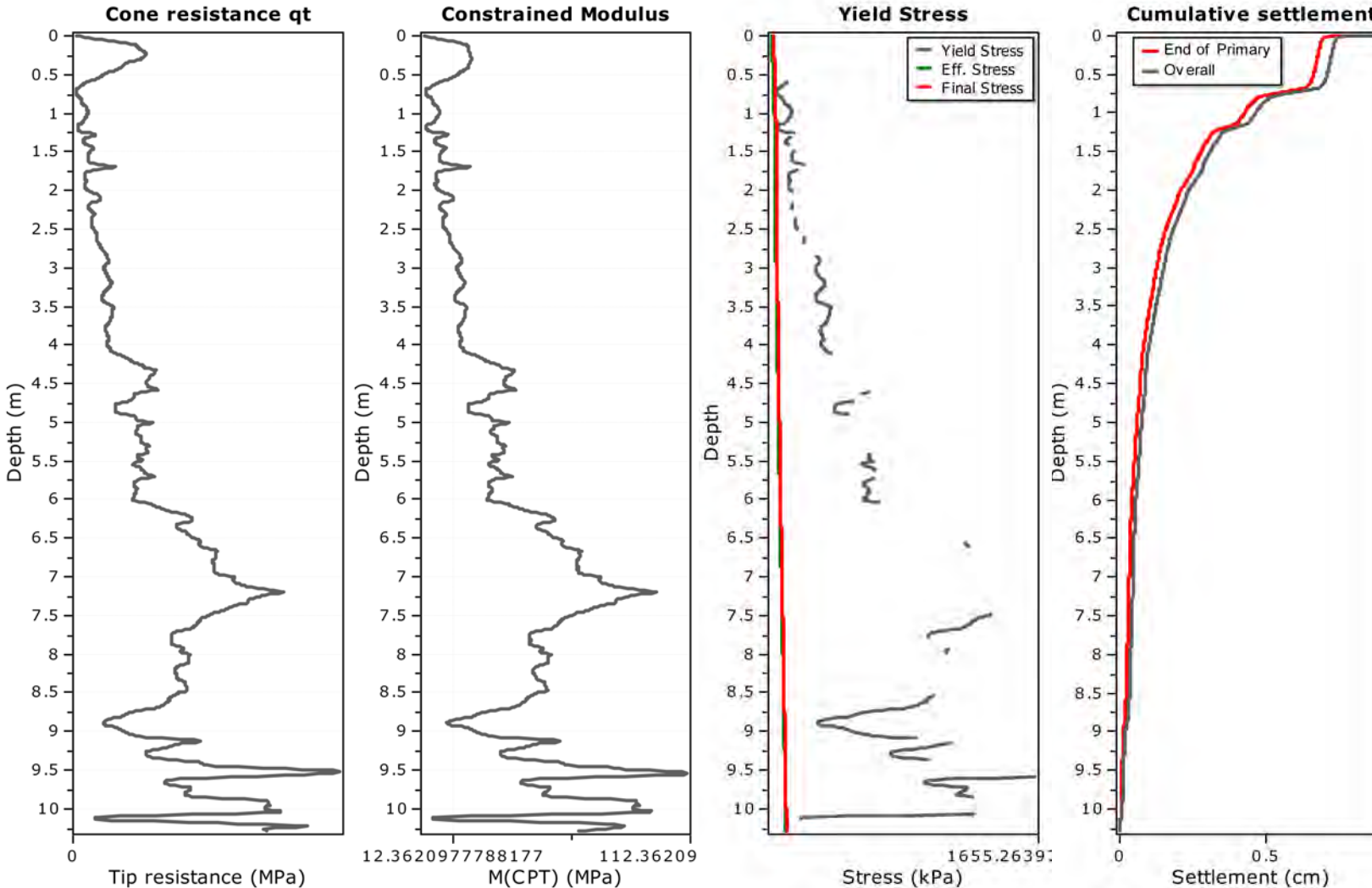
Total calculated settlement: 0.47

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: No
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.12	10.13	0.01	10.13	3.35	3.40	0.30	0.001	0.001	0.002
1014	10.13	10.14	0.01	10.13	3.35	3.38	0.30	0.001	0.001	0.002
1015	10.14	10.15	0.01	10.14	3.35	3.38	0.30	0.001	0.001	0.002
1016	10.15	10.16	0.01	10.15	3.34	14.80	0.30	0.000	0.000	0.000
1017	10.16	10.17	0.01	10.16	3.34	36.58	0.30	0.000	0.000	0.000
1018	10.17	10.18	0.01	10.18	3.34	48.58	0.30	0.000	0.000	0.000
1019	10.18	10.19	0.01	10.19	3.33	62.36	0.30	0.000	0.000	0.000
1020	10.19	10.20	0.01	10.20	3.33	65.39	0.30	0.000	0.000	0.000
1021	10.20	10.21	0.01	10.21	3.33	77.24	0.30	0.000	0.000	0.000
1022	10.21	10.22	0.01	10.21	3.33	80.37	0.30	0.000	0.000	0.000
1023	10.22	10.23	0.01	10.22	3.32	83.48	0.30	0.000	0.000	0.000
1024	10.23	10.24	0.01	10.23	3.32	84.52	0.30	0.000	0.000	0.000
1025	10.24	10.25	0.01	10.24	3.32	83.18	0.30	0.000	0.000	0.000
1026	10.25	10.26	0.01	10.26	3.31	80.41	0.30	0.000	0.000	0.000
1027	10.26	10.27	0.01	10.27	3.31	76.76	0.30	0.000	0.000	0.000
1028	10.27	10.28	0.01	10.28	3.31	72.89	0.30	0.000	0.000	0.000
1029	10.28	10.29	0.01	10.29	3.31	68.33	0.30	0.000	0.000	0.000

Total primary settlement: 0.85
Total secondary settlement: 0.05

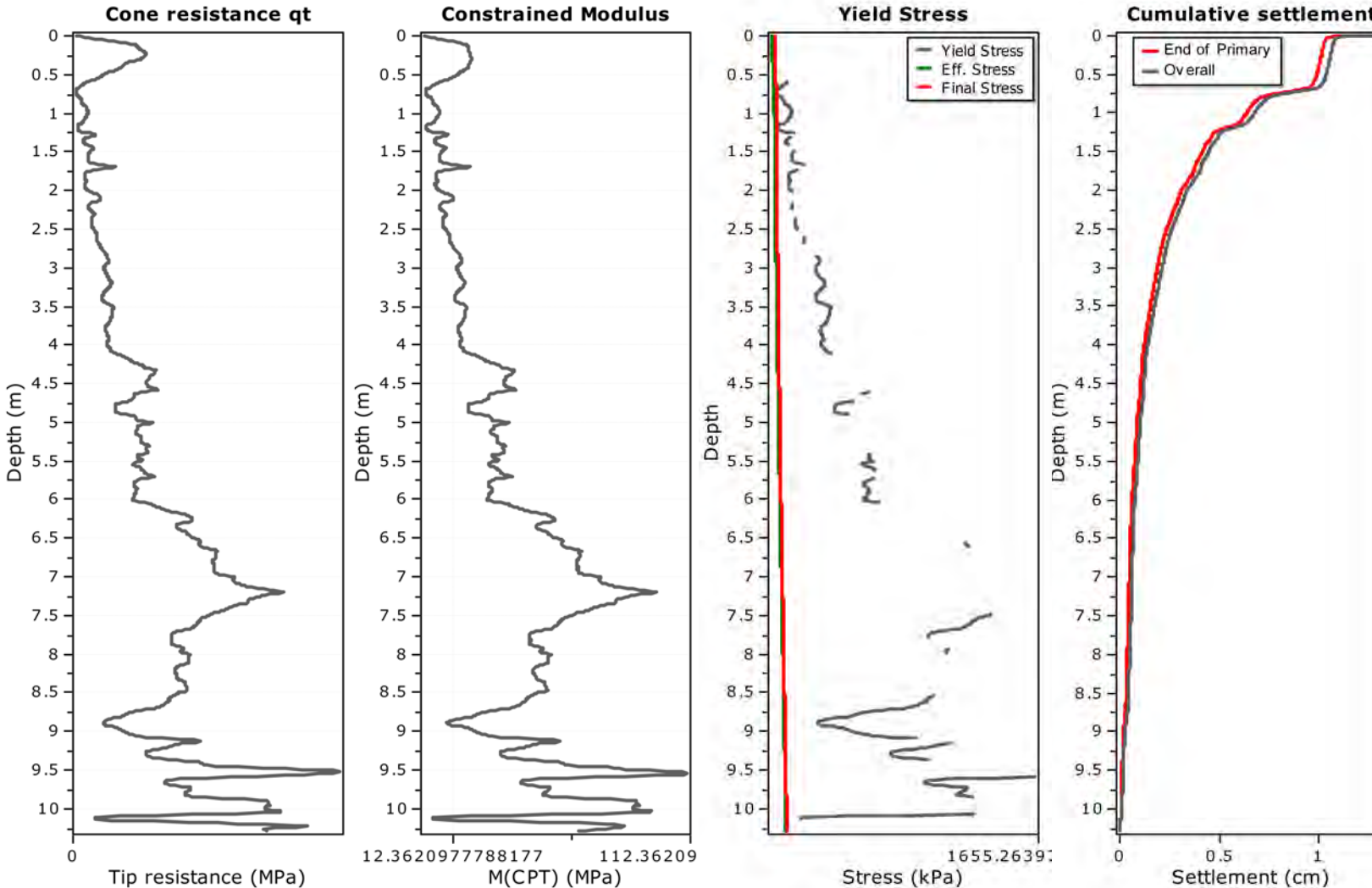
Total calculated settlement: 0.90

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 16.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: No
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.12	10.13	0.01	10.13	5.03	3.40	0.30	0.001	0.001	0.002
1014	10.13	10.14	0.01	10.13	5.02	3.38	0.30	0.001	0.001	0.002
1015	10.14	10.15	0.01	10.14	5.02	3.38	0.30	0.001	0.001	0.002
1016	10.15	10.16	0.01	10.15	5.01	14.80	0.30	0.000	0.000	0.000
1017	10.16	10.17	0.01	10.16	5.01	36.58	0.30	0.000	0.000	0.000
1018	10.17	10.18	0.01	10.18	5.01	48.58	0.30	0.000	0.000	0.000
1019	10.18	10.19	0.01	10.19	5.00	62.36	0.30	0.000	0.000	0.000
1020	10.19	10.20	0.01	10.20	5.00	65.39	0.30	0.000	0.000	0.000
1021	10.20	10.21	0.01	10.21	4.99	77.24	0.30	0.000	0.000	0.000
1022	10.21	10.22	0.01	10.21	4.99	80.37	0.30	0.000	0.000	0.000
1023	10.22	10.23	0.01	10.22	4.98	83.48	0.30	0.000	0.000	0.000
1024	10.23	10.24	0.01	10.23	4.98	84.52	0.30	0.000	0.000	0.000
1025	10.24	10.25	0.01	10.24	4.98	83.18	0.30	0.000	0.000	0.000
1026	10.25	10.26	0.01	10.26	4.97	80.41	0.30	0.000	0.000	0.000
1027	10.26	10.27	0.01	10.27	4.97	76.76	0.30	0.000	0.000	0.000
1028	10.27	10.28	0.01	10.28	4.96	72.89	0.30	0.000	0.000	0.000
1029	10.28	10.29	0.01	10.29	4.96	68.33	0.30	0.000	0.000	0.000

Total primary settlement: 1.28
Total secondary settlement: 0.05

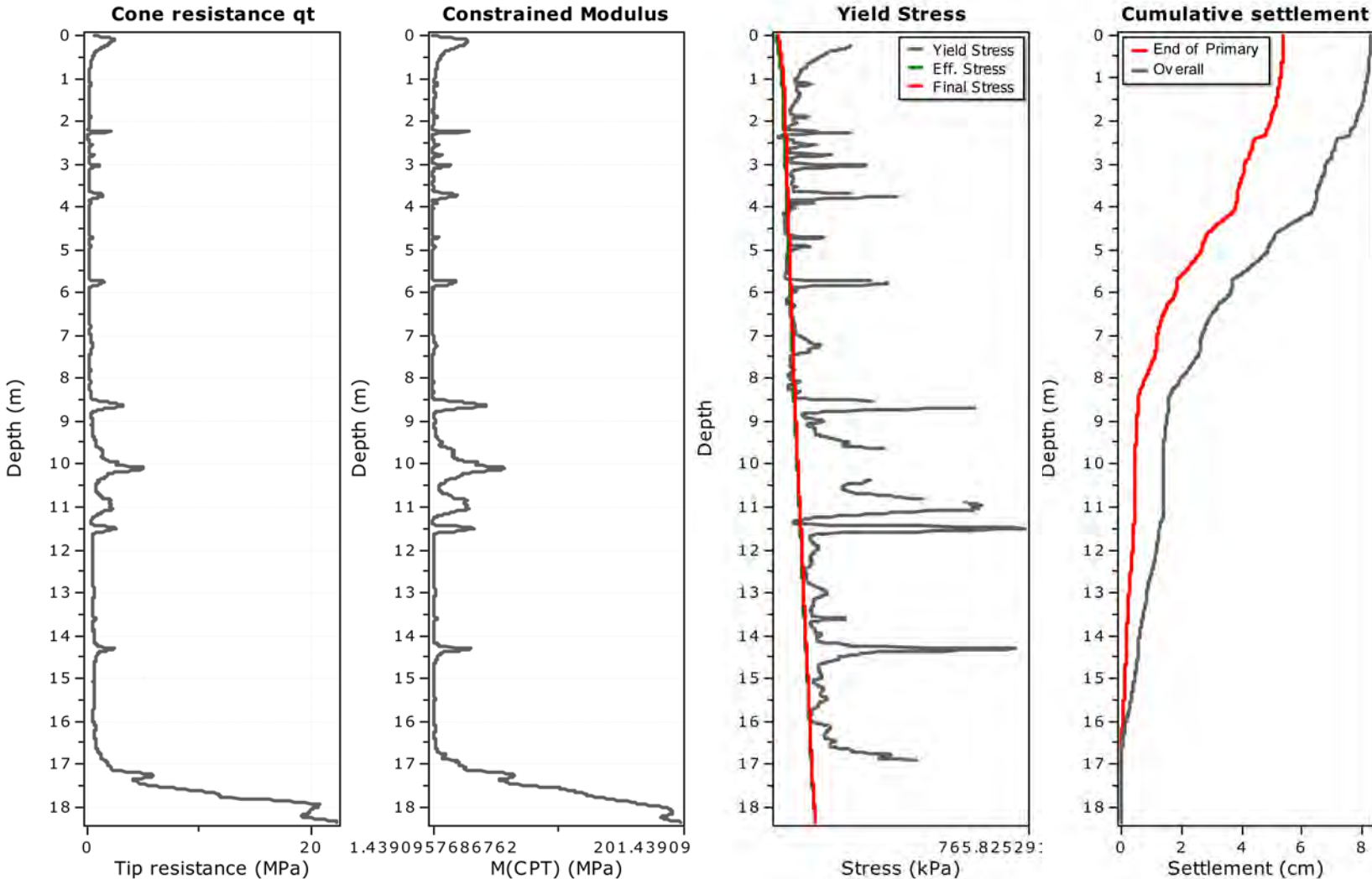
Total calculated settlement: 1.32

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 5.37
Total secondary settlement: 2.89

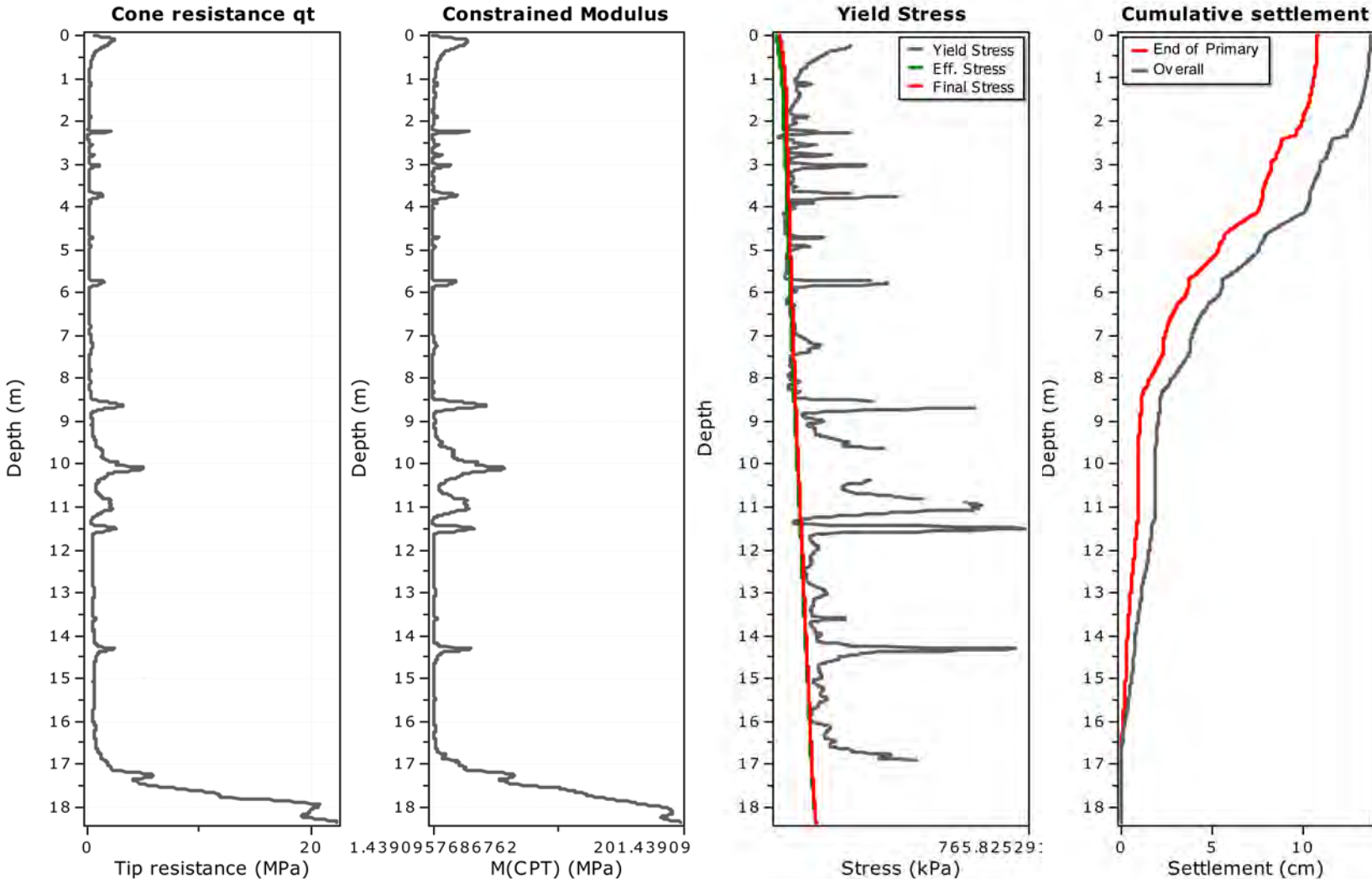
Total calculated settlement: 8.27

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
Footing width: 10.00 (m)
L/B: 2.0
Footing pressure: 11.00 (kPa)
Embedment depth: 0.00 (m)
Footing is rigid: Yes
Remove excavation load: Yes
Apply 20% rule: No
Calculate secondary settlements: Yes
Time period for primary consolidation: 6 months
Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 10.75
Total secondary settlement: 2.89

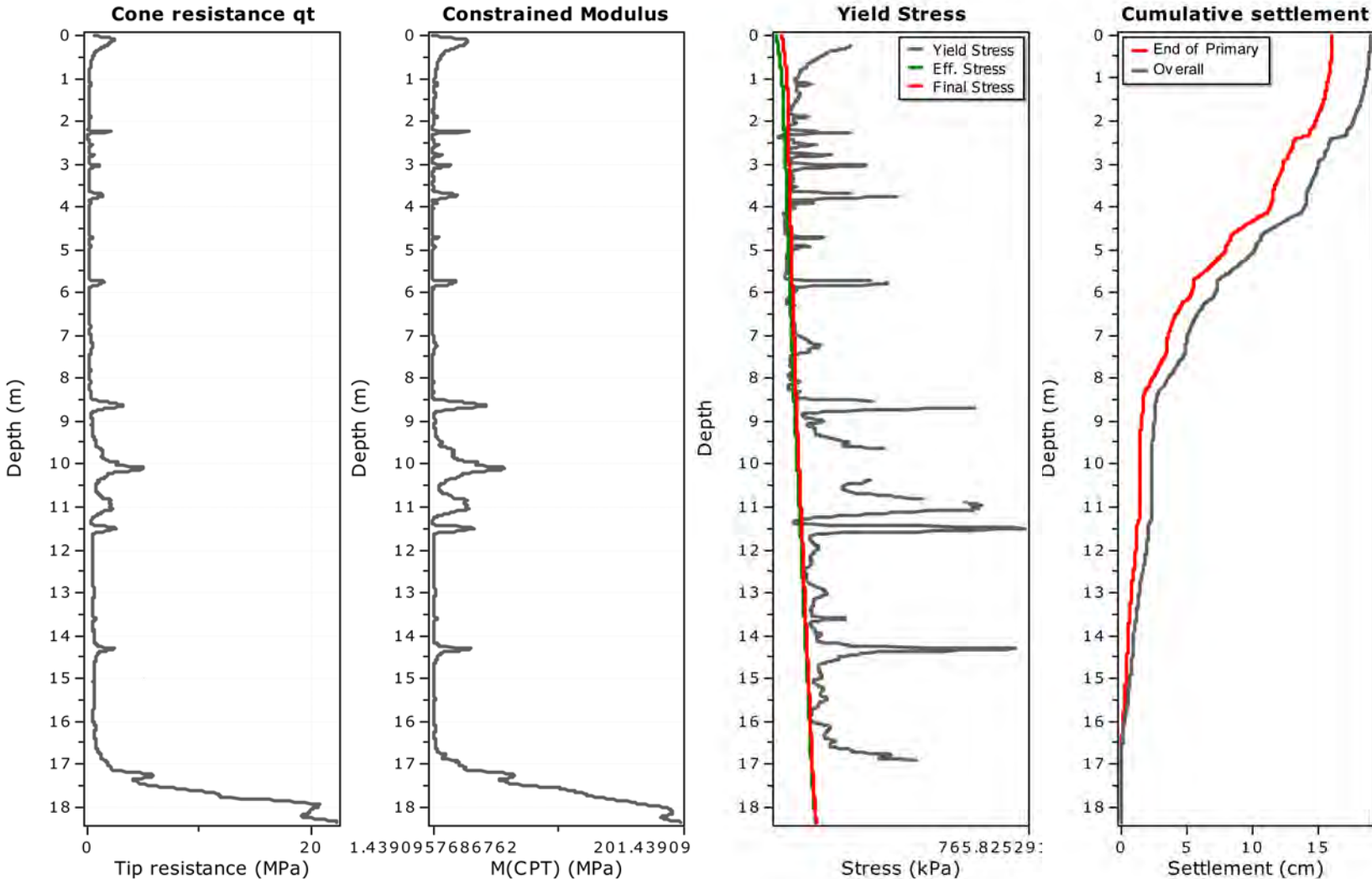
Total calculated settlement: 13.64

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 16.12

Total secondary settlement: 2.89

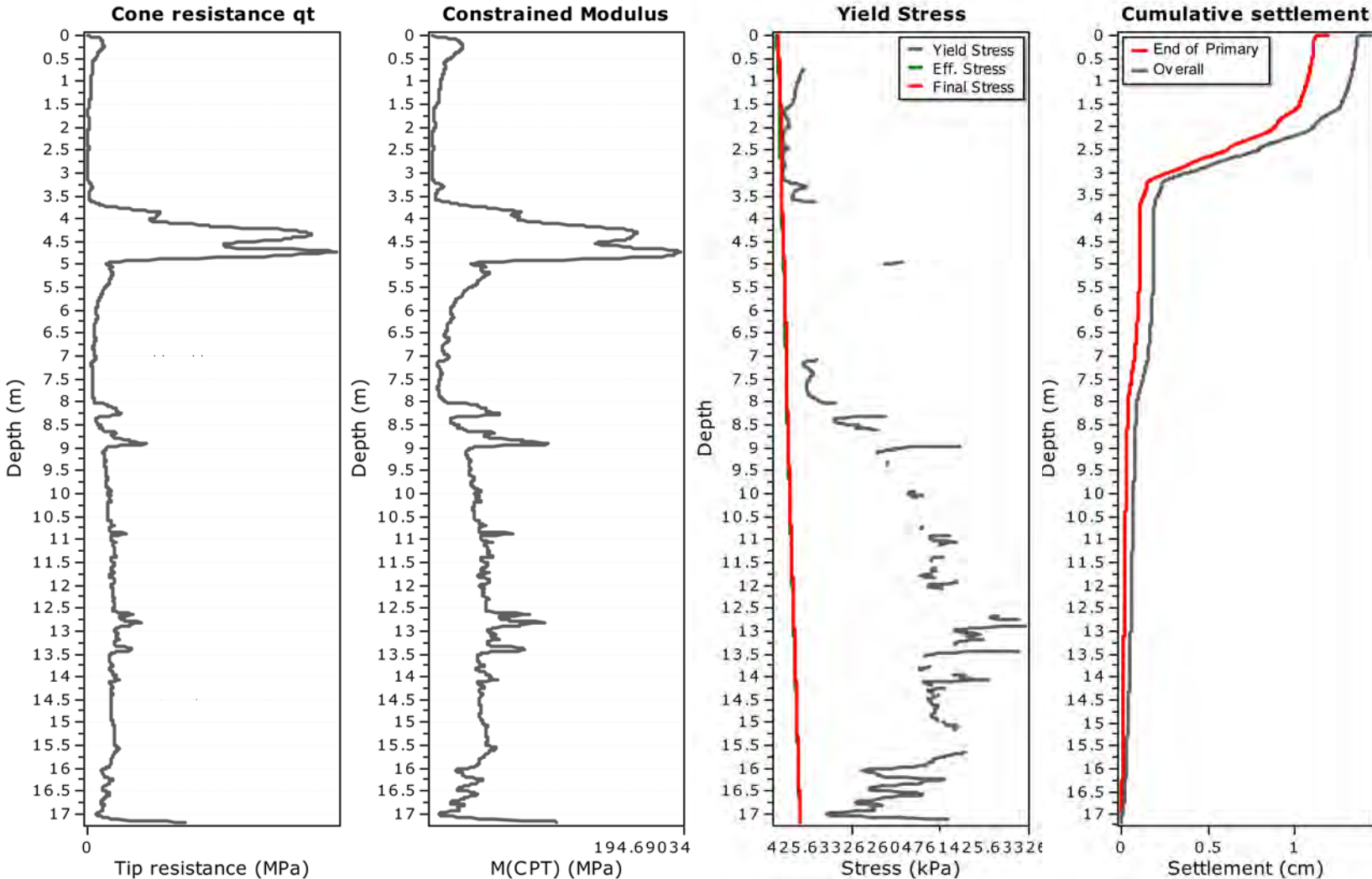
Total calculated settlement: 19.01

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

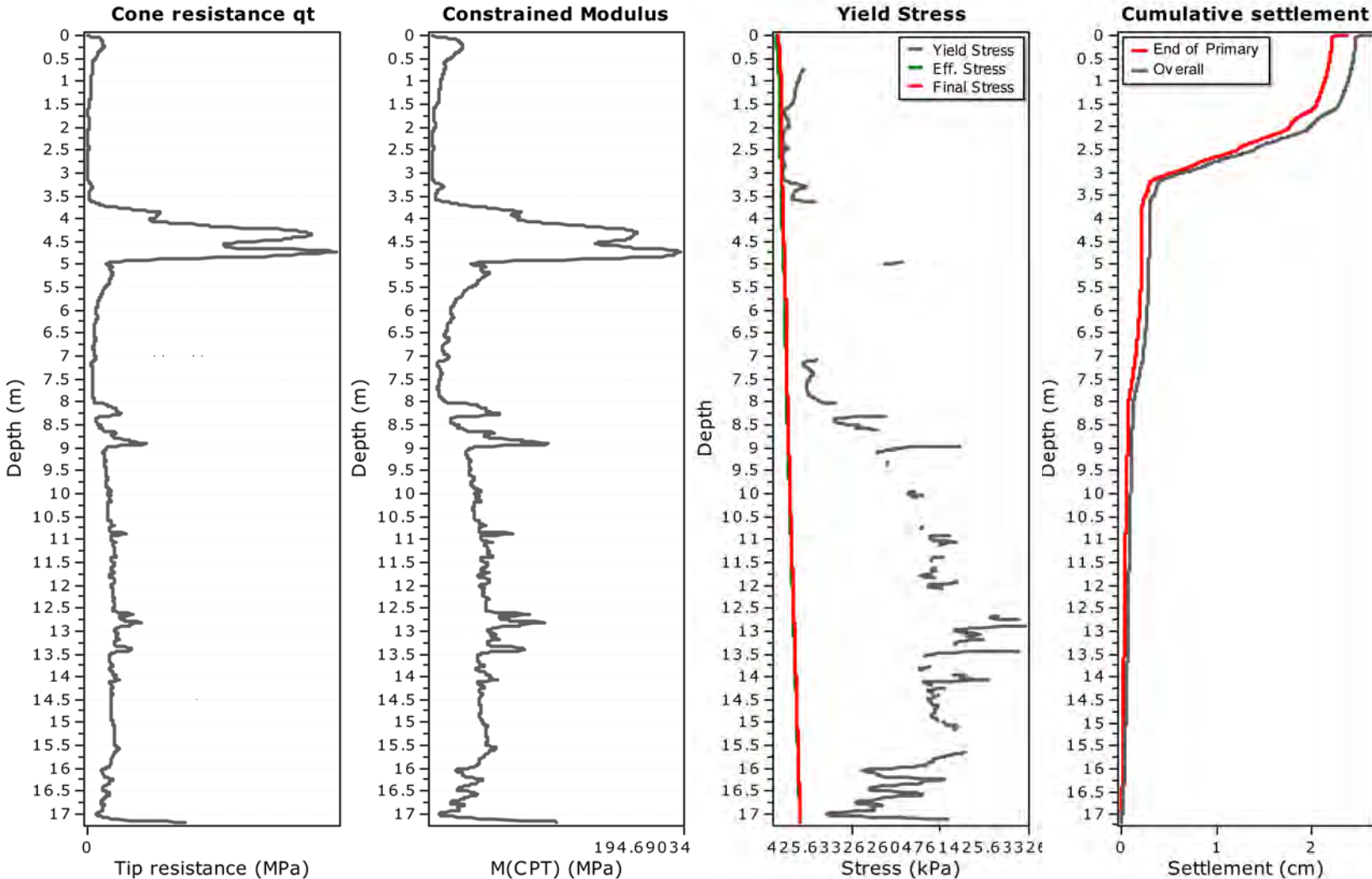
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1703	17.02	17.03	0.01	17.02	0.99	6.44	0.18	0.000	0.001	0.001
1704	17.03	17.04	0.01	17.04	0.99	7.50	0.18	0.000	0.001	0.001
1705	17.04	17.05	0.01	17.05	0.99	9.25	0.18	0.000	0.000	0.001
1706	17.05	17.06	0.01	17.05	0.99	15.70	0.18	0.000	0.000	0.000
1707	17.06	17.07	0.01	17.07	0.99	18.96	0.18	0.000	0.000	0.000
1708	17.07	17.08	0.01	17.07	0.99	26.98	0.18	0.000	0.000	0.000
1709	17.08	17.09	0.01	17.09	0.99	29.56	0.18	0.000	0.000	0.000
1710	17.09	17.10	0.01	17.09	0.99	36.35	0.18	0.000	0.000	0.000
1711	17.10	17.11	0.01	17.11	0.99	40.00	0.18	0.000	0.000	0.000
1712	17.11	17.12	0.01	17.11	0.98	44.24	0.18	0.000	0.000	0.000
1713	17.12	17.13	0.01	17.13	0.98	48.13	0.18	0.000	0.000	0.000
1714	17.13	17.14	0.01	17.14	0.98	68.35	0.18	0.000	0.000	0.000
1715	17.14	17.15	0.01	17.14	0.98	83.75	0.18	0.000	0.000	0.000
1716	17.15	17.16	0.01	17.16	0.98	90.25	0.18	0.000	0.000	0.000
1717	17.16	17.17	0.01	17.16	0.98	95.39	0.18	0.000	0.000	0.000
1718	17.17	17.18	0.01	17.18	0.98	96.33	0.18	0.000	0.000	0.000

Total primary settlement: 1.18**Total secondary settlement: 0.25****Total calculated settlement: 1.43****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \exp\left(-\frac{t}{t_p}\right) \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

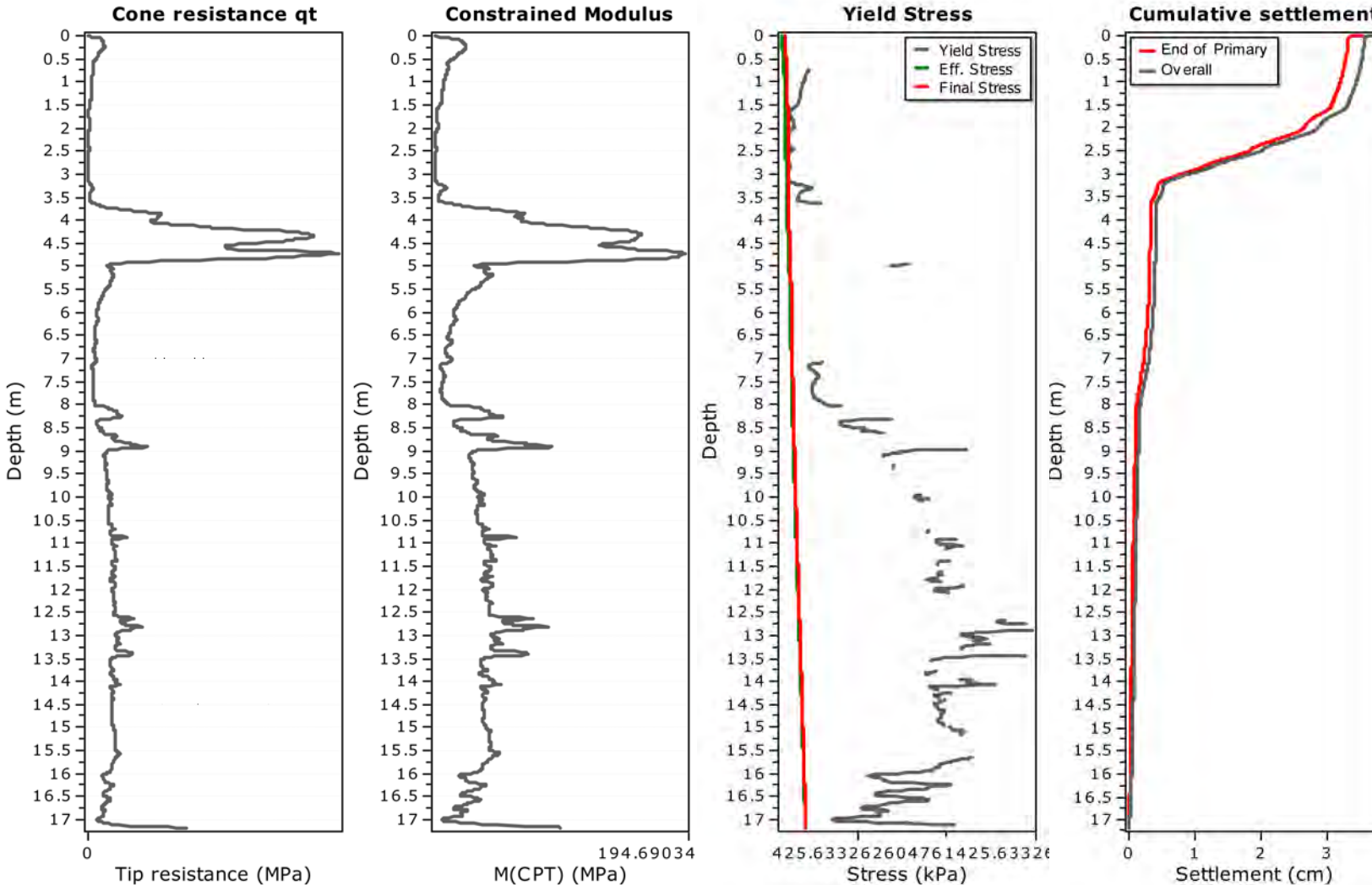
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1703	17.02	17.03	0.01	17.02	1.98	6.44	0.18	0.000	0.001	0.001
1704	17.03	17.04	0.01	17.04	1.98	7.50	0.18	0.000	0.001	0.001
1705	17.04	17.05	0.01	17.05	1.98	9.25	0.18	0.000	0.000	0.001
1706	17.05	17.06	0.01	17.05	1.98	15.70	0.18	0.000	0.000	0.000
1707	17.06	17.07	0.01	17.07	1.98	18.96	0.18	0.000	0.000	0.000
1708	17.07	17.08	0.01	17.07	1.98	26.98	0.18	0.000	0.000	0.000
1709	17.08	17.09	0.01	17.09	1.97	29.56	0.18	0.000	0.000	0.000
1710	17.09	17.10	0.01	17.09	1.97	36.35	0.18	0.000	0.000	0.000
1711	17.10	17.11	0.01	17.11	1.97	40.00	0.18	0.000	0.000	0.000
1712	17.11	17.12	0.01	17.11	1.97	44.24	0.18	0.000	0.000	0.000
1713	17.12	17.13	0.01	17.13	1.97	48.13	0.18	0.000	0.000	0.000
1714	17.13	17.14	0.01	17.14	1.97	68.35	0.18	0.000	0.000	0.000
1715	17.14	17.15	0.01	17.14	1.97	83.75	0.18	0.000	0.000	0.000
1716	17.15	17.16	0.01	17.16	1.96	90.25	0.18	0.000	0.000	0.000
1717	17.16	17.17	0.01	17.16	1.96	95.39	0.18	0.000	0.000	0.000
1718	17.17	17.18	0.01	17.18	1.96	96.33	0.18	0.000	0.000	0.000

Total primary settlement: 2.37**Total secondary settlement: 0.25****Total calculated settlement: 2.62****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

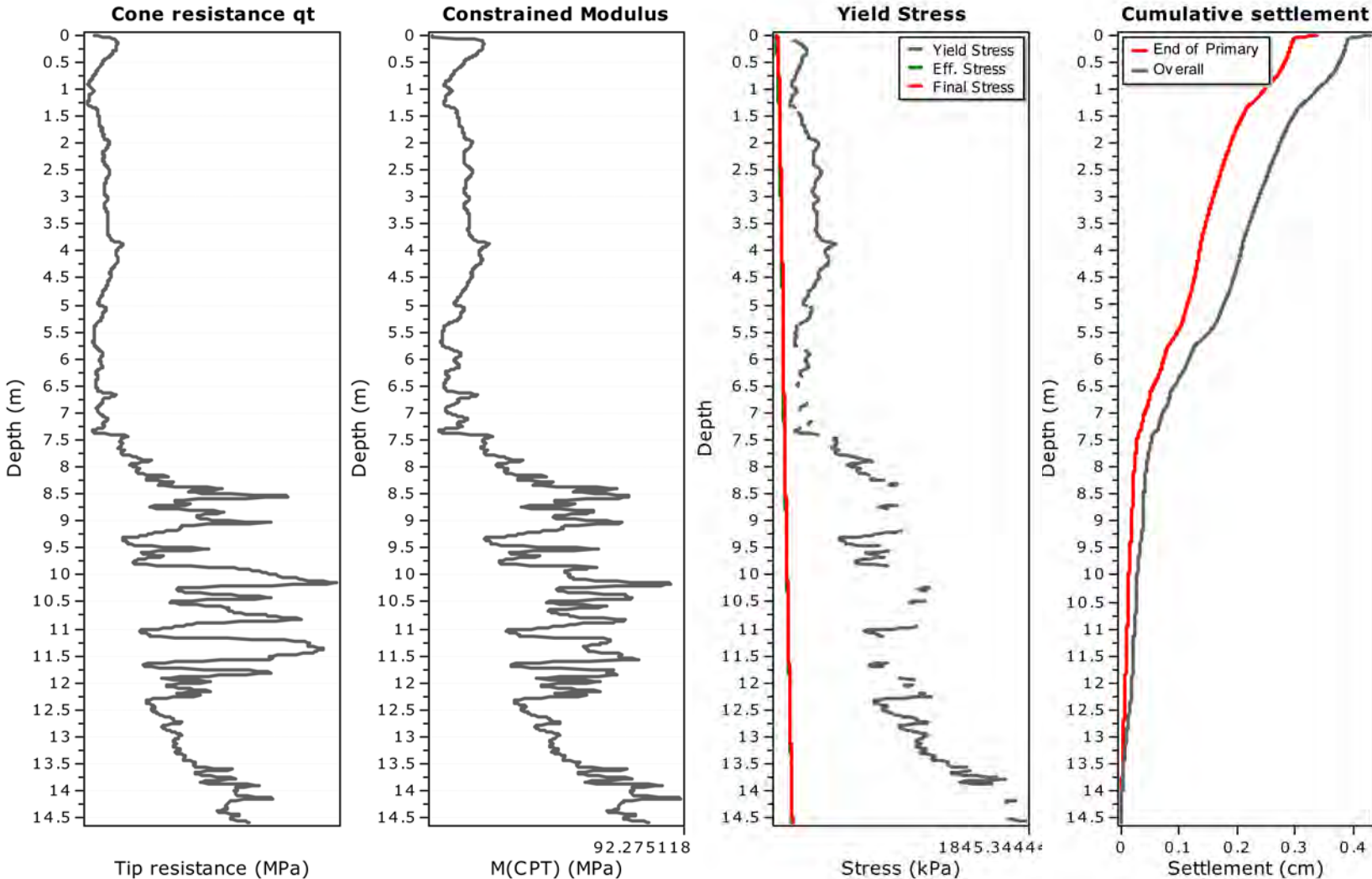
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1703	17.02	17.03	0.01	17.02	2.97	6.44	0.18	0.000	0.001	0.001
1704	17.03	17.04	0.01	17.04	2.97	7.50	0.18	0.000	0.001	0.001
1705	17.04	17.05	0.01	17.05	2.97	9.25	0.18	0.000	0.000	0.001
1706	17.05	17.06	0.01	17.05	2.97	15.70	0.18	0.000	0.000	0.000
1707	17.06	17.07	0.01	17.07	2.97	18.96	0.18	0.000	0.000	0.000
1708	17.07	17.08	0.01	17.07	2.96	26.98	0.18	0.000	0.000	0.000
1709	17.08	17.09	0.01	17.09	2.96	29.56	0.18	0.000	0.000	0.000
1710	17.09	17.10	0.01	17.09	2.96	36.35	0.18	0.000	0.000	0.000
1711	17.10	17.11	0.01	17.11	2.96	40.00	0.18	0.000	0.000	0.000
1712	17.11	17.12	0.01	17.11	2.95	44.24	0.18	0.000	0.000	0.000
1713	17.12	17.13	0.01	17.13	2.95	48.13	0.18	0.000	0.000	0.000
1714	17.13	17.14	0.01	17.14	2.95	68.35	0.18	0.000	0.000	0.000
1715	17.14	17.15	0.01	17.14	2.95	83.75	0.18	0.000	0.000	0.000
1716	17.15	17.16	0.01	17.16	2.95	90.25	0.18	0.000	0.000	0.000
1717	17.16	17.17	0.01	17.16	2.94	95.39	0.18	0.000	0.000	0.000
1718	17.17	17.18	0.01	17.18	2.94	96.33	0.18	0.000	0.000	0.000

Total primary settlement: 3.55**Total secondary settlement: 0.25****Total calculated settlement: 3.80****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

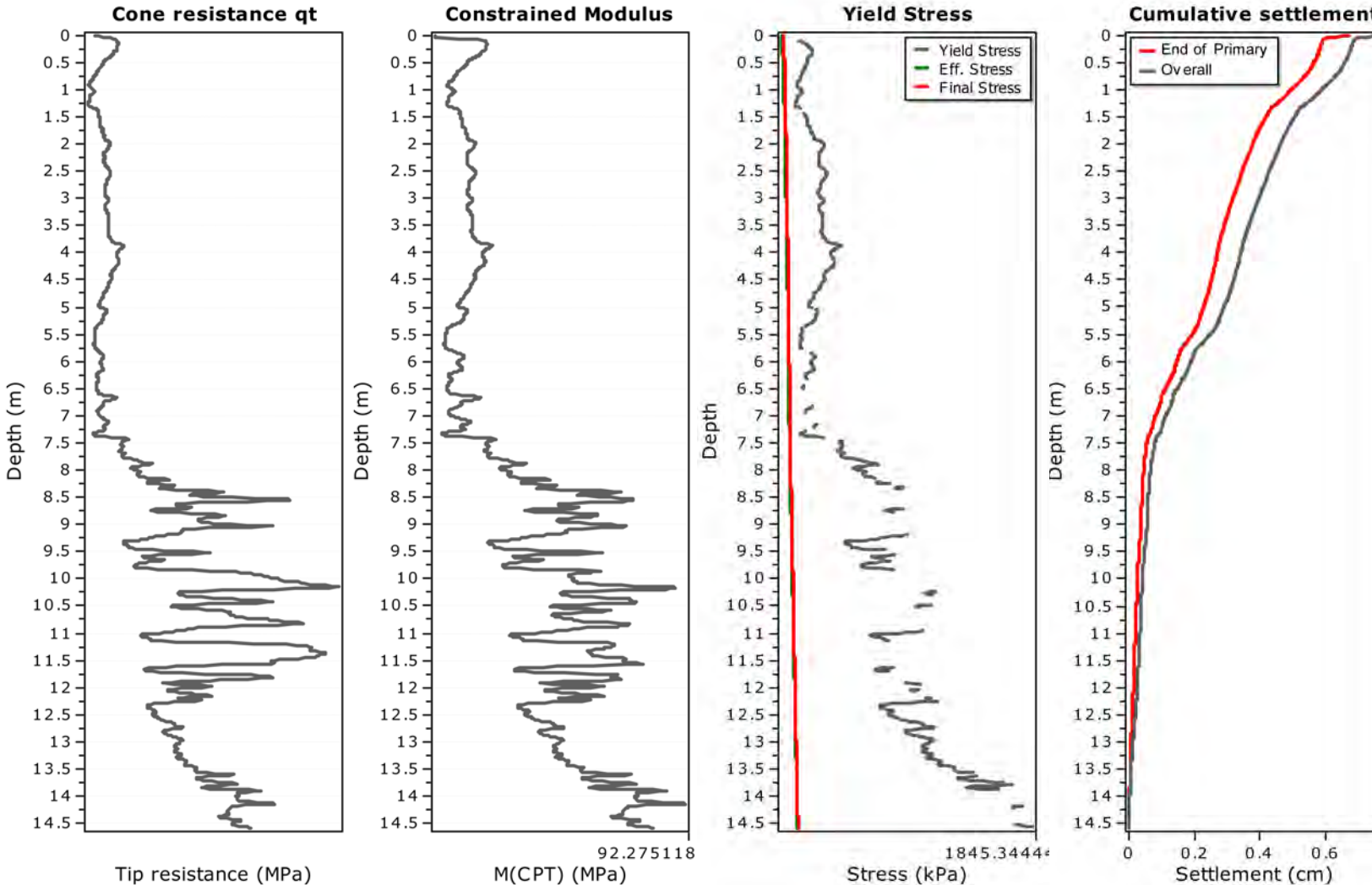
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1427	14.27	14.28	0.01	14.28	1.21	68.47	0.22	0.000	0.000	0.000
1428	14.28	14.29	0.01	14.29	1.21	68.32	0.22	0.000	0.000	0.000
1429	14.29	14.30	0.01	14.30	1.21	68.30	0.22	0.000	0.000	0.000
1430	14.30	14.31	0.01	14.31	1.21	68.55	0.22	0.000	0.000	0.000
1431	14.31	14.32	0.01	14.32	1.20	68.63	0.22	0.000	0.000	0.000
1432	14.32	14.33	0.01	14.33	1.20	68.72	0.22	0.000	0.000	0.000
1433	14.33	14.34	0.01	14.34	1.20	68.61	0.22	0.000	0.000	0.000
1434	14.34	14.35	0.01	14.35	1.20	68.08	0.22	0.000	0.000	0.000
1435	14.35	14.36	0.01	14.36	1.20	67.39	0.22	0.000	0.000	0.000
1436	14.36	14.37	0.01	14.37	1.20	65.77	0.22	0.000	0.000	0.000
1437	14.37	14.38	0.01	14.38	1.20	64.66	0.22	0.000	0.000	0.000
1438	14.38	14.39	0.01	14.39	1.20	63.93	0.22	0.000	0.000	0.000
1439	14.39	14.40	0.01	14.40	1.20	64.58	0.22	0.000	0.000	0.000
1440	14.40	14.41	0.01	14.41	1.20	66.00	0.22	0.000	0.000	0.000
1441	14.41	14.42	0.01	14.42	1.20	68.09	0.22	0.000	0.000	0.000
1442	14.42	14.43	0.01	14.43	1.19	70.77	0.22	0.000	0.000	0.000
1443	14.43	14.44	0.01	14.44	1.19	72.65	0.22	0.000	0.000	0.000
1444	14.44	14.45	0.01	14.45	1.19	74.16	0.22	0.000	0.000	0.000
1445	14.45	14.46	0.01	14.46	1.19	74.56	0.22	0.000	0.000	0.000
1446	14.46	14.47	0.01	14.47	1.19	74.68	0.22	0.000	0.000	0.000
1447	14.47	14.48	0.01	14.48	1.19	73.68	0.22	0.000	0.000	0.000
1448	14.48	14.49	0.01	14.49	1.19	72.48	0.22	0.000	0.000	0.000
1449	14.49	14.50	0.01	14.50	1.19	71.37	0.22	0.000	0.000	0.000
1450	14.50	14.51	0.01	14.51	1.19	70.65	0.22	0.000	0.000	0.000
1451	14.51	14.52	0.01	14.52	1.19	70.31	0.22	0.000	0.000	0.000
1452	14.52	14.53	0.01	14.53	1.19	70.31	0.22	0.000	0.000	0.000
1453	14.53	14.54	0.01	14.54	1.18	70.64	0.22	0.000	0.000	0.000
1454	14.54	14.55	0.01	14.55	1.18	71.76	0.22	0.000	0.000	0.000
1455	14.55	14.56	0.01	14.56	1.18	73.48	0.22	0.000	0.000	0.000
1456	14.56	14.57	0.01	14.57	1.18	75.62	0.21	0.000	0.000	0.000
1457	14.57	14.58	0.01	14.58	1.18	77.80	0.21	0.000	0.000	0.000
1458	14.58	14.59	0.01	14.59	1.18	79.02	0.21	0.000	0.000	0.000

Total primary settlement: 0.34**Total secondary settlement: 0.09****Total calculated settlement: 0.43****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

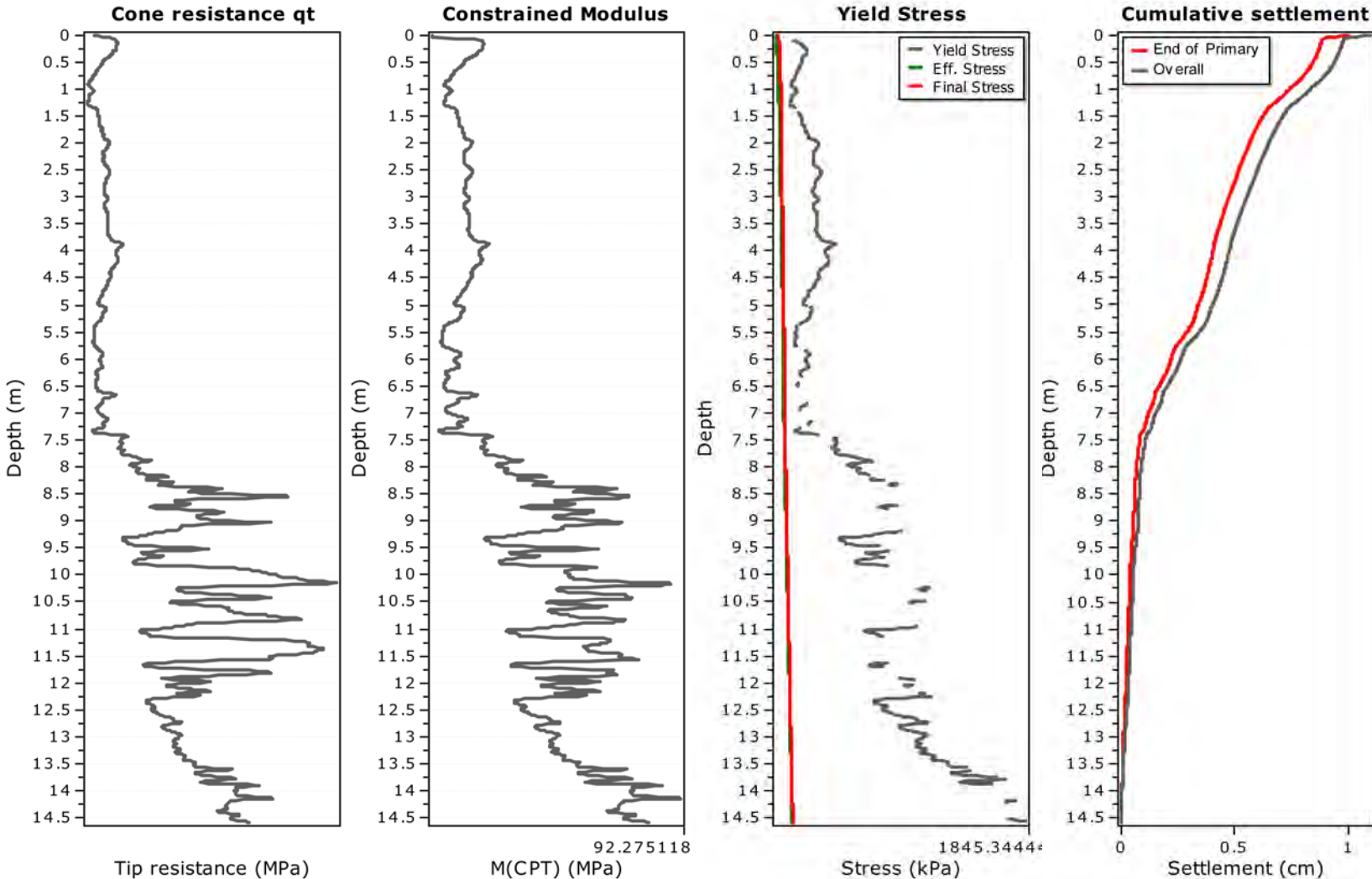
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1427	14.27	14.28	0.01	14.28	2.42	68.47	0.22	0.000	0.000	0.000
1428	14.28	14.29	0.01	14.29	2.41	68.32	0.22	0.000	0.000	0.000
1429	14.29	14.30	0.01	14.30	2.41	68.30	0.22	0.000	0.000	0.000
1430	14.30	14.31	0.01	14.31	2.41	68.55	0.22	0.000	0.000	0.000
1431	14.31	14.32	0.01	14.32	2.41	68.63	0.22	0.000	0.000	0.000
1432	14.32	14.33	0.01	14.33	2.41	68.72	0.22	0.000	0.000	0.000
1433	14.33	14.34	0.01	14.34	2.41	68.61	0.22	0.000	0.000	0.000
1434	14.34	14.35	0.01	14.35	2.40	68.08	0.22	0.000	0.000	0.000
1435	14.35	14.36	0.01	14.36	2.40	67.39	0.22	0.000	0.000	0.000
1436	14.36	14.37	0.01	14.37	2.40	65.77	0.22	0.000	0.000	0.000
1437	14.37	14.38	0.01	14.38	2.40	64.66	0.22	0.000	0.000	0.000
1438	14.38	14.39	0.01	14.39	2.40	63.93	0.22	0.000	0.000	0.000
1439	14.39	14.40	0.01	14.40	2.39	64.58	0.22	0.000	0.000	0.000
1440	14.40	14.41	0.01	14.41	2.39	66.00	0.22	0.000	0.000	0.000
1441	14.41	14.42	0.01	14.42	2.39	68.09	0.22	0.000	0.000	0.000
1442	14.42	14.43	0.01	14.43	2.39	70.77	0.22	0.000	0.000	0.000
1443	14.43	14.44	0.01	14.44	2.39	72.65	0.22	0.000	0.000	0.000
1444	14.44	14.45	0.01	14.45	2.39	74.16	0.22	0.000	0.000	0.000
1445	14.45	14.46	0.01	14.46	2.38	74.56	0.22	0.000	0.000	0.000
1446	14.46	14.47	0.01	14.47	2.38	74.68	0.22	0.000	0.000	0.000
1447	14.47	14.48	0.01	14.48	2.38	73.68	0.22	0.000	0.000	0.000
1448	14.48	14.49	0.01	14.49	2.38	72.48	0.22	0.000	0.000	0.000
1449	14.49	14.50	0.01	14.50	2.38	71.37	0.22	0.000	0.000	0.000
1450	14.50	14.51	0.01	14.51	2.37	70.65	0.22	0.000	0.000	0.000
1451	14.51	14.52	0.01	14.52	2.37	70.31	0.22	0.000	0.000	0.000
1452	14.52	14.53	0.01	14.53	2.37	70.31	0.22	0.000	0.000	0.000
1453	14.53	14.54	0.01	14.54	2.37	70.64	0.22	0.000	0.000	0.000
1454	14.54	14.55	0.01	14.55	2.37	71.76	0.22	0.000	0.000	0.000
1455	14.55	14.56	0.01	14.56	2.37	73.48	0.22	0.000	0.000	0.000
1456	14.56	14.57	0.01	14.57	2.36	75.62	0.21	0.000	0.000	0.000
1457	14.57	14.58	0.01	14.58	2.36	77.80	0.21	0.000	0.000	0.000
1458	14.58	14.59	0.01	14.59	2.36	79.02	0.21	0.000	0.000	0.000

Total primary settlement: 0.67**Total secondary settlement: 0.09****Total calculated settlement: 0.76****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

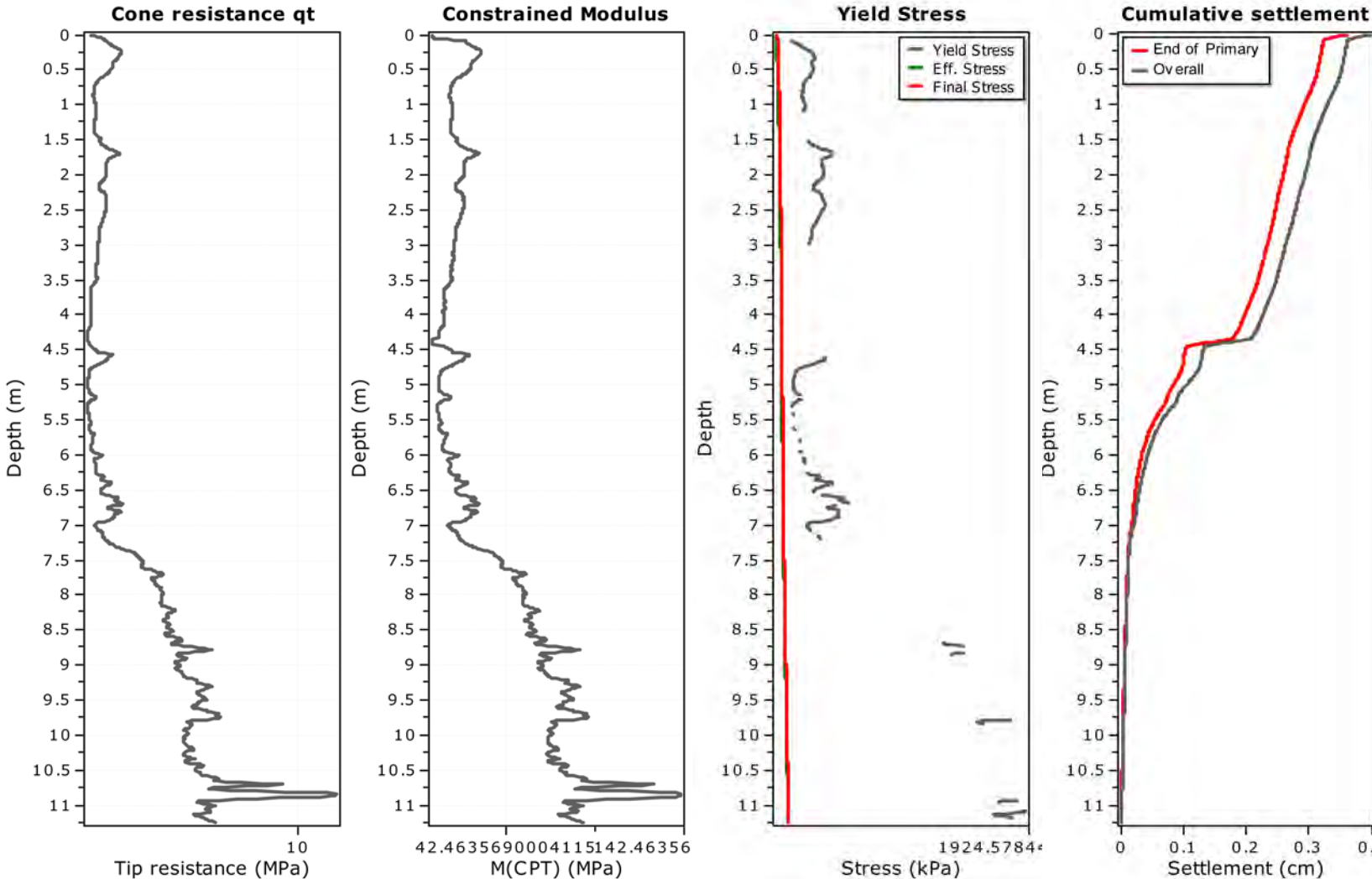
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1427	14.27	14.28	0.01	14.28	3.62	68.47	0.22	0.000	0.000	0.000
1428	14.28	14.29	0.01	14.29	3.62	68.32	0.22	0.000	0.000	0.000
1429	14.29	14.30	0.01	14.30	3.62	68.30	0.22	0.000	0.000	0.000
1430	14.30	14.31	0.01	14.31	3.62	68.55	0.22	0.000	0.000	0.000
1431	14.31	14.32	0.01	14.32	3.61	68.63	0.22	0.000	0.000	0.000
1432	14.32	14.33	0.01	14.33	3.61	68.72	0.22	0.000	0.000	0.000
1433	14.33	14.34	0.01	14.34	3.61	68.61	0.22	0.000	0.000	0.000
1434	14.34	14.35	0.01	14.35	3.60	68.08	0.22	0.000	0.000	0.000
1435	14.35	14.36	0.01	14.36	3.60	67.39	0.22	0.000	0.000	0.000
1436	14.36	14.37	0.01	14.37	3.60	65.77	0.22	0.000	0.000	0.000
1437	14.37	14.38	0.01	14.38	3.60	64.66	0.22	0.000	0.000	0.000
1438	14.38	14.39	0.01	14.39	3.59	63.93	0.22	0.000	0.000	0.000
1439	14.39	14.40	0.01	14.40	3.59	64.58	0.22	0.000	0.000	0.000
1440	14.40	14.41	0.01	14.41	3.59	66.00	0.22	0.000	0.000	0.000
1441	14.41	14.42	0.01	14.42	3.59	68.09	0.22	0.000	0.000	0.000
1442	14.42	14.43	0.01	14.43	3.58	70.77	0.22	0.000	0.000	0.000
1443	14.43	14.44	0.01	14.44	3.58	72.65	0.22	0.000	0.000	0.000
1444	14.44	14.45	0.01	14.45	3.58	74.16	0.22	0.000	0.000	0.000
1445	14.45	14.46	0.01	14.46	3.58	74.56	0.22	0.000	0.000	0.000
1446	14.46	14.47	0.01	14.47	3.57	74.68	0.22	0.000	0.000	0.000
1447	14.47	14.48	0.01	14.48	3.57	73.68	0.22	0.000	0.000	0.000
1448	14.48	14.49	0.01	14.49	3.57	72.48	0.22	0.000	0.000	0.000
1449	14.49	14.50	0.01	14.50	3.57	71.37	0.22	0.000	0.000	0.000
1450	14.50	14.51	0.01	14.51	3.56	70.65	0.22	0.000	0.000	0.000
1451	14.51	14.52	0.01	14.52	3.56	70.31	0.22	0.000	0.000	0.000
1452	14.52	14.53	0.01	14.53	3.56	70.31	0.22	0.000	0.000	0.000
1453	14.53	14.54	0.01	14.54	3.55	70.64	0.22	0.000	0.000	0.000
1454	14.54	14.55	0.01	14.55	3.55	71.76	0.22	0.000	0.000	0.000
1455	14.55	14.56	0.01	14.56	3.55	73.48	0.22	0.000	0.000	0.000
1456	14.56	14.57	0.01	14.57	3.55	75.62	0.21	0.000	0.000	0.000
1457	14.57	14.58	0.01	14.58	3.54	77.80	0.21	0.000	0.000	0.000
1458	14.58	14.59	0.01	14.59	3.54	79.02	0.21	0.000	0.000	0.000

Total primary settlement: 1.01**Total secondary settlement: 0.09****Total calculated settlement: 1.10****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.05	1.55	78.40	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.06	1.55	78.58	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.07	1.55	79.69	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	1.55	81.39	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	1.55	82.50	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	1.55	82.11	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	1.54	79.44	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	1.54	75.51	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.13	1.54	72.67	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.14	1.54	71.39	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.15	1.54	72.35	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.16	1.54	74.85	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	1.54	76.75	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	1.54	78.08	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	1.53	78.03	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	1.53	78.60	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.21	1.53	79.89	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.22	1.53	81.47	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.23	1.53	83.42	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.24	1.53	84.88	0.28	0.000	0.000	0.000

Total primary settlement: 0.36
Total secondary settlement: 0.04

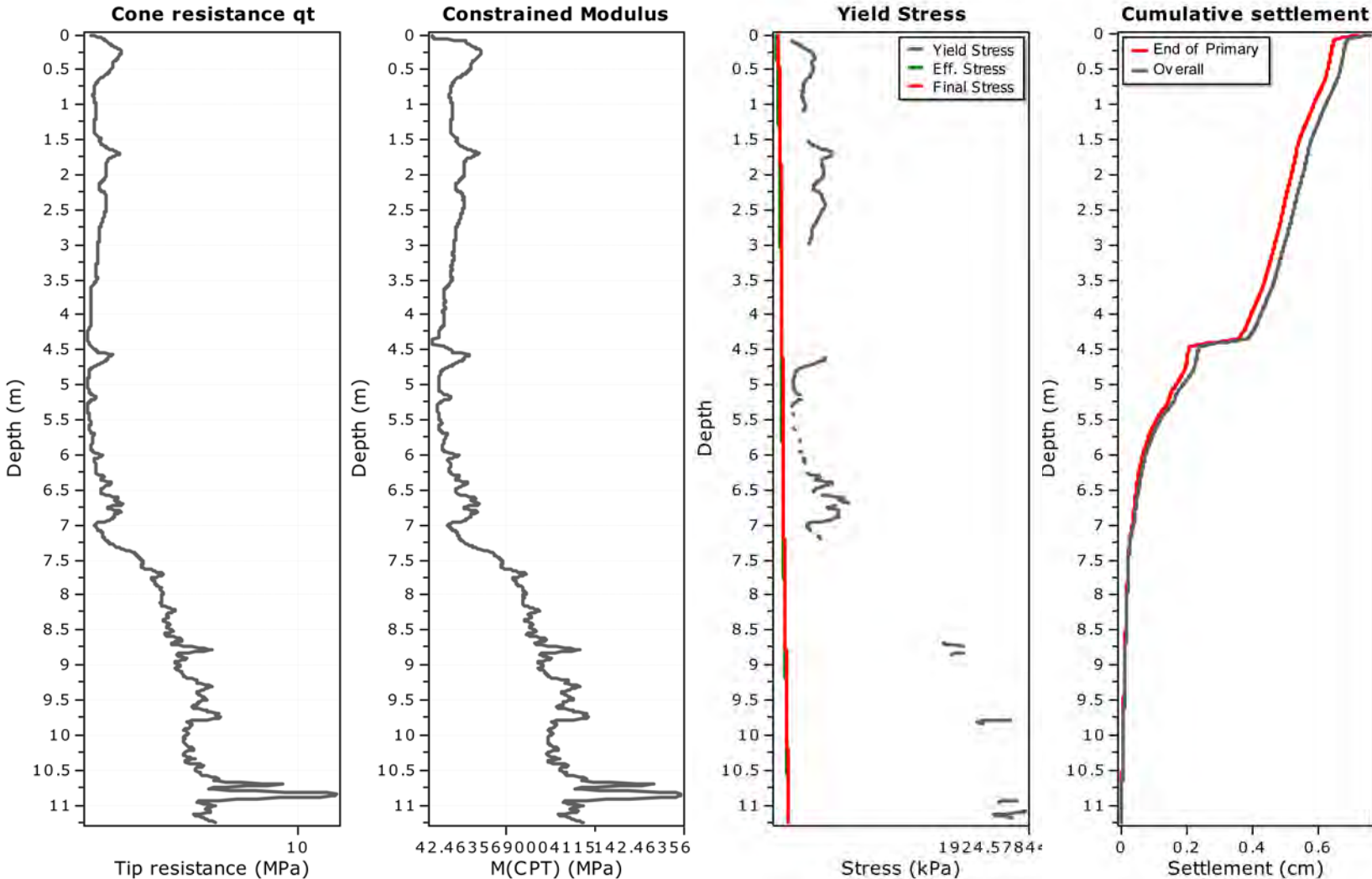
Total calculated settlement: 0.40

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.05	3.10	78.40	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.06	3.10	78.58	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.07	3.10	79.69	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	3.10	81.39	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	3.09	82.50	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	3.09	82.11	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	3.09	79.44	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	3.09	75.51	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.13	3.08	72.67	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.14	3.08	71.39	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.15	3.08	72.35	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.16	3.08	74.85	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	3.07	76.75	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	3.07	78.08	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	3.07	78.03	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	3.07	78.60	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.21	3.06	79.89	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.22	3.06	81.47	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.23	3.06	83.42	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.24	3.06	84.88	0.28	0.000	0.000	0.000

Total primary settlement: 0.72
Total secondary settlement: 0.04

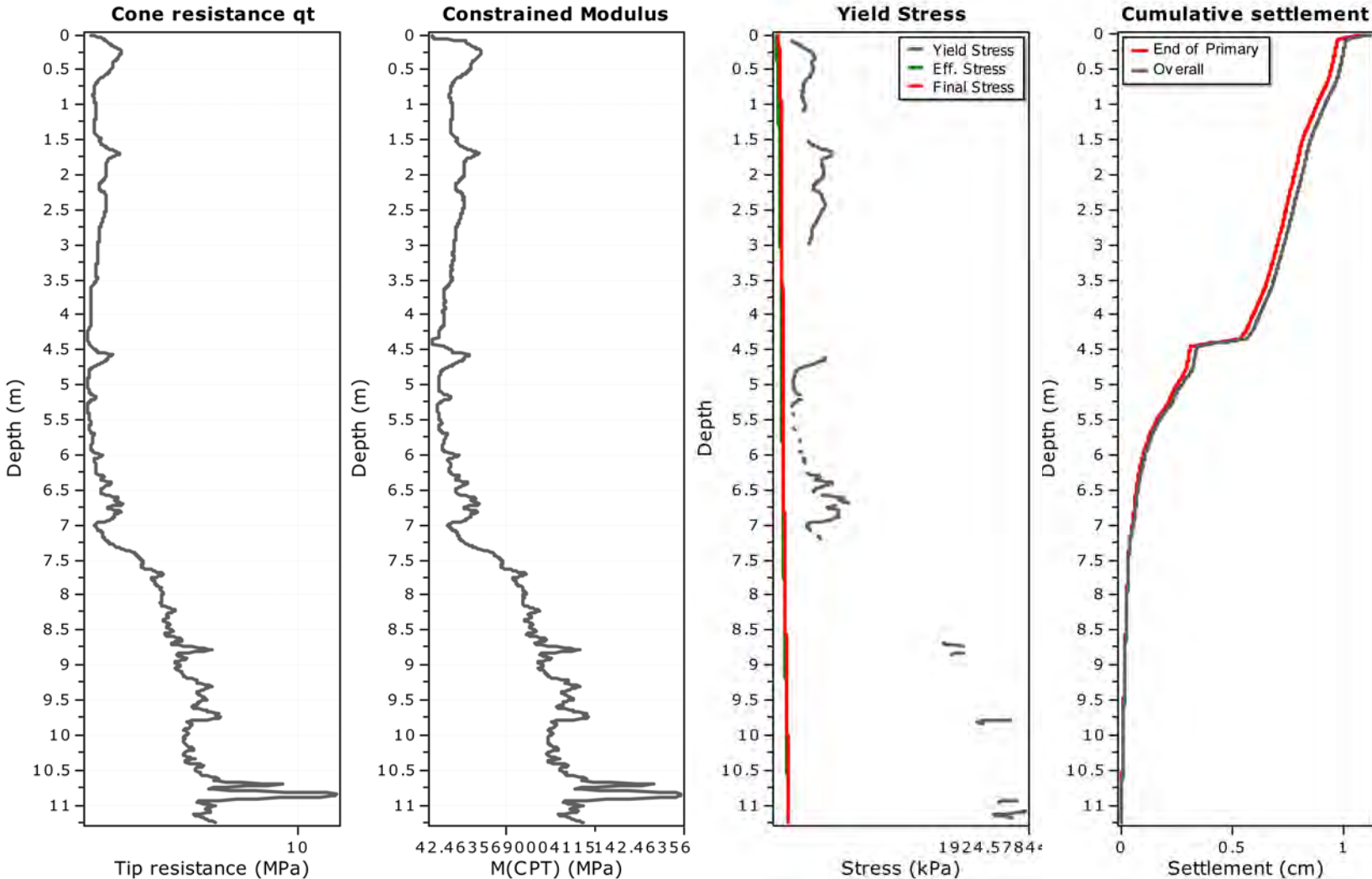
Total calculated settlement: 0.76

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.05	4.65	78.40	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.06	4.65	78.58	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.07	4.65	79.69	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	4.64	81.39	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	4.64	82.50	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	4.64	82.11	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	4.63	79.44	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	4.63	75.51	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.13	4.62	72.67	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.14	4.62	71.39	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.15	4.62	72.35	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.16	4.61	74.85	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	4.61	76.75	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	4.61	78.08	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	4.60	78.03	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	4.60	78.60	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.21	4.59	79.89	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.22	4.59	81.47	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.23	4.59	83.42	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.24	4.58	84.88	0.28	0.000	0.000	0.000

Total primary settlement: 1.08
Total secondary settlement: 0.04

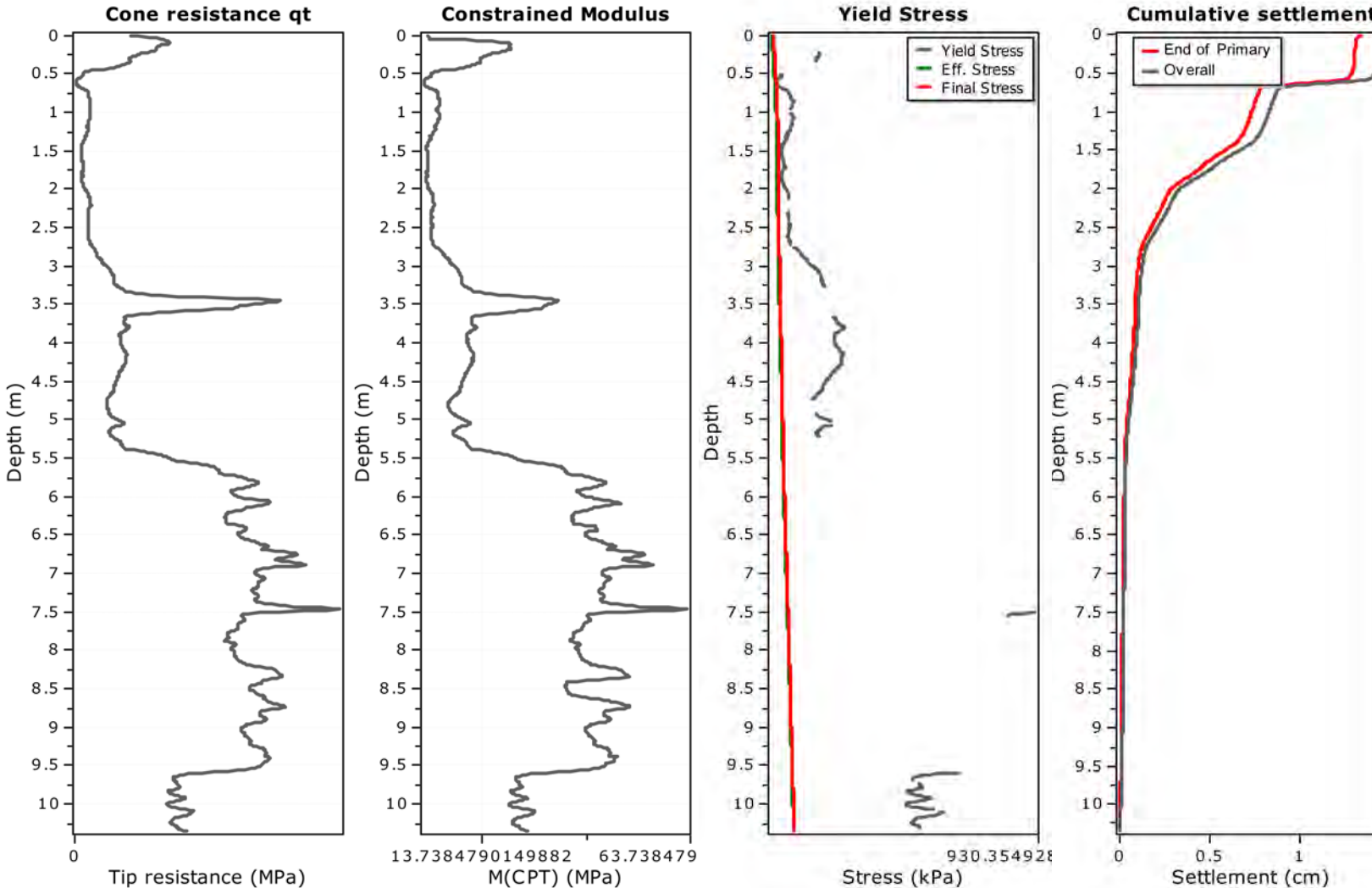
Total calculated settlement: 1.12

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 5.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.13	10.14	0.01	10.13	1.67	25.70	0.30	0.000	0.000	0.000
1014	10.14	10.15	0.01	10.14	1.67	25.50	0.30	0.000	0.000	0.000
1015	10.15	10.16	0.01	10.15	1.67	25.00	0.30	0.000	0.000	0.000
1016	10.16	10.17	0.01	10.16	1.67	24.10	0.30	0.000	0.000	0.000
1017	10.17	10.18	0.01	10.18	1.67	23.05	0.30	0.000	0.000	0.000
1018	10.18	10.19	0.01	10.19	1.67	22.27	0.30	0.000	0.000	0.000
1019	10.19	10.20	0.01	10.20	1.67	21.98	0.30	0.000	0.000	0.000
1020	10.20	10.21	0.01	10.21	1.66	21.74	0.30	0.000	0.000	0.000
1021	10.21	10.22	0.01	10.21	1.66	21.54	0.30	0.000	0.000	0.000
1022	10.22	10.23	0.01	10.22	1.66	21.34	0.30	0.000	0.000	0.000
1023	10.23	10.24	0.01	10.23	1.66	21.20	0.30	0.000	0.000	0.000
1024	10.24	10.25	0.01	10.24	1.66	21.06	0.30	0.000	0.000	0.000
1025	10.25	10.26	0.01	10.26	1.66	21.06	0.30	0.000	0.000	0.000
1026	10.26	10.27	0.01	10.27	1.66	21.26	0.30	0.000	0.000	0.000
1027	10.27	10.28	0.01	10.28	1.65	21.70	0.30	0.000	0.000	0.000
1028	10.28	10.29	0.01	10.29	1.65	22.17	0.30	0.000	0.000	0.000
1029	10.29	10.30	0.01	10.29	1.65	22.60	0.30	0.000	0.000	0.000
1030	10.30	10.31	0.01	10.30	1.65	22.77	0.30	0.000	0.000	0.000
1031	10.31	10.32	0.01	10.31	1.65	22.95	0.30	0.000	0.000	0.000
1032	10.32	10.33	0.01	10.32	1.65	23.14	0.30	0.000	0.000	0.000
1033	10.33	10.34	0.01	10.34	1.65	23.54	0.30	0.000	0.000	0.000
1034	10.34	10.35	0.01	10.35	1.65	24.32	0.30	0.000	0.000	0.000

Total primary settlement: 1.34
Total secondary settlement: 0.13

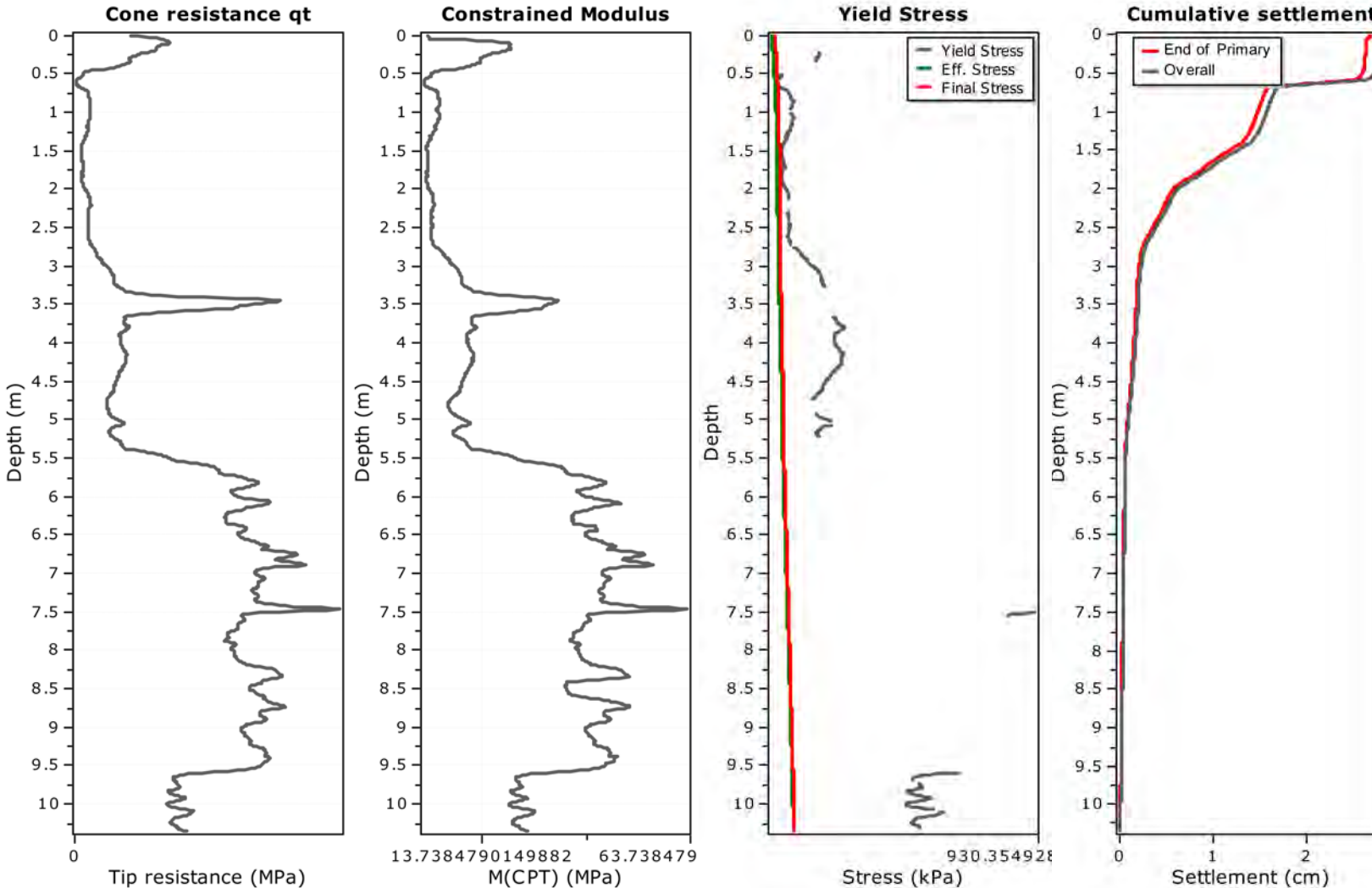
Total calculated settlement: 1.47

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.13	10.14	0.01	10.13	3.35	25.70	0.30	0.000	0.000	0.000
1014	10.14	10.15	0.01	10.14	3.35	25.50	0.30	0.000	0.000	0.000
1015	10.15	10.16	0.01	10.15	3.34	25.00	0.30	0.000	0.000	0.000
1016	10.16	10.17	0.01	10.16	3.34	24.10	0.30	0.000	0.000	0.000
1017	10.17	10.18	0.01	10.18	3.34	23.05	0.30	0.000	0.000	0.000
1018	10.18	10.19	0.01	10.19	3.33	22.27	0.30	0.000	0.000	0.000
1019	10.19	10.20	0.01	10.20	3.33	21.98	0.30	0.000	0.000	0.000
1020	10.20	10.21	0.01	10.21	3.33	21.74	0.30	0.000	0.000	0.000
1021	10.21	10.22	0.01	10.21	3.33	21.54	0.30	0.000	0.000	0.000
1022	10.22	10.23	0.01	10.22	3.32	21.34	0.30	0.000	0.000	0.000
1023	10.23	10.24	0.01	10.23	3.32	21.20	0.30	0.000	0.000	0.000
1024	10.24	10.25	0.01	10.24	3.32	21.06	0.30	0.000	0.000	0.000
1025	10.25	10.26	0.01	10.26	3.31	21.06	0.30	0.000	0.000	0.000
1026	10.26	10.27	0.01	10.27	3.31	21.26	0.30	0.000	0.000	0.000
1027	10.27	10.28	0.01	10.28	3.31	21.70	0.30	0.000	0.000	0.000
1028	10.28	10.29	0.01	10.29	3.31	22.17	0.30	0.000	0.000	0.000
1029	10.29	10.30	0.01	10.29	3.30	22.60	0.30	0.000	0.000	0.000
1030	10.30	10.31	0.01	10.30	3.30	22.77	0.30	0.000	0.000	0.000
1031	10.31	10.32	0.01	10.31	3.30	22.95	0.30	0.000	0.000	0.000
1032	10.32	10.33	0.01	10.32	3.30	23.14	0.30	0.000	0.000	0.000
1033	10.33	10.34	0.01	10.34	3.29	23.54	0.30	0.000	0.000	0.000
1034	10.34	10.35	0.01	10.35	3.29	24.32	0.30	0.000	0.000	0.000

Total primary settlement: 2.68
Total secondary settlement: 0.13

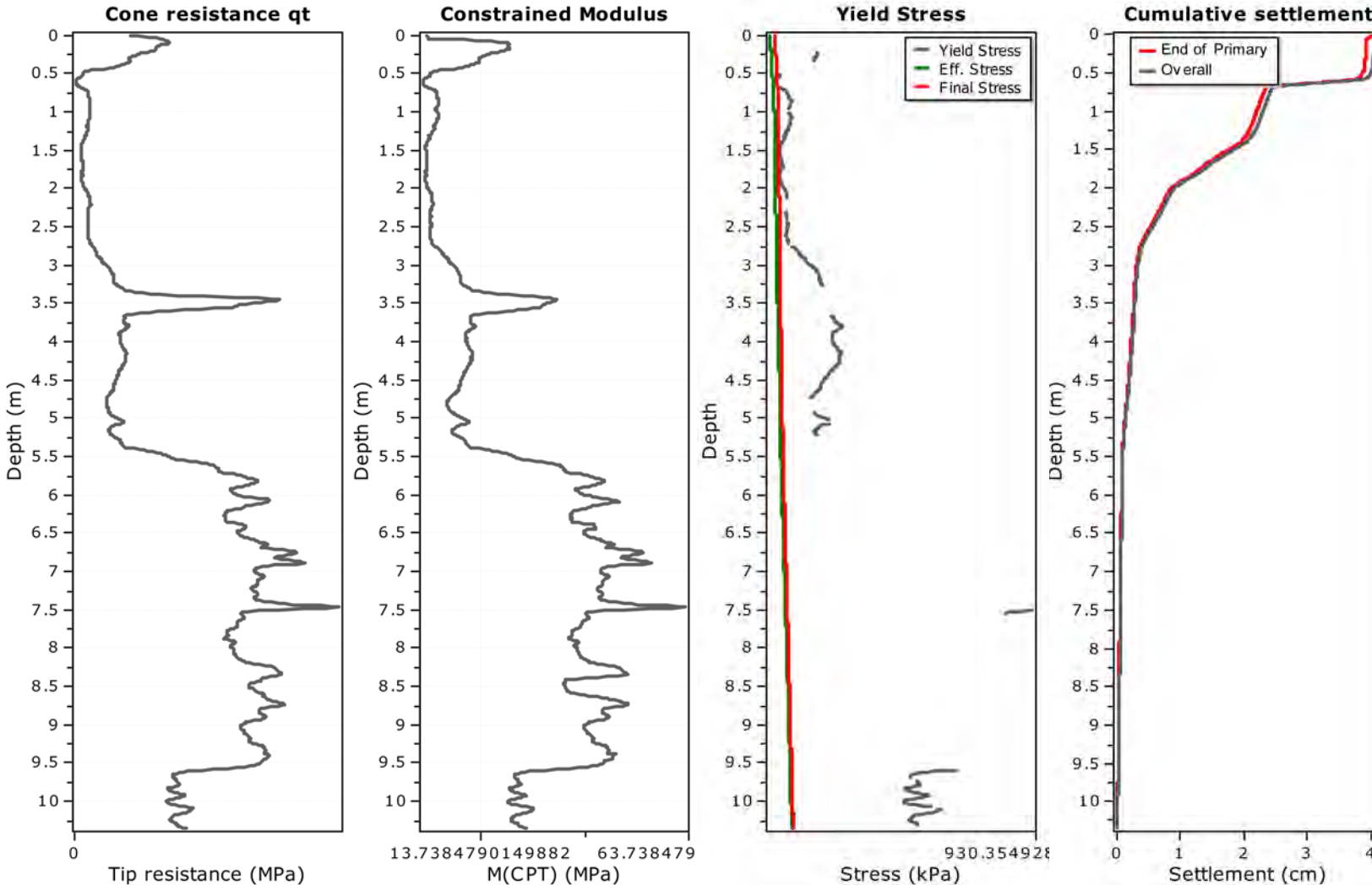
Total calculated settlement: 2.81

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1013	10.13	10.14	0.01	10.13	5.02	25.70	0.30	0.000	0.000	0.000
1014	10.14	10.15	0.01	10.14	5.02	25.50	0.30	0.000	0.000	0.000
1015	10.15	10.16	0.01	10.15	5.01	25.00	0.30	0.000	0.000	0.000
1016	10.16	10.17	0.01	10.16	5.01	24.10	0.30	0.000	0.000	0.000
1017	10.17	10.18	0.01	10.18	5.01	23.05	0.30	0.000	0.000	0.000
1018	10.18	10.19	0.01	10.19	5.00	22.27	0.30	0.000	0.000	0.000
1019	10.19	10.20	0.01	10.20	5.00	21.98	0.30	0.000	0.000	0.000
1020	10.20	10.21	0.01	10.21	4.99	21.74	0.30	0.000	0.000	0.000
1021	10.21	10.22	0.01	10.21	4.99	21.54	0.30	0.000	0.000	0.000
1022	10.22	10.23	0.01	10.22	4.98	21.34	0.30	0.000	0.000	0.000
1023	10.23	10.24	0.01	10.23	4.98	21.20	0.30	0.000	0.000	0.000
1024	10.24	10.25	0.01	10.24	4.98	21.06	0.30	0.000	0.000	0.000
1025	10.25	10.26	0.01	10.26	4.97	21.06	0.30	0.000	0.000	0.000
1026	10.26	10.27	0.01	10.27	4.97	21.26	0.30	0.000	0.000	0.000
1027	10.27	10.28	0.01	10.28	4.96	21.70	0.30	0.000	0.000	0.000
1028	10.28	10.29	0.01	10.29	4.96	22.17	0.30	0.000	0.000	0.000
1029	10.29	10.30	0.01	10.29	4.96	22.60	0.30	0.000	0.000	0.000
1030	10.30	10.31	0.01	10.30	4.95	22.77	0.30	0.000	0.000	0.000
1031	10.31	10.32	0.01	10.31	4.95	22.95	0.30	0.000	0.000	0.000
1032	10.32	10.33	0.01	10.32	4.94	23.14	0.30	0.000	0.000	0.000
1033	10.33	10.34	0.01	10.34	4.94	23.54	0.30	0.000	0.000	0.000
1034	10.34	10.35	0.01	10.35	4.94	24.32	0.30	0.000	0.000	0.000

Total primary settlement: 4.02
Total secondary settlement: 0.13

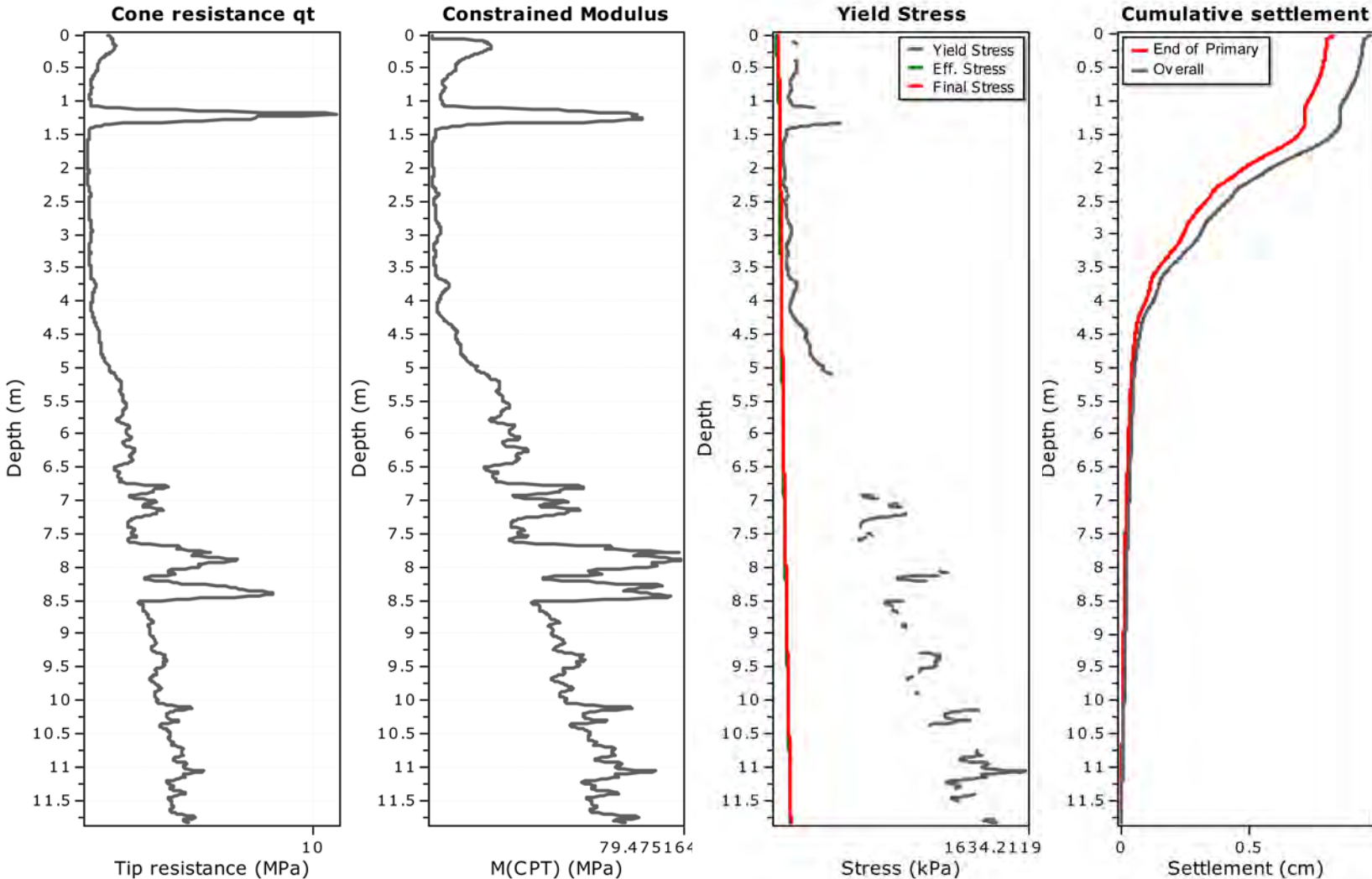
Total calculated settlement: 4.14

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

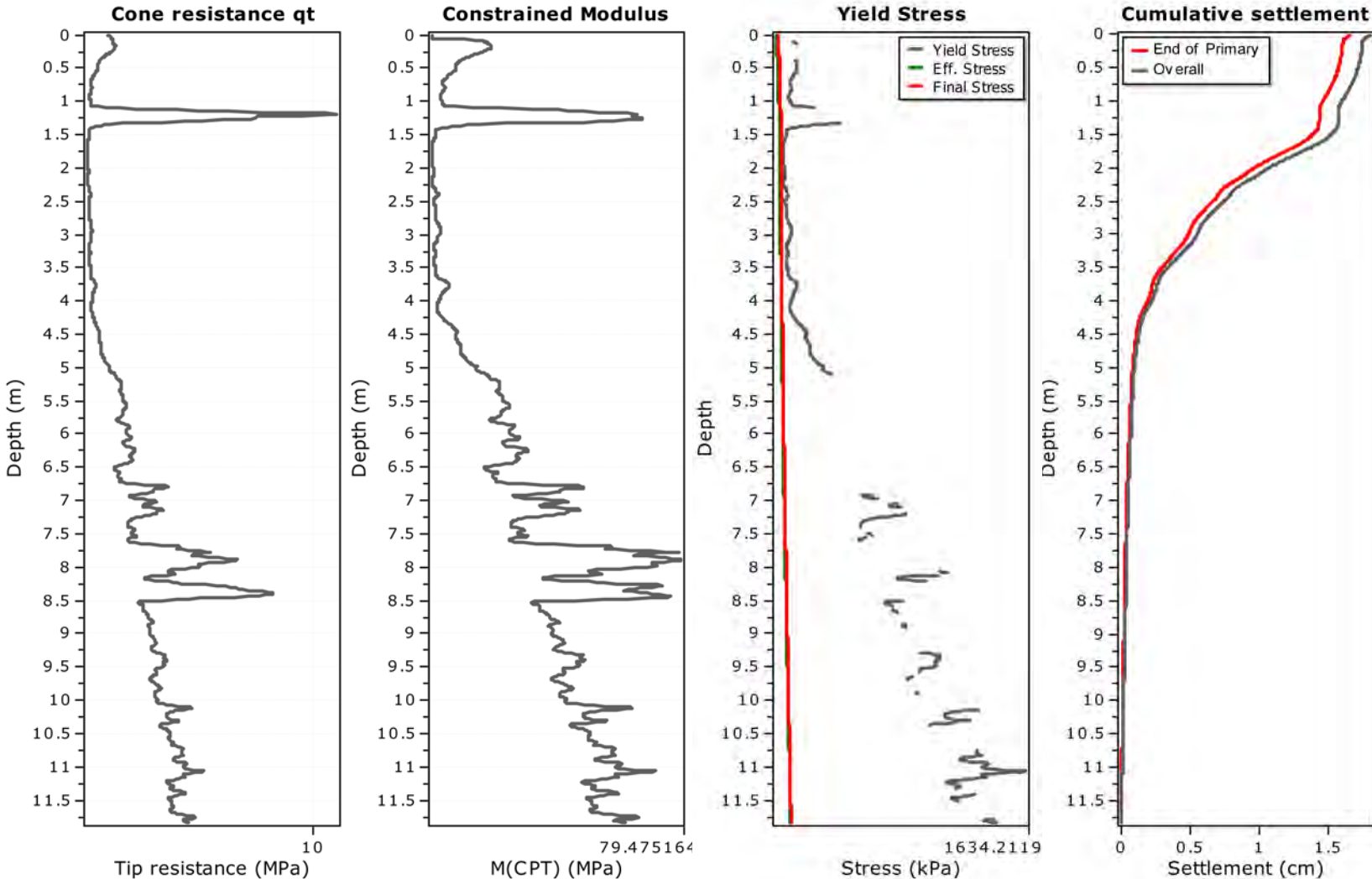
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	1.49	50.88	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	1.49	50.93	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	1.49	50.76	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	1.49	50.59	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	1.49	50.66	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	1.49	50.72	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	1.49	50.86	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	1.49	51.14	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	1.49	51.63	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	1.48	52.21	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	1.48	52.41	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	1.48	52.03	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	1.48	51.21	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	1.48	50.52	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	1.48	50.19	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	1.48	50.19	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	1.48	50.33	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	1.47	50.84	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	1.47	51.69	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	1.47	52.98	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	1.47	54.44	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	1.47	56.96	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	1.47	59.82	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	1.47	62.61	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	1.47	64.51	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	1.47	65.51	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	1.46	65.18	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	1.46	63.43	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	1.46	60.40	0.27	0.000	0.000	0.000
1180	11.80	11.81	0.01	11.80	1.46	58.48	0.27	0.000	0.000	0.000
1181	11.81	11.82	0.01	11.81	1.46	57.60	0.27	0.000	0.000	0.000
1182	11.82	11.83	0.01	11.82	1.46	58.50	0.27	0.000	0.000	0.000
1183	11.83	11.84	0.01	11.84	1.46	60.00	0.26	0.000	0.000	0.000

Total primary settlement: 0.83**Total secondary settlement: 0.14****Total calculated settlement: 0.98****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

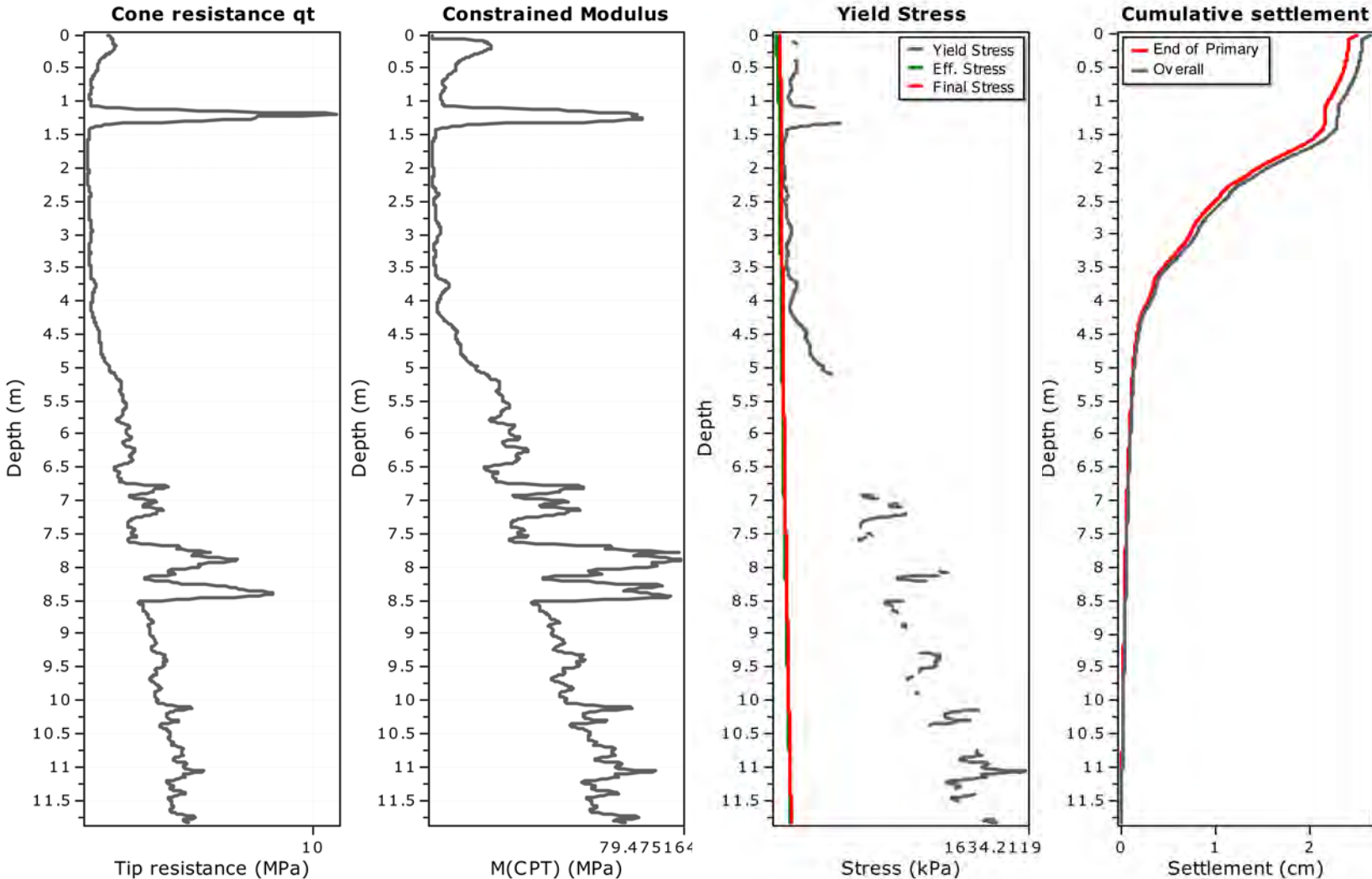
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	2.99	50.88	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	2.99	50.93	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	2.98	50.76	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	2.98	50.59	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	2.98	50.66	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	2.98	50.72	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	2.98	50.86	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	2.97	51.14	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	2.97	51.63	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	2.97	52.21	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	2.97	52.41	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	2.96	52.03	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	2.96	51.21	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	2.96	50.52	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	2.96	50.19	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	2.95	50.19	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	2.95	50.33	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	2.95	50.84	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	2.95	51.69	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	2.94	52.98	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	2.94	54.44	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	2.94	56.96	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	2.94	59.82	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	2.94	62.61	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	2.93	64.51	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	2.93	65.51	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	2.93	65.18	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	2.93	63.43	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	2.92	60.40	0.27	0.000	0.000	0.000
1180	11.80	11.81	0.01	11.80	2.92	58.48	0.27	0.000	0.000	0.000
1181	11.81	11.82	0.01	11.81	2.92	57.60	0.27	0.000	0.000	0.000
1182	11.82	11.83	0.01	11.82	2.92	58.50	0.27	0.000	0.000	0.000
1183	11.83	11.84	0.01	11.84	2.91	60.00	0.26	0.000	0.000	0.000

Total primary settlement: 1.67**Total secondary settlement: 0.14****Total calculated settlement: 1.81****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

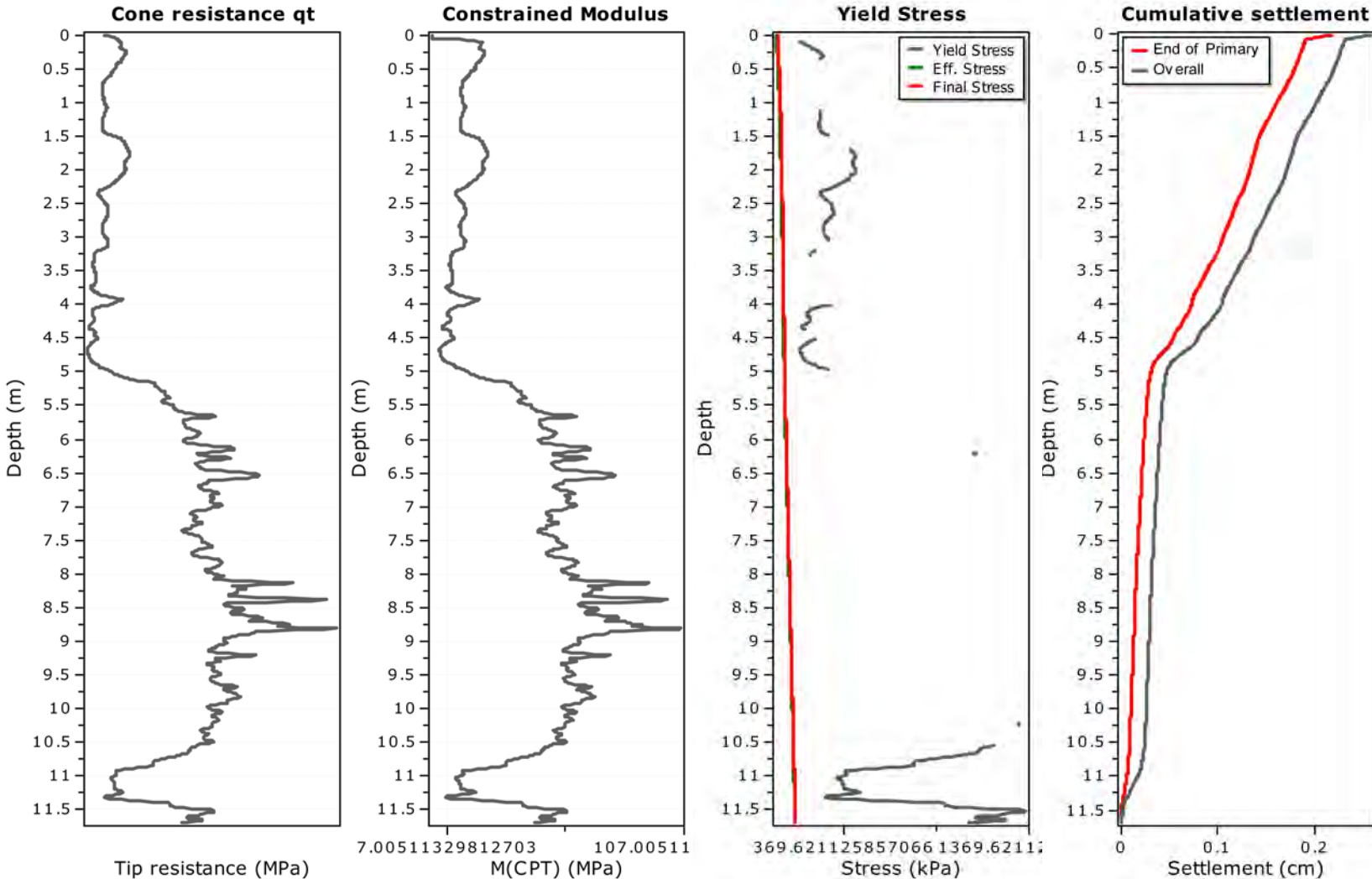
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	4.48	50.88	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	4.48	50.93	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	4.48	50.76	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	4.47	50.59	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	4.47	50.66	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	4.47	50.72	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	4.46	50.86	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	4.46	51.14	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	4.46	51.63	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	4.45	52.21	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	4.45	52.41	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	4.45	52.03	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	4.44	51.21	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	4.44	50.52	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	4.43	50.19	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	4.43	50.19	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	4.43	50.33	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	4.42	50.84	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	4.42	51.69	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	4.42	52.98	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	4.41	54.44	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	4.41	56.96	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	4.41	59.82	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	4.40	62.61	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	4.40	64.51	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	4.40	65.51	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	4.39	65.18	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	4.39	63.43	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	4.39	60.40	0.27	0.000	0.000	0.000
1180	11.80	11.81	0.01	11.80	4.38	58.48	0.27	0.000	0.000	0.000
1181	11.81	11.82	0.01	11.81	4.38	57.60	0.27	0.000	0.000	0.000
1182	11.82	11.83	0.01	11.82	4.37	58.50	0.27	0.000	0.000	0.000
1183	11.83	11.84	0.01	11.84	4.37	60.00	0.26	0.000	0.000	0.000

Total primary settlement: 2.50**Total secondary settlement: 0.14****Total calculated settlement: 2.64****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	1.49	57.32	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	1.49	57.47	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	1.49	57.15	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.55	1.49	56.01	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.56	1.49	54.27	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.57	1.49	52.45	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.58	1.49	51.89	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	1.49	50.81	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	1.49	48.82	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	1.48	46.82	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	1.48	45.83	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	1.48	45.82	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.64	1.48	46.70	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.65	1.48	49.95	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.66	1.48	52.66	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.67	1.48	52.62	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	1.48	50.22	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	1.47	46.17	0.27	0.000	0.000	0.000

Total primary settlement: 0.22
Total secondary settlement: 0.04

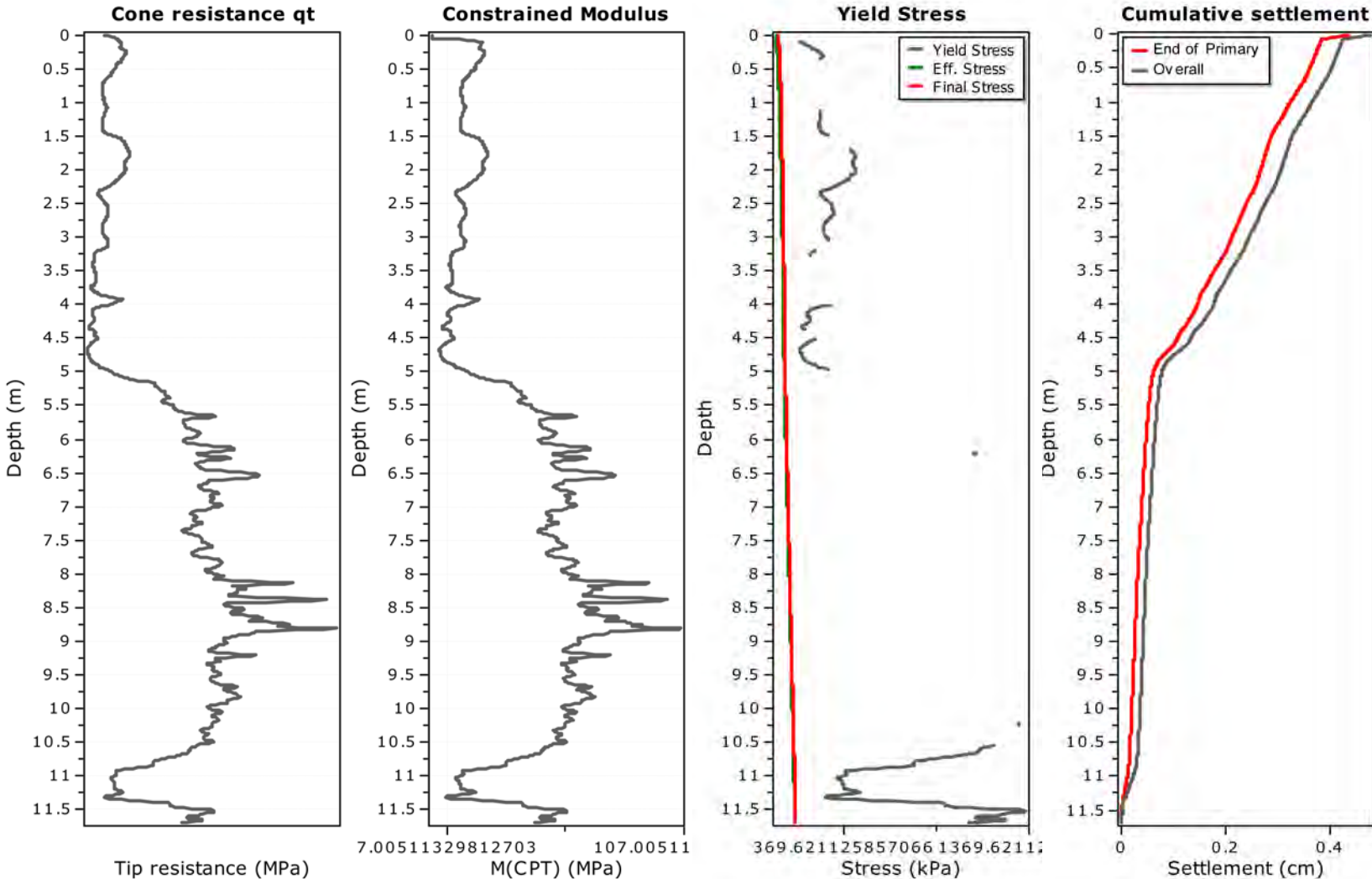
Total calculated settlement: 0.26

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	2.99	57.32	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	2.99	57.47	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	2.98	57.15	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.55	2.98	56.01	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.56	2.98	54.27	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.57	2.98	52.45	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.58	2.98	51.89	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	2.97	50.81	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	2.97	48.82	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	2.97	46.82	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	2.97	45.83	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	2.96	45.82	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.64	2.96	46.70	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.65	2.96	49.95	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.66	2.96	52.66	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.67	2.95	52.62	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	2.95	50.22	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	2.95	46.17	0.27	0.000	0.000	0.000

Total primary settlement: 0.44
Total secondary settlement: 0.04

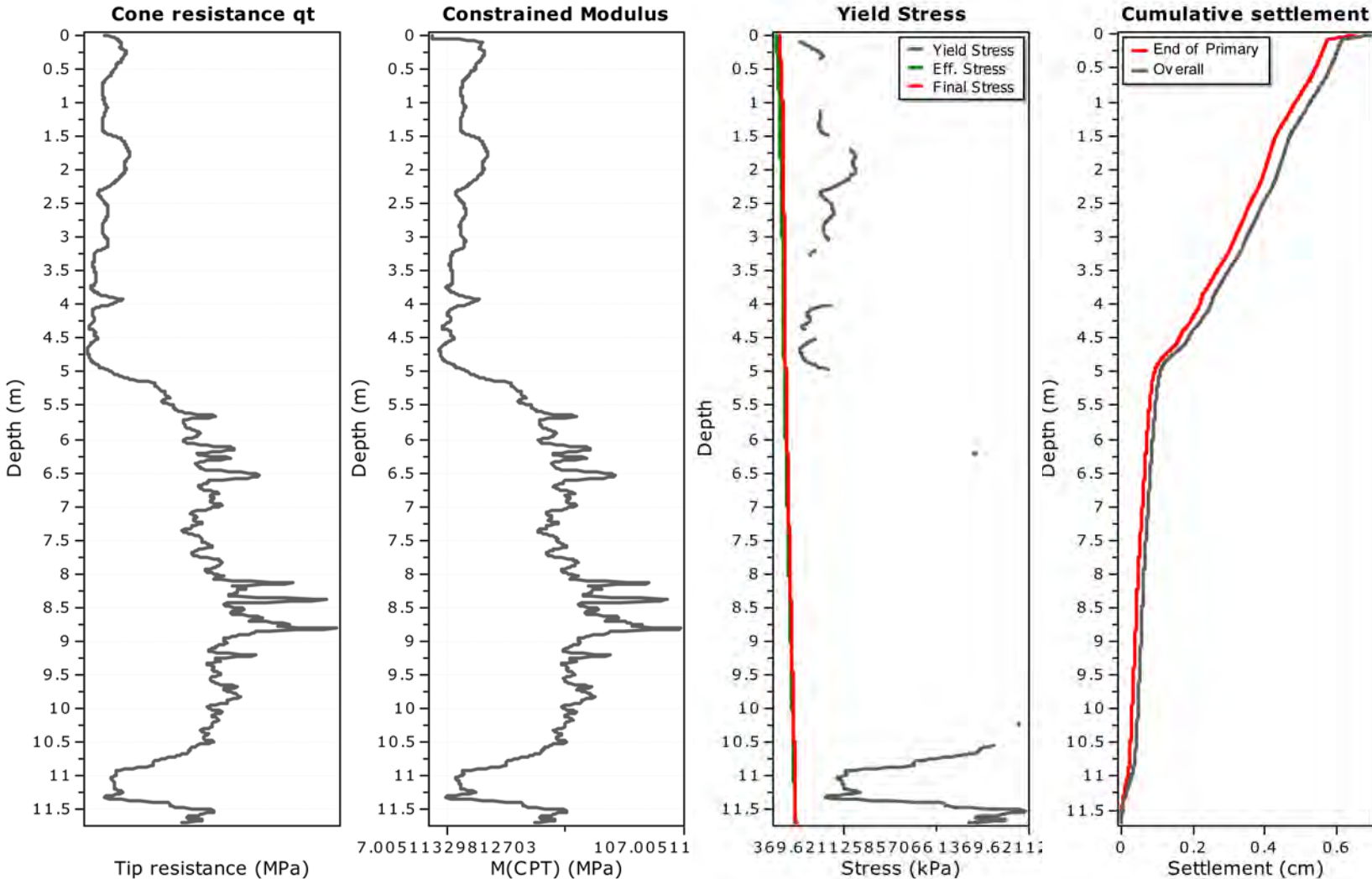
Total calculated settlement: 0.48

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	4.48	57.32	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	4.48	57.47	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	4.48	57.15	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.55	4.47	56.01	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.56	4.47	54.27	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.57	4.47	52.45	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.58	4.46	51.89	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	4.46	50.81	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	4.46	48.82	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	4.45	46.82	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	4.45	45.83	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	4.45	45.82	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.64	4.44	46.70	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.65	4.44	49.95	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.66	4.43	52.66	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.67	4.43	52.62	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	4.43	50.22	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	4.42	46.17	0.27	0.000	0.000	0.000

Total primary settlement: 0.65
Total secondary settlement: 0.04

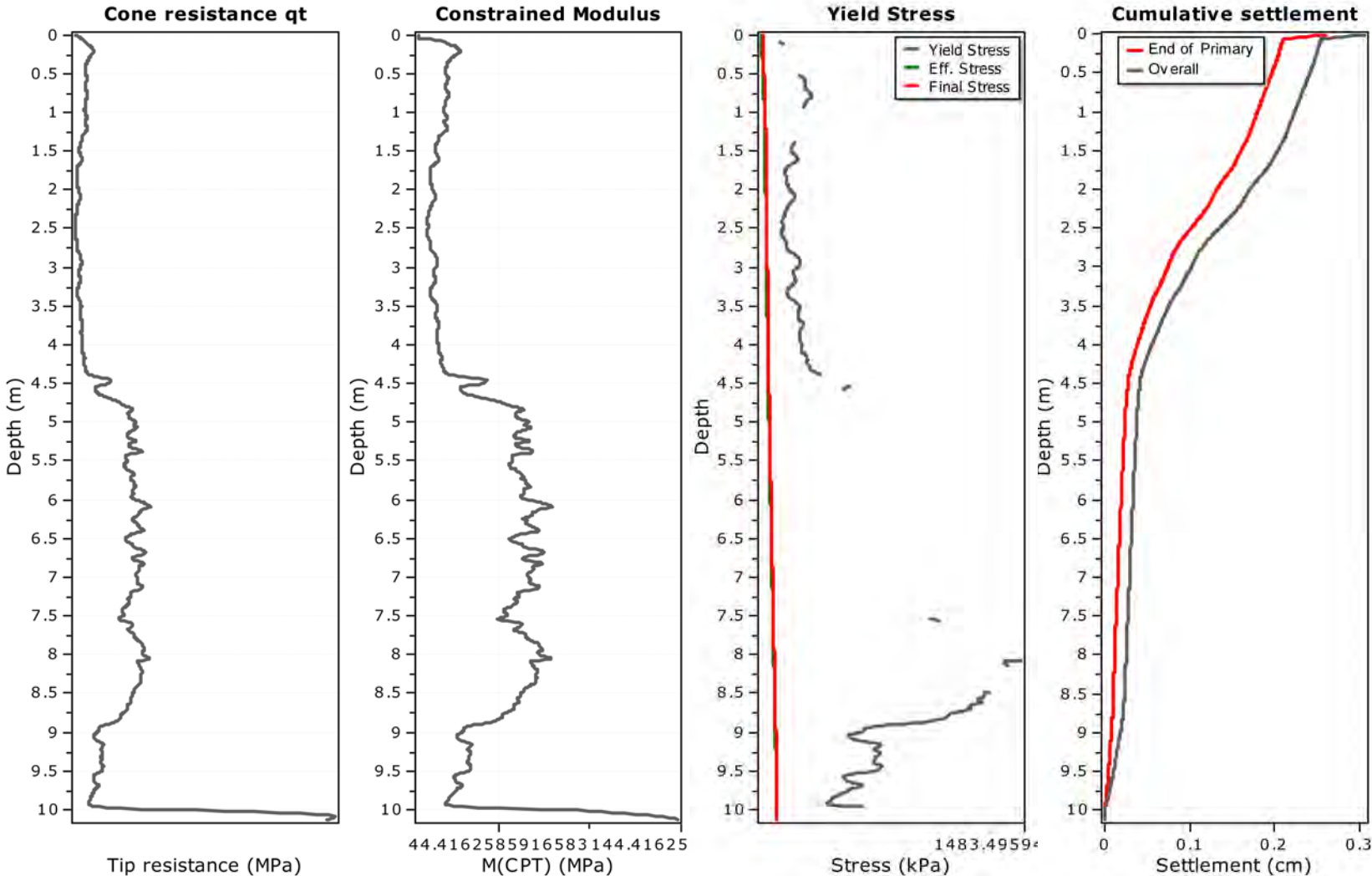
Total calculated settlement: 0.69

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-0.5}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 0.26
Total secondary settlement: 0.04

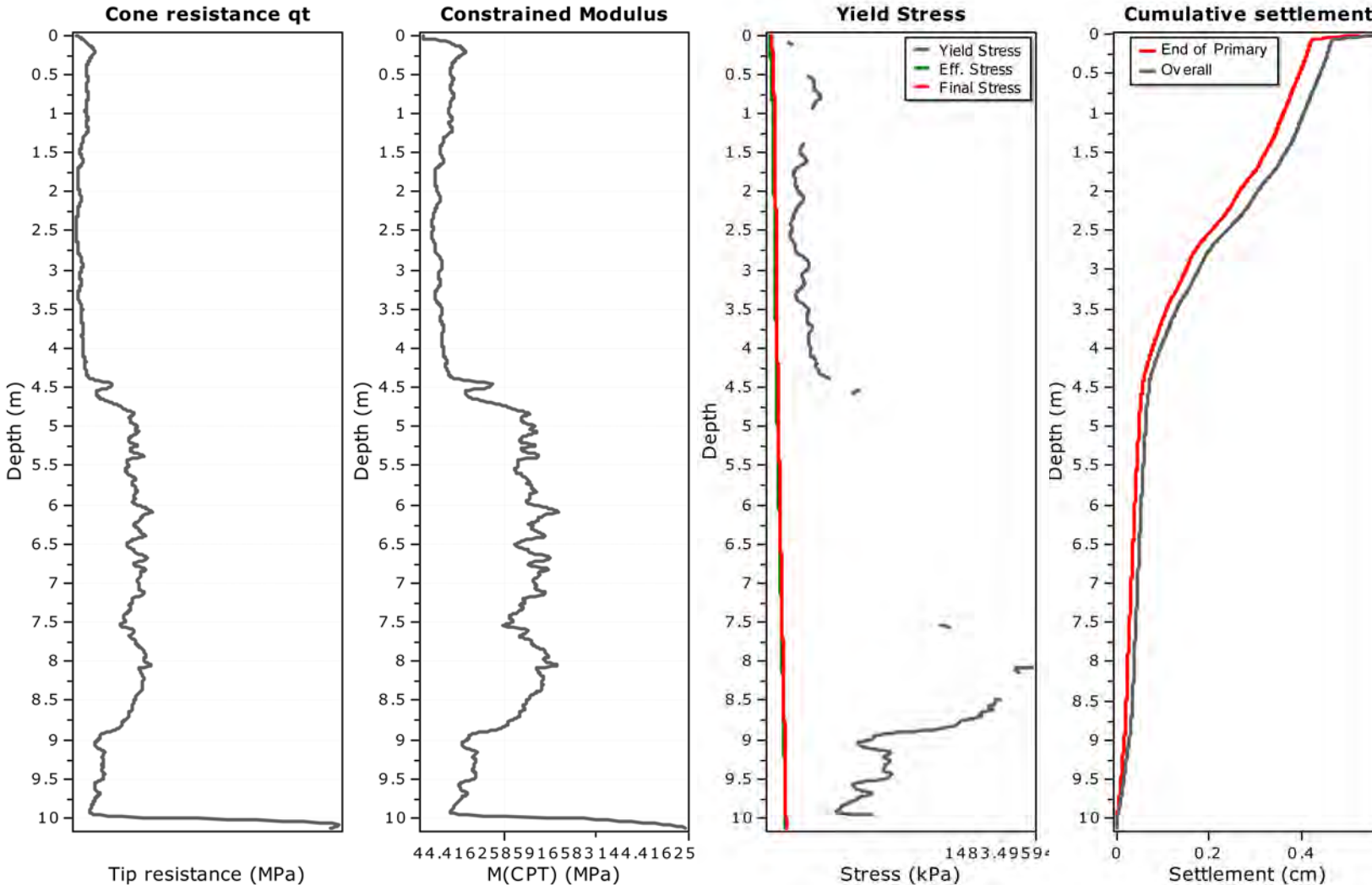
Total calculated settlement: 0.31

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 11.00 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-0.5}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 0.52
Total secondary settlement: 0.04

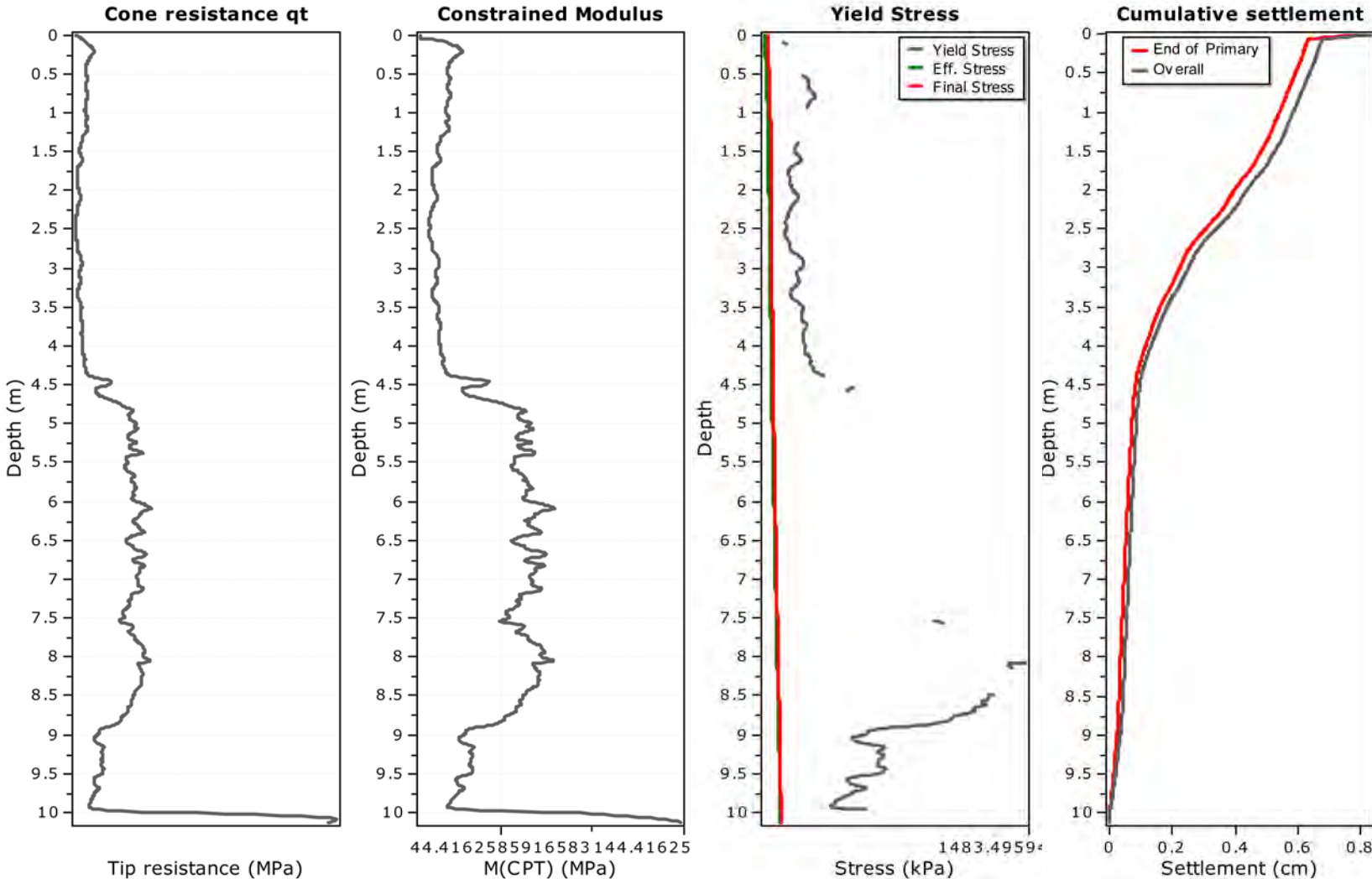
Total calculated settlement: 0.57

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-t/t_p} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
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Total primary settlement: 0.79
Total secondary settlement: 0.04

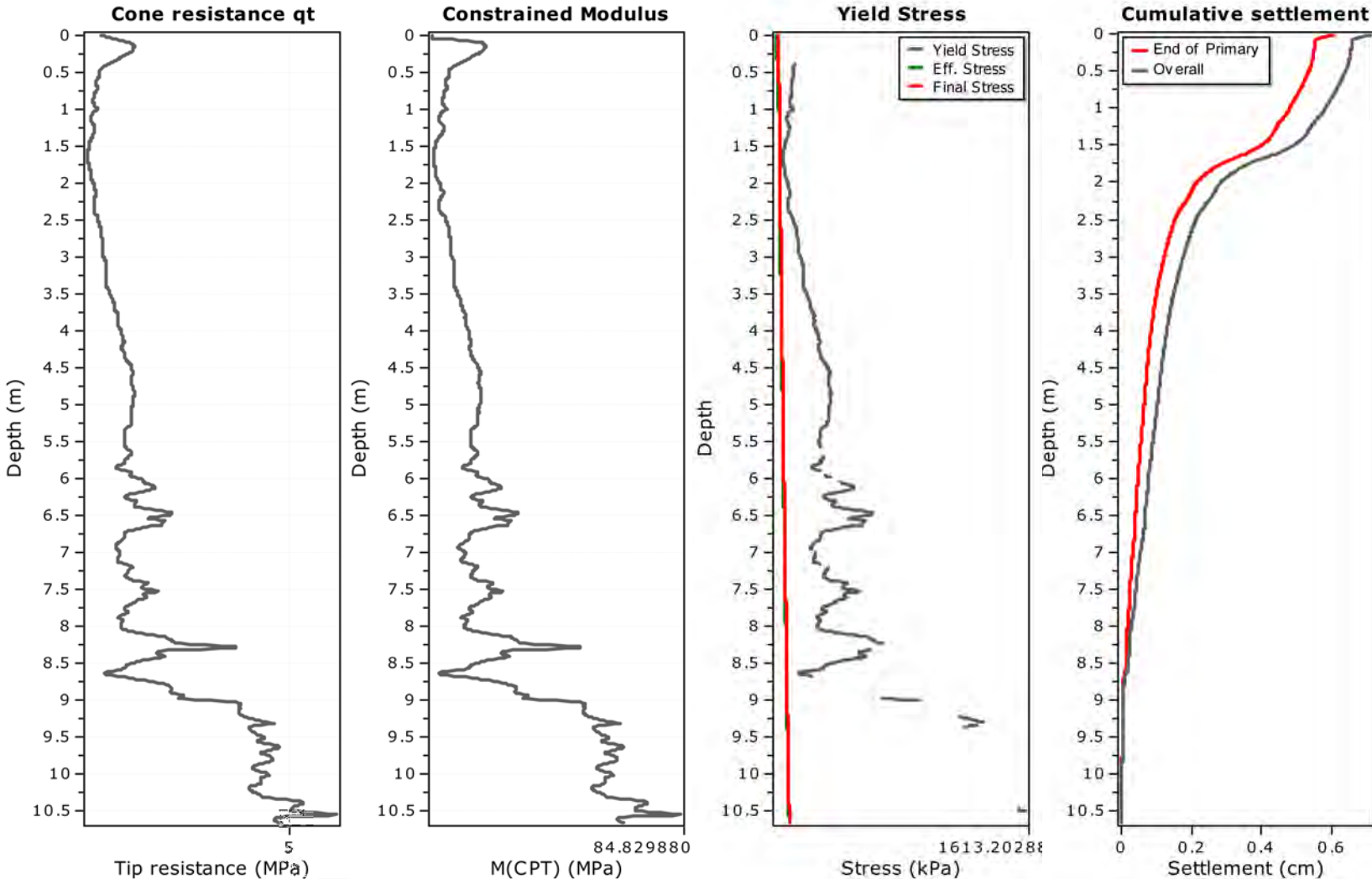
Total calculated settlement: 0.83

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.59	10.60	0.01	10.60	1.61	64.70	0.29	0.000	0.000	0.000
1060	10.60	10.61	0.01	10.61	1.61	63.02	0.29	0.000	0.000	0.000
1061	10.61	10.62	0.01	10.62	1.61	62.54	0.29	0.000	0.000	0.000
1062	10.62	10.63	0.01	10.63	1.61	62.52	0.29	0.000	0.000	0.000
1063	10.63	10.64	0.01	10.64	1.61	62.73	0.29	0.000	0.000	0.000
1064	10.64	10.65	0.01	10.65	1.60	63.13	0.29	0.000	0.000	0.000
1065	10.65	10.66	0.01	10.66	1.60	63.97	0.29	0.000	0.000	0.000

Total primary settlement: 0.61
Total secondary settlement: 0.11

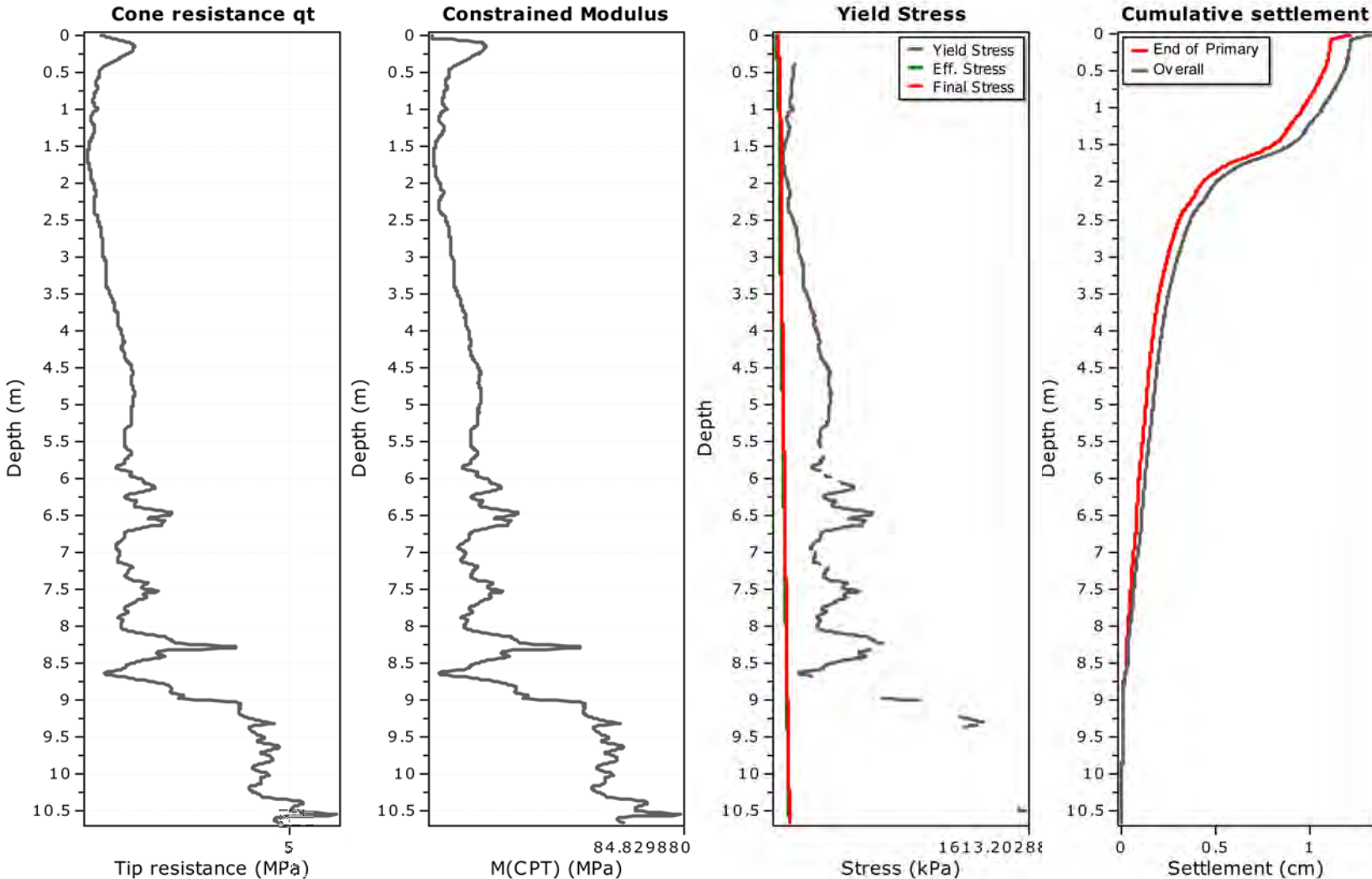
Total calculated settlement: 0.71

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.59	10.60	0.01	10.60	3.22	64.70	0.29	0.000	0.000	0.000
1060	10.60	10.61	0.01	10.61	3.22	63.02	0.29	0.000	0.000	0.000
1061	10.61	10.62	0.01	10.62	3.22	62.54	0.29	0.000	0.000	0.000
1062	10.62	10.63	0.01	10.63	3.21	62.52	0.29	0.000	0.000	0.000
1063	10.63	10.64	0.01	10.64	3.21	62.73	0.29	0.000	0.000	0.000
1064	10.64	10.65	0.01	10.65	3.21	63.13	0.29	0.000	0.000	0.000
1065	10.65	10.66	0.01	10.66	3.21	63.97	0.29	0.000	0.000	0.000

Total primary settlement: 1.21
Total secondary settlement: 0.11

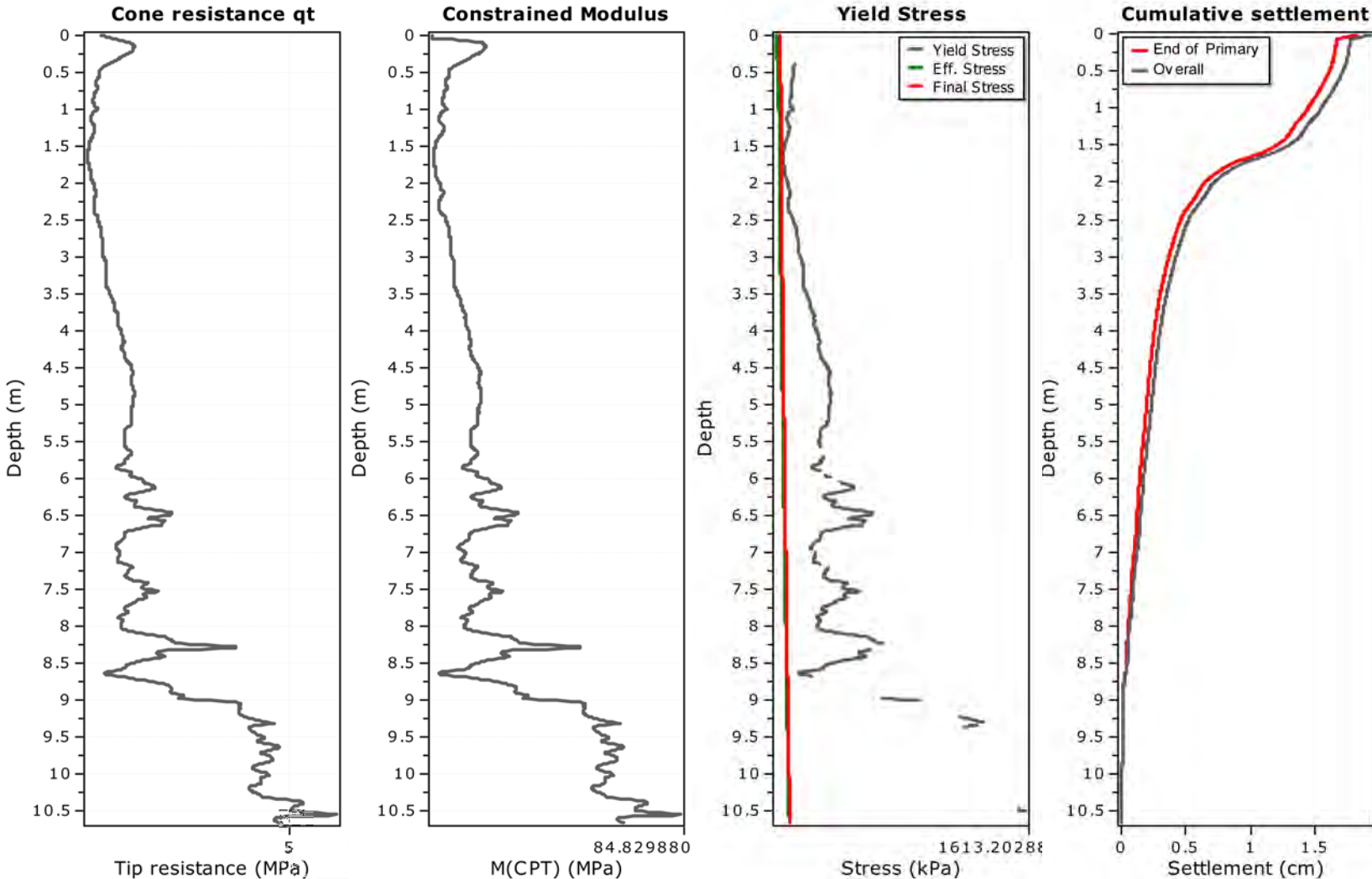
Total calculated settlement: 1.32

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1059	10.59	10.60	0.01	10.60	4.83	64.70	0.29	0.000	0.000	0.000
1060	10.60	10.61	0.01	10.61	4.83	63.02	0.29	0.000	0.000	0.000
1061	10.61	10.62	0.01	10.62	4.83	62.54	0.29	0.000	0.000	0.000
1062	10.62	10.63	0.01	10.63	4.82	62.52	0.29	0.000	0.000	0.000
1063	10.63	10.64	0.01	10.64	4.82	62.73	0.29	0.000	0.000	0.000
1064	10.64	10.65	0.01	10.65	4.81	63.13	0.29	0.000	0.000	0.000
1065	10.65	10.66	0.01	10.66	4.81	63.97	0.29	0.000	0.000	0.000

Total primary settlement: 1.82
Total secondary settlement: 0.11

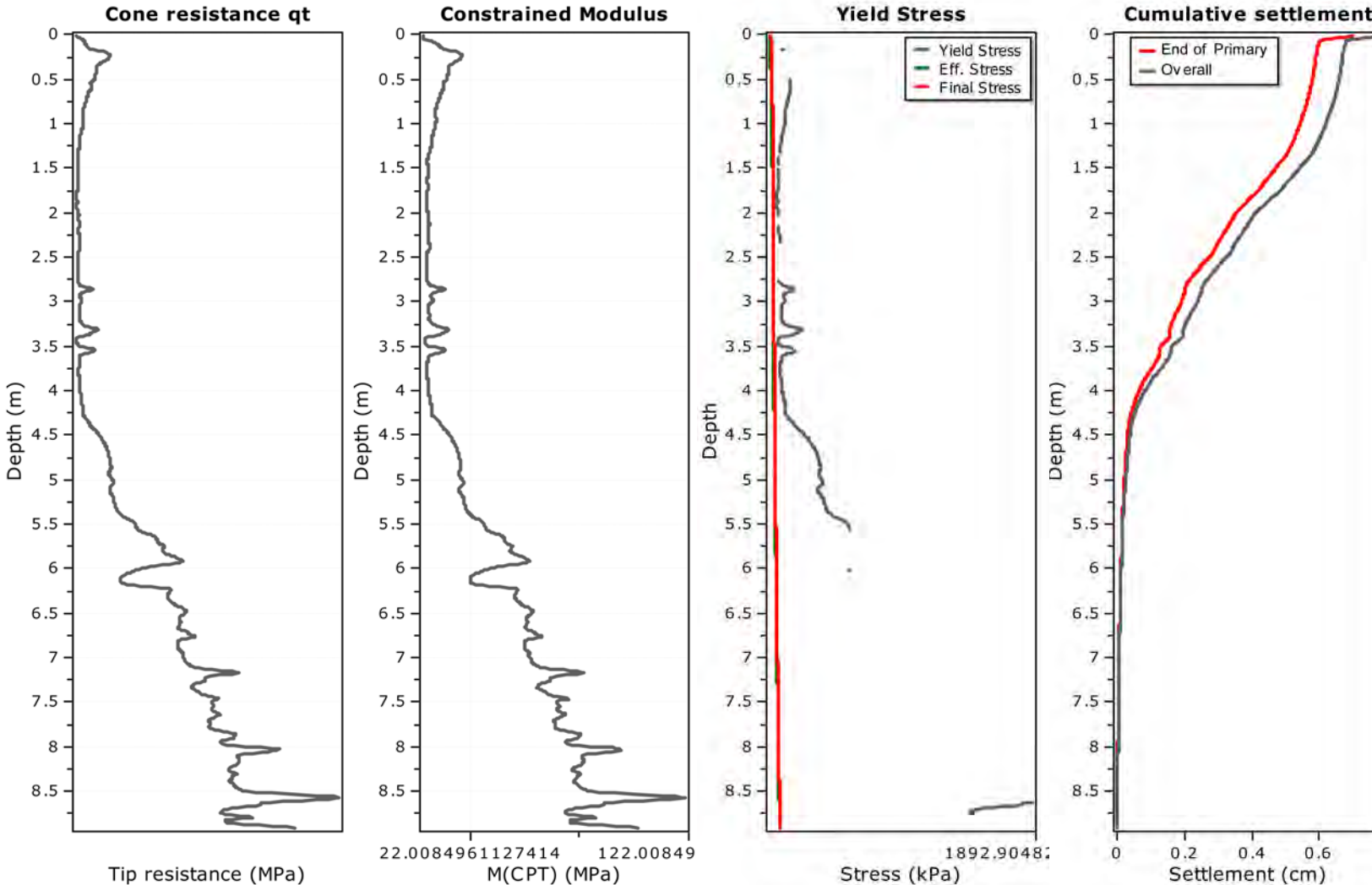
Total calculated settlement: 1.92

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.75	8.76	0.01	8.76	1.89	65.67	0.34	0.000	0.000	0.000
876	8.76	8.77	0.01	8.77	1.88	67.20	0.34	0.000	0.000	0.000
877	8.77	8.78	0.01	8.78	1.88	69.64	0.34	0.000	0.000	0.000
878	8.78	8.79	0.01	8.79	1.88	73.94	0.34	0.000	0.000	0.000
879	8.79	8.80	0.01	8.79	1.88	77.78	0.34	0.000	0.000	0.000
880	8.80	8.81	0.01	8.80	1.88	79.07	0.34	0.000	0.000	0.000
881	8.81	8.82	0.01	8.81	1.88	75.28	0.34	0.000	0.000	0.000
882	8.82	8.83	0.01	8.82	1.87	70.60	0.34	0.000	0.000	0.000
883	8.83	8.84	0.01	8.84	1.87	67.47	0.34	0.000	0.000	0.000
884	8.84	8.85	0.01	8.85	1.87	67.33	0.34	0.000	0.000	0.000
885	8.85	8.86	0.01	8.86	1.87	67.55	0.34	0.000	0.000	0.000
886	8.86	8.87	0.01	8.87	1.87	68.09	0.34	0.000	0.000	0.000
887	8.87	8.88	0.01	8.88	1.87	71.00	0.34	0.000	0.000	0.000
888	8.88	8.89	0.01	8.88	1.86	75.89	0.34	0.000	0.000	0.000
889	8.89	8.90	0.01	8.89	1.86	82.64	0.34	0.000	0.000	0.000
890	8.90	8.91	0.01	8.90	1.86	88.69	0.34	0.000	0.000	0.000
891	8.91	8.92	0.01	8.91	1.86	94.72	0.34	0.000	0.000	0.000

Total primary settlement: 0.70
Total secondary settlement: 0.08

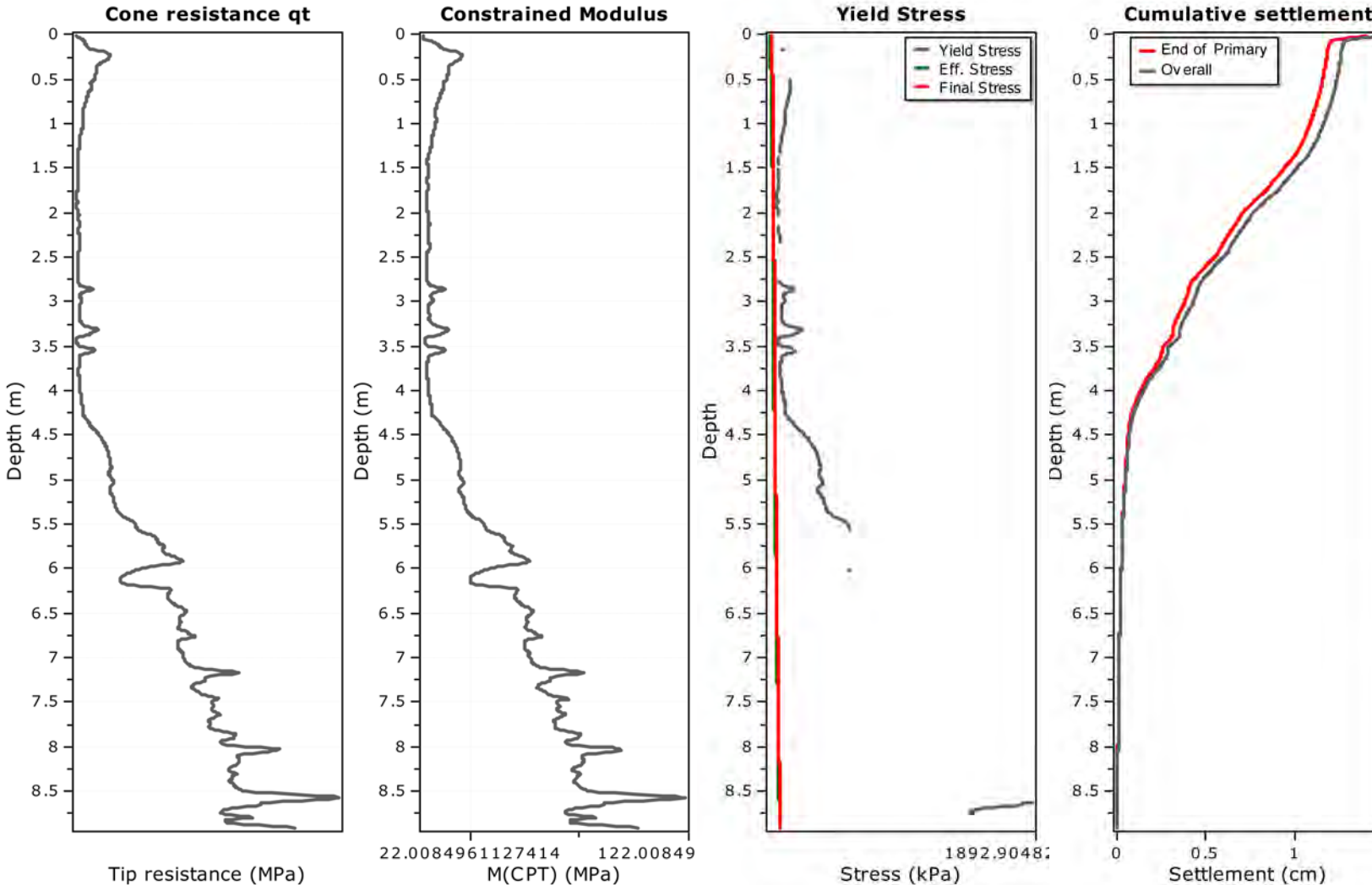
Total calculated settlement: 0.78

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.75	8.76	0.01	8.76	3.77	65.67	0.34	0.000	0.000	0.000
876	8.76	8.77	0.01	8.77	3.77	67.20	0.34	0.000	0.000	0.000
877	8.77	8.78	0.01	8.78	3.77	69.64	0.34	0.000	0.000	0.000
878	8.78	8.79	0.01	8.79	3.76	73.94	0.34	0.000	0.000	0.000
879	8.79	8.80	0.01	8.79	3.76	77.78	0.34	0.000	0.000	0.000
880	8.80	8.81	0.01	8.80	3.76	79.07	0.34	0.000	0.000	0.000
881	8.81	8.82	0.01	8.81	3.75	75.28	0.34	0.000	0.000	0.000
882	8.82	8.83	0.01	8.82	3.75	70.60	0.34	0.000	0.000	0.000
883	8.83	8.84	0.01	8.84	3.75	67.47	0.34	0.000	0.000	0.000
884	8.84	8.85	0.01	8.85	3.74	67.33	0.34	0.000	0.000	0.000
885	8.85	8.86	0.01	8.86	3.74	67.55	0.34	0.000	0.000	0.000
886	8.86	8.87	0.01	8.87	3.74	68.09	0.34	0.000	0.000	0.000
887	8.87	8.88	0.01	8.88	3.73	71.00	0.34	0.000	0.000	0.000
888	8.88	8.89	0.01	8.88	3.73	75.89	0.34	0.000	0.000	0.000
889	8.89	8.90	0.01	8.89	3.73	82.64	0.34	0.000	0.000	0.000
890	8.90	8.91	0.01	8.90	3.72	88.69	0.34	0.000	0.000	0.000
891	8.91	8.92	0.01	8.91	3.72	94.72	0.34	0.000	0.000	0.000

Total primary settlement: 1.40
Total secondary settlement: 0.08

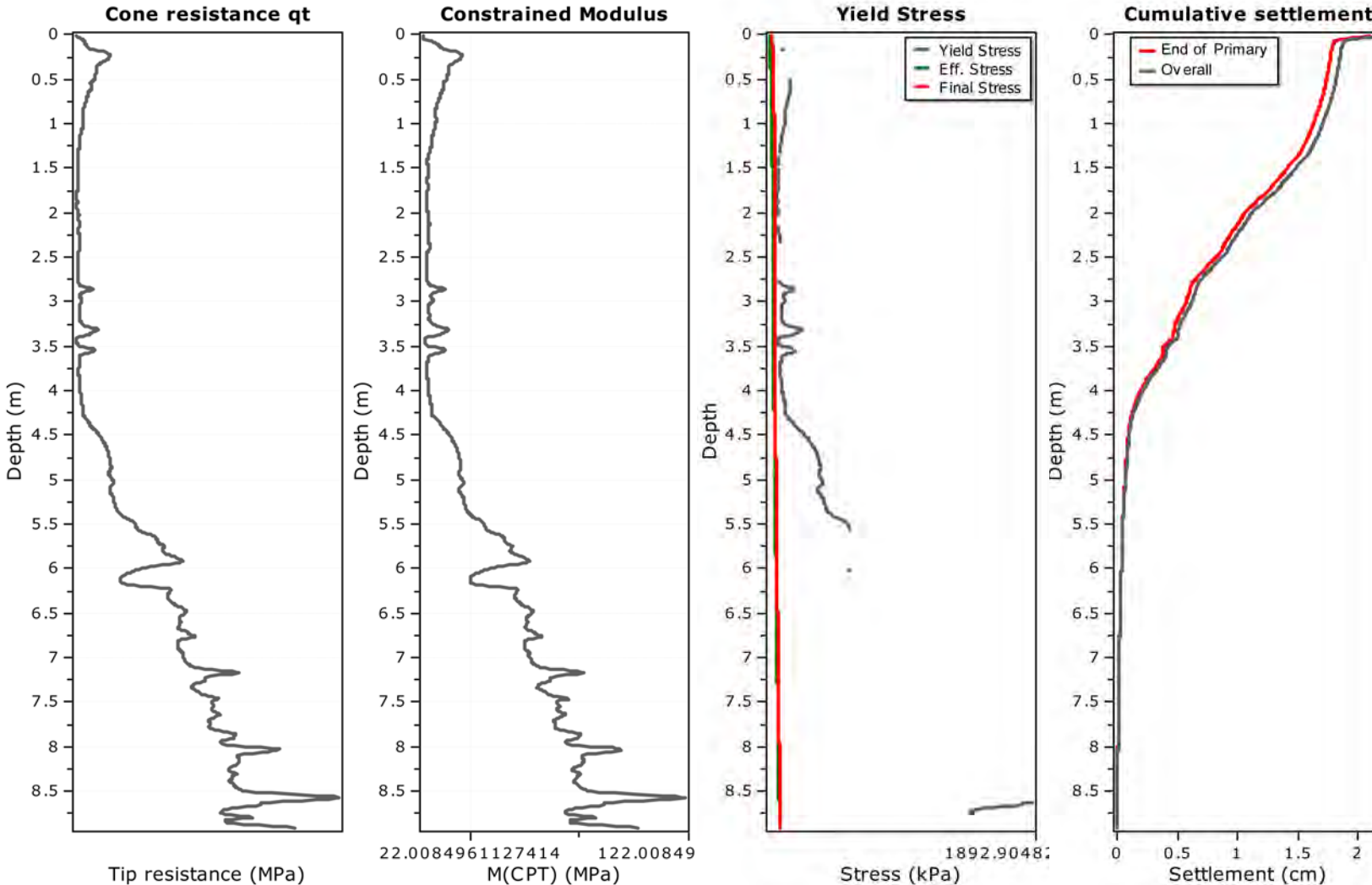
Total calculated settlement: 1.48

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
875	8.75	8.76	0.01	8.76	5.66	65.67	0.34	0.000	0.000	0.000
876	8.76	8.77	0.01	8.77	5.65	67.20	0.34	0.000	0.000	0.000
877	8.77	8.78	0.01	8.78	5.65	69.64	0.34	0.000	0.000	0.000
878	8.78	8.79	0.01	8.79	5.64	73.94	0.34	0.000	0.000	0.000
879	8.79	8.80	0.01	8.79	5.64	77.78	0.34	0.000	0.000	0.000
880	8.80	8.81	0.01	8.80	5.63	79.07	0.34	0.000	0.000	0.000
881	8.81	8.82	0.01	8.81	5.63	75.28	0.34	0.000	0.000	0.000
882	8.82	8.83	0.01	8.82	5.62	70.60	0.34	0.000	0.000	0.000
883	8.83	8.84	0.01	8.84	5.62	67.47	0.34	0.000	0.000	0.000
884	8.84	8.85	0.01	8.85	5.61	67.33	0.34	0.000	0.000	0.000
885	8.85	8.86	0.01	8.86	5.61	67.55	0.34	0.000	0.000	0.000
886	8.86	8.87	0.01	8.87	5.60	68.09	0.34	0.000	0.000	0.000
887	8.87	8.88	0.01	8.88	5.60	71.00	0.34	0.000	0.000	0.000
888	8.88	8.89	0.01	8.88	5.59	75.89	0.34	0.000	0.000	0.000
889	8.89	8.90	0.01	8.89	5.59	82.64	0.34	0.000	0.000	0.000
890	8.90	8.91	0.01	8.90	5.58	88.69	0.34	0.000	0.000	0.000
891	8.91	8.92	0.01	8.91	5.58	94.72	0.34	0.000	0.000	0.000

Total primary settlement: 2.10
Total secondary settlement: 0.08

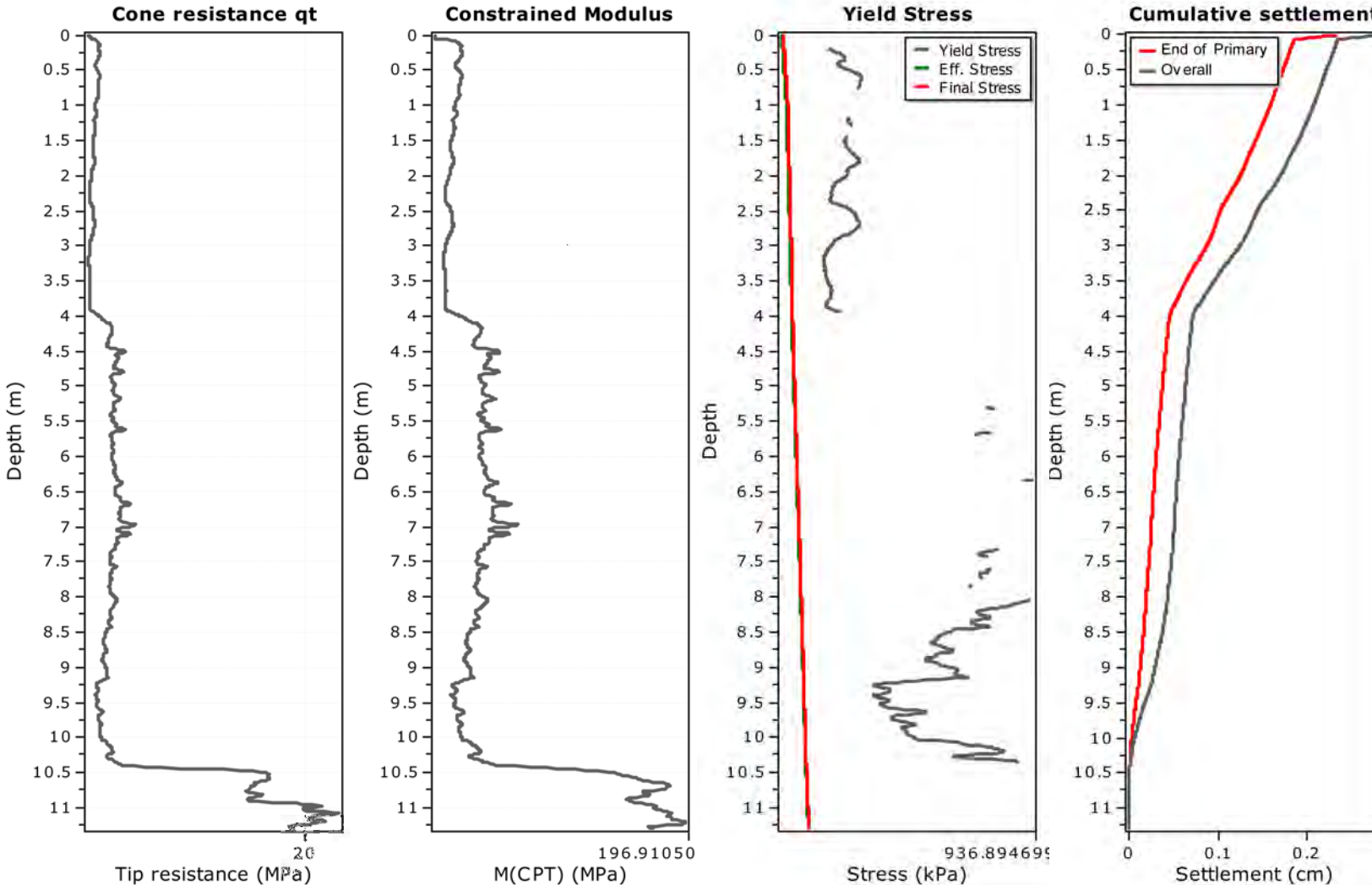
Total calculated settlement: 2.18

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.06	1.55	178.23	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.07	1.55	180.47	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.08	1.55	182.39	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	1.55	183.24	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	1.55	181.87	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	1.55	180.76	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	1.54	180.40	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	1.54	181.88	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.14	1.54	182.78	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.15	1.54	183.60	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.16	1.54	183.46	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.17	1.54	184.00	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	1.54	185.23	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	1.54	188.07	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	1.53	191.79	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	1.53	194.14	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.22	1.53	194.29	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.23	1.53	192.66	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.24	1.53	191.25	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.25	1.53	187.58	0.28	0.000	0.000	0.000
1125	11.25	11.26	0.01	11.26	1.53	180.05	0.28	0.000	0.000	0.000
1126	11.26	11.27	0.01	11.27	1.53	172.24	0.28	0.000	0.000	0.000
1127	11.27	11.28	0.01	11.28	1.52	165.92	0.28	0.000	0.000	0.000
1128	11.28	11.29	0.01	11.29	1.52	167.16	0.28	0.000	0.000	0.000

Total primary settlement: 0.23
Total secondary settlement: 0.05

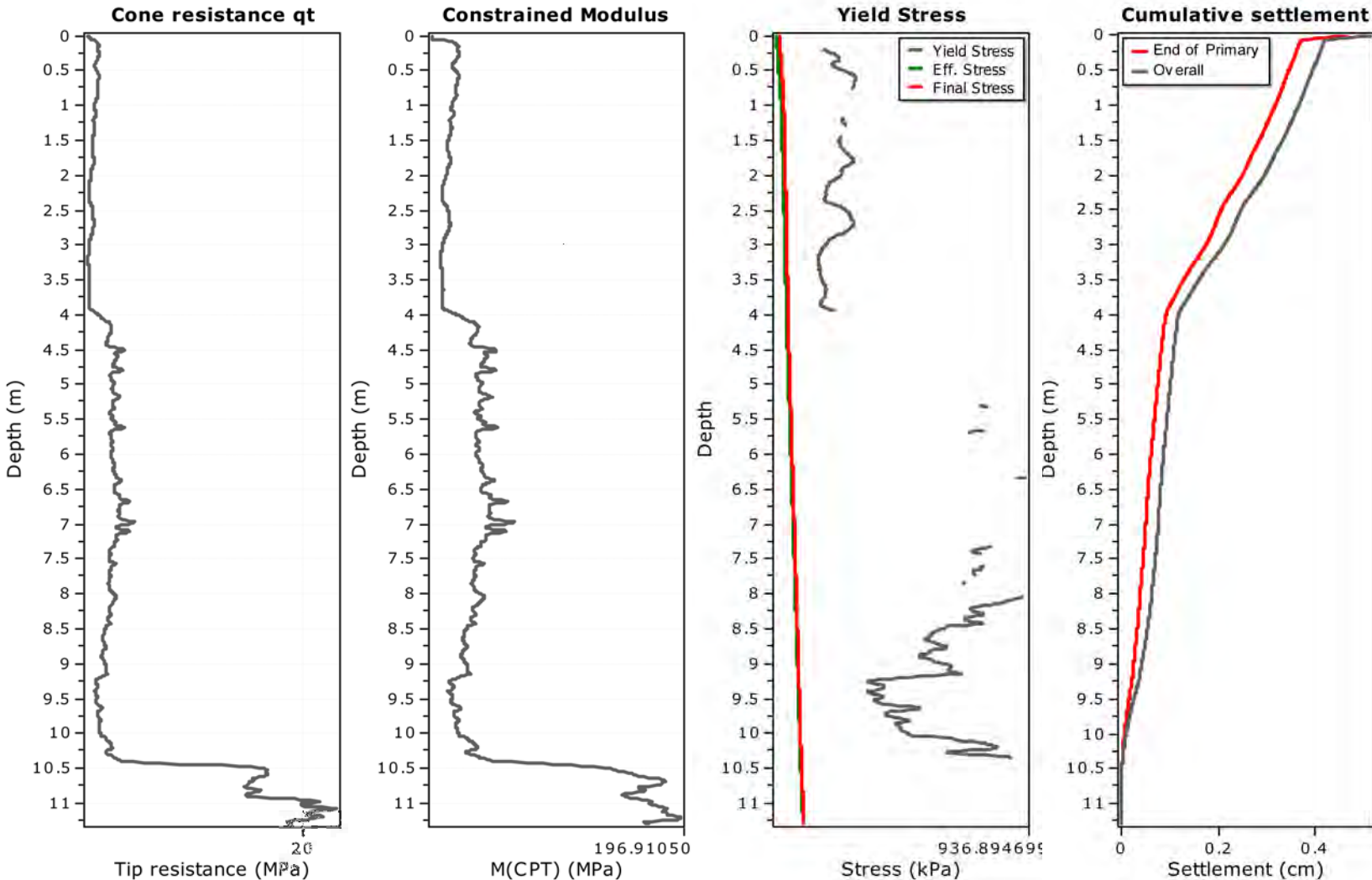
Total calculated settlement: 0.28

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.06	3.10	178.23	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.07	3.10	180.47	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.08	3.10	182.39	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	3.10	183.24	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	3.09	181.87	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	3.09	180.76	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	3.09	180.40	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	3.09	181.88	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.14	3.08	182.78	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.15	3.08	183.60	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.16	3.08	183.46	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.17	3.08	184.00	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	3.07	185.23	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	3.07	188.07	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	3.07	191.79	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	3.07	194.14	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.22	3.06	194.29	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.23	3.06	192.66	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.24	3.06	191.25	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.25	3.06	187.58	0.28	0.000	0.000	0.000
1125	11.25	11.26	0.01	11.26	3.05	180.05	0.28	0.000	0.000	0.000
1126	11.26	11.27	0.01	11.27	3.05	172.24	0.28	0.000	0.000	0.000
1127	11.27	11.28	0.01	11.28	3.05	165.92	0.28	0.000	0.000	0.000
1128	11.28	11.29	0.01	11.29	3.05	167.16	0.28	0.000	0.000	0.000

Total primary settlement: 0.46
Total secondary settlement: 0.05

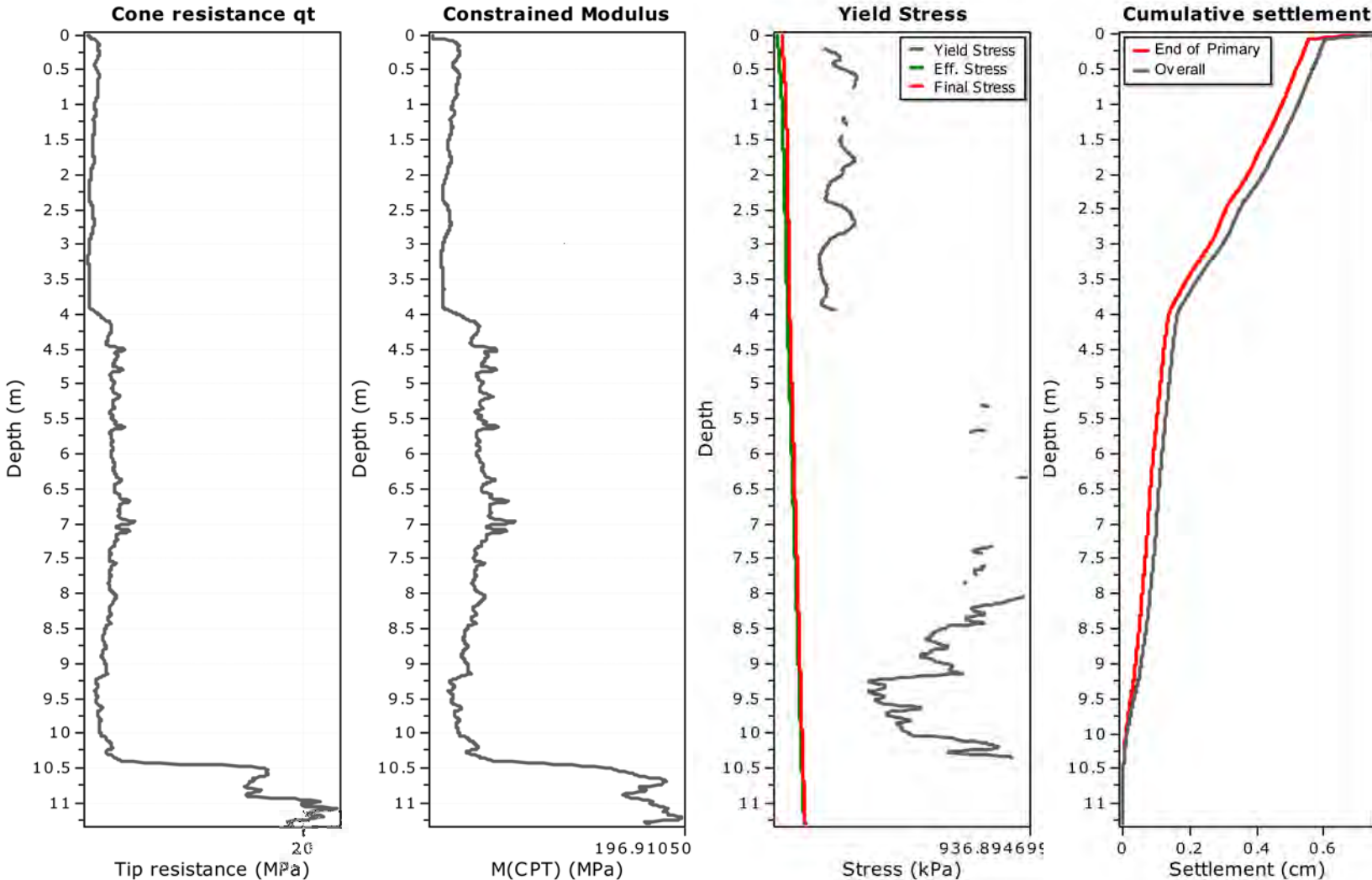
Total calculated settlement: 0.51

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1105	11.05	11.06	0.01	11.06	4.65	178.23	0.28	0.000	0.000	0.000
1106	11.06	11.07	0.01	11.07	4.65	180.47	0.28	0.000	0.000	0.000
1107	11.07	11.08	0.01	11.08	4.65	182.39	0.28	0.000	0.000	0.000
1108	11.08	11.09	0.01	11.09	4.64	183.24	0.28	0.000	0.000	0.000
1109	11.09	11.10	0.01	11.10	4.64	181.87	0.28	0.000	0.000	0.000
1110	11.10	11.11	0.01	11.11	4.64	180.76	0.28	0.000	0.000	0.000
1111	11.11	11.12	0.01	11.12	4.63	180.40	0.28	0.000	0.000	0.000
1112	11.12	11.13	0.01	11.13	4.63	181.88	0.28	0.000	0.000	0.000
1113	11.13	11.14	0.01	11.14	4.62	182.78	0.28	0.000	0.000	0.000
1114	11.14	11.15	0.01	11.15	4.62	183.60	0.28	0.000	0.000	0.000
1115	11.15	11.16	0.01	11.16	4.62	183.46	0.28	0.000	0.000	0.000
1116	11.16	11.17	0.01	11.17	4.61	184.00	0.28	0.000	0.000	0.000
1117	11.17	11.18	0.01	11.18	4.61	185.23	0.28	0.000	0.000	0.000
1118	11.18	11.19	0.01	11.19	4.61	188.07	0.28	0.000	0.000	0.000
1119	11.19	11.20	0.01	11.20	4.60	191.79	0.28	0.000	0.000	0.000
1120	11.20	11.21	0.01	11.21	4.60	194.14	0.28	0.000	0.000	0.000
1121	11.21	11.22	0.01	11.22	4.59	194.29	0.28	0.000	0.000	0.000
1122	11.22	11.23	0.01	11.23	4.59	192.66	0.28	0.000	0.000	0.000
1123	11.23	11.24	0.01	11.24	4.59	191.25	0.28	0.000	0.000	0.000
1124	11.24	11.25	0.01	11.25	4.58	187.58	0.28	0.000	0.000	0.000
1125	11.25	11.26	0.01	11.26	4.58	180.05	0.28	0.000	0.000	0.000
1126	11.26	11.27	0.01	11.27	4.58	172.24	0.28	0.000	0.000	0.000
1127	11.27	11.28	0.01	11.28	4.57	165.92	0.28	0.000	0.000	0.000
1128	11.28	11.29	0.01	11.29	4.57	167.16	0.28	0.000	0.000	0.000

Total primary settlement: 0.70
Total secondary settlement: 0.05

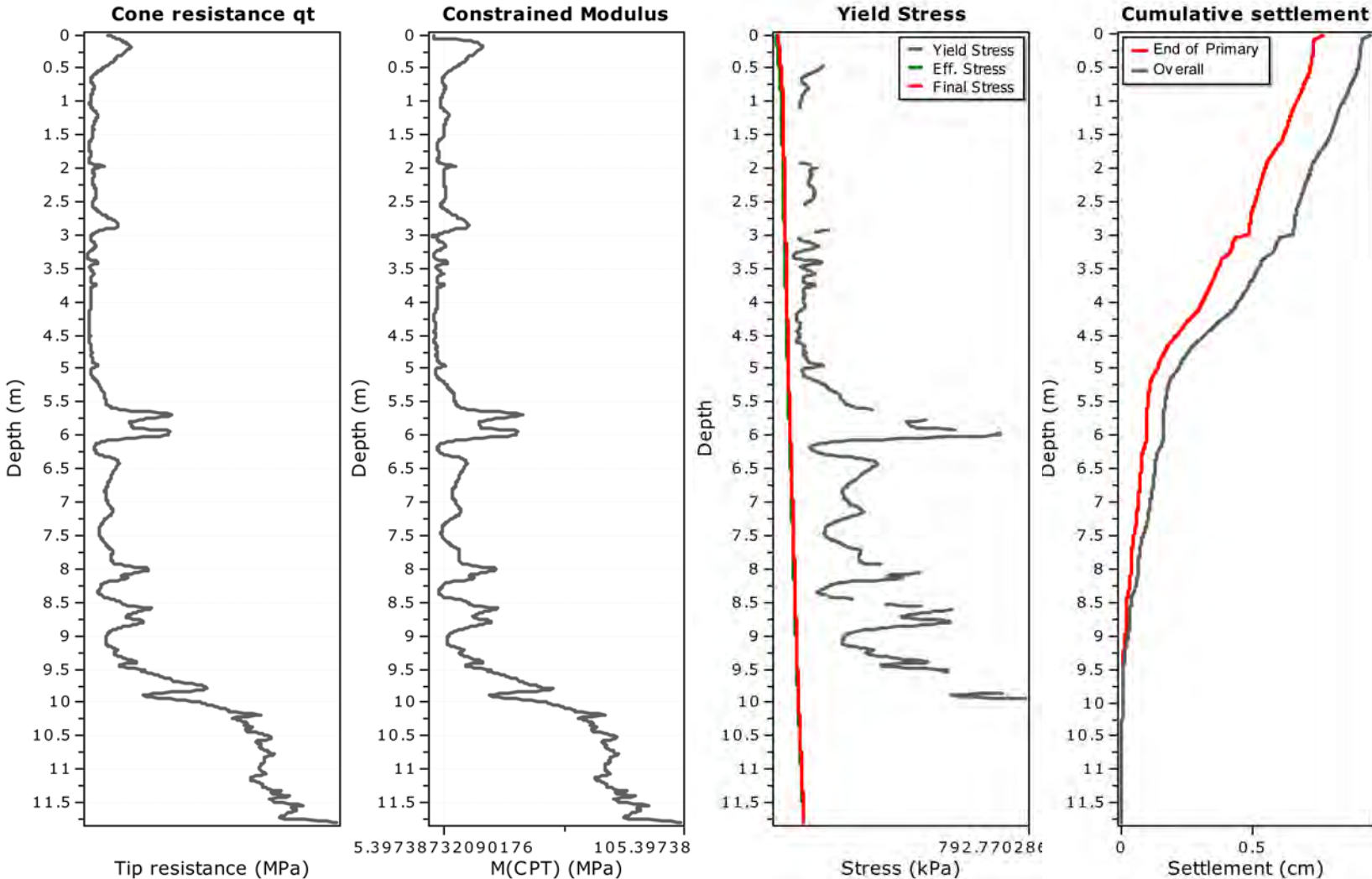
Total calculated settlement: 0.74

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	1.49	81.65	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	1.49	84.54	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	1.49	87.97	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	1.49	90.33	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	1.49	90.21	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	1.49	87.93	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	1.49	85.79	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	1.49	85.42	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	1.49	85.95	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	1.48	86.56	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	1.48	87.11	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	1.48	87.08	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	1.48	86.44	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	1.48	85.39	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	1.48	84.33	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	1.48	83.48	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	1.48	82.88	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	1.47	82.77	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	1.47	82.61	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	1.47	81.79	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	1.47	80.82	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	1.47	80.17	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	1.47	80.40	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	1.47	82.14	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	1.47	85.66	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	1.47	90.99	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	1.46	96.00	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	1.46	99.89	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	1.46	102.51	0.27	0.000	0.000	0.000

Total primary settlement: 0.77
Total secondary settlement: 0.18

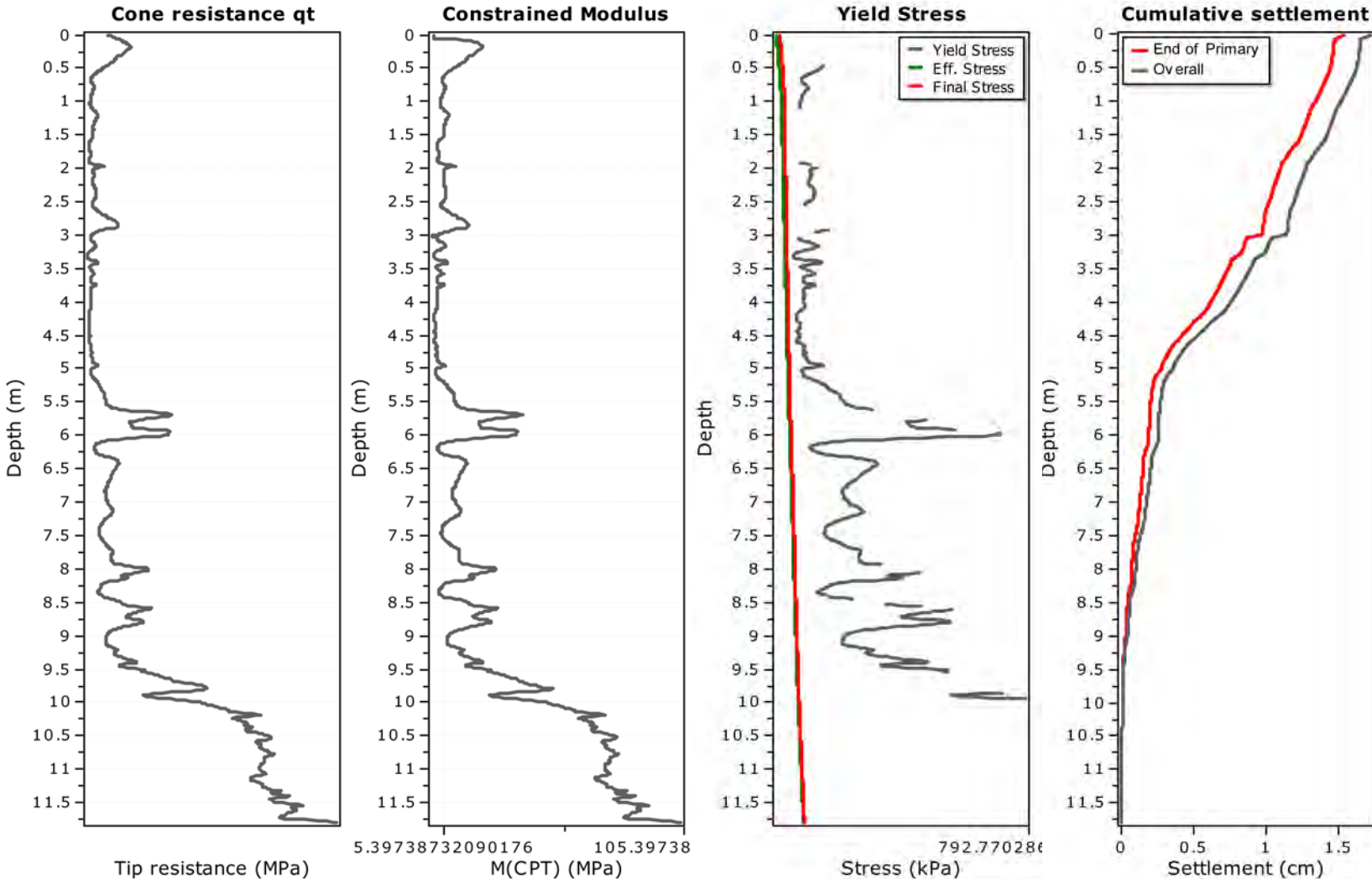
Total calculated settlement: 0.95

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	2.99	81.65	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	2.99	84.54	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	2.98	87.97	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	2.98	90.33	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	2.98	90.21	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	2.98	87.93	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	2.98	85.79	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	2.97	85.42	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	2.97	85.95	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	2.97	86.56	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	2.97	87.11	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	2.96	87.08	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	2.96	86.44	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	2.96	85.39	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	2.96	84.33	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	2.95	83.48	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	2.95	82.88	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	2.95	82.77	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	2.95	82.61	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	2.94	81.79	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	2.94	80.82	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	2.94	80.17	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	2.94	80.40	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	2.94	82.14	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	2.93	85.66	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	2.93	90.99	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	2.93	96.00	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	2.93	99.89	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	2.92	102.51	0.27	0.000	0.000	0.000

Total primary settlement: 1.54
Total secondary settlement: 0.18

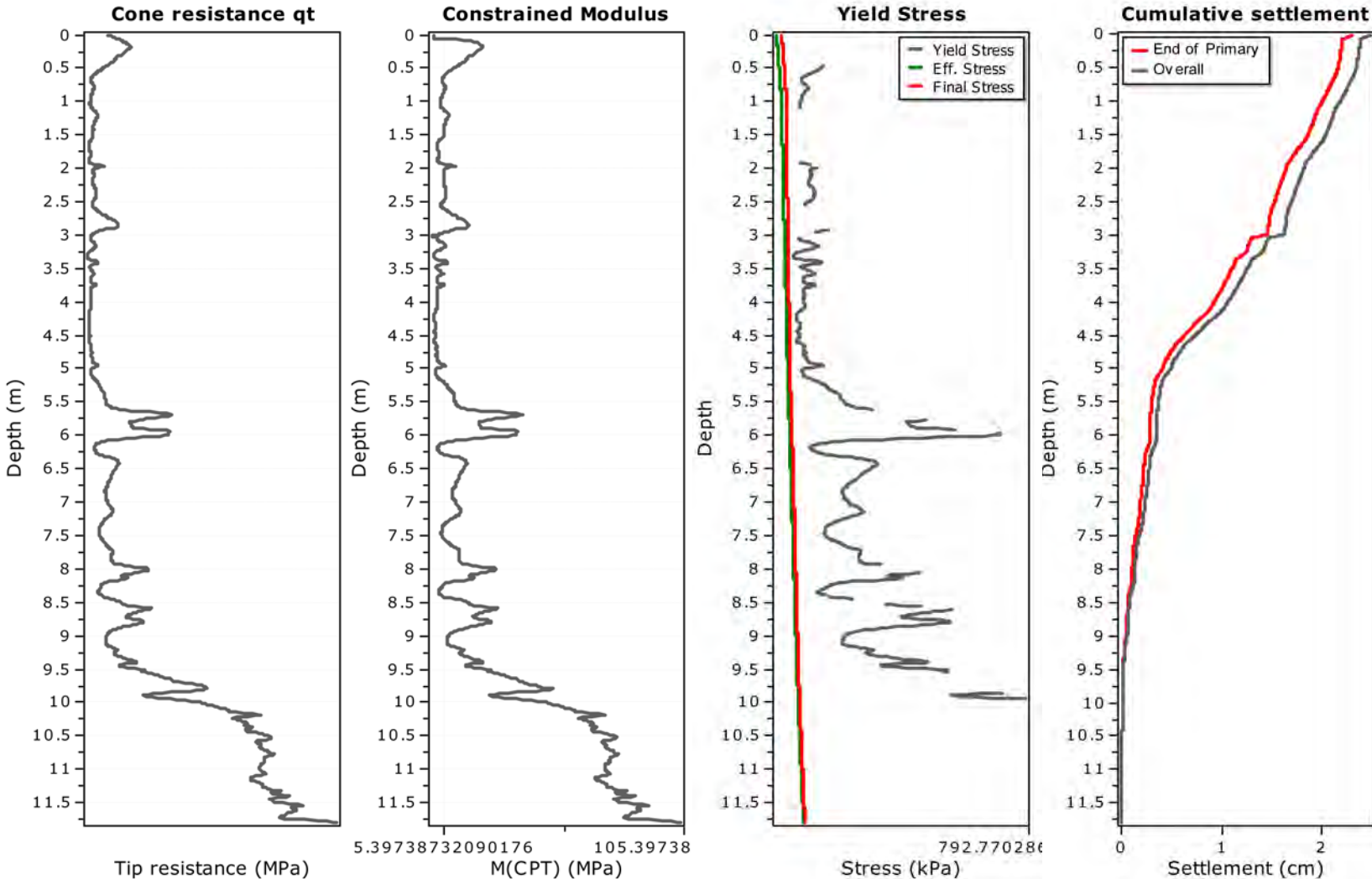
Total calculated settlement: 1.72

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1151	11.51	11.52	0.01	11.52	4.48	81.65	0.27	0.000	0.000	0.000
1152	11.52	11.53	0.01	11.53	4.48	84.54	0.27	0.000	0.000	0.000
1153	11.53	11.54	0.01	11.54	4.48	87.97	0.27	0.000	0.000	0.000
1154	11.54	11.55	0.01	11.54	4.47	90.33	0.27	0.000	0.000	0.000
1155	11.55	11.56	0.01	11.55	4.47	90.21	0.27	0.000	0.000	0.000
1156	11.56	11.57	0.01	11.56	4.47	87.93	0.27	0.000	0.000	0.000
1157	11.57	11.58	0.01	11.57	4.46	85.79	0.27	0.000	0.000	0.000
1158	11.58	11.59	0.01	11.59	4.46	85.42	0.27	0.000	0.000	0.000
1159	11.59	11.60	0.01	11.60	4.46	85.95	0.27	0.000	0.000	0.000
1160	11.60	11.61	0.01	11.61	4.45	86.56	0.27	0.000	0.000	0.000
1161	11.61	11.62	0.01	11.62	4.45	87.11	0.27	0.000	0.000	0.000
1162	11.62	11.63	0.01	11.63	4.45	87.08	0.27	0.000	0.000	0.000
1163	11.63	11.64	0.01	11.63	4.44	86.44	0.27	0.000	0.000	0.000
1164	11.64	11.65	0.01	11.64	4.44	85.39	0.27	0.000	0.000	0.000
1165	11.65	11.66	0.01	11.65	4.43	84.33	0.27	0.000	0.000	0.000
1166	11.66	11.67	0.01	11.66	4.43	83.48	0.27	0.000	0.000	0.000
1167	11.67	11.68	0.01	11.68	4.43	82.88	0.27	0.000	0.000	0.000
1168	11.68	11.69	0.01	11.69	4.42	82.77	0.27	0.000	0.000	0.000
1169	11.69	11.70	0.01	11.70	4.42	82.61	0.27	0.000	0.000	0.000
1170	11.70	11.71	0.01	11.71	4.42	81.79	0.27	0.000	0.000	0.000
1171	11.71	11.72	0.01	11.71	4.41	80.82	0.27	0.000	0.000	0.000
1172	11.72	11.73	0.01	11.72	4.41	80.17	0.27	0.000	0.000	0.000
1173	11.73	11.74	0.01	11.73	4.41	80.40	0.27	0.000	0.000	0.000
1174	11.74	11.75	0.01	11.74	4.40	82.14	0.27	0.000	0.000	0.000
1175	11.75	11.76	0.01	11.76	4.40	85.66	0.27	0.000	0.000	0.000
1176	11.76	11.77	0.01	11.77	4.40	90.99	0.27	0.000	0.000	0.000
1177	11.77	11.78	0.01	11.78	4.39	96.00	0.27	0.000	0.000	0.000
1178	11.78	11.79	0.01	11.79	4.39	99.89	0.27	0.000	0.000	0.000
1179	11.79	11.80	0.01	11.79	4.39	102.51	0.27	0.000	0.000	0.000

Total primary settlement: 2.30
Total secondary settlement: 0.18

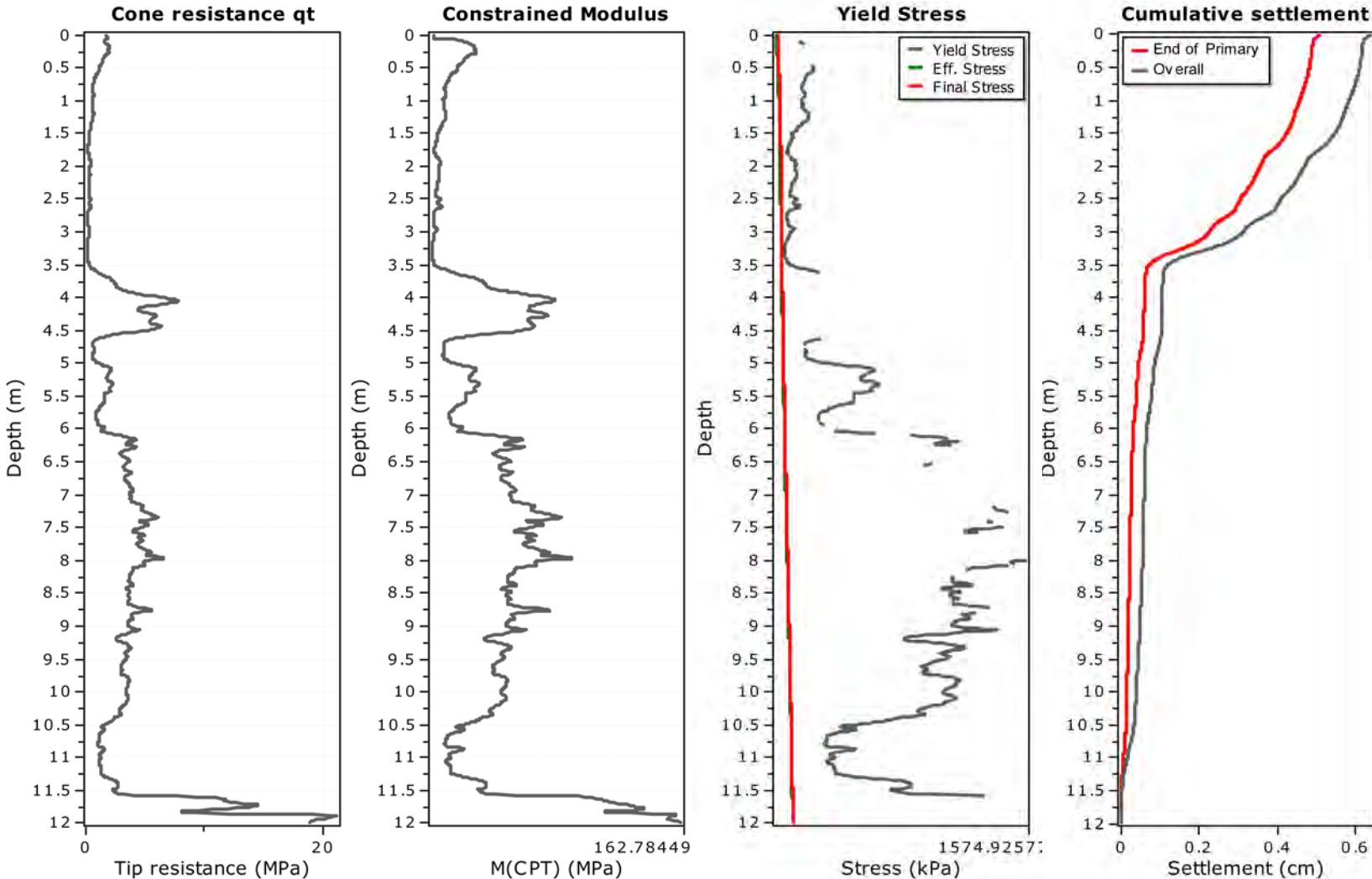
Total calculated settlement: 2.48

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
 Footing width: 10.00 (m)
 L/B: 2.0
 Footing pressure: 5.50 (kPa)
 Embedment depth: 0.00 (m)
 Footing is rigid: Yes
 Remove excavation load: Yes
 Apply 20% rule: No
 Calculate secondary settlements: Yes
 Time period for primary consolidation: 6 months
 Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.97	11.98	0.01	11.97	1.44	158.89	0.26	0.000	0.000	0.000
1198	11.98	11.99	0.01	11.98	1.44	160.62	0.26	0.000	0.000	0.000

Total primary settlement: 0.51
Total secondary settlement: 0.13

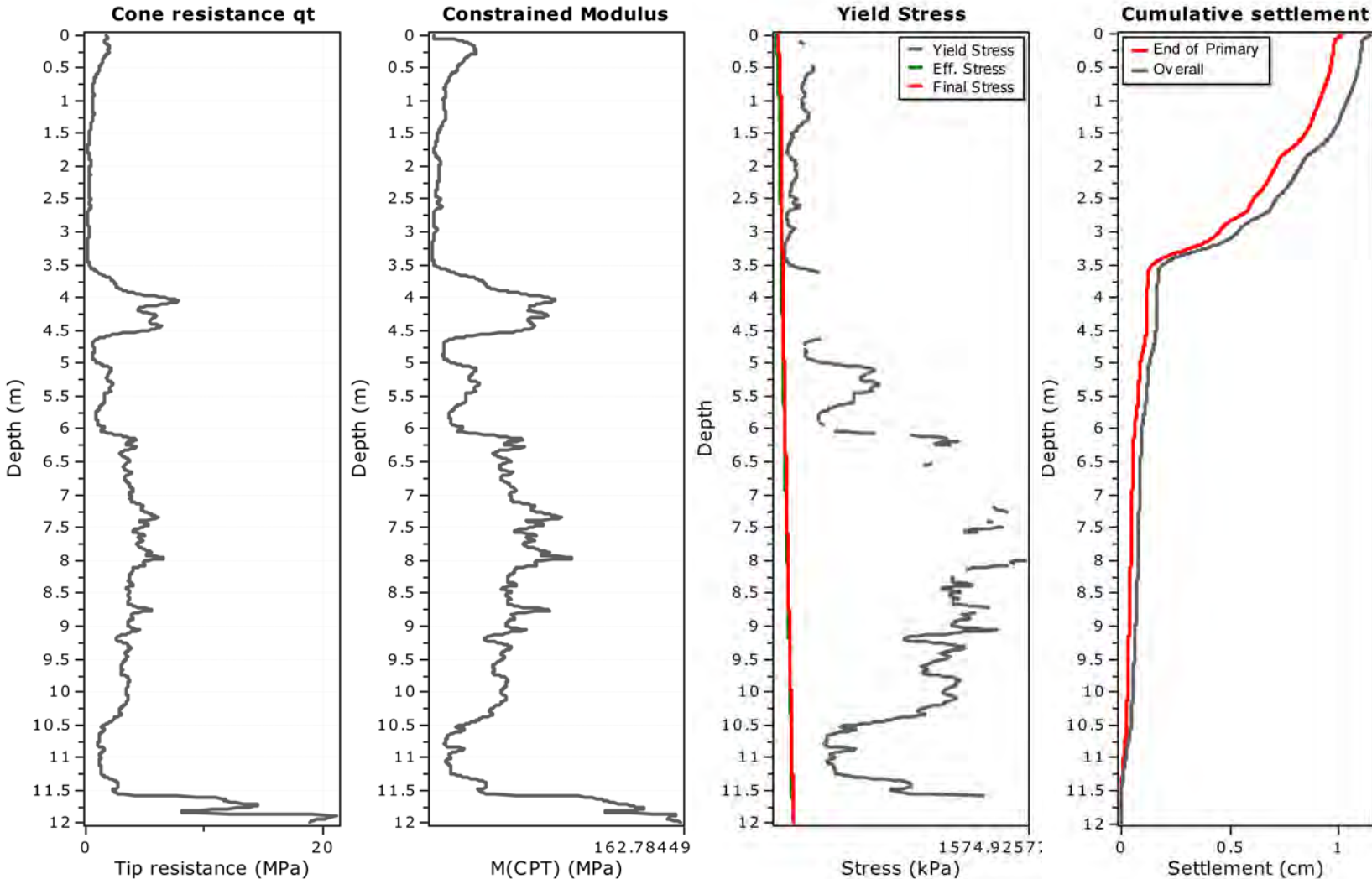
Total calculated settlement: 0.64

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.97	11.98	0.01	11.97	2.88	158.89	0.26	0.000	0.000	0.000
1198	11.98	11.99	0.01	11.98	2.88	160.62	0.26	0.000	0.000	0.000

Total primary settlement: 1.02
Total secondary settlement: 0.13

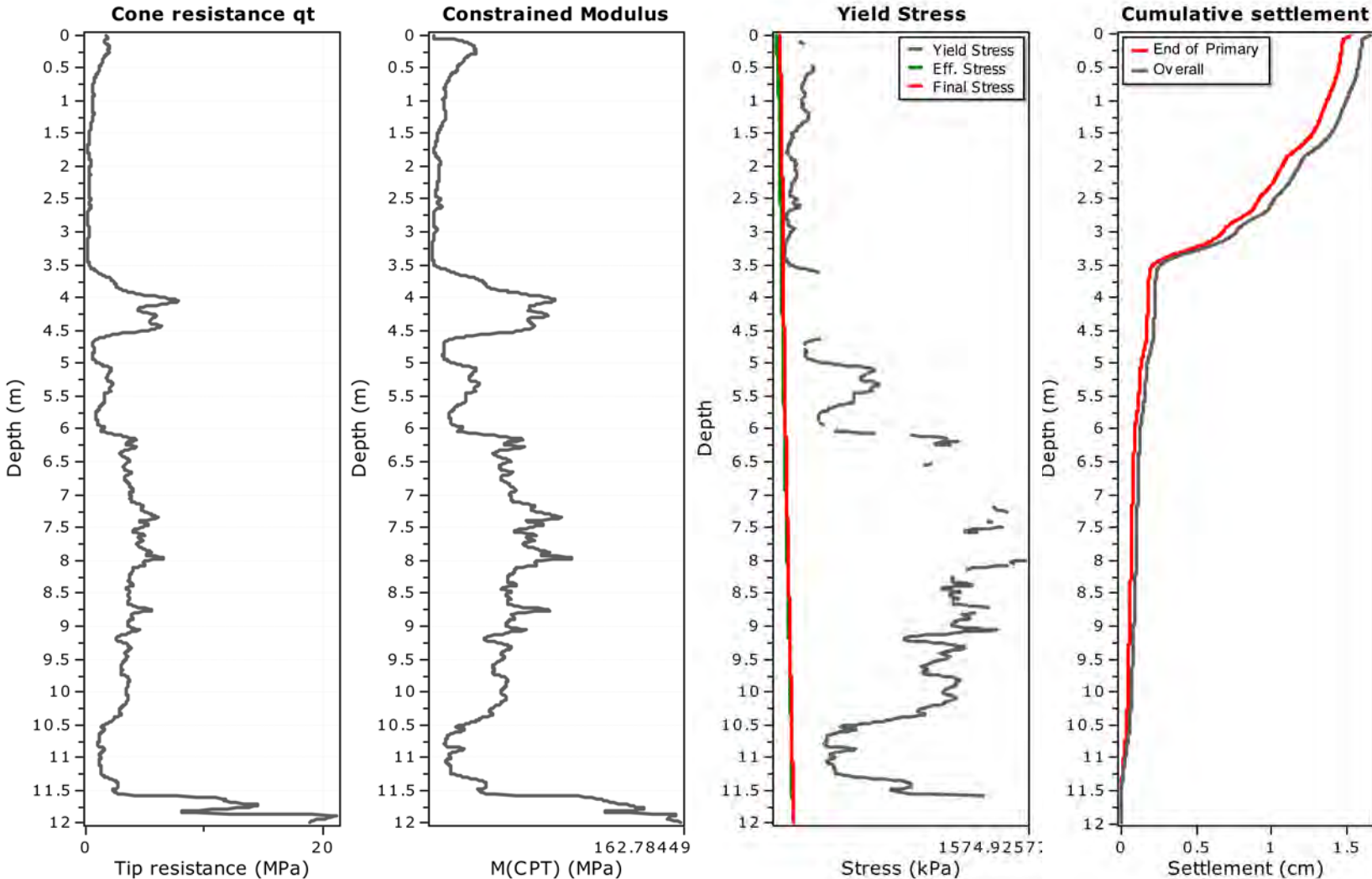
Total calculated settlement: 1.15

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_c = S_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1197	11.97	11.98	0.01	11.97	4.32	158.89	0.26	0.000	0.000	0.000
1198	11.98	11.99	0.01	11.98	4.32	160.62	0.26	0.000	0.000	0.000

Total primary settlement: 1.53
Total secondary settlement: 0.13

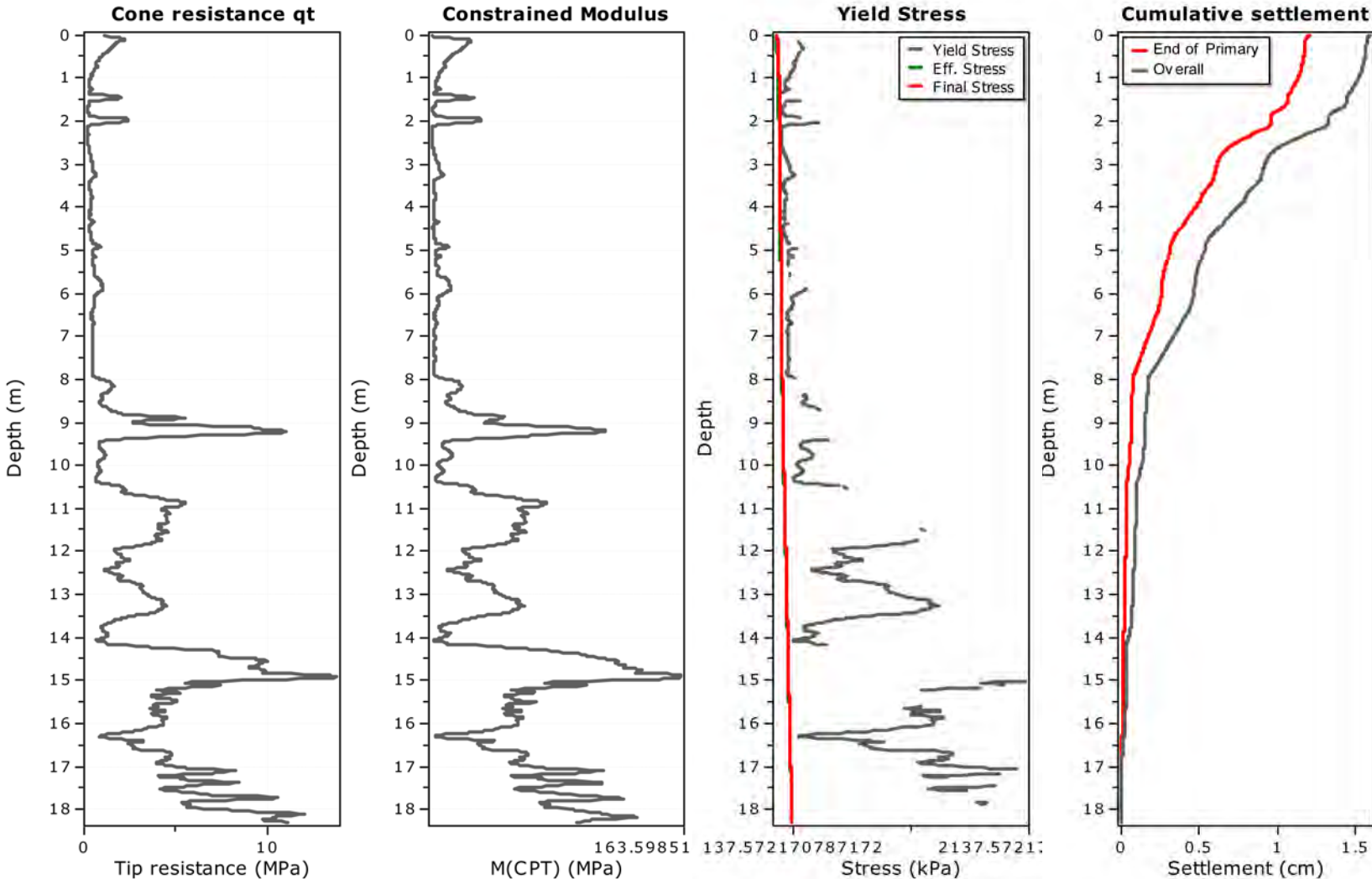
Total calculated settlement: 1.65

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
Footing width: 10.00 (m)
L/B: 2.0
Footing pressure: 5.50 (kPa)
Embedment depth: 0.00 (m)
Footing is rigid: Yes
Remove excavation load: Yes
Apply 20% rule: No
Calculate secondary settlements: Yes
Time period for primary consolidation: 6 months
Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1795	17.95	17.96	0.01	17.95	0.93	76.26	0.17	0.000	0.000	0.000
1796	17.96	17.97	0.01	17.96	0.93	80.50	0.17	0.000	0.000	0.000
1797	17.97	17.98	0.01	17.98	0.93	89.32	0.17	0.000	0.000	0.000
1798	17.98	17.99	0.01	17.98	0.93	90.28	0.17	0.000	0.000	0.000
1799	17.99	18.00	0.01	18.00	0.93	91.27	0.17	0.000	0.000	0.000
1800	18.00	18.01	0.01	18.00	0.93	92.00	0.17	0.000	0.000	0.000
1801	18.01	18.02	0.01	18.02	0.93	92.60	0.17	0.000	0.000	0.000
1802	18.02	18.03	0.01	18.02	0.93	93.37	0.17	0.000	0.000	0.000
1803	18.03	18.04	0.01	18.04	0.92	95.14	0.17	0.000	0.000	0.000
1804	18.04	18.05	0.01	18.05	0.92	98.91	0.17	0.000	0.000	0.000
1805	18.05	18.06	0.01	18.05	0.92	103.07	0.17	0.000	0.000	0.000
1806	18.06	18.07	0.01	18.07	0.92	106.70	0.17	0.000	0.000	0.000
1807	18.07	18.08	0.01	18.07	0.92	108.46	0.17	0.000	0.000	0.000
1808	18.08	18.09	0.01	18.09	0.92	109.51	0.17	0.000	0.000	0.000
1809	18.09	18.10	0.01	18.09	0.92	110.25	0.17	0.000	0.000	0.000
1810	18.10	18.11	0.01	18.11	0.92	110.92	0.17	0.000	0.000	0.000
1811	18.11	18.12	0.01	18.11	0.92	111.73	0.17	0.000	0.000	0.000
1812	18.12	18.13	0.01	18.13	0.92	113.20	0.17	0.000	0.000	0.000
1813	18.13	18.14	0.01	18.14	0.92	116.61	0.17	0.000	0.000	0.000
1814	18.14	18.15	0.01	18.14	0.92	121.47	0.17	0.000	0.000	0.000
1815	18.15	18.16	0.01	18.16	0.92	127.22	0.17	0.000	0.000	0.000
1816	18.16	18.17	0.01	18.16	0.92	130.73	0.17	0.000	0.000	0.000
1817	18.17	18.18	0.01	18.18	0.92	132.62	0.17	0.000	0.000	0.000
1818	18.18	18.19	0.01	18.18	0.92	132.84	0.17	0.000	0.000	0.000
1819	18.19	18.20	0.01	18.20	0.91	131.43	0.17	0.000	0.000	0.000
1820	18.20	18.21	0.01	18.20	0.91	127.89	0.17	0.000	0.000	0.000
1821	18.21	18.22	0.01	18.21	0.91	118.96	0.17	0.000	0.000	0.000
1822	18.22	18.23	0.01	18.23	0.91	111.03	0.17	0.000	0.000	0.000
1823	18.23	18.24	0.01	18.23	0.91	104.77	0.17	0.000	0.000	0.000
1824	18.24	18.25	0.01	18.25	0.91	103.77	0.17	0.000	0.000	0.000
1825	18.25	18.26	0.01	18.25	0.91	103.15	0.17	0.000	0.000	0.000
1826	18.26	18.27	0.01	18.27	0.91	102.52	0.17	0.000	0.000	0.000
1827	18.27	18.28	0.01	18.27	0.91	101.23	0.17	0.000	0.000	0.000
1828	18.28	18.29	0.01	18.29	0.91	99.35	0.17	0.000	0.000	0.000
1829	18.29	18.30	0.01	18.30	0.91	96.31	0.17	0.000	0.000	0.000

Total primary settlement: 1.20
Total secondary settlement: 0.39

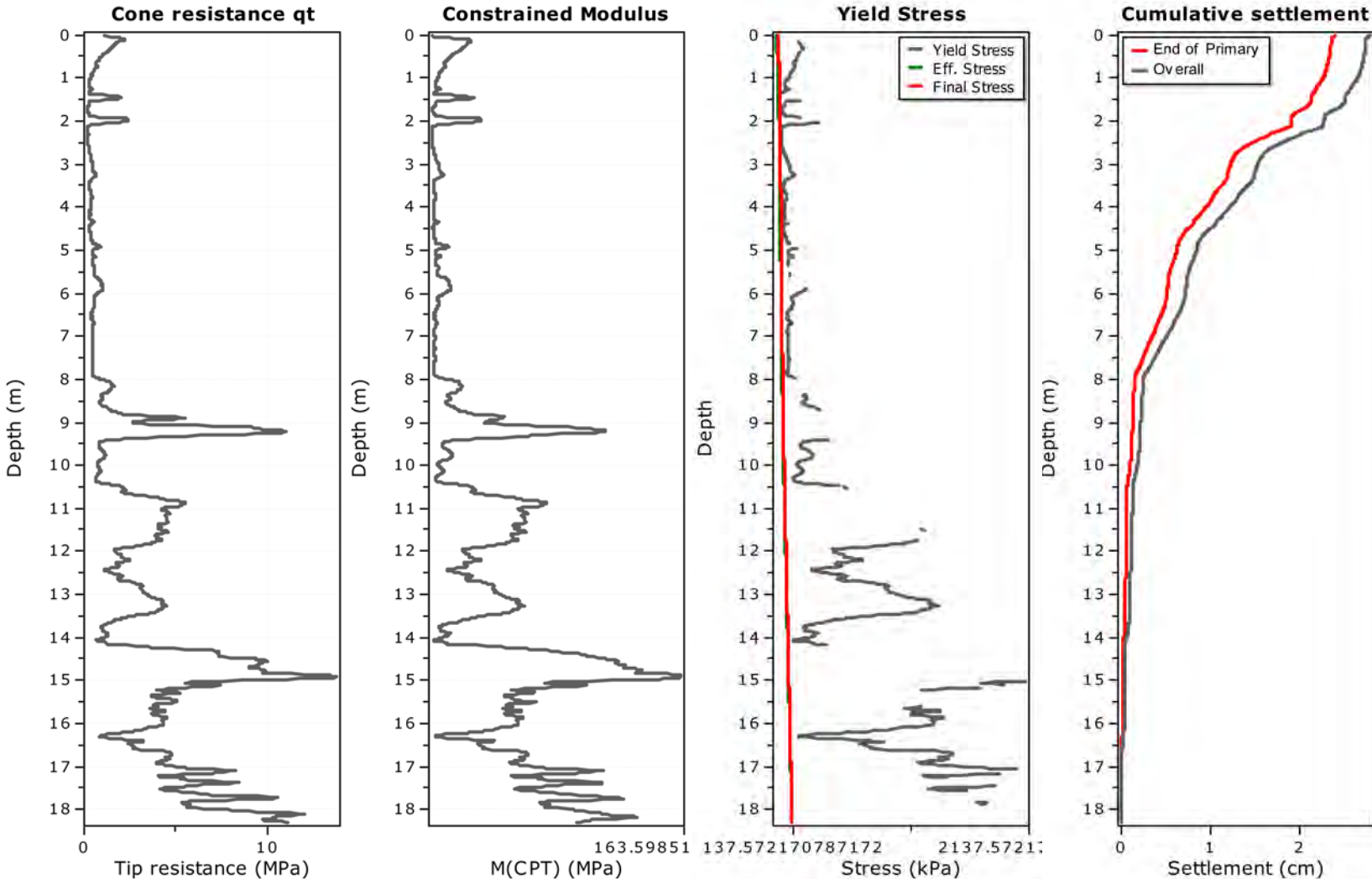
Total calculated settlement: 1.60

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1795	17.95	17.96	0.01	17.95	1.86	76.26	0.17	0.000	0.000	0.000
1796	17.96	17.97	0.01	17.96	1.86	80.50	0.17	0.000	0.000	0.000
1797	17.97	17.98	0.01	17.98	1.86	89.32	0.17	0.000	0.000	0.000
1798	17.98	17.99	0.01	17.98	1.86	90.28	0.17	0.000	0.000	0.000
1799	17.99	18.00	0.01	18.00	1.85	91.27	0.17	0.000	0.000	0.000
1800	18.00	18.01	0.01	18.00	1.85	92.00	0.17	0.000	0.000	0.000
1801	18.01	18.02	0.01	18.02	1.85	92.60	0.17	0.000	0.000	0.000
1802	18.02	18.03	0.01	18.02	1.85	93.37	0.17	0.000	0.000	0.000
1803	18.03	18.04	0.01	18.04	1.85	95.14	0.17	0.000	0.000	0.000
1804	18.04	18.05	0.01	18.05	1.85	98.91	0.17	0.000	0.000	0.000
1805	18.05	18.06	0.01	18.05	1.85	103.07	0.17	0.000	0.000	0.000
1806	18.06	18.07	0.01	18.07	1.85	106.70	0.17	0.000	0.000	0.000
1807	18.07	18.08	0.01	18.07	1.84	108.46	0.17	0.000	0.000	0.000
1808	18.08	18.09	0.01	18.09	1.84	109.51	0.17	0.000	0.000	0.000
1809	18.09	18.10	0.01	18.09	1.84	110.25	0.17	0.000	0.000	0.000
1810	18.10	18.11	0.01	18.11	1.84	110.92	0.17	0.000	0.000	0.000
1811	18.11	18.12	0.01	18.11	1.84	111.73	0.17	0.000	0.000	0.000
1812	18.12	18.13	0.01	18.13	1.84	113.20	0.17	0.000	0.000	0.000
1813	18.13	18.14	0.01	18.14	1.84	116.61	0.17	0.000	0.000	0.000
1814	18.14	18.15	0.01	18.14	1.84	121.47	0.17	0.000	0.000	0.000
1815	18.15	18.16	0.01	18.16	1.83	127.22	0.17	0.000	0.000	0.000
1816	18.16	18.17	0.01	18.16	1.83	130.73	0.17	0.000	0.000	0.000
1817	18.17	18.18	0.01	18.18	1.83	132.62	0.17	0.000	0.000	0.000
1818	18.18	18.19	0.01	18.18	1.83	132.84	0.17	0.000	0.000	0.000
1819	18.19	18.20	0.01	18.20	1.83	131.43	0.17	0.000	0.000	0.000
1820	18.20	18.21	0.01	18.20	1.83	127.89	0.17	0.000	0.000	0.000
1821	18.21	18.22	0.01	18.21	1.83	118.96	0.17	0.000	0.000	0.000
1822	18.22	18.23	0.01	18.23	1.83	111.03	0.17	0.000	0.000	0.000
1823	18.23	18.24	0.01	18.23	1.82	104.77	0.17	0.000	0.000	0.000
1824	18.24	18.25	0.01	18.25	1.82	103.77	0.17	0.000	0.000	0.000
1825	18.25	18.26	0.01	18.25	1.82	103.15	0.17	0.000	0.000	0.000
1826	18.26	18.27	0.01	18.27	1.82	102.52	0.17	0.000	0.000	0.000
1827	18.27	18.28	0.01	18.27	1.82	101.23	0.17	0.000	0.000	0.000
1828	18.28	18.29	0.01	18.29	1.82	99.35	0.17	0.000	0.000	0.000
1829	18.29	18.30	0.01	18.30	1.82	96.31	0.17	0.000	0.000	0.000

Total primary settlement: 2.41
Total secondary settlement: 0.39

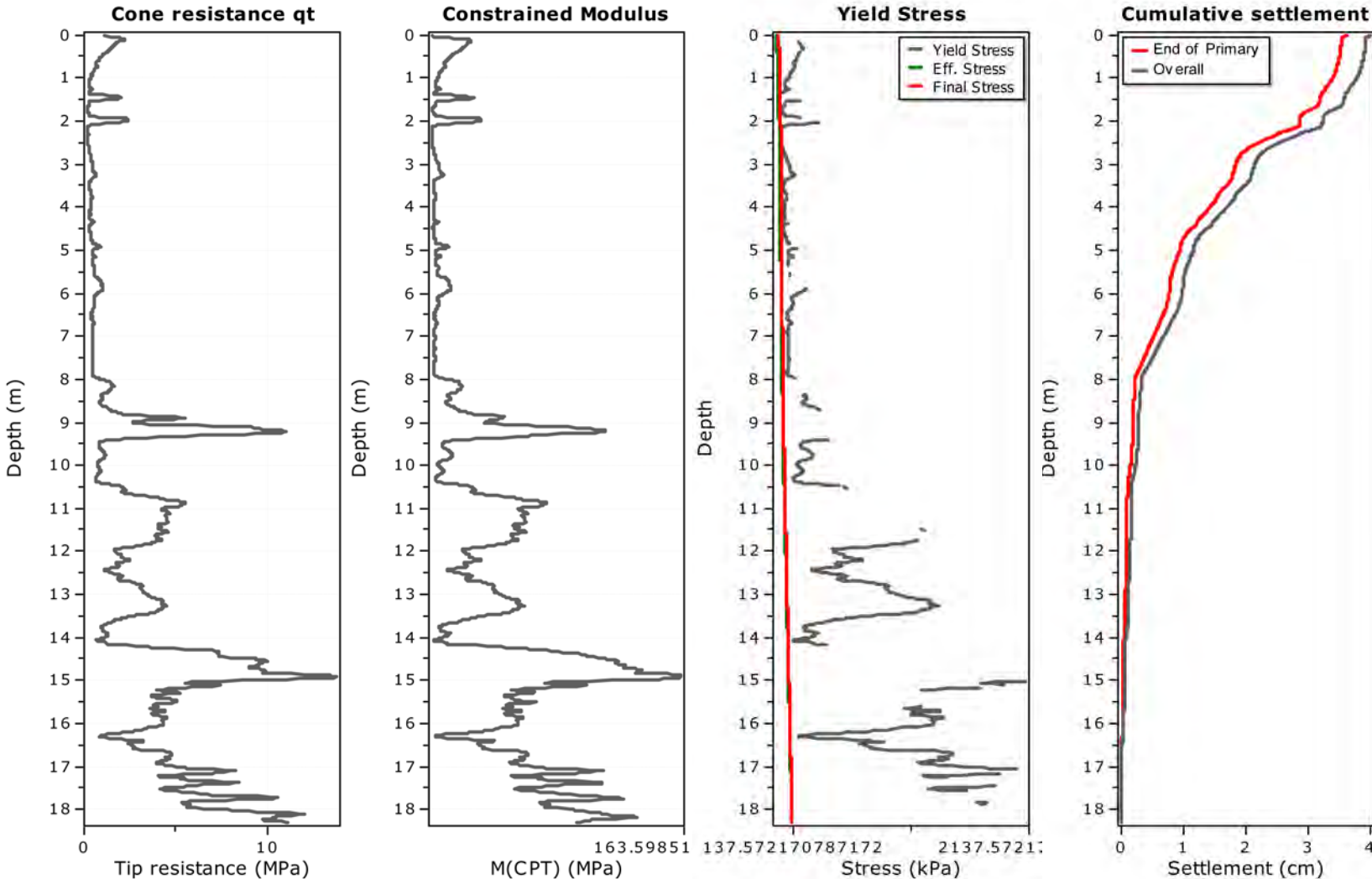
Total calculated settlement: 2.80

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1795	17.95	17.96	0.01	17.95	2.79	76.26	0.17	0.000	0.000	0.000
1796	17.96	17.97	0.01	17.96	2.79	80.50	0.17	0.000	0.000	0.000
1797	17.97	17.98	0.01	17.98	2.79	89.32	0.17	0.000	0.000	0.000
1798	17.98	17.99	0.01	17.98	2.78	90.28	0.17	0.000	0.000	0.000
1799	17.99	18.00	0.01	18.00	2.78	91.27	0.17	0.000	0.000	0.000
1800	18.00	18.01	0.01	18.00	2.78	92.00	0.17	0.000	0.000	0.000
1801	18.01	18.02	0.01	18.02	2.78	92.60	0.17	0.000	0.000	0.000
1802	18.02	18.03	0.01	18.02	2.78	93.37	0.17	0.000	0.000	0.000
1803	18.03	18.04	0.01	18.04	2.77	95.14	0.17	0.000	0.000	0.000
1804	18.04	18.05	0.01	18.05	2.77	98.91	0.17	0.000	0.000	0.000
1805	18.05	18.06	0.01	18.05	2.77	103.07	0.17	0.000	0.000	0.000
1806	18.06	18.07	0.01	18.07	2.77	106.70	0.17	0.000	0.000	0.000
1807	18.07	18.08	0.01	18.07	2.77	108.46	0.17	0.000	0.000	0.000
1808	18.08	18.09	0.01	18.09	2.76	109.51	0.17	0.000	0.000	0.000
1809	18.09	18.10	0.01	18.09	2.76	110.25	0.17	0.000	0.000	0.000
1810	18.10	18.11	0.01	18.11	2.76	110.92	0.17	0.000	0.000	0.000
1811	18.11	18.12	0.01	18.11	2.76	111.73	0.17	0.000	0.000	0.000
1812	18.12	18.13	0.01	18.13	2.76	113.20	0.17	0.000	0.000	0.000
1813	18.13	18.14	0.01	18.14	2.76	116.61	0.17	0.000	0.000	0.000
1814	18.14	18.15	0.01	18.14	2.75	121.47	0.17	0.000	0.000	0.000
1815	18.15	18.16	0.01	18.16	2.75	127.22	0.17	0.000	0.000	0.000
1816	18.16	18.17	0.01	18.16	2.75	130.73	0.17	0.000	0.000	0.000
1817	18.17	18.18	0.01	18.18	2.75	132.62	0.17	0.000	0.000	0.000
1818	18.18	18.19	0.01	18.18	2.75	132.84	0.17	0.000	0.000	0.000
1819	18.19	18.20	0.01	18.20	2.74	131.43	0.17	0.000	0.000	0.000
1820	18.20	18.21	0.01	18.20	2.74	127.89	0.17	0.000	0.000	0.000
1821	18.21	18.22	0.01	18.21	2.74	118.96	0.17	0.000	0.000	0.000
1822	18.22	18.23	0.01	18.23	2.74	111.03	0.17	0.000	0.000	0.000
1823	18.23	18.24	0.01	18.23	2.74	104.77	0.17	0.000	0.000	0.000
1824	18.24	18.25	0.01	18.25	2.73	103.77	0.17	0.000	0.000	0.000
1825	18.25	18.26	0.01	18.25	2.73	103.15	0.17	0.000	0.000	0.000
1826	18.26	18.27	0.01	18.27	2.73	102.52	0.17	0.000	0.000	0.000
1827	18.27	18.28	0.01	18.27	2.73	101.23	0.17	0.000	0.000	0.000
1828	18.28	18.29	0.01	18.29	2.73	99.35	0.17	0.000	0.000	0.000
1829	18.29	18.30	0.01	18.30	2.73	96.31	0.17	0.000	0.000	0.000

Total primary settlement: 3.61
Total secondary settlement: 0.39

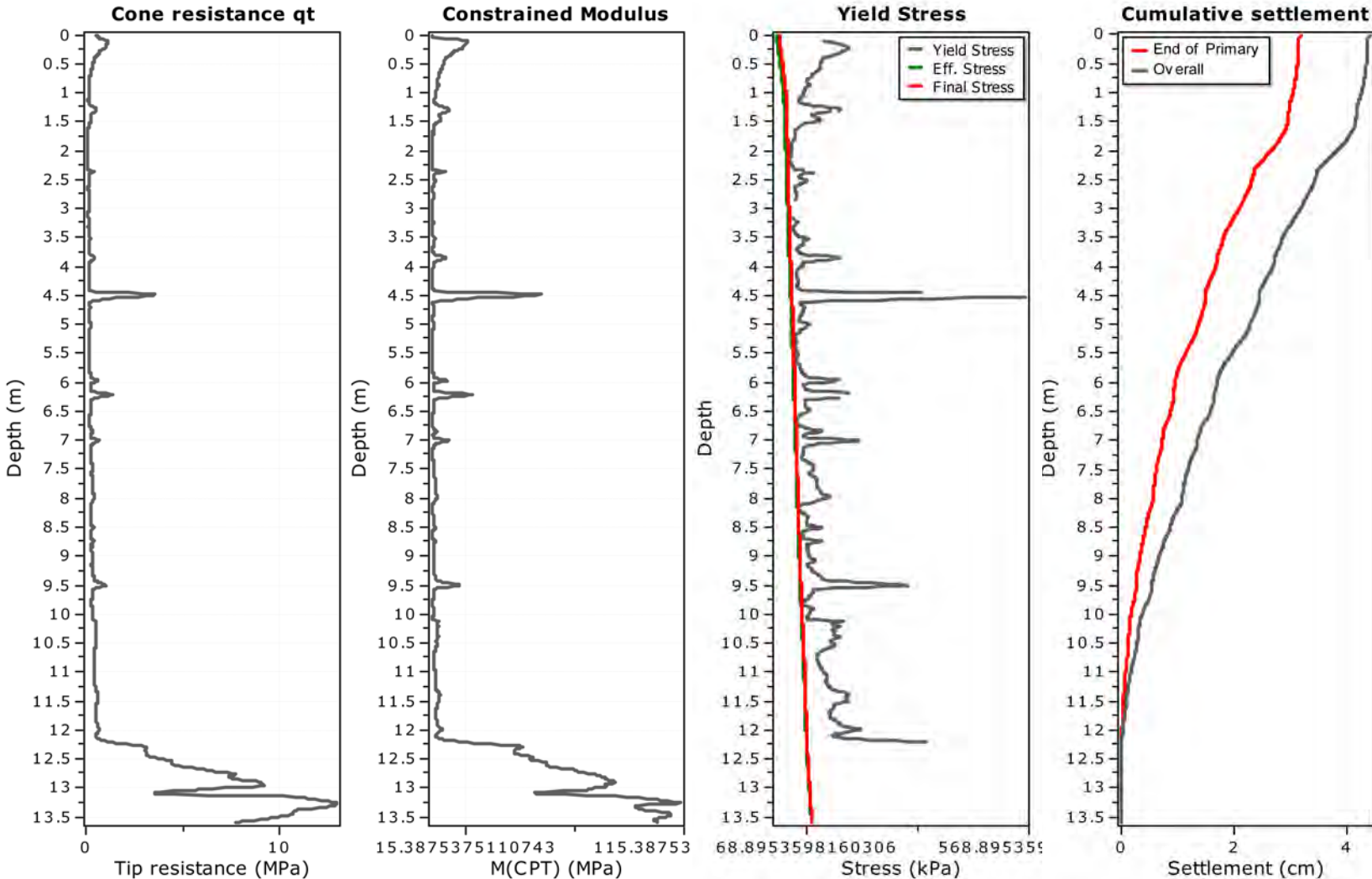
Total calculated settlement: 4.01

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

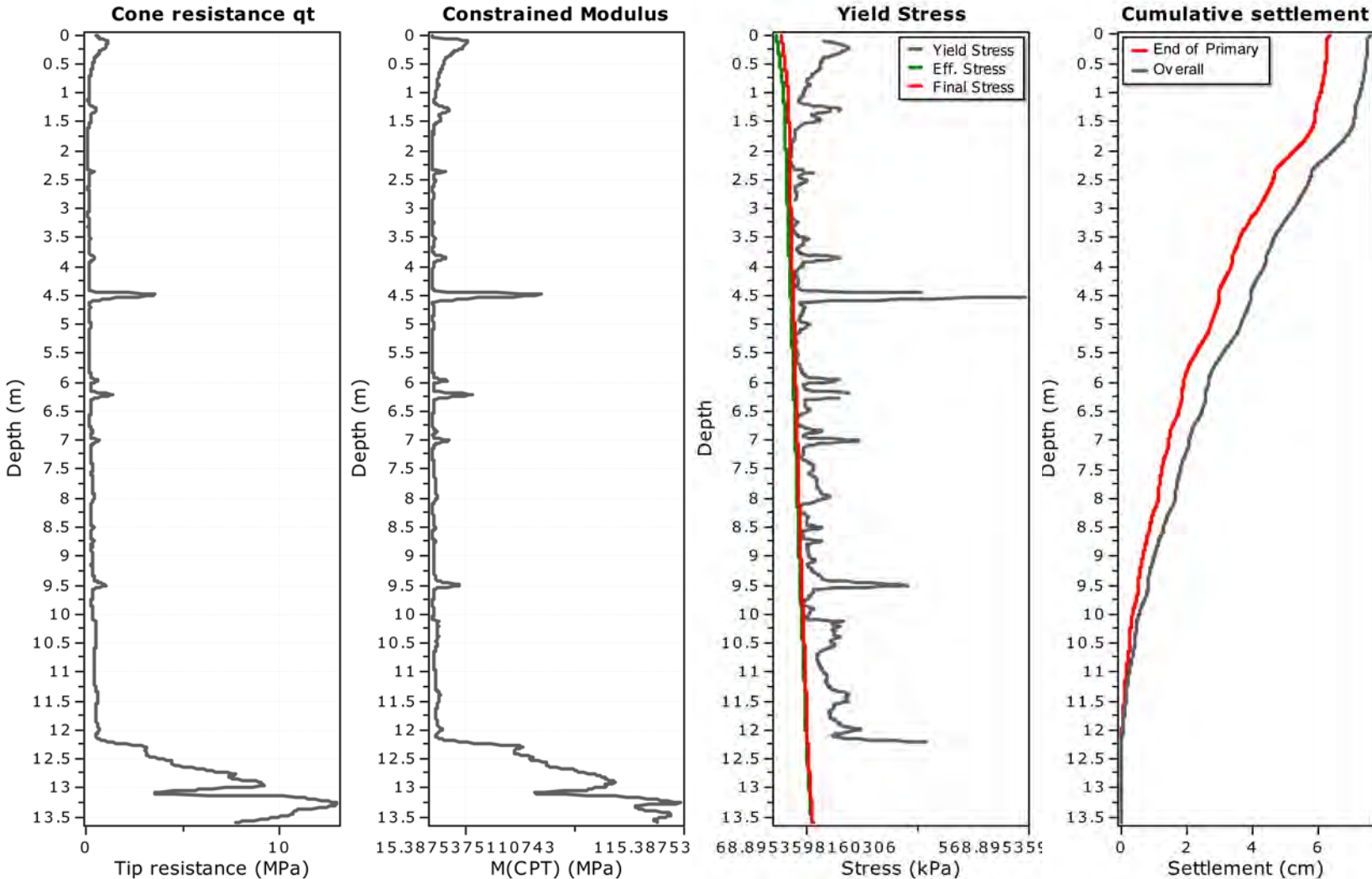
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1335	13.35	13.36	0.01	13.36	1.29	94.31	0.24	0.000	0.000	0.000
1336	13.36	13.37	0.01	13.37	1.29	94.71	0.24	0.000	0.000	0.000
1337	13.37	13.38	0.01	13.38	1.29	95.32	0.24	0.000	0.000	0.000
1338	13.38	13.39	0.01	13.38	1.29	95.88	0.23	0.000	0.000	0.000
1339	13.39	13.40	0.01	13.39	1.29	97.66	0.23	0.000	0.000	0.000
1340	13.40	13.41	0.01	13.40	1.29	99.72	0.23	0.000	0.000	0.000
1341	13.41	13.42	0.01	13.41	1.29	102.63	0.23	0.000	0.000	0.000
1342	13.42	13.43	0.01	13.43	1.29	105.06	0.23	0.000	0.000	0.000
1343	13.43	13.44	0.01	13.44	1.29	107.47	0.23	0.000	0.000	0.000
1344	13.44	13.45	0.01	13.45	1.29	108.86	0.23	0.000	0.000	0.000
1345	13.45	13.46	0.01	13.46	1.28	109.58	0.23	0.000	0.000	0.000
1346	13.46	13.47	0.01	13.46	1.28	109.58	0.23	0.000	0.000	0.000
1347	13.47	13.48	0.01	13.47	1.28	109.25	0.23	0.000	0.000	0.000
1348	13.48	13.49	0.01	13.48	1.28	108.65	0.23	0.000	0.000	0.000
1349	13.49	13.50	0.01	13.49	1.28	107.85	0.23	0.000	0.000	0.000
1350	13.50	13.51	0.01	13.51	1.28	106.61	0.23	0.000	0.000	0.000
1351	13.51	13.52	0.01	13.52	1.28	105.14	0.23	0.000	0.000	0.000
1352	13.52	13.53	0.01	13.53	1.28	103.73	0.23	0.000	0.000	0.000
1353	13.53	13.54	0.01	13.54	1.28	102.84	0.23	0.000	0.000	0.000
1354	13.54	13.55	0.01	13.54	1.28	102.15	0.23	0.000	0.000	0.000
1355	13.55	13.56	0.01	13.55	1.28	101.56	0.23	0.000	0.000	0.000
1356	13.56	13.57	0.01	13.56	1.27	101.83	0.23	0.000	0.000	0.000
1357	13.57	13.58	0.01	13.57	1.27	102.58	0.23	0.000	0.000	0.000
1358	13.58	13.59	0.01	13.59	1.27	103.04	0.23	0.000	0.000	0.000
1359	13.59	13.60	0.01	13.60	1.27	102.98	0.23	0.000	0.000	0.000

Total primary settlement: 3.20**Total secondary settlement: 1.22****Total calculated settlement: 4.42****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

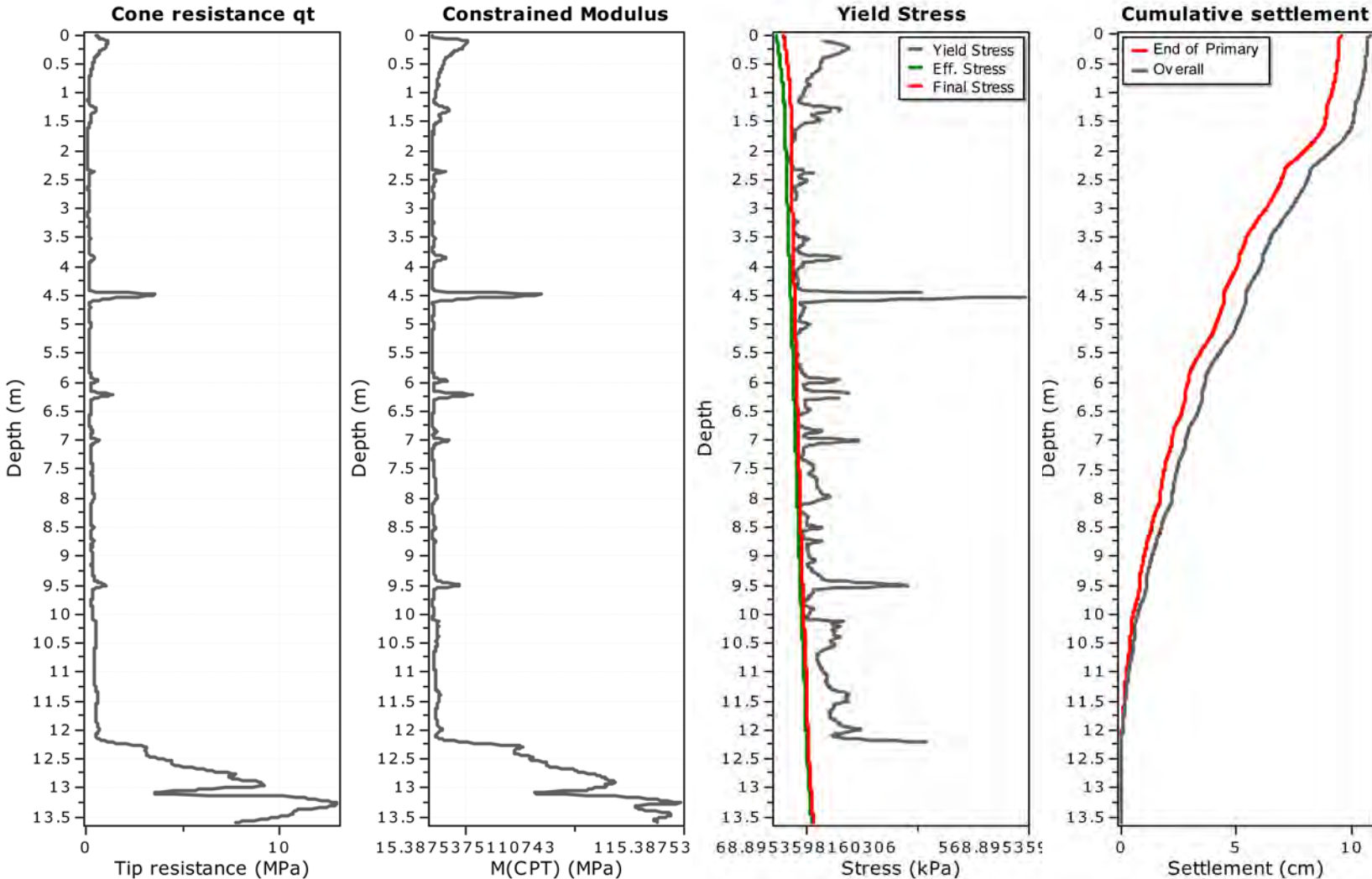
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1335	13.35	13.36	0.01	13.36	2.59	94.31	0.24	0.000	0.000	0.000
1336	13.36	13.37	0.01	13.37	2.59	94.71	0.24	0.000	0.000	0.000
1337	13.37	13.38	0.01	13.38	2.59	95.32	0.24	0.000	0.000	0.000
1338	13.38	13.39	0.01	13.38	2.58	95.88	0.23	0.000	0.000	0.000
1339	13.39	13.40	0.01	13.39	2.58	97.66	0.23	0.000	0.000	0.000
1340	13.40	13.41	0.01	13.40	2.58	99.72	0.23	0.000	0.000	0.000
1341	13.41	13.42	0.01	13.41	2.58	102.63	0.23	0.000	0.000	0.000
1342	13.42	13.43	0.01	13.43	2.58	105.06	0.23	0.000	0.000	0.000
1343	13.43	13.44	0.01	13.44	2.57	107.47	0.23	0.000	0.000	0.000
1344	13.44	13.45	0.01	13.45	2.57	108.86	0.23	0.000	0.000	0.000
1345	13.45	13.46	0.01	13.46	2.57	109.58	0.23	0.000	0.000	0.000
1346	13.46	13.47	0.01	13.46	2.57	109.58	0.23	0.000	0.000	0.000
1347	13.47	13.48	0.01	13.47	2.57	109.25	0.23	0.000	0.000	0.000
1348	13.48	13.49	0.01	13.48	2.56	108.65	0.23	0.000	0.000	0.000
1349	13.49	13.50	0.01	13.49	2.56	107.85	0.23	0.000	0.000	0.000
1350	13.50	13.51	0.01	13.51	2.56	106.61	0.23	0.000	0.000	0.000
1351	13.51	13.52	0.01	13.52	2.56	105.14	0.23	0.000	0.000	0.000
1352	13.52	13.53	0.01	13.53	2.56	103.73	0.23	0.000	0.000	0.000
1353	13.53	13.54	0.01	13.54	2.55	102.84	0.23	0.000	0.000	0.000
1354	13.54	13.55	0.01	13.54	2.55	102.15	0.23	0.000	0.000	0.000
1355	13.55	13.56	0.01	13.55	2.55	101.56	0.23	0.000	0.000	0.000
1356	13.56	13.57	0.01	13.56	2.55	101.83	0.23	0.000	0.000	0.000
1357	13.57	13.58	0.01	13.57	2.55	102.58	0.23	0.000	0.000	0.000
1358	13.58	13.59	0.01	13.59	2.54	103.04	0.23	0.000	0.000	0.000
1359	13.59	13.60	0.01	13.60	2.54	102.98	0.23	0.000	0.000	0.000

Total primary settlement: 6.40**Total secondary settlement: 1.22****Total calculated settlement: 7.62****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(\frac{t}{t_p} \right)^{-n}$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1335	13.35	13.36	0.01	13.36	3.88	94.31	0.24	0.000	0.000	0.000
1336	13.36	13.37	0.01	13.37	3.88	94.71	0.24	0.000	0.000	0.000
1337	13.37	13.38	0.01	13.38	3.88	95.32	0.24	0.000	0.000	0.000
1338	13.38	13.39	0.01	13.38	3.87	95.88	0.23	0.000	0.000	0.000
1339	13.39	13.40	0.01	13.39	3.87	97.66	0.23	0.000	0.000	0.000
1340	13.40	13.41	0.01	13.40	3.87	99.72	0.23	0.000	0.000	0.000
1341	13.41	13.42	0.01	13.41	3.87	102.63	0.23	0.000	0.000	0.000
1342	13.42	13.43	0.01	13.43	3.86	105.06	0.23	0.000	0.000	0.000
1343	13.43	13.44	0.01	13.44	3.86	107.47	0.23	0.000	0.000	0.000
1344	13.44	13.45	0.01	13.45	3.86	108.86	0.23	0.000	0.000	0.000
1345	13.45	13.46	0.01	13.46	3.85	109.58	0.23	0.000	0.000	0.000
1346	13.46	13.47	0.01	13.46	3.85	109.58	0.23	0.000	0.000	0.000
1347	13.47	13.48	0.01	13.47	3.85	109.25	0.23	0.000	0.000	0.000
1348	13.48	13.49	0.01	13.48	3.85	108.65	0.23	0.000	0.000	0.000
1349	13.49	13.50	0.01	13.49	3.84	107.85	0.23	0.000	0.000	0.000
1350	13.50	13.51	0.01	13.51	3.84	106.61	0.23	0.000	0.000	0.000
1351	13.51	13.52	0.01	13.52	3.84	105.14	0.23	0.000	0.000	0.000
1352	13.52	13.53	0.01	13.53	3.83	103.73	0.23	0.000	0.000	0.000
1353	13.53	13.54	0.01	13.54	3.83	102.84	0.23	0.000	0.000	0.000
1354	13.54	13.55	0.01	13.54	3.83	102.15	0.23	0.000	0.000	0.000
1355	13.55	13.56	0.01	13.55	3.83	101.56	0.23	0.000	0.000	0.000
1356	13.56	13.57	0.01	13.56	3.82	101.83	0.23	0.000	0.000	0.000
1357	13.57	13.58	0.01	13.57	3.82	102.58	0.23	0.000	0.000	0.000
1358	13.58	13.59	0.01	13.59	3.82	103.04	0.23	0.000	0.000	0.000
1359	13.59	13.60	0.01	13.60	3.81	102.98	0.23	0.000	0.000	0.000

Total primary settlement: 9.60
Total secondary settlement: 1.22

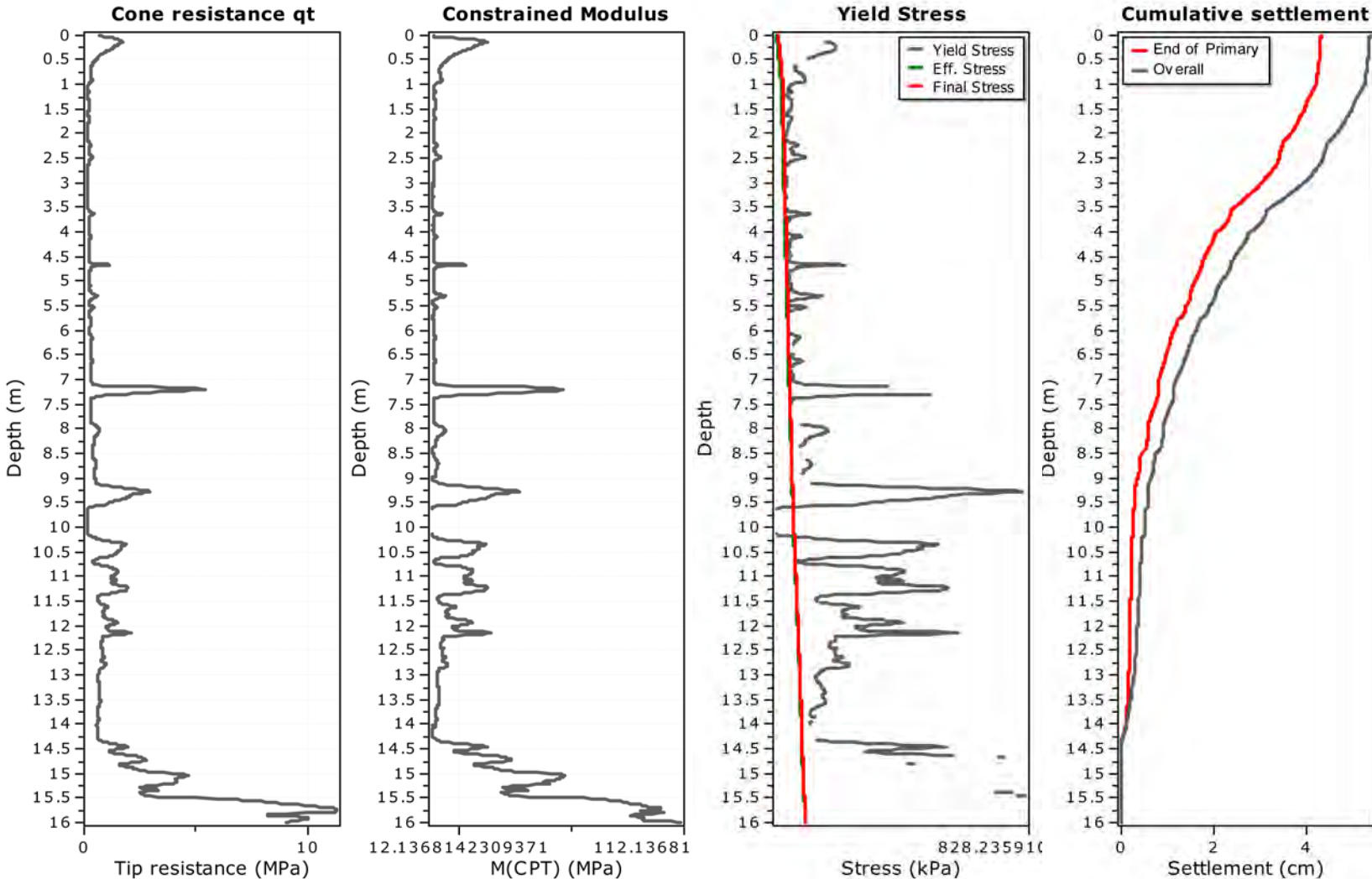
Total calculated settlement: 10.82

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	1.09	93.54	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	1.09	94.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	1.09	95.30	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	1.09	96.68	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	1.09	98.34	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	1.09	100.47	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	1.09	101.64	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	1.09	101.67	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	1.09	100.57	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	1.08	97.91	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	1.08	95.13	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	1.08	93.03	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	1.08	94.43	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	1.08	97.78	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	1.08	101.54	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	1.08	102.93	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	1.08	101.44	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	1.08	97.82	0.20	0.000	0.000	0.000
1583	15.83	15.84	0.01	15.84	1.08	93.95	0.20	0.000	0.000	0.000
1584	15.84	15.85	0.01	15.85	1.08	90.70	0.20	0.000	0.000	0.000
1585	15.85	15.86	0.01	15.86	1.08	88.28	0.20	0.000	0.000	0.000
1586	15.86	15.87	0.01	15.87	1.08	87.92	0.20	0.000	0.000	0.000
1587	15.87	15.88	0.01	15.88	1.07	88.70	0.20	0.000	0.000	0.000
1588	15.88	15.89	0.01	15.88	1.07	90.68	0.20	0.000	0.000	0.000
1589	15.89	15.90	0.01	15.89	1.07	92.21	0.20	0.000	0.000	0.000
1590	15.90	15.91	0.01	15.90	1.07	93.54	0.20	0.000	0.000	0.000
1591	15.91	15.92	0.01	15.91	1.07	94.32	0.19	0.000	0.000	0.000
1592	15.92	15.93	0.01	15.93	1.07	94.24	0.19	0.000	0.000	0.000
1593	15.93	15.94	0.01	15.94	1.07	93.98	0.19	0.000	0.000	0.000
1594	15.94	15.95	0.01	15.95	1.07	93.74	0.19	0.000	0.000	0.000
1595	15.95	15.96	0.01	15.96	1.07	93.97	0.19	0.000	0.000	0.000
1596	15.96	15.97	0.01	15.96	1.07	97.12	0.19	0.000	0.000	0.000
1597	15.97	15.98	0.01	15.97	1.07	101.49	0.19	0.000	0.000	0.000
1598	15.98	15.99	0.01	15.98	1.07	106.33	0.19	0.000	0.000	0.000
1599	15.99	16.00	0.01	15.99	1.07	109.15	0.19	0.000	0.000	0.000

Total primary settlement: 4.31
Total secondary settlement: 1.05

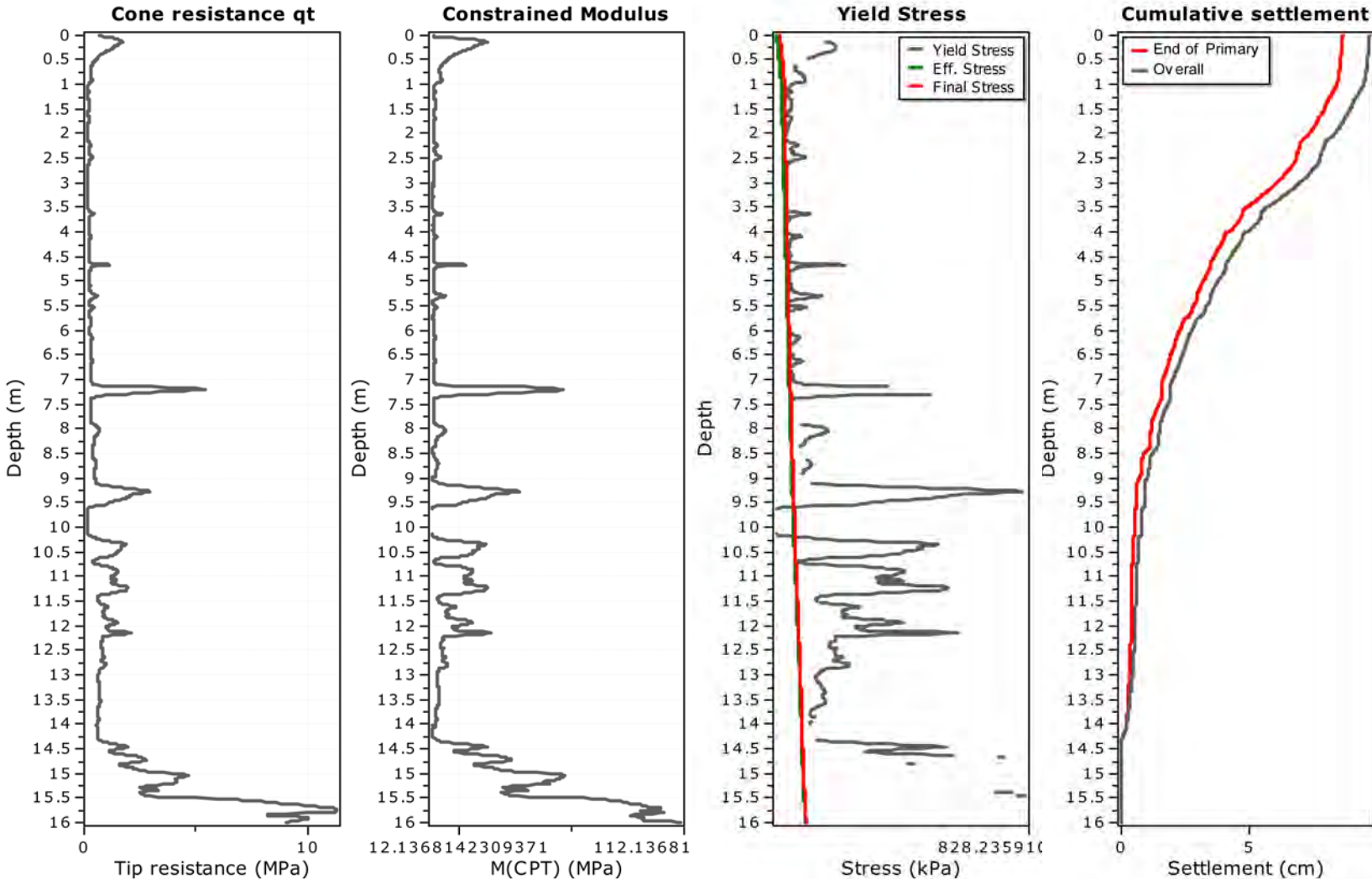
Total calculated settlement: 5.36

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$S_{sec} = S_{p} \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	2.18	93.54	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	2.18	94.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	2.18	95.30	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	2.18	96.68	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	2.18	98.34	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	2.18	100.47	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	2.17	101.64	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	2.17	101.67	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	2.17	100.57	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	2.17	97.91	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	2.17	95.13	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	2.17	93.03	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	2.17	94.43	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	2.16	97.78	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	2.16	101.54	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	2.16	102.93	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	2.16	101.44	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	2.16	97.82	0.20	0.000	0.000	0.000
1583	15.83	15.84	0.01	15.84	2.16	93.95	0.20	0.000	0.000	0.000
1584	15.84	15.85	0.01	15.85	2.15	90.70	0.20	0.000	0.000	0.000
1585	15.85	15.86	0.01	15.86	2.15	88.28	0.20	0.000	0.000	0.000
1586	15.86	15.87	0.01	15.87	2.15	87.92	0.20	0.000	0.000	0.000
1587	15.87	15.88	0.01	15.88	2.15	88.70	0.20	0.000	0.000	0.000
1588	15.88	15.89	0.01	15.88	2.15	90.68	0.20	0.000	0.000	0.000
1589	15.89	15.90	0.01	15.89	2.15	92.21	0.20	0.000	0.000	0.000
1590	15.90	15.91	0.01	15.90	2.15	93.54	0.20	0.000	0.000	0.000
1591	15.91	15.92	0.01	15.91	2.14	94.32	0.19	0.000	0.000	0.000
1592	15.92	15.93	0.01	15.93	2.14	94.24	0.19	0.000	0.000	0.000
1593	15.93	15.94	0.01	15.94	2.14	93.98	0.19	0.000	0.000	0.000
1594	15.94	15.95	0.01	15.95	2.14	93.74	0.19	0.000	0.000	0.000
1595	15.95	15.96	0.01	15.96	2.14	93.97	0.19	0.000	0.000	0.000
1596	15.96	15.97	0.01	15.96	2.14	97.12	0.19	0.000	0.000	0.000
1597	15.97	15.98	0.01	15.97	2.13	101.49	0.19	0.000	0.000	0.000
1598	15.98	15.99	0.01	15.98	2.13	106.33	0.19	0.000	0.000	0.000
1599	15.99	16.00	0.01	15.99	2.13	109.15	0.19	0.000	0.000	0.000

Total primary settlement: 8.63
Total secondary settlement: 1.05

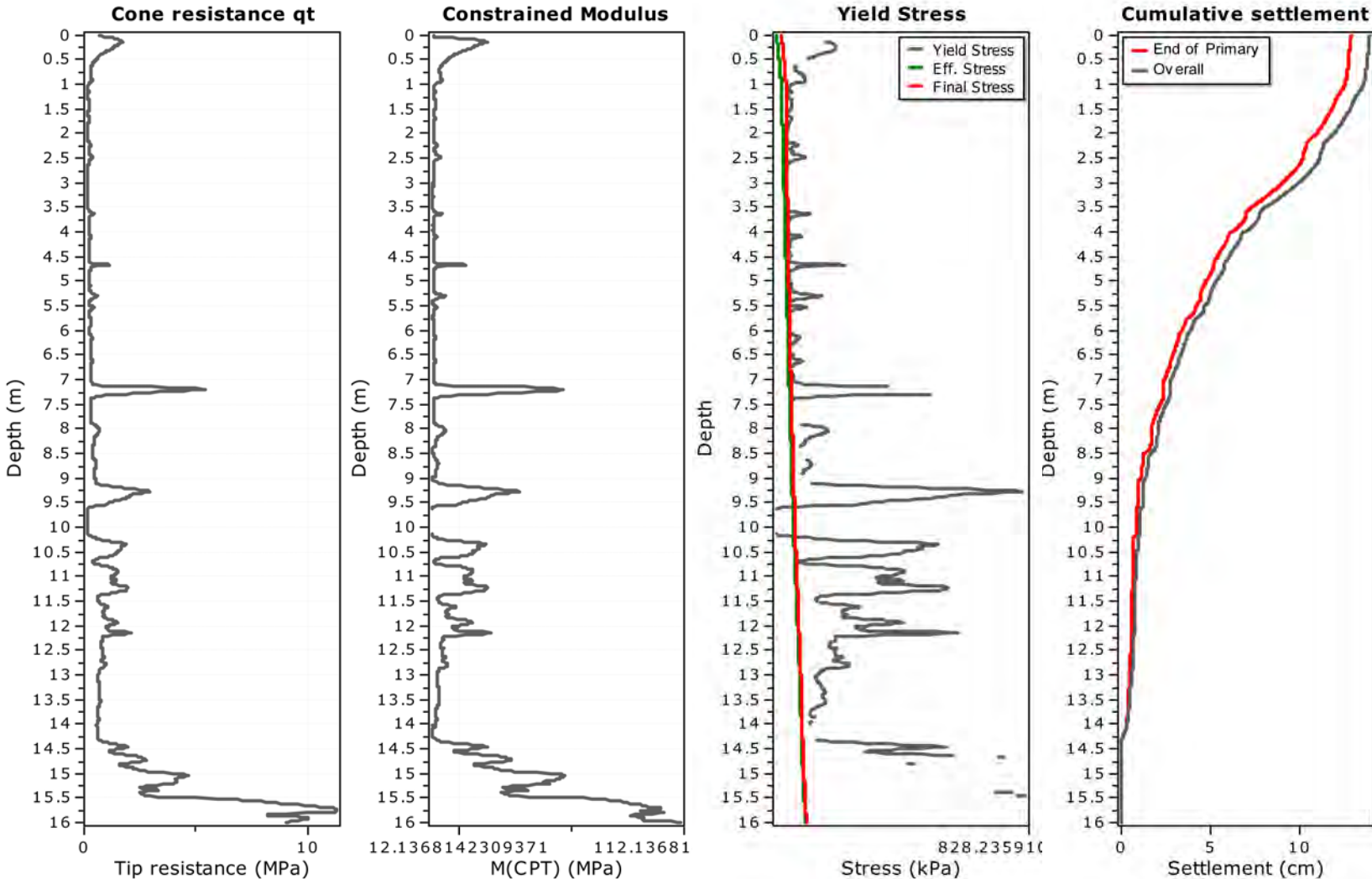
Total calculated settlement: 9.68

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

Footing type: Rectangular
Footing width: 10.00 (m)
L/B: 2.0
Footing pressure: 16.50 (kPa)
Embedment depth: 0.00 (m)
Footing is rigid: Yes
Remove excavation load: Yes
Apply 20% rule: No
Calculate secondary settlements: Yes
Time period for primary consolidation: 6 months
Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - \frac{t_p}{t} \right)^n$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	3.28	93.54	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	3.27	94.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	3.27	95.30	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	3.27	96.68	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	3.27	98.34	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	3.26	100.47	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	3.26	101.64	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	3.26	101.67	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	3.26	100.57	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	3.25	97.91	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	3.25	95.13	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	3.25	93.03	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	3.25	94.43	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	3.25	97.78	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	3.24	101.54	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	3.24	102.93	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	3.24	101.44	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	3.24	97.82	0.20	0.000	0.000	0.000
1583	15.83	15.84	0.01	15.84	3.23	93.95	0.20	0.000	0.000	0.000
1584	15.84	15.85	0.01	15.85	3.23	90.70	0.20	0.000	0.000	0.000
1585	15.85	15.86	0.01	15.86	3.23	88.28	0.20	0.000	0.000	0.000
1586	15.86	15.87	0.01	15.87	3.23	87.92	0.20	0.000	0.000	0.000
1587	15.87	15.88	0.01	15.88	3.22	88.70	0.20	0.000	0.000	0.000
1588	15.88	15.89	0.01	15.88	3.22	90.68	0.20	0.000	0.000	0.000
1589	15.89	15.90	0.01	15.89	3.22	92.21	0.20	0.000	0.000	0.000
1590	15.90	15.91	0.01	15.90	3.22	93.54	0.20	0.000	0.000	0.000
1591	15.91	15.92	0.01	15.91	3.22	94.32	0.19	0.000	0.000	0.000
1592	15.92	15.93	0.01	15.93	3.21	94.24	0.19	0.000	0.000	0.000
1593	15.93	15.94	0.01	15.94	3.21	93.98	0.19	0.000	0.000	0.000
1594	15.94	15.95	0.01	15.95	3.21	93.74	0.19	0.000	0.000	0.000
1595	15.95	15.96	0.01	15.96	3.21	93.97	0.19	0.000	0.000	0.000
1596	15.96	15.97	0.01	15.96	3.20	97.12	0.19	0.000	0.000	0.000
1597	15.97	15.98	0.01	15.97	3.20	101.49	0.19	0.000	0.000	0.000
1598	15.98	15.99	0.01	15.98	3.20	106.33	0.19	0.000	0.000	0.000
1599	15.99	16.00	0.01	15.99	3.20	109.15	0.19	0.000	0.000	0.000

Total primary settlement: 12.94
Total secondary settlement: 1.05

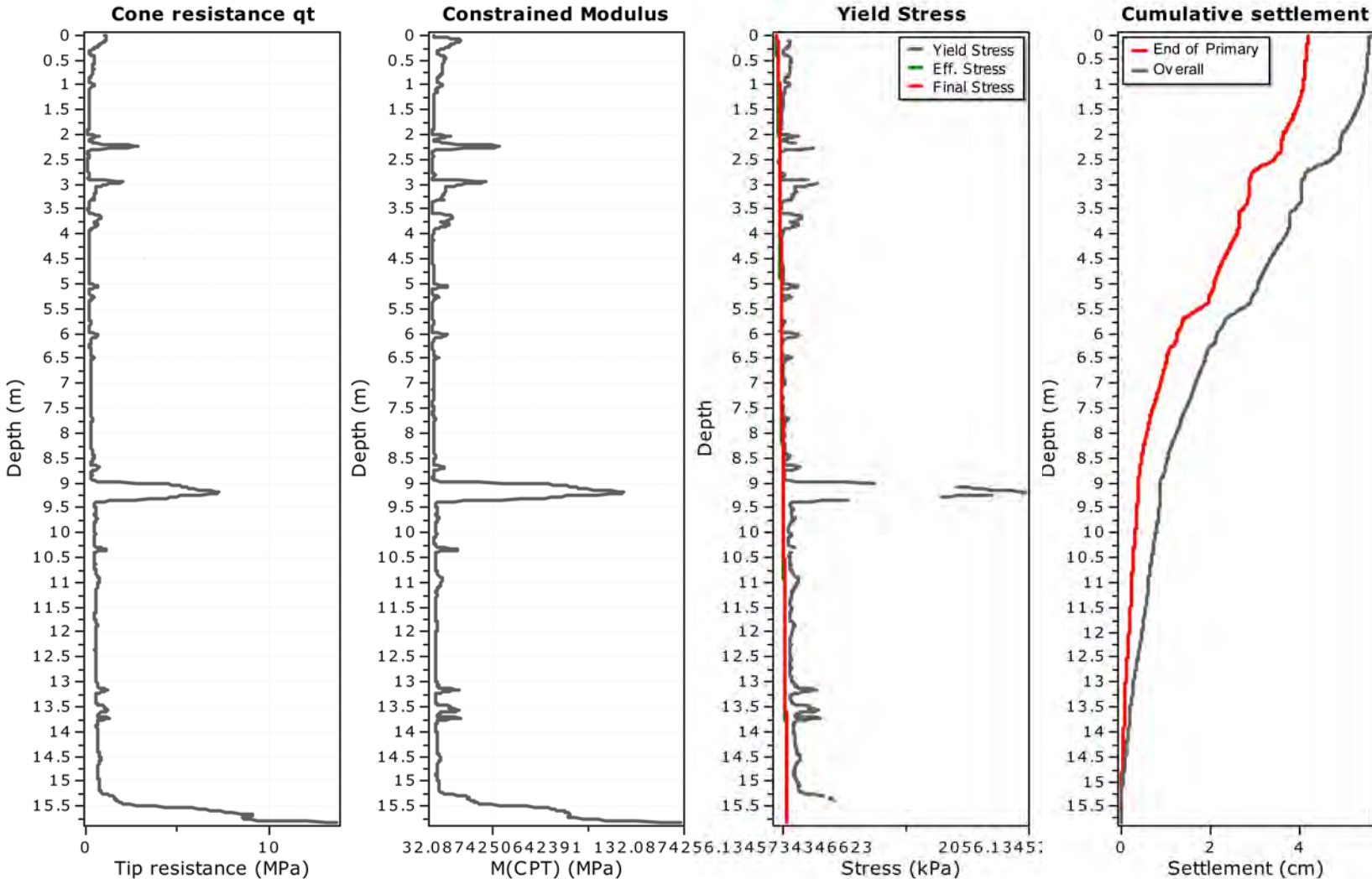
Total calculated settlement: 13.99

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 5.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

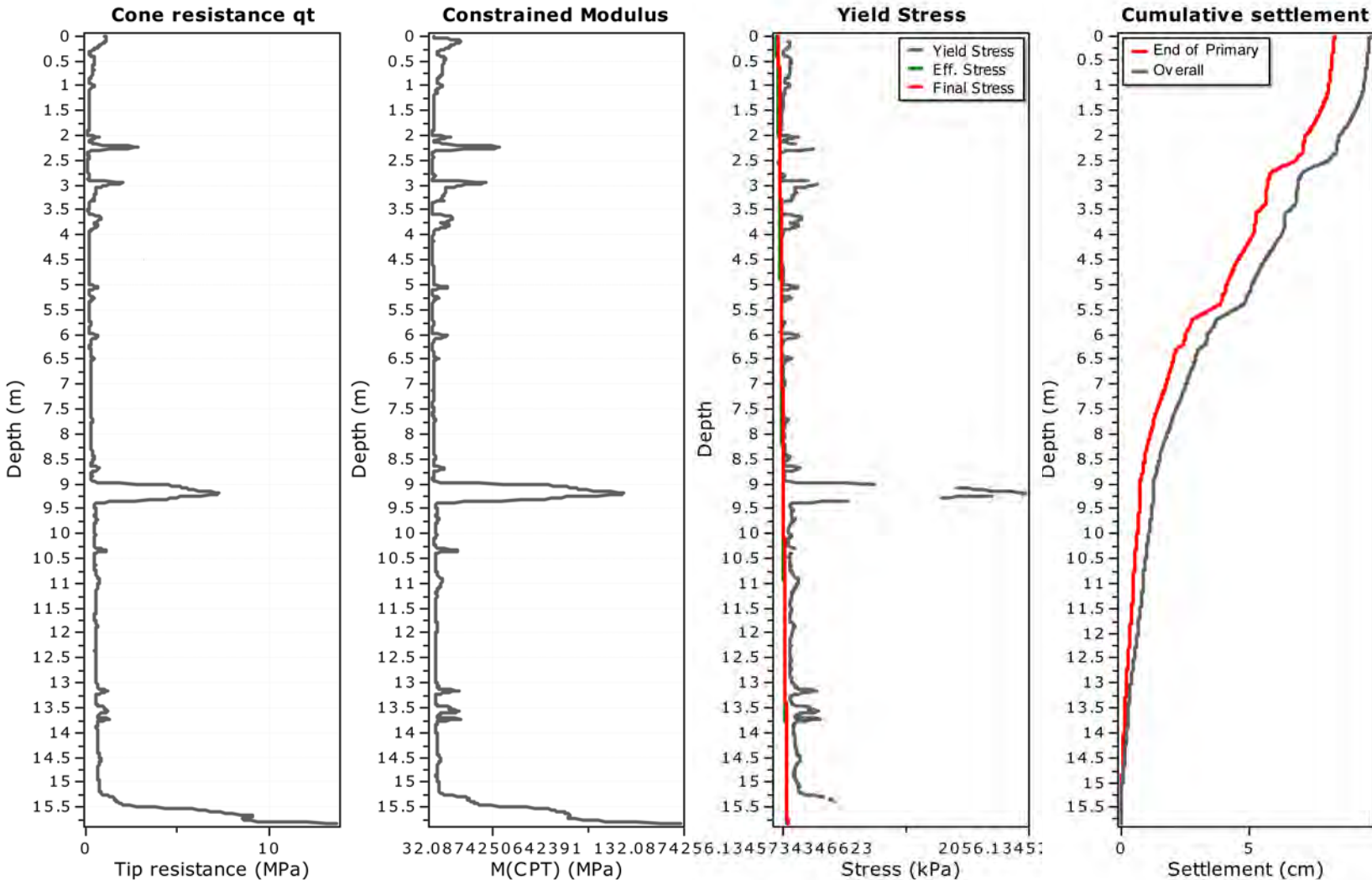
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	1.09	72.12	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	1.09	72.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	1.09	72.49	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	1.09	71.92	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	1.09	71.69	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	1.09	71.70	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	1.09	71.79	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	1.09	71.77	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	1.09	72.11	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	1.08	74.81	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	1.08	79.11	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	1.08	83.79	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	1.08	87.50	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	1.08	91.03	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	1.08	95.37	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	1.08	100.63	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	1.08	106.93	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	1.08	120.03	0.20	0.000	0.000	0.000

Total primary settlement: 4.19**Total secondary settlement: 1.38****Total calculated settlement: 5.56****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
 Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 11.00 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

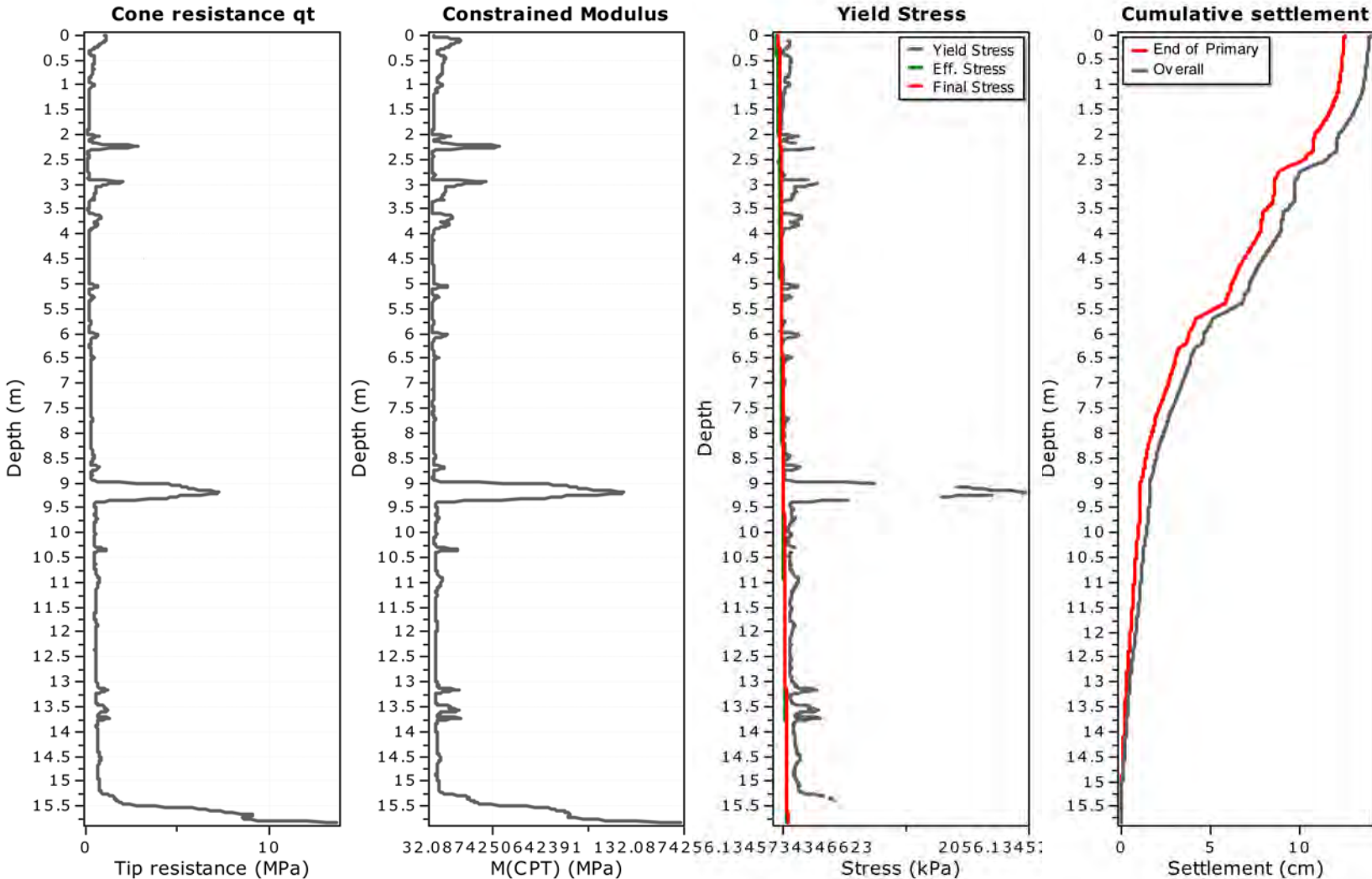
Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	2.18	72.12	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	2.18	72.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	2.18	72.49	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	2.18	71.92	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	2.18	71.69	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	2.18	71.70	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	2.17	71.79	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	2.17	71.77	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	2.17	72.11	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	2.17	74.81	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	2.17	79.11	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	2.17	83.79	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	2.17	87.50	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	2.16	91.03	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	2.16	95.37	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	2.16	100.63	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	2.16	106.93	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	2.16	120.03	0.20	0.000	0.000	0.000

Total primary settlement: 8.38**Total secondary settlement: 1.38****Total calculated settlement: 9.75****Abbreviations**

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

Project:
Location:

Settlements calculation according to theory of elasticity*



Calculation properties

- Footing type: Rectangular
- Footing width: 10.00 (m)
- L/B: 2.0
- Footing pressure: 16.50 (kPa)
- Embedment depth: 0.00 (m)
- Footing is rigid: Yes
- Remove excavation load: Yes
- Apply 20% rule: No
- Calculate secondary settlements: Yes
- Time period for primary consolidation: 6 months
- Time period for second. settlements: 12 months

* Primary settlement calculation is performed according to the following formula:

$$S = \sum \frac{\Delta\sigma_v}{M_{CPT}} \Delta z$$

* Secondary (creep) settlement calculation is performed according to the following formula:

$$s_c = s_p \left(1 - e^{-\frac{t}{t_p}} \right)$$

where t_p is the duration of primary consolidation

:: Tabular results ::

Point No	Start depth (m)	End depth (m)	Thickness (m)	Relative depth (m)	Delta P (kPa)	$M_{(CPT)}$ (MPa)	Iz	Settlement (cm)	Second. settlement (cm)	Overall settlement (cm)
1565	15.65	15.66	0.01	15.65	3.28	72.12	0.20	0.000	0.000	0.000
1566	15.66	15.67	0.01	15.66	3.27	72.54	0.20	0.000	0.000	0.000
1567	15.67	15.68	0.01	15.68	3.27	72.49	0.20	0.000	0.000	0.000
1568	15.68	15.69	0.01	15.69	3.27	71.92	0.20	0.000	0.000	0.000
1569	15.69	15.70	0.01	15.70	3.27	71.69	0.20	0.000	0.000	0.000
1570	15.70	15.71	0.01	15.71	3.26	71.70	0.20	0.000	0.000	0.000
1571	15.71	15.72	0.01	15.71	3.26	71.79	0.20	0.000	0.000	0.000
1572	15.72	15.73	0.01	15.72	3.26	71.77	0.20	0.000	0.000	0.000
1573	15.73	15.74	0.01	15.73	3.26	72.11	0.20	0.000	0.000	0.000
1574	15.74	15.75	0.01	15.74	3.25	74.81	0.20	0.000	0.000	0.000
1575	15.75	15.76	0.01	15.76	3.25	79.11	0.20	0.000	0.000	0.000
1576	15.76	15.77	0.01	15.77	3.25	83.79	0.20	0.000	0.000	0.000
1577	15.77	15.78	0.01	15.78	3.25	87.50	0.20	0.000	0.000	0.000
1578	15.78	15.79	0.01	15.79	3.25	91.03	0.20	0.000	0.000	0.000
1579	15.79	15.80	0.01	15.79	3.24	95.37	0.20	0.000	0.000	0.000
1580	15.80	15.81	0.01	15.80	3.24	100.63	0.20	0.000	0.000	0.000
1581	15.81	15.82	0.01	15.81	3.24	106.93	0.20	0.000	0.000	0.000
1582	15.82	15.83	0.01	15.82	3.24	120.03	0.20	0.000	0.000	0.000

Total primary settlement: 12.56
Total secondary settlement: 1.38

Total calculated settlement: 13.94

Abbreviations

Start depth:	Start depth of soil layer (penetration depth measured from ground free surface)
End depth:	End depth of soil layer (penetration depth measured from ground free surface)
Thickness:	Thickness of soil layer
Relative depth:	Depth of calculation relative to footing
Iz:	Stress influence factor
Delta P:	Footing imposed stress:
Eff. stress:	Effective stress
$M_{(CPT)}$:	Constrained modulus from CPT
Settlement:	Primary settlement
Second. settlement:	Secondary settlements due to creep

APPENDIX 6.3
DMT CONSOLIDATION SETTLEMENT ANALYSIS RESULTS

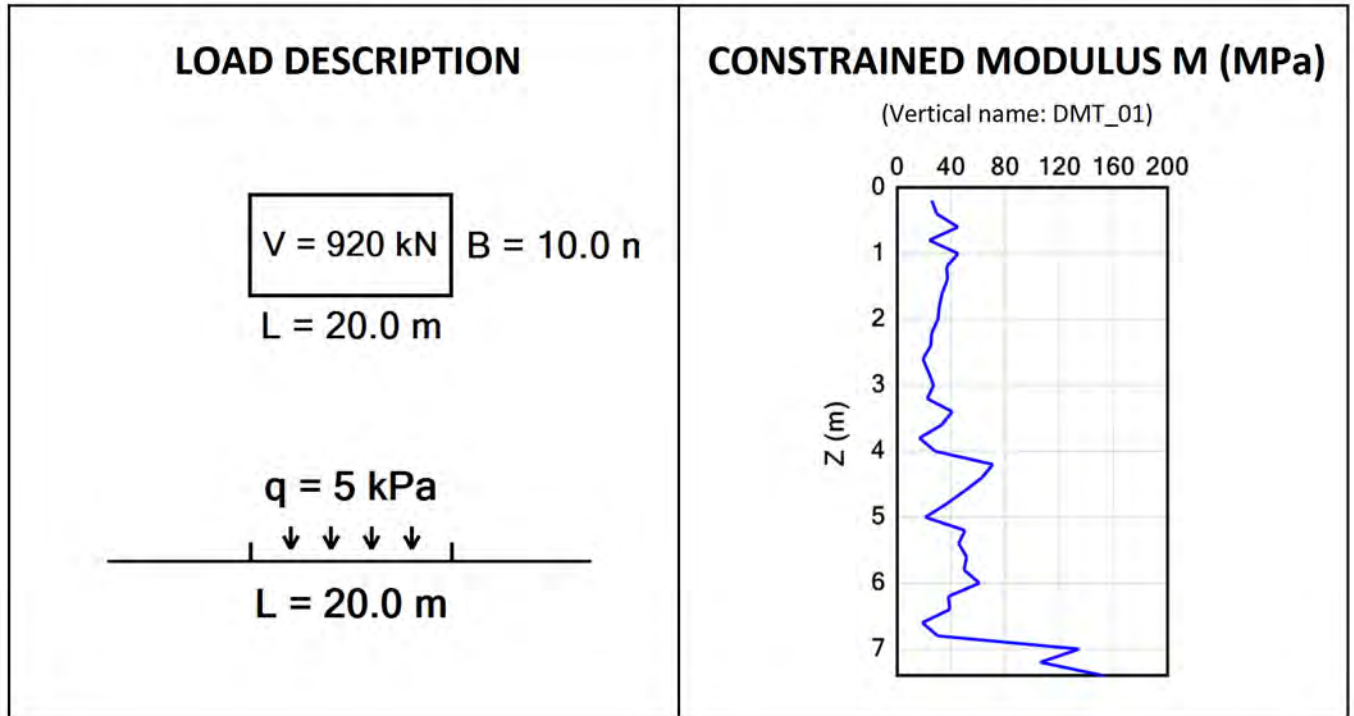
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT01: Case 1

Hamlin Rd, Ardmore



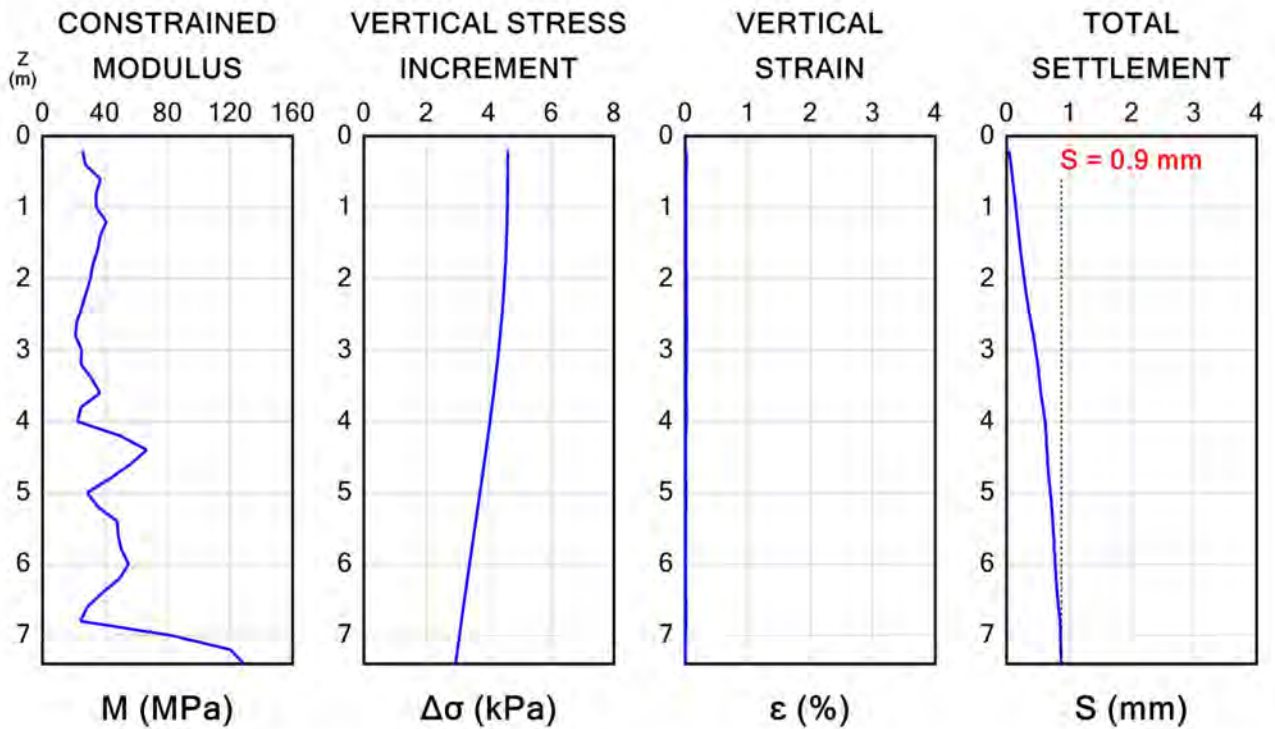
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION																	
(one-dimensional conventional method)																	
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$																	
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Calculation Point</th> <th>Settlements [mm]</th> <th>Z Stop [m]</th> </tr> </thead> <tbody> <tr> <td>below the center</td> <td style="text-align: center;">0.9</td> <td style="text-align: center;">7.40</td> </tr> <tr> <td>below the corner</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">7.40</td> </tr> <tr> <td>below the median point of short side</td> <td style="text-align: center;">0.4</td> <td style="text-align: center;">7.40</td> </tr> <tr> <td>below the median point of long side</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">7.40</td> </tr> </tbody> </table>	Calculation Point	Settlements [mm]	Z Stop [m]	below the center	0.9	7.40	below the corner	0.2	7.40	below the median point of short side	0.4	7.40	below the median point of long side	0.5	7.40	<p>Settlements [mm]</p>
Calculation Point	Settlements [mm]	Z Stop [m]															
below the center	0.9	7.40															
below the corner	0.2	7.40															
below the median point of short side	0.4	7.40															
below the median point of long side	0.5	7.40															
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>																	

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

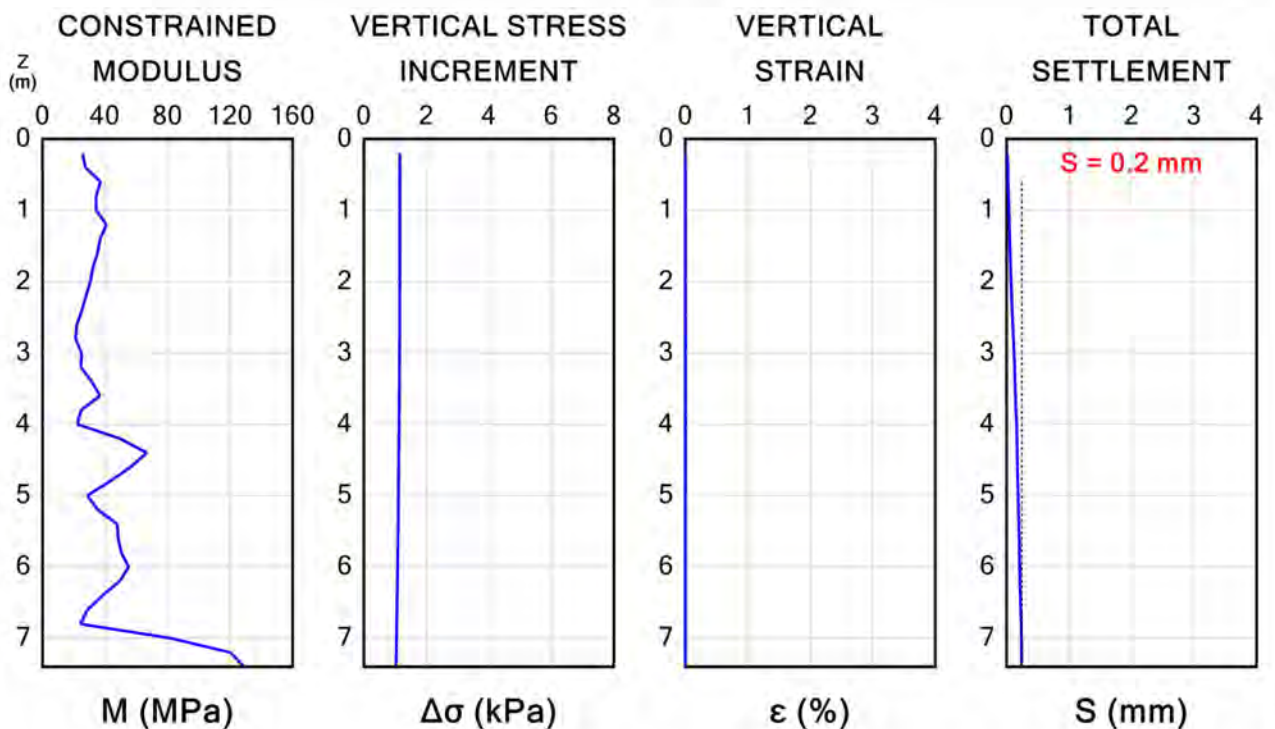
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

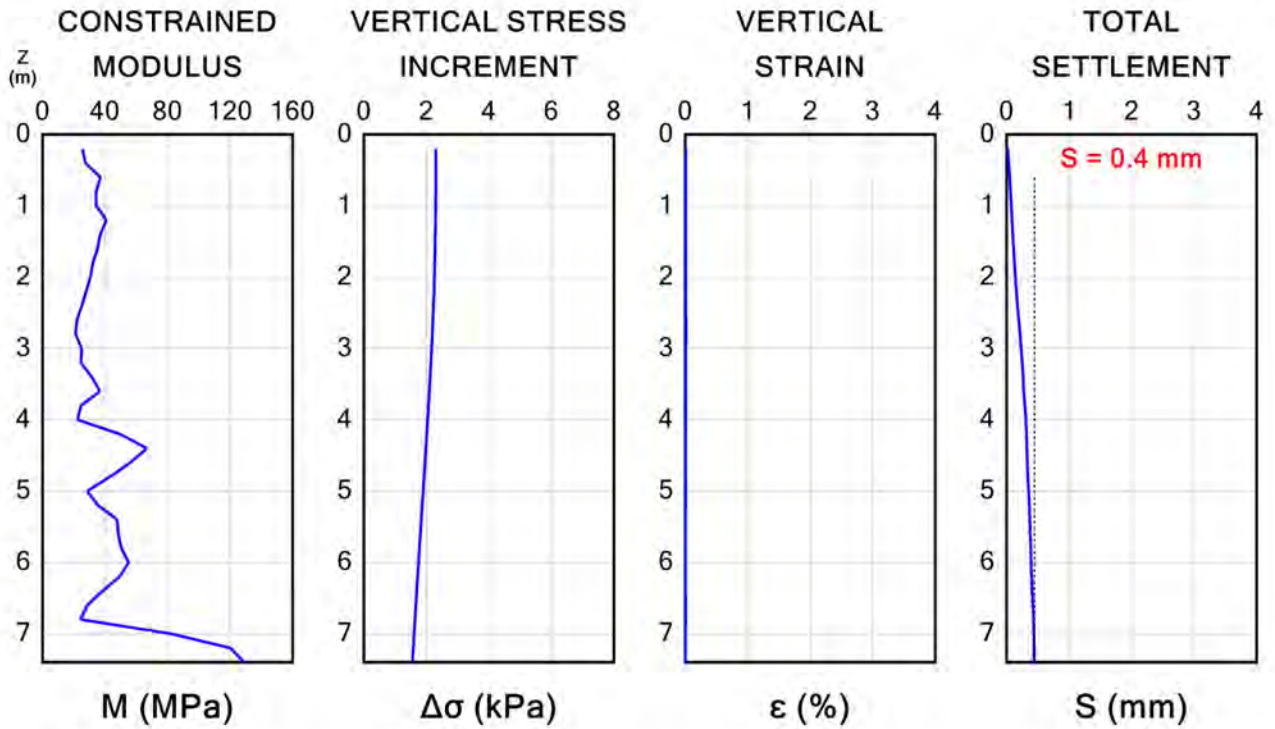
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

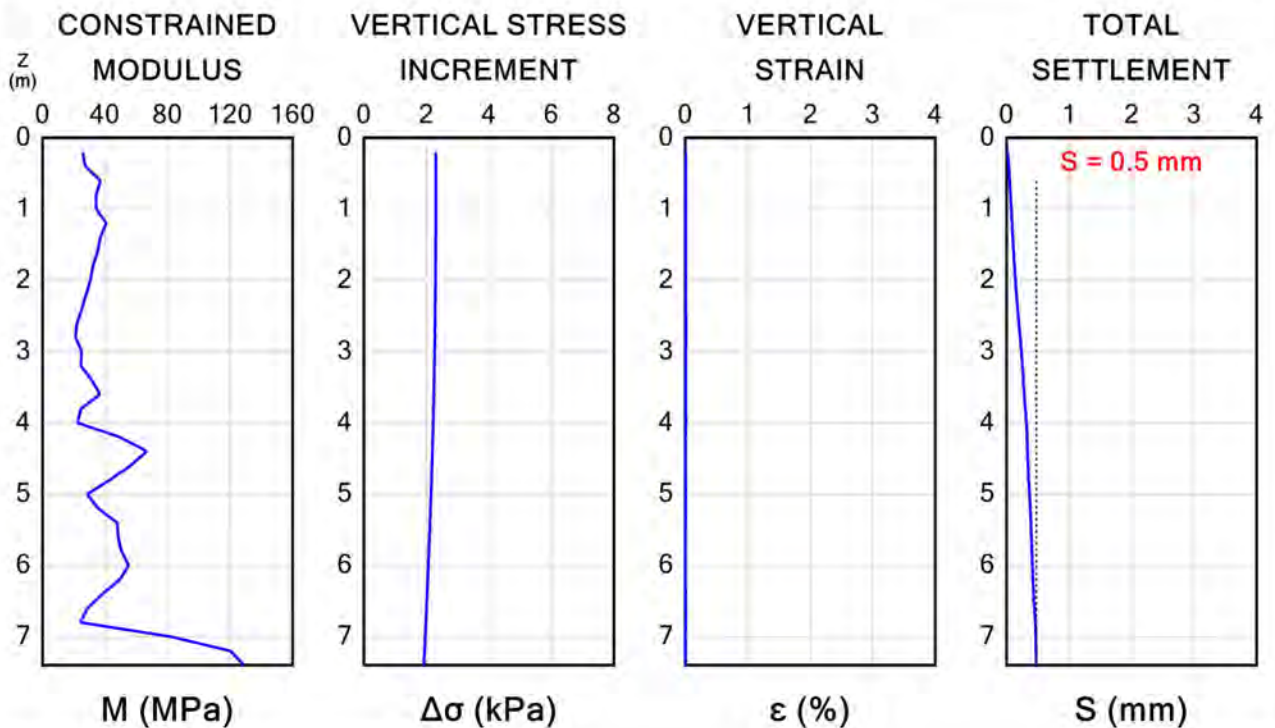
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



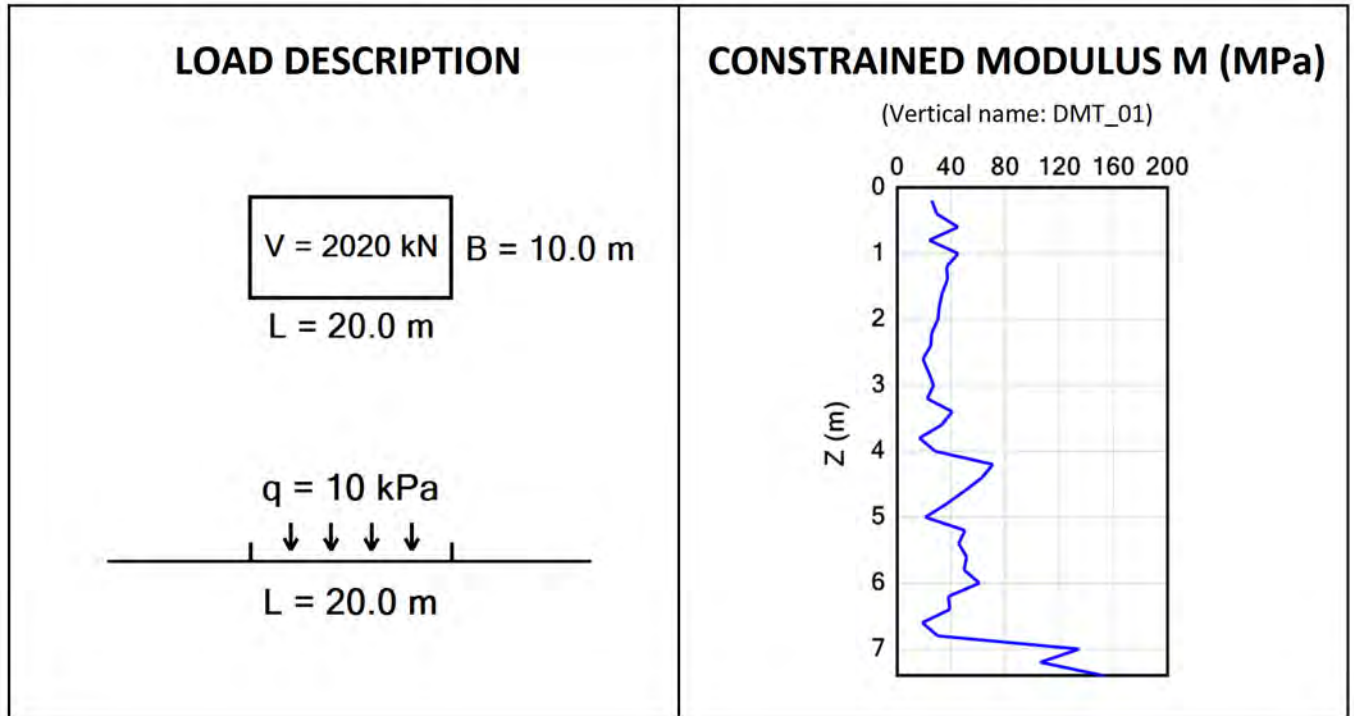
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT01: Case 2

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements	Z Stop
	[mm]	[m]
below the center	1.9	7.40
below the corner	0.5	7.40
below the median point of short side	1.0	7.40
below the median point of long side	1.0	7.40

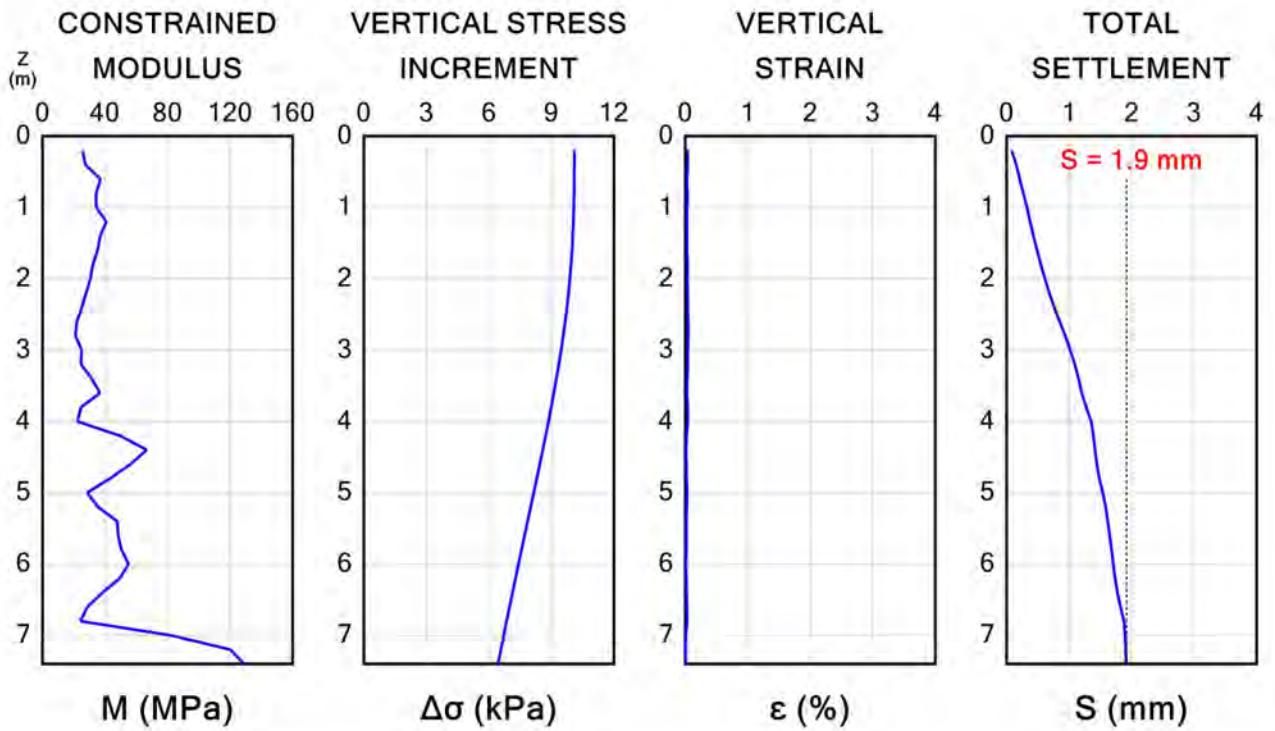
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

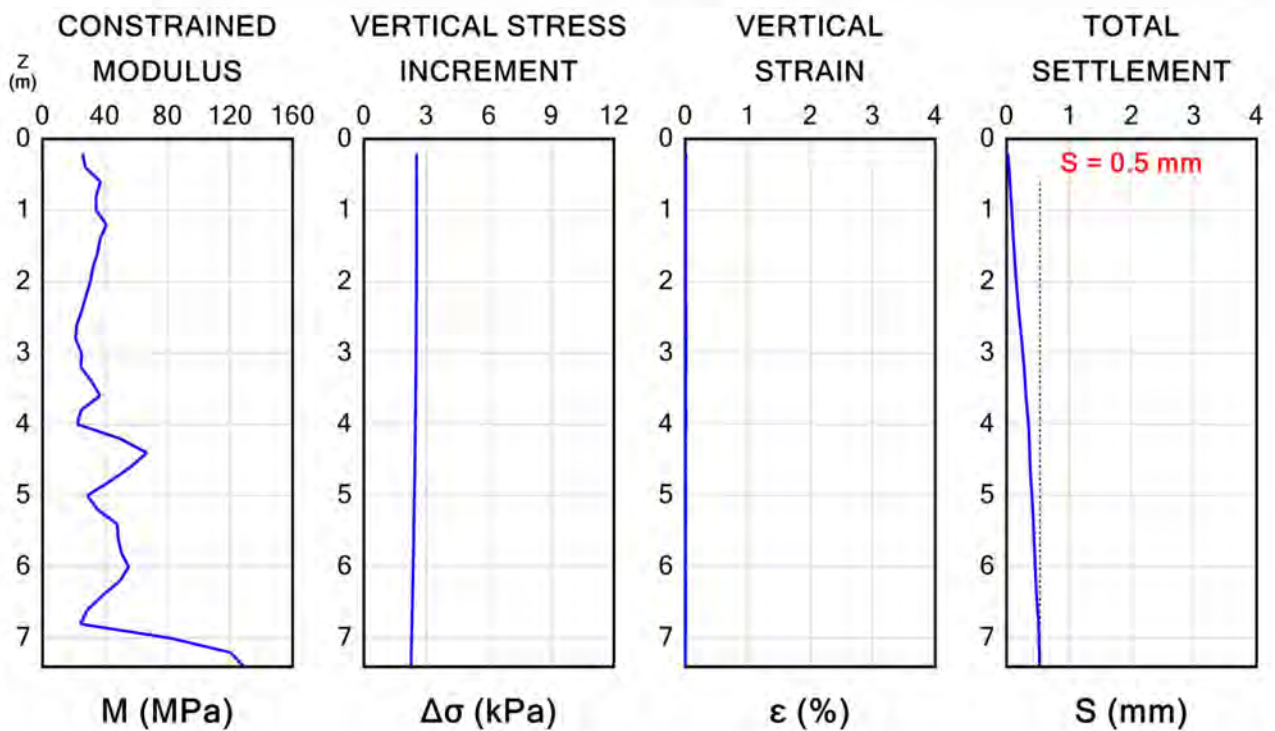
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

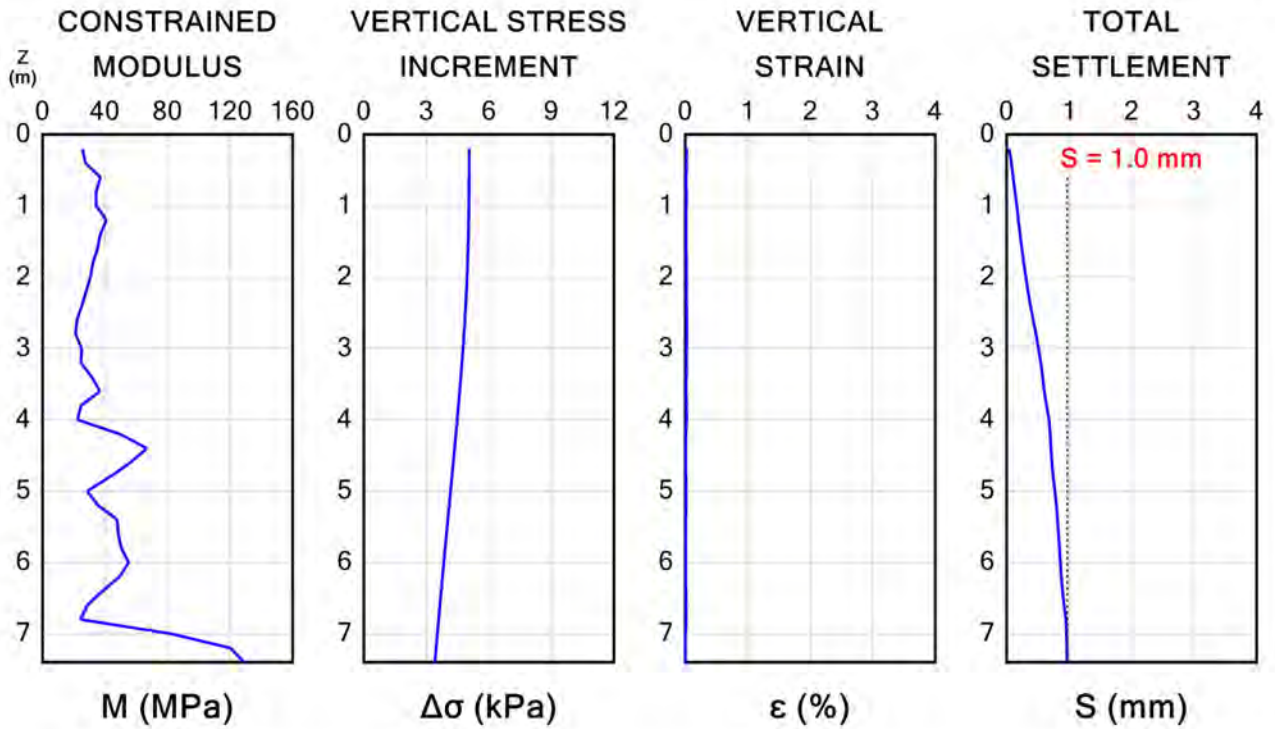
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

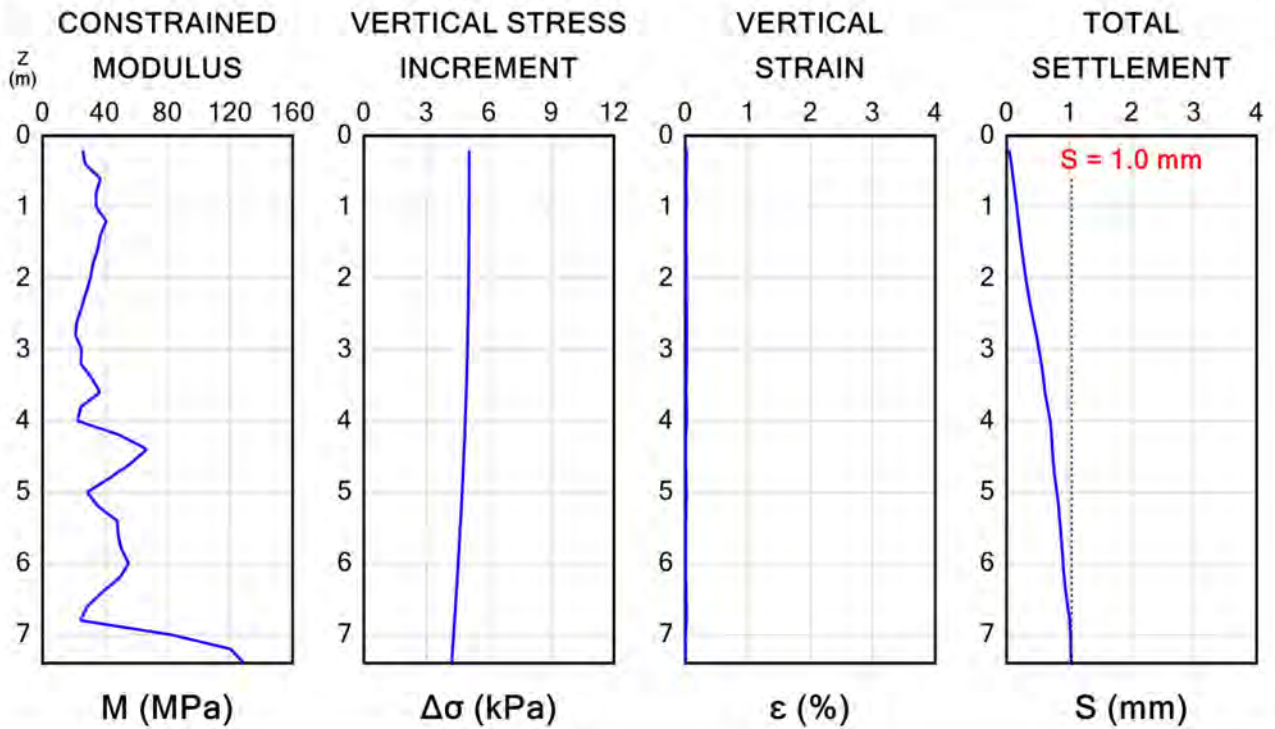
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



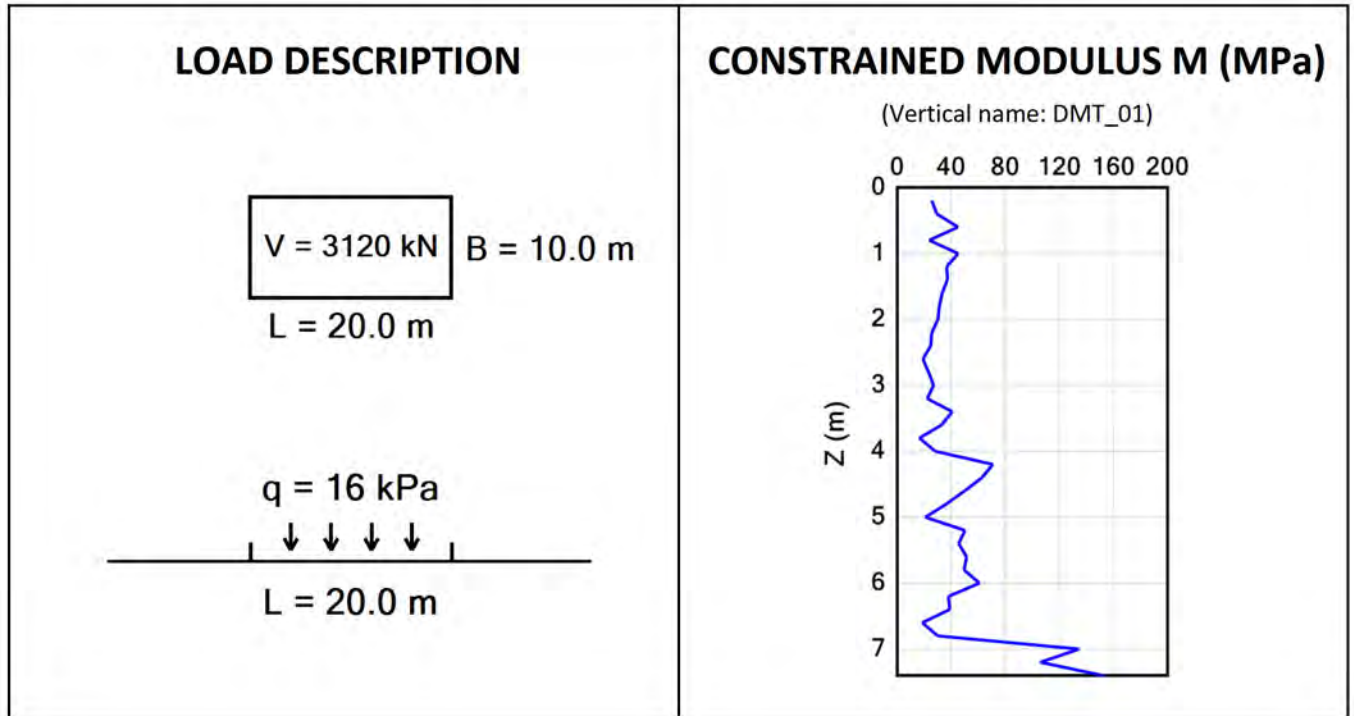
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT01: Case 3

Hamlin Rd, Ardmore



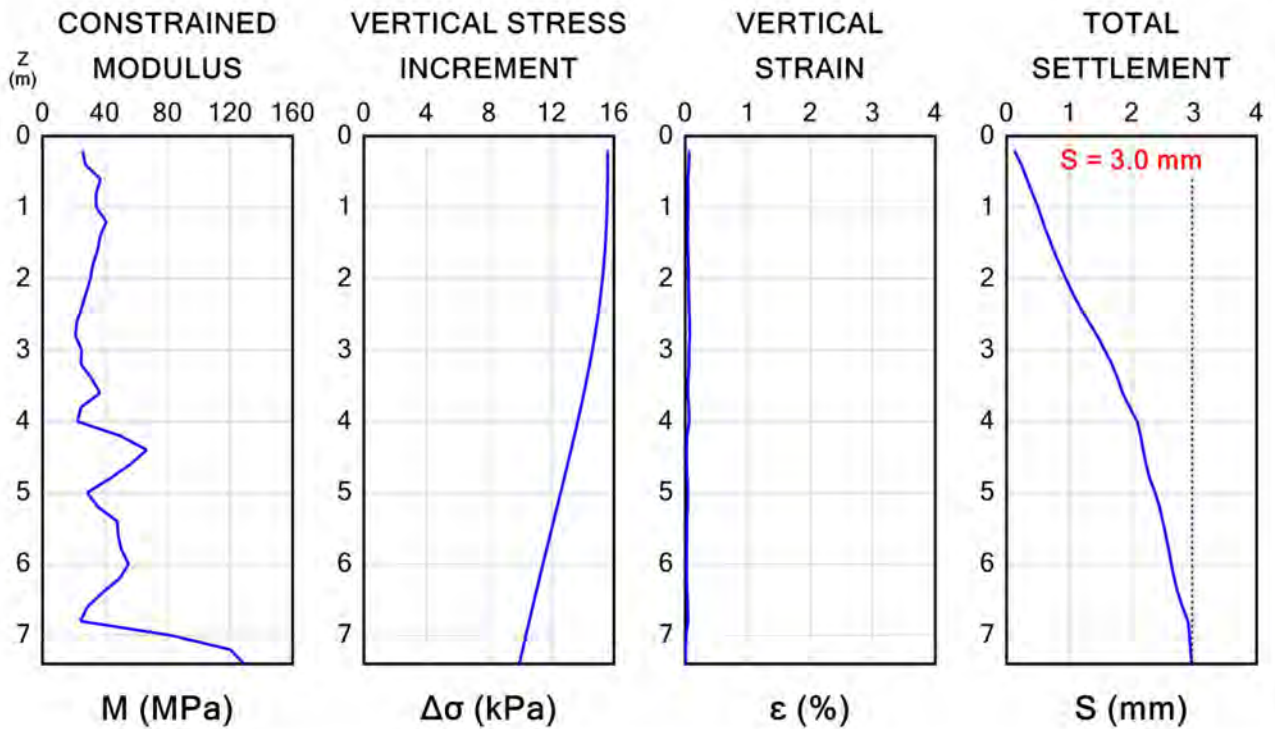
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
	Settlements [mm]	
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	3.0	7.40
below the corner	0.8	7.40
below the median point of short side	1.5	7.40
below the median point of long side	1.6	7.40
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>		

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

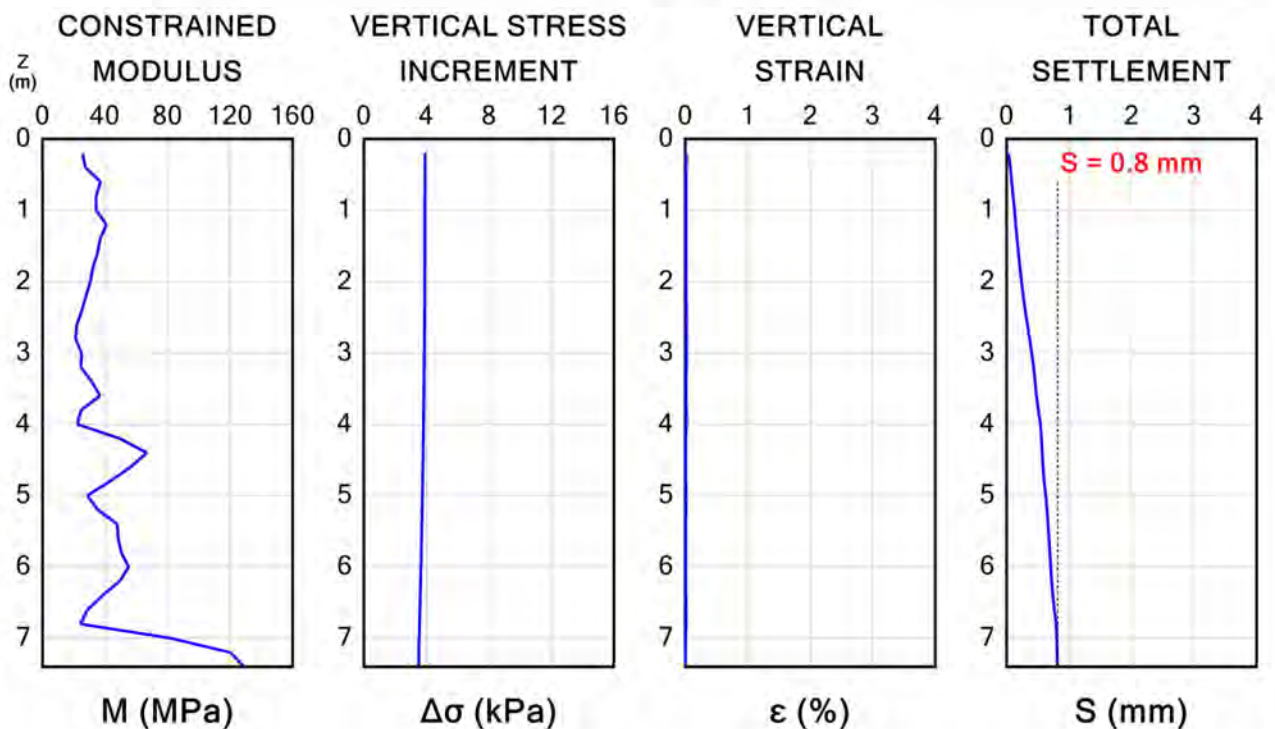
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

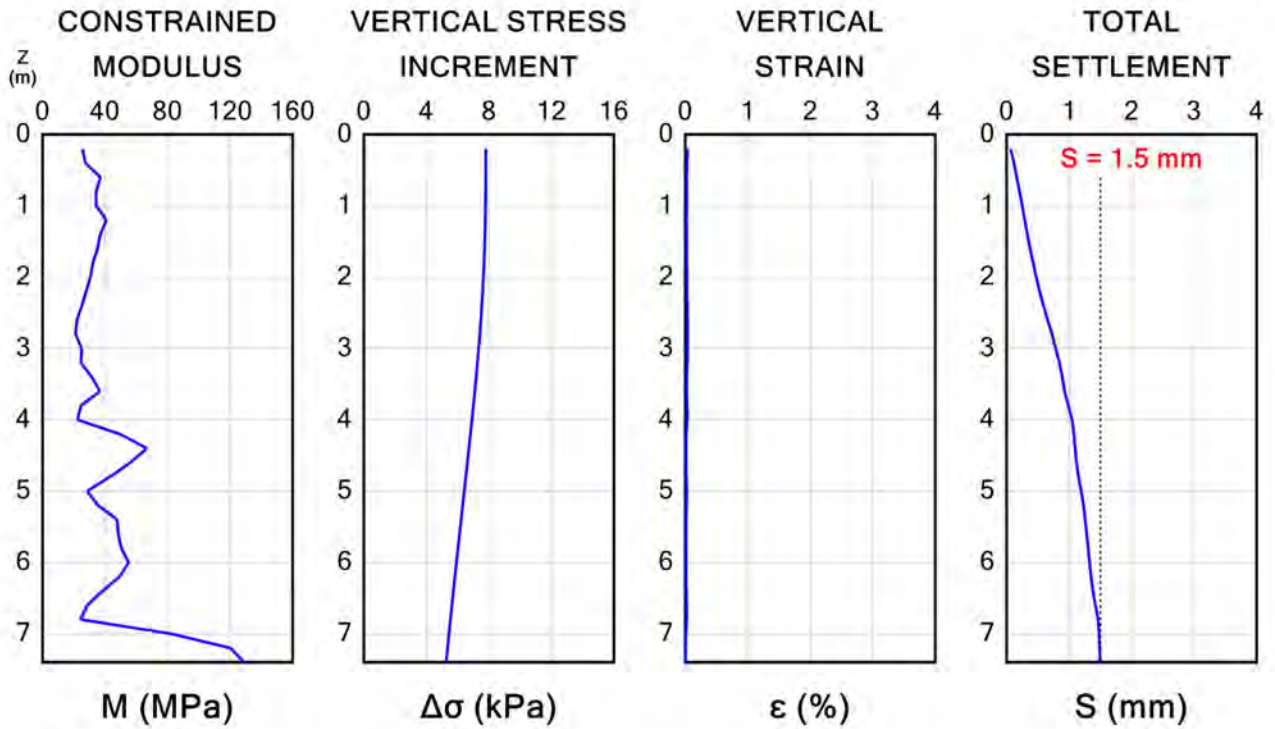
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

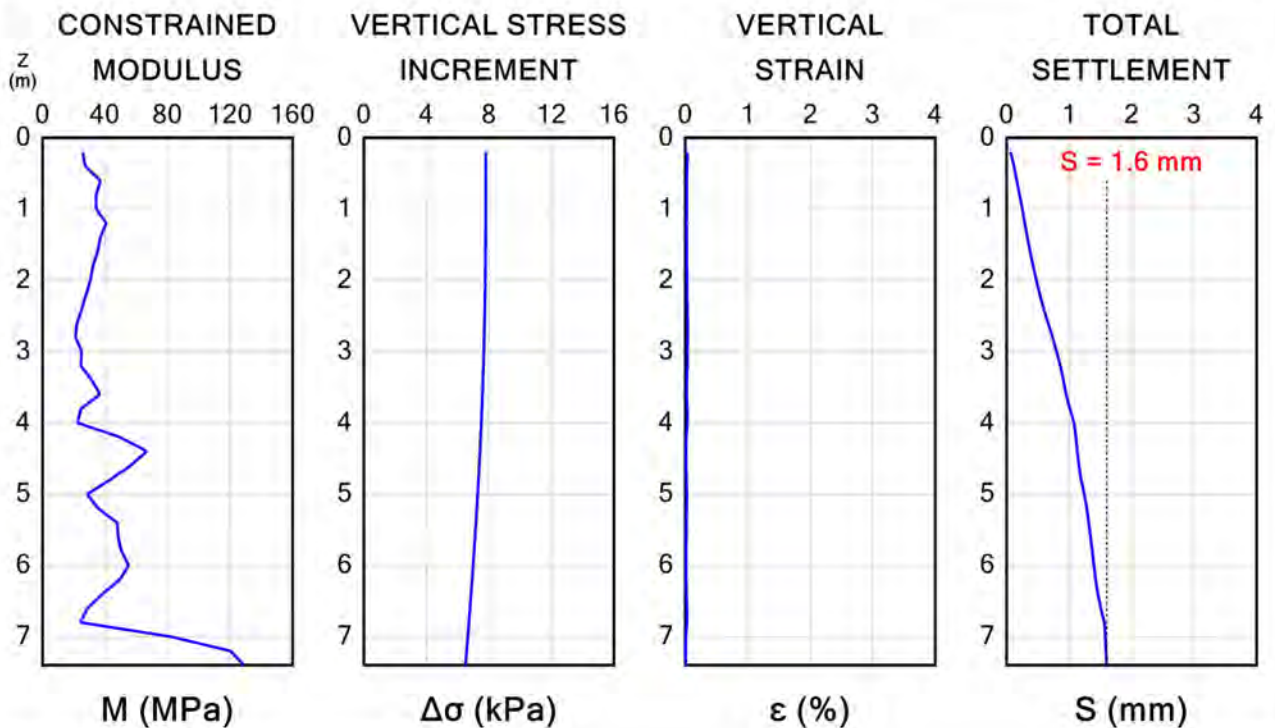
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



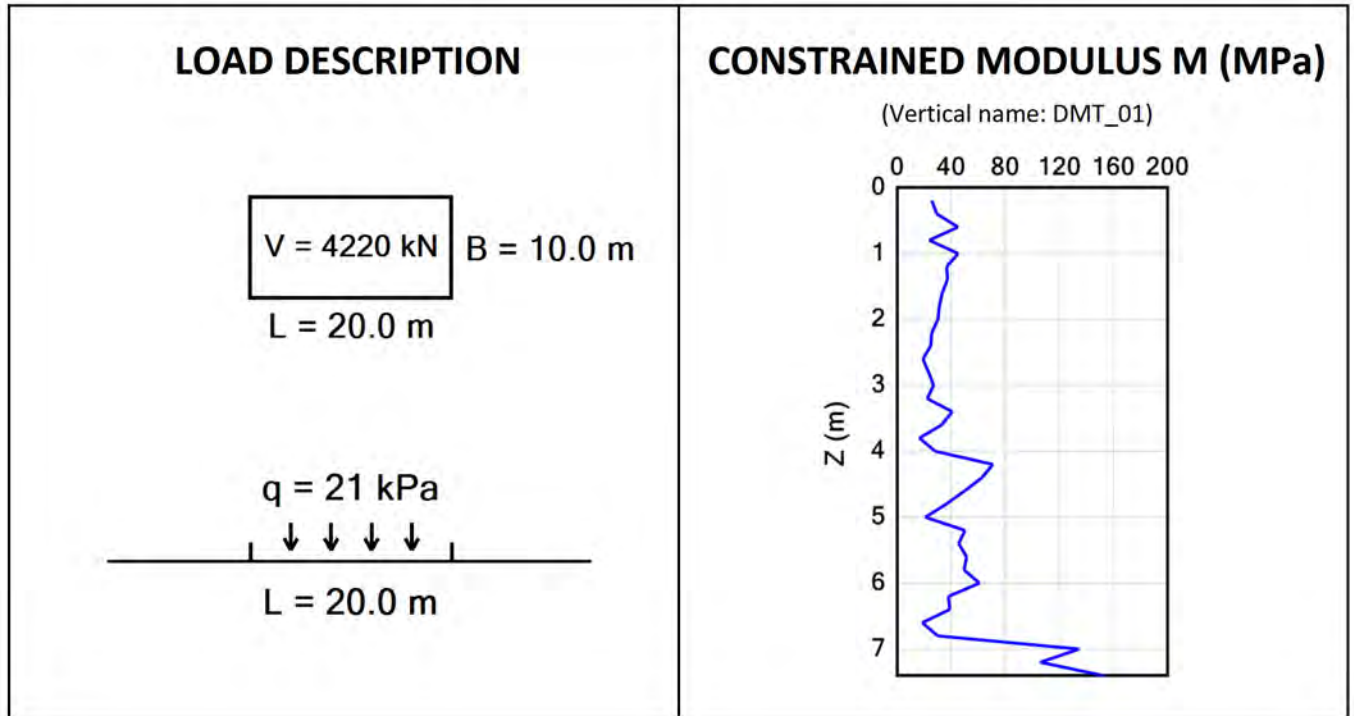
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 – DMT01: Case 4

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements	Z Stop
	[mm]	[m]
below the center	4.0	7.40
below the corner	1.1	7.40
below the median point of short side	2.0	7.40
below the median point of long side	2.2	7.40

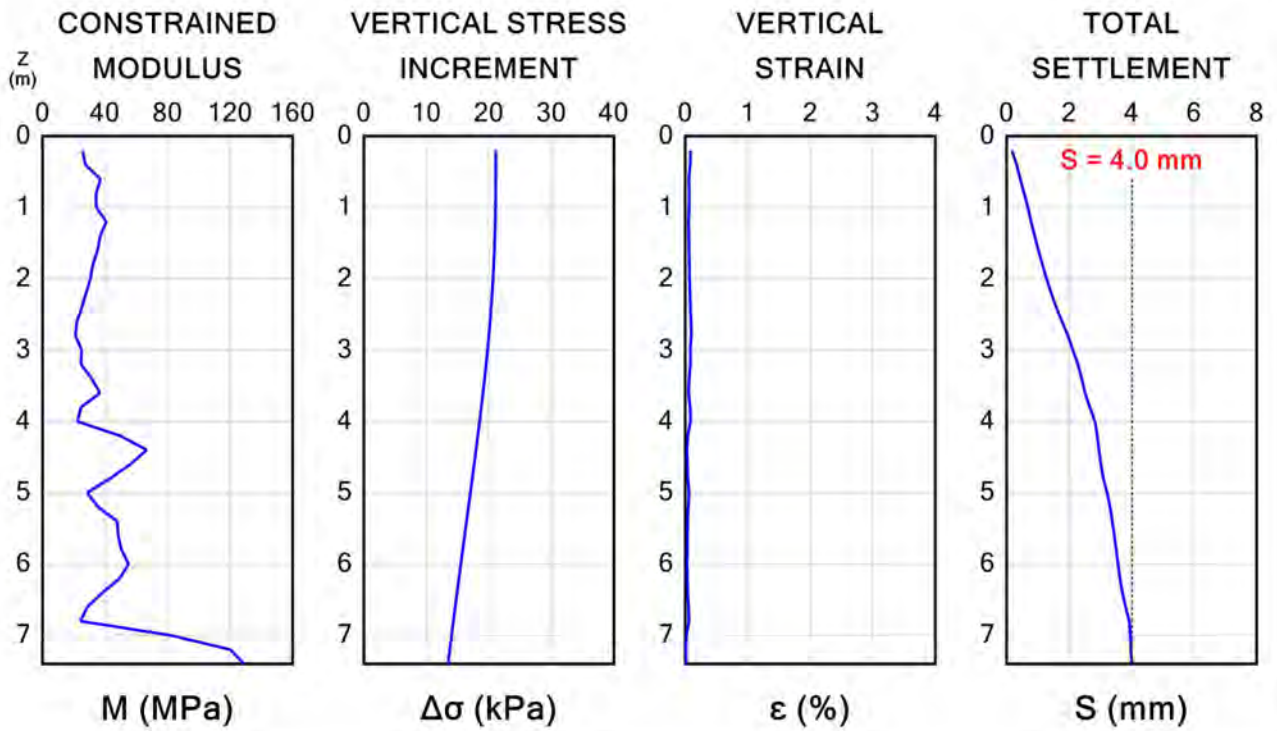
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

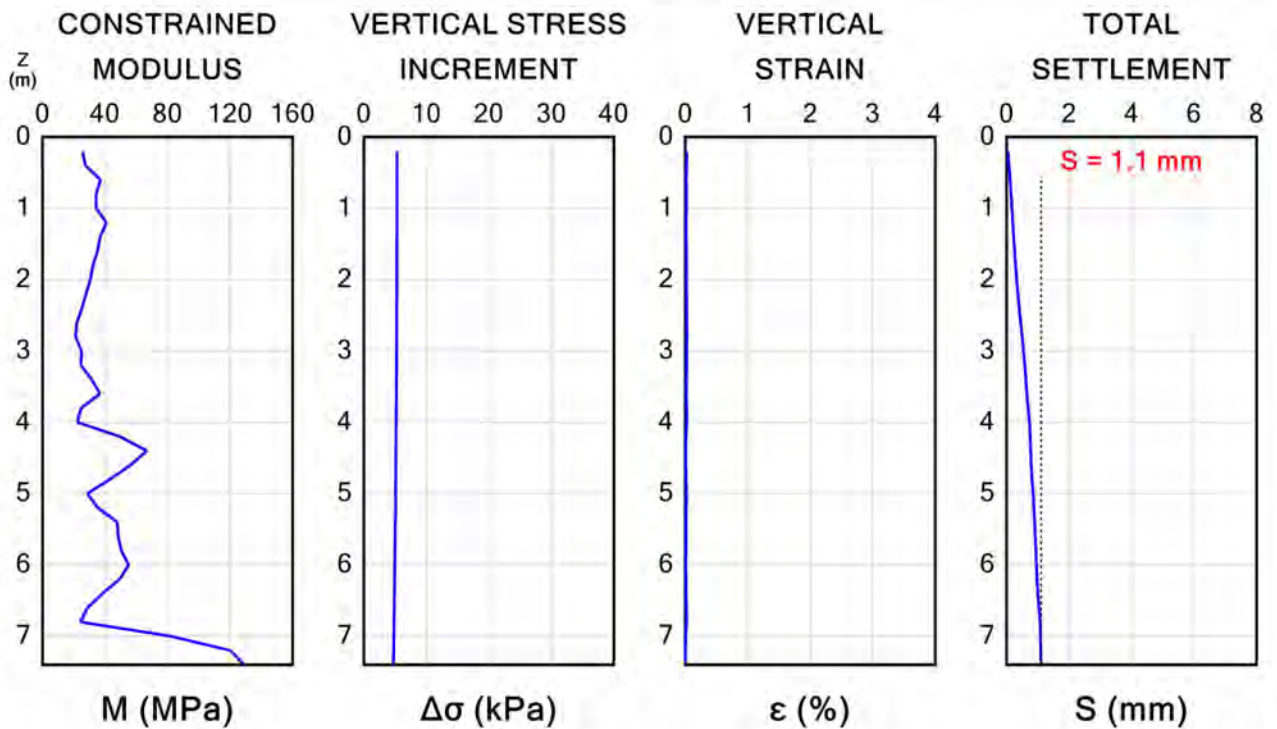
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

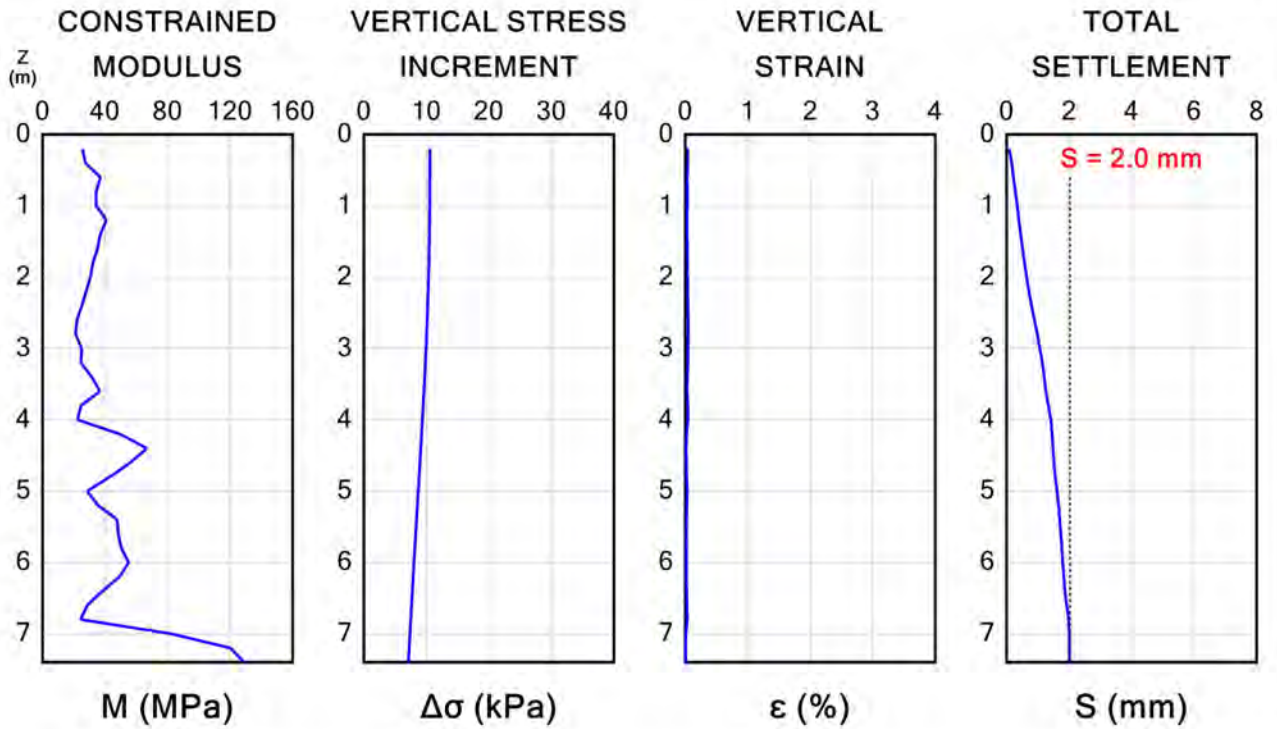
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

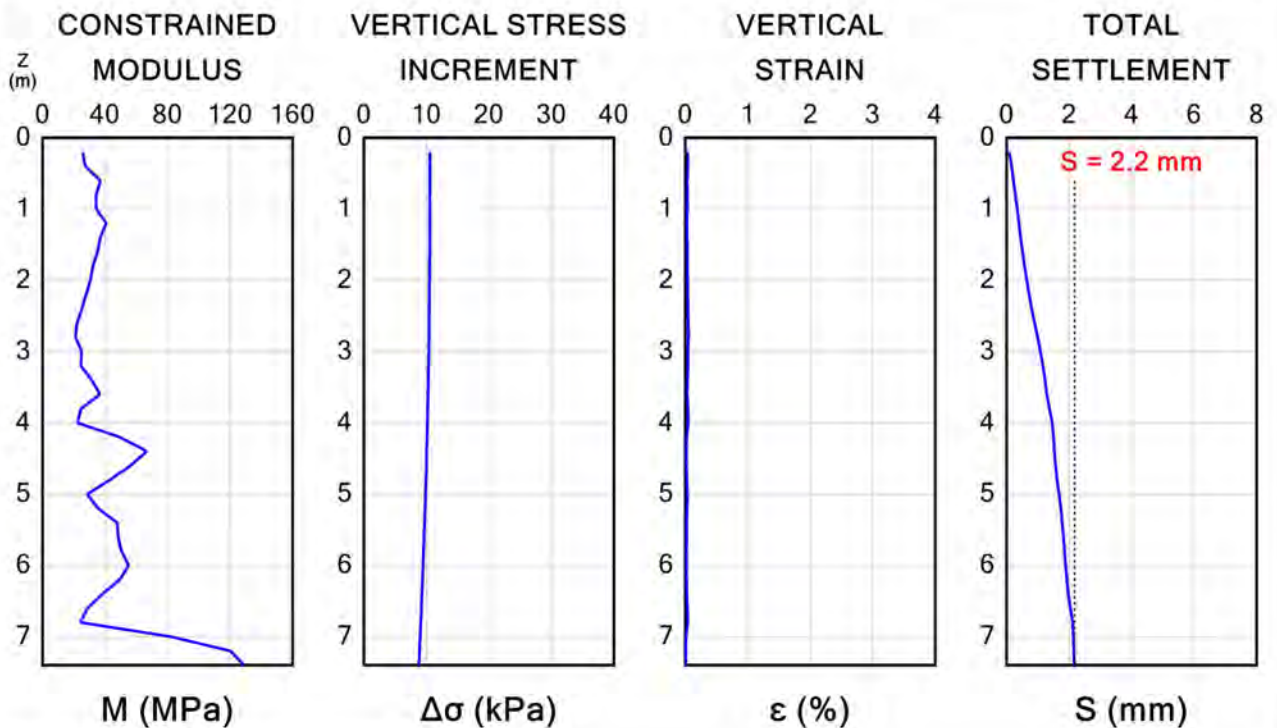
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



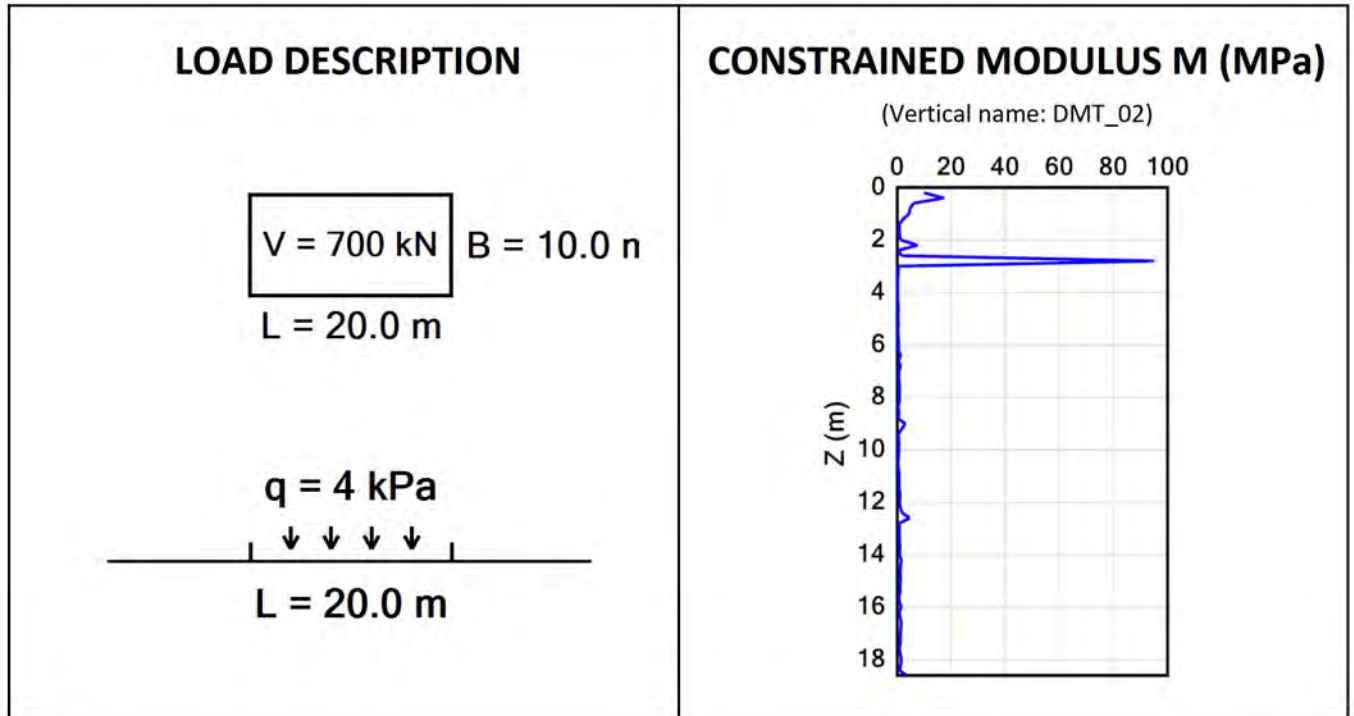
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT02: Case 1

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	37.6	18.60
below the corner	13.6	18.60
below the median point of short side	20.4	18.60
below the median point of long side	24.4	18.60

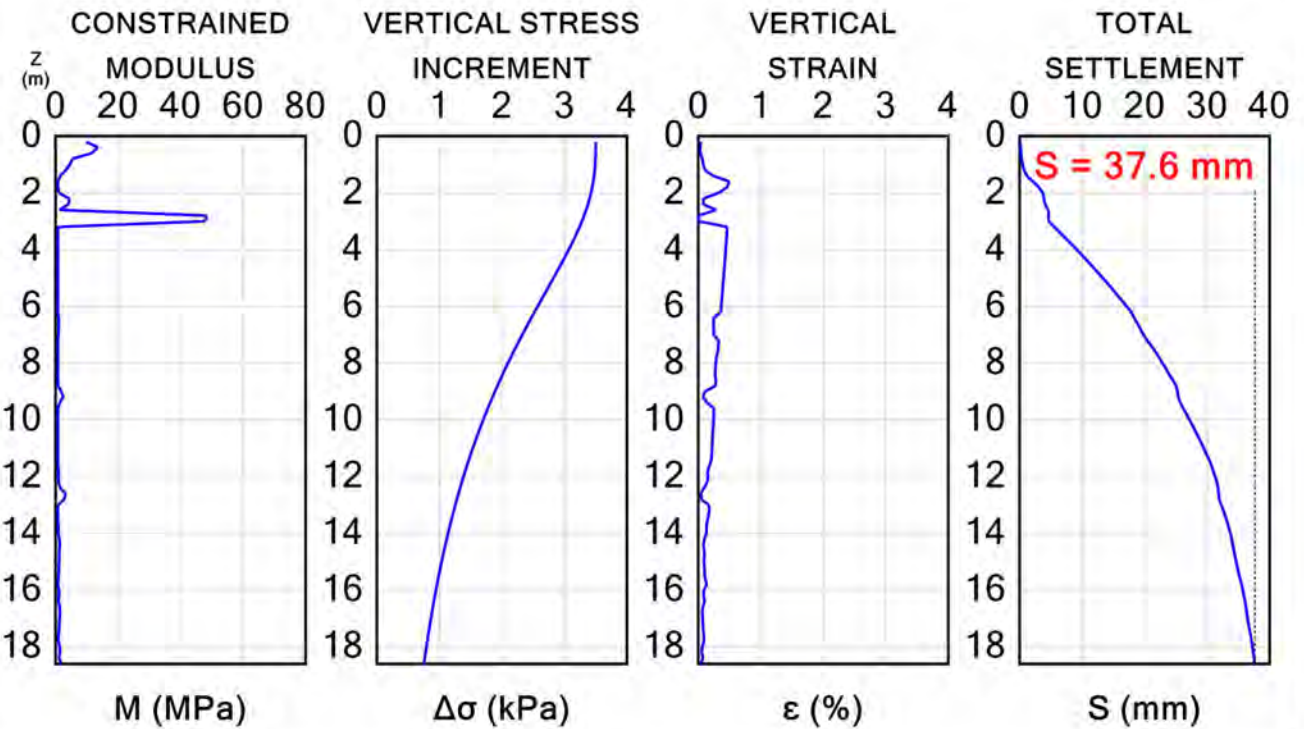
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

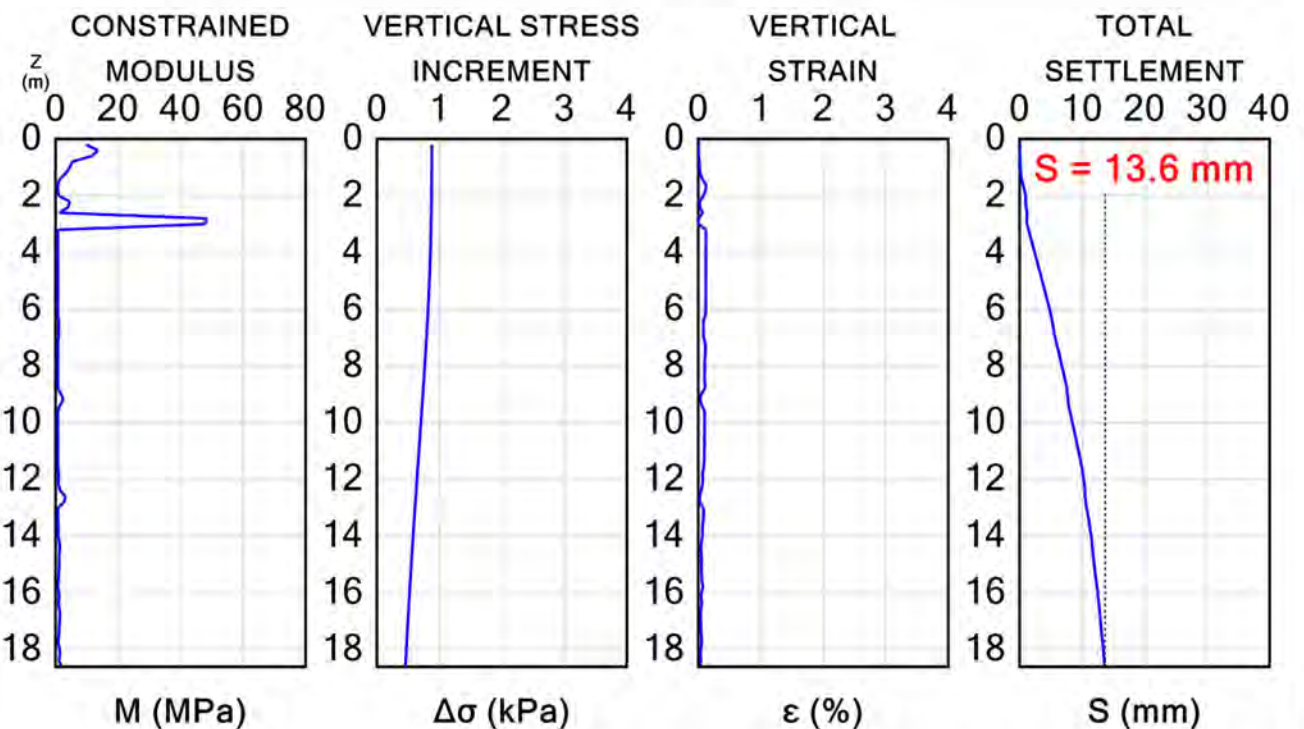
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

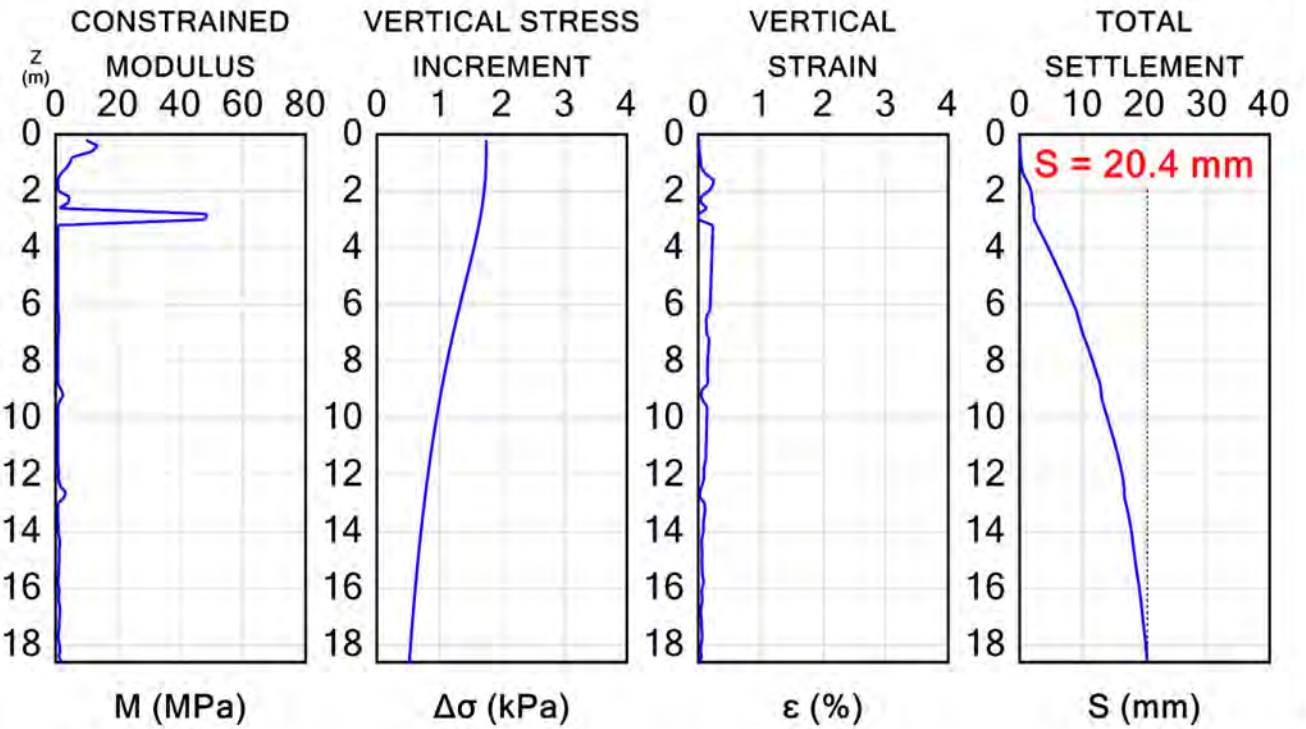
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

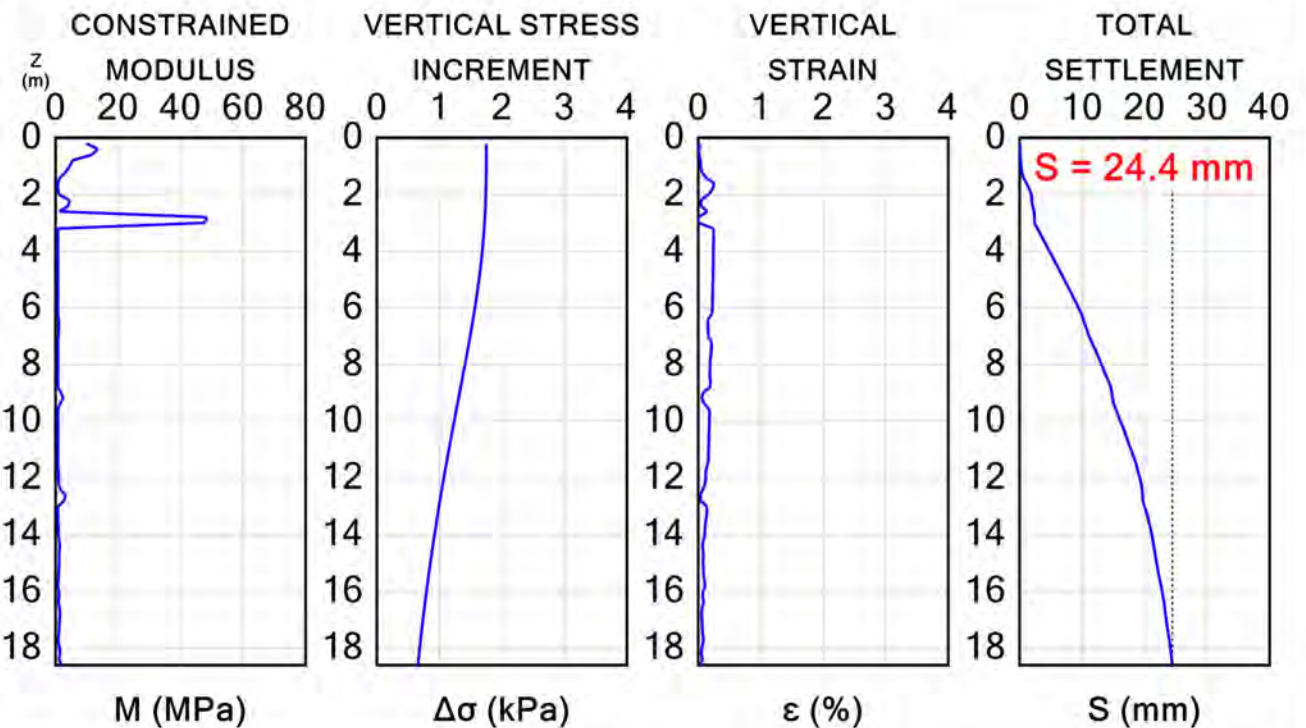
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



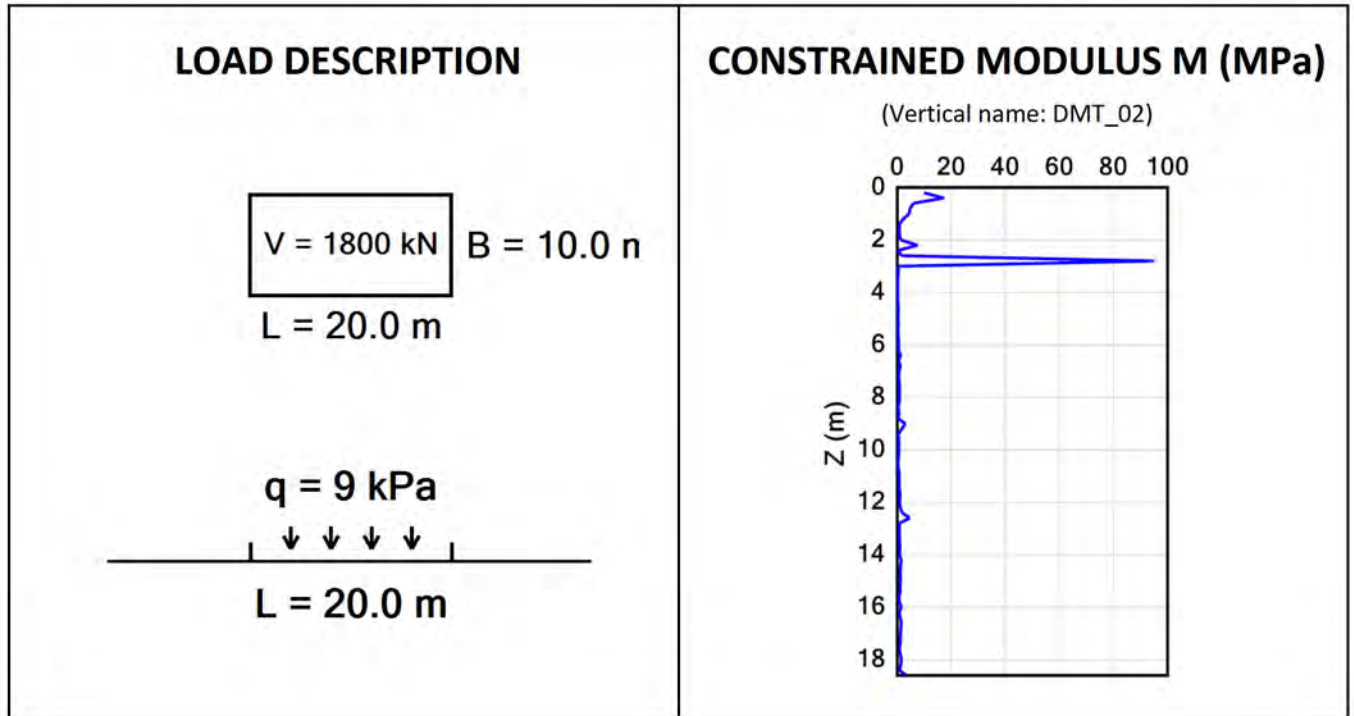
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT02: Case 2

Hamlin Rd, Ardmore



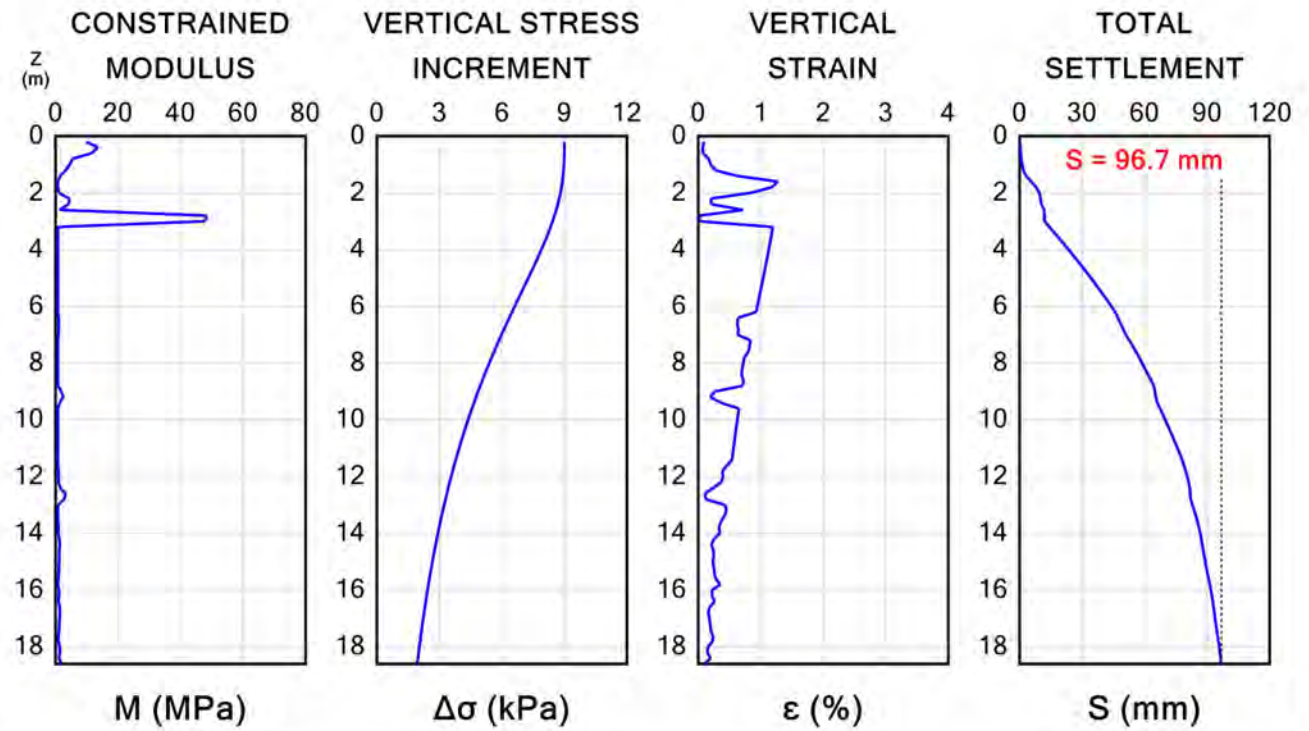
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION																
(one-dimensional conventional method)																
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Calculation Point</th> <th style="text-align: center; padding: 5px;">Settlements [mm]</th> <th style="text-align: center; padding: 5px;">Z Stop [m]</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">below the center</td> <td style="text-align: center; padding: 5px;">96.7</td> <td style="text-align: center; padding: 5px;">18.60</td> </tr> <tr> <td style="text-align: center; padding: 5px;">below the corner</td> <td style="text-align: center; padding: 5px;">35.0</td> <td style="text-align: center; padding: 5px;">18.60</td> </tr> <tr> <td style="text-align: center; padding: 5px;">below the median point of short side</td> <td style="text-align: center; padding: 5px;">52.5</td> <td style="text-align: center; padding: 5px;">18.60</td> </tr> <tr> <td style="text-align: center; padding: 5px;">below the median point of long side</td> <td style="text-align: center; padding: 5px;">62.8</td> <td style="text-align: center; padding: 5px;">18.60</td> </tr> </tbody> </table>	Calculation Point	Settlements [mm]	Z Stop [m]	below the center	96.7	18.60	below the corner	35.0	18.60	below the median point of short side	52.5	18.60	below the median point of long side	62.8	18.60	<p>Settlements [mm]</p>
Calculation Point	Settlements [mm]	Z Stop [m]														
below the center	96.7	18.60														
below the corner	35.0	18.60														
below the median point of short side	52.5	18.60														
below the median point of long side	62.8	18.60														
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>																

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

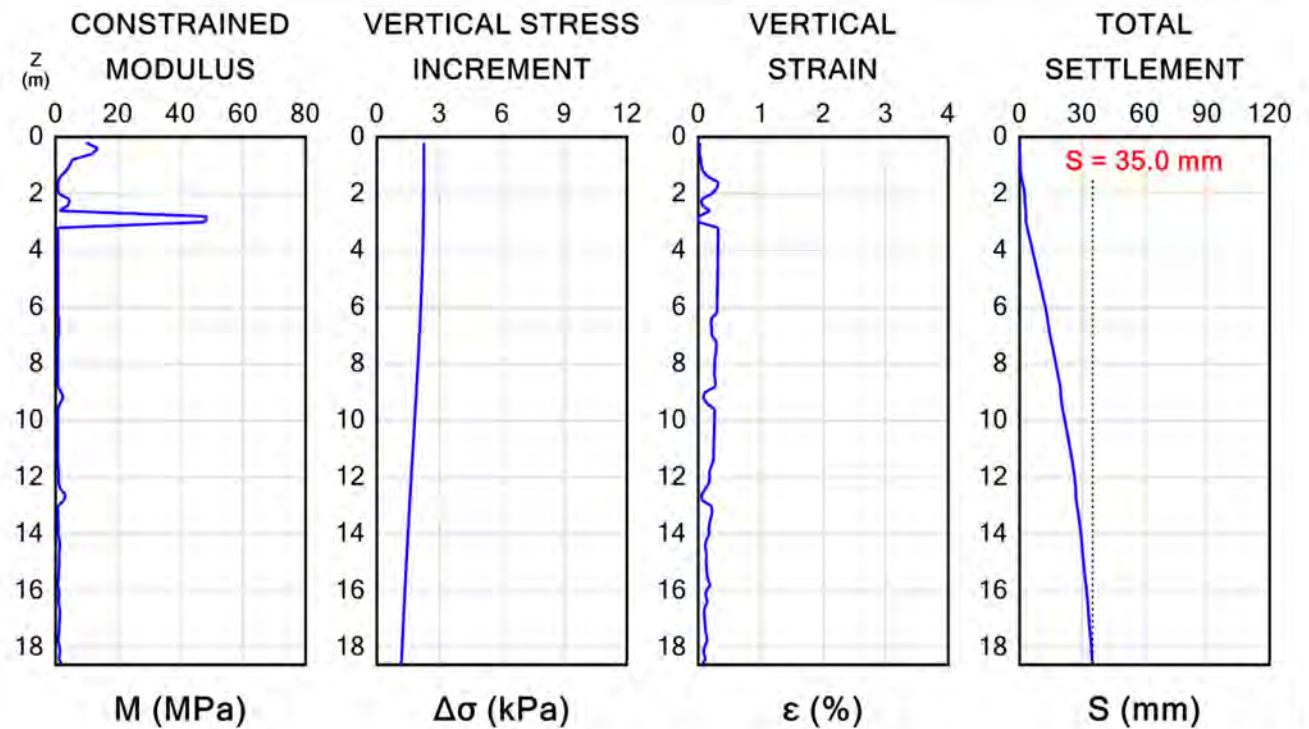
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

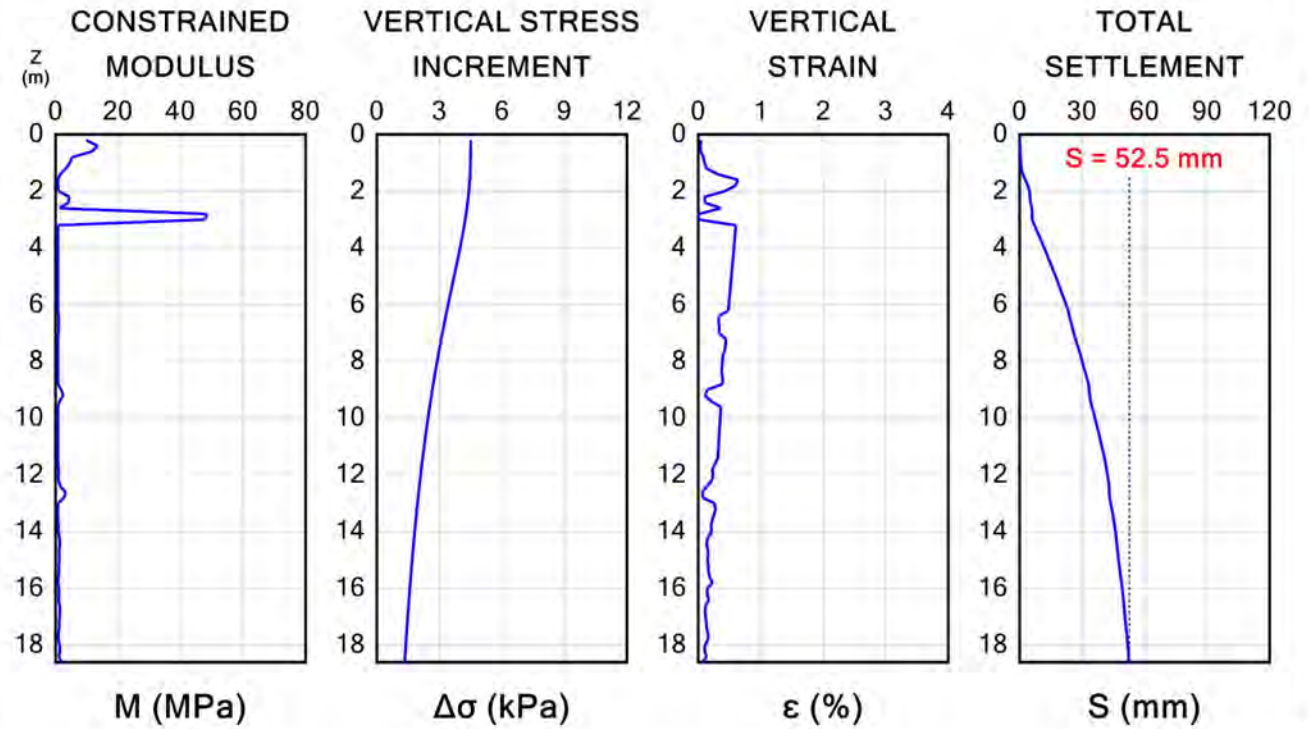
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

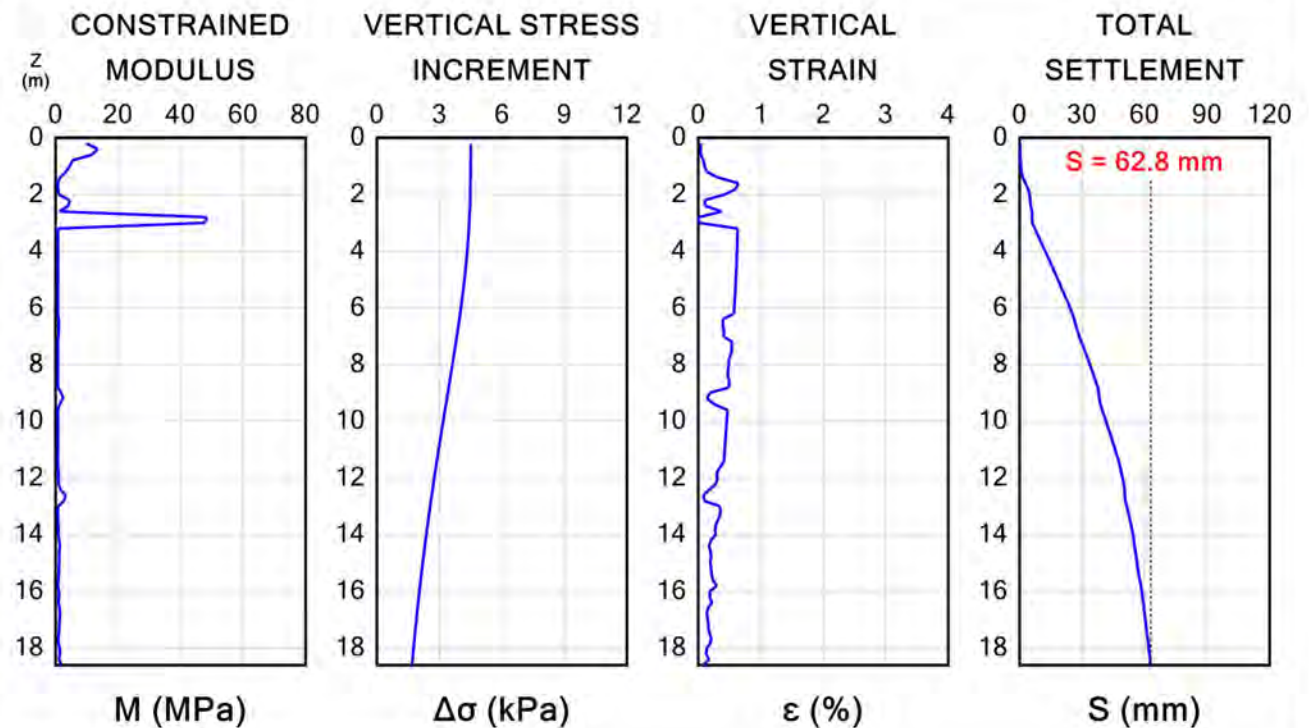
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



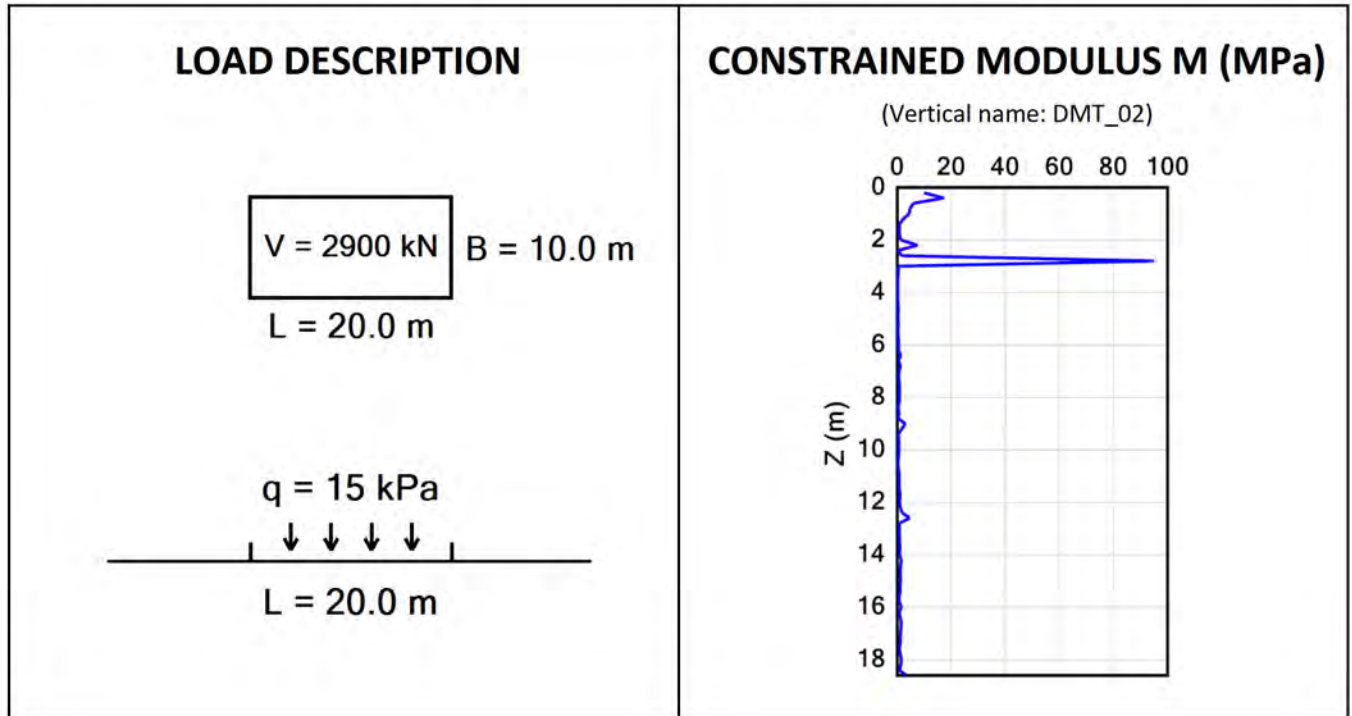
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT02: Case 3

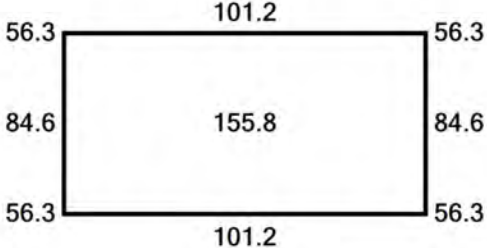
Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	155.8	18.60
below the corner	56.3	18.60
below the median point of short side	84.6	18.60
below the median point of long side	101.2	18.60

Settlements [mm]

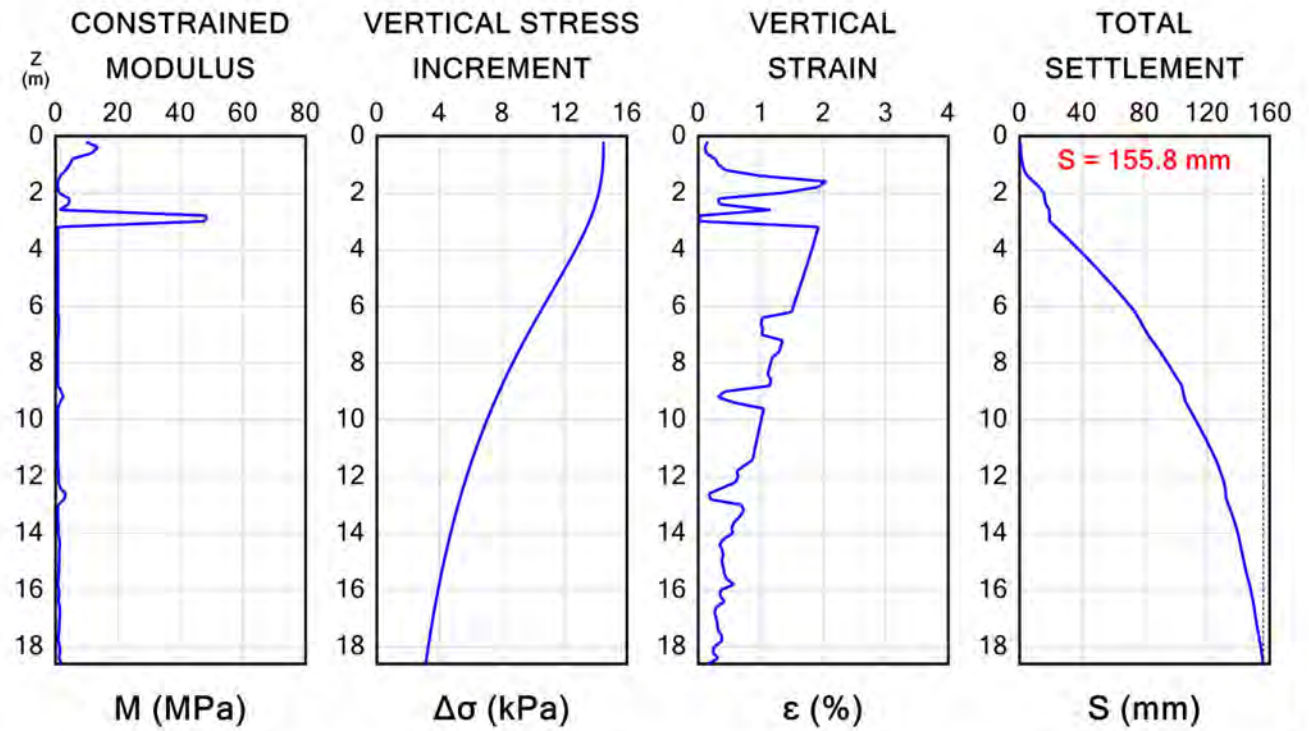


The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

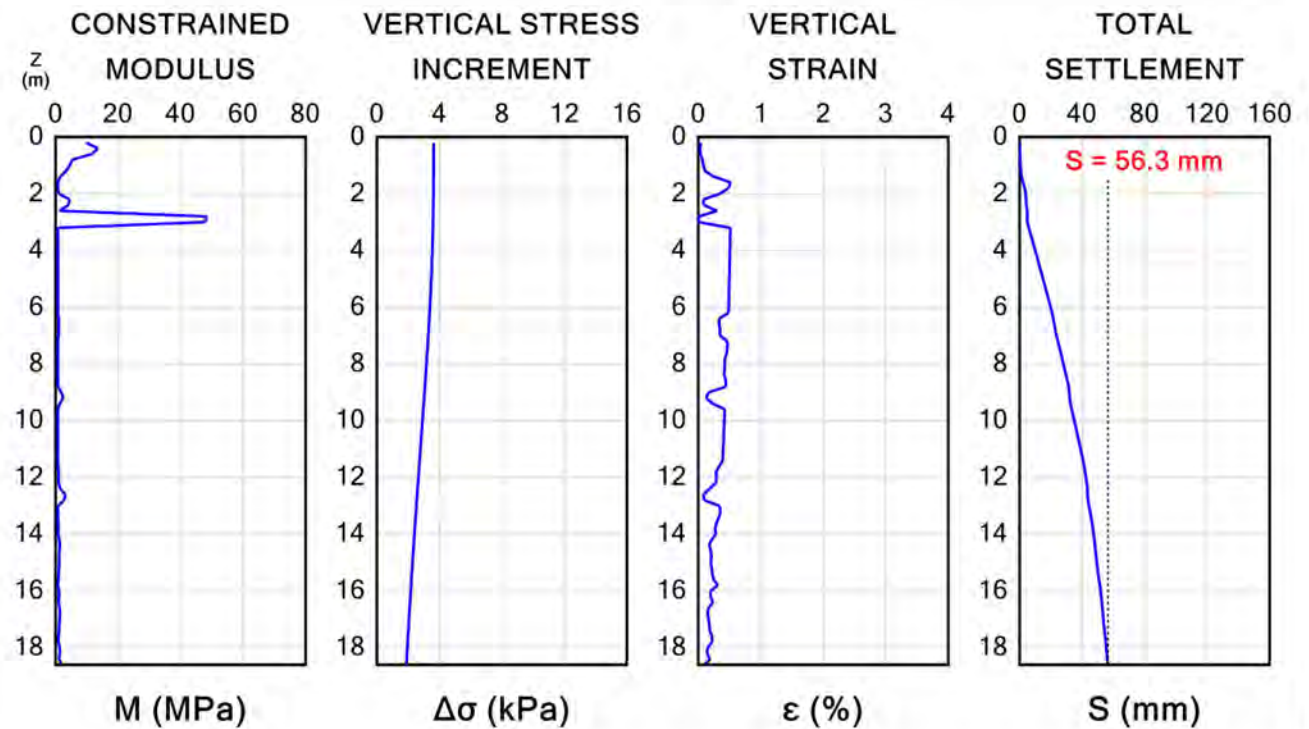
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

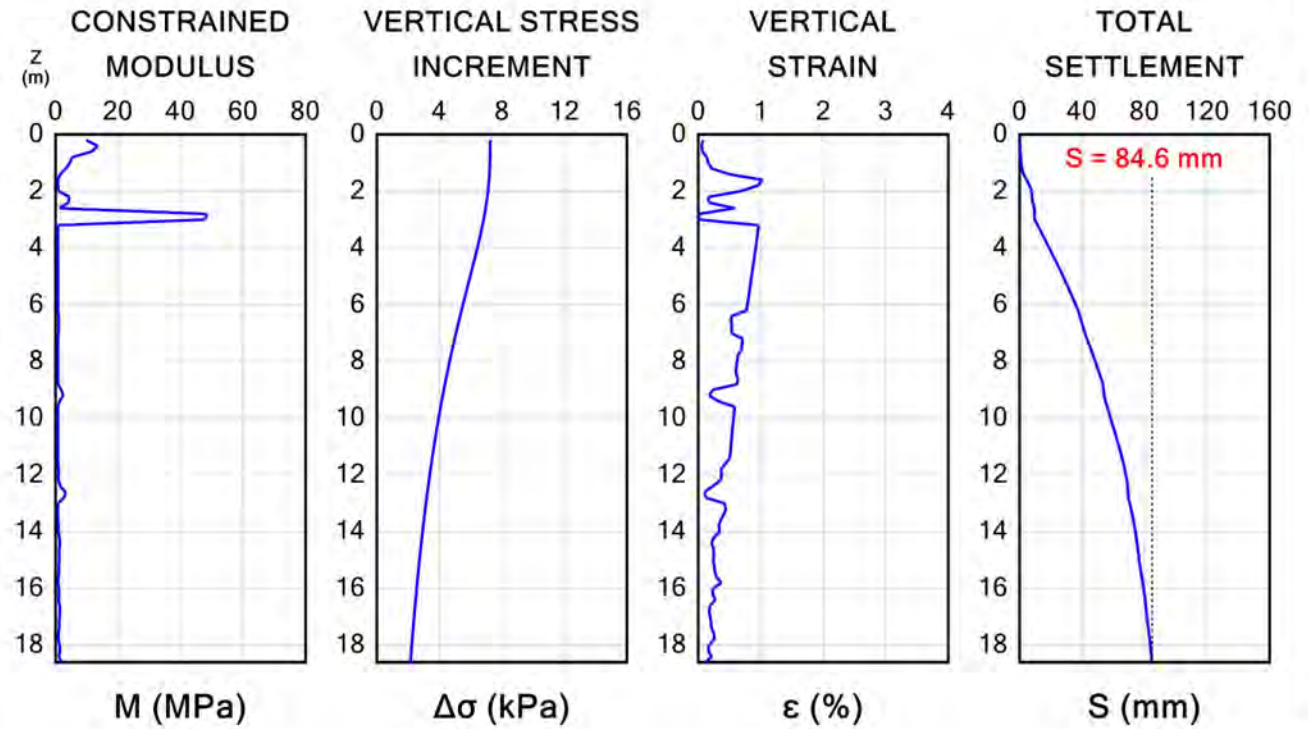
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

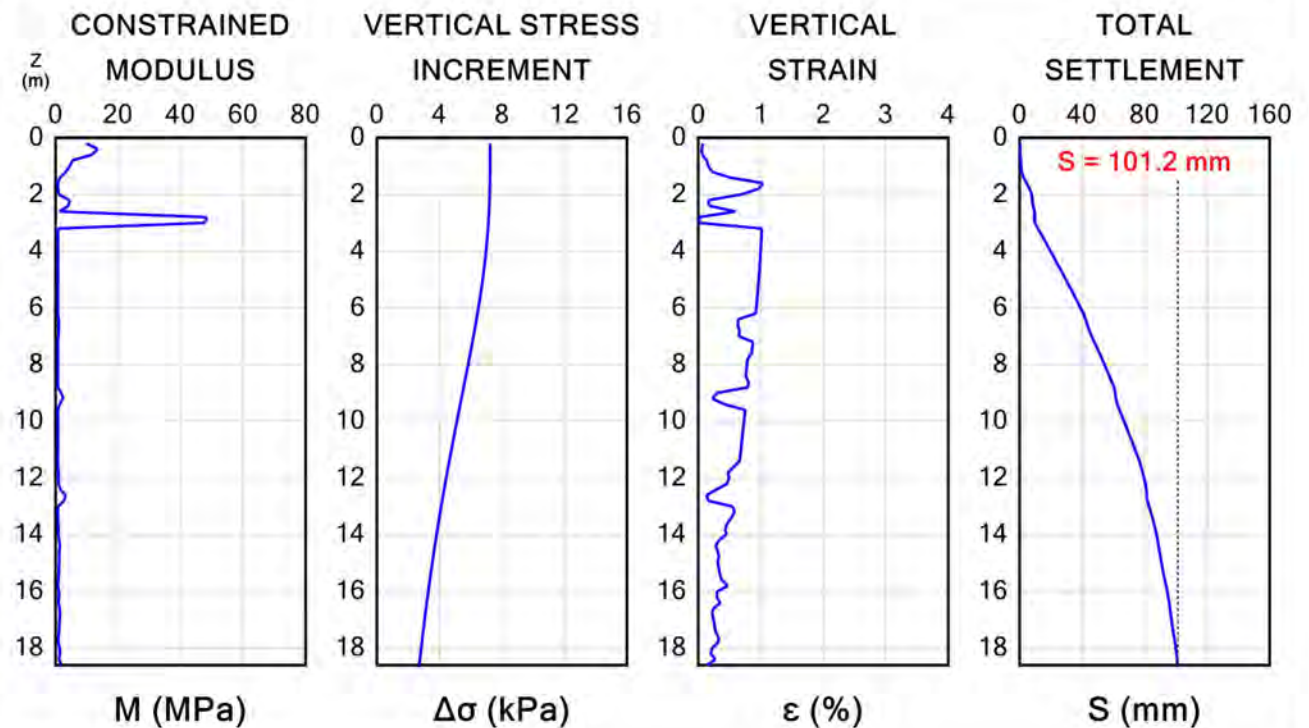
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



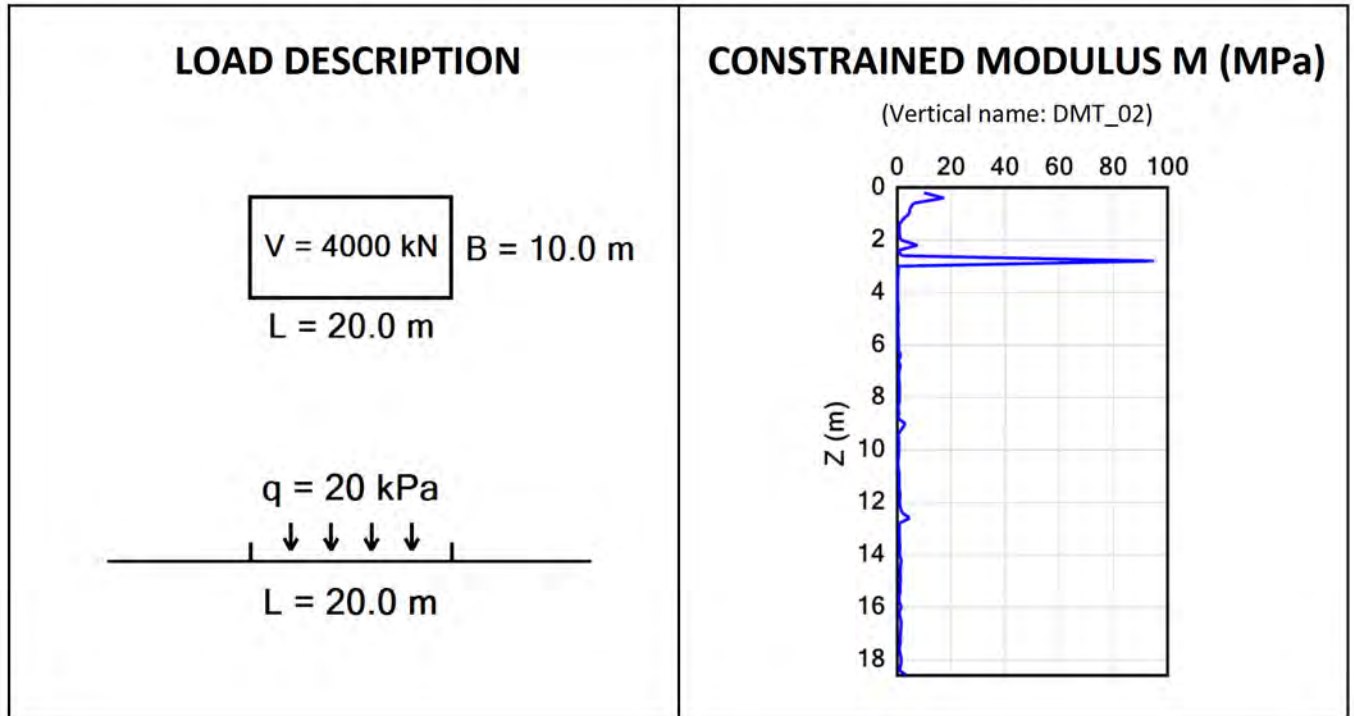
Settlements Calculation

Drill Force NZ

Lander Geotechnical

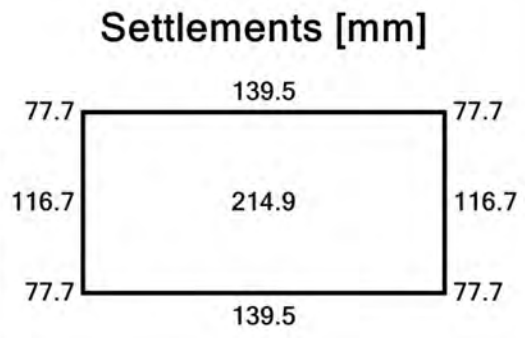
DF21GE034 - DMT02: Case 4

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	214.9	18.60
below the corner	77.7	18.60
below the median point of short side	116.7	18.60
below the median point of long side	139.5	18.60



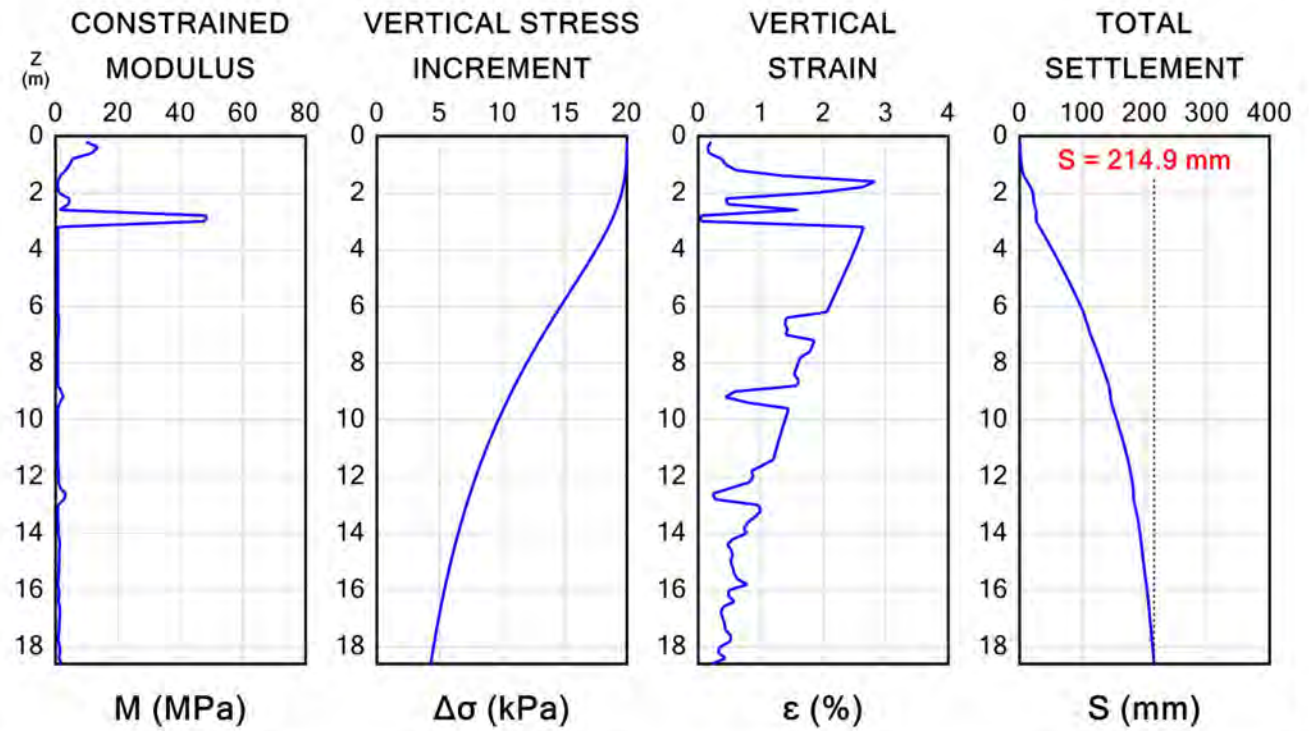
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

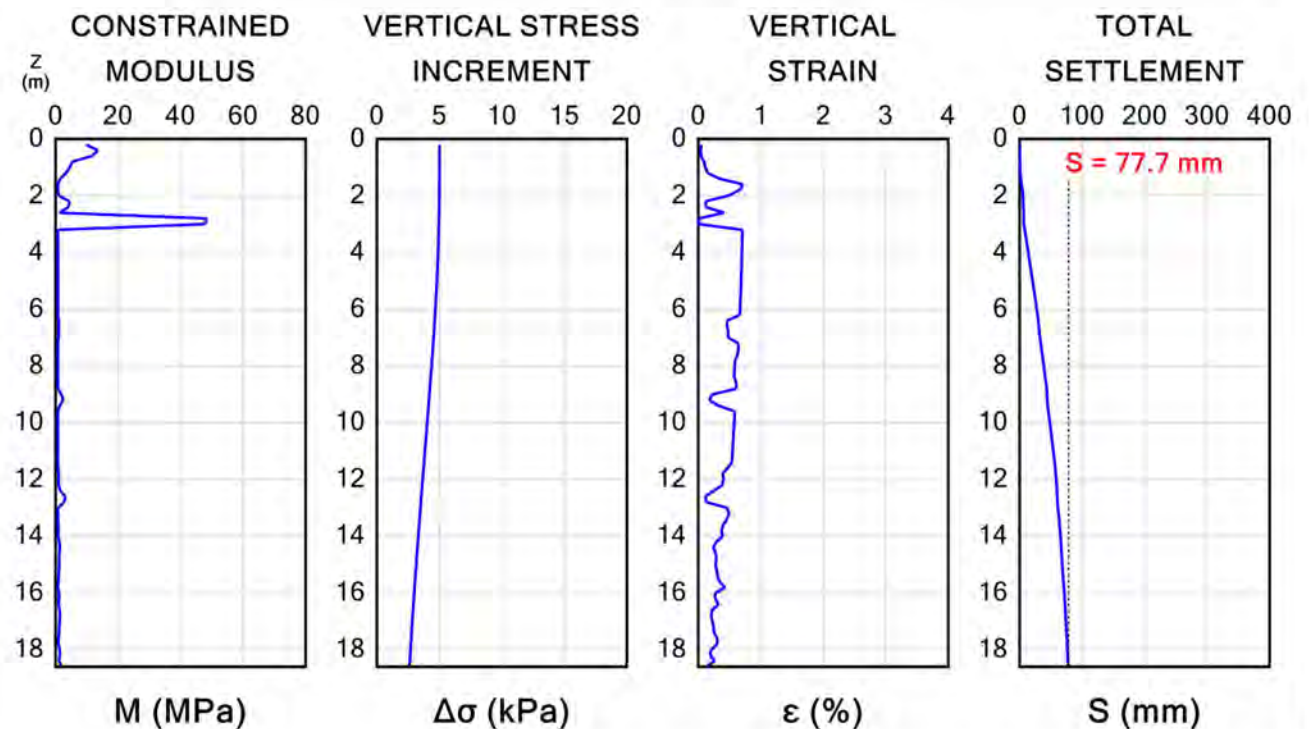
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

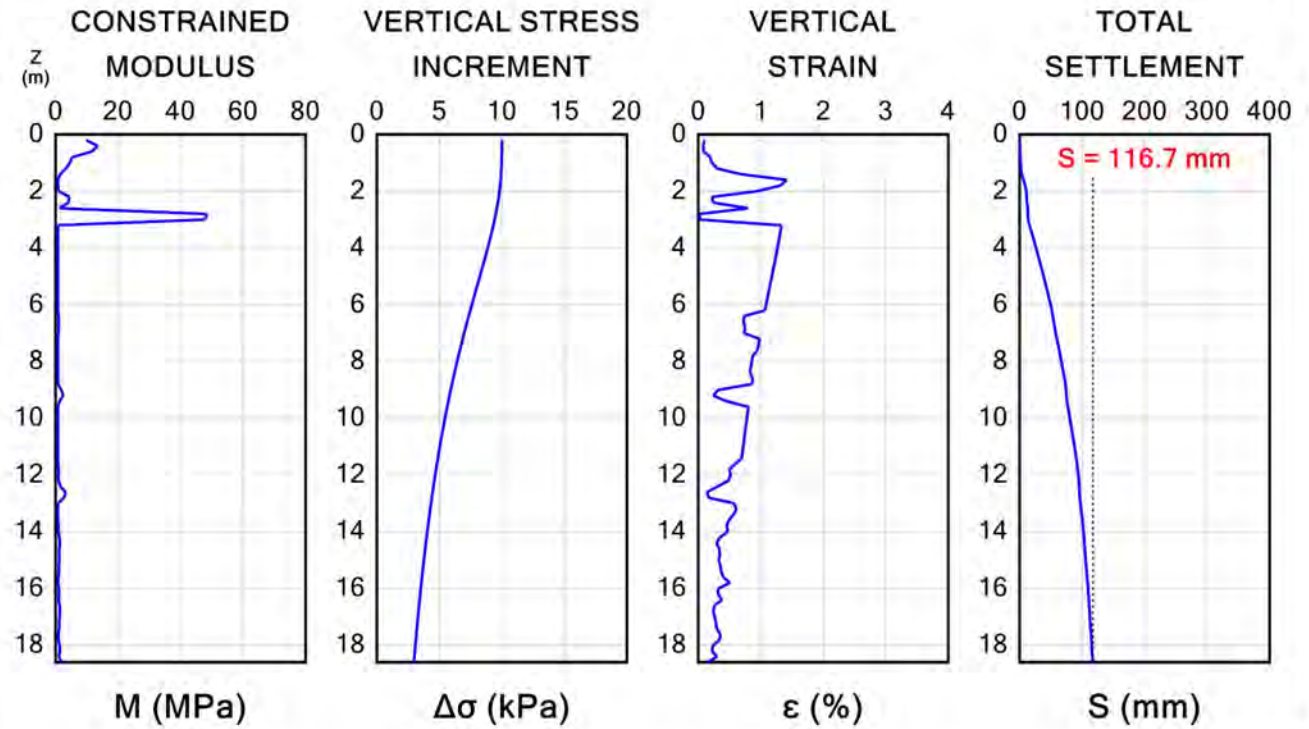
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

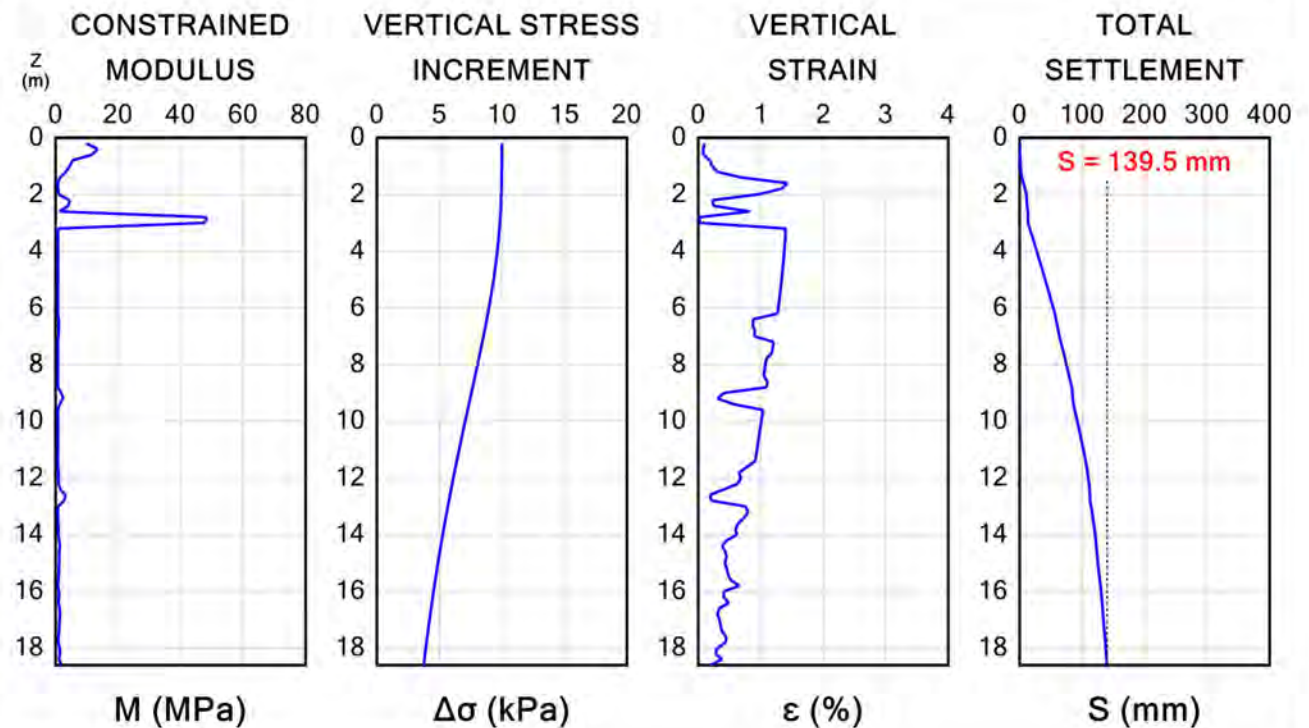
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



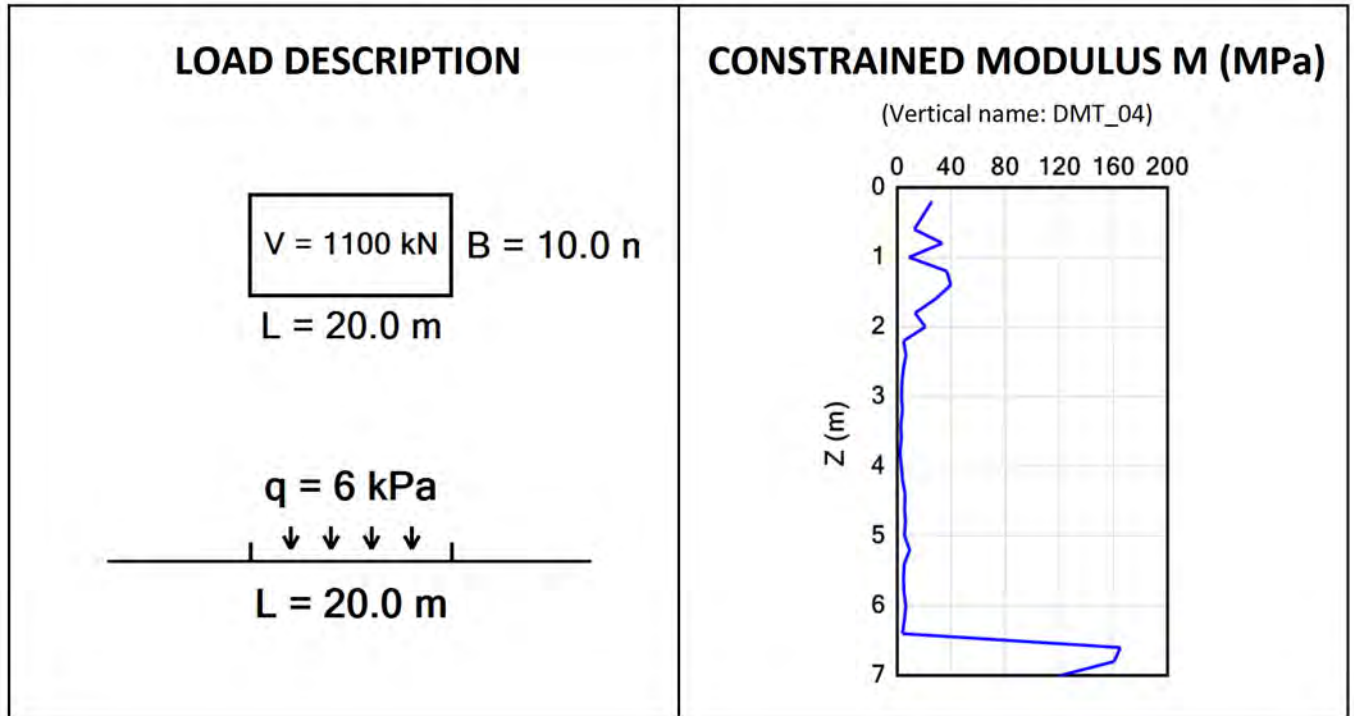
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT04: Case 2

Hamlin Rd, Ardmore



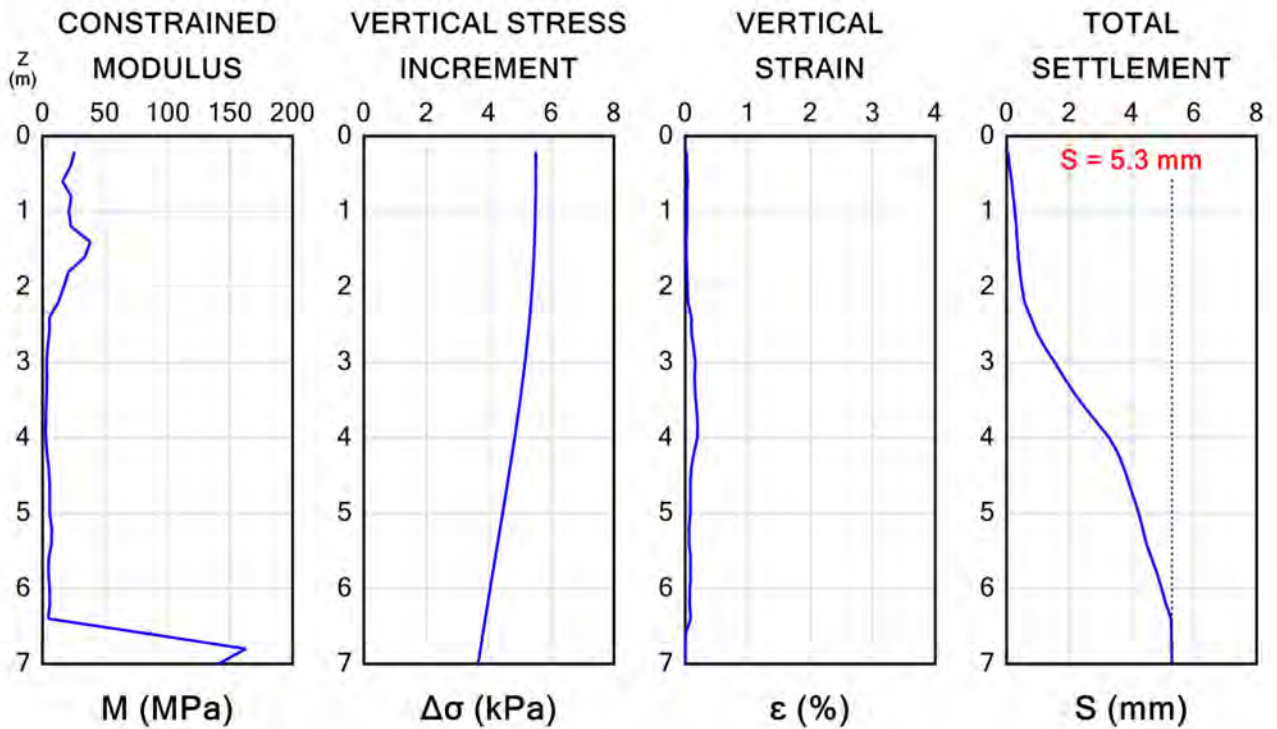
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION																
(one-dimensional conventional method)																
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Calculation Point</th> <th style="text-align: center;">Settlements [mm]</th> <th style="text-align: center;">Z Stop [m]</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">below the center</td> <td style="text-align: center;">5.3</td> <td style="text-align: center;">7.00</td> </tr> <tr> <td style="text-align: center;">below the corner</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">7.00</td> </tr> <tr> <td style="text-align: center;">below the median point of short side</td> <td style="text-align: center;">2.7</td> <td style="text-align: center;">7.00</td> </tr> <tr> <td style="text-align: center;">below the median point of long side</td> <td style="text-align: center;">2.9</td> <td style="text-align: center;">7.00</td> </tr> </tbody> </table>	Calculation Point	Settlements [mm]	Z Stop [m]	below the center	5.3	7.00	below the corner	1.5	7.00	below the median point of short side	2.7	7.00	below the median point of long side	2.9	7.00	<p>Settlements [mm]</p>
Calculation Point	Settlements [mm]	Z Stop [m]														
below the center	5.3	7.00														
below the corner	1.5	7.00														
below the median point of short side	2.7	7.00														
below the median point of long side	2.9	7.00														
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>																

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

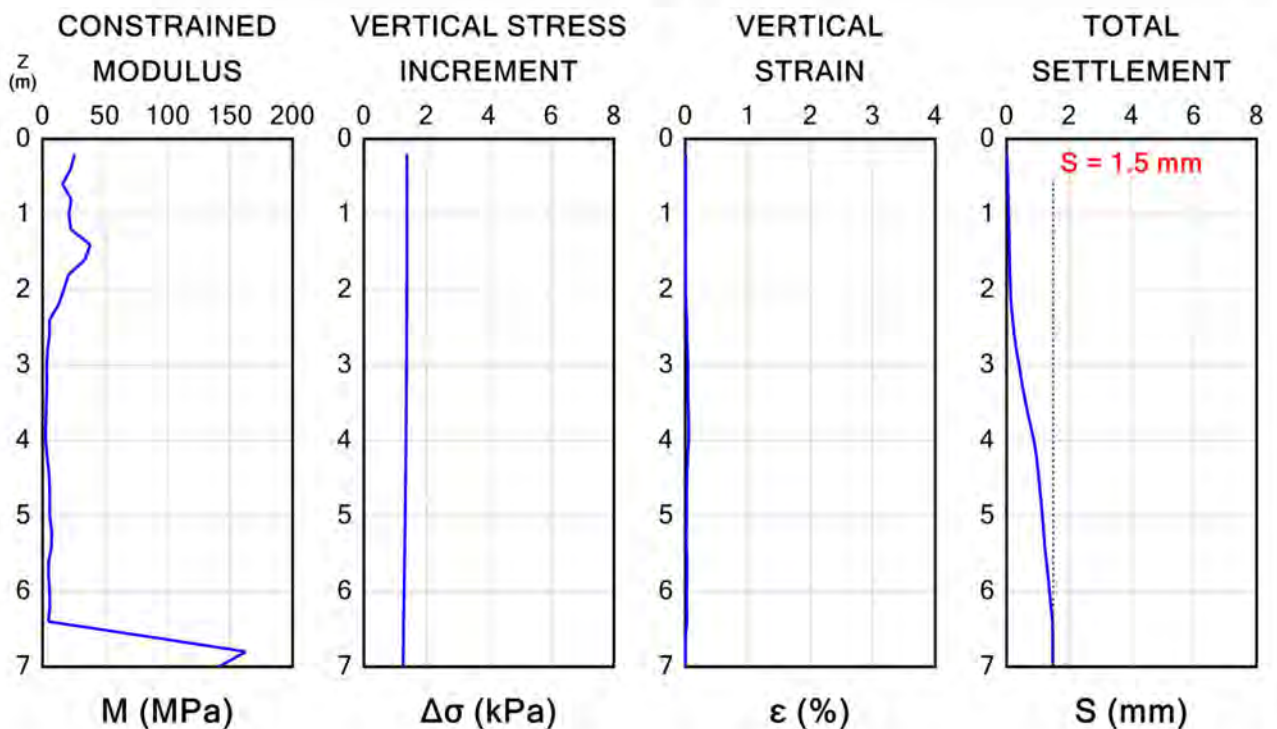
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

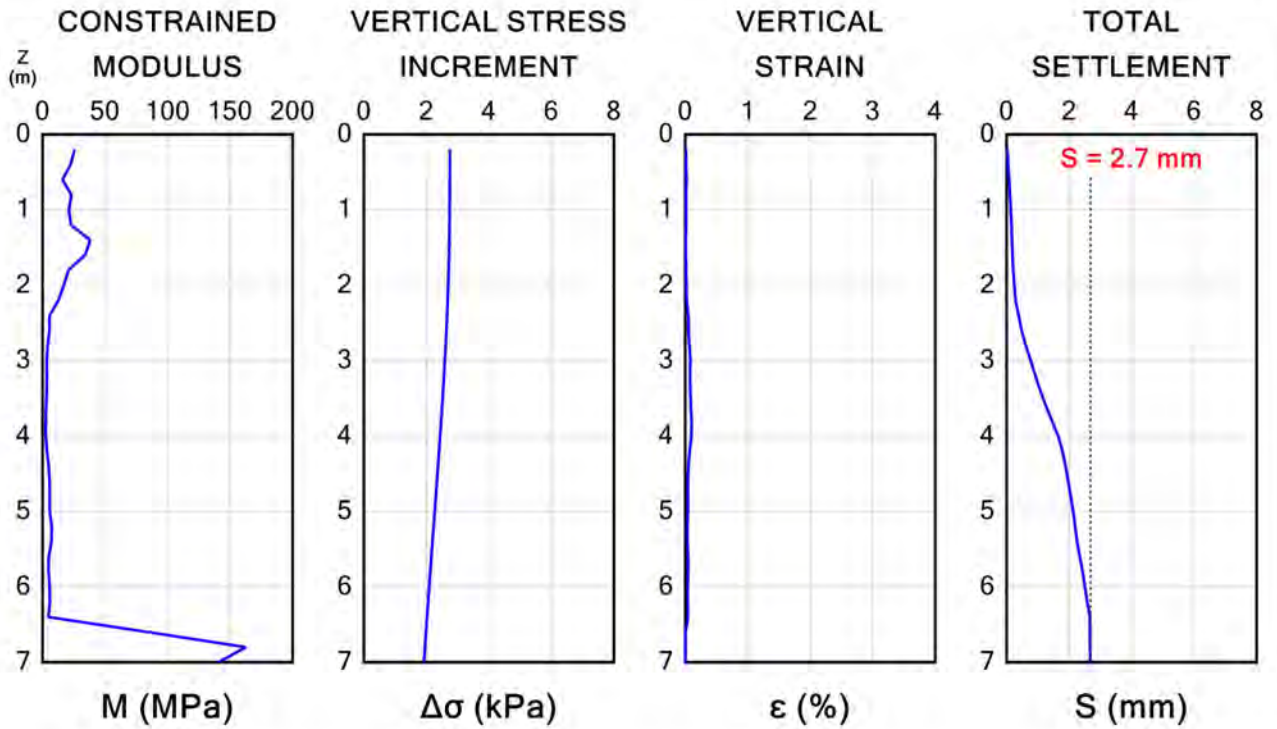
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

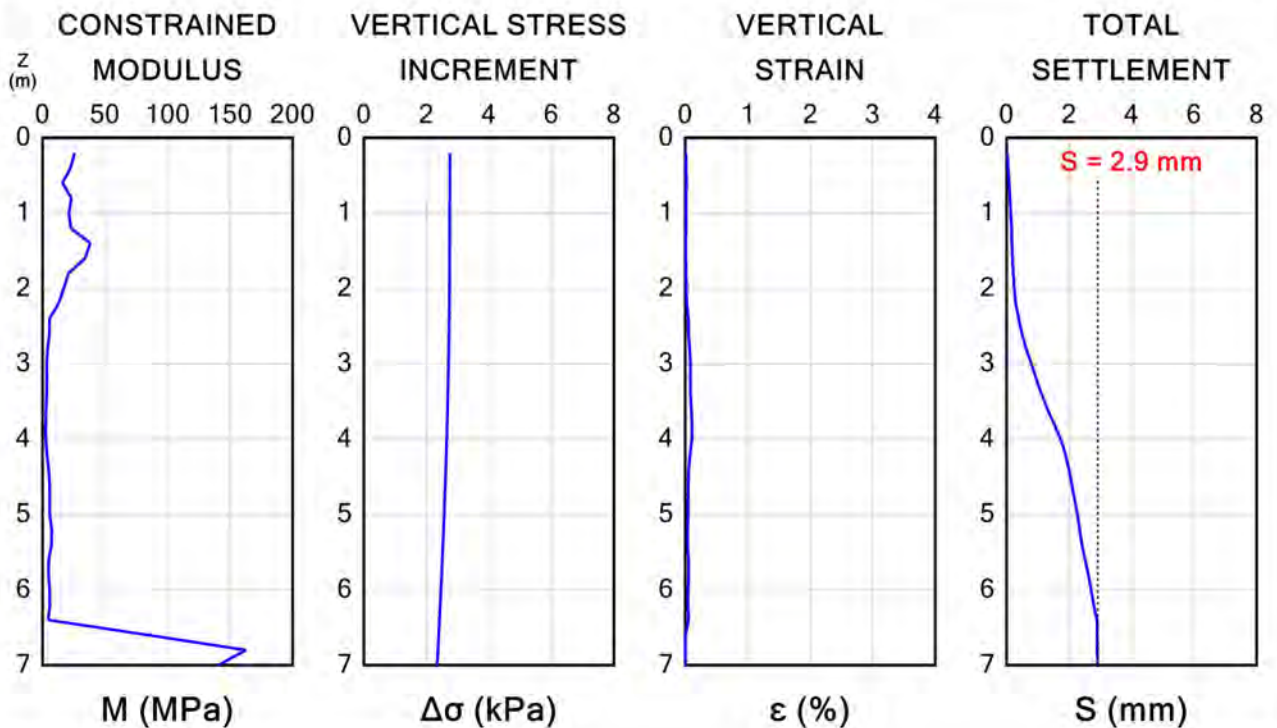
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



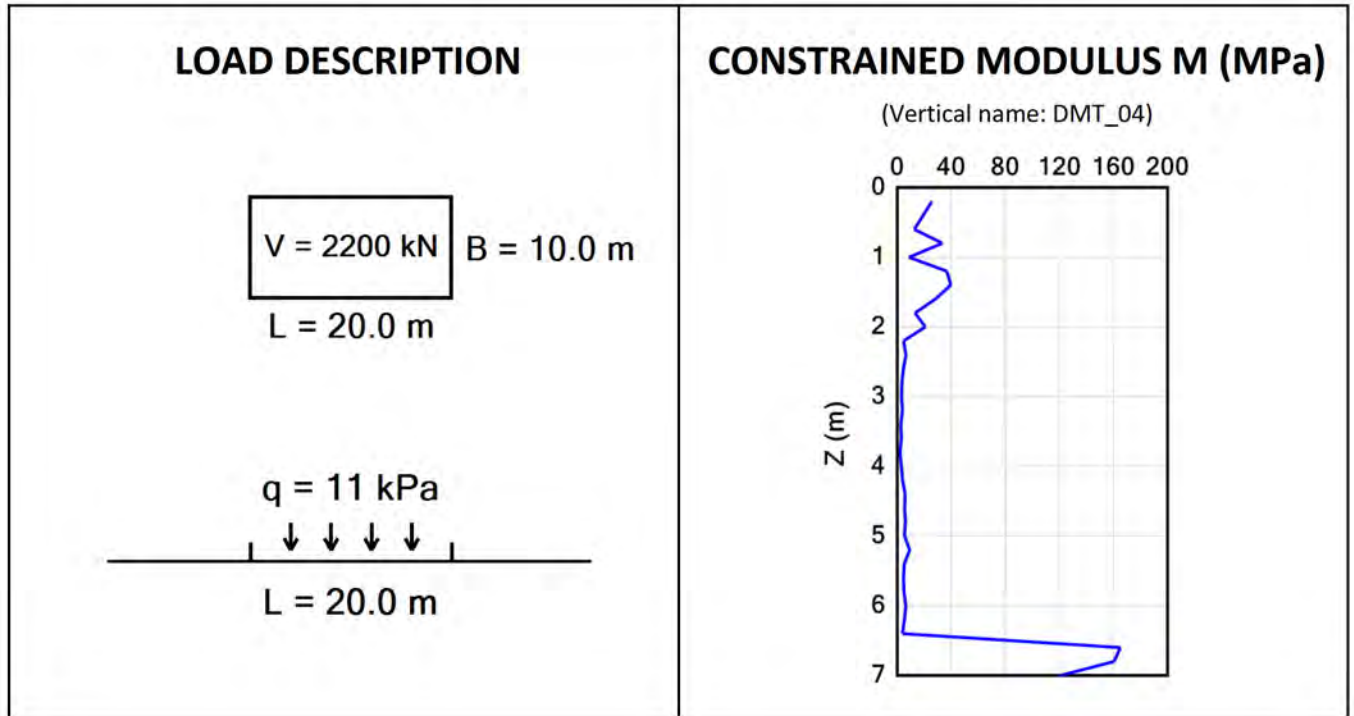
Settlements Calculation

Drill Force NZ

Lander Geotechnical

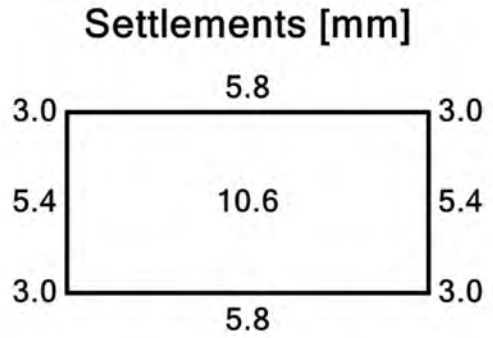
DF21GE034 - DMT04: Case 3

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	10.6	7.00
below the corner	3.0	7.00
below the median point of short side	5.4	7.00
below the median point of long side	5.8	7.00



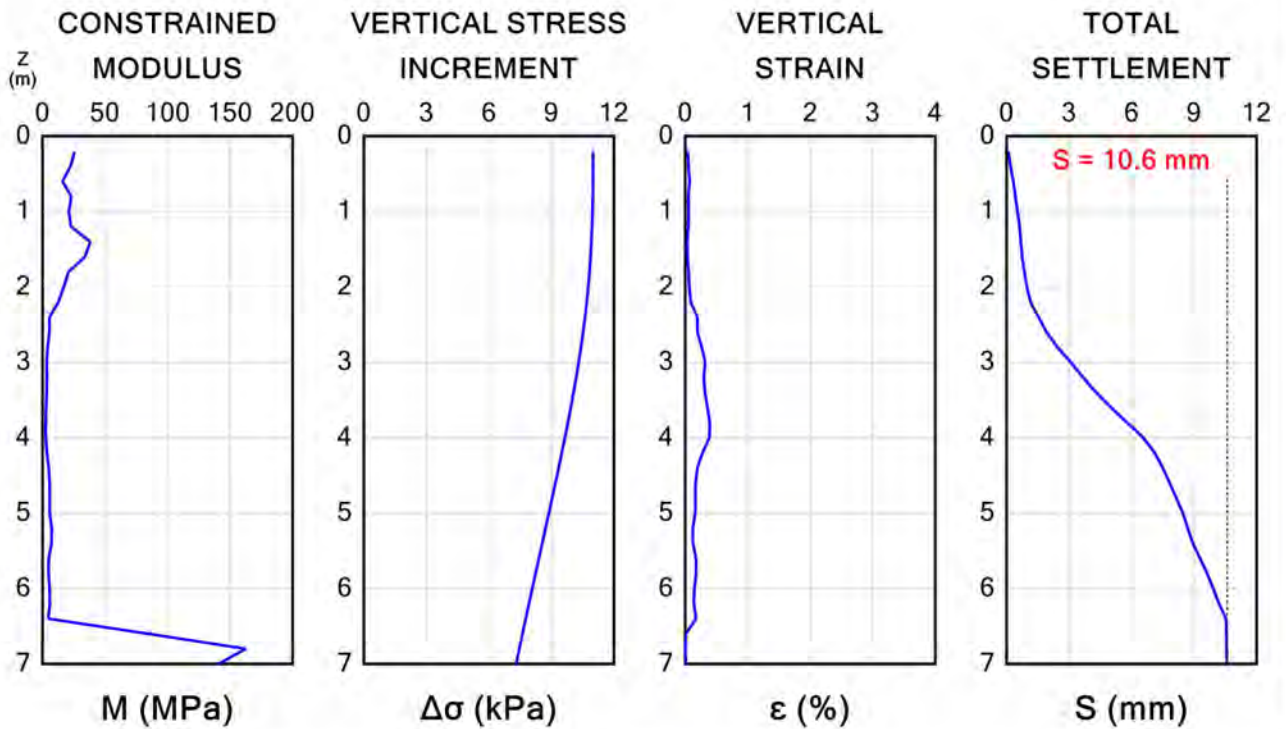
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

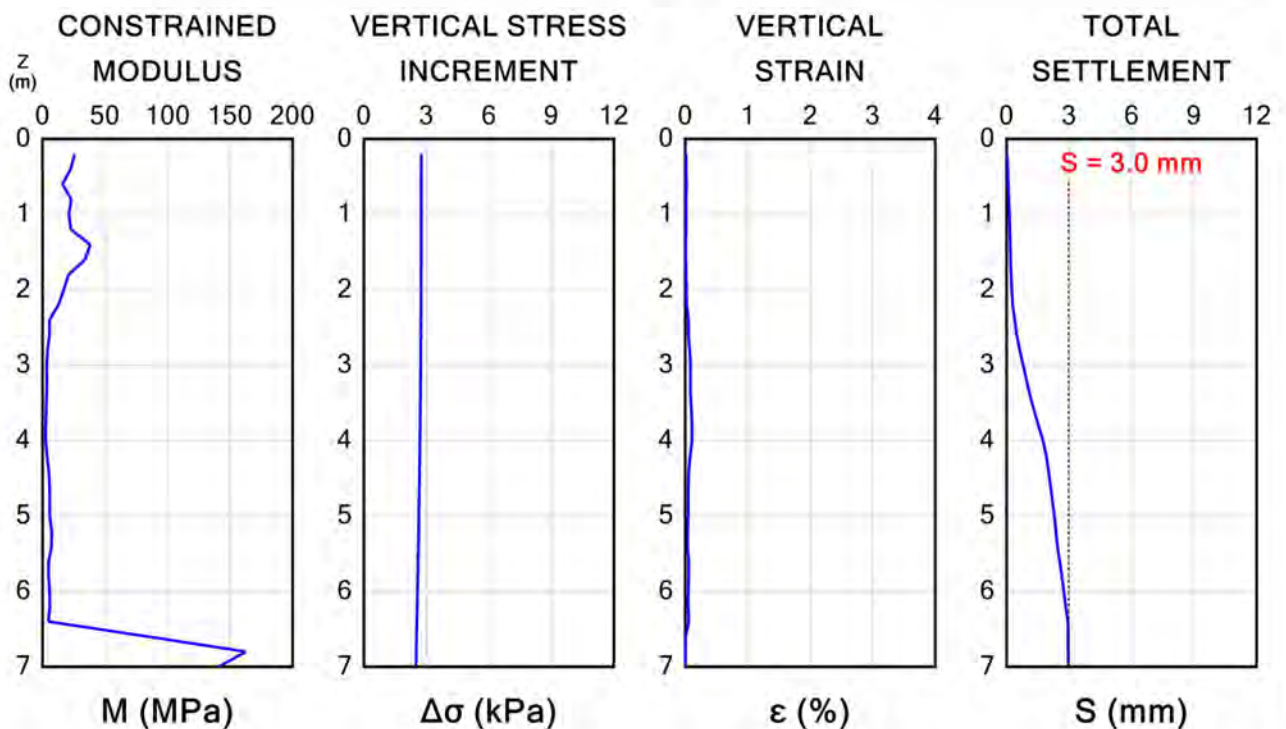
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

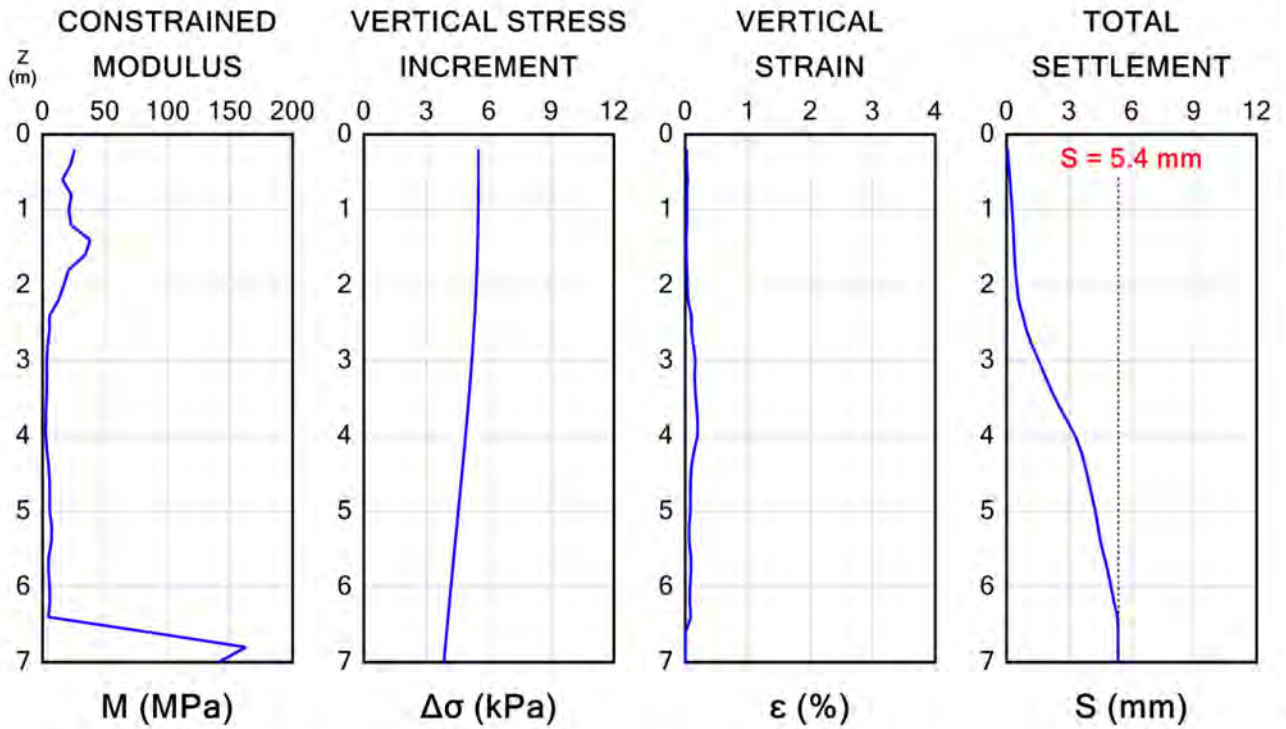
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

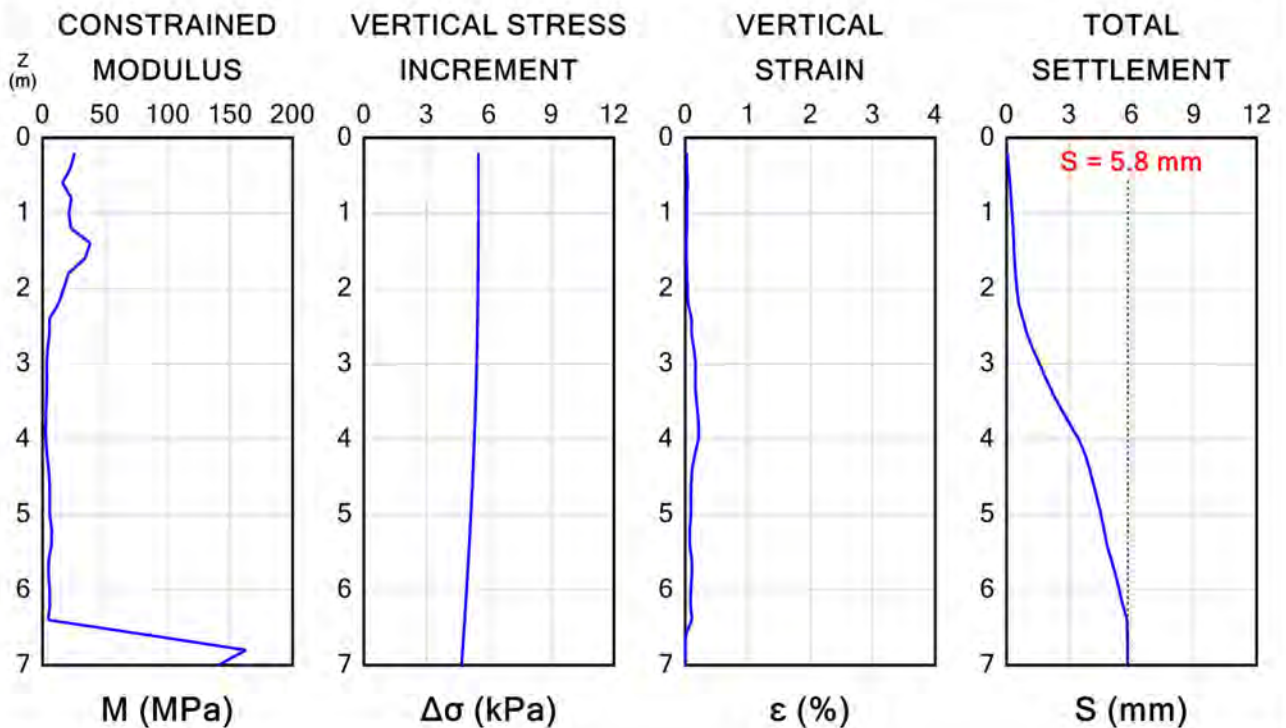
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



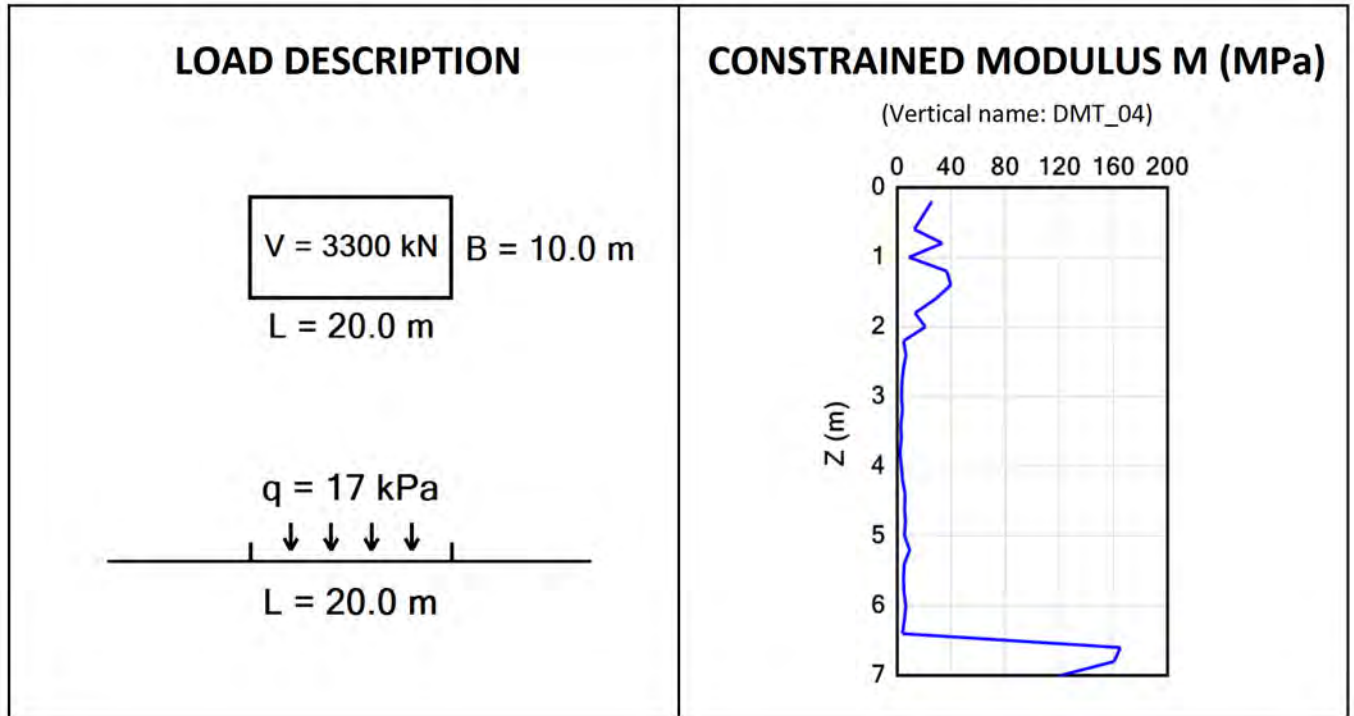
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT04: Case 4

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	15.9	7.00
below the corner	4.4	7.00
below the median point of short side	8.0	7.00
below the median point of long side	8.7	7.00

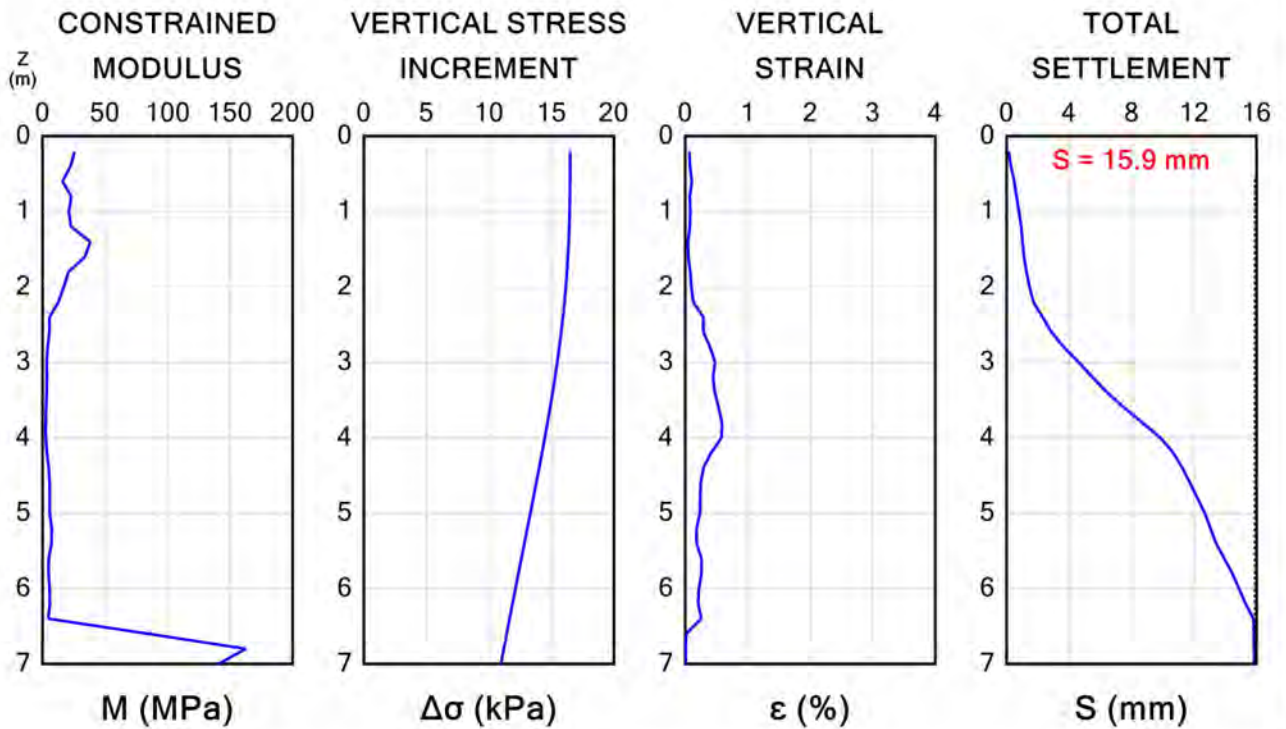
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

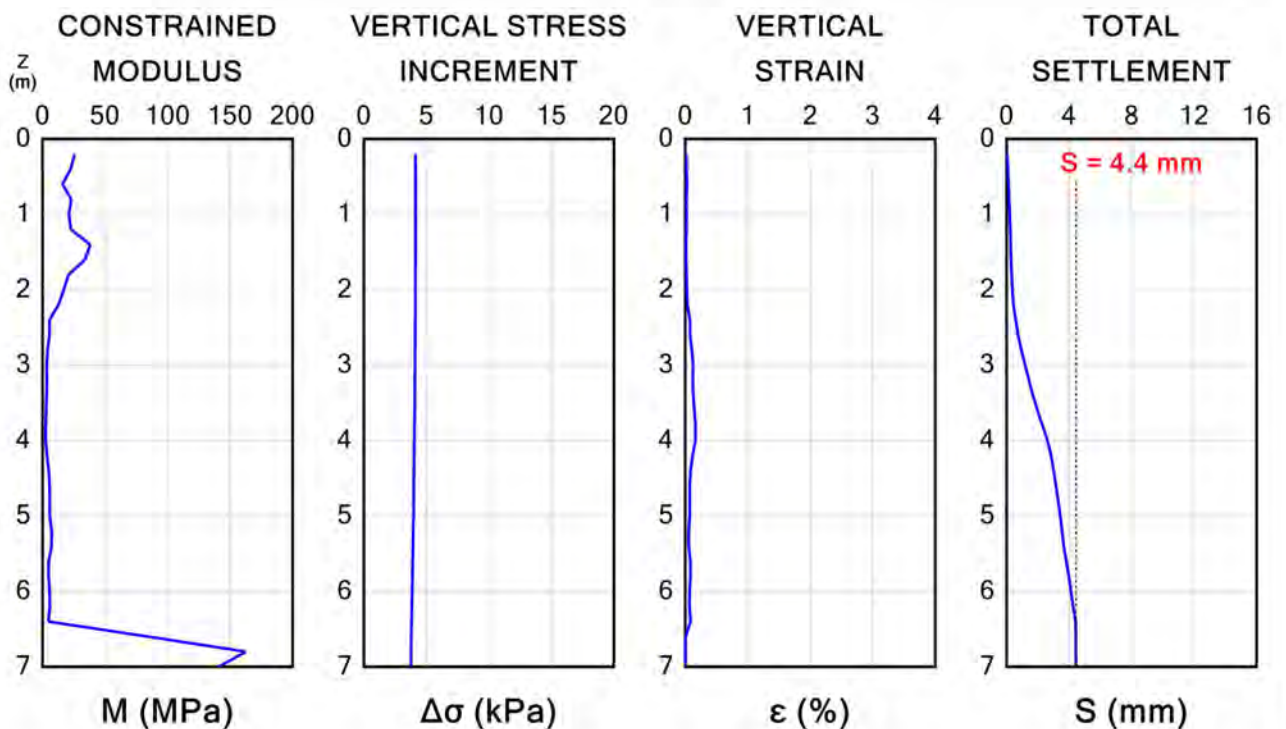
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

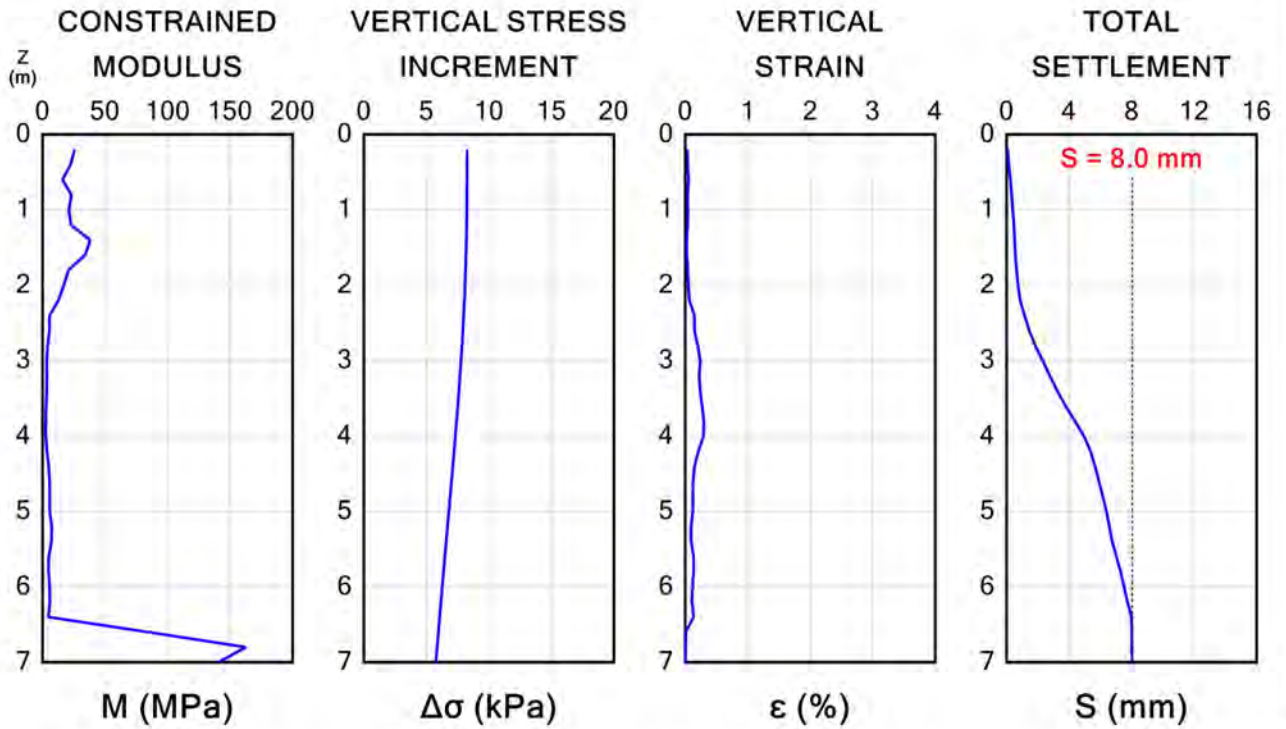
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

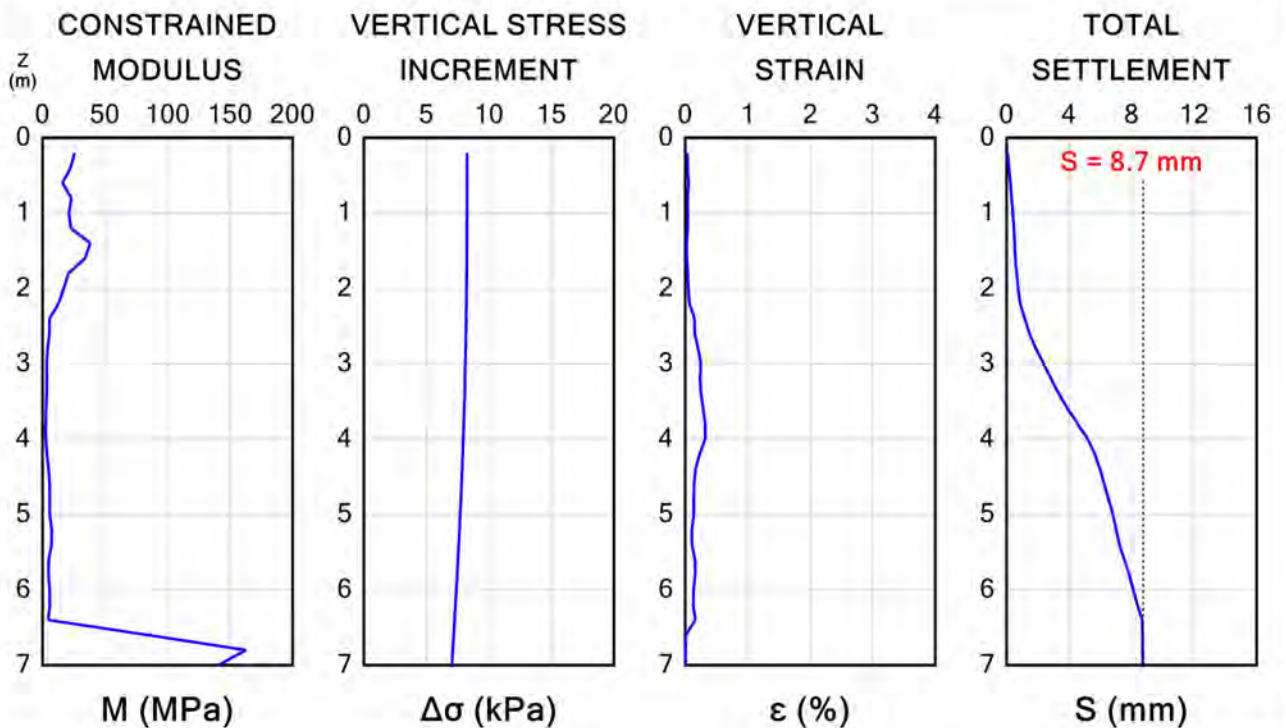
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



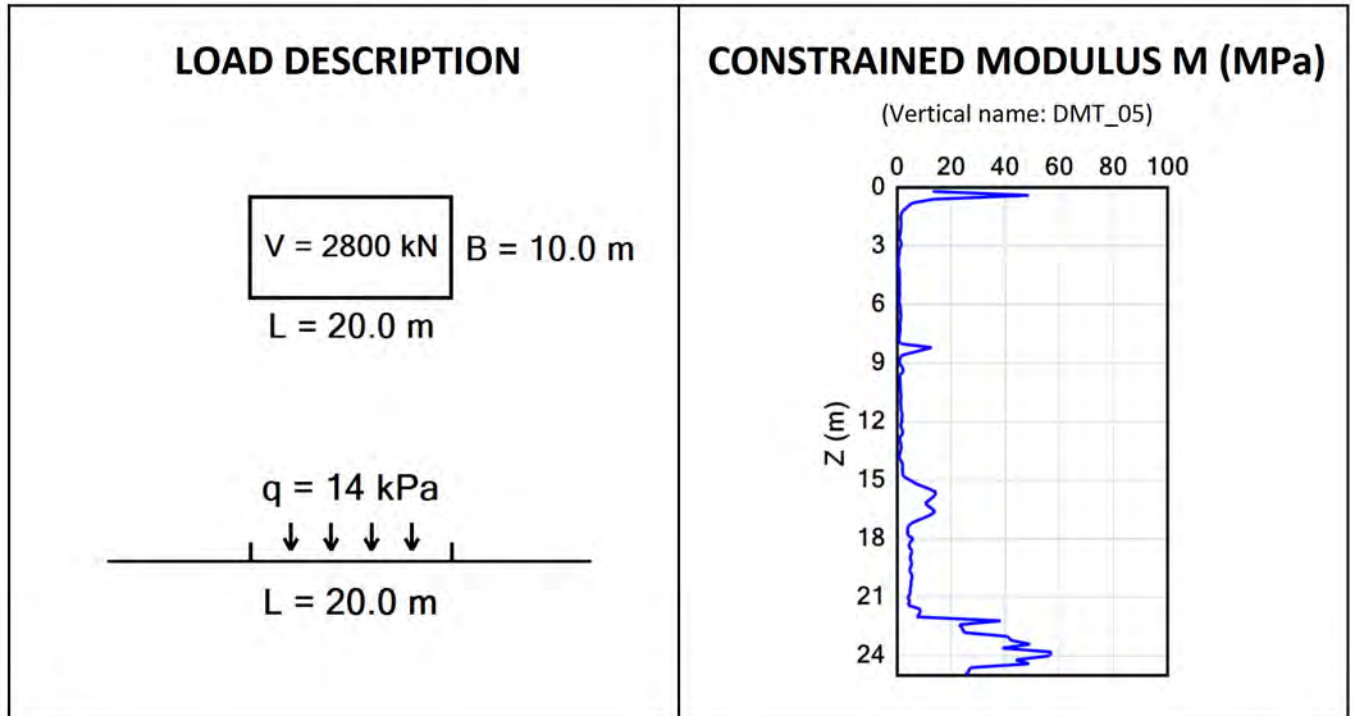
Settlements Calculation

Drill Force NZ

Lander Geotechnical

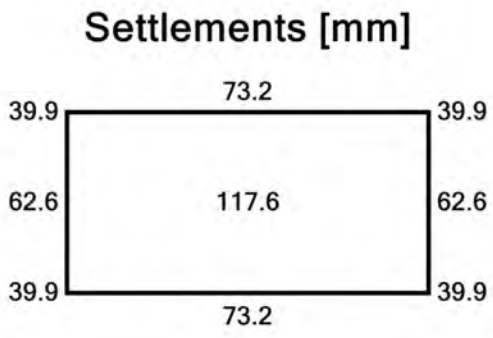
DF21GE034 - DMT05: Case 1

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	117.6	25.00
below the corner	39.9	25.00
below the median point of short side	62.6	25.00
below the median point of long side	73.2	25.00



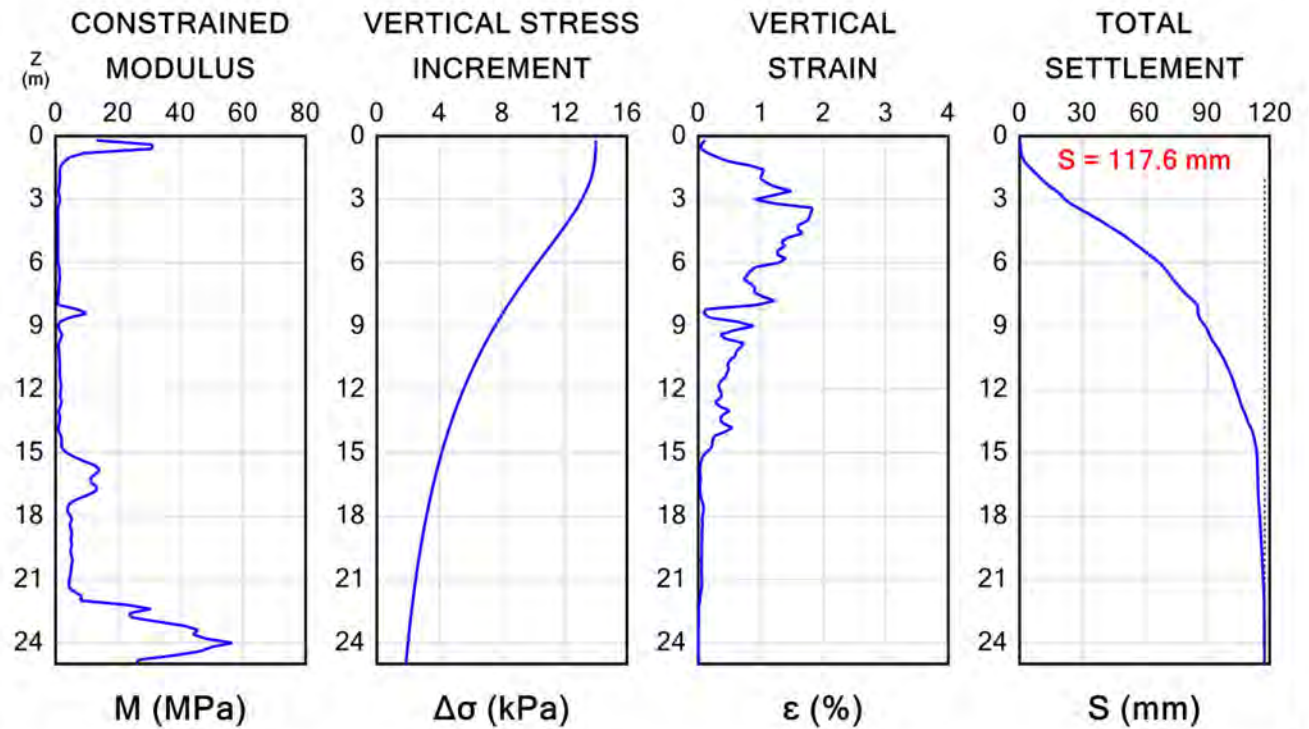
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

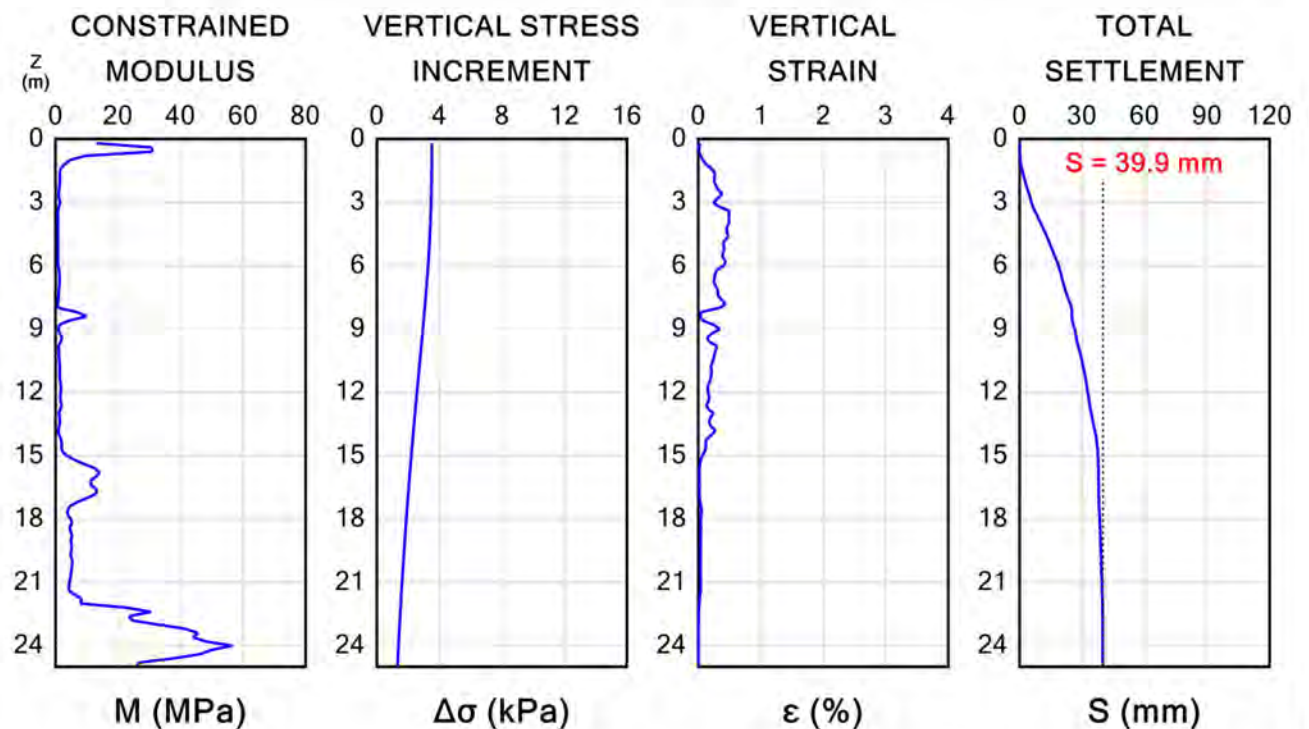
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

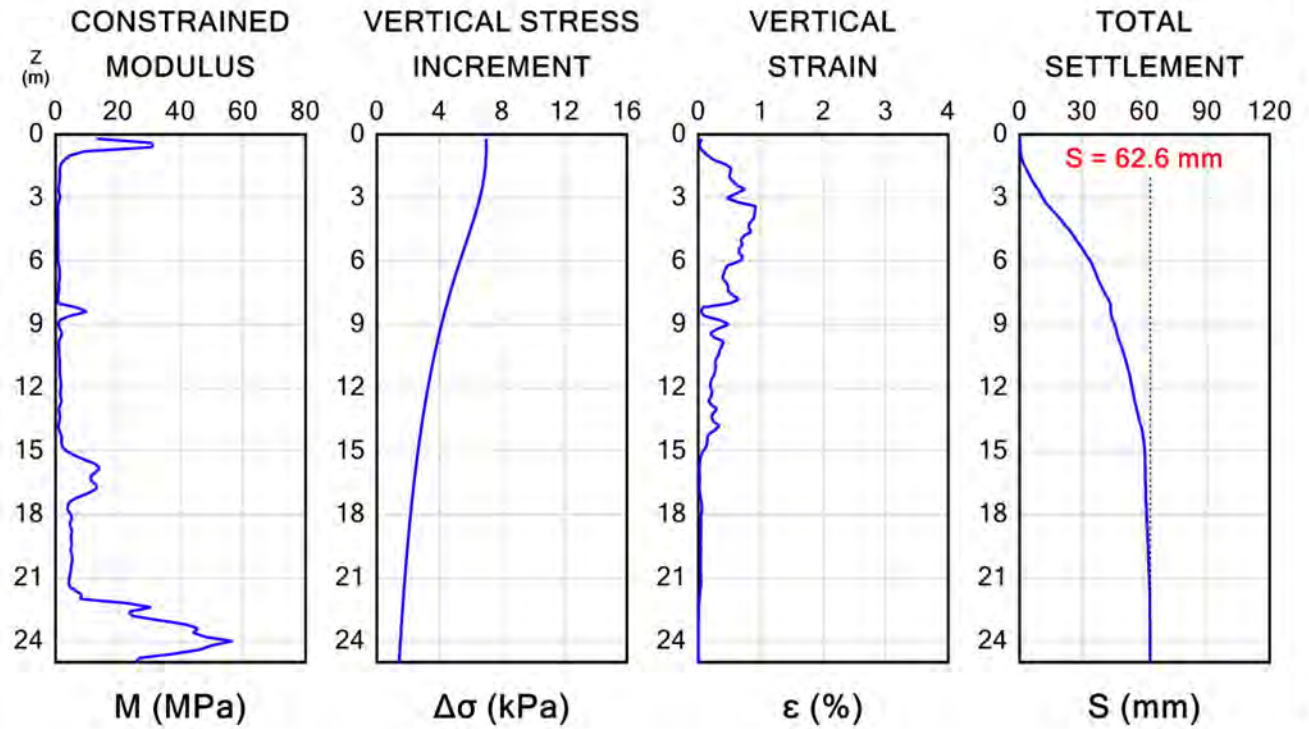
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

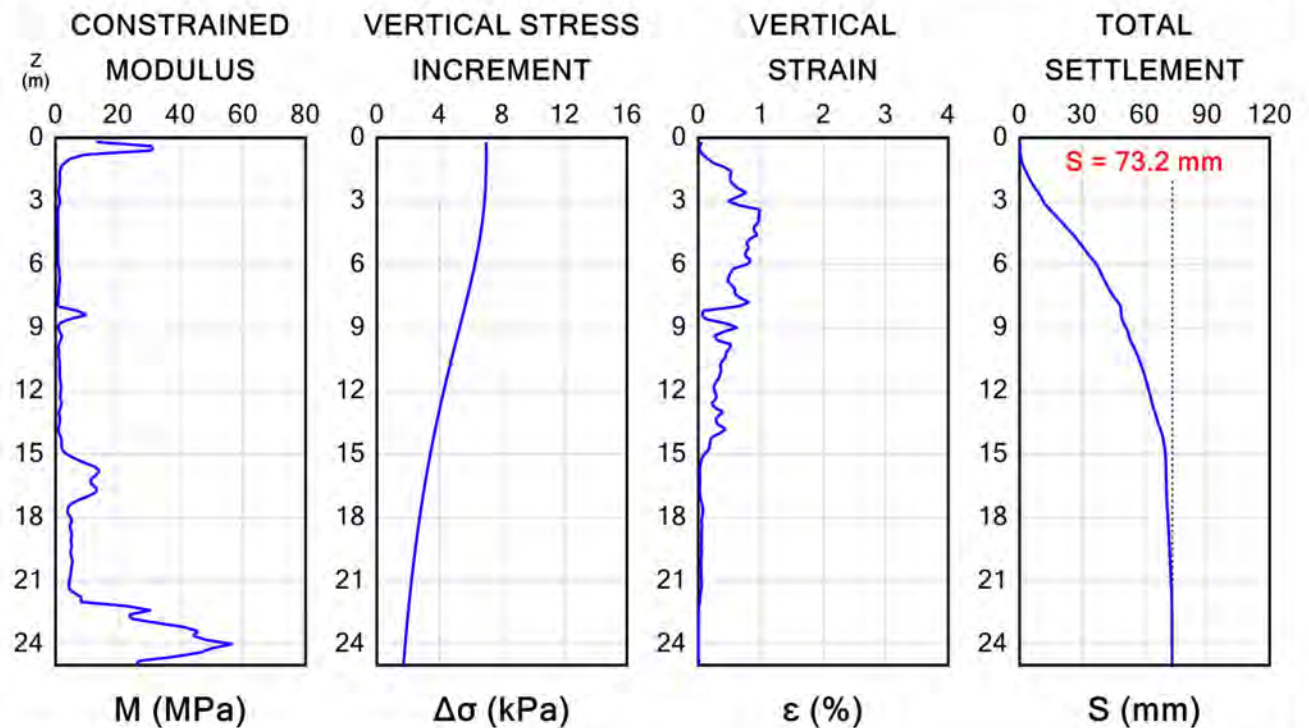
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



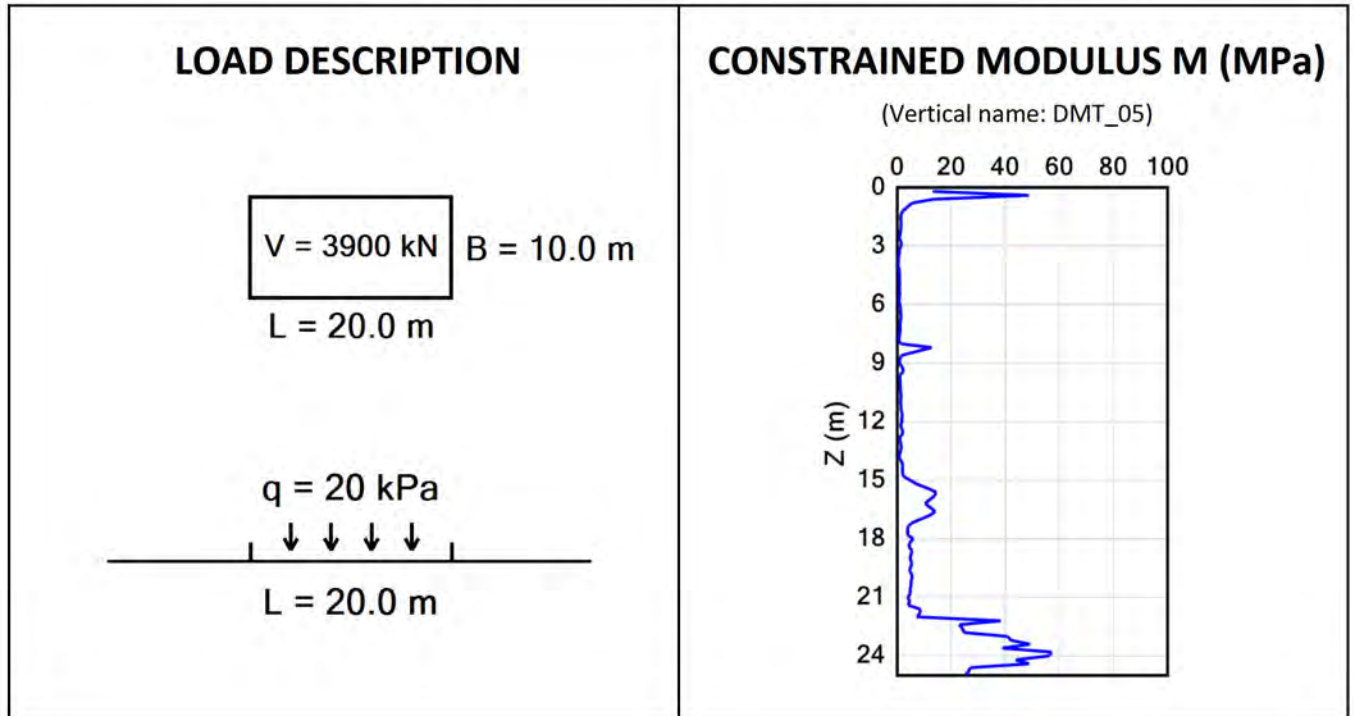
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT05: Case 2

Hamlin Rd, Ardmore



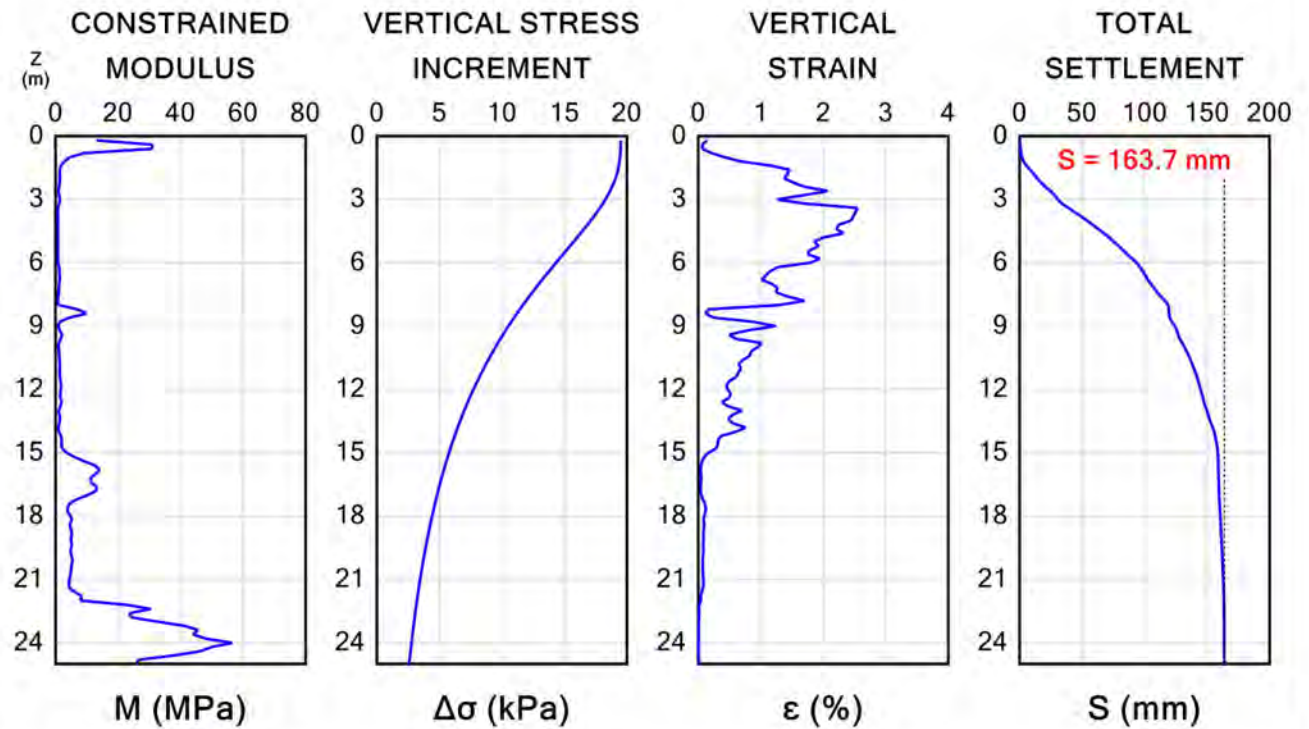
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
	Settlements [mm]	
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	163.7	25.00
below the corner	55.5	25.00
below the median point of short side	87.2	25.00
below the median point of long side	102.0	25.00
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>		

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

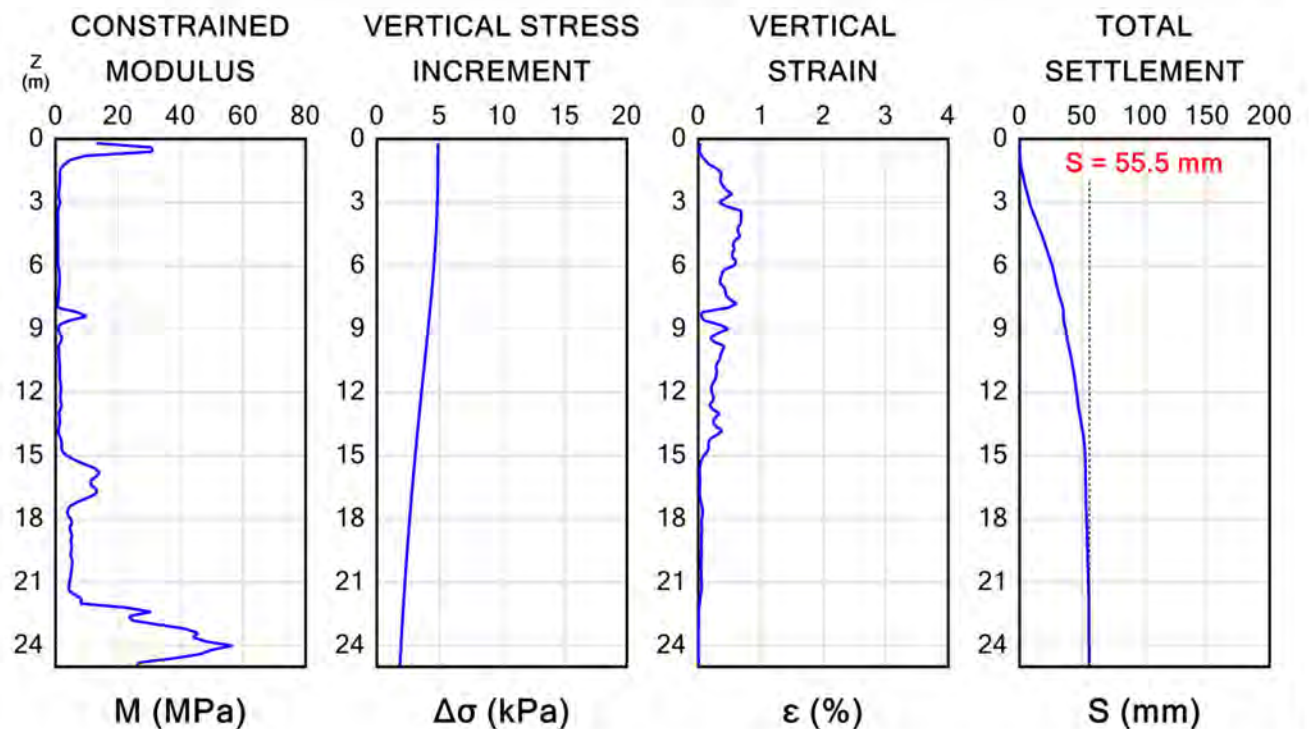
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

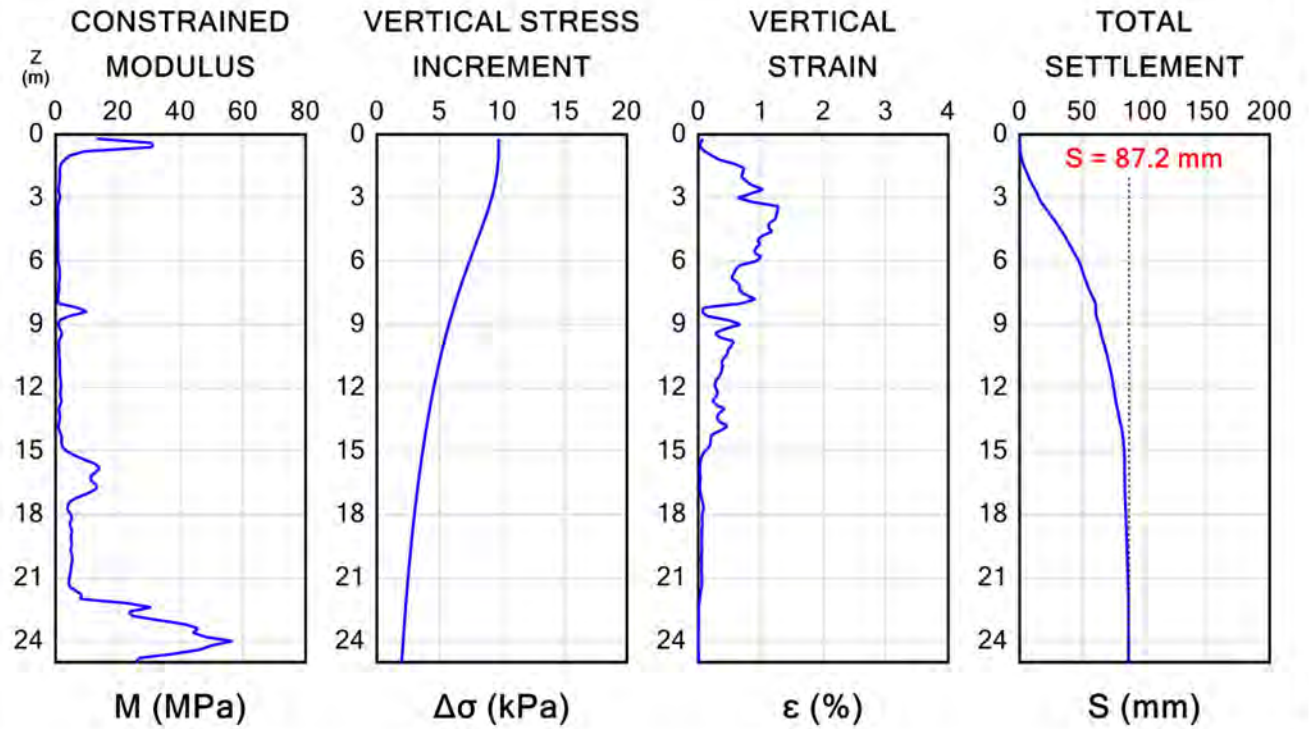
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

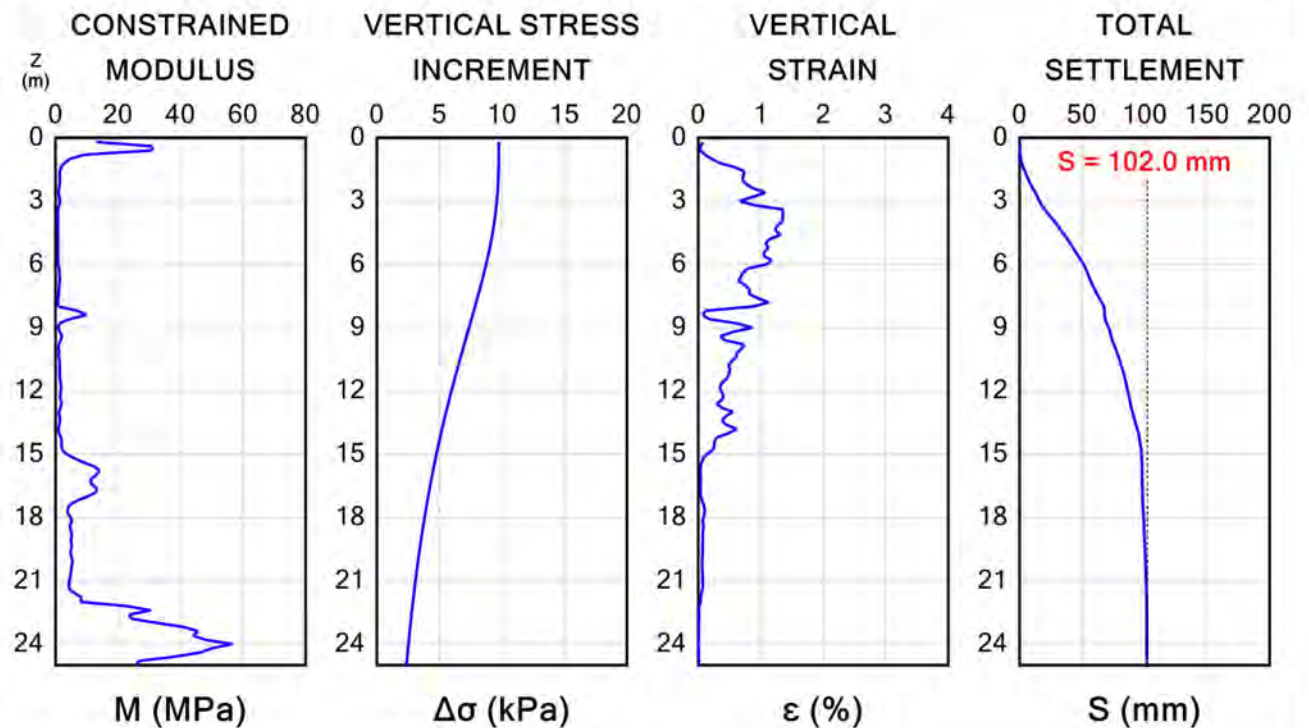
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



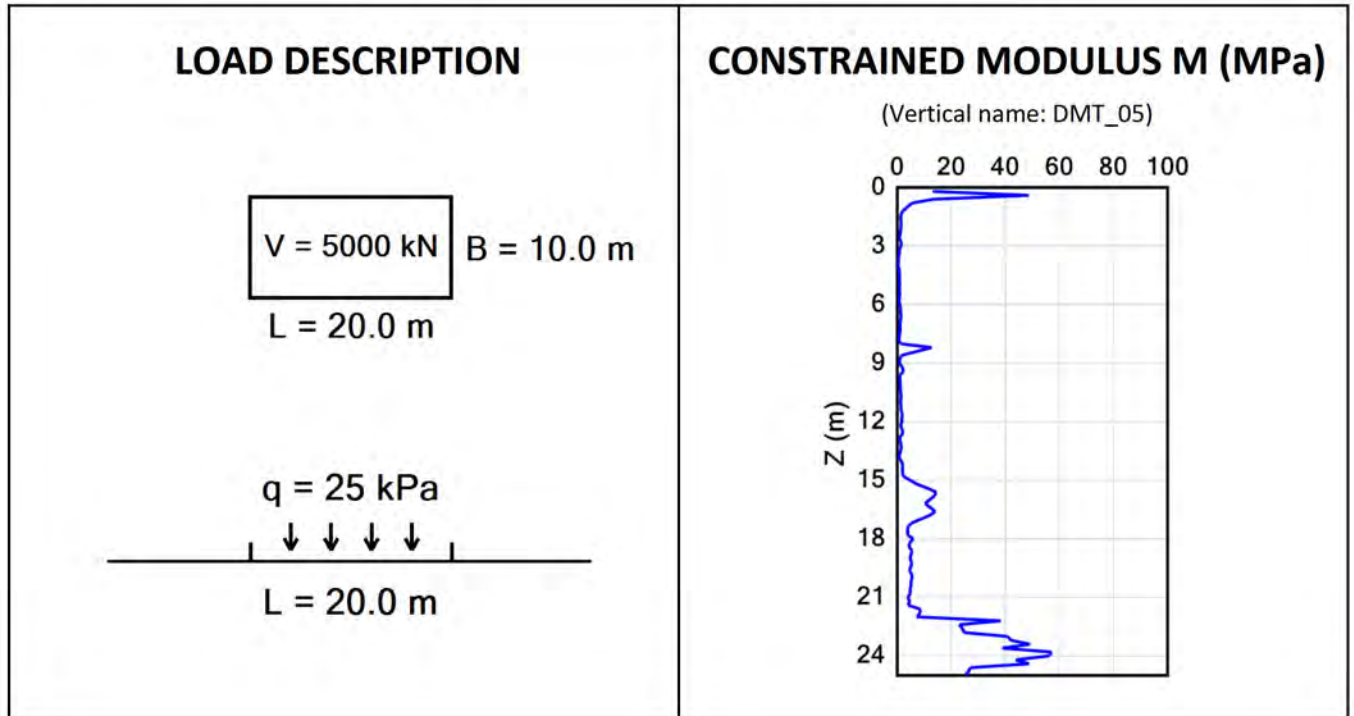
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT05: Case 3

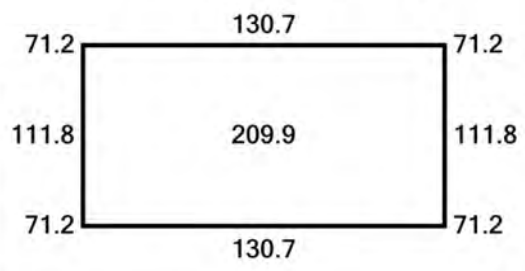
Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements	Z Stop
	[mm]	[m]
below the center	209.9	25.00
below the corner	71.2	25.00
below the median point of short side	111.8	25.00
below the median point of long side	130.7	25.00

Settlements [mm]

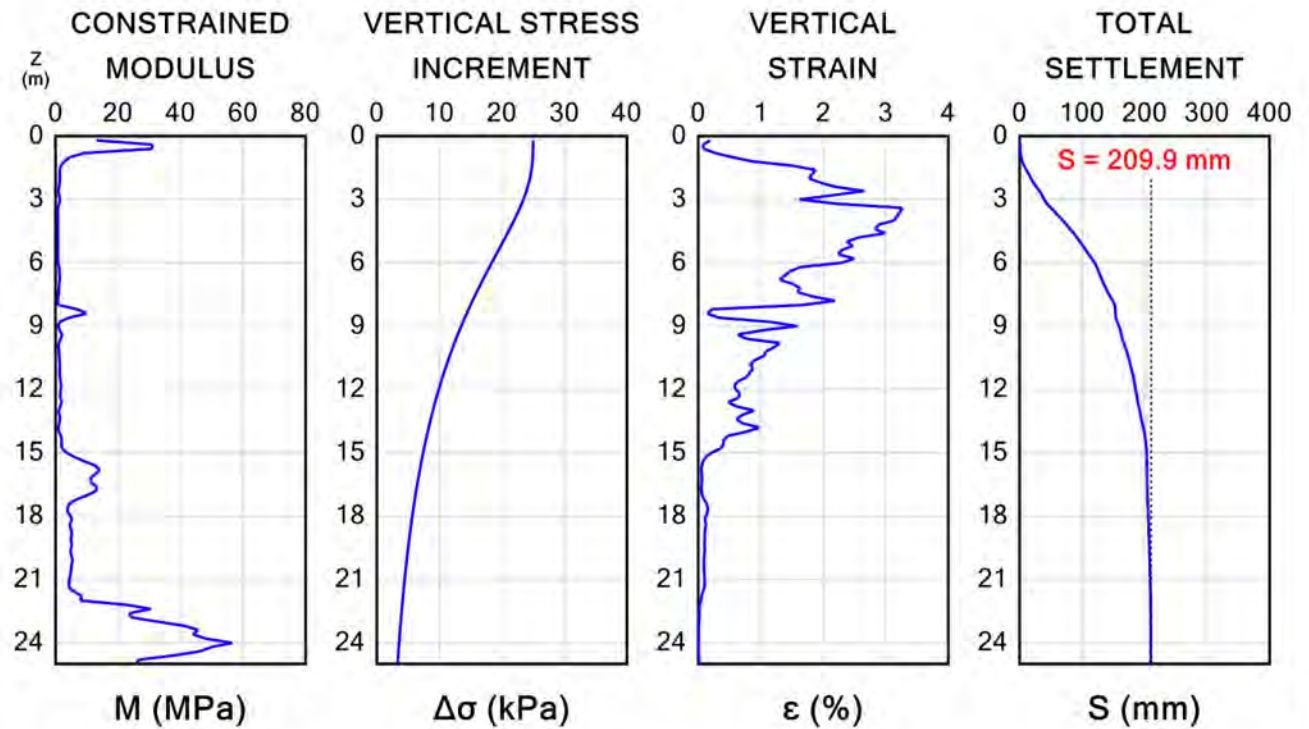


The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

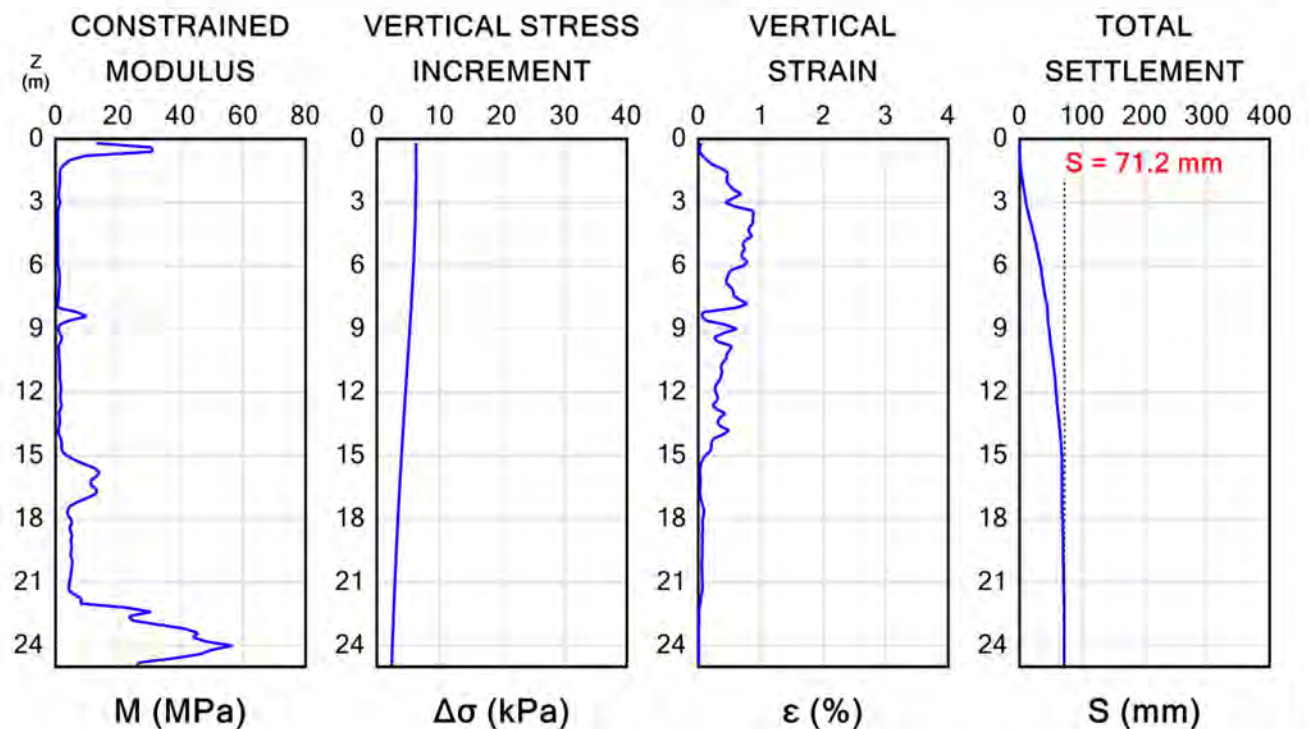
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

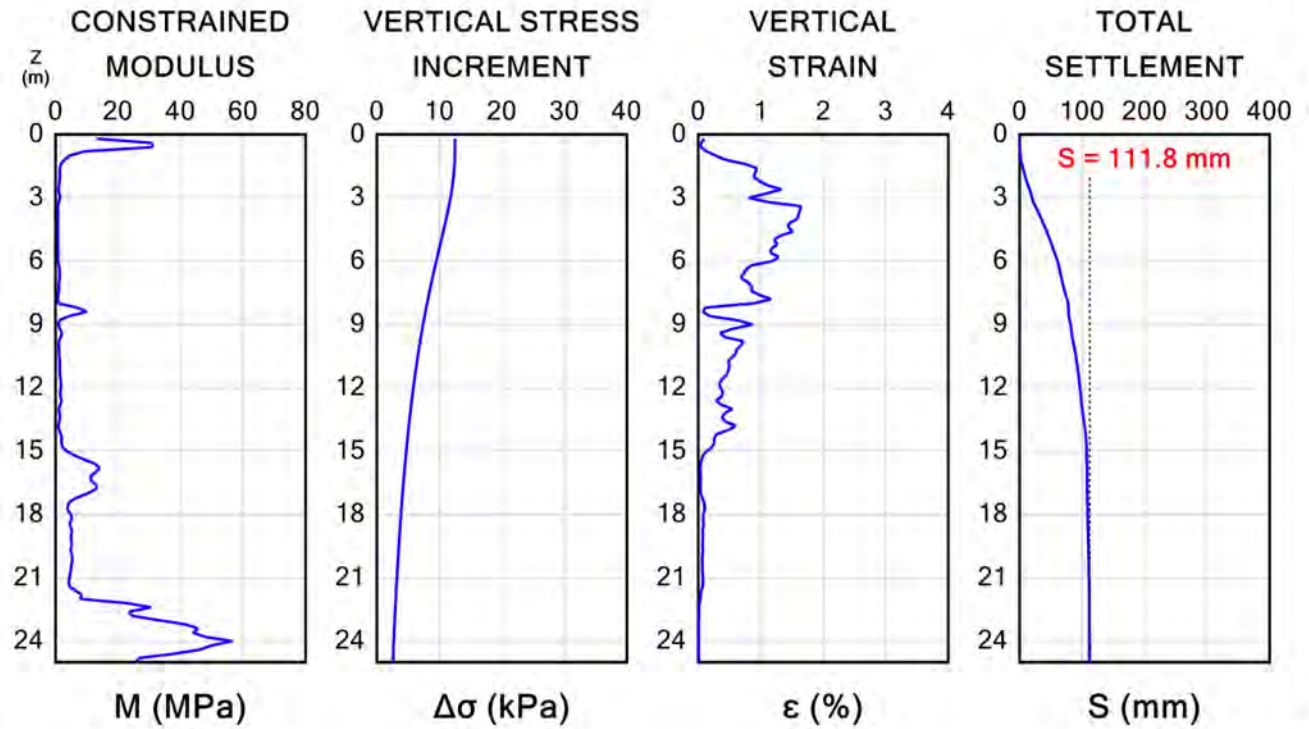
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

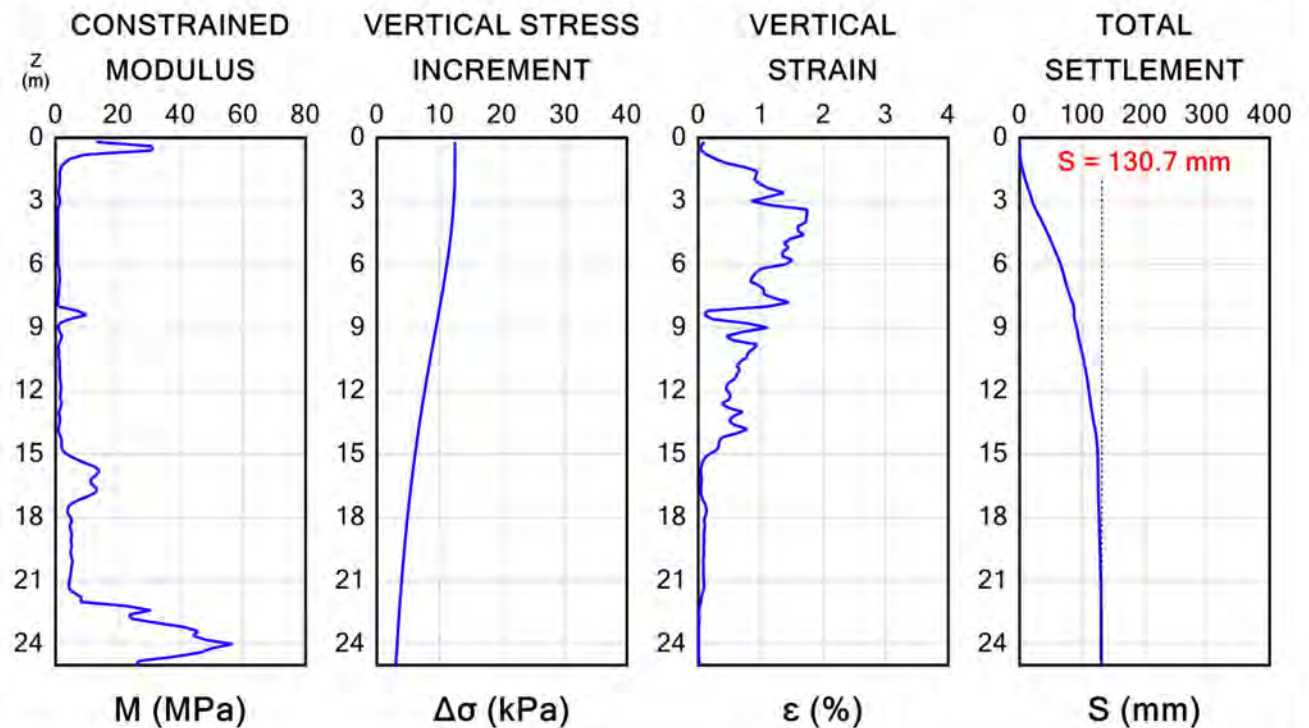
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



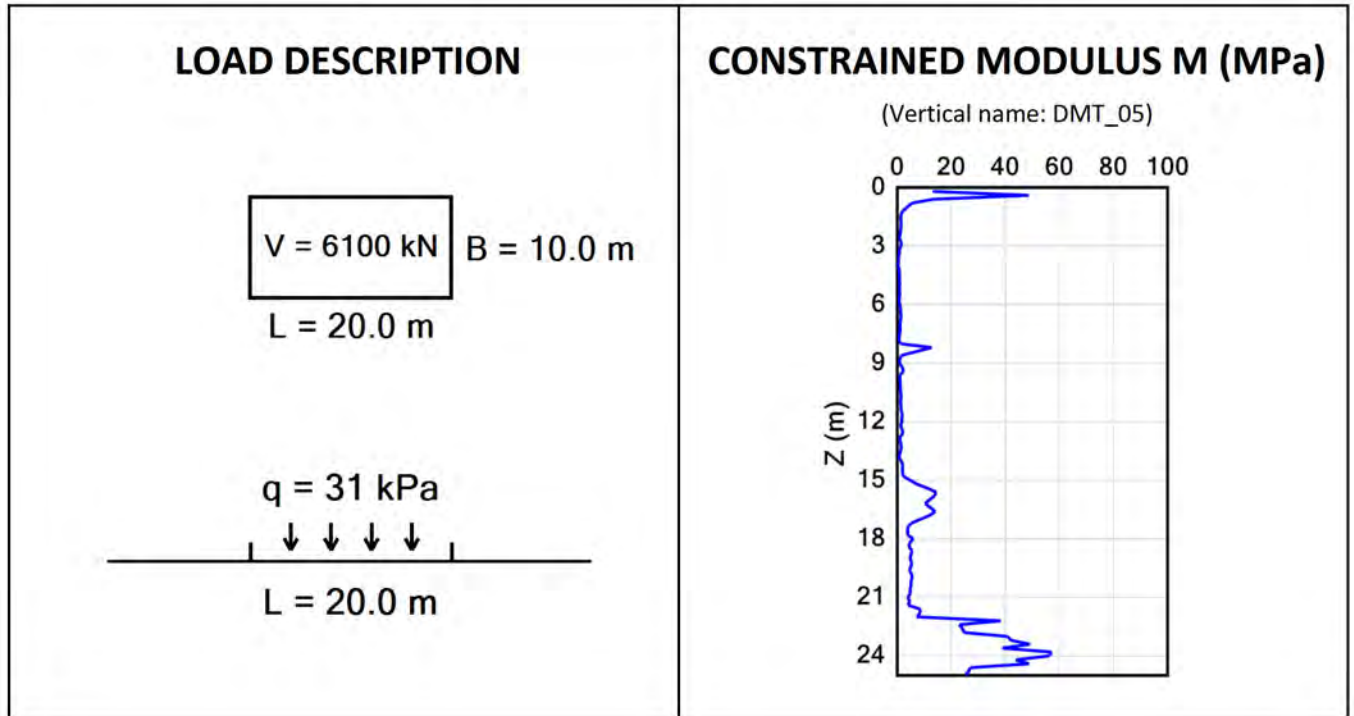
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT05: Case 4

Hamlin Rd, Ardmore



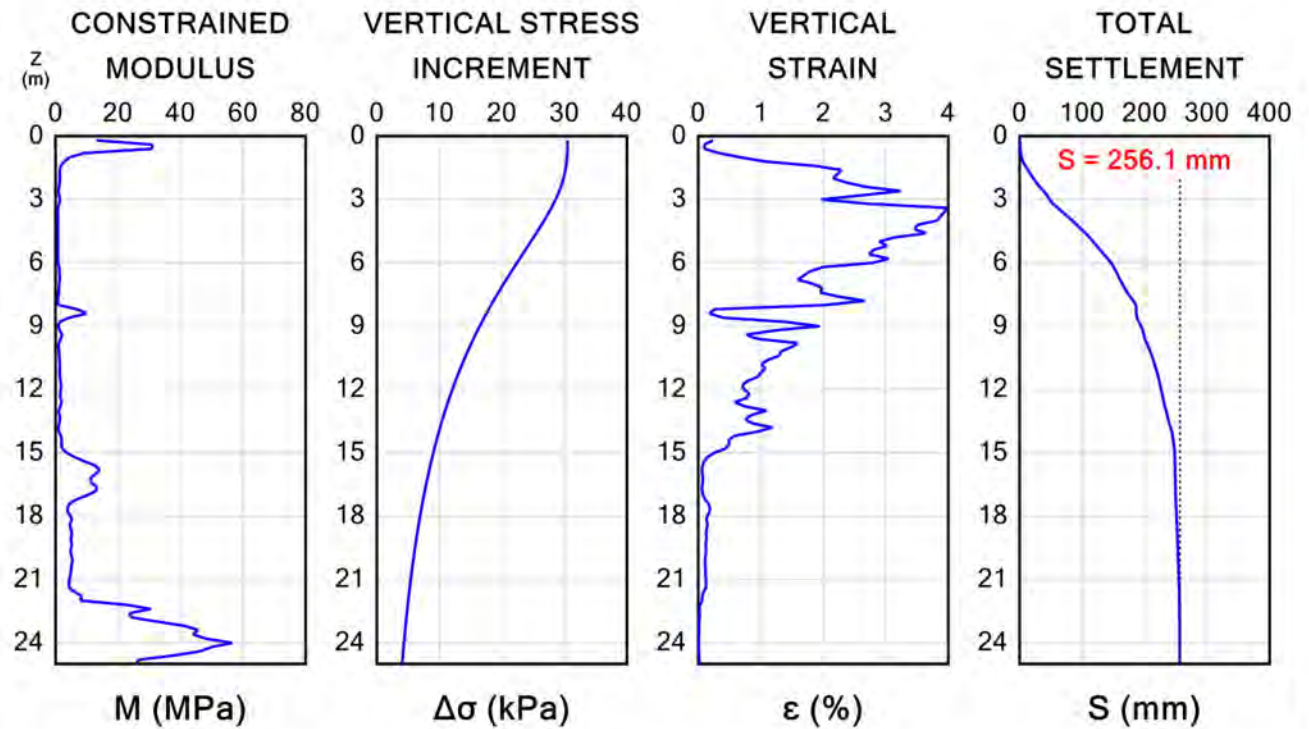
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
	Settlements [mm]	
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	256.1	25.00
below the corner	86.9	25.00
below the median point of short side	136.4	25.00
below the median point of long side	159.5	25.00
<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>		

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

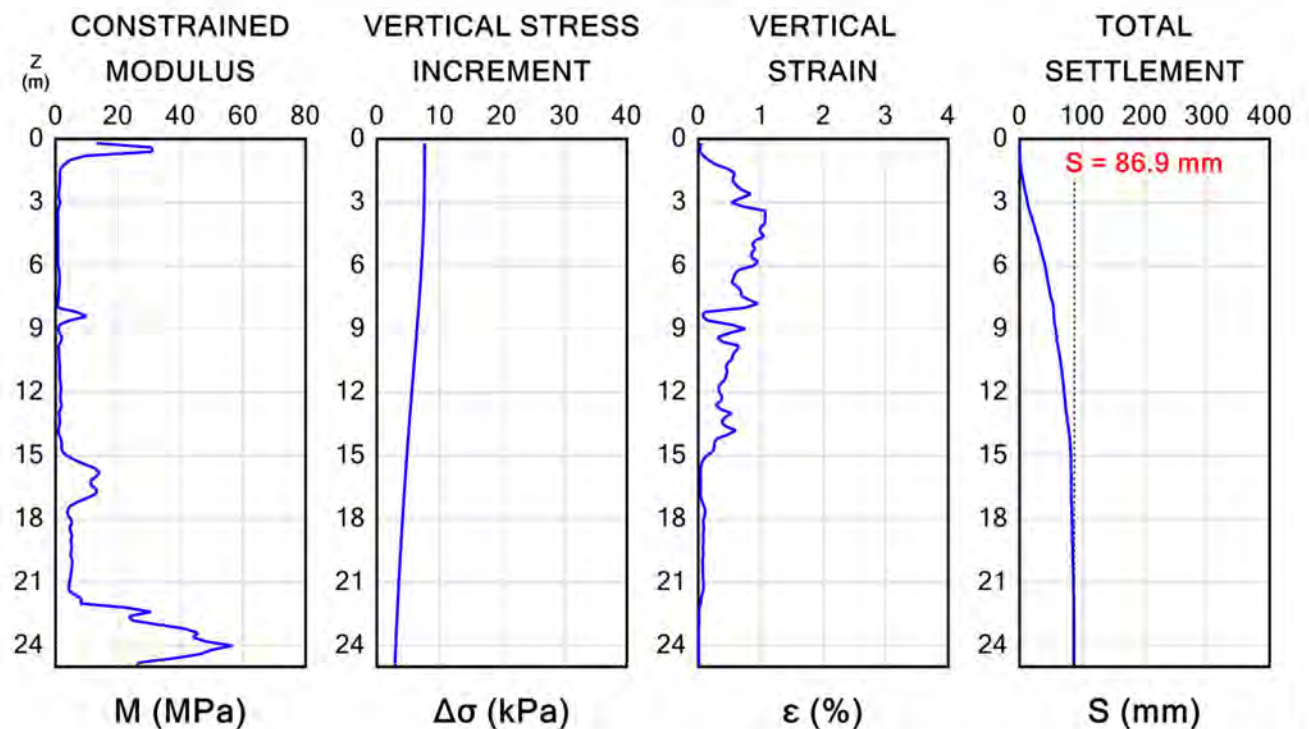
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

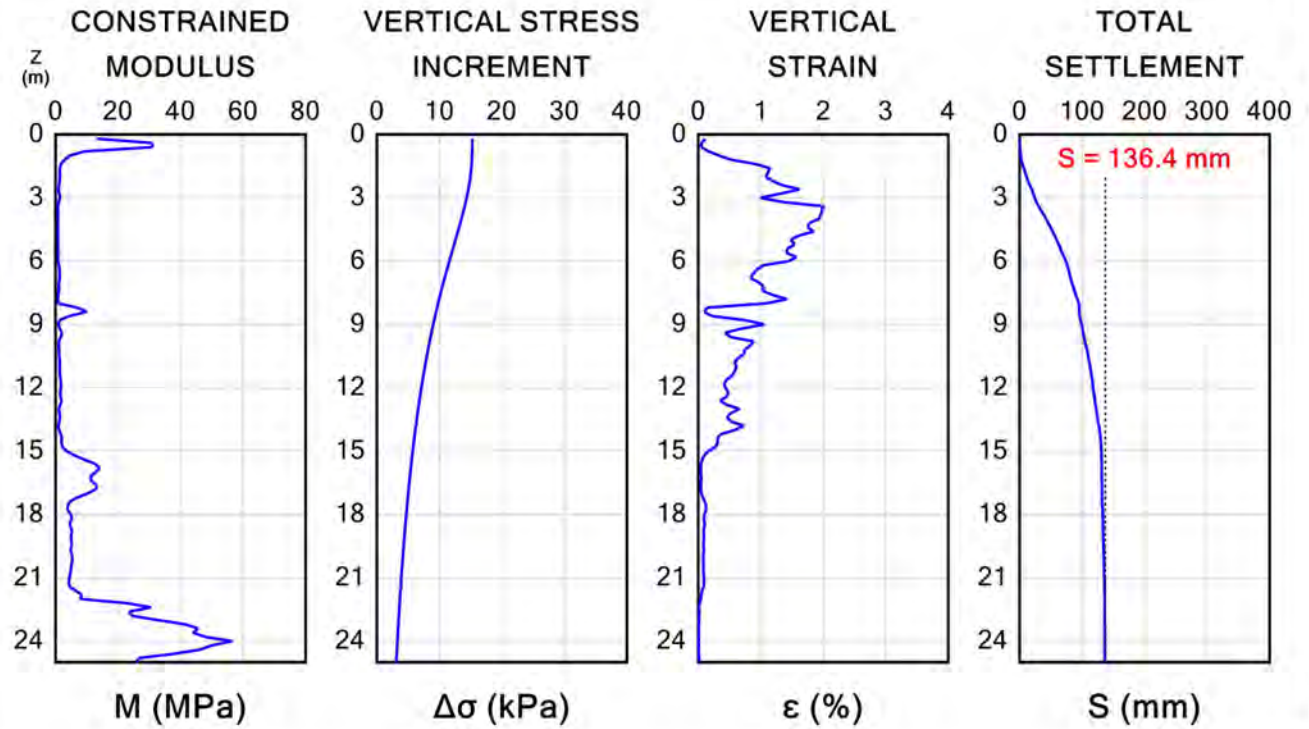
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

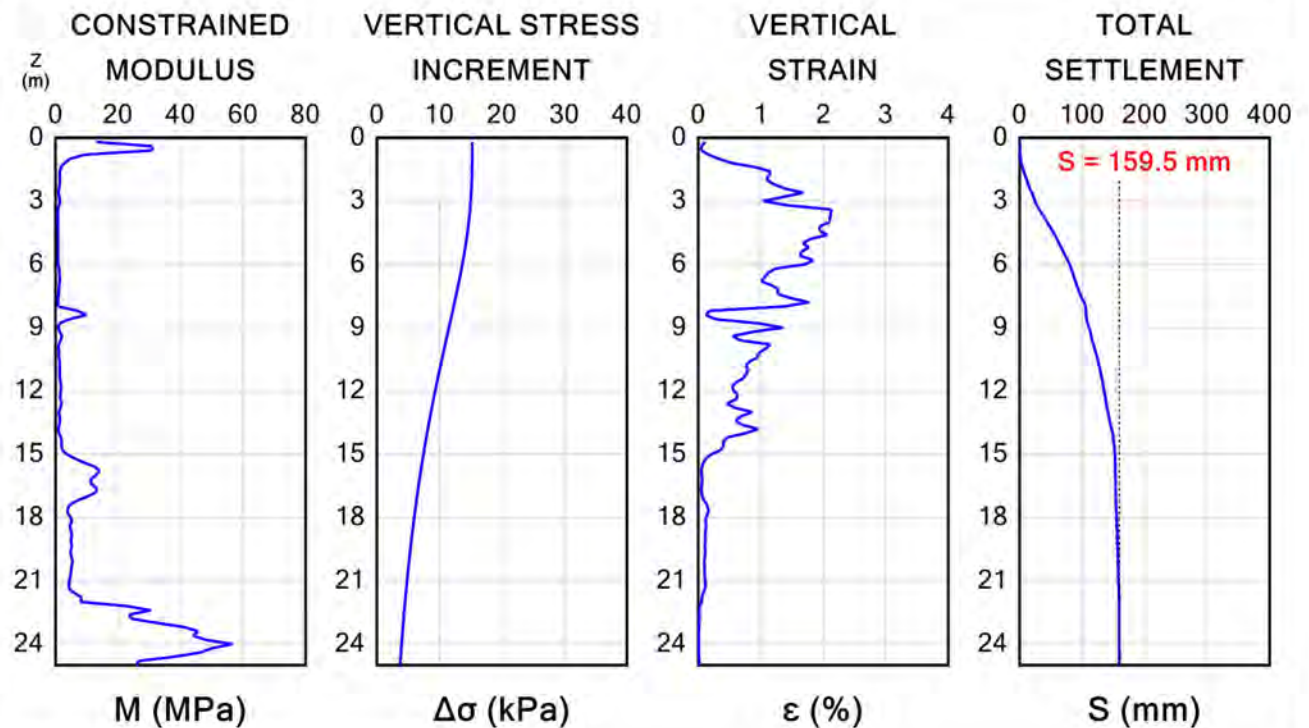
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



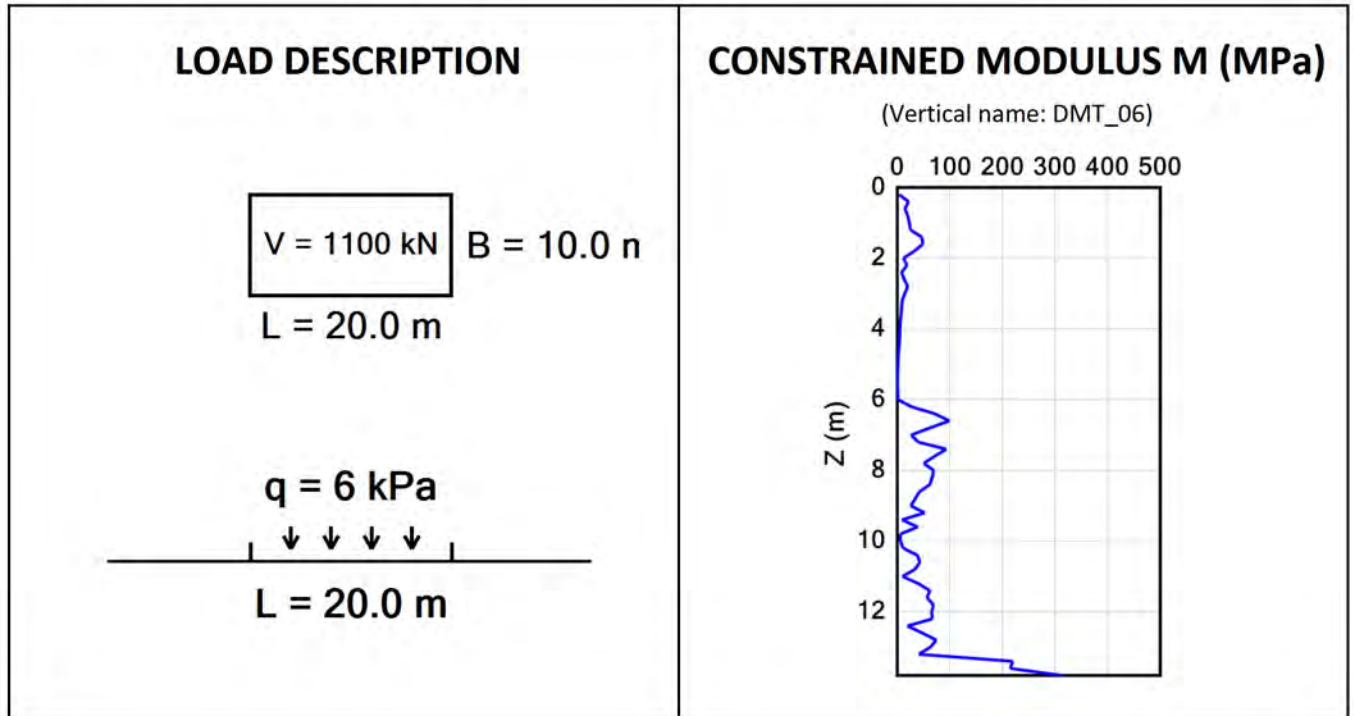
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT06: Case 2

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	9.0	13.80
below the corner	2.7	13.80
below the median point of short side	4.6	13.80
below the median point of long side	5.2	13.80

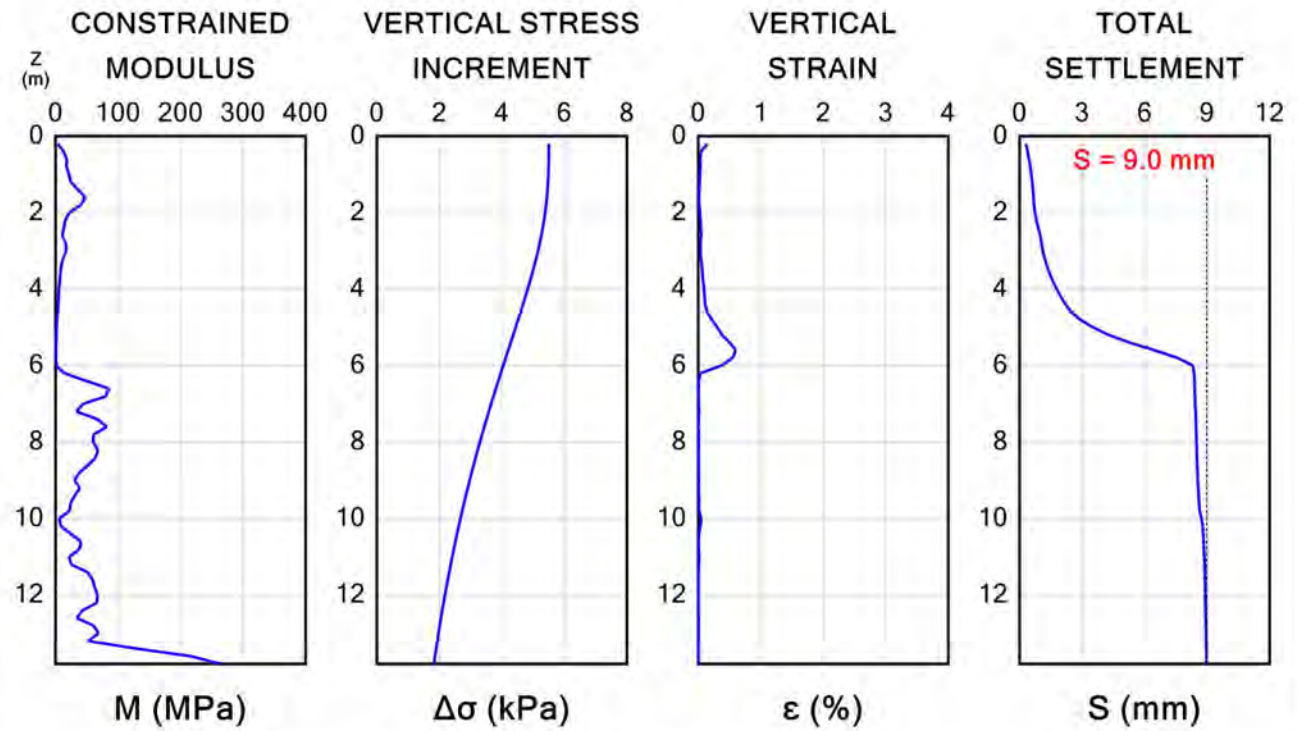
Settlements [mm]

The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

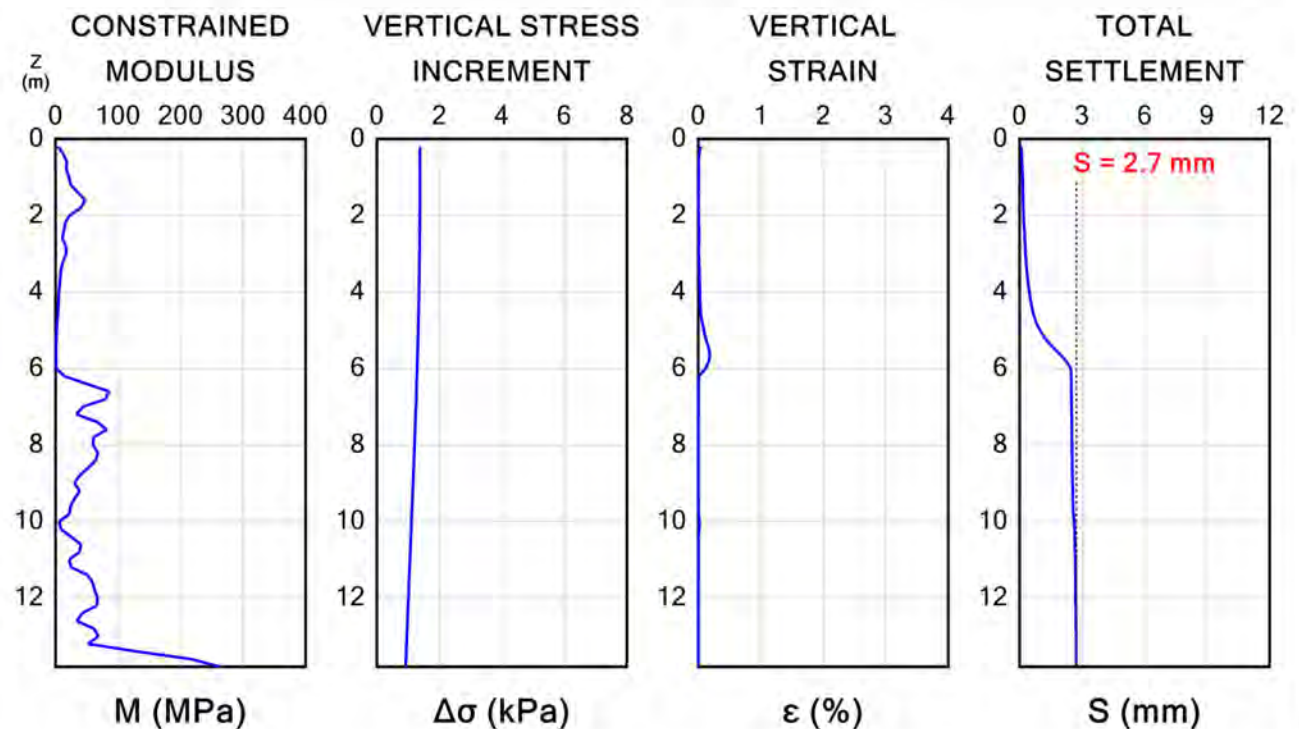
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

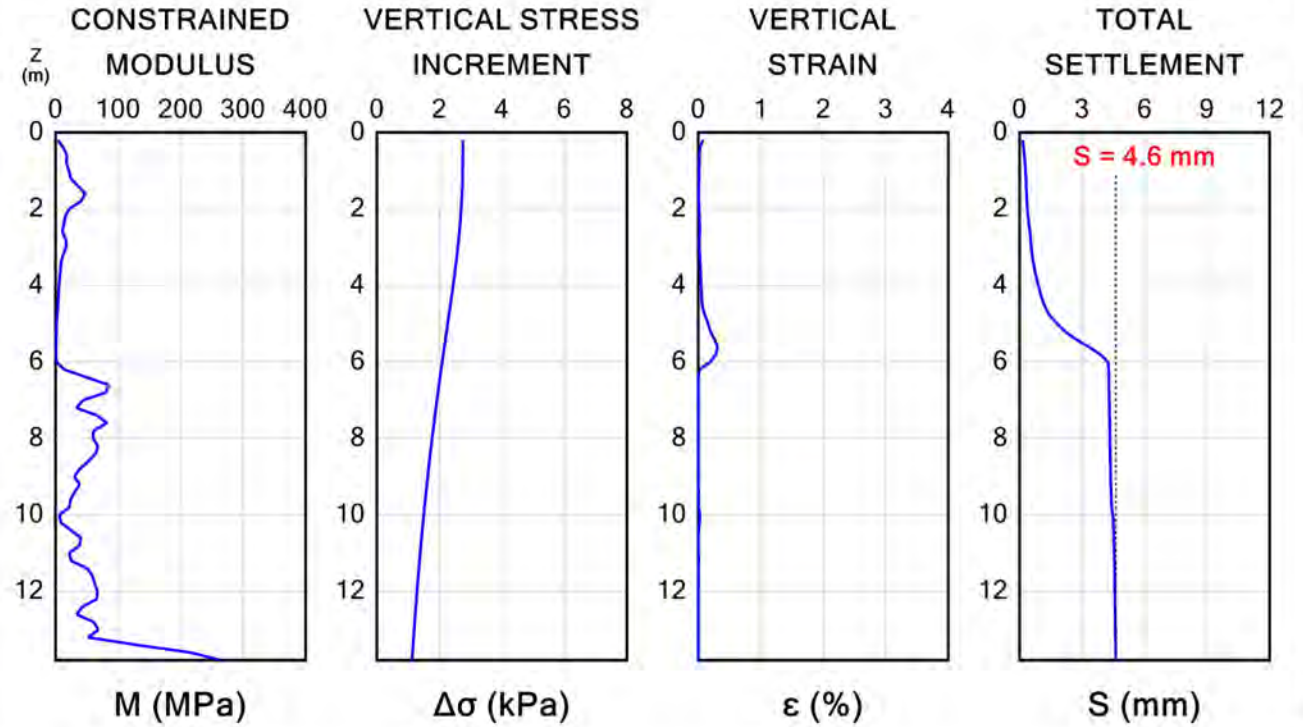
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

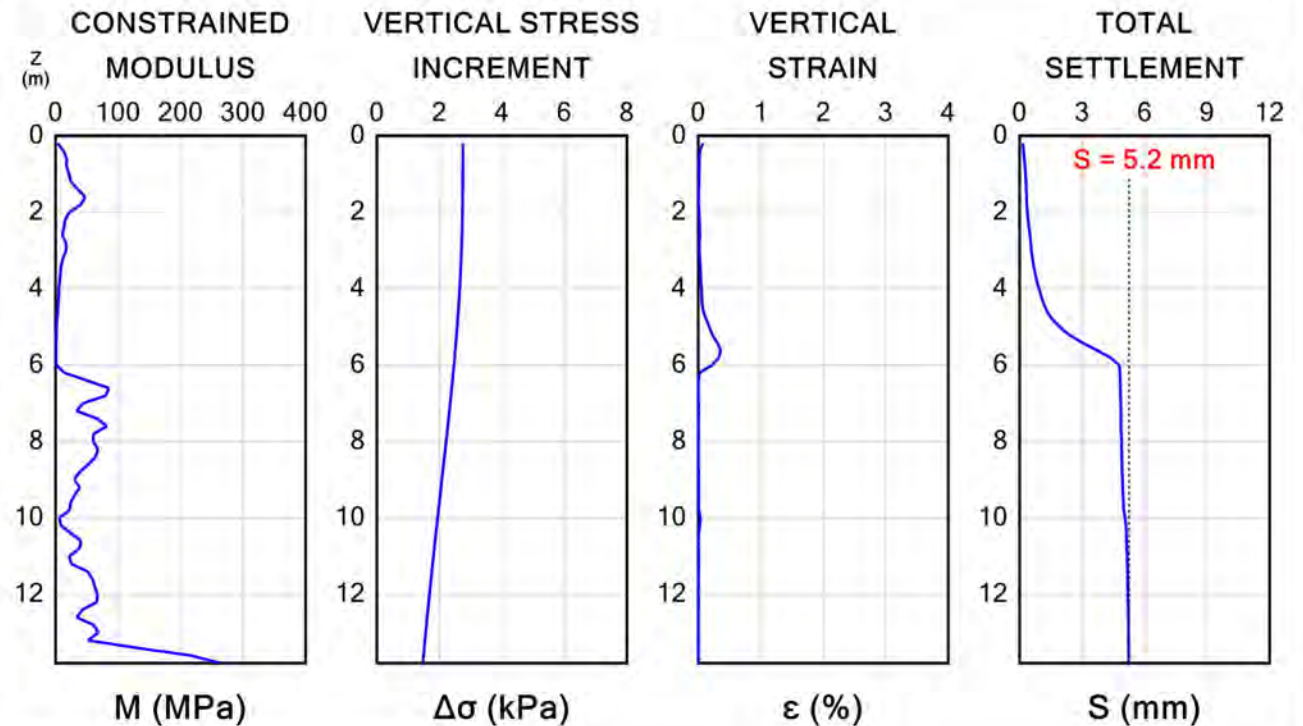
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



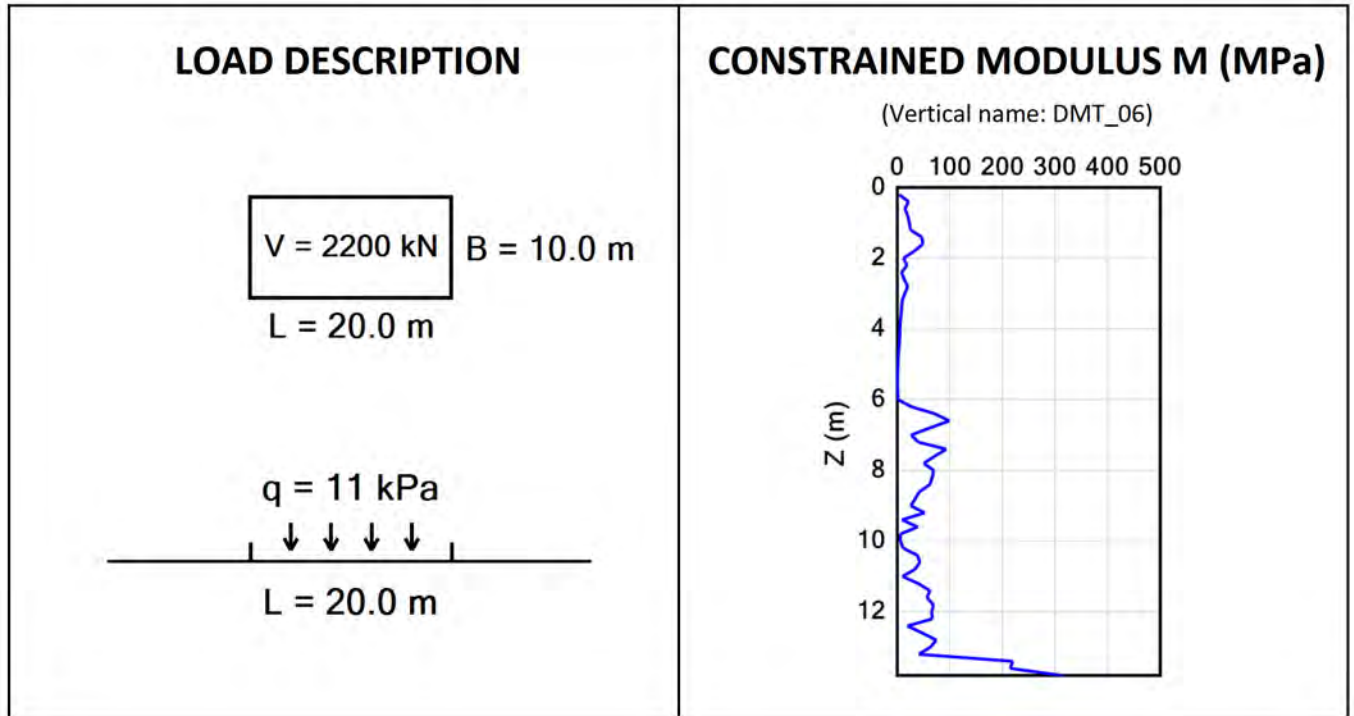
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT06: Case 3

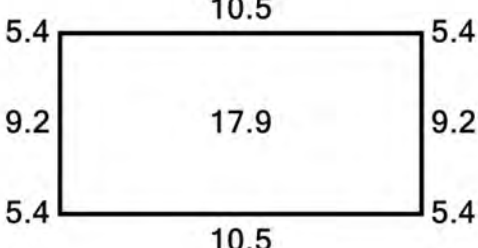
Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	17.9	13.80
below the corner	5.4	13.80
below the median point of short side	9.2	13.80
below the median point of long side	10.5	13.80

Settlements [mm]

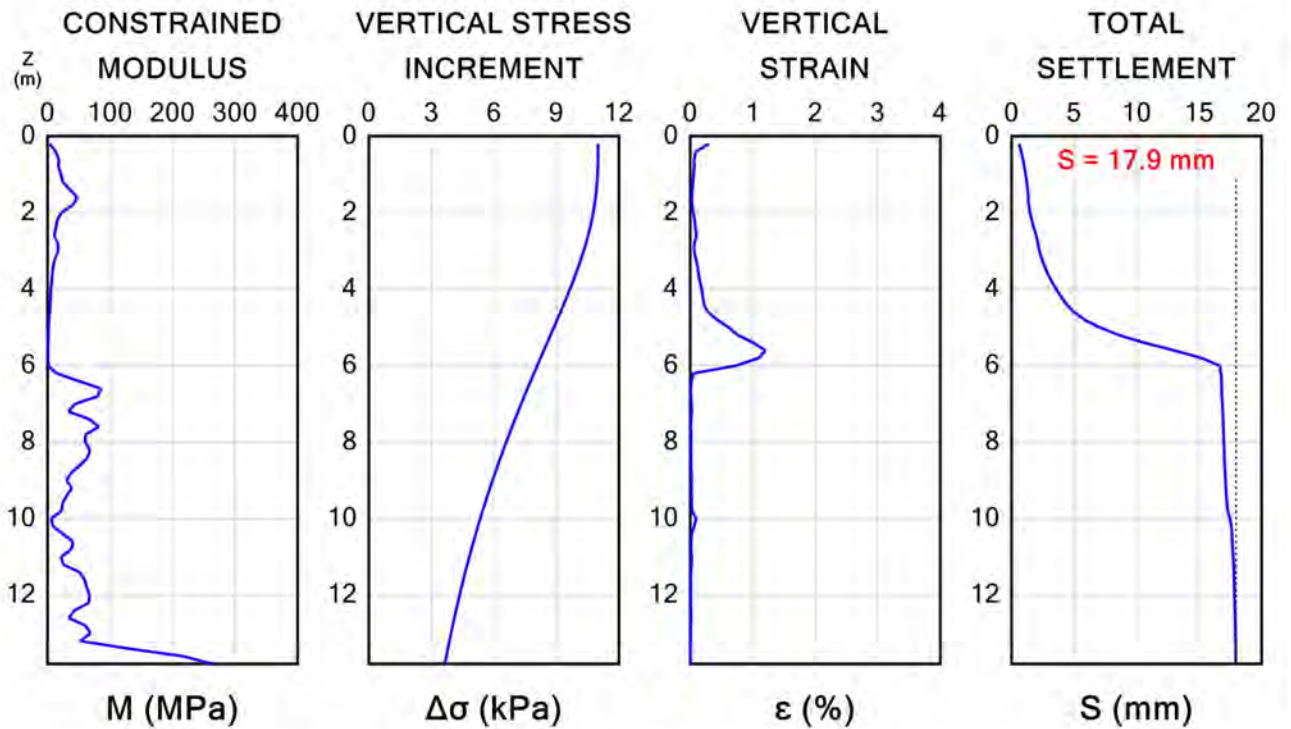


The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

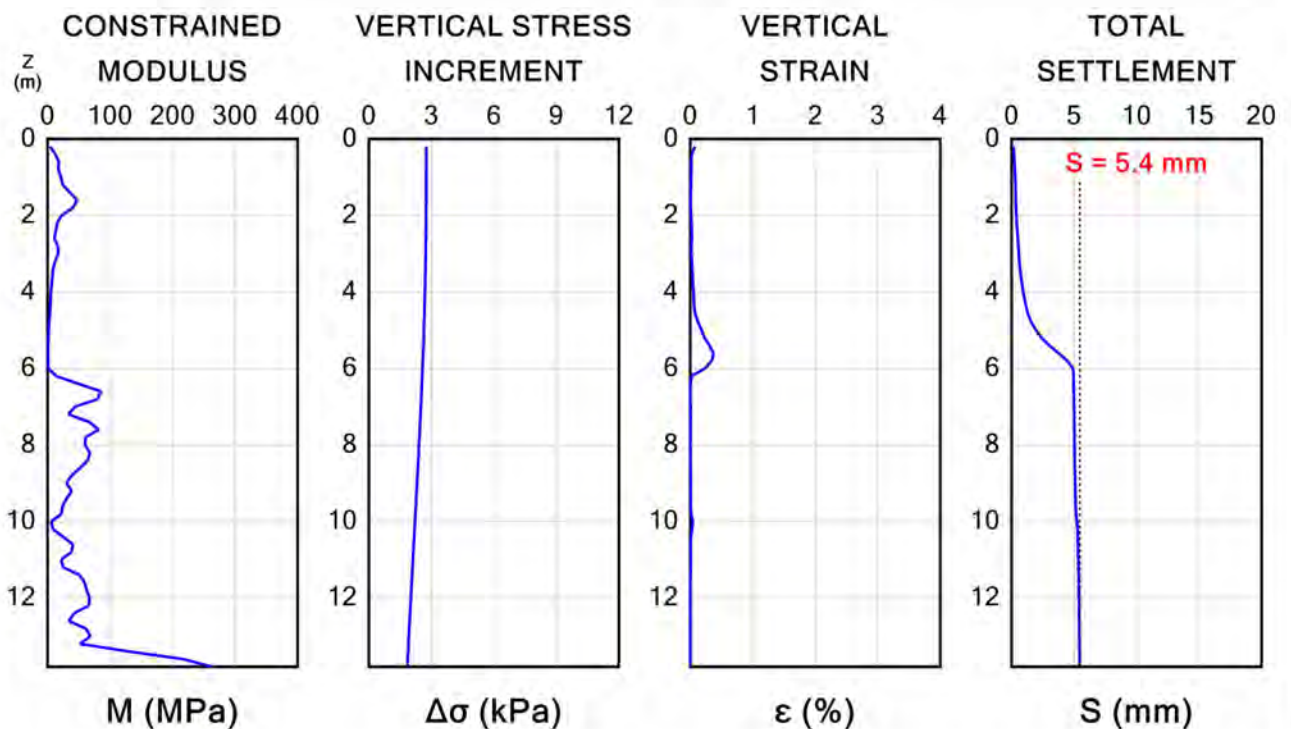
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

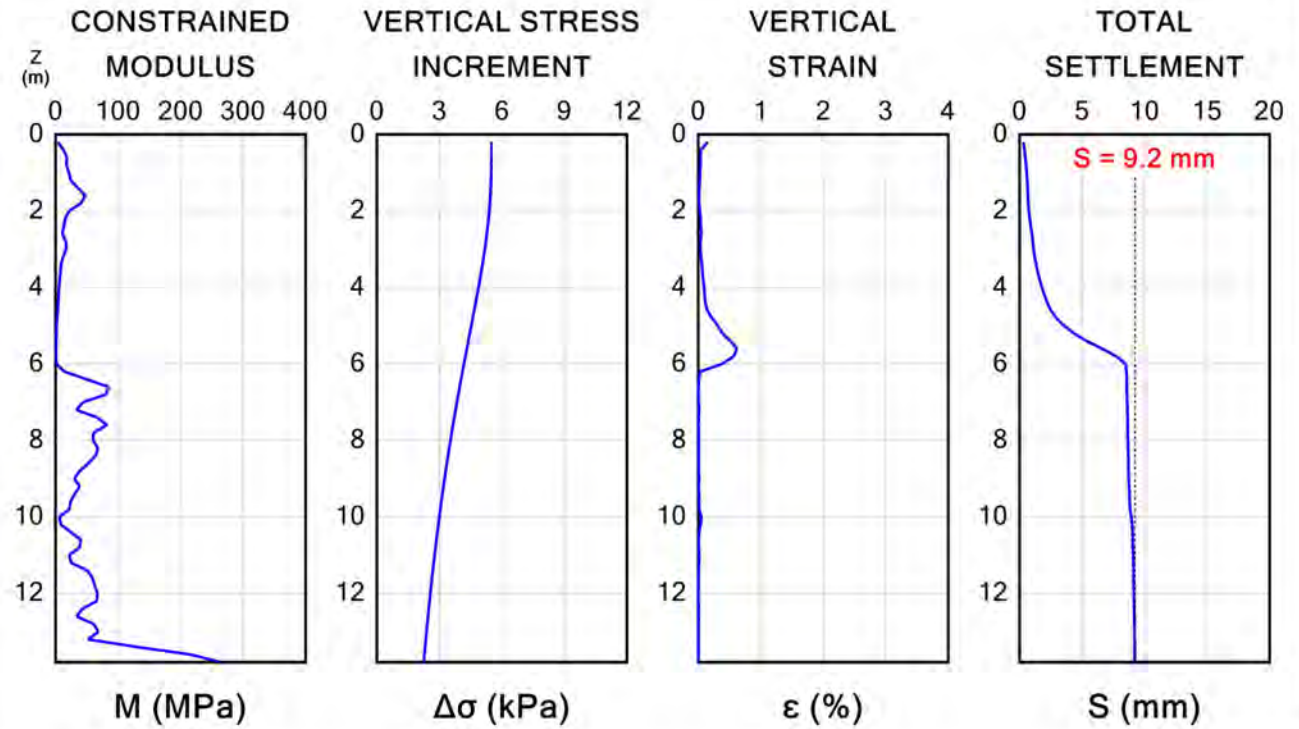
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

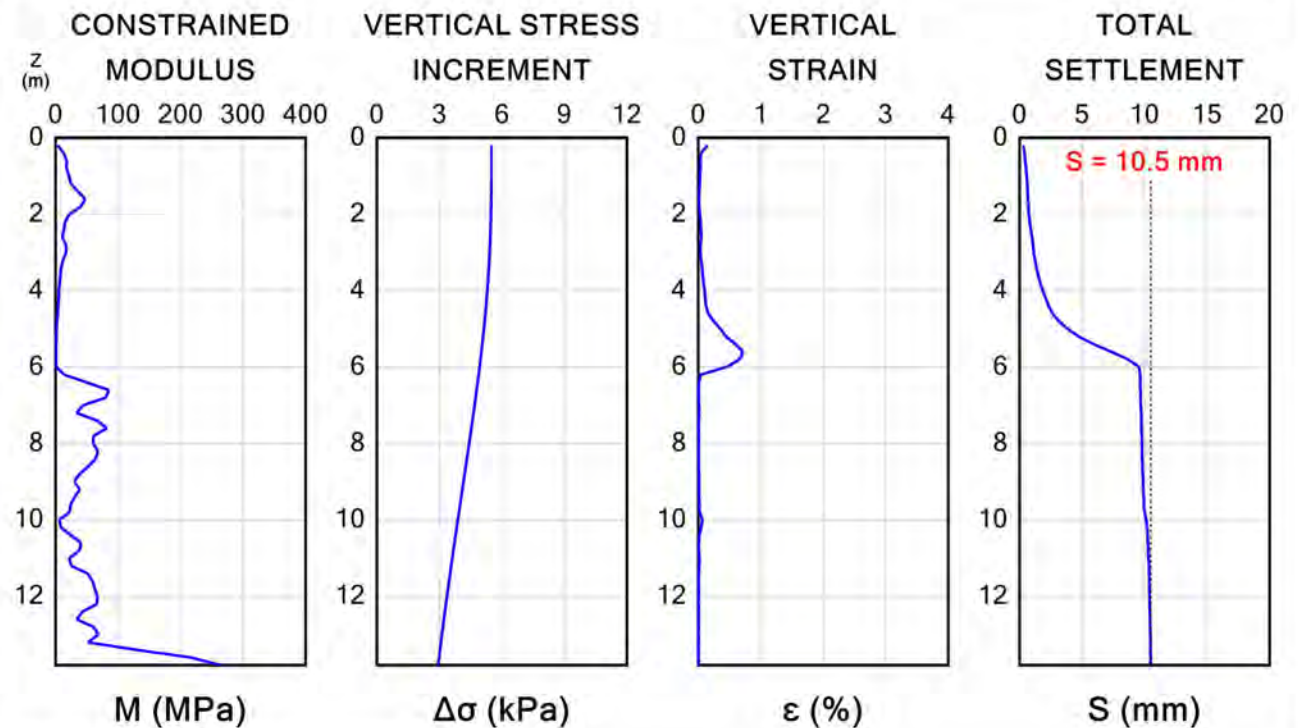
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



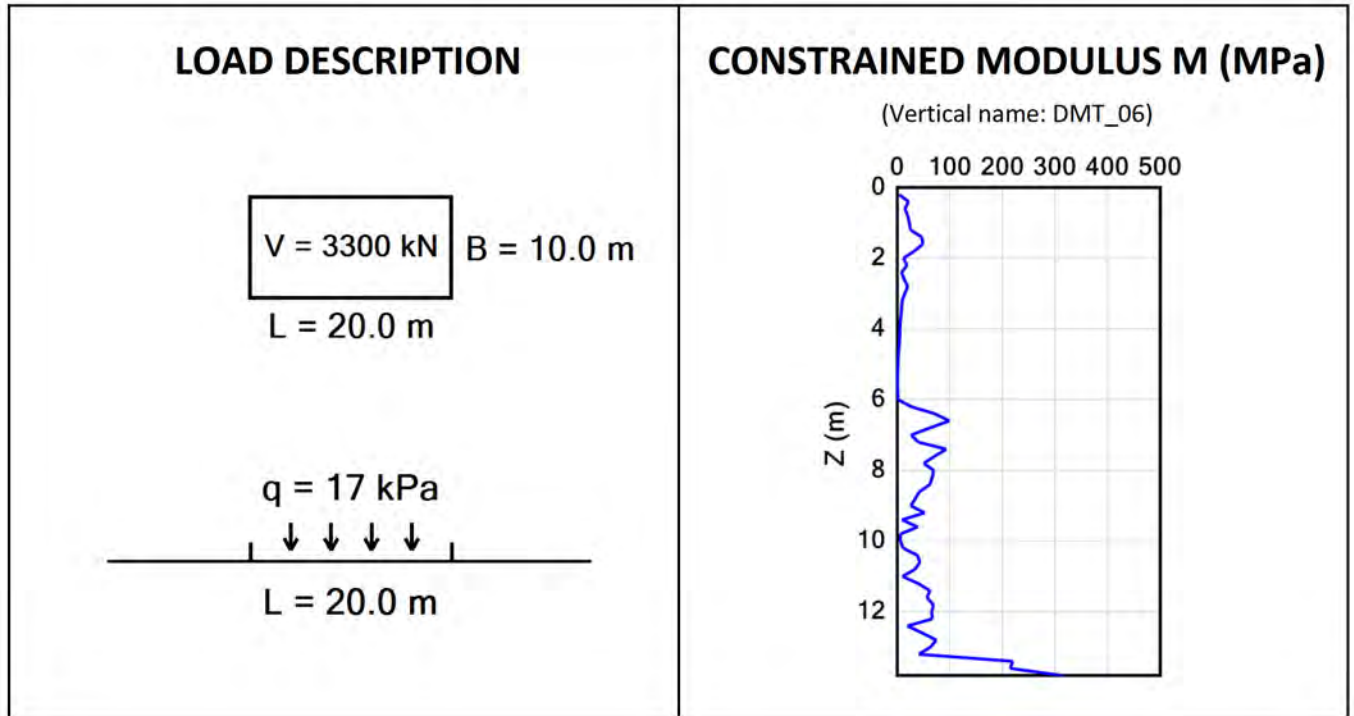
Settlements Calculation

Drill Force NZ


Lander Geotechnical

DF21GE034 - DMT06: Case 4

Hamlin Rd, Ardmore



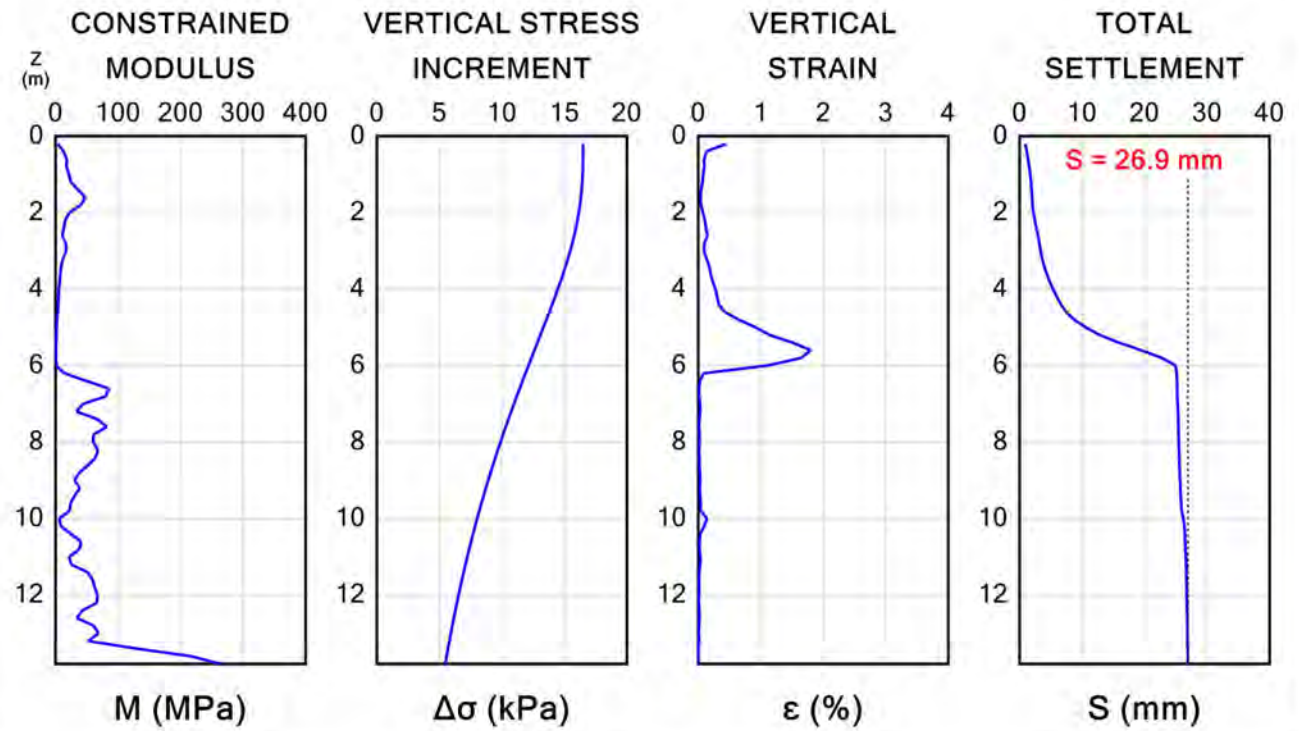
CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION																	
(one-dimensional conventional method)																	
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$																	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Calculation Point</th> <th>Settlements [mm]</th> <th>Z Stop [m]</th> </tr> </thead> <tbody> <tr> <td>below the center</td> <td style="text-align: center;">26.9</td> <td style="text-align: center;">13.80</td> </tr> <tr> <td>below the corner</td> <td style="text-align: center;">8.1</td> <td style="text-align: center;">13.80</td> </tr> <tr> <td>below the median point of short side</td> <td style="text-align: center;">13.8</td> <td style="text-align: center;">13.80</td> </tr> <tr> <td>below the median point of long side</td> <td style="text-align: center;">15.7</td> <td style="text-align: center;">13.80</td> </tr> </tbody> </table>	Calculation Point	Settlements [mm]	Z Stop [m]	below the center	26.9	13.80	below the corner	8.1	13.80	below the median point of short side	13.8	13.80	below the median point of long side	15.7	13.80	 <p style="text-align: center;">Settlements [mm]</p>
Calculation Point	Settlements [mm]	Z Stop [m]															
below the center	26.9	13.80															
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<p><i>The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.</i></p>																	

SETTLEMENTS CALCULATION - below the center

Drill Force NZ
Lander Geotechnical

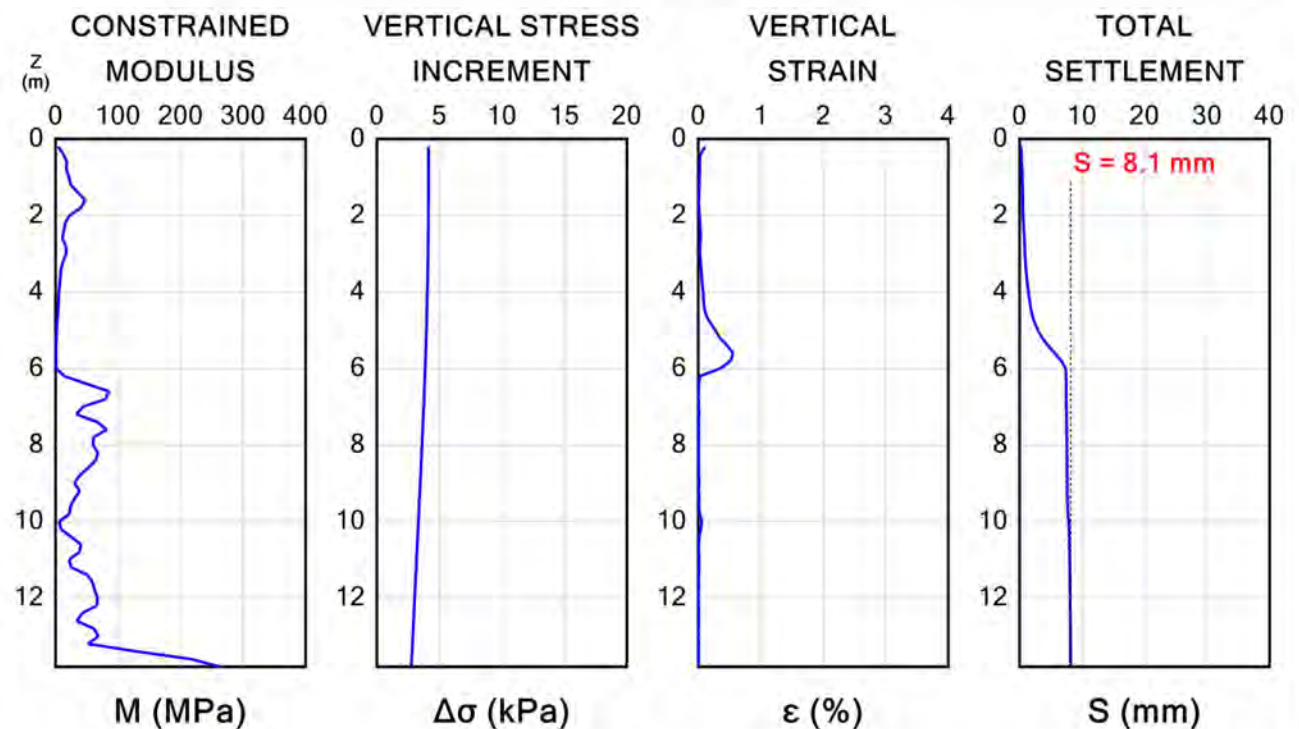
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

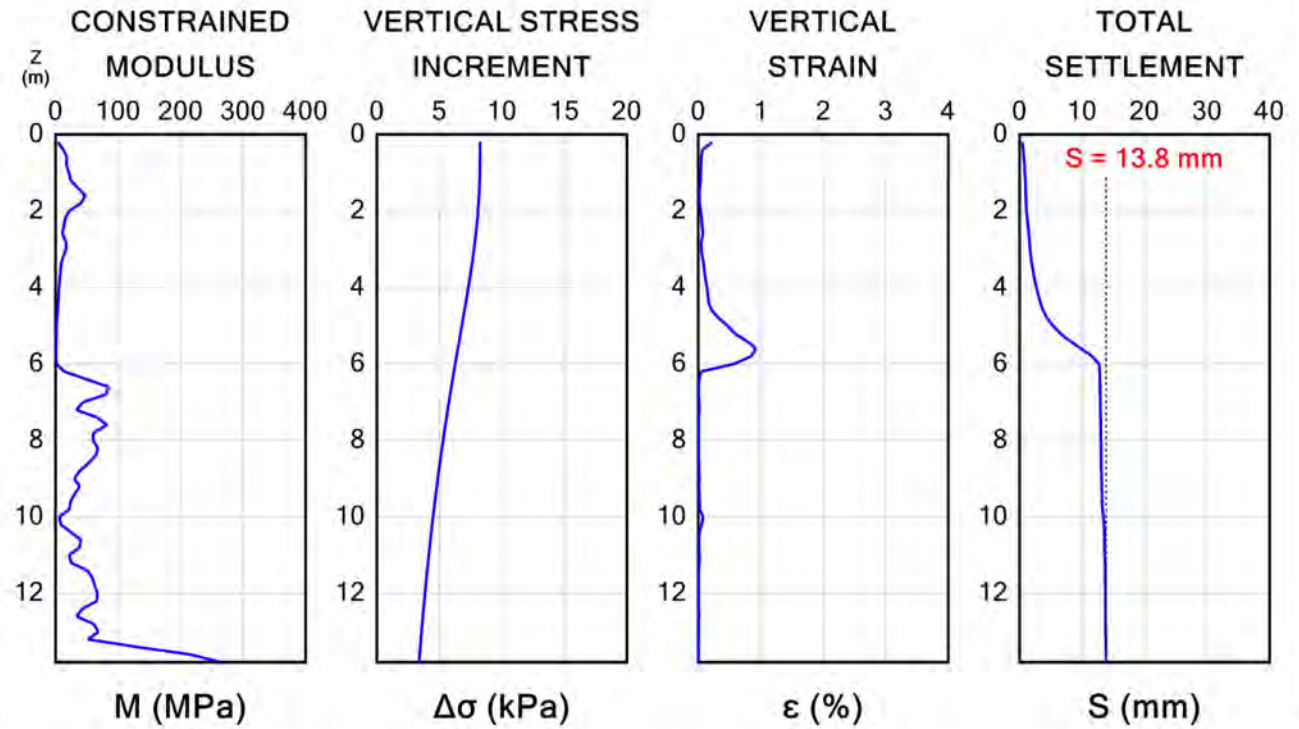
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

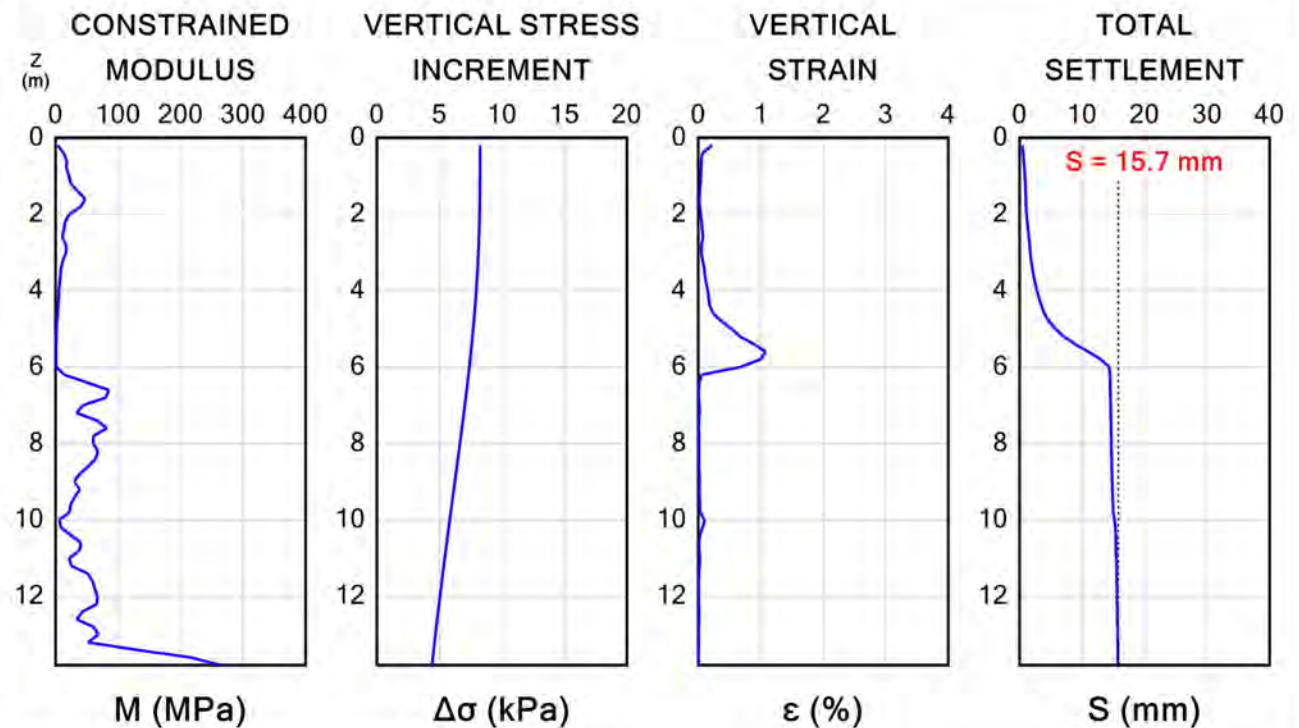
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

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Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



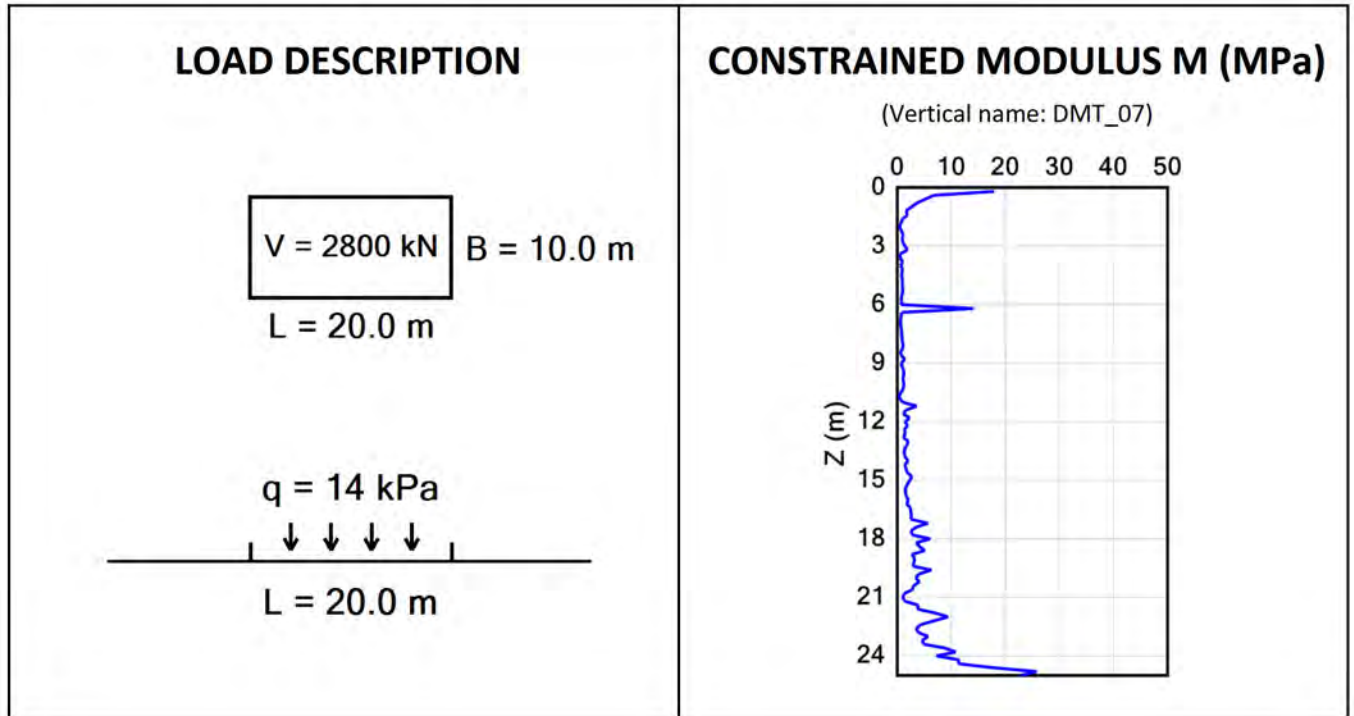
Settlements Calculation

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DF21GE034 - DMT07: Case 1

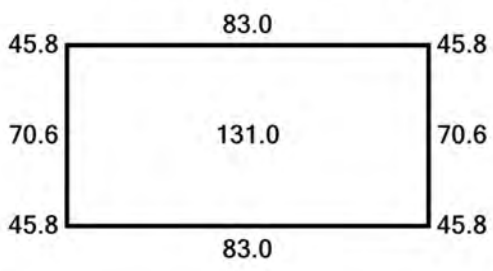
Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	131.0	25.00
below the corner	45.8	25.00
below the median point of short side	70.6	25.00
below the median point of long side	83.0	25.00

Settlements [mm]

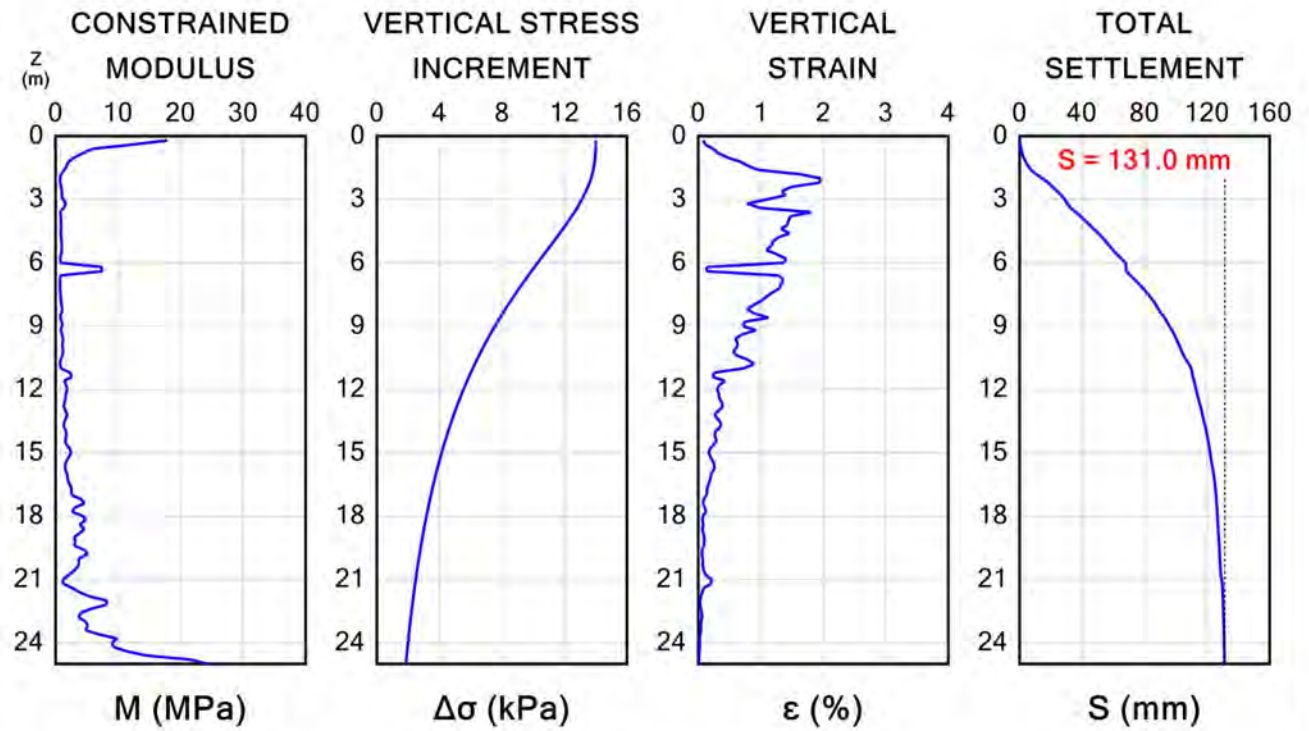


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SETTLEMENTS CALCULATION - below the center

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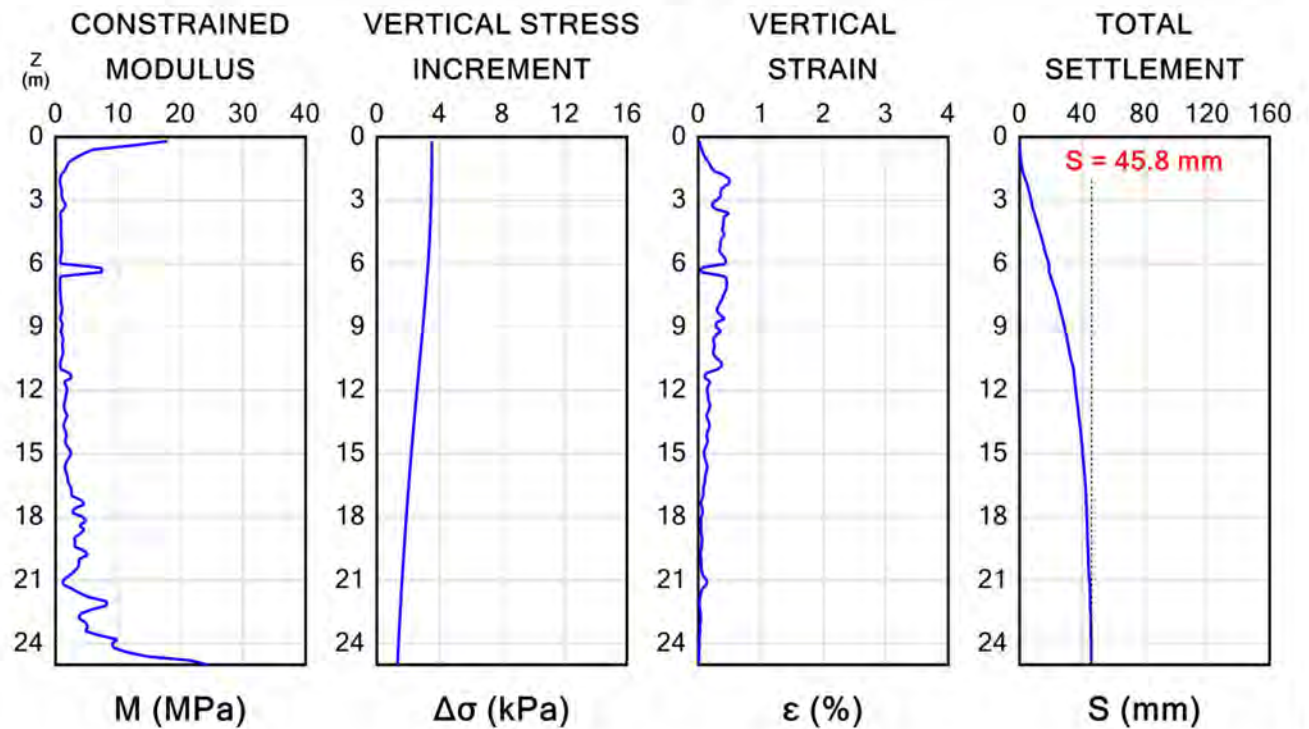
DF21GE034
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SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

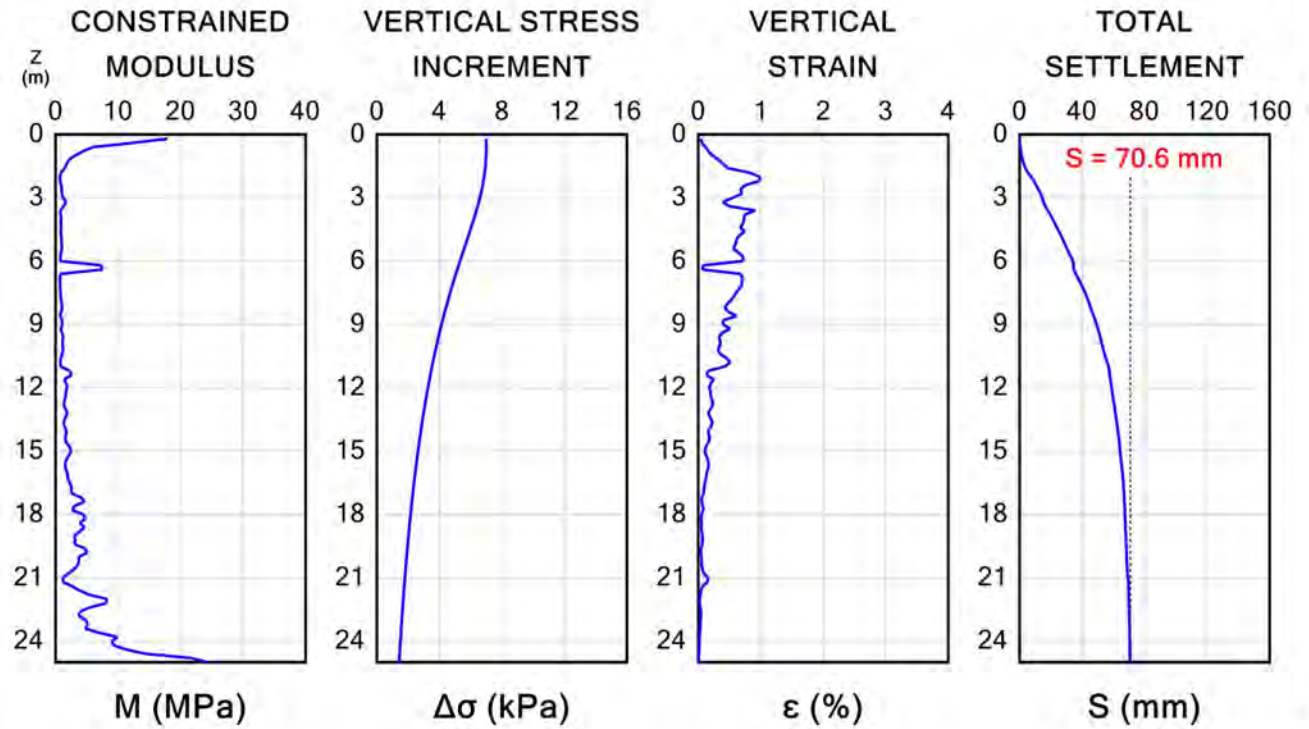
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

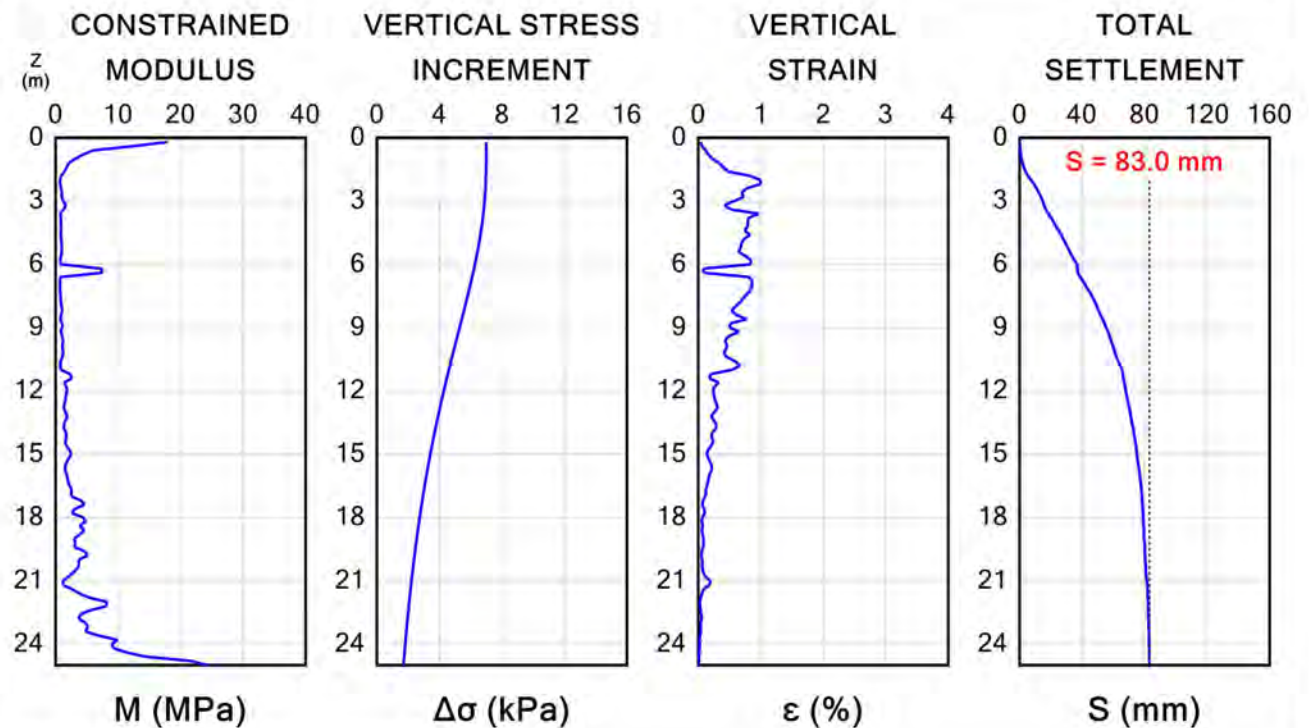
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SETTLEMENTS CALCULATION - below the median point of long side

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Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



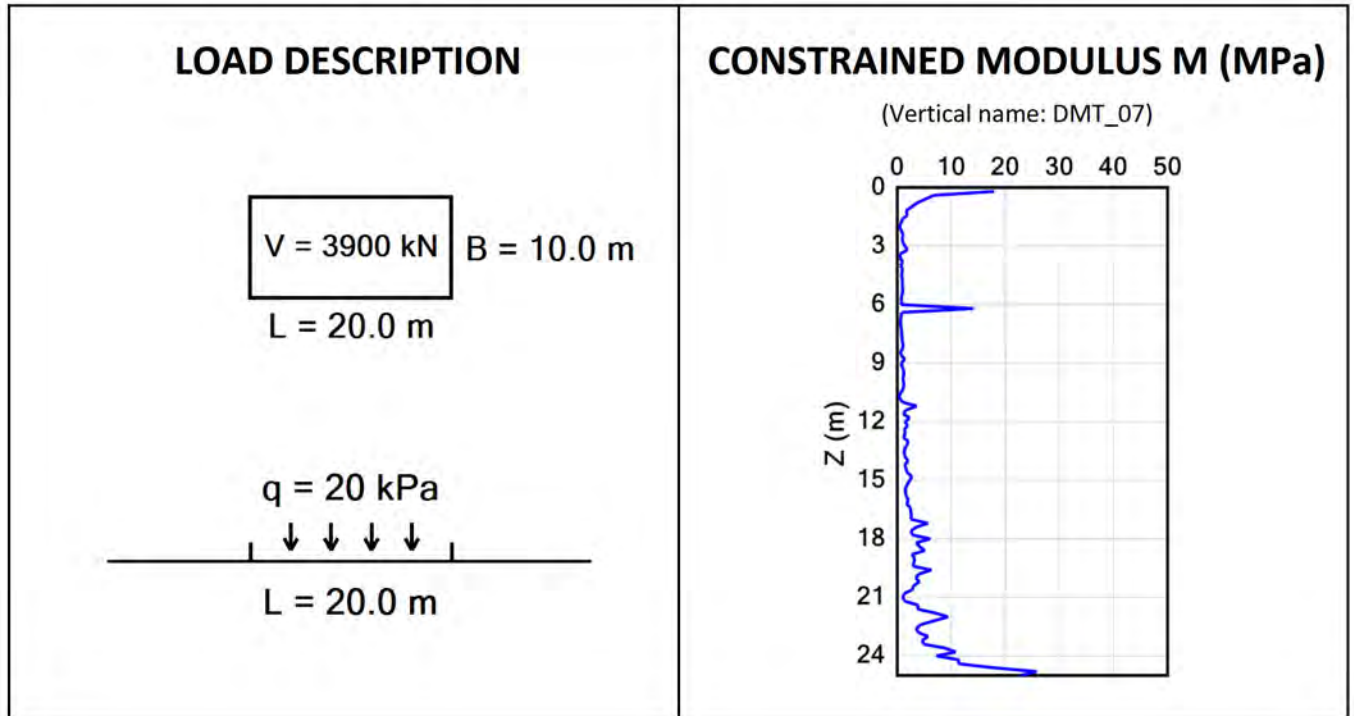
Settlements Calculation

Drill Force NZ

Lander Geotechnical

DF21GE034 - DMT07: Case 2

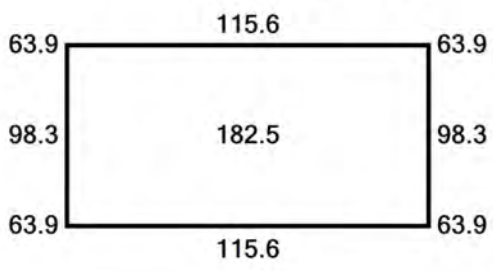
Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	182.5	25.00
below the corner	63.9	25.00
below the median point of short side	98.3	25.00
below the median point of long side	115.6	25.00

Settlements [mm]

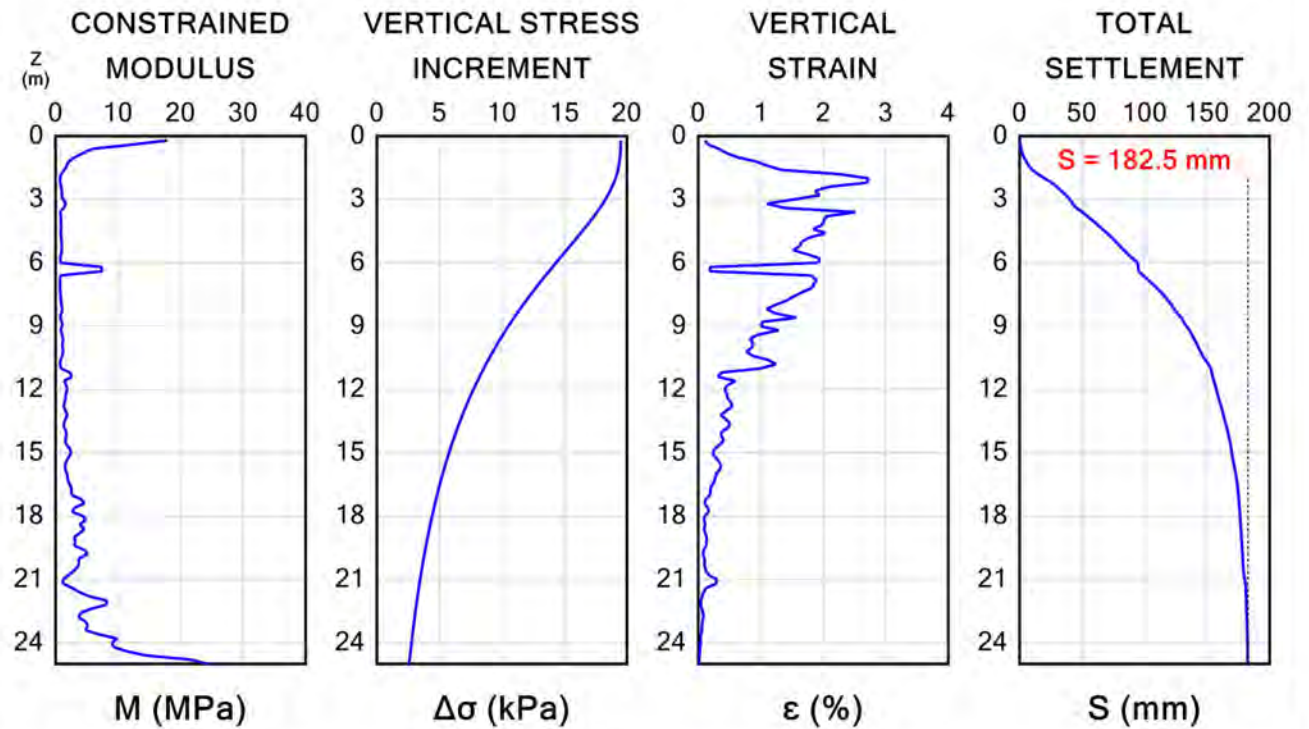


The calculated settlements are obtained using the interpretation formulae and the calculation method recommended in the TC16 DMT Report(2001). It is the designer's responsibility to use alternative procedures if considered preferable.

SETTLEMENTS CALCULATION - below the center

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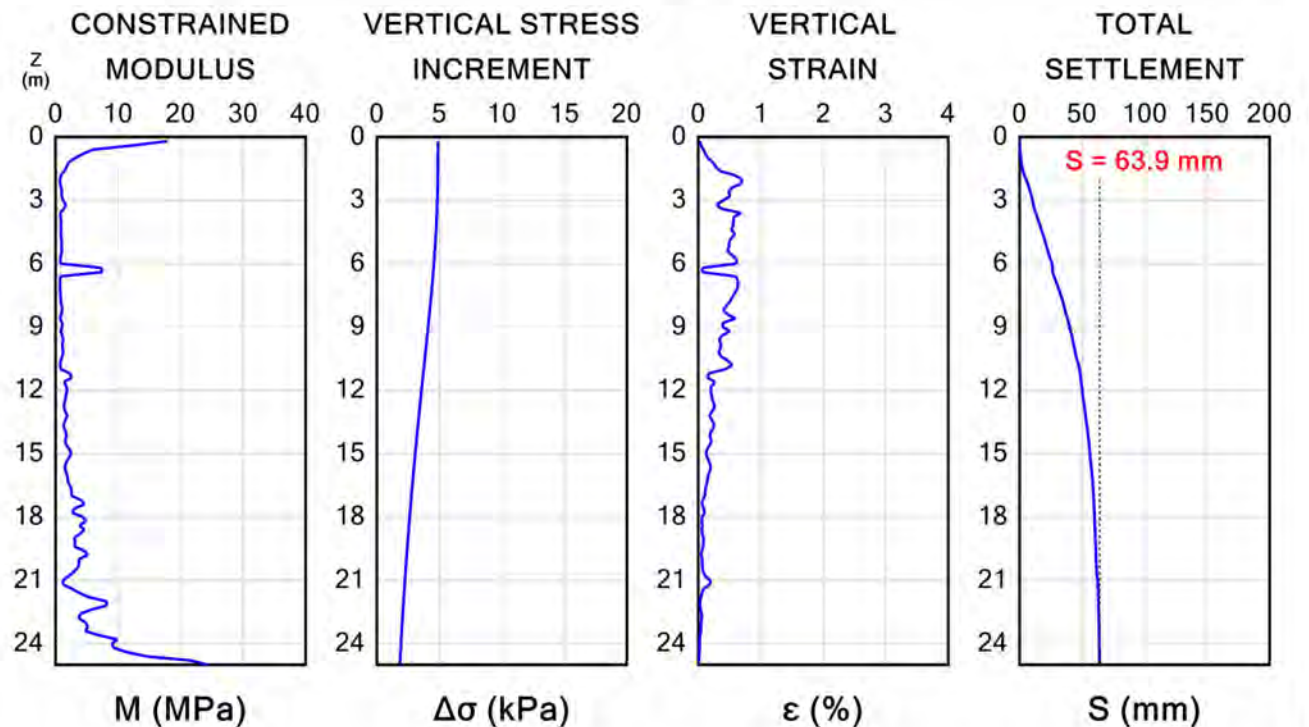
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

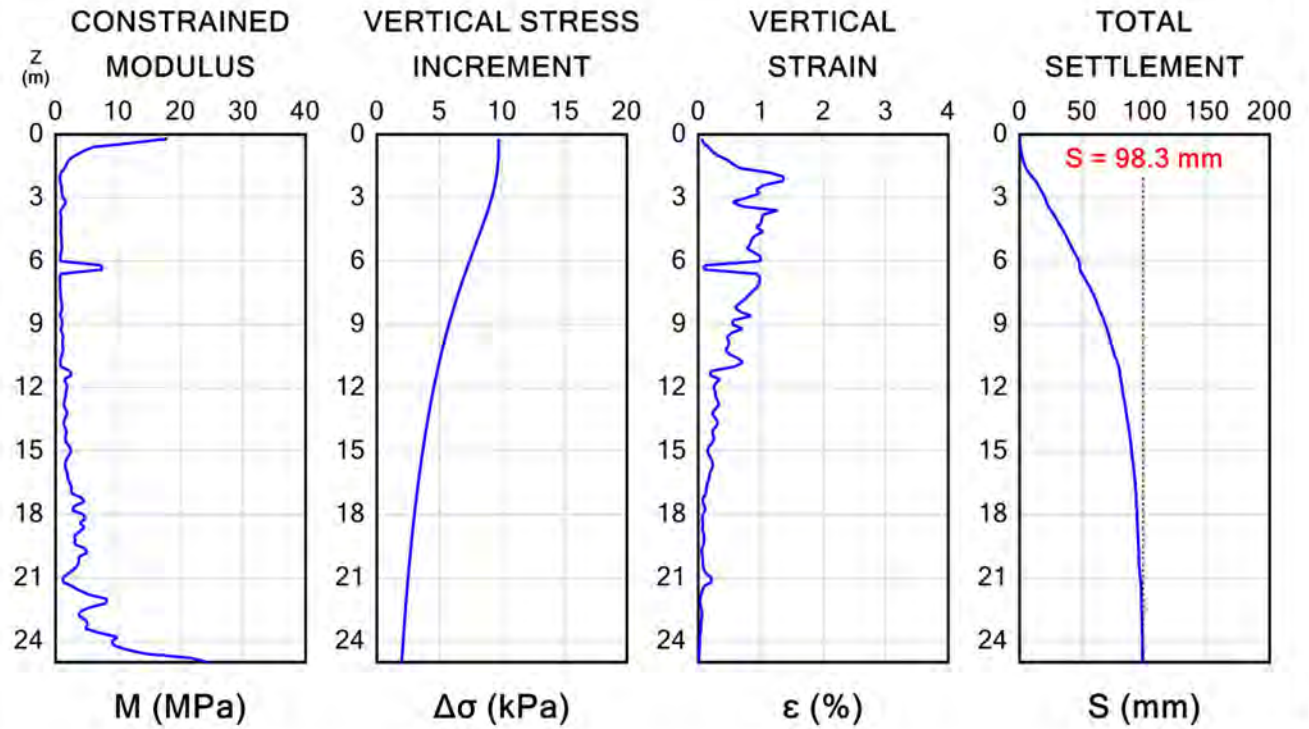
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

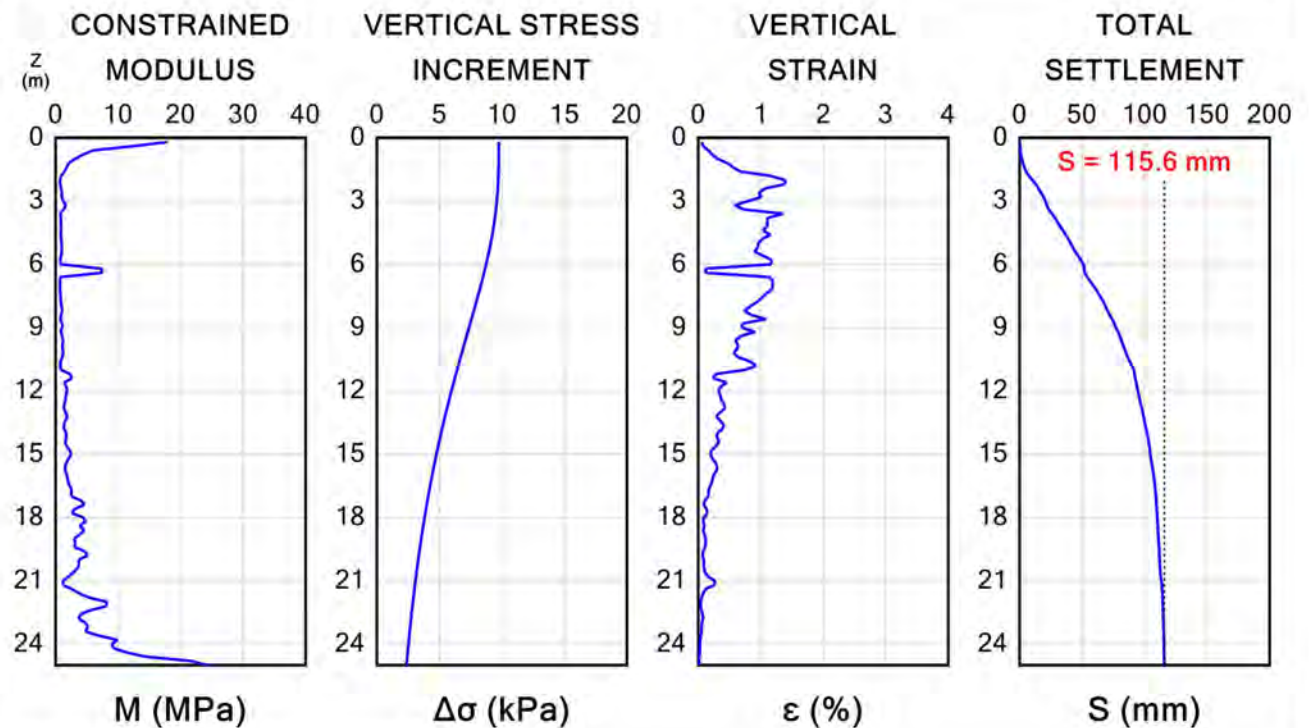
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SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



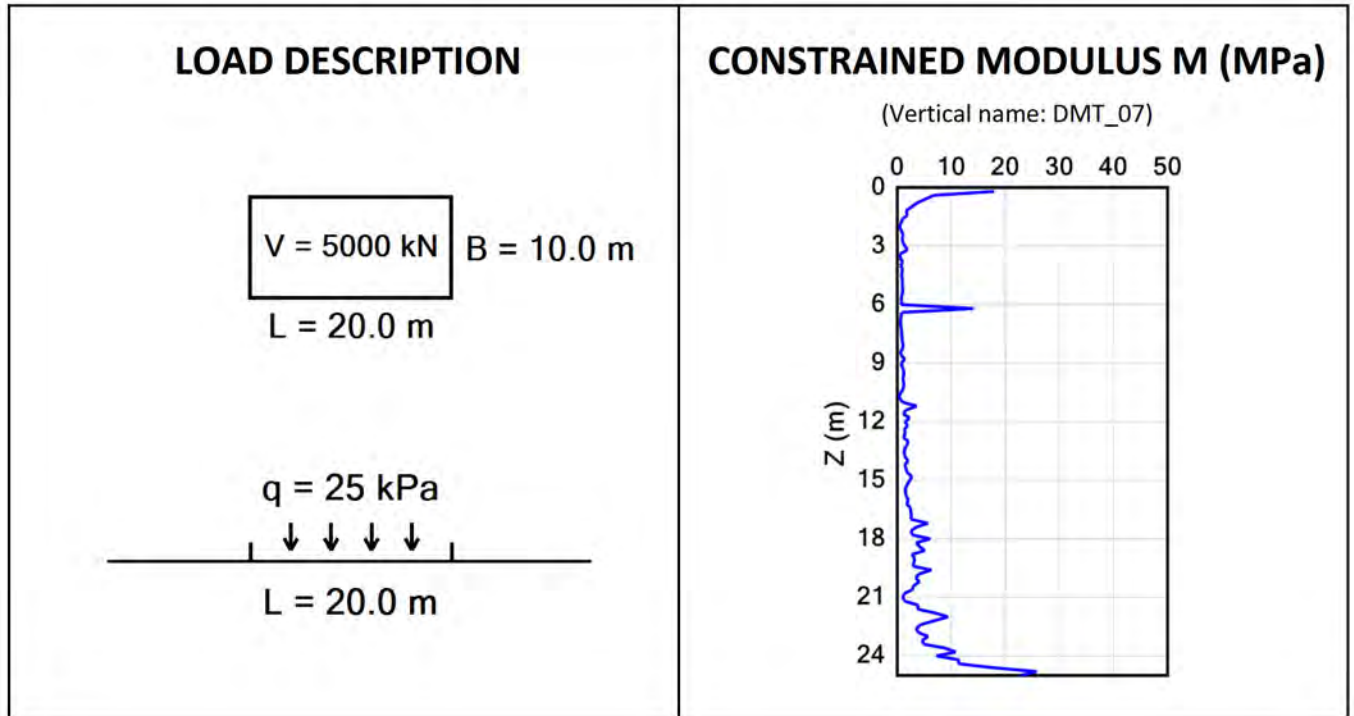
Settlements Calculation

Drill Force NZ

Lander Geotechnical

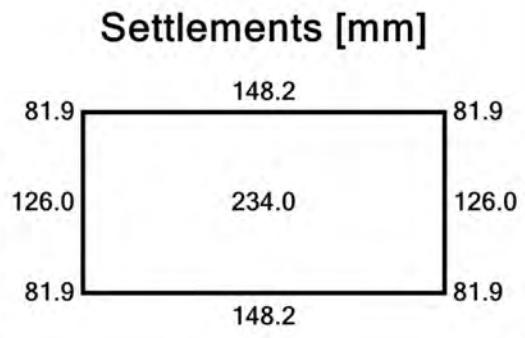
DF21GE034 - DMT07: Case 3

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	234.0	25.00
below the corner	81.9	25.00
below the median point of short side	126.0	25.00
below the median point of long side	148.2	25.00



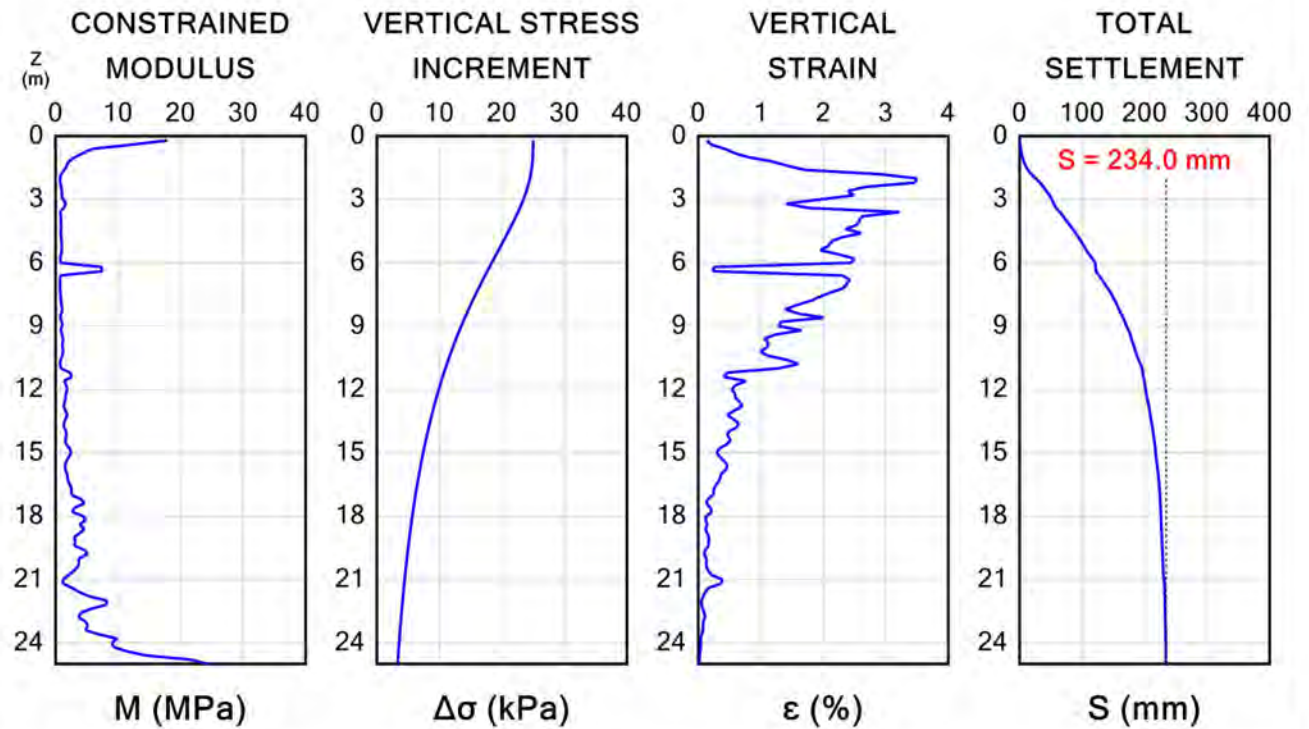
Settlements [mm]

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SETTLEMENTS CALCULATION - below the center

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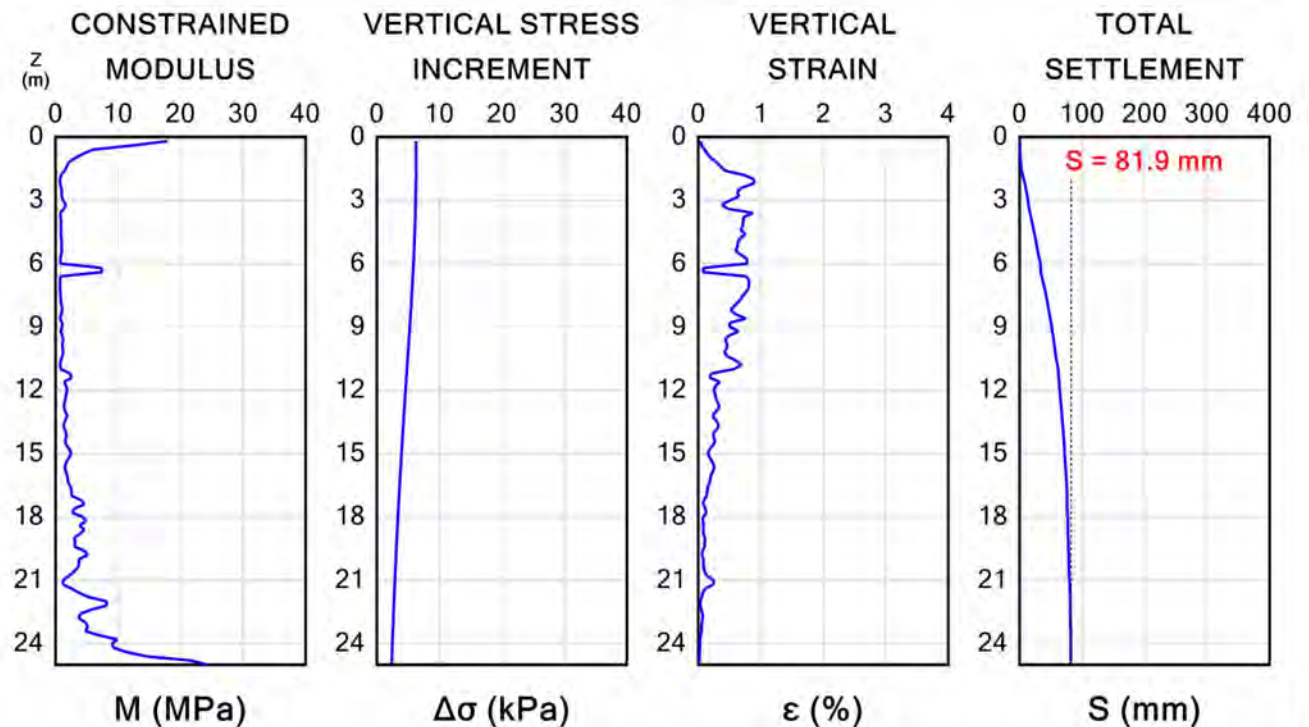
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

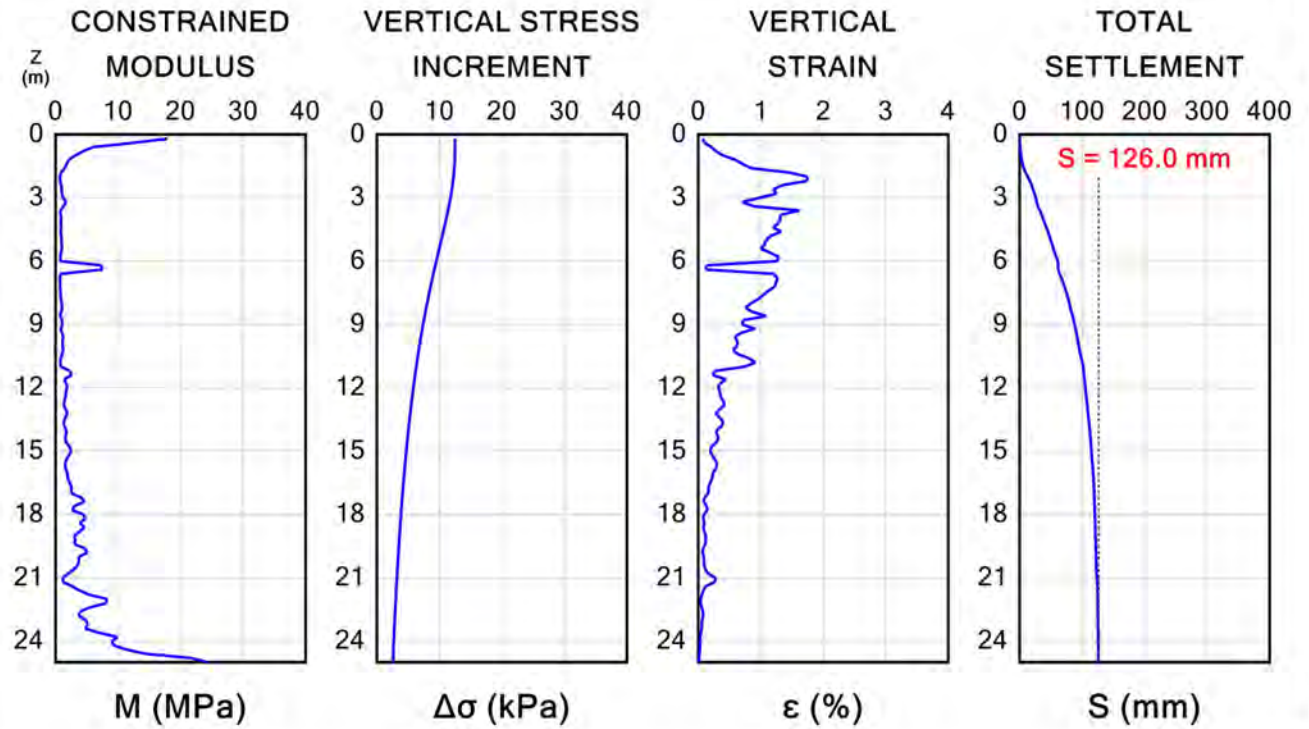
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

Drill Force NZ
Lander Geotechnical

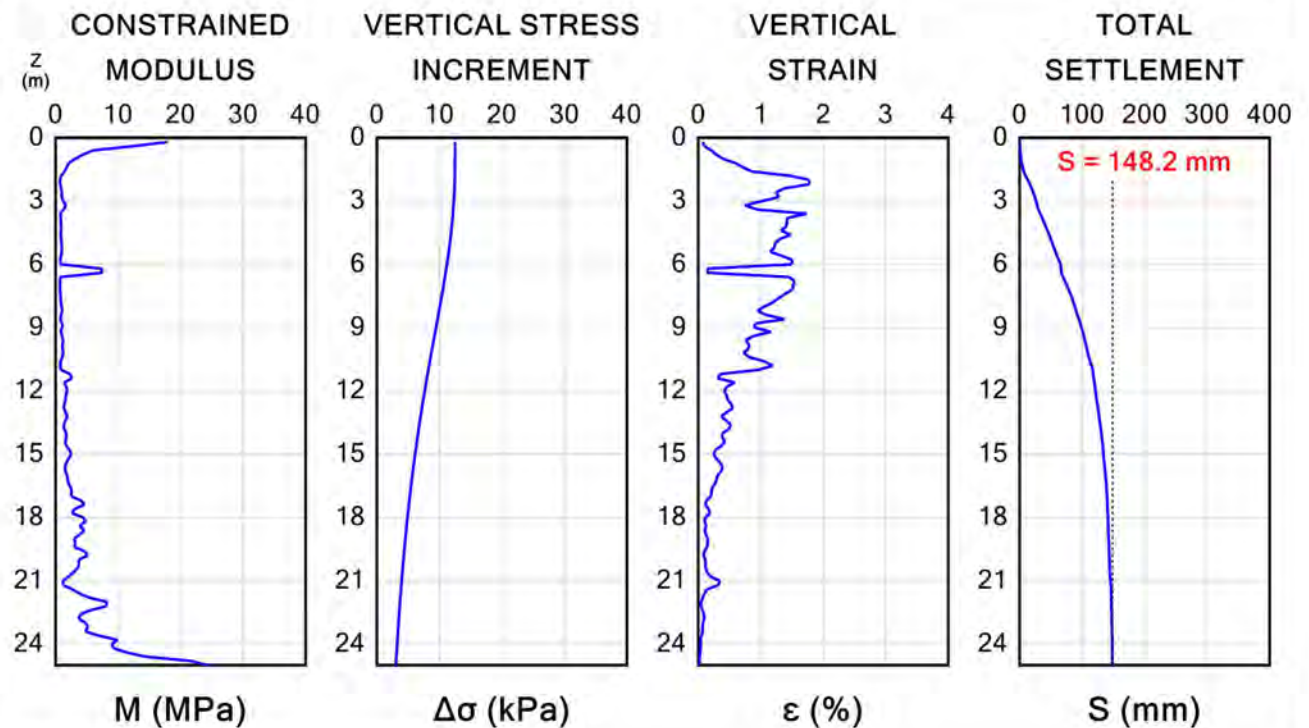
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore



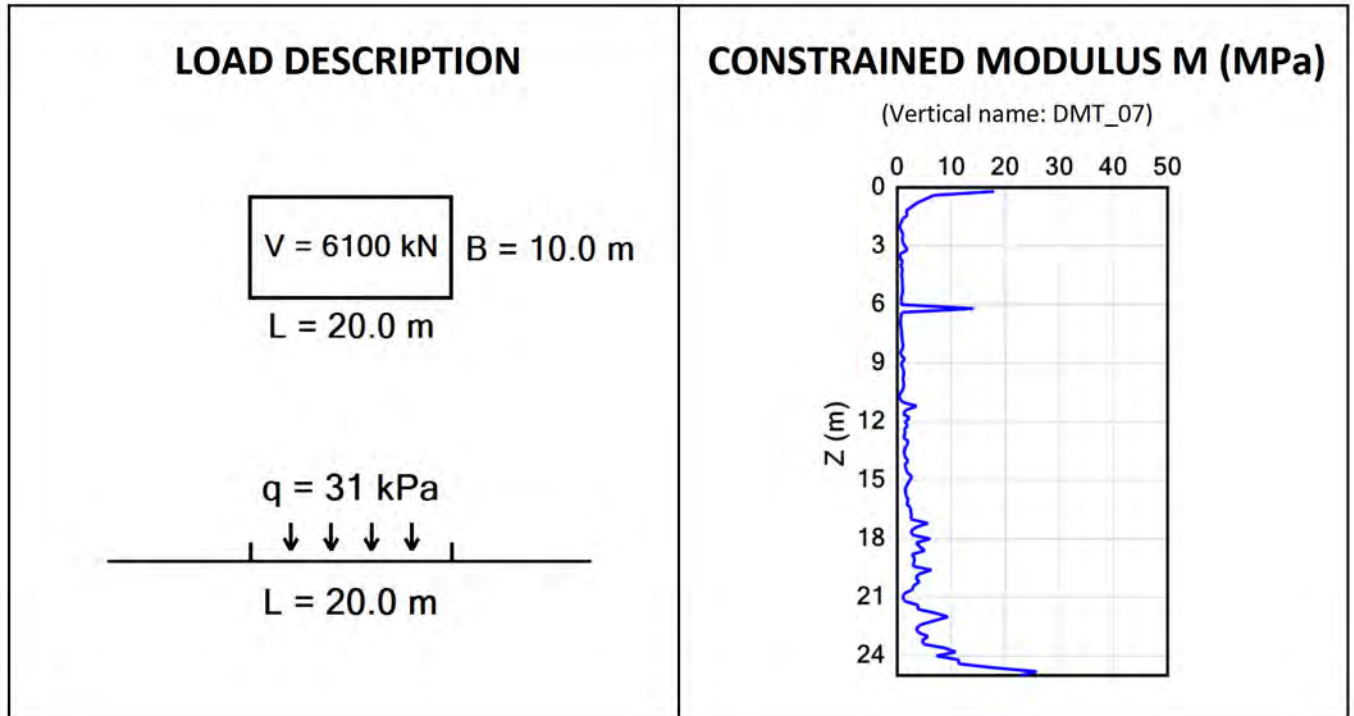
Settlements Calculation

Drill Force NZ

Lander Geotechnical

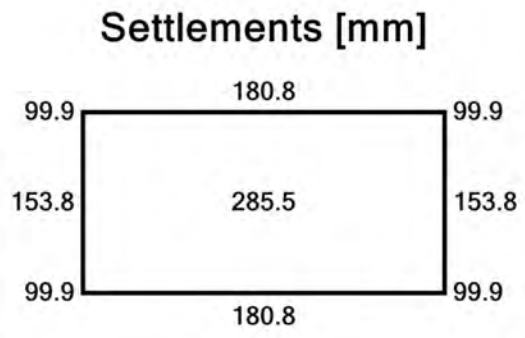
DF21GE034 - DMT07: Case 4

Hamlin Rd, Ardmore



CALCULATION OPTIONS	
Lower limit of Constrained Modulus assigned in the calculation	0.70 MPa
Thickness of calculation layer	0.20 m
End of Calculation	at end of assigned profile

SETTLEMENTS CALCULATION		
(one-dimensional conventional method)		
$S = \sum \frac{\Delta\sigma_v}{M} \Delta z$		
Calculation Point	Settlements [mm]	Z Stop [m]
below the center	285.5	25.00
below the corner	99.9	25.00
below the median point of short side	153.8	25.00
below the median point of long side	180.8	25.00



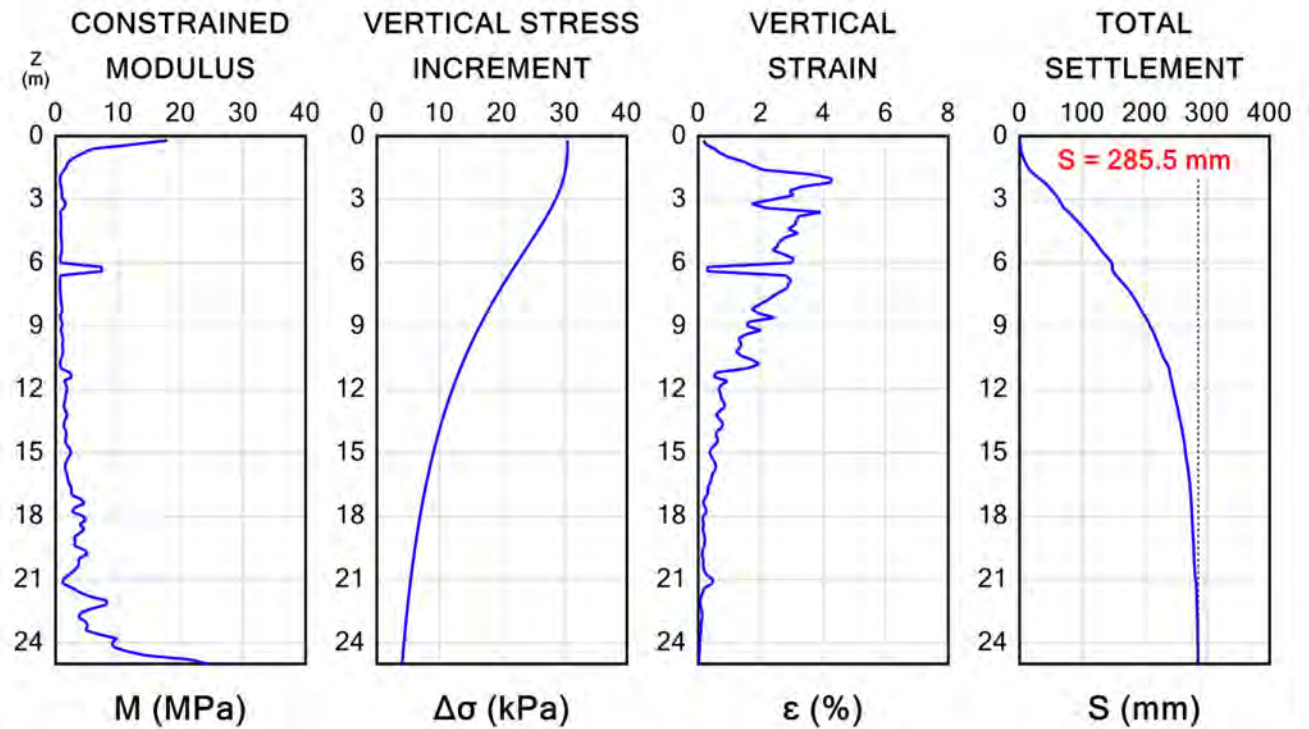
Settlements [mm]

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SETTLEMENTS CALCULATION - below the center

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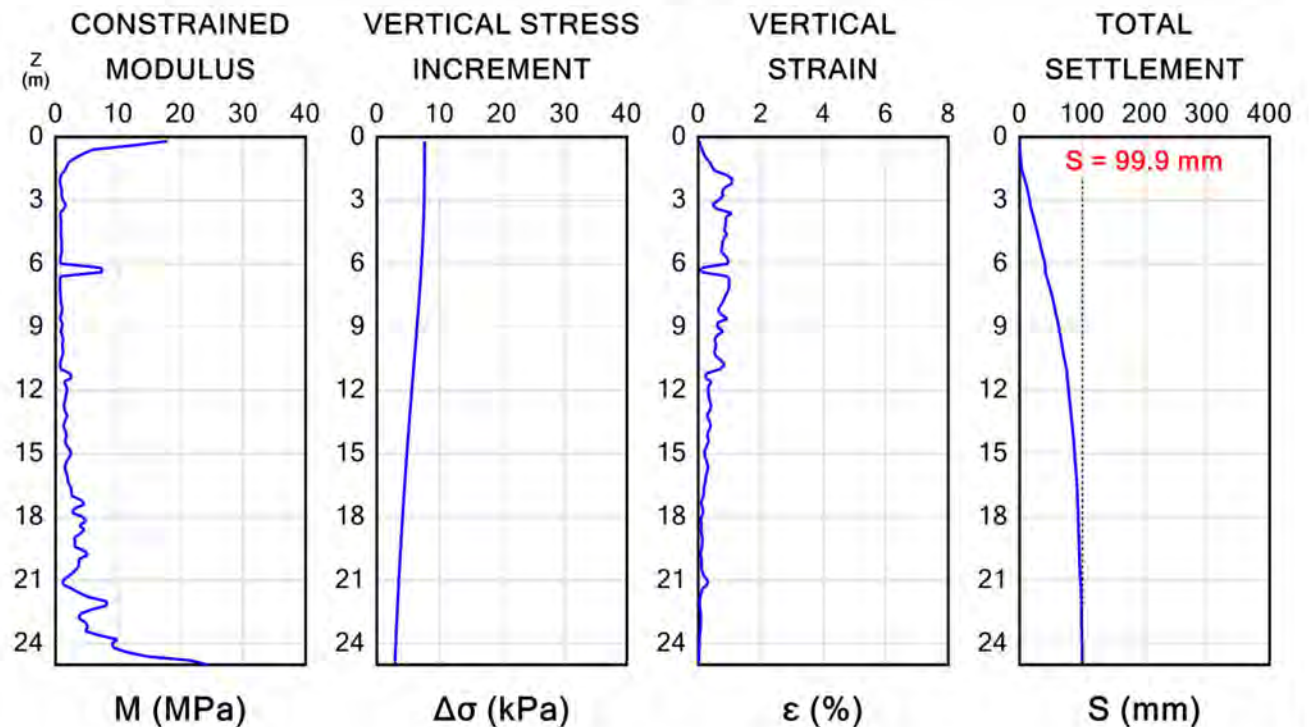
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the corner

Drill Force NZ
Lander Geotechnical

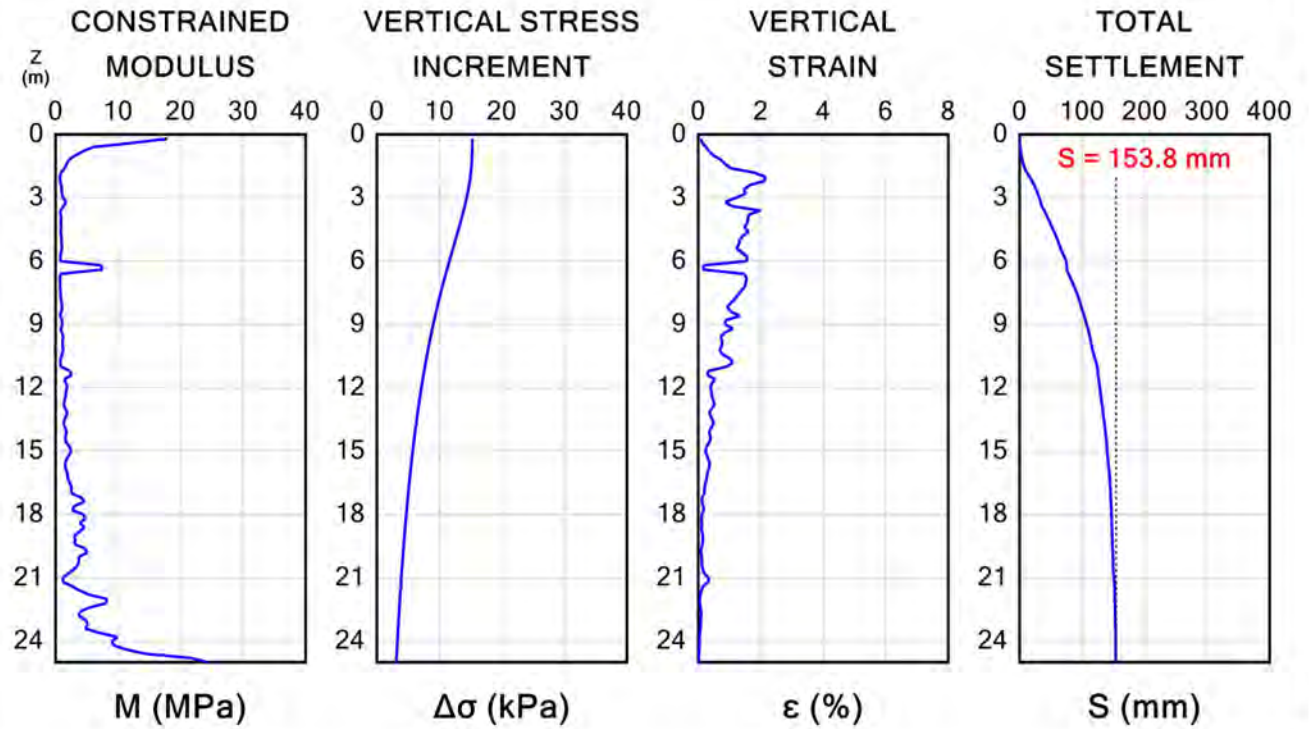
DF21GE034
Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of short side

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Hamlin Rd, Ardmore



SETTLEMENTS CALCULATION - below the median point of long side

Drill Force NZ
Lander Geotechnical

DF21GE034
Hamlin Rd, Ardmore

