

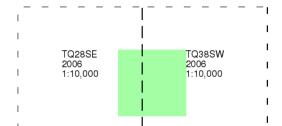


10k Raster Mapping Published 2006

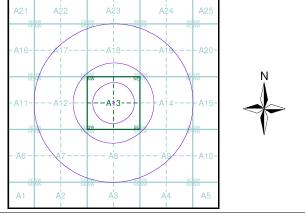
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 116693910_1_1 Customer Ref: J17059

National Grid Reference: 530370, 181880

Site Area (Ha): 0.04 Search Buffer (m): 1000

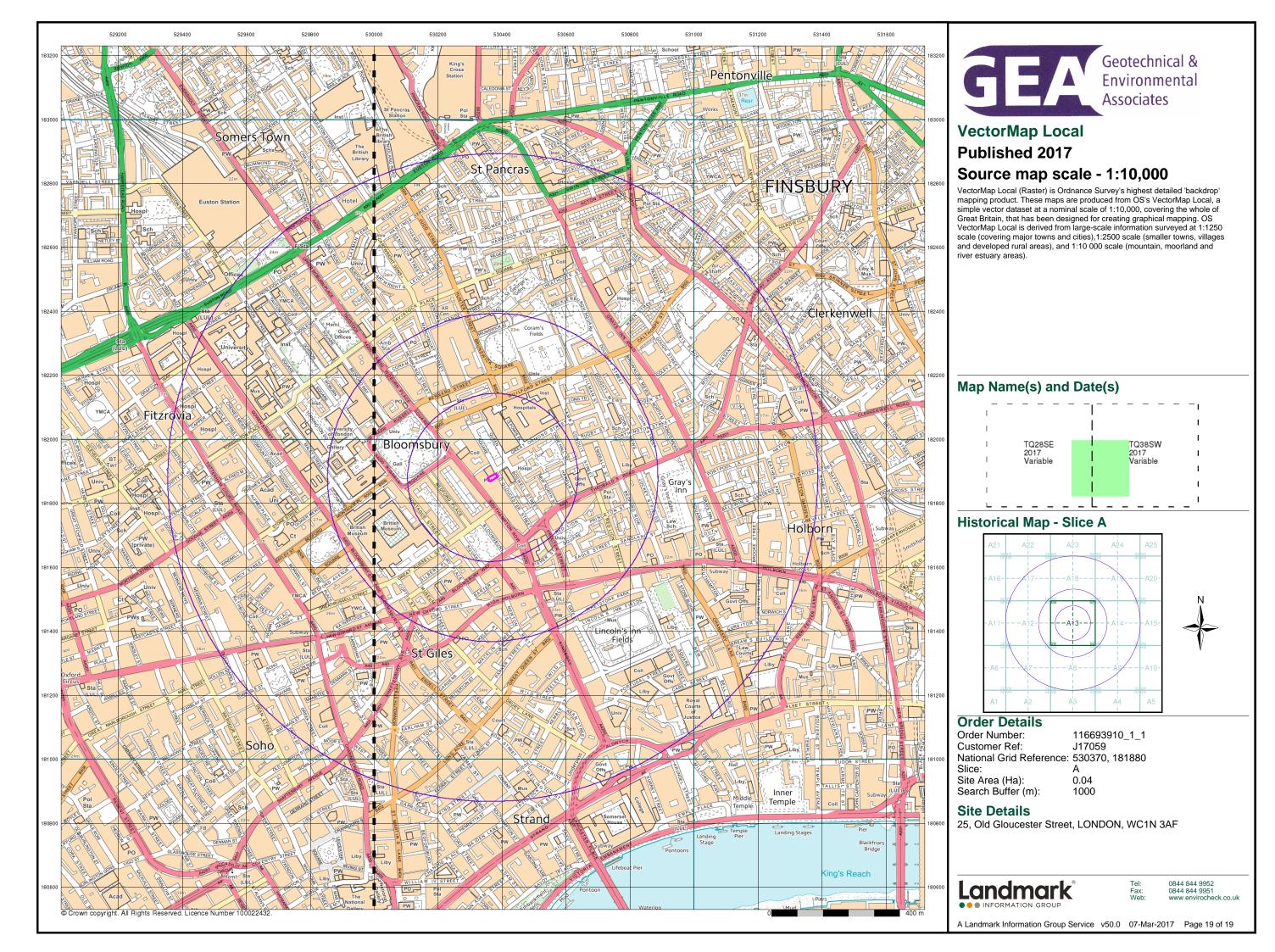
Site Details

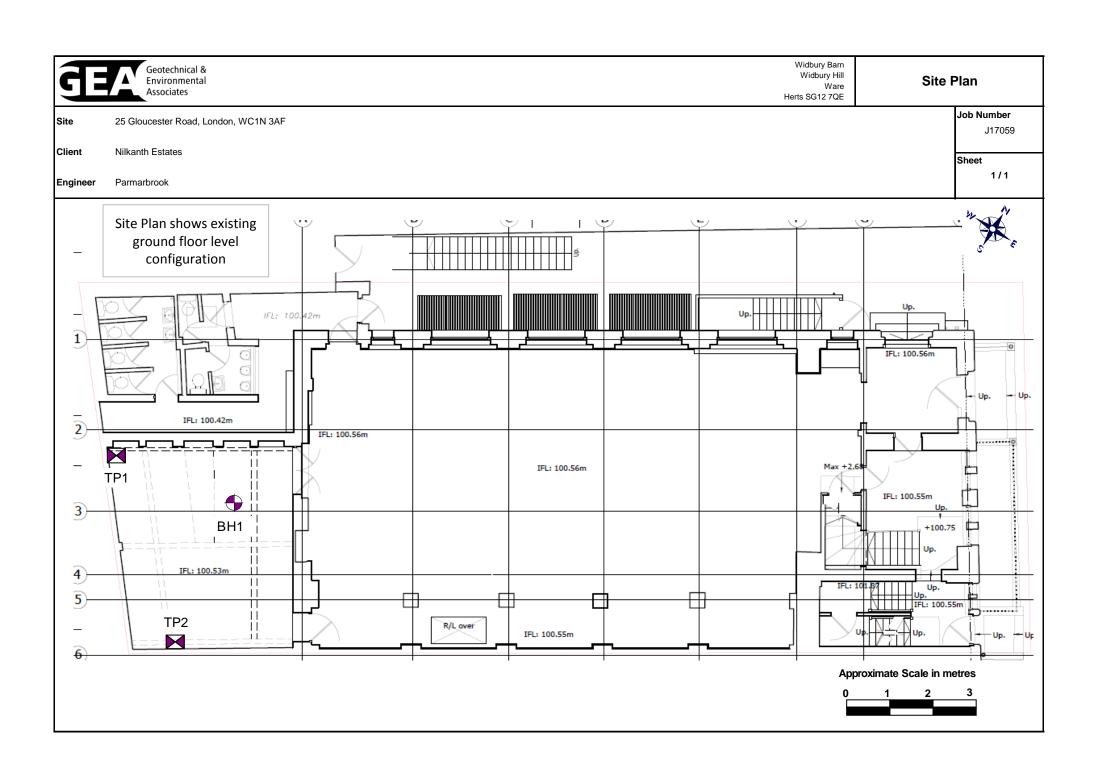
25, Old Gloucester Street, LONDON, WC1N 3AF

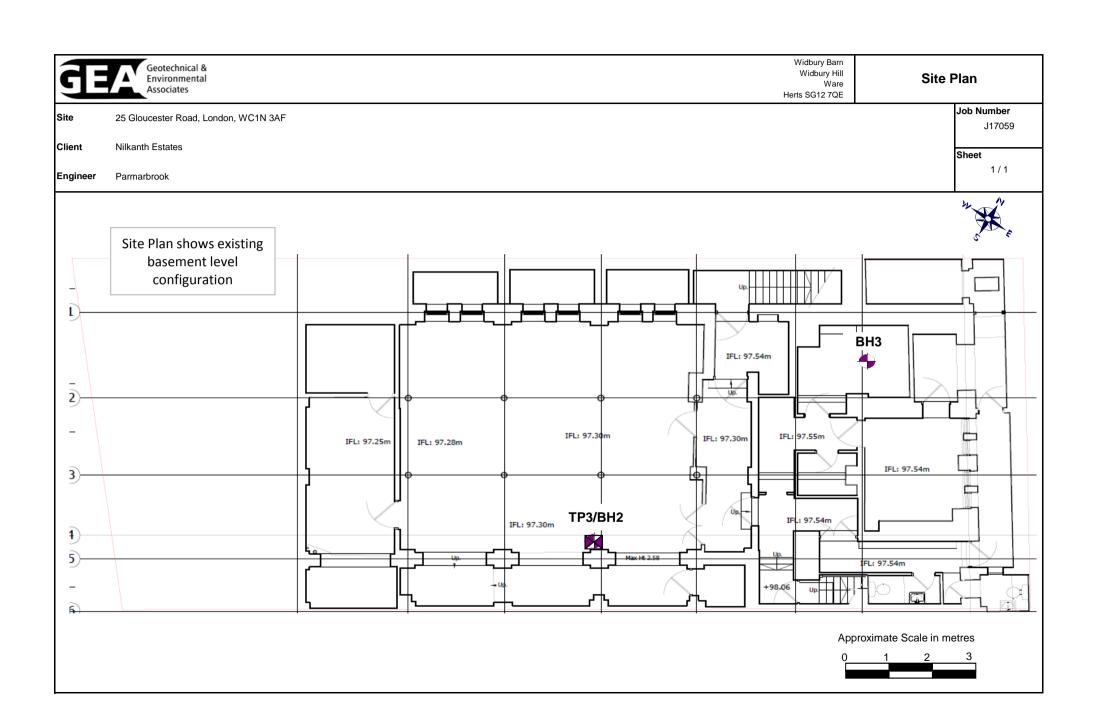
Landmark

el: 0844 844 9952 ax: 0844 844 9951 'eb: www.envirocheck.o

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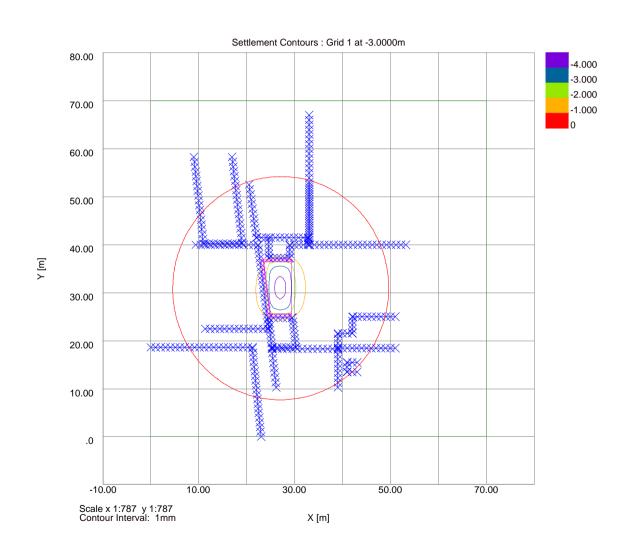


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25 Old Gloucester Street, London, WC1N 3AF

Short Term Movements

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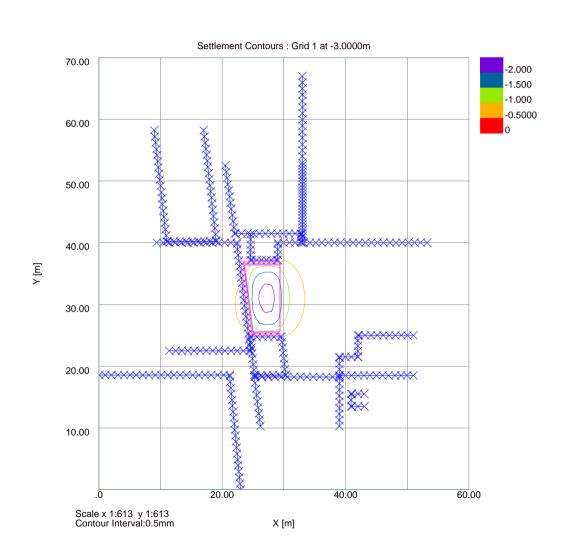


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25 Old Gloucester Street, London, WC1N 3AF

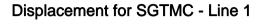
Overall Term Movements

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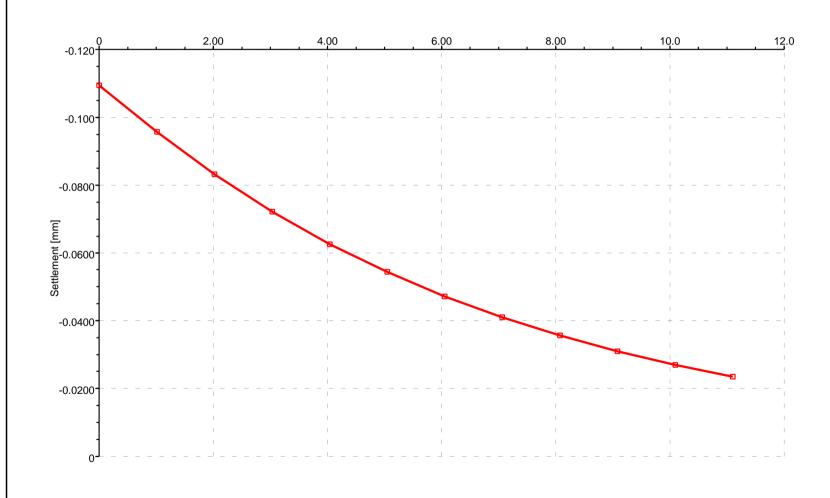


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Distance from (22,41.5) in m

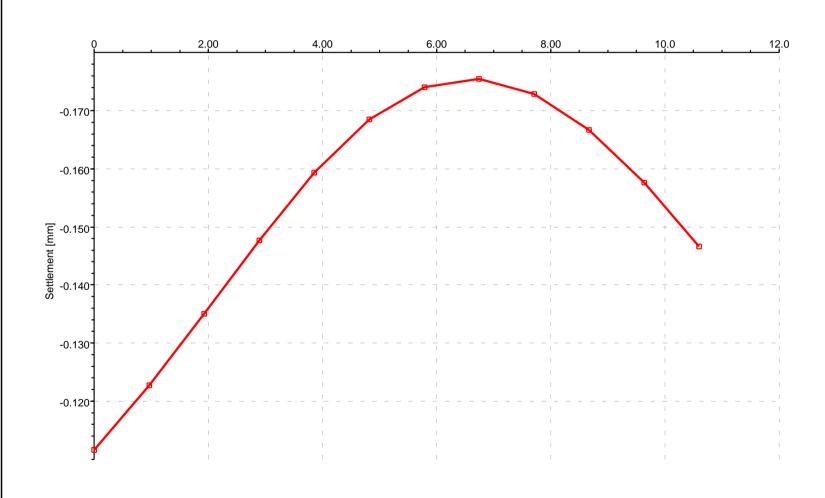


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Overall Term Movements

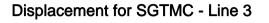
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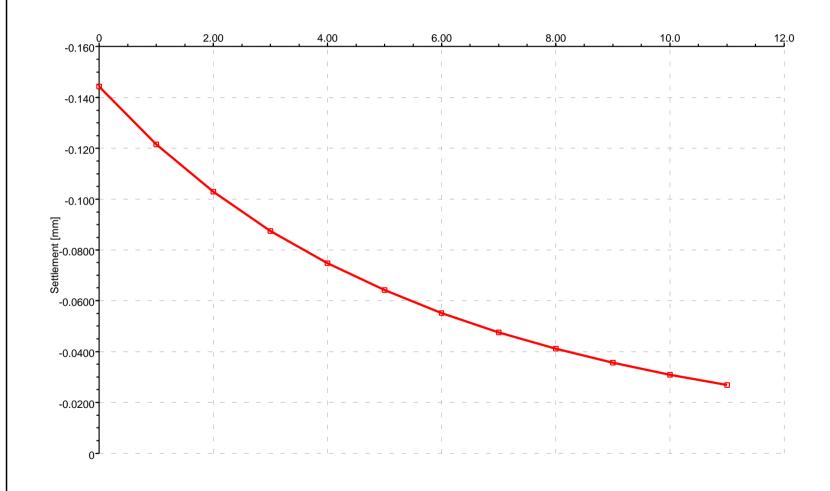


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Distance from (33,41.5) in m

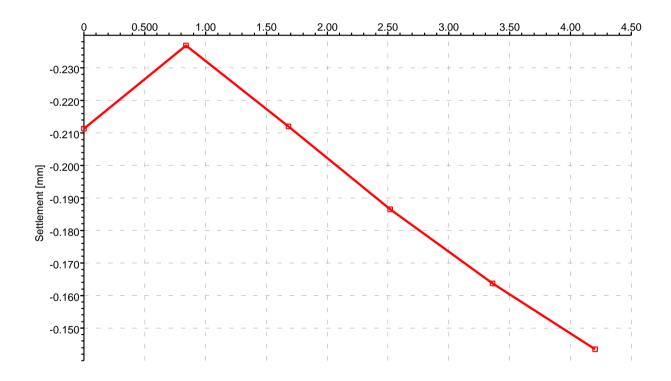




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Displacement for SGTMC - Line 4

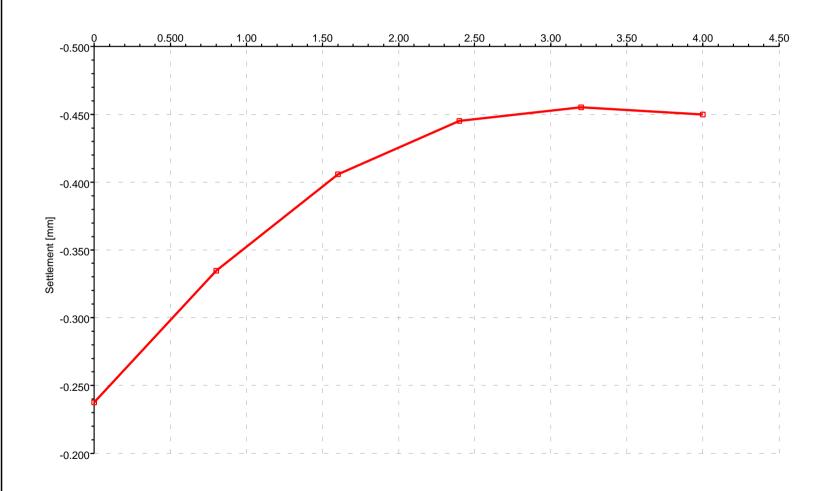


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Displacement for SGTMC - Line 5

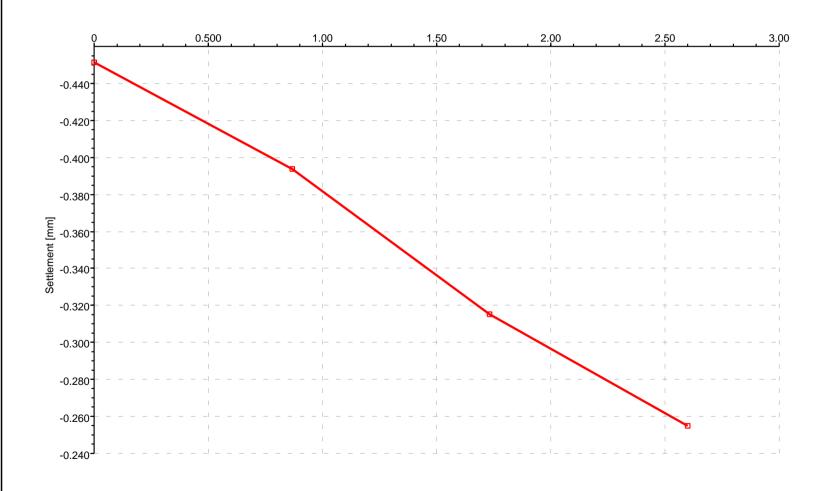


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Displacement for SGTMC - Line 6

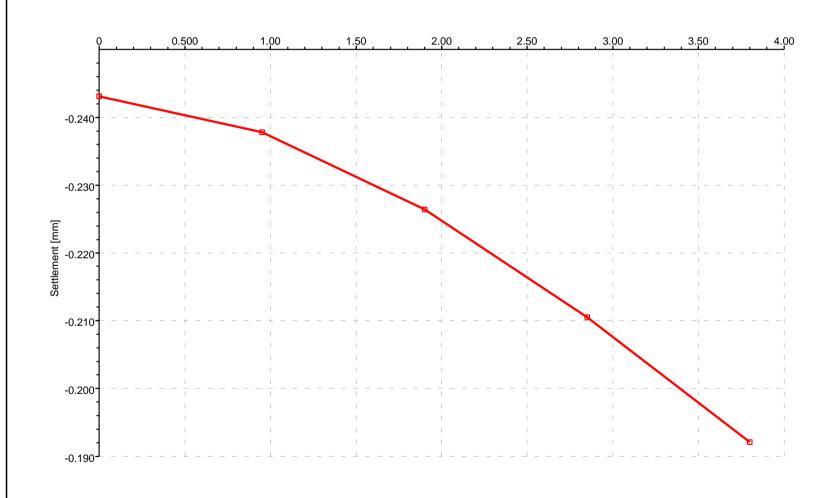


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Displacement for SGTMC - Line 7

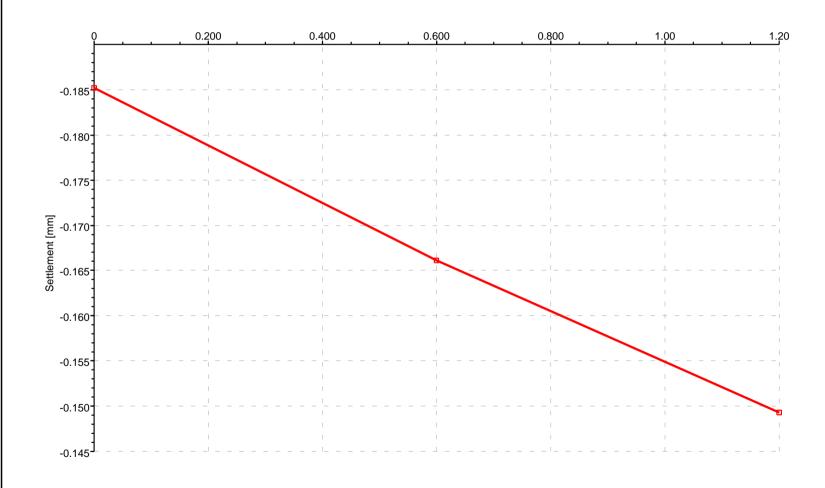


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Displacement for SGTMC - Line 8



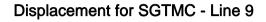
Overall Term Movements

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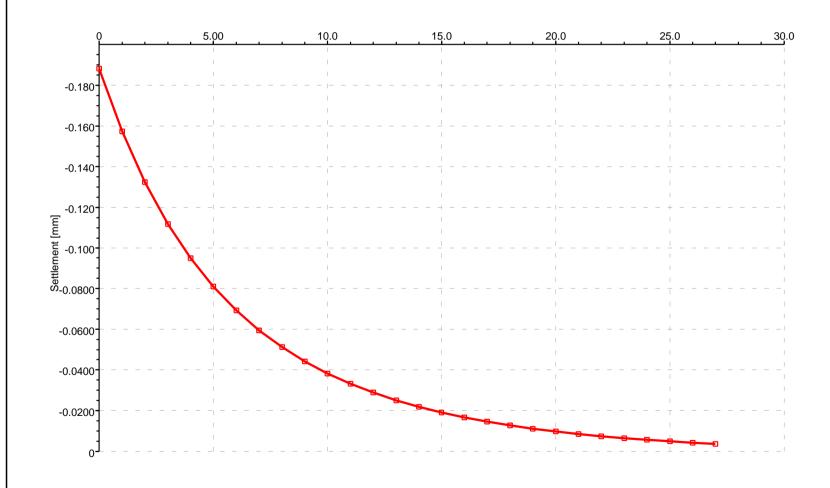
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Distance from (33,40) in m



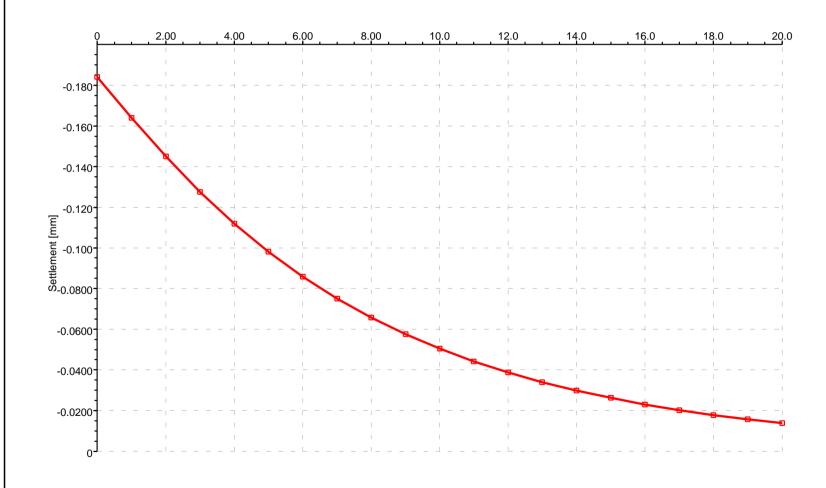
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Displacement for SGTMC - Line 10

Distance from (33.2,40) in m



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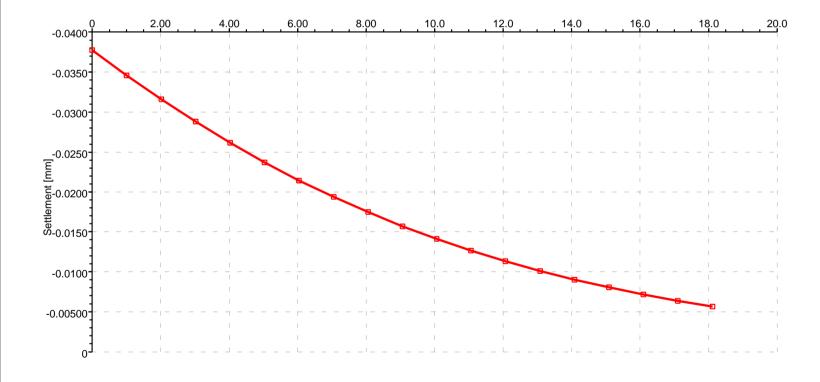
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Displacement for RSQM - Line1

Line Displacement

Distance from (11,40.2) in m

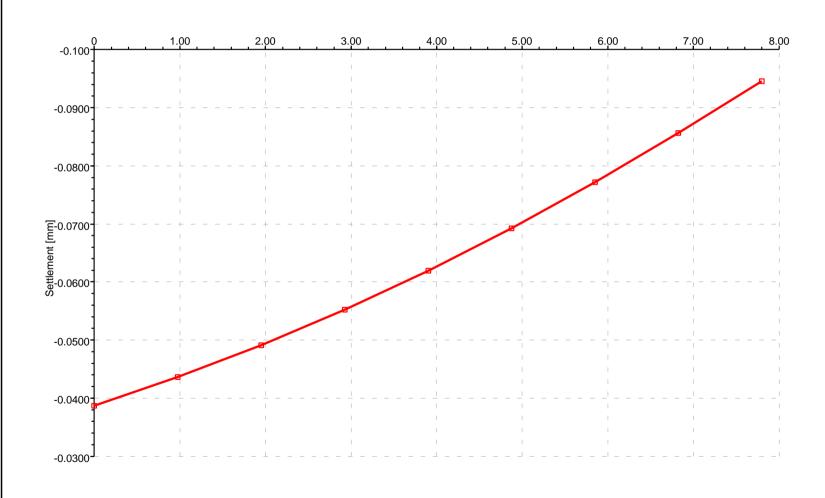


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Made by	Date	Checked

Displacement for RSQM - Line 2

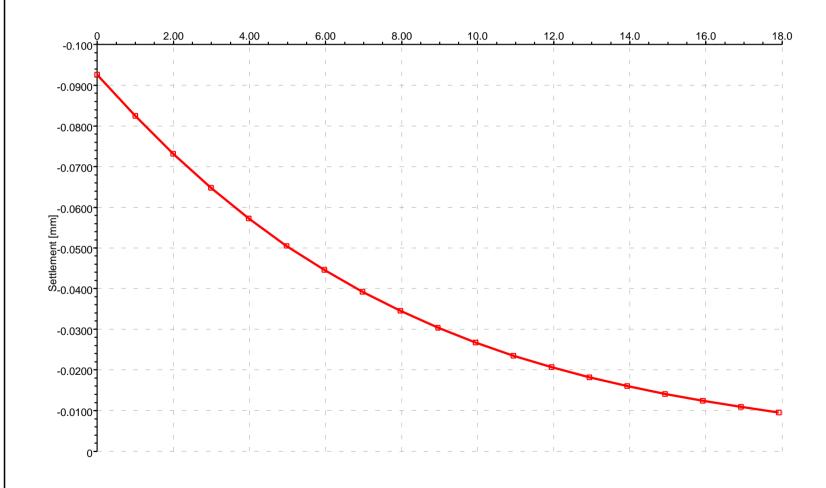


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Displacement for RSQM - Line 3

Distance from (19,40.4) in m



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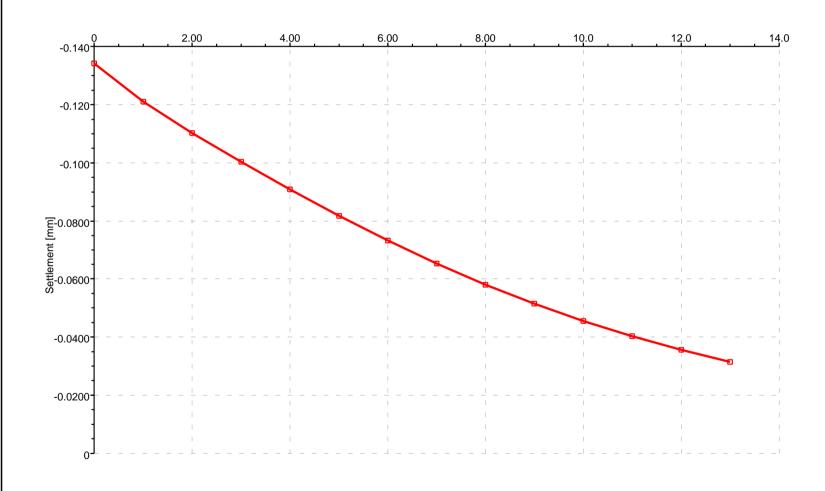
J17059

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Made by Date Checked



Distance from (22.4,40) in m



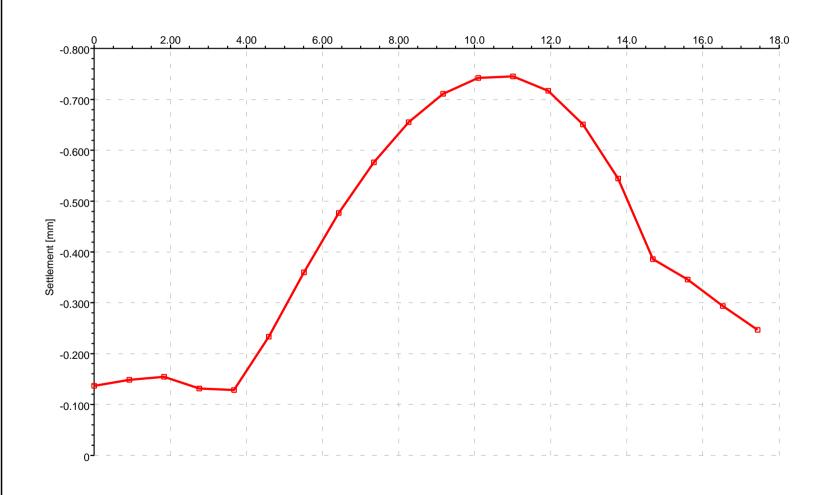
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Displacement for 114-118SR - Line 2

Distance from (22.4,39.8) in m





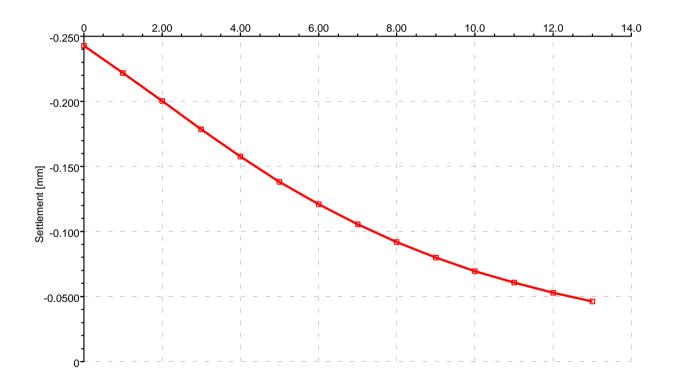
Overall Term Movements

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Displacement for 114-118SR - Line 3

Line Displacement

Distance from (24.4,22.5) in m

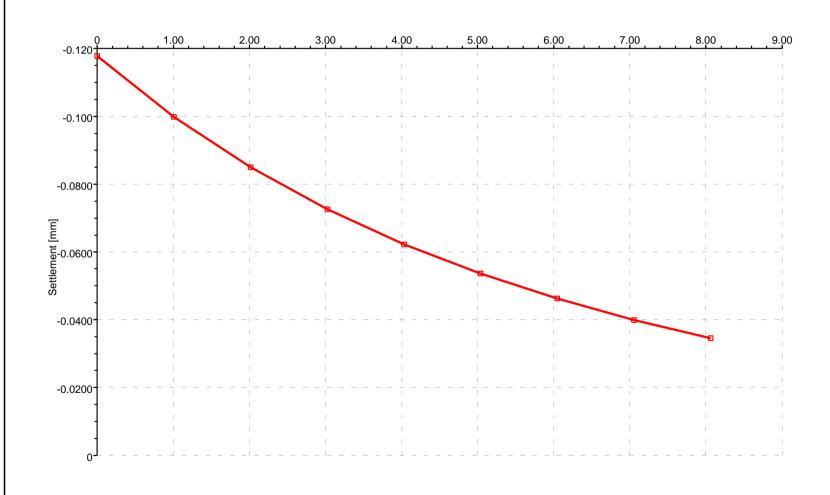


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Displacement for MH - Line 1

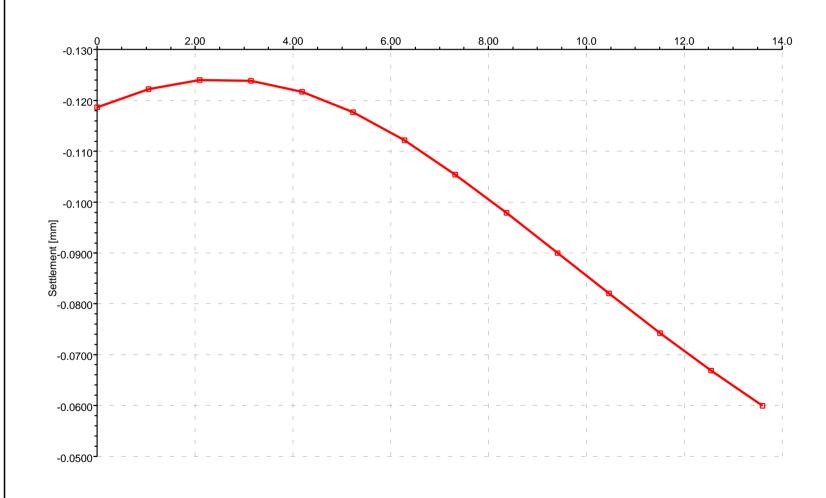
Distance from (25.2,18.3) in m



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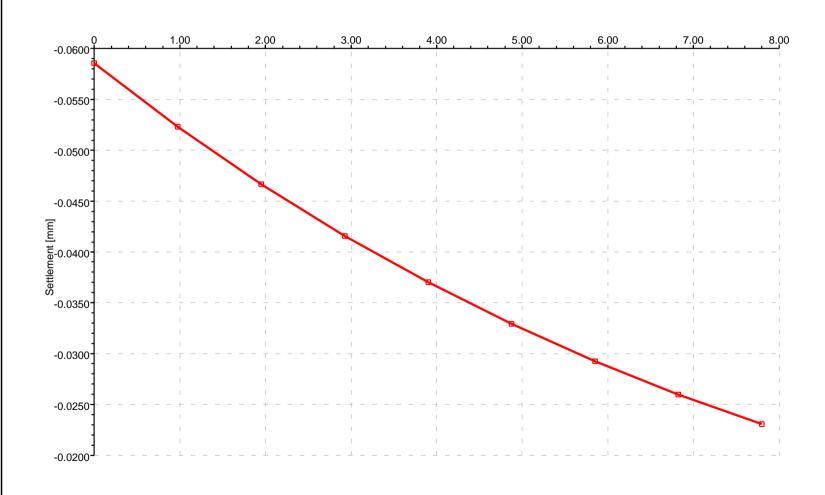
Displacement for MH - Line 2



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Displacement for MH - Line 3



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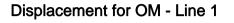
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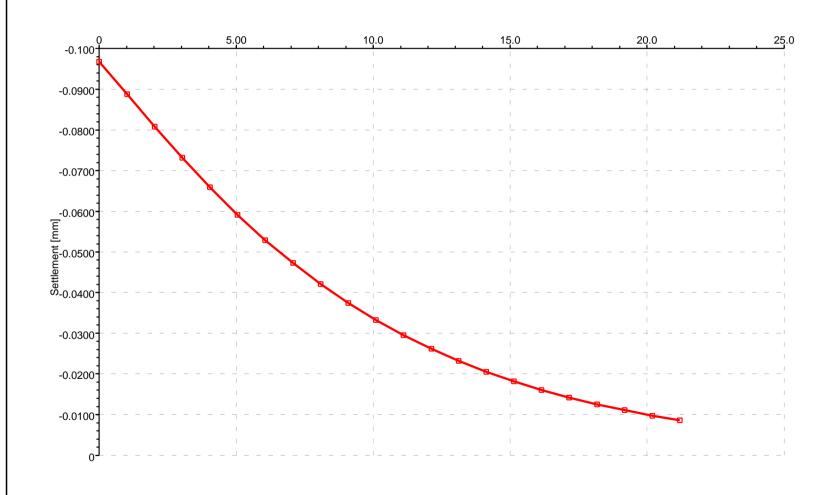
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Distance from (21.2,18.6) in m

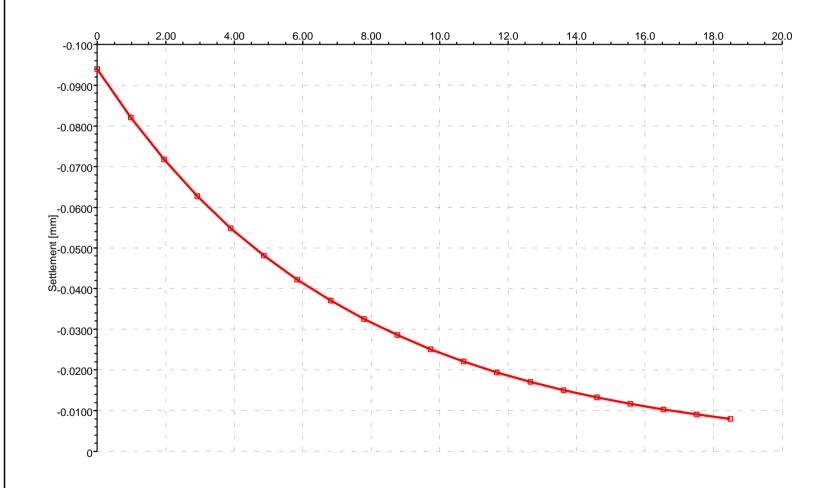


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Distance from (21.2,18.4) in m

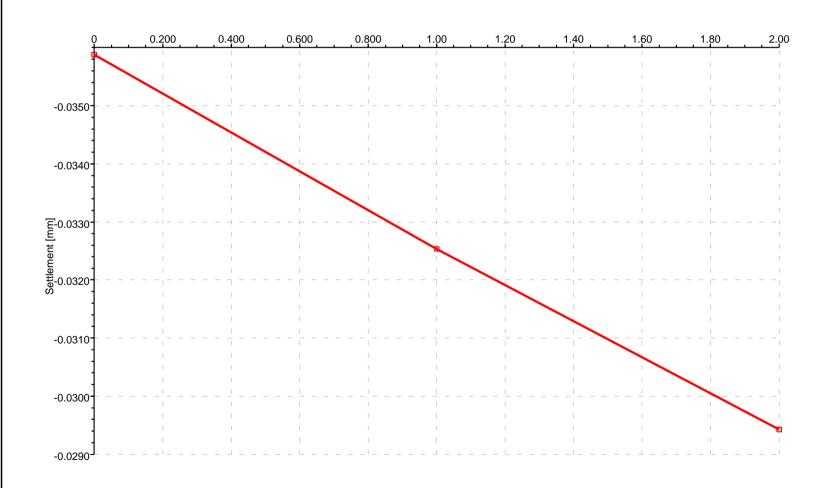


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Displacement for 27OGS - Line1

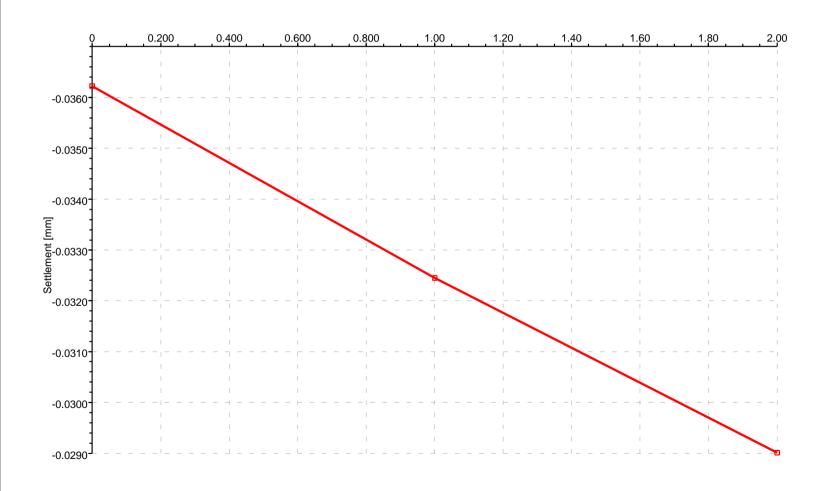


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Displacement for 27OGS - Line 2



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Displacement for 27OGS - Line 3



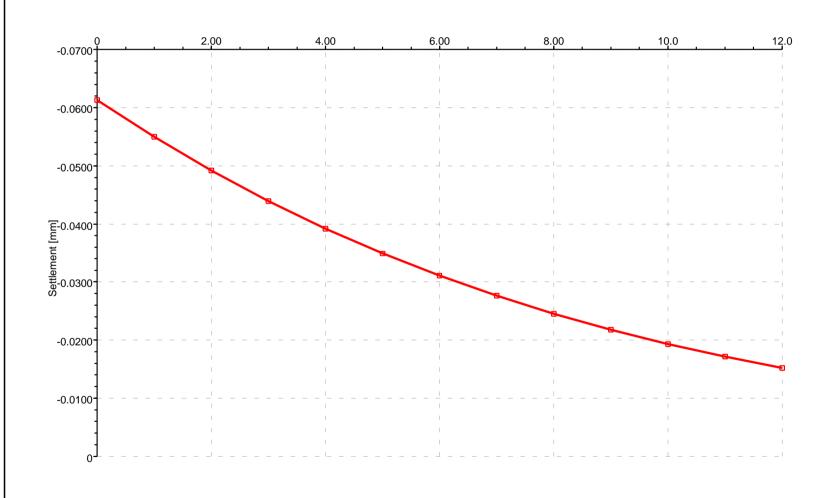
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Overall Term Movements

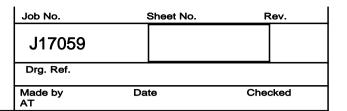
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Displacement for 26OGS - Line 1

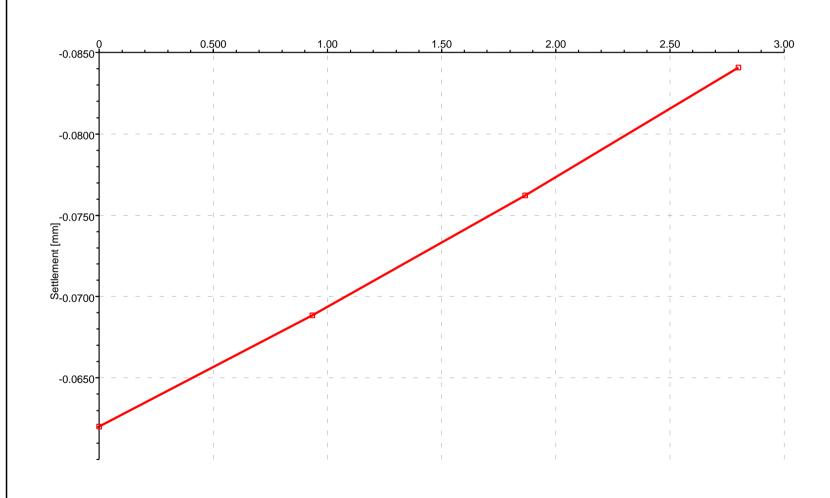
Distance from (39,18.5) in m



Overall Term Movements



Displacement for 26OGS - Line 2

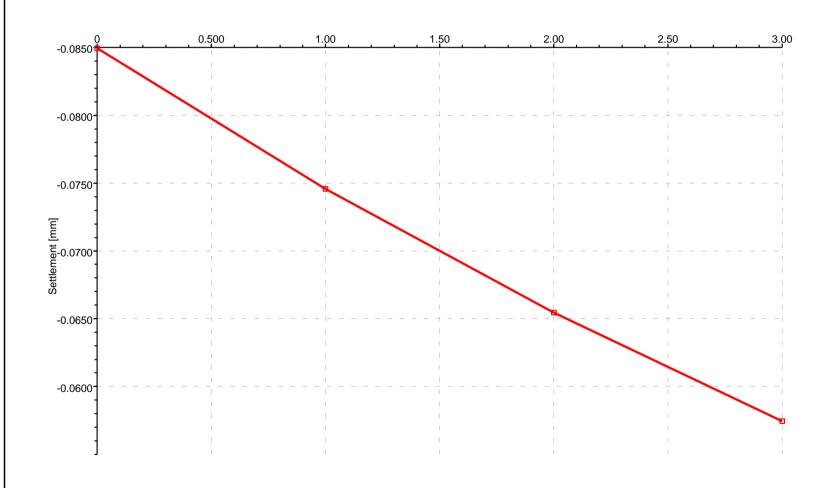


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Overall Term Movements

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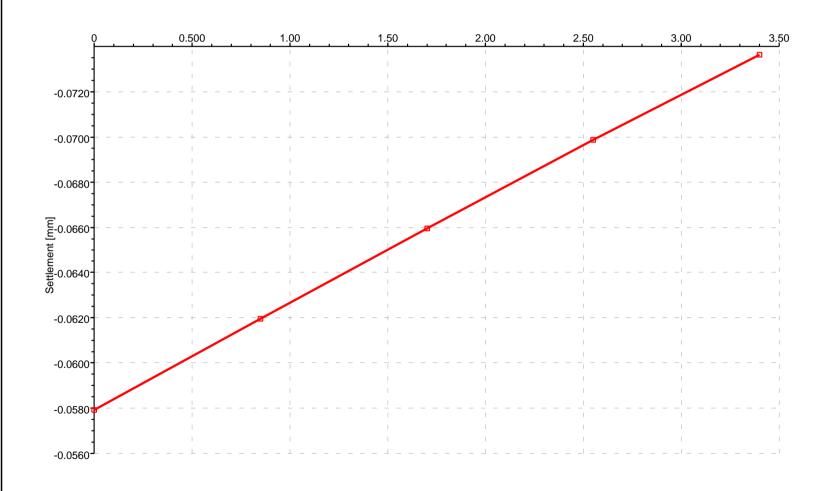
Displacement for 26OGS - Line 3



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Displacement for 26OGS - Line 4

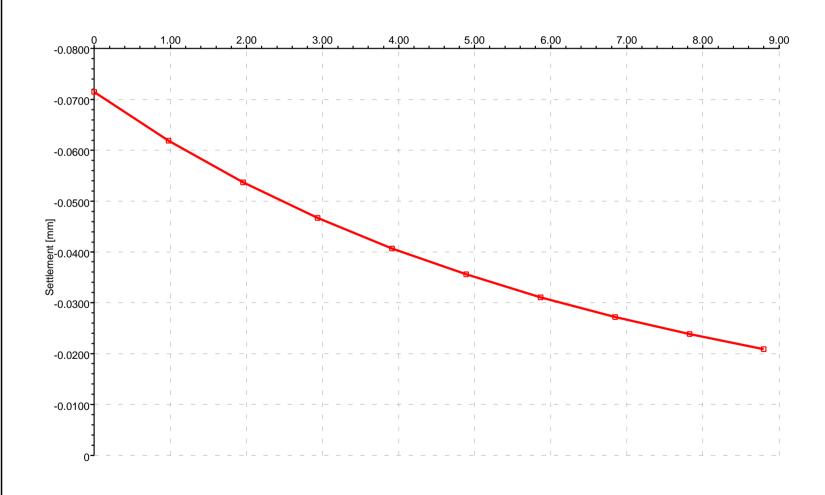


Overall Term Movements

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Displacement for 26OGS - Line 5

Distance from (42.2,25) in m

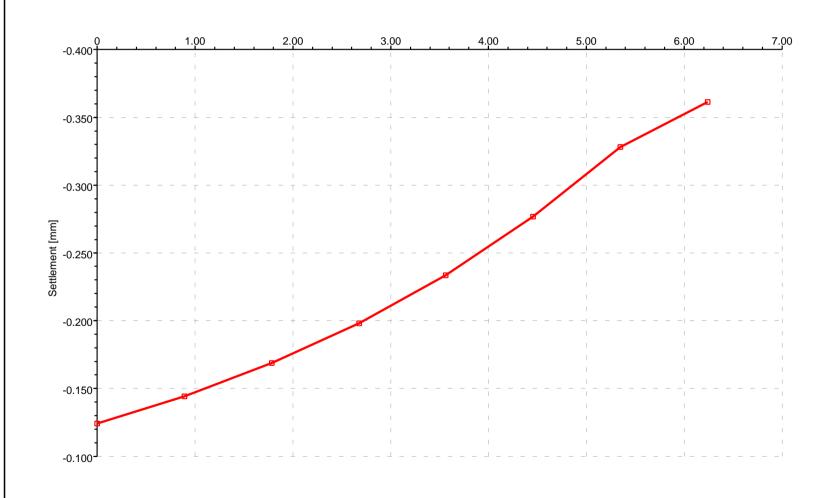


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Displacement for 26OGS - Line 6



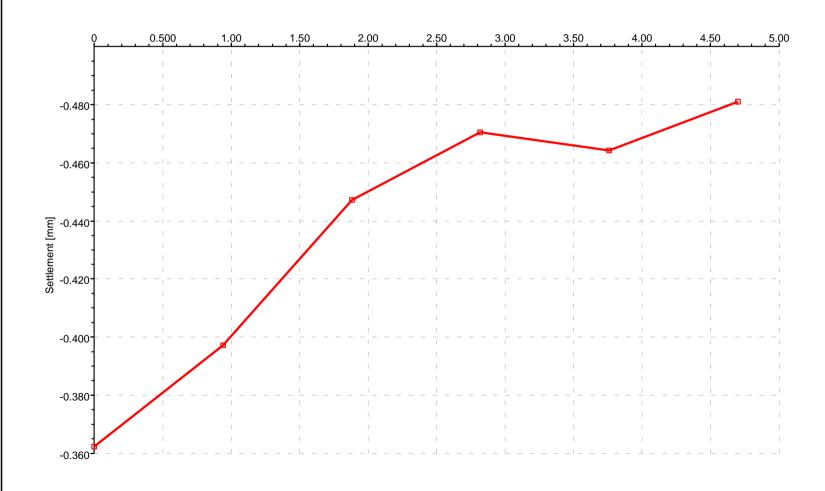
25 Old Gloucester Street, London, WC1N 3AF

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Displacement for 26OGS - Line 7

Line Displacement



25 Old Gloucester Street, London, WC1N 3AF

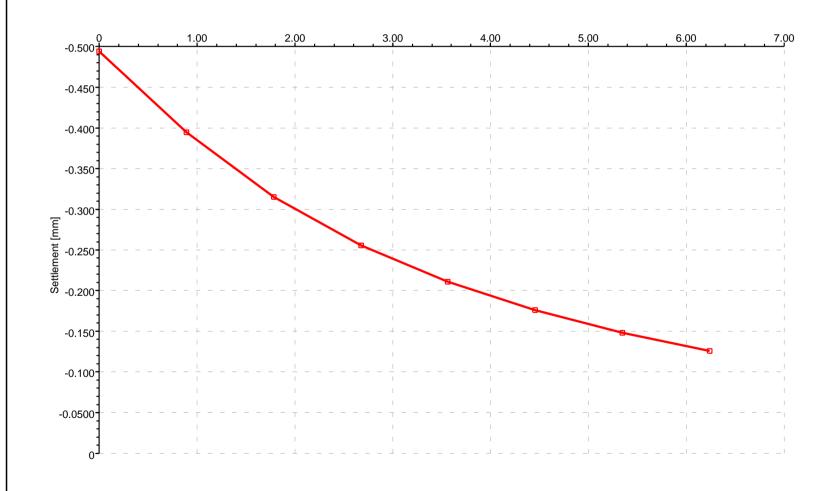
Overall Term Movements

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Displacement for 26 OGS - Line 8

Distance from (29.6,24.8) in m

Line Displacement



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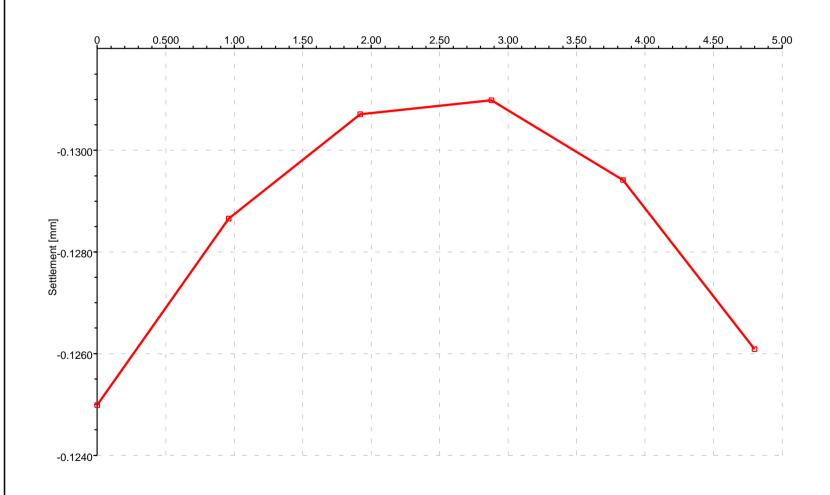
25 Old Gloucester Street, London, WC1N 3AF

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Displacement for 26OGS - Line 9

Line Displacement





Project Number	J17059
Revision	AT
Wall Reference	STGMC 1

Input parameters:

Wall Length, L = 11.0 m Wall Height, H = 21.0 m Proposed basement depth = 0.50 m

L/H = 0.52

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 2

Input parameters:

Wall Length, L = 11.0 m Wall Height, H = 21.0 m Proposed basement depth = 3.00 m

L/H = 0.52

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.04 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.04$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 3

Input parameters:

Wall Length, L = 11.0 m
Wall Height, H = 21.0 m

Proposed basement depth = 3.00 m

L/H = 0.52

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.03 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.03$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations

ONLY INPUT DETAILS ON THIS PAGE

Ground Movement Assessment Summary



Project Number	J17059
Revision	AT
Wall Reference	STGMC 4

Input parameters:

Wall Length, L = 4.0 m

Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 0.29

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.32 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.32$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.90$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations

Building Damage Category = CATEGORY 1 - VERY SLIGHT



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 5

Input parameters:

Wall Length, L = 4.0 m
Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

0.29

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.09 mm
Predicted from P-Disp

L/H=

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.09$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 1.60$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations

Building Damage Category = CATEGORY 1 - VERY SLIGHT



Project Number J17059
Revision AT
Wall Reference SGTMC 6

Input parameters:

Wall Length, L = 2.5 m Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 0.18

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 1.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 7

Input parameters:

Wall Length, L = 4.0 m

Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 0.29

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.09 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.09$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.40$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 8

Input parameters:

Wall Length, L = 1.5 m
Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 0.11

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm

Predicted from P-Disp

Total settlement = mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	SGTMC 9

Input parameters:

Wall Length, L = 27.0 m Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 1.93

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.08 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.08$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number J17059
Revision AT
Wall Reference SGTMC 10

Input parameters:

Wall Length, L = 20.0 m Wall Height, H = 14.0 m

Proposed basement depth = 3.00 m

L/H = 1.43

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.05 mm

Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.05$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	RSQM 1

Input parameters:

Wall Length, L = 18.0 m Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m

L/H = 0.88

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	RSQM 2

Input parameters:

Wall Length, L = 8.0 m Wall Height, H = 20.5 m Proposed basement depth = 3.00 m

L/H = 0.39

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	RSQM 3

Input parameters:

Wall Length, L = 18.0 m
Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m

L/H = 0.88

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.02 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.02$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number J17059
Revision AT
Wall Reference 114-118SR 1

Input parameters:

Wall Length, L = 13.0 m Wall Height, H = 7.5 m

Proposed basement depth = 3.00 m

L/H = 1.73

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.02 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.02$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number J17059
Revision AT
Wall Reference 114-118SR 2

Input parameters:

Wall Length, L = 18.0 m Wall Height, H = 7.5 m

Proposed basement depth = 2.00 m

L/H = 2.40

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.48 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.48$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 1.50$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number J17059
Revision AT
Wall Reference 114-118SR 3

Input parameters:

Wall Length, L = 13.0 m Wall Height, H = 7.5 m

Proposed basement depth = 3.00 m

L/H = 1.73

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.03 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.03$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	MH 1

Input parameters:

Wall Length, L = 8.0 m

Wall Height, H = 7.0 m

Proposed basement depth = 3.00 m

L/H = 1.14

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.02 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.02$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	MH 2

Input parameters:

Wall Length, L = 14.0 m Wall Height, H = 7.0 m Proposed basement depth = 3.00 m L/H= 2.00

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.02 mm Predicted from P-Disp Total settlement = 0.00 mm No settlement due to wall deflection as the retaining

walls will be sufficiently braced preventing movement

Change in vertical movement, Δ = 0.02 mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, δ_h = 0.00 mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	MH 3

Input parameters:

Wall Length, L = 8.0 m m

Wall Height, H = 7.0 m

Proposed basement depth = 3.00 m

L/H = 1.14

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm

Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	OM 1

Input parameters:

 $Wall \ Length, \ L = \ 21.0 \ m$ $Wall \ Height, \ H = \ 20.5 \ m$ $Proposed \ basement \ depth = \ 3.00 \ m$

L/H = 1.02

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.02 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.02$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	OM 2

Input parameters:

Wall Length, L = 19.0 m
Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m L/H = 0.93

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.03 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.03$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	270GS 1

Input parameters:

 $Wall \ Length, \ L = 2.0 \qquad m$ $Wall \ Height, \ H = 24.0 \qquad m$ $Proposed \ basement \ depth = 3.00 \qquad m$

L/H = 0.08

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	270GS 2

Input parameters:

Wall Length, L = 2.0 m
Wall Height, H = 24.0 m

Proposed basement depth = 3.00 m

L/H = 0.08

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm

Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	270GS 3

Input parameters:

 $Wall \ Length, \ L = 2.0 \qquad m$ $Wall \ Height, \ H = 24.0 \qquad m$ $Proposed \ basement \ depth = 0.50 \qquad m$

0.08

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm
Predicted from P-Disp

L/H=

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	260GS 1

Input parameters:

 $Wall \ Length, \ L = 12.0 \qquad m$ $Wall \ Height, \ H = 20.5 \qquad m$ $Proposed \ basement \ depth = 3.00 \qquad m$

L/H = 0.59

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	260GS 2

Input parameters:

Wall Length, L = 3.0 m
Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m

L/H = 0.15

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm

Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	260GS 3

Input parameters:

Wall Length, L = 3.0 m m

Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m

0.15

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm
Predicted from P-Disp

L/H=

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.00$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	260GS 4

Input parameters:

Wall Length, L = 3.5 m Wall Height, H = 20.5 m Proposed basement depth = 3.00

> L/H= 0.17

m

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.00 mm Predicted from P-Disp

> Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

> Change in vertical movement, Δ = 0.00 mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, δ_h = 0.00 mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	260GS 5

Input parameters:

Wall Length, L = 9.0 m
Wall Height, H = 20.5 m

Proposed basement depth = 3.00 m

L/H = 0.44

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	26OGS 6

Input parameters:

Wall Length, L = 6.0 m

Wall Height, H = 7.0 m

Proposed basement depth = 3.00 m

L/H = 0.86

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.03 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.03$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.70$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	26OGS 7

Input parameters:

Wall Length, L = 5.0 m m

Wall Height, H = 7.0 m

Proposed basement depth = 3.00 m

L/H = 0.71

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.04 mm
Predicted from P-Disp

Total settlement = mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.04$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.80$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations



Project Number	J17059
Revision	AT
Wall Reference	26OGS 9

Input parameters:

Wall Length, L = 5.0 m
Wall Height, H = 7.0 m

Proposed basement depth = 3.00 m

L/H = 0.71

Vertical Displacement Behind Wall Prediction:

Differential total heave = 0.01 mm
Predicted from P-Disp

Total settlement = 0.00 mm

No settlement due to wall deflection as the retaining walls will be sufficiently braced preventing movement

Change in vertical movement, $\Delta = 0.01$ mm

Horizontal Displacement Behind Wall Prediction:

Change in horizontal movement, $\delta_h = 0.00$ mm

Predicted from CIRIA C580 (Fig 2.11a) assuming excavation in front of a wall in stiff clay and based on 2 mm horizontal movement at wall on the basis of a 1 m excavation below the existing foundations

Geotechnical & Environmental Associates (GEA) is an engineer-led and client-focused independent specialist providing a complete range of geotechnical and contaminated land investigation, analytical and consultancy services to the property and construction industries.

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