GROUND MOVEMENT ASSESSMENT REPORT

Royal Academy of Dramatic Arts
16-18 Chenies Street
London WC1E 7EX

Client: Royal Academy of Dramatic Arts

J15215

October 2018




GEA Geotechnical & Environmental Associates

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1.0 INTRODUCTION

Geotechnical and Environmental Associates (GEA) has been commissioned by Sinclair Johnston and Partners (SJ&P), on behalf of the Royal Academy of Dramatic Art (RADA), to update a ground movement assessment for the proposed extension of an existing basement at RADA's site at 16-18 Chenies Street, London, WC1E 7EX.

A Site Investigation and Basement Impact Assessment has previously been carried out by GEA (report ref J15215A, October 2018) and the findings of this report, along with an additional borehole by others, have been used in the derivation of parameters for use in this assessment.

A Ground Movement Assessment was undertaken for the previous scheme and developed through three issues between December 2015 and March 2016 under direction from Price and Myers as the consulting engineer. These formed part of a planning application and in 2016 the final issue received approval from Campbell Reith who were acting as auditors on behalf of the London Borough of Camden.

The purpose of this assessment has been to develop the previous assessment in respect of any effects of the proposed basement construction upon nearby sensitive structures.

1.1 Proposed Development

It is proposed to extend the existing single-storey basement that is present beneath the Drill Hall at No 16 Chenies Street as well as extending an existing basement beneath No 18 Chenies Street. The extension below No 16 is already at about 1.9 m depth and will be extended laterally by some 7 m and deepened by approximately 0.9 m. Further to the previous GMA, a 3.65 m deep corridor has been extended. The existing basement at No 18 Chenies Street will be extended by some 5 m laterally. The basement extensions will be the same depth as the existing, of 2.8 m below ground level but involving excavation to 3.33 m depth.

This report is specific to the proposed development and the advice herein should be reviewed if the development proposals are amended.

1.2 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, gas or groundwater samples tested; no liability can be accepted for information in other data sources or conditions not revealed by the sampling or testing. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by GEA.

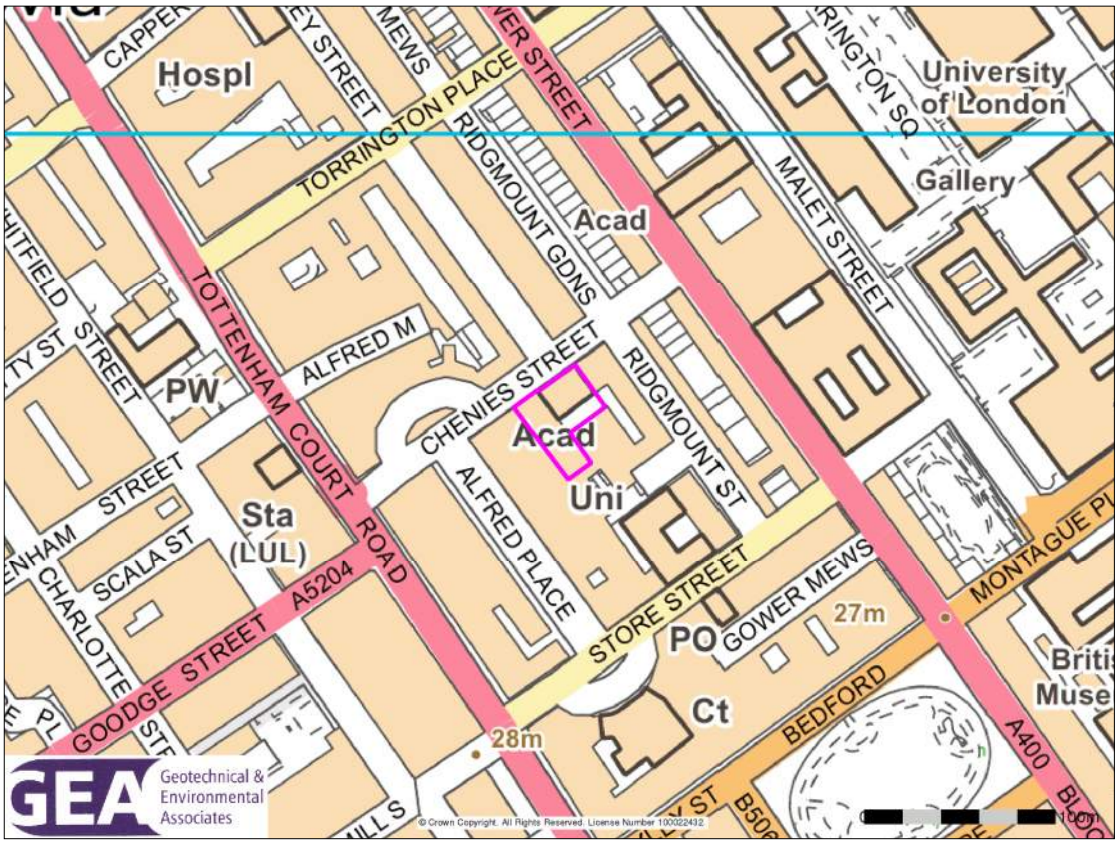
2.0 THE SITE

2.1 Site Description

The site is located in the London Borough of Camden, approximately 150 m northwest of the British Museum. It is bounded to the north by Chenies Street with access to the rear of the building via Ridgmount Street to the east and by five-storey and seven-storey buildings to the

east and west respectively. It may be additionally located by National Grid Reference 529670, 181850 and is shown on the map extract overleaf.

The site is accessed at the front of the building, and is roughly L shaped, measuring approximately 45 m by 40 m; it is occupied by the Royal Academy of Dramatic Arts (RADA), a three-storey Victorian brick building with a single level basement. The site is devoid of vegetation and sensibly levelled.



3.0 SUMMARY OF GROUND CONDITIONS

The previous site investigation has been supplemented by additional investigation points and confirmed the findings of the previous work in that, based on all of the borehole data, the updated ground model for the site generally comprises a significant thickness of made ground, overlying the Lynch Hill Gravel, which is in turn underlain by the London Clay and at depth the Lambeth Group.

The made ground generally comprised brownish grey clay with fragments of brick, concrete, mortar and ash and extended to depths of between 0.80 m and 5.50 m (23.78 m OD and 22.48 m OD). The Lynch Hill Gravel extended to depths of between 3.00 m and 9.60 m (21.00 m OD and 19.01 m OD) and generally comprised an upper clay horizon, overlying varying proportions of sand and gravel with pockets and bands of clay locally encountered. The London Clay comprised an upper thin horizon of weathered brown silty sandy clay, overlying an unweathered stiff becoming very stiff dark grey silty fissured clay with varying proportions of silt and sand, shell fragments, grey burrows and speckles of mica. This stratum was found to extend to depths of 22.60 m (3.90 m OD) and 24.70 m (4.10 m OD). The Lambeth Group comprised very stiff locally water softened multi-coloured silty sandy clay with rare fragments of mudstone and was proved to a depth of 33.00 m (-3.50 m OD).

Groundwater is present within the Lynch Hill Gravel at levels of between 21.03 m OD and 20.32 m OD.

A borehole record from the adjacent Alfred Street building indicates that the London Clay extends to a depth of 26.0 m whereupon the soils of the Lambeth Group (listed as the Woolwich and Reading Beds) were encountered and underlain in turn by Thanet Sand at 38.1 m and ultimately chalk at 42.2 m.

Groundwater was not encountered in the boreholes during drilling, but subsequent monitoring of standpipes has measured water at a depth of 5.45 m.

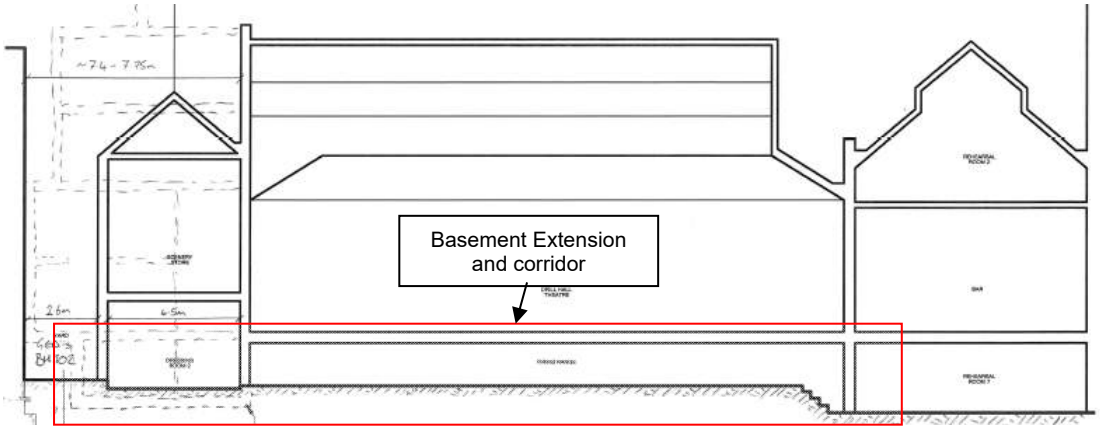
3.1 Surrounding Structures

This assessment of ground movements has been undertaken to determine the potential for damage to No 16 Chenies Street and for No 18 Chenies Street as well as the University of Law building and its infill building that abuts No 16 Chenies Street.

4.0 CONSTRUCTION SEQUENCE

4.1 16 Chenies Street

A section through the proposed building at No 16 Chenies Street including its basement is included below.



For the purposes of the ground movement assessment, the existing external ground level has been taken as 0.0 m and the proposed basement will be formed at depths between 1.25 m and 3.65 m deeper than at present; the greater depth representing a new corridor running parallel to the existing basement. The underpinning of the external walls will be through traditional methods and will deepen their foundations by around 0.9 m to bear at a depth 2.8 m from the existing ground level.

The new structure that is to be formed within the basement extension is to be supported upon piled foundations and will be completely independent of the existing structure. The drawings within the Construction Method Statement (CMS) show that the piles are relatively widely spaced and therefore can be deemed to act singly. On this basis the loading of the piles will not affect the existing building but the limited unloading due to the basement deepening will cause a minor degree of heave. SJ&P have provided drawings that indicate the unloading

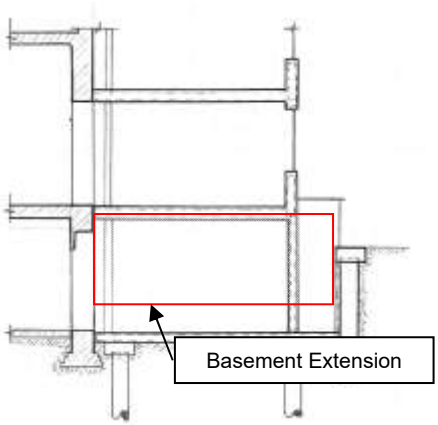
effects of the development and also the reloading information for the remaining parts of the building. The reloading occurs where new spread foundations are to be cast or where existing walls are to support additional load. For the purpose of this analysis, the unloading and subsequent loading at basement level will be applied at depth of generally 2.80 m below existing ground level, although as deep as 3.65 m beneath the new corridor. The appended results graphs show the movements at 2.8 m below existing ground level, the level of the new foundations.

The construction sequence has been modelled at three stages. These are short term unloading only, short term unloading and reloading and then unloading and reloading in the long term when reversion to drained soil parameters has been assumed to take place.

4.2 18 Chenies Street

A section through the proposed building at No 18 Chenies Street including its basement is included below.

The section, right, shows the location of a small length of bored pile wall which enables the lateral extension of the existing basement by 5.0 m.



The wall is to retain approximately 3.3 m of soil and will initially act as a cantilever with propping force provided in the long term by the basement slab and ground beams.

For such a retained height it is considered that a bored pile wall of 450 mm diameter contiguous piles should be sufficient and that with a ratio of embedded length to exposed length of roughly 2:1 for a cantilevered wall, the pile lengths may be expected to be about 9.0 m.

5.0 GROUND MOVEMENTS

An assessment of ground movements within and surrounding the excavation has been undertaken using the X_Disp and P-Disp computer programs licensed from the OASYS suite of geotechnical modelling software from Arup. These programs are commonly used within the ground engineering industry and are considered to be appropriate tools for this analysis.

The X-Disp program has been used to predict ground movements likely to arise from the construction of the proposed basement. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement) which occur due to the installation of piling and underpinning together and subsequent excavation.

The analysis of potential ground movements within the excavation, as a result of unloading of the underlying soils and subsequent reloading as the building is constructed, has been carried out using the Oasys P-Disp Version 19.4 software package and is based on the assumption that the soils behave elastically, which provides a reasonable approximation to soil behaviour at small strains.

For the purpose of these analyses, the corners have been defined by x and y coordinates, with the x-direction roughly perpendicular to Chenies Street and the y-direction parallel with the same road. Vertical movement is in the z-direction.

The output movement contour plots are included within the appendix along with the full data set of results and line graphs for the walls analysed.

5.1 Movements Surrounding the Excavations

5.1.1 Model Used

For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are based on the default values CIRIA report C760[1]. The C760 movements were derived from a number of historic case studies of the short term movements that result from wall installation and basement excavation.

Given the limited extent of the mass concrete underpinning it is deemed appropriate to adopt the ground movement curves for 'no horizontal and vertical movement' for this analysis.

On the basis of the notes in Section 4.2 above, a pile length of 9.0 m has been assumed along with a maximum basement excavation depth of 3.3 m. Groundwater has not been encountered within the proposed basement depth and therefore a contiguous bored pile wall is deemed appropriate; a lining wall will provide long term water-tightness. The piled wall, which will act as a cantilever, falls into the low stiffness category in C760.

5.1.2 Results

The X-Disp analysis has been used to estimate the movements behind the walls resulting from pile installation and basement excavation. This includes the settlement of the ground (vertical movement) and the lateral movement of soil behind the wall (horizontal movement). The contour graphs of these movement predictions are appended for the piling phase together with the total movement prediction which combined the effects. For clarity the graphs show the movements at a depth of 2.8 m below existing ground level, the level of the new foundations.

The following values of vertical and horizontal movement are those occurring immediately behind the piled wall and reduce to zero at the distance noted as the maximum lateral influence.

Phase of Works (CIRIA C760 Movement Curve)	Maximum Movements at Existing Ground Level of 0.0 m	
	Vertical Settlement (mm) [Maximum lateral influence (m)]	Horizontal Movement (mm) [Maximum lateral influence (m)]
Piling Phase (C760 Contiguous Bored Pile Wall)	<4 [18.0]	<4 [13.5]
Combined Piling and Basement Excavation Phases (Excavation in front of a low stiffness wall)	10 [12.0]	10 to 16 [12.0]

[1] Gaba, A, Hardy S, Doughty, L, Powrie, W and Selemetas, D (2017) *Guidance on Embedded Retaining Wall Design.* CIRIA Report C760.

5.2 Movements within the Excavations

5.2.1 Model Used

At this site the loading configurations supplied by SJ&P indicate that the various walls and slab areas will be subject to unloading and different walls and areas will be reloaded. The annotated drawings indicate the imposed load increases are relatively modest and the maximum unloading is 60 kN/m^2. Where there is a net unloading of the London Clay, there will be a reduction in vertical stress in the short term that will cause heave to take place. Undrained soil parameters have been used to estimate the potential short term movements, which include the "immediate" or elastic movements as a result of the basement excavation. Drained parameters have been used to provide an estimate of the total long-term movement.

The elastic analysis requires values of soil stiffness at various levels to calculate displacements. Values of stiffness for the soils at this site are readily available from published data and well-established methods have been used to provide our estimates. These relate values of E_u and E', the undrained and drained stiffness respectively, to values of undrained cohesion, as described by Padfield and Sharrock[2] and Butler[3] and more recently by O'Brien and Sharp[4]. Relationships of E_u = 500 C_u and E' = 300 C_u for the cohesive soils have been used to obtain values of Young's modulus. More recent published data[5] indicates stiffness values of 750 x Cu for the London Clay and a ratio of E' to Eu of 0.75 but it is considered that the use of the more conservative values provides a sensible approach for this site at this stage in the design.

The soil parameters used in this assessment are tabulated below.

Stratum	Depth range (m)	Eu (MPa)	E' (MPa)
Made Ground	G/L to 3.3	25	15
Firm Clay	3.3 – 4.1	37.5	22.5
Lynch Hill Gravel	4.1 – 6.3	54	54
London Clay	6.3 – 20	55 – 108	33 – 64.8
London Clay	20 – 26	55	108

It is noted that the made ground extended to a depth of 5.0 m in Borehole No 1 beyond the end of the building. This thickness of made ground is considered to derive from the Dallas House building that stood on that part of the site, but was demolished following World War II, such that it is not considered to be representative of the typical conditions beneath the site. The ground conditions in the table above are based on GEA Borehole Nos 101 and 103 to 106 which are essentially consistent with the findings of LBH Borehole No 1 and therefore considered to be a reliable representation of the ground conditions on the wider site.

2 Padfield CJ and Sharrock MJ (1983) *Settlement of structures on clay soils*. CIRIA Special Publication 27
3 Butler FG (1974) *Heavily overconsolidated clays: a state of the art review*. Proc Conf Settlement of Structures, Cambridge, 531-578, Pentech Press, Lond
4 O'Brien AS and Sharp P (2001) *Settlement and heave of overconsolidated clays - a simplified non-linear method.* Part Two, Ground Engineering, Nov 2001, 48-53
5 Burland JB, Standing, JR, and Jardine, FM (2001) *Building response to tunnelling, case studies from construction of the Jubilee Line Extension* CIRIA Special Publication 200

A rigid boundary for the analysis has been set within the Lambeth Group at a depth of 26.0 m below existing ground level. Below this depth the soils are considered essentially incompressible.

5.2.2 Results

The P-Disp analysis indicates that, by the time the basement construction is complete, less than 8 mm of heave is likely to have taken place at the centre of the proposed extension, whilst settlement is not shown to be dominant. This ties in with the fact that new vertical loading will be very limited since it is to be largely carried on piles.

Following completion of the basement construction and application of new loads, the heave is predicted to be less than 10 mm, settlement under subsequent reloading is not predicted for the external walls. For clarity the appended graphs show the movements at a depth of 2.8 m below existing ground level, the level of the new foundations.

The results of the P-Disp analysis can be used to indicate the likely impact of the proposed basement construction beyond the site boundaries. At a distance of about 5.0 m away from the basement extension excavation, the total movements reduce to roughly 2.0 mm of heave and at a similar distance from the external walls. Movements outside the excavation will be constrained to a certain extent by the presence of the new retaining walls and off-set to a large extend by the movements during pile and underpin installation. The estimated movements obtained from the analysis may therefore not occur in practice.

Basement Location	Movement (mm) Heave –ve / Settlement +ve		
	Short-term Heave (Unloading / excavation phase)	Short-term Heave / Settlement (Post-construction)	Total Heave / Settlement
16 Chenies Street	-5 to -8	-5 to -8	-5 to -10
18 Chenies Street	-5 to -8	-5 to -8	-5 to -10

A void or layer of compressible material may need to be incorporated into the design to accommodate these potential long term movements. This analysis suggests that if such a compressible material is to be used beneath the slab, it will need to be designed to be able to resist the limited potential uplift forces generated by the ground movements and relating to less than 10 mm of total uplift movement.

6.0 DAMAGE ASSESSMENT

In addition to the above assessment of the likely movements that will result from the proposed development, the neighbouring buildings are considered to be sensitive structures, requiring Building Damage Assessments, on the basis of the classification given in C760[1].

All structures are shown on the appended site plan.

6.1 Damage to Neighbouring Structures

The movements resulting from the construction of the basement extension have been considered with the infill wall to the Law Building taken as being sensitive to the ground movements as well as the four main walls of No 16 Chenies Street, the retained wall at No 18 Chenies Street and the nearest two walls of the University of law building.

A building damage assessment is included within the X-Disp analysis and indicates that all walls other than one segment in each of the Eastern wall of 16 Chenies Street and the Infill Building will suffer movement equivalent to Damage Category 0 – 'Negligible' or Category 1 – 'Very Slight'. The other two segments are indicated to be Category 2 – 'Slight'. However consideration of the wall as a whole, where individual segments of hogging or sagging, are combined to give a more realistic pattern of movement indicates that the effect will be Category 0 – 'Negligible'.

Analysis of the line plot for the wall to the Law Building Infill and 16 Chenies St East taken from the P-Disp analysis shows that the total movement will generate 'negligible' damage with the deflection ratios shown as much less than 1 in 1000 through either the 'hogging' heave movements or 'sagging' settlements.

6.2 Monitoring of Ground Movements

The predictions of ground movement based on the ground movement analysis should be checked by monitoring of the adjacent properties and structures and following confirmation of the foundation arrangements. The structures to be monitored during the construction stages should include the neighbouring structures. Condition surveys of the above existing structures should be carried out before and after the proposed works.

However, it should be remembered that the context is that this is a small extension to an existing basement and that the movements predicted are relatively small.

The precise monitoring strategy will be developed at a later stage and it will be subject to discussions and agreements with the owners of the adjacent structures under the obligations of the Party Wall Act. Contingency measures will be implemented if movements of the adjacent structures exceed predefined trigger levels. Both contingency measures and trigger levels will need to be developed within a future monitoring specification for the works.

7.0 CONCLUSIONS

The analysis has concluded that the predicted damage to the neighbouring properties from the construction of the basement extension would generally be 'Negligible' or 'very slight' for which the damage that would occur would fall within the acceptable limits. It is recommended that movement monitoring is carried out on all structures prior to and during the proposed basement construction.

The separate phases of work, including excavation of the proposed basement, will in practice be separated by a number of weeks during which time construction of permanent supports, basement slab and retaining wall curing will take place. This will provide an opportunity for the ground movements during and immediately after underpin construction to be measured and the data acquired can be fed back into the design and compared with the predicted values. Such a comparison will allow the ground model to be reviewed and the predicted wall movements to be reassessed prior to the main excavation taking place so that propping arrangements can be adjusted if required.

APPENDICES

X-DISP ANALYSIS

Pile and Underpinning Installation Movement Contour Plots and Tabular Data

Excavation Movement Contour Plots and Tabular Data

P-DISP ANALYSIS

Short Term Movement Contour Plots – Unloading

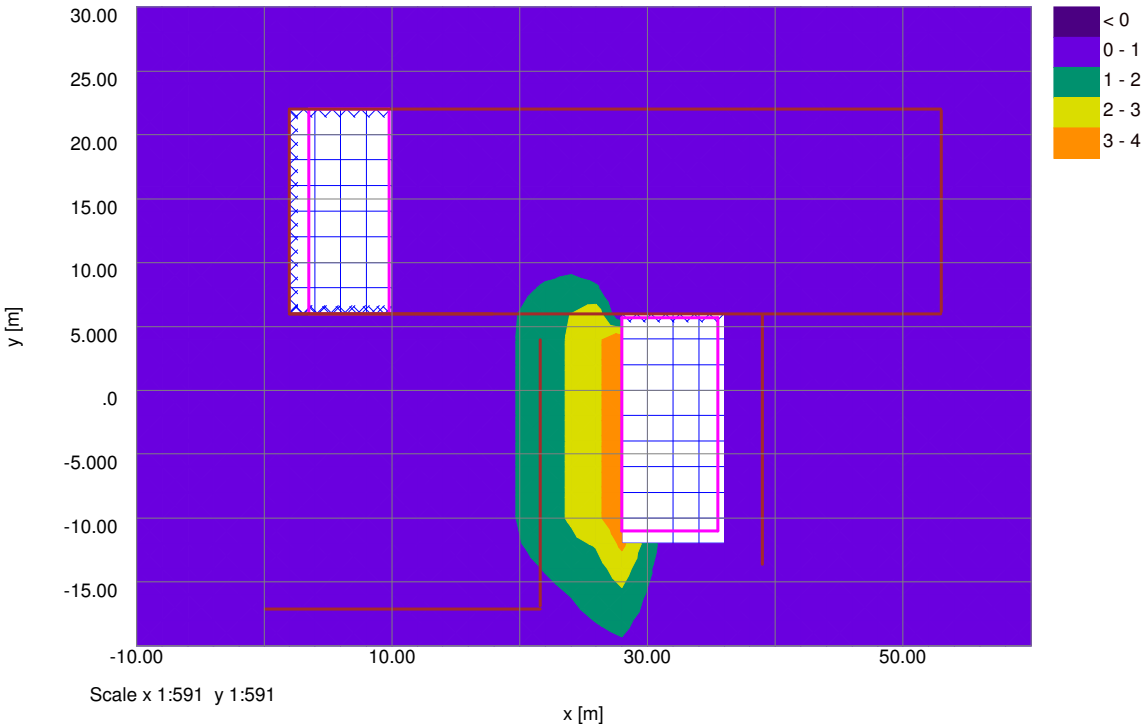
Short Term Movement Contour Plots – Reloading

Total Movement Contour Plots

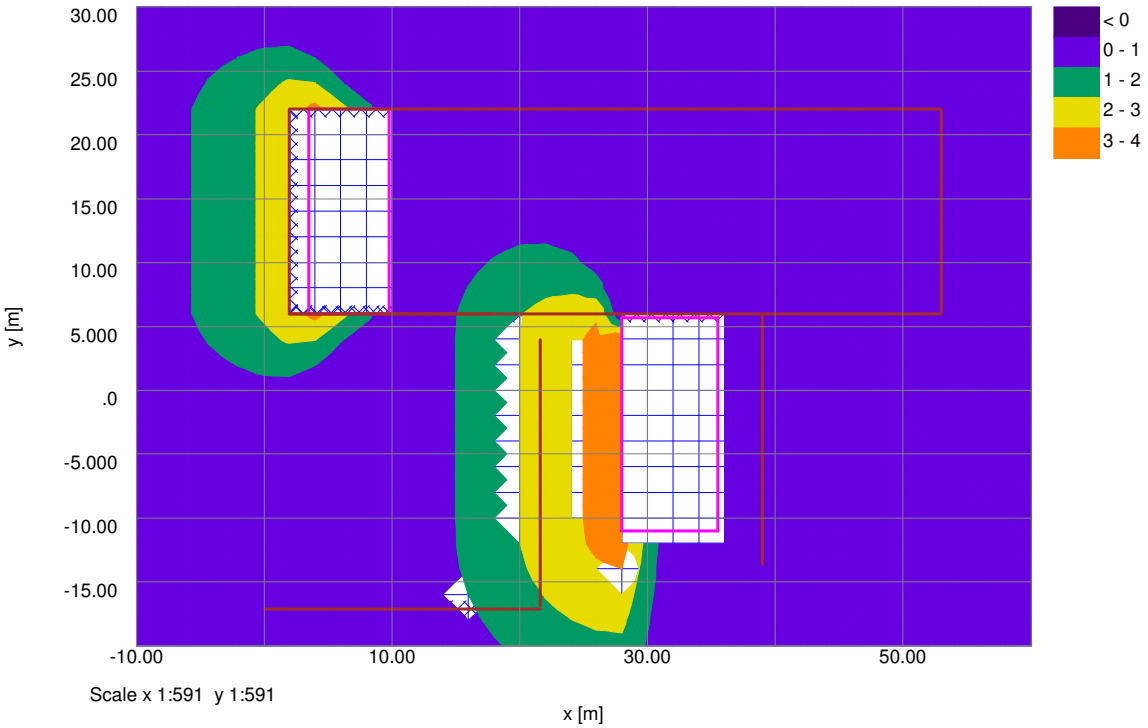
Cross Section Line Plots

Basement Plan and Loading Information

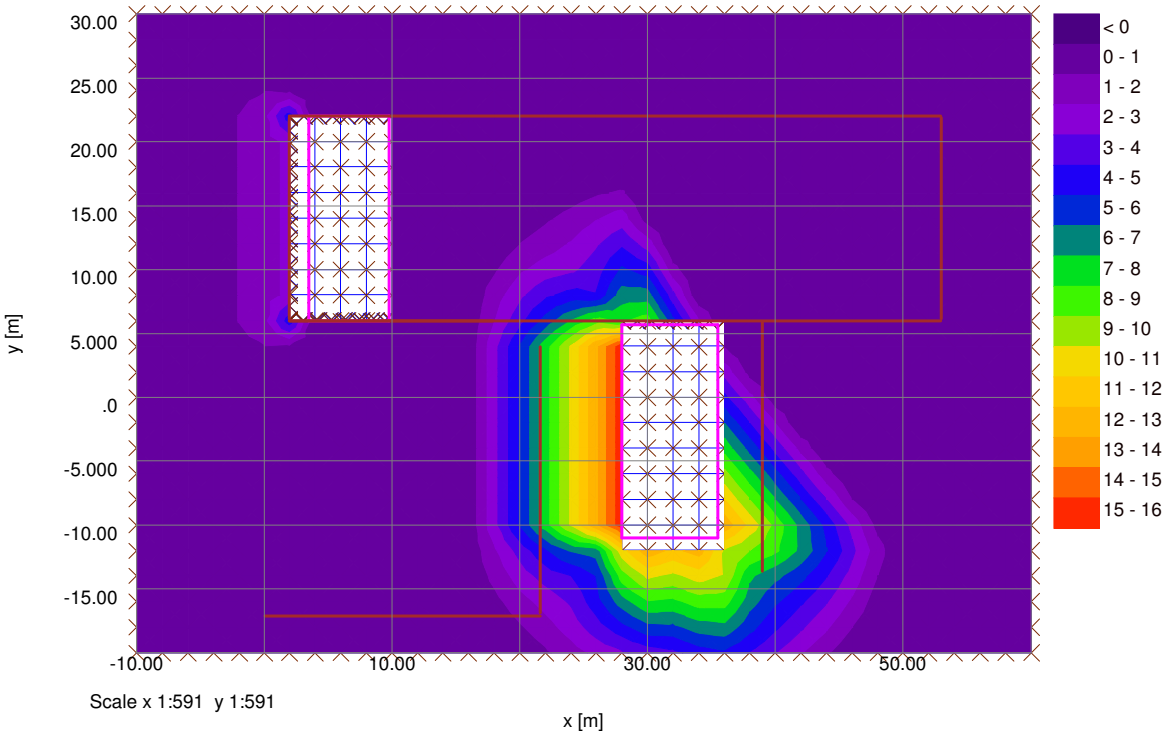
Horizontal Displacement Contours: Grid 1 (level -2.800m) Interval 1mm



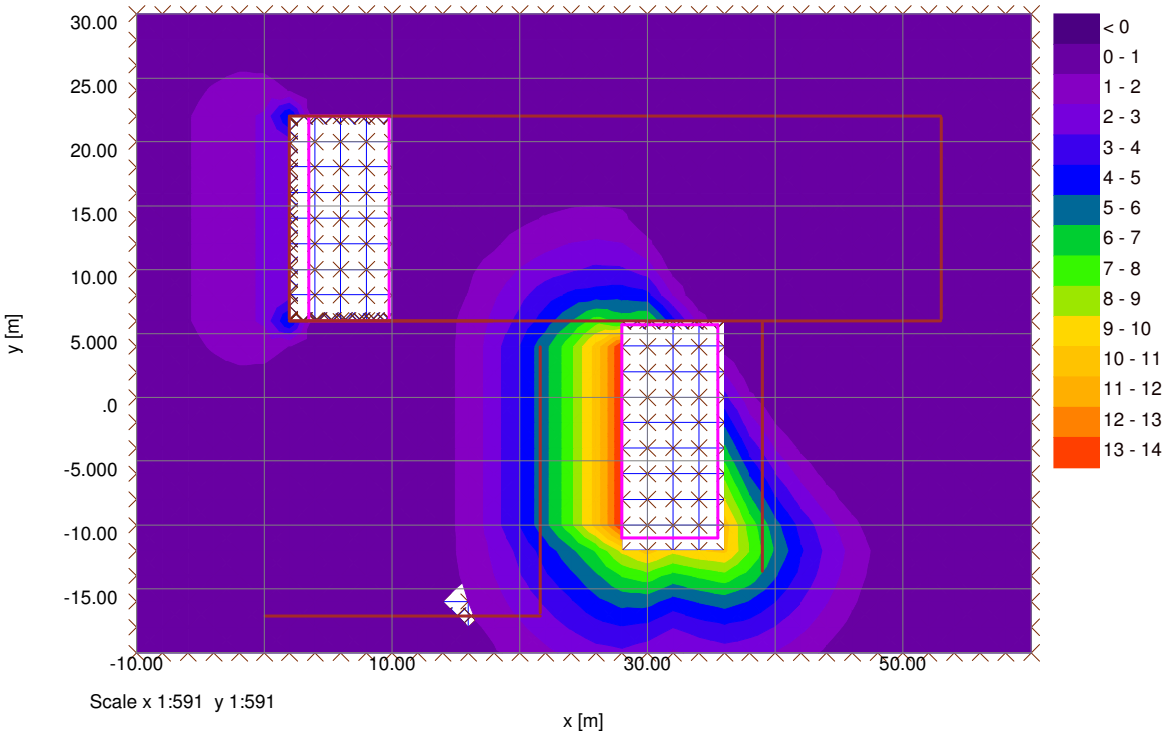
Vertical Settlement Contours: Grid 1 (level -2.800m) (Interval 1mm)



Horizontal Displacement Contours: Grid 1 (level -2.800m) Interval 1mm



Vertical Settlement Contours: Grid 1 (level -2.800m) (Interval 1mm)



Scale x 1:591 y 1:591

Problem Type

Problem Type : Tunnelling and Embedded Wall Excavations

Displacement Data

Type	Name	Direction of extrusion	Point/Line/Line for extrusion						No. of intervals across extrusion/line	Extrusion depth	No. of intervals along extrusion	Calculate	Surface type for tunnels
			First point			Second point							
			X [m]	Y [m]	Z(level) [m]	X [m]	Y [m]	Z(level) [m]		[m]			
Grid	Grid 1	Global X	-10.00000	-20.00000	-2.80000	-	30.00000	-2.80000	25	70.00000	35	Yes	Surface
Line	Law Bdg Infill	-	2.00000	6.00000	-1.50000	18.00000	6.00000	-1.50000	15	-	-	Yes	Surface
Line	16 Chenies Wst	-	2.00000	22.00000	-2.80000	53.00000	22.00000	-2.80000	45	-	-	Yes	Surface
Line	16 Chenies Sth	-	2.00000	21.90000	-2.80000	2.00000	6.10000	-2.80000	15	-	-	Yes	Surface
Line	16 Chenies Est	-	2.00000	6.00000	-2.80000	53.00000	6.00000	-2.80000	45	-	-	Yes	Surface
Line	16 Chenies Nth	-	53.00000	21.90000	-2.80000	53.00000	6.10000	-2.80000	15	-	-	Yes	Surface
Line	18 Chenies Retained Wall	-	39.00000	-13.60000	-3.50000	39.00000	6.00000	-3.50000	20	-	-	Yes	Surface
Line	Law Bdg Nth	-	21.60000	4.00000	-2.80000	21.60000	-17.00000	-2.80000	20	-	-	Yes	Surface
Line	Law Bbg Est	-	21.60000	-17.10000	-2.80000	0.00000	-17.10000	-2.80000	20	-	-	Yes	Surface

Imported Displacements

The following data points and displacements were found in the import file Xdisp1 Run 4 Installation.csv.

Ref.	Coordinates			Displacements			
	x [m]	y [m]	z [m]	x [mm]	y [mm]	z [mm]	
1	-10.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
2	-8.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
3	-6.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
4	-4.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
5	-2.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
6	0.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
7	2.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
8	4.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
9	6.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
10	8.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
11	10.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
12	12.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
13	14.00000	-20.00000	-2.80000	0.00000	0.00000	0.27134	1
14	16.00000	-20.00000	-2.80000	0.00000	0.00000	0.60000	1
15	18.00000	-20.00000	-2.80000	0.00550	0.00481	0.90928	1
16	20.00000	-20.00000	-2.80000	0.12054	0.14003	1.19168	1
17	22.00000	-20.00000	-2.80000	0.18143	0.30325	1.43667	1
18	24.00000	-20.00000	-2.80000	0.17848	0.49188	1.63023	1
19	26.00000	-20.00000	-2.80000	0.11090	0.68577	1.75609	1
20	28.00000	-20.00000	-2.80000	0.00000	0.84195	1.80000	1
21	30.00000	-20.00000	-2.80000	0.00000	0.42098	0.90000	1
22	32.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
23	34.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
24	36.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
25	38.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
26	40.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
27	42.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
28	44.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
29	46.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
30	48.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
31	50.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
32	52.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
33	54.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
34	56.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
35	58.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
36	60.00000	-20.00000	-2.80000	0.00000	0.00000	0.00000	1
37	-10.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
38	-8.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
39	-6.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
40	-4.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
41	-2.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
42	0.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
43	2.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
44	4.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
45	6.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
46	8.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
47	10.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
48	12.00000	-18.00000	-2.80000	0.00000	0.00000	0.10715	1
49	14.00000	-18.00000	-2.80000	0.00000	0.00000	0.46950	1
50	16.00000	-18.00000	-2.80000	0.00000	0.00000	0.82151	1
51	18.00000	-18.00000	-2.80000	0.14121	0.08983	1.15869	1
52	20.00000	-18.00000	-2.80000	0.28191	0.23785	1.47397	1
53	22.00000	-18.00000	-2.80000	0.35940	0.43727	1.75609	1
54	24.00000	-18.00000	-2.80000	0.34484	0.69856	1.98755	1
55	26.00000	-18.00000	-2.80000	0.21665	1.00616	2.14398	1
56	28.00000	-18.00000	-2.80000	0.00000	1.28988	2.20000	1
57	30.00000	-18.00000	-2.80000	0.00000	0.64494	1.10000	1
58	32.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
59	34.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
60	36.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
61	38.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
62	40.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
63	42.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
64	44.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
65	46.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
66	48.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
67	50.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
68	52.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
69	54.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
70	56.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
71	58.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
72	60.00000	-18.00000	-2.80000	0.00000	0.00000	0.00000	1
73	-10.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
74	-8.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
75	-6.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
76	-4.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
77	-2.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
78	0.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
79	2.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
80	4.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
81	6.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
82	8.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
83	10.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
84	12.00000	-16.00000	-2.80000	0.00000	0.00000	0.24739	1
85	14.00000	-16.00000	-2.80000	0.00000	0.00000	0.62679	1
86	16.00000	-16.00000	-2.80000	0.06757	0.02268	1.00000	1
87	18.00000	-16.00000	-2.80000	0.29397	0.12311	1.36393	1
88	20.00000	-16.00000	-2.80000	0.48527	0.26781	1.71320	1
89	22.00000	-16.00000	-2.80000	0.61348	0.48651	2.03795	1
90	24.00000	-16.00000	-2.80000	0.61779	0.82043	2.31938	1
91	26.00000	-16.00000	-2.80000	0.41421	1.29571	2.52297	1
92	28.00000	-16.00000	-2.80000	0.00000	1.81942	2.60000	1
93	30.00000	-16.00000	-2.80000	0.00000	0.90971	1.30000	1
94	32.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
95	34.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
96	36.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
97	38.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
98	40.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
99	42.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
100	44.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
101	46.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
102	48.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
103	50.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
104	52.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
105	54.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
106	56.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
107	58.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
108	60.00000	-16.00000	-2.80000	0.00000	0.00000	0.00000	1
109	-10.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
110	-8.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
111	-6.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
112	-4.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
113	-2.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
114	0.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
115	2.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
116	4.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
117	6.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
118	8.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
119	10.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
120	12.00000	-14.00000	-2.80000	0.00000	0.00000	0.34424	1
121	14.00000	-14.00000	-2.80000	0.00000	0.00000	0.73644	1
122	16.00000	-14.00000	-2.80000	0.17050	0.03150	1.12614	1
123	18.00000	-14.00000	-2.80000	0.45267	0.10313	1.51194	1
124	20.00000	-14.00000	-2.80000	0.72392	0.21429	1.89120	1
125	22.00000	-14.00000	-2.80000	0.95959	0.40186	2.25836	1
126	24.00000	-14.00000	-2.80000	1.07407	0.74535	2.60000	1
127	26.00000	-14.00000	-2.80000	0.84237	1.40795	2.87889	1
128	28.00000	-14.00000	-2.80000	0.00000	2.45576	3.00000	1
129	30.00000	-14.00000	-2.80000	0.00000	1.22788	1.50000	1
130	32.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
131	34.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
132	36.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
133	38.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
134	40.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
135	42.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
136	44.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
137	46.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
138	48.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
139	50.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
140	52.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
141	54.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
142	56.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
143	58.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
144	60.00000	-14.00000	-2.80000	0.00000	0.00000	0.00000	1
145	-10.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
146	-8.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
147	-6.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
148	-4.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
149	-2.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
150	0.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
151	2.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
152	4.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
153	6.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
154	8.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
155	10.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
156	12.00000	-12.00000	-2.80000	0.00000	0.00000	0.39376	1
157	14.00000	-12.00000	-2.80000	0.00000	0.00000	0.79287	1
158	16.00000	-12.00000	-2.80000	0.24677	0.01379	1.19168	1
159	18.00000	-12.00000	-2.80000	0.59097	0.04004	1.59003	1
160	20.00000	-12.00000	-2.80000	0.96080	0.08260	1.98755	1
161	22.00000	-12.00000	-2.80000	1.36116	0.15992	2.38345	1
162	24.00000	-12.00000	-2.80000	1.75880	0.32498	2.77538	1
163	26.00000	-12.00000	-2.80000	1.92580	0.80648	3.15279	1
164	28.00000	-12.00000	-2.80000	0.00000	3.22407	3.40000	1
165	30.00000	-12.00000	-2.80000	0.00000	1.61204	1.70000	1
166	32.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
167	34.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
168	36.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
169	38.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
170	40.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
171	42.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
172	44.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
173	46.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
174	48.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
175	50.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
176	52.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
177	54.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
178	56.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
179	58.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
180	60.00000	-12.00000	-2.80000	0.00000	0.00000	0.00000	1
181	-10.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
182	-8.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
183	-6.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
184	-4.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
185	-2.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
186	0.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
187	2.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
188	4.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
189	6.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
190	8.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
191	10.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
192	12.00000	-10.00000	-2.80000	0.00000	0.00000	0.40000	1
193	14.00000	-10.00000	-2.80000	0.00000	0.00000	0.80000	1
194	16.00000	-10.00000	-2.80000	0.26803	0.00000	1.20000	1
195	18.00000	-10.00000	-2.80000	0.64073	0.00000	1.60000	1
196	20.00000	-10.00000	-2.80000	1.05728	0.00000	2.00000	1
197	22.00000	-10.00000	-2.80000	1.54287	0.00000	2.40000	1
198	24.00000	-10.00000	-2.80000	2.12267	0.00000	2.80000	1
199	26.00000	-10.00000	-2.80000	2.82185	0.00000	3.20000	1
200	28.00000	-10.00000	-2.80000	3.66559	0.00000	3.60000	1
201	30.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
202	32.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
203	34.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
204	36.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
205	38.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
206	40.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
207	42.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
208	44.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
209	46.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
210	48.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
211	50.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
212	52.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
213	54.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
214	56.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
215	58.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
216	60.00000	-10.00000	-2.80000	0.00000	0.00000	0.00000	1
217	-10.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
218	-8.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
219	-6.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
220	-4.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
221	-2.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
222	0.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
223	2.00000	-8.00000	-2.80000	0.00000	0.00000	0.00163	1
224	4.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
225	6.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
226	8.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
227	10.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
228	12.00000	-8.00000	-2.80000	0.00000	0.00000	0.40000	1
229	14.00000	-8.00000	-2.80000	0.00000	0.00000	0.80000	1
230	16.00000	-8.00000	-2.80000	0.26803	0.00000	1.20000	1
231	18.00000	-8.00000	-2.80000	0.64073	0.00000	1.60000	1
232	20.00000	-8.00000	-2.80000	1.05728	0.00000	2.00000	1
233	22.00000	-8.00000	-2.80000	1.54287	0.00000	2.40000	1
234	24.00000	-8.00000	-2.80000	2.12267	0.00000	2.80000	1
235	26.00000	-8.00000	-2.80000	2.82185	0.00000	3.20000	1
236	28.00000	-8.00000	-2.80000	3.66559	0.00000	3.60000	1
237	30.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
238	32.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
239	34.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
240	36.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
241	38.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
242	40.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
243	42.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
244	44.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
245	46.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
246	48.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
247	50.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
248	52.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
249	54.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
250	56.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
251	58.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
252	60.00000	-8.00000	-2.80000	0.00000	0.00000	0.00000	1
253	-10.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
254	-8.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
255	-6.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
256	-4.00000	-6.00000	-2.80000	0.00000	0.00000	0.00349	1
257	-2.00000	-6.00000	-2.80000	0.00000	0.00000	0.05470	1
258	0.00000	-6.00000	-2.80000	0.00000	0.00000	0.06143	1
259	2.00000	-6.00000	-2.80000	0.00000	0.00000	0.03335	1
260	4.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
261	6.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
262	8.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
263	10.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
264	12.00000	-6.00000	-2.80000	0.00000	0.00000	0.40000	1
265	14.00000	-6.00000	-2.80000	0.00000	0.00000	0.80000	1
266	16.00000	-6.00000	-2.80000	0.26803	0.00000	1.20000	1
267	18.00000	-6.00000	-2.80000	0.64073	0.00000	1.60000	1
268	20.00000	-6.00000	-2.80000	1.05728	0.00000	2.00000	1
269	22.00000	-6.00000	-2.80000	1.54287	0.00000	2.40000	1
270	24.00000	-6.00000	-2.80000	2.12267	0.00000	2.80000	1
271	26.00000	-6.00000	-2.80000	2.82185	0.00000	3.20000	1
272	28.00000	-6.00000	-2.80000	3.66559	0.00000	3.60000	1
273	30.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
274	32.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
275	34.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
276	36.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
277	38.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
278	40.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
279	42.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
280	44.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
281	46.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
282	48.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
283	50.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
284	52.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
285	54.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
286	56.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
287	58.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
288	60.00000	-6.00000	-2.80000	0.00000	0.00000	0.00000	1
289	-10.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
290	-8.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
291	-6.00000	-4.00000	-2.80000	0.00000	0.00000	0.03936	1
292	-4.00000	-4.00000	-2.80000	0.00000	0.00000	0.13929	1
293	-2.00000	-4.00000	-2.80000	0.00000	0.00000	0.17845	1
294	0.00000	-4.00000	-2.80000	0.00245	0.00000	0.15454	1
295	2.00000	-4.00000	-2.80000	0.00915	0.00000	0.07750	1
296	4.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
297	6.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
298	8.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
299	10.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
300	12.00000	-4.00000	-2.80000	0.00000	0.00000	0.40000	1
301	14.00000	-4.00000	-2.80000	0.00000	0.00000	0.80000	1
302	16.00000	-4.00000	-2.80000	0.26803	0.00000	1.20000	1
303	18.00000	-4.00000	-2.80000	0.64073	0.00000	1.60000	1
304	20.00000	-4.00000	-2.80000	1.05728	0.00000	2.00000	1
305	22.00000	-4.00000	-2.80000	1.54287	0.00000	2.40000	1
306	24.00000	-4.00000	-2.80000	2.12267	0.00000	2.80000	1
307	26.00000	-4.00000	-2.80000	2.82185	0.00000	3.20000	1
308	28.00000	-4.00000	-2.80000	3.66559	0.00000	3.60000	1
309	30.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
310	32.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
311	34.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
312	36.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
313	38.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
314	40.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
315	42.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
316	44.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
317	46.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
318	48.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
319	50.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
320	52.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
321	54.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
322	56.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
323	58.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
324	60.00000	-4.00000	-2.80000	0.00000	0.00000	0.00000	1
325	-10.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
326	-8.00000	-2.00000	-2.80000	0.00000	0.00000	0.02343	1
327	-6.00000	-2.00000	-2.80000	0.00000	0.00000	0.19741	1
328	-4.00000	-2.00000	-2.80000	0.00000	0.00000	0.31014	1
329	-2.00000	-2.00000	-2.80000	0.06450	0.00000	0.34445	1
330	0.00000	-2.00000	-2.80000	0.09065	0.00000	0.28712	1
331	2.00000	-2.00000	-2.80000	0.05392	0.00000	0.14303	1
332	4.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
333	6.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
334	8.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
335	10.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
336	12.00000	-2.00000	-2.80000	0.00000	0.00000	0.40000	1
337	14.00000	-2.00000	-2.80000	0.00000	0.00000	0.80000	1
338	16.00000	-2.00000	-2.80000	0.26803	0.00000	1.20000	1
339	18.00000	-2.00000	-2.80000	0.64073	0.00000	1.60000	1
340	20.00000	-2.00000	-2.80000	1.05728	0.00000	2.00000	1
341	22.00000	-2.00000	-2.80000	1.54287	0.00000	2.40000	1
342	24.00000	-2.00000	-2.80000	2.12267	0.00000	2.80000	1
343	26.00000	-2.00000	-2.80000	2.82185	0.00000	3.20000	1
344	28.00000	-2.00000	-2.80000	3.66559	0.00000	3.60000	1
345	30.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
346	32.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
347	34.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
348	36.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
349	38.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
350	40.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
351	42.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
352	44.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
353	46.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
354	48.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
355	50.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
356	52.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
357	54.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
358	56.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
359	58.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
360	60.00000	-2.00000	-2.80000	0.00000	0.00000	0.00000	1
361	-10.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
362	-8.00000	0.00000	-2.80000	0.00000	0.00000	0.17053	1
363	-6.00000	0.00000	-2.80000	0.00000	0.00000	0.38020	1
364	-4.00000	0.00000	-2.80000	0.10651	0.00000	0.52428	1
365	-2.00000	0.00000	-2.80000	0.21585	0.00000	0.57253	1
366	0.00000	0.00000	-2.80000	0.23411	0.00000	0.48772	1
367	2.00000	0.00000	-2.80000	0.13452	0.00000	0.25001	1
368	4.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
369	6.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
370	8.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
371	10.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
372	12.00000	0.00000	-2.80000	0.00000	0.00000	0.40000	1
373	14.00000	0.00000	-2.80000	0.00000	0.00000	0.80000	1
374	16.00000	0.00000	-2.80000	0.26803	0.00000	1.20000	1
375	18.00000	0.00000	-2.80000	0.64073	0.00000	1.60000	1
376	20.00000	0.00000	-2.80000	1.05728	0.00000	2.00000	1
377	22.00000	0.00000	-2.80000	1.54287	0.00000	2.40000	1
378	24.00000	0.00000	-2.80000	2.12267	0.00000	2.80000	1
379	26.00000	0.00000	-2.80000	2.82185	0.00000	3.20000	1
380	28.00000	0.00000	-2.80000	3.66559	0.00000	3.60000	1
381	30.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
382	32.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
383	34.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
384	36.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
385	38.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
386	40.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
387	42.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
388	44.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
389	46.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
390	48.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
391	50.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
392	52.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
393	54.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
394	56.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
395	58.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
396	60.00000	0.00000	-2.80000	0.00000	0.00000	0.00000	1
397	-10.00000	2.00000	-2.80000	0.00000	0.00000	0.01958	1
398	-8.00000	2.00000	-2.80000	0.00000	0.00000	0.31857	1
399	-6.00000	2.00000	-2.80000	0.04626	0.00000	0.58095	1
400	-4.00000	2.00000	-2.80000	0.26737	0.00000	0.78442	1
401	-2.00000	2.00000	-2.80000	0.43610	0.00000	0.88746	1
402	0.00000	2.00000	-2.80000	0.48888	0.00000	0.81319	1
403	2.00000	2.00000	-2.80000	0.30659	0.00000	0.45351	1
404	4.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
405	6.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
406	8.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
407	10.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
408	12.00000	2.00000	-2.80000	0.00000	0.00000	0.40000	1
409	14.00000	2.00000	-2.80000	0.00000	0.00000	0.80000	1
410	16.00000	2.00000	-2.80000	0.26803	0.00000	1.20000	1
411	18.00000	2.00000	-2.80000	0.64073	0.00000	1.60000	1
412	20.00000	2.00000	-2.80000	1.05728	0.00000	2.00000	1
413	22.00000	2.00000	-2.80000	1.54287	0.00000	2.40000	1
414	24.00000	2.00000	-2.80000	2.12267	0.00000	2.80000	1
415	26.00000	2.00000	-2.80000	2.82185	0.00000	3.20000	1
416	28.00000	2.00000	-2.80000	3.66559	0.00000	3.60000	1
417	30.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
418	32.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
419	34.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
420	36.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
421	38.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
422	40.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
423	42.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
424	44.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
425	46.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
426	48.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
427	50.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
428	52.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
429	54.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
430	56.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
431	58.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
432	60.00000	2.00000	-2.80000	0.00000	0.00000	0.00000	1
433	-10.00000	4.00000	-2.80000	0.00000	0.00000	0.10018	1
434	-8.00000	4.00000	-2.80000	0.00000	0.00000	0.45007	1
435	-6.00000	4.00000	-2.80000	0.14600	0.00000	0.77968	1
436	-4.00000	4.00000	-2.80000	0.44235	0.00000	1.07397	1
437	-2.00000	4.00000	-2.80000	0.73048	0.00000	1.29884	1
438	0.00000	4.00000	-2.80000	0.94424	0.00000	1.36162	1
439	2.00000	4.00000	-2.80000	0.77474	0.00000	0.95862	1
440	4.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
441	6.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
442	8.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
443	10.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
444	12.00000	4.00000	-2.80000	0.00000	0.00000	0.40000	1
445	14.00000	4.00000	-2.80000	0.00000	0.00000	0.80000	1
446	16.00000	4.00000	-2.80000	0.26803	0.00000	1.20000	1
447	18.00000	4.00000	-2.80000	0.64073	0.00000	1.60000	1
448	20.00000	4.00000	-2.80000	1.05728	0.00000	2.00000	1
449	22.00000	4.00000	-2.80000	1.54287	0.00000	2.40000	1
450	24.00000	4.00000	-2.80000	2.12267	0.00000	2.80000	1
451	26.00000	4.00000	-2.80000	2.82185	0.00000	3.20000	1
452	28.00000	4.00000	-2.80000	3.66559	0.00000	3.60000	1
453	30.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
454	32.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
455	34.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
456	36.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
457	38.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
458	40.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
459	42.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
460	44.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
461	46.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
462	48.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
463	50.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
464	52.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
465	54.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
466	56.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
467	58.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
468	60.00000	4.00000	-2.80000	0.00000	0.00000	0.00000	1
469	-10.00000	6.00000	-2.80000	0.00000	0.00000	0.14000	1
470	-8.00000	6.00000	-2.80000	0.00000	0.00000	0.54000	1
471	-6.00000	6.00000	-2.80000	0.20546	0.00000	0.94000	1
472	-4.00000	6.00000	-2.80000	0.58248	0.00000	1.34000	1
473	-2.00000	6.00000	-2.80000	1.02296	0.00000	1.74000	1
474	0.00000	6.00000	-2.80000	1.56735	0.00000	2.14000	1
475	2.00000	6.00000	-2.80000	2.25610	0.00000	2.54000	1,2,6
476	4.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
477	6.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
478	8.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
479	10.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
480	12.00000	6.00000	-2.80000	0.00000	0.00000	0.39467	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
481	14.00000	6.00000	-2.80000	0.00000	0.00000	0.78845	1
482	16.00000	6.00000	-2.80000	0.26310	0.00000	1.18017	1
483	18.00000	6.00000	-2.80000	0.62764	0.00000	1.56857	1
484	20.00000	6.00000	-2.80000	1.03083	0.00000	1.95118	1
485	22.00000	6.00000	-2.80000	1.49188	0.00000	2.32222	1
486	24.00000	6.00000	-2.80000	2.01811	0.00000	2.66442	1
487	26.00000	6.00000	-2.80000	2.54661	0.00000	2.89263	1
488	28.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
489	30.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
490	32.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
491	34.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
492	36.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
493	38.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
494	40.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
495	42.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
496	44.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
497	46.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
498	48.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
499	50.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
500	52.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
501	54.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
502	56.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
503	58.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
504	60.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1
505	-10.00000	8.00000	-2.80000	0.00000	0.00000	0.14000	1
506	-8.00000	8.00000	-2.80000	0.00000	0.00000	0.54000	1
507	-6.00000	8.00000	-2.80000	0.20546	0.00000	0.94000	1
508	-4.00000	8.00000	-2.80000	0.58248	0.00000	1.34000	1
509	-2.00000	8.00000	-2.80000	1.02296	0.00000	1.74000	1
510	0.00000	8.00000	-2.80000	1.56735	0.00000	2.14000	1
511	2.00000	8.00000	-2.80000	2.25610	0.00000	2.54000	1
512	4.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
513	6.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
514	8.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
515	10.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
516	12.00000	8.00000	-2.80000	0.00000	0.00000	0.33374	1
517	14.00000	8.00000	-2.80000	0.00000	0.00000	0.68343	1
518	16.00000	8.00000	-2.80000	0.20131	0.00000	1.01691	1
519	18.00000	8.00000	-2.80000	0.50519	0.00000	1.32503	1
520	20.00000	8.00000	-2.80000	0.81008	0.00000	1.59030	1
521	22.00000	8.00000	-2.80000	1.09865	0.00000	1.77540	1
522	24.00000	8.00000	-2.80000	1.29091	0.00000	1.78779	1
523	26.00000	8.00000	-2.80000	1.11137	0.00000	1.36260	1
524	28.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
525	30.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
526	32.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
527	34.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
528	36.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
529	38.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
530	40.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
531	42.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
532	44.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
533	46.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
534	48.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
535	50.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
536	52.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
537	54.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
538	56.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
539	58.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
540	60.00000	8.00000	-2.80000	0.00000	0.00000	0.00000	1
541	-10.00000	10.00000	-2.80000	0.00000	0.00000	0.14000	1
542	-8.00000	10.00000	-2.80000	0.00000	0.00000	0.54000	1
543	-6.00000	10.00000	-2.80000	0.20546	0.00000	0.94000	1
544	-4.00000	10.00000	-2.80000	0.58248	0.00000	1.34000	1
545	-2.00000	10.00000	-2.80000	1.02296	0.00000	1.74000	1
546	0.00000	10.00000	-2.80000	1.56735	0.00000	2.14000	1
547	2.00000	10.00000	-2.80000	2.25610	0.00000	2.54000	1
548	4.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
549	6.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
550	8.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
551	10.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
552	12.00000	10.00000	-2.80000	0.00000	0.00000	0.23857	1
553	14.00000	10.00000	-2.80000	0.00000	0.00000	0.54363	1
554	16.00000	10.00000	-2.80000	0.10538	0.00000	0.82044	1
555	18.00000	10.00000	-2.80000	0.34985	0.00000	1.05507	1
556	20.00000	10.00000	-2.80000	0.56589	0.00000	1.22353	1
557	22.00000	10.00000	-2.80000	0.72427	0.00000	1.28297	1
558	24.00000	10.00000	-2.80000	0.75207	0.00000	1.15693	1
559	26.00000	10.00000	-2.80000	0.52517	0.00000	0.73488	1
560	28.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
561	30.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
562	32.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
563	34.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
564	36.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
565	38.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
566	40.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
567	42.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
568	44.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
569	46.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
570	48.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
571	50.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
572	52.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
573	54.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
574	56.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
575	58.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
576	60.00000	10.00000	-2.80000	0.00000	0.00000	0.00000	1
577	-10.00000	12.00000	-2.80000	0.00000	0.00000	0.14000	1
578	-8.00000	12.00000	-2.80000	0.00000	0.00000	0.54000	1
579	-6.00000	12.00000	-2.80000	0.20546	0.00000	0.94000	1
580	-4.00000	12.00000	-2.80000	0.58248	0.00000	1.34000	1
581	-2.00000	12.00000	-2.80000	1.02296	0.00000	1.74000	1
582	0.00000	12.00000	-2.80000	1.56735	0.00000	2.14000	1
583	2.00000	12.00000	-2.80000	2.25610	0.00000	2.54000	1
584	4.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
585	6.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
586	8.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
587	10.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
588	12.00000	12.00000	-2.80000	0.00000	0.00000	0.12246	1
589	14.00000	12.00000	-2.80000	0.00000	0.00000	0.38700	1
590	16.00000	12.00000	-2.80000	0.00000	0.00000	0.61564	1
591	18.00000	12.00000	-2.80000	0.19302	0.00000	0.79376	1
592	20.00000	12.00000	-2.80000	0.34820	0.00000	0.89949	1
593	22.00000	12.00000	-2.80000	0.43842	0.00000	0.90112	1
594	24.00000	12.00000	-2.80000	0.42494	0.00000	0.75898	1
595	26.00000	12.00000	-2.80000	0.27123	0.00000	0.44580	1
596	28.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
597	30.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
598	32.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
599	34.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
600	36.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
601	38.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
602	40.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
603	42.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
604	44.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
605	46.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
606	48.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
607	50.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
608	52.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
609	54.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
610	56.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
611	58.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
612	60.00000	12.00000	-2.80000	0.00000	0.00000	0.00000	1
613	-10.00000	14.00000	-2.80000	0.00000	0.00000	0.14000	1
614	-8.00000	14.00000	-2.80000	0.00000	0.00000	0.54000	1
615	-6.00000	14.00000	-2.80000	0.20546	0.00000	0.94000	1
616	-4.00000	14.00000	-2.80000	0.58248	0.00000	1.34000	1
617	-2.00000	14.00000	-2.80000	1.02296	0.00000	1.74000	1
618	0.00000	14.00000	-2.80000	1.56735	0.00000	2.14000	1
619	2.00000	14.00000	-2.80000	2.25610	0.00000	2.54000	1
620	4.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
621	6.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
622	8.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
623	10.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
624	12.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
625	14.00000	14.00000	-2.80000	0.00000	0.00000	0.22740	1
626	16.00000	14.00000	-2.80000	0.00000	0.00000	0.41918	1
627	18.00000	14.00000	-2.80000	0.05087	0.00000	0.55944	1
628	20.00000	14.00000	-2.80000	0.17256	0.00000	0.63206	1
629	22.00000	14.00000	-2.80000	0.23665	0.00000	0.61831	1
630	24.00000	14.00000	-2.80000	0.22812	0.00000	0.50240	1
631	26.00000	14.00000	-2.80000	0.14144	0.00000	0.28488	1
632	28.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
633	30.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
634	32.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
635	34.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
636	36.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
637	38.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
638	40.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
639	42.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
640	44.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
641	46.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
642	48.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
643	50.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
644	52.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
645	54.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
646	56.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
647	58.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
648	60.00000	14.00000	-2.80000	0.00000	0.00000	0.00000	1
649	-10.00000	16.00000	-2.80000	0.00000	0.00000	0.14000	1
650	-8.00000	16.00000	-2.80000	0.00000	0.00000	0.54000	1
651	-6.00000	16.00000	-2.80000	0.20546	0.00000	0.94000	1
652	-4.00000	16.00000	-2.80000	0.58248	0.00000	1.34000	1
653	-2.00000	16.00000	-2.80000	1.02296	0.00000	1.74000	1
654	0.00000	16.00000	-2.80000	1.56735	0.00000	2.14000	1
655	2.00000	16.00000	-2.80000	2.25610	0.00000	2.54000	1
656	4.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
657	6.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
658	8.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
659	10.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
660	12.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
661	14.00000	16.00000	-2.80000	0.00000	0.00000	0.07384	1
662	16.00000	16.00000	-2.80000	0.00000	0.00000	0.23975	1
663	18.00000	16.00000	-2.80000	0.00000	0.00000	0.35756	1
664	20.00000	16.00000	-2.80000	0.03484	0.00000	0.41689	1
665	22.00000	16.00000	-2.80000	0.09482	0.00000	0.40832	1
666	24.00000	16.00000	-2.80000	0.10407	0.00000	0.32781	1
667	26.00000	16.00000	-2.80000	0.06665	0.00000	0.18333	1
668	28.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
669	30.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
670	32.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
671	34.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
672	36.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
673	38.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
674	40.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
675	42.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
676	44.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
677	46.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
678	48.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
679	50.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
680	52.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
681	54.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
682	56.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
683	58.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
684	60.00000	16.00000	-2.80000	0.00000	0.00000	0.00000	1
685	-10.00000	18.00000	-2.80000	0.00000	0.00000	0.14000	1
686	-8.00000	18.00000	-2.80000	0.00000	0.00000	0.54000	1
687	-6.00000	18.00000	-2.80000	0.20546	0.00000	0.94000	1
688	-4.00000	18.00000	-2.80000	0.58248	0.00000	1.34000	1
689	-2.00000	18.00000	-2.80000	1.02296	0.00000	1.74000	1
690	0.00000	18.00000	-2.80000	1.56735	0.00000	2.14000	1
691	2.00000	18.00000	-2.80000	2.25610	0.00000	2.54000	1
692	4.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
693	6.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
694	8.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
695	10.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
696	12.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
697	14.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
698	16.00000	18.00000	-2.80000	0.00000	0.00000	0.08032	1
699	18.00000	18.00000	-2.80000	0.00000	0.00000	0.18668	1
700	20.00000	18.00000	-2.80000	0.00000	0.00000	0.24429	1
701	22.00000	18.00000	-2.80000	0.00000	0.00000	0.24932	1
702	24.00000	18.00000	-2.80000	0.02040	0.00000	0.20280	1
703	26.00000	18.00000	-2.80000	0.01904	0.00000	0.11367	1
704	28.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
705	30.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
706	32.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
707	34.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
708	36.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
709	38.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
710	40.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
711	42.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
712	44.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
713	46.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
714	48.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
715	50.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
716	52.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
717	54.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
718	56.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
719	58.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
720	60.00000	18.00000	-2.80000	0.00000	0.00000	0.00000	1
721	-10.00000	20.00000	-2.80000	0.00000	0.00000	0.14000	1
722	-8.00000	20.00000	-2.80000	0.00000	0.00000	0.54000	1
723	-6.00000	20.00000	-2.80000	0.20546	0.00000	0.94000	1
724	-4.00000	20.00000	-2.80000	0.58248	0.00000	1.34000	1
725	-2.00000	20.00000	-2.80000	1.02296	0.00000	1.74000	1
726	0.00000	20.00000	-2.80000	1.56735	0.00000	2.14000	1
727	2.00000	20.00000	-2.80000	2.25610	0.00000	2.54000	1
728	4.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
729	6.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
730	8.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
731	10.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
732	12.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
733	14.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
734	16.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
735	18.00000	20.00000	-2.80000	0.00000	0.00000	0.04276	1
736	20.00000	20.00000	-2.80000	0.00000	0.00000	0.10484	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
737	22.00000	20.00000	-2.80000	0.00000	0.00000	0.12606	1
738	24.00000	20.00000	-2.80000	0.00000	0.00000	0.10943	1
739	26.00000	20.00000	-2.80000	0.00000	0.00000	0.06300	1
740	28.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
741	30.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
742	32.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
743	34.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
744	36.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
745	38.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
746	40.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
747	42.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
748	44.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
749	46.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
750	48.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
751	50.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
752	52.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
753	54.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
754	56.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
755	58.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
756	60.00000	20.00000	-2.80000	0.00000	0.00000	0.00000	1
757	-10.00000	22.00000	-2.80000	0.00000	0.00000	0.14000	1
758	-8.00000	22.00000	-2.80000	0.00000	0.00000	0.54000	1
759	-6.00000	22.00000	-2.80000	0.20546	0.00000	0.94000	1
760	-4.00000	22.00000	-2.80000	0.58248	0.00000	1.34000	1
761	-2.00000	22.00000	-2.80000	1.02296	0.00000	1.74000	1
762	0.00000	22.00000	-2.80000	1.56735	0.00000	2.14000	1
763	2.00000	22.00000	-2.80000	2.25610	0.00000	2.54000	1,2,6
764	4.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
765	6.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
766	8.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
767	10.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
768	12.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
769	14.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
770	16.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
771	18.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
772	20.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
773	22.00000	22.00000	-2.80000	0.00000	0.00000	0.02833	1
774	24.00000	22.00000	-2.80000	0.00000	0.00000	0.03727	1
775	26.00000	22.00000	-2.80000	0.00000	0.00000	0.02453	1
776	28.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
777	30.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
778	32.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
779	34.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
780	36.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
781	38.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
782	40.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
783	42.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
784	44.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
785	46.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
786	48.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
787	50.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
788	52.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
789	54.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
790	56.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
791	58.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
792	60.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1
793	-10.00000	24.00000	-2.80000	0.00000	0.00000	0.10018	1
794	-8.00000	24.00000	-2.80000	0.00000	0.00000	0.45007	1
795	-6.00000	24.00000	-2.80000	0.14600	0.00000	0.77968	1
796	-4.00000	24.00000	-2.80000	0.44235	0.00000	1.07397	1
797	-2.00000	24.00000	-2.80000	0.73048	0.00000	1.29884	1
798	0.00000	24.00000	-2.80000	0.94424	0.00000	1.36162	1
799	2.00000	24.00000	-2.80000	0.77474	0.00000	0.95862	1
800	4.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
801	6.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
802	8.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
803	10.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
804	12.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
805	14.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
806	16.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
807	18.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
808	20.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
809	22.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
810	24.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
811	26.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
812	28.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
813	30.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
814	32.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
815	34.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
816	36.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
817	38.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
818	40.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
819	42.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
820	44.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
821	46.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
822	48.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
823	50.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
824	52.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
825	54.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
826	56.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
827	58.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
828	60.00000	24.00000	-2.80000	0.00000	0.00000	0.00000	1
829	-10.00000	26.00000	-2.80000	0.00000	0.00000	0.01958	1
830	-8.00000	26.00000	-2.80000	0.00000	0.00000	0.31857	1
831	-6.00000	26.00000	-2.80000	0.04626	0.00000	0.58095	1
832	-4.00000	26.00000	-2.80000	0.26737	0.00000	0.78442	1
833	-2.00000	26.00000	-2.80000	0.43610	0.00000	0.88746	1
834	0.00000	26.00000	-2.80000	0.48888	0.00000	0.81319	1
835	2.00000	26.00000	-2.80000	0.30659	0.00000	0.45351	1
836	4.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
837	6.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
838	8.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
839	10.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
840	12.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
841	14.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
842	16.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
843	18.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
844	20.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
845	22.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
846	24.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
847	26.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
848	28.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
849	30.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
850	32.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
851	34.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
852	36.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
853	38.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
854	40.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
855	42.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
856	44.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
857	46.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
858	48.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
859	50.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
860	52.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
861	54.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
862	56.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
863	58.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1
864	60.00000	26.00000	-2.80000	0.00000	0.00000	0.00000	1

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
865	-10.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
866	-8.00000	28.00000	-2.80000	0.00000	0.00000	0.17053	1
867	-6.00000	28.00000	-2.80000	0.00000	0.00000	0.38020	1
868	-4.00000	28.00000	-2.80000	0.10651	0.00000	0.52428	1
869	-2.00000	28.00000	-2.80000	0.21585	0.00000	0.57253	1
870	0.00000	28.00000	-2.80000	0.23411	0.00000	0.48772	1
871	2.00000	28.00000	-2.80000	0.13452	0.00000	0.25001	1
872	4.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
873	6.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
874	8.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
875	10.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
876	12.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
877	14.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
878	16.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
879	18.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
880	20.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
881	22.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
882	24.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
883	26.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
884	28.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
885	30.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
886	32.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
887	34.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
888	36.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
889	38.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
890	40.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
891	42.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
892	44.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
893	46.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
894	48.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
895	50.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
896	52.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
897	54.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
898	56.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
899	58.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
900	60.00000	28.00000	-2.80000	0.00000	0.00000	0.00000	1
901	-10.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
902	-8.00000	30.00000	-2.80000	0.00000	0.00000	0.02343	1
903	-6.00000	30.00000	-2.80000	0.00000	0.00000	0.19741	1
904	-4.00000	30.00000	-2.80000	0.00000	0.00000	0.31014	1
905	-2.00000	30.00000	-2.80000	0.06450	0.00000	0.34445	1
906	0.00000	30.00000	-2.80000	0.09065	0.00000	0.28712	1
907	2.00000	30.00000	-2.80000	0.05392	0.00000	0.14303	1
908	4.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
909	6.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
910	8.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
911	10.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
912	12.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
913	14.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
914	16.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
915	18.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
916	20.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
917	22.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
918	24.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
919	26.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
920	28.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
921	30.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
922	32.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
923	34.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
924	36.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
925	38.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
926	40.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
927	42.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
928	44.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
929	46.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
930	48.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
931	50.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
932	52.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
933	54.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
934	56.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
935	58.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
936	60.00000	30.00000	-2.80000	0.00000	0.00000	0.00000	1
937	2.00000	6.00000	-1.50000	2.25610	0.00000	2.54000	1,2,6
938	3.06667	6.00000	-1.50000	2.69644	0.00000	2.75333	1,2,6
939	4.13333	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
940	5.20000	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
941	6.26667	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
942	7.33333	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
943	8.40000	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
944	9.46667	6.00000	-1.50000	0.00000	0.00000	0.00000	1,2,6
945	10.53333	6.00000	-1.50000	0.00000	0.00000	0.10499	1,2,6
946	11.60000	6.00000	-1.50000	0.00000	0.00000	0.31573	1,2,6
947	12.66667	6.00000	-1.50000	0.00000	0.00000	0.52611	1,2,6
948	13.73333	6.00000	-1.50000	0.00000	0.00000	0.73605	1,2,6
949	14.80000	6.00000	-1.50000	0.05360	0.00000	0.94544	1,2,6
950	15.86667	6.00000	-1.50000	0.23963	0.00000	1.15414	1,2,6
951	16.93333	6.00000	-1.50000	0.42980	0.00000	1.36194	1,2,6
952	18.00000	6.00000	-1.50000	0.62764	0.00000	1.56857	1,2,6
953	2.00000	22.00000	-2.80000	2.25610	0.00000	2.54000	1,2,6
954	3.13333	22.00000	-2.80000	2.72584	0.00000	2.76667	1,2,6
955	4.26667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
956	5.40000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
957	6.53333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
958	7.66667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
959	8.80000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
960	9.93333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
961	11.06667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
962	12.20000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
963	13.33333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
964	14.46667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
965	15.60000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
966	16.73333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
967	17.86667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
968	19.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
969	20.13333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
970	21.26667	22.00000	-2.80000	0.00000	0.00000	0.01816	1,2,6
971	22.40000	22.00000	-2.80000	0.00000	0.00000	0.03223	1,2,6
972	23.53333	22.00000	-2.80000	0.00000	0.00000	0.03743	1,2,6
973	24.66667	22.00000	-2.80000	0.00000	0.00000	0.03500	1,2,6
974	25.80000	22.00000	-2.80000	0.00000	0.00000	0.02651	1,2,6
975	26.93333	22.00000	-2.80000	0.00000	0.00000	0.01385	1,2,6
976	28.06667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
977	29.20000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
978	30.33333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
979	31.46667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
980	32.60000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
981	33.73333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
982	34.86667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
983	36.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
984	37.13333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
985	38.26667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
986	39.40000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
987	40.53333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
988	41.66667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
989	42.80000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
990	43.93333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
991	45.06667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
992	46.20000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
993	47.33333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
994	48.46667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
995	49.60000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
996	50.73333	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
997	51.86667	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
998	53.00000	22.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
999	2.00000	21.90000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1000	2.00000	20.84667	-2.80000	2.25610	0.00000	2.54000	1,2,6
1001	2.00000	19.79333	-2.80000	2.25610	0.00000	2.54000	1,2,6
1002	2.00000	18.74000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1003	2.00000	17.68667	-2.80000	2.25610	0.00000	2.54000	1,2,6
1004	2.00000	16.63333	-2.80000	2.25610	0.00000	2.54000	1,2,6
1005	2.00000	15.58000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1006	2.00000	14.52667	-2.80000	2.25610	0.00000	2.54000	1,2,6
1007	2.00000	13.47333	-2.80000	2.25610	0.00000	2.54000	1,2,6
1008	2.00000	12.42000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1009	2.00000	11.36667	-2.80000	2.25610	0.00000	2.54000	1,2,6
1010	2.00000	10.31333	-2.80000	2.25610	0.00000	2.54000	1,2,6
1011	2.00000	9.26000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1012	2.00000	8.20667	-2.80000	2.25610	0.00000	2.54000	1,2,6
1013	2.00000	7.15333	-2.80000	2.25610	0.00000	2.54000	1,2,6
1014	2.00000	6.10000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1015	2.00000	6.00000	-2.80000	2.25610	0.00000	2.54000	1,2,6
1016	3.13333	6.00000	-2.80000	2.72584	0.00000	2.76667	1,2,6
1017	4.26667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1018	5.40000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1019	6.53333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1020	7.66667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1021	8.80000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1022	9.93333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1023	11.06667	6.00000	-2.80000	0.00000	0.00000	0.21040	1,2,6
1024	12.20000	6.00000	-2.80000	0.00000	0.00000	0.43412	1,2,6
1025	13.33333	6.00000	-2.80000	0.00000	0.00000	0.65738	1,2,6
1026	14.46667	6.00000	-2.80000	0.00000	0.00000	0.88007	1,2,6
1027	15.60000	6.00000	-2.80000	0.19288	0.00000	1.10204	1,2,6
1028	16.73333	6.00000	-2.80000	0.39367	0.00000	1.32306	1,2,6
1029	17.86667	6.00000	-2.80000	0.60237	0.00000	1.54282	1,2,6
1030	19.00000	6.00000	-2.80000	0.82308	0.00000	1.76084	1,2,6
1031	20.13333	6.00000	-2.80000	1.05959	0.00000	1.97637	1,2,6
1032	21.26667	6.00000	-2.80000	1.31519	0.00000	2.18816	1,2,6
1033	22.40000	6.00000	-2.80000	1.59213	0.00000	2.39395	1,2,6
1034	23.53333	6.00000	-2.80000	1.89027	0.00000	2.58918	1,2,6
1035	24.66667	6.00000	-2.80000	2.20314	0.00000	2.76318	1,2,6
1036	25.80000	6.00000	-2.80000	2.50193	0.00000	2.88364	1,2,6
1037	26.93333	6.00000	-2.80000	2.62395	0.00000	2.78872	1,2,6
1038	28.06667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1039	29.20000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1040	30.33333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1041	31.46667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1042	32.60000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1043	33.73333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1044	34.86667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1045	36.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1046	37.13333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1047	38.26667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1048	39.40000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1049	40.53333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1050	41.66667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1051	42.80000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1052	43.93333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1053	45.06667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1054	46.20000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1055	47.33333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1056	48.46667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1057	49.60000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1058	50.73333	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1059	51.86667	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1060	53.00000	6.00000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1061	53.00000	21.90000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1062	53.00000	20.84667	-2.80000	0.00000	0.00000	0.00000	1,2,6
1063	53.00000	19.79333	-2.80000	0.00000	0.00000	0.00000	1,2,6
1064	53.00000	18.74000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1065	53.00000	17.68667	-2.80000	0.00000	0.00000	0.00000	1,2,6
1066	53.00000	16.63333	-2.80000	0.00000	0.00000	0.00000	1,2,6
1067	53.00000	15.58000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1068	53.00000	14.52667	-2.80000	0.00000	0.00000	0.00000	1,2,6
1069	53.00000	13.47333	-2.80000	0.00000	0.00000	0.00000	1,2,6
1070	53.00000	12.42000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1071	53.00000	11.36667	-2.80000	0.00000	0.00000	0.00000	1,2,6
1072	53.00000	10.31333	-2.80000	0.00000	0.00000	0.00000	1,2,6
1073	53.00000	9.26000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1074	53.00000	8.20667	-2.80000	0.00000	0.00000	0.00000	1,2,6
1075	53.00000	7.15333	-2.80000	0.00000	0.00000	0.00000	1,2,6
1076	53.00000	6.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1077	39.00000	-13.60000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1078	39.00000	-12.62000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1079	39.00000	-11.64000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1080	39.00000	-10.66000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1081	39.00000	-9.68000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1082	39.00000	-8.70000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1083	39.00000	-7.72000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1084	39.00000	-6.74000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1085	39.00000	-5.76000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1086	39.00000	-4.78000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1087	39.00000	-3.80000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1088	39.00000	-2.82000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1089	39.00000	-1.84000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1090	39.00000	-0.86000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1091	39.00000	0.12000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1092	39.00000	1.10000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1093	39.00000	2.08000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1094	39.00000	3.06000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1095	39.00000	4.04000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1096	39.00000	5.02000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1097	39.00000	6.00000	-3.50000	0.00000	0.00000	0.00000	1,2,6
1098	21.60000	4.00000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1099	21.60000	2.95000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1100	21.60000	1.90000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1101	21.60000	0.85000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1102	21.60000	-0.20000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1103	21.60000	-1.25000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1104	21.60000	-2.30000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1105	21.60000	-3.35000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1106	21.60000	-4.40000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1107	21.60000	-5.45000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1108	21.60000	-6.50000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1109	21.60000	-7.55000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1110	21.60000	-8.60000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1111	21.60000	-9.65000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1112	21.60000	-10.70000	-2.80000	1.43902	0.00000	2.32000	1,2,6
1113	21.60000	-11.75000	-2.80000	1.32183	0.10604	2.31124	1,2,6
1114	21.60000	-12.80000	-2.80000	1.13613	0.24023	2.27034	1,2,6
1115	21.60000	-13.85000	-2.80000	0.94480	0.34364	2.19882	1,2,6
1116	21.60000	-14.90000	-2.80000	0.76396	0.40850	2.10107	1,2,6
1117	21.60000	-15.95000	-2.80000	0.60241	0.43463	1.98182	1,2,6
1118	21.60000	-17.00000	-2.80000	0.46304	0.42651	1.84546	1,2,6
1119	21.60000	-17.10000	-2.80000	0.45091	0.42417	1.83172	1,2,6
1120	20.52000	-17.10000	-2.80000	0.40041	0.30895	1.66961	1,2,6

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]	
1121	19.44000	-17.10000	-2.80000	0.32856	0.21376	1.49778	1,2,6
1122	18.36000	-17.10000	-2.80000	0.24050	0.13479	1.31843	1,2,6
1123	17.28000	-17.10000	-2.80000	0.13969	0.06860	1.13319	1,2,6
1124	16.20000	-17.10000	-2.80000	0.02805	0.01224	0.94331	1,2,6
1125	15.12000	-17.10000	-2.80000	0.00000	0.00000	0.74971	1,2,6
1126	14.04000	-17.10000	-2.80000	0.00000	0.00000	0.55309	1,2,6
1127	12.96000	-17.10000	-2.80000	0.00000	0.00000	0.35401	1,2,6
1128	11.88000	-17.10000	-2.80000	0.00000	0.00000	0.15289	1,2,6
1129	10.80000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1130	9.72000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1131	8.64000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1132	7.56000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1133	6.48000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1134	5.40000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1135	4.32000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1136	3.24000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1137	2.16000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1138	1.08000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6
1139	0.00000	-17.10000	-2.80000	0.00000	0.00000	0.00000	1,2,6

1 - Data point coincident with displacement data. Its displacement has been added to those calculated by Xdisp.
2 - Data point coincident with horizontal movement calculation point for a specific building. Its displacement has been added before performing building damage calculations.
6 - Data point coincident with vertical movement calculation point for a specific building. Its displacement has been added before performing building damage calculations.

Vertical Ground Movement Curves (Excavations)

Curve Name: **No vertical ground movement**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.000][1.000,0.000,0.000][0.000,1.000,0.000][1.000,1.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = 0.0x + 0.0
Coeff. of Determination: -2147483648.E+2147483647

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: $z = -2.6455E\text{-}3x^4 + 2.8495E\text{-}2x^3 - 1.0051E\text{-}1x^2 + 1.0569E\text{-}1x + 3.8990E\text{-}2$
Coeff. of Determination: 9.9991E-1

Curve Name: **Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.345][0.100,0.000,0.327][0.200,0.000,0.311][0.300,0.000,0.294]
[0.400,0.000,0.279][0.500,0.000,0.264][0.600,0.000,0.250][0.700,0.000,0.237]
[0.800,0.000,0.224][0.900,0.000,0.212][1.000,0.000,0.200][1.100,0.000,0.189]
[1.200,0.000,0.178][1.300,0.000,0.168][1.400,0.000,0.158][1.500,0.000,0.149]
[1.600,0.000,0.140][1.700,0.000,0.132][1.800,0.000,0.124][1.900,0.000,0.116]
[2.000,0.000,0.109][2.100,0.000,0.101][2.200,0.000,0.095][2.300,0.000,0.088]
[2.400,0.000,0.082][2.500,0.000,0.076][2.600,0.000,0.070][2.700,0.000,0.065]
[2.800,0.000,0.059][2.900,0.000,0.054][3.000,0.000,0.049][3.100,0.000,0.044]
[3.200,0.000,0.039][3.300,0.000,0.034][3.400,0.000,0.029][3.500,0.000,0.025]
[3.600,0.000,0.020][3.700,0.000,0.015][3.800,0.000,0.010][3.900,0.000,0.005]
[4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: $z = -3.5383E\text{-}3x^3 + 3.7194E\text{-}2x^2 - 1.7831E\text{-}1x + 3.4467E\text{-}1$
Coeff. of Determination: 9.9999E-1

Horizontal Ground Movement Curves (Excavations)

Curve Name: **No horizontal ground movement**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.000][1.000,0.000,0.000][0.000,1.000,0.000][1.000,1.000,0.000]
Curve Fitting Method: Polynomial
x Order: 0
y Order: 0
Polynomial: z = 0.0
Coeff. of Determination: -2147483648.E+2147483647

Curve Name: **Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Curve Name: **Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.400][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -10.E-2x + 4.0E-1
Coeff. of Determination: 1.0

Polygonal Excavations

Excavation Name:	**16 Chenies Underpinning**
Surface level [m]:	-1.9000
Contribution:	Positive
Enabled:	Yes
Surface movement curves which are selected are applied between	-2.8000

Ref.	Coordinates x [m]	y [m]	z [m]	Displacements x [mm]	y [mm]	z [mm]

surface and [m]:

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	pl [%]	p2* [%]	Next Side d [m]	pl [%]	p2* [%]
1	3.5000	6.0000	-2.8000	No	-	-	-	-	-	-
2	3.5000	22.000	-2.8000	No	-	-	-	-	-	-
3	9.8000	22.000	-2.8000	No	-	-	-	-	-	-
4	9.8000	6.0000	-2.8000	No	-	-	-	-	-	-

Side	Corner 1 x [m]	y [m]	Corner 2 x [m]	y [m]	Ground Movement Curve Vertical	Horizontal
1	3.5000	6.0000	3.5000	22.000	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b)	Excavation in front of high stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	3.5000	22.000	9.8000	22.000	No vertical ground movement	No horizontal ground movement
3	9.8000	22.000	9.8000	6.0000	No vertical ground movement	No horizontal ground movement
4	9.8000	6.0000	3.5000	6.0000	No vertical ground movement	No horizontal ground movement

Excavation Name:	**18 Chenies Piling**
Surface level [m]:	0.0
Contribution:	Positive
Enabled:	Yes
Surface movement curves which are selected are applied between surface and [m]:	-3.0000

Corner	x [m]	y [m]	Base Level [m]	Stiffened	Previous Side d [m]	pl [%]	p2* [%]	Next Side d [m]	pl [%]	p2* [%]
1	28.000	5.7000	-3.0000	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	35.500	5.7000	0.0	No	-	-	-	-	-	-
3	35.500	-11.000	-3.5000	No	-	-	-	-	-	-
4	30.000	-11.000	-3.0000	No	-	-	-	-	-	-
5	28.000	-11.000	-3.0000	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	Corner 1 x [m]	y [m]	Corner 2 x [m]	y [m]	Ground Movement Curve Vertical	Horizontal
1	28.000	5.7000	35.500	5.7000	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
2	35.500	5.7000	35.500	-11.000	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
3	35.500	-11.000	30.000	-11.000	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
4	30.000	-11.000	28.000	-11.000	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))
5	28.000	-11.000	28.000	5.7000	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(b))	Excavation in front of low stiffness wall in stiff clay (CIRIA 580 Fig. 2.11(a))

Damage Category Strains

Name	0 (Negligible) to 1 (Very Slight)	1 (Very Slight) to 2 (Slight)	2 (Slight) to 3 (Moderate)	3 (Moderate) to 4 (Severe)
Burland Strain Limits	0.0	500.00E-6	750.00E-6	0.0015000

Specific Structures - Geometry

Structure Name	Sub-Structure Name	Displacement Line	Start Distance Along Line [m]	End Distance Along Line [m]	Vertical Offsets from Line for Vertical Movement Calculations [m]	Vertical Displacement Limit Sensitivity [mm]	Damage Category Strains	Poisson's Ratio	E/G
Law Building	Infill	Law Bdg Infill	0.00000	15.90000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
16 Chenies	West	16 Chenies Wst	0.00000	50.90000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
16 Chenies	South	16 Chenies Sth	0.00000	15.70000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
16 Chenies	East	16 Chenies Est	0.00000	50.90000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
16 Chenies	North	16 Chenies Nth	0.00000	15.70000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
18 Chenies	Retained Wall	18 Chenies Retained Wall	0.00000	19.50000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Law Building	North	Law Bdg Nth	0.00000	20.90000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000
Law Building	East	Law Bbg Est	0.00000	21.50000	0.0	0.10000	Burland Strain Limits	0.20000	2.6000

Specific Structures - Bending Parameters

Structure Name	Sub-Structure Name	Height [m]	Default Properties	Hogging 2nd Moment of Area (per unit width) [m³]	Hogging Distance of Bending Strain from N.A. [m]	Hogging Distance of N.A. from Edge of Beam in Tension [m]	Sagging 2nd Moment of Area (per unit width) [m³]	Sagging Distance of Bending Strain from N.A. [m]	Sagging Distance of N.A. from Edge of Beam in Tension [m]
Law Building	Infill	10.000	Yes	333.33	10.000	10.000	83.333	5.0000	5.0000
16 Chenies	West	16.000	Yes	1365.3	16.000	16.000	341.33	8.0000	8.0000
16 Chenies	South	16.000	Yes	1365.3	16.000	16.000	341.33	8.0000	8.0000
16 Chenies	East	16.000	Yes	1365.3	16.000	16.000	341.33	8.0000	8.0000
16 Chenies	North	16.000	Yes	1365.3	16.000	16.000	341.33	8.0000	8.0000
18 Chenies	Retained Wall	22.000	Yes	3549.3	22.000	22.000	887.33	11.000	11.000
Law Building	North	22.000	Yes	3549.3	22.000	22.000	887.33	11.000	11.000
Law Building	East	22.000	Yes	3549.3	22.000	22.000	887.33	11.000	11.000

Building Segment Combinations

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical Movement Calculations [m]	Segment	Start [m]	Length [m]	Curvature	Combined Segment
Law Building	Infill	0.0	1	0.0	1.8443	Sagging	1
			2	1.8443	2.4224	Hogging	1
			3	4.2667	1.0667	None	1
			4	5.3333	5.3153	Hogging	1
			5	10.649	1.0927	Sagging	1
			6	11.741	3.9318	Hogging	1
			7	15.673	0.22695	None	1
16 Chenies	East	0.0	1	0.0	0.88703	Hogging	1
			2	0.88703	3.6463	Hogging	1
			3	4.5333	1.1333	None	1
			4	5.6667	5.4783	Hogging	1
			5	11.145	0.19946	Sagging	1
			6	11.344	10.989	Hogging	1
			7	22.333	0.51468	Hogging	1
			8	22.848	1.2945	Sagging	1
			9	24.142	4.1884	Sagging	1
			10	28.331	4.5358	Hogging	1

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : No

Structure Name	Sub-Structure Name	Vertical Offset from Line for Vertical	Segment	Start	Length	Curvature	Combined Segment

Warnings

1 Multiple excavations have been specified. The displacements resulting from these excavations are calculated by summing the displacements resulting from each individual excavation. No account has been taken of the interactions between excavations (e.g. overlapping zones of influence or 'shielding' of one excavation by another).

2 If an embedded wall excavation is assigned a 'surface' ground movement curve and if the 'allow movement calculation to level' option is checked for the excavation then displacements induced by it are calculated for points at the surface, and points below the surface to the level specified. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 1/Line 1/Vertical. This is an example only. There are 13 others.

3 If an embedded wall excavation is assigned a 'sub-surface' ground movement curve then displacements induced by it can only be calculated for those points that are level with or below the embedded wall excavation's 'surface level'. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 2/Line 1/Vertical. This is an example only. There are 5 others.

Errors

None

Displacement and Strain Results

Type/No.		Coordinates			Displacements					Angle of Line to x Axis	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement along Line	Horizontal displacement perpendicular to Line		
	[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[°]	
Grid 1	Grid 1	-10.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	-20.00000	-2.80000	0.0	0.0	0.27134	-	-	-	*
		16.00000	-20.00000	-2.80000	0.0	0.0	0.60000	-	-	-	*
		18.00000	-20.00000	-2.80000	0.0054992	0.0048090	0.90928	-	-	-	*
		20.00000	-20.00000	-2.80000	0.12054	0.14003	1.1917	-	-	-	*
		22.00000	-20.00000	-2.80000	0.40291	0.72400	1.7533	-	-	-	*
		24.00000	-20.00000	-2.80000	0.46485	1.4520	2.2382	-	-	-	*
		26.00000	-20.00000	-2.80000	0.30444	2.2235	2.6020	-	-	-	*
		28.00000	-20.00000	-2.80000	0.0	2.8520	2.7842	-	-	-	*
		30.00000	-20.00000	-2.80000	0.0	3.4210	2.3689	-	-	-	*
		32.00000	-20.00000	-2.80000	0.0	3.7273	1.8399	-	-	-	*
		34.00000	-20.00000	-2.80000	0.0	4.4545	2.2228	-	-	-	*
		36.00000	-20.00000	-2.80000	-0.17617	4.8100	2.5101	-	-	-	*
		38.00000	-20.00000	-2.80000	-0.80367	3.8556	2.3262	-	-	-	*
		40.00000	-20.00000	-2.80000	-1.1623	2.7754	1.9387	-	-	-	*
		42.00000	-20.00000	-2.80000	-1.1541	1.7441	1.4136	-	-	-	*
		44.00000	-20.00000	-2.80000	-0.78082	0.83976	0.79604	-	-	-	*
		46.00000	-20.00000	-2.80000	-0.093684	0.077000	0.089232	-	-	-	*
		48.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-18.00000	-2.80000	0.0	0.0	0.10715	-	-	-	*
		14.00000	-18.00000	-2.80000	0.0	0.0	0.46950	-	-	-	*
		16.00000	-18.00000	-2.80000	0.0	0.0	0.82151	-	-	-	*
		18.00000	-18.00000	-2.80000	0.14121	0.089825	1.1587	-	-	-	*
		20.00000	-18.00000	-2.80000	0.67314	0.55129	1.8202	-	-	-	*
		22.00000	-18.00000	-2.80000	0.98657	1.2465	2.4579	-	-	-	*
		24.00000	-18.00000	-2.80000	0.99555	2.2437	3.0822	-	-	-	*
		26.00000	-18.00000	-2.80000	0.63476	3.4661	3.6155	-	-	-	*
		28.00000	-18.00000	-2.80000	0.0	4.6399	3.9321	-	-	-	*
		30.00000	-18.00000	-2.80000	0.0	5.6449	3.6852	-	-	-	*
		32.00000	-18.00000	-2.80000	0.0	5.7273	3.0145	-	-	-	*
		34.00000	-18.00000	-2.80000	0.0	6.4545	3.4577	-	-	-	*
		36.00000	-18.00000	-2.80000	-0.31696	6.6652	3.7857	-	-	-	*
		38.00000	-18.00000	-2.80000	-1.4341	5.1329	3.4951	-	-	-	*
		40.00000	-18.00000	-2.80000	-2.0654	3.6130	2.9200	-	-	-	*
		42.00000	-18.00000	-2.80000	-2.1189	2.3286	2.2101	-	-	-	*
		44.00000	-18.00000	-2.80000	-1.6779	1.3108	1.4582	-	-	-	*
		46.00000	-18.00000	-2.80000	-0.86378	0.51679	0.68075	-	-	-	*
		48.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-16.00000	-2.80000	0.0	0.0	0.24739	-	-	-	*
		14.00000	-16.00000	-2.80000	0.0	0.0	0.62679	-	-	-	*
		16.00000	-16.00000	-2.80000	0.067574	0.022685	1.0000	-	-	-	*
		18.00000	-16.00000	-2.80000	0.63992	0.24408	1.5963	-	-	-	*
		20.00000	-16.00000	-2.80000	1.4380	0.72406	2.4007	-	-	-	*
		22.00000	-16.00000	-2.80000	1.8640	1.4130	3.1311	-	-	-	*
		24.00000	-16.00000	-2.80000	1.8199	2.5508	3.8776	-	-	-	*
		26.00000	-16.00000	-2.80000	1.2154	4.3817	4.7087	-	-	-	*
		28.00000	-16.00000	-2.80000	0.0	6.5094	5.3021	-	-	-	*
		30.00000	-16.00000	-2.80000	0.0	7.9097	5.3329	-	-	-	*
		32.00000	-16.00000	-2.80000	0.0	7.7273	4.5371	-	-	-	*
		34.00000	-16.00000	-2.80000	0.0	8.4545	5.0517	-	-	-	*
		36.00000	-16.00000	-2.80000	-0.56948	8.4056	5.4206	-	-	-	*
		38.00000	-16.00000	-2.80000	-2.4823	5.9275	4.9122	-	-	-	*
		40.00000	-16.00000	-2.80000	-3.3931	3.8801	3.9987	-	-	-	*
		42.00000	-16.00000	-2.80000	-3.3786	2.4208	2.9949	-	-	-	*
		44.00000	-16.00000	-2.80000	-2.7376	1.4009	2.0443	-	-	-	*
		46.00000	-16.00000	-2.80000	-1.6997	0.67062	1.1565	-	-	-	*
		48.00000	-16.00000	-2.80000	-0.40698	0.13010	0.27115	-	-	-	*
		50.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		52.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-14.00000	-2.80000	0.0	0.0	0.34424	-	-	-	*
		14.00000	-14.00000	-2.80000	0.0	0.0	0.73644	-	-	-	*
		16.00000	-14.00000	-2.80000	0.17050	0.031504	1.1261	-	-	-	*
		18.00000	-14.00000	-2.80000	1.2546	0.24782	1.9757	-	-	-	*
		20.00000	-14.00000	-2.80000	2.3764	0.60896	2.9006	-	-	-	*
		22.00000	-14.00000	-2.80000	3.1930	1.1828	3.8370	-	-	-	*
		24.00000	-14.00000	-2.80000	3.3552	2.1792	4.7403	-	-	-	*
		26.00000	-14.00000	-2.80000	2.4135	4.3927	5.7764	-	-	-	*
		28.00000	-14.00000	-2.80000	0.0	8.4858	7.0204	-	-	-	*
		30.00000	-14.00000	-2.80000	0.0	10.228	7.5007	-	-	-	*
		32.00000	-14.00000	-2.80000	0.0	9.7273	6.5754	-	-	-	*
		34.00000	-14.00000	-2.80000	0.0	10.455	7.1551	-	-	-	*
		36.00000	-14.00000	-2.80000	-1.1522	9.8065	7.5423	-	-	-	*
		38.00000	-14.00000	-2.80000	-4.4648	5.6301	6.5490	-	-	-	*
		40.00000	-14.00000	-2.80000	-5.3755	3.2162	5.0716	-	-	-	*
		42.00000	-14.00000	-2.80000	-4.9579	1.8832	3.6853	-	-	-	*
		44.00000	-14.00000	-2.80000	-3.9091	1.0770	2.5101	-	-	-	*
		46.00000	-14.00000	-2.80000	-2.5342	0.54566	1.5033	-	-	-	*
		48.00000	-14.00000	-2.80000	-0.97334	0.17170	0.56726	-	-	-	*
		50.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-12.00000	-2.80000	0.0	0.0	0.39376	-	-	-	*
		14.00000	-12.00000	-2.80000	0.0	0.0	0.79287	-	-	-	*
		16.00000	-12.00000	-2.80000	0.24677	0.013792	1.1917	-	-	-	*
		18.00000	-12.00000	-2.80000	1.7936	0.10191	2.2073	-	-	-	*
		20.00000	-12.00000	-2.80000	3.3372	0.23847	3.2500	-	-	-	*
		22.00000	-12.00000	-2.80000	4.8031	0.47098	4.4109	-	-	-	*
		24.00000	-12.00000	-2.80000	6.0044	0.93922	5.7495	-	-	-	*
		26.00000	-12.00000	-2.80000	6.0468	2.2475	7.0999	-	-	-	*
		28.00000	-12.00000	-2.80000	0.0	10.594	9.2137	-	-	-	*
		30.00000	-12.00000	-2.80000	0.0	12.612	10.377	-	-	-	*
		32.00000	-12.00000	-2.80000	0.0	11.727	9.2972	-	-	-	*
		34.00000	-12.00000	-2.80000	0.0	12.455	9.9179	-	-	-	*
		36.00000	-12.00000	-2.80000	-3.8023	9.0796	10.199	-	-	-	*
		38.00000	-12.00000	-2.80000	-8.5683	2.7391	7.9766	-	-	-	*
		40.00000	-12.00000	-2.80000	-8.0830	1.3072	5.8193	-	-	-	*
		42.00000	-12.00000	-2.80000	-6.7021	0.72142	4.1118	-	-	-	*
		44.00000	-12.00000	-2.80000	-5.0357	0.40568	2.7763	-	-	-	*
		46.00000	-12.00000	-2.80000	-3.2438	0.20870	1.6897	-	-	-	*
		48.00000	-12.00000	-2.80000	-1.3859	0.074202	0.71896	-	-	-	*
		50.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		4.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-10.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	-10.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	-10.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	-10.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	-10.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	-10.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	-10.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	-10.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	-10.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	-10.00000	-2.80000		Point lies within an excavation.					*
		32.00000	-10.00000	-2.80000		Point lies within an excavation.					*
		34.00000	-10.00000	-2.80000		Point lies within an excavation.					*
		36.00000	-10.00000	-2.80000	-12.662	0.0	10.477	-	-	-	*
		38.00000	-10.00000	-2.80000	-10.662	0.0	7.5389	-	-	-	*
		40.00000	-10.00000	-2.80000	-8.6617	0.0	5.3086	-	-	-	*
		42.00000	-10.00000	-2.80000	-6.6617	0.0	3.6296	-	-	-	*
		44.00000	-10.00000	-2.80000	-4.6617	0.0	2.3450	-	-	-	*
		46.00000	-10.00000	-2.80000	-2.6617	0.0	1.2981	-	-	-	*
		48.00000	-10.00000	-2.80000	-0.66168	0.0	0.33183	-	-	-	*
		50.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-2.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		0.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		2.00000	-8.00000	-2.80000	0.0	0.0	0.0016291	-	-	-	*
		4.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-8.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	-8.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	-8.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	-8.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	-8.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	-8.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	-8.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	-8.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	-8.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	-8.00000	-2.80000		Point lies within an excavation.					*
		32.00000	-8.00000	-2.80000		Point lies within an excavation.					*
		34.00000	-8.00000	-2.80000		Point lies within an excavation.					*
		36.00000	-8.00000	-2.80000	-10.985	0.0	9.0367	-	-	-	*
		38.00000	-8.00000	-2.80000	-8.9850	0.0	6.1813	-	-	-	*
		40.00000	-8.00000	-2.80000	-6.9850	0.0	4.1047	-	-	-	*
		42.00000	-8.00000	-2.80000	-4.9850	0.0	2.6009	-	-	-	*
		44.00000	-8.00000	-2.80000	-2.9850	0.0	1.4638	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		46.00000	-8.00000	-2.80000	-0.98503	0.0	0.48741	-	-	-	*
		48.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-4.00000	-6.00000	-2.80000	0.0	0.0	0.0034870	-	-	-	*
		-2.00000	-6.00000	-2.80000	0.0	0.0	0.054698	-	-	-	*
		0.00000	-6.00000	-2.80000	0.0	0.0	0.061427	-	-	-	*
		2.00000	-6.00000	-2.80000	0.0	0.0	0.033355	-	-	-	*
		4.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-6.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	-6.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	-6.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	-6.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	-6.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	-6.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	-6.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	-6.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	-6.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	-6.00000	-2.80000		Point lies within an excavation.					*
		32.00000	-6.00000	-2.80000		Point lies within an excavation.					*
		34.00000	-6.00000	-2.80000		Point lies within an excavation.					*
		36.00000	-6.00000	-2.80000	-9.3084	0.0	7.5974	-	-	-	*
		38.00000	-6.00000	-2.80000	-7.3084	0.0	4.8501	-	-	-	*
		40.00000	-6.00000	-2.80000	-5.3084	0.0	2.9632	-	-	-	*
		42.00000	-6.00000	-2.80000	-3.3084	0.0	1.6543	-	-	-	*
		44.00000	-6.00000	-2.80000	-1.3084	0.0	0.64073	-	-	-	*
		46.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-6.00000	-4.00000	-2.80000	0.0	0.0	0.039361	-	-	-	*
		-4.00000	-4.00000	-2.80000	0.0	0.0	0.13929	-	-	-	*
		-2.00000	-4.00000	-2.80000	0.0	0.0	0.17845	-	-	-	*
		0.00000	-4.00000	-2.80000	0.0024453	0.0	0.15454	-	-	-	*
		2.00000	-4.00000	-2.80000	0.0091549	0.0	0.077500	-	-	-	*
		4.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-4.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	-4.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	-4.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	-4.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	-4.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	-4.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	-4.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	-4.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	-4.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	-4.00000	-2.80000		Point lies within an excavation.					*
		32.00000	-4.00000	-2.80000		Point lies within an excavation.					*
		34.00000	-4.00000	-2.80000		Point lies within an excavation.					*
		36.00000	-4.00000	-2.80000	-7.6317	0.0	6.1601	-	-	-	*
		38.00000	-4.00000	-2.80000	-5.6317	0.0	3.5590	-	-	-	*
		40.00000	-4.00000	-2.80000	-3.6317	0.0	1.9079	-	-	-	*
		42.00000	-4.00000	-2.80000	-1.6317	0.0	0.79575	-	-	-	*
		44.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	-2.00000	-2.80000	0.0	0.0	0.023428	-	-	-	*
		-6.00000	-2.00000	-2.80000	0.0	0.0	0.19741	-	-	-	*
		-4.00000	-2.00000	-2.80000	0.0	0.0	0.31014	-	-	-	*
		-2.00000	-2.00000	-2.80000	0.064502	0.0	0.34445	-	-	-	*
		0.00000	-2.00000	-2.80000	0.090655	0.0	0.28712	-	-	-	*
		2.00000	-2.00000	-2.80000	0.053922	0.0	0.14303	-	-	-	*
		4.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	-2.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	-2.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	-2.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	-2.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	-2.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	-2.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	-2.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	-2.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	-2.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	-2.00000	-2.80000		Point lies within an excavation.					*
		32.00000	-2.00000	-2.80000		Point lies within an excavation.					*
		34.00000	-2.00000	-2.80000		Point lies within an excavation.					*
		36.00000	-2.00000	-2.80000	-5.9551	0.0	4.7266	-	-	-	*
		38.00000	-2.00000	-2.80000	-3.9551	0.0	2.3328	-	-	-	*
		40.00000	-2.00000	-2.80000	-1.9551	0.0	0.96753	-	-	-	*
		42.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	-2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	0.00000	-2.80000	0.0	0.0	0.17053	-	-	-	*
		-6.00000	0.00000	-2.80000	0.0	0.0	0.38020	-	-	-	*
		-4.00000	0.00000	-2.80000	0.10651	0.0	0.52428	-	-	-	*
		-2.00000	0.00000	-2.80000	0.21585	0.0	0.57253	-	-	-	*
		0.00000	0.00000	-2.80000	0.23411	0.0	0.48772	-	-	-	*
		2.00000	0.00000	-2.80000	0.13452	0.0	0.25001	-	-	-	*
		4.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	0.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	0.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	0.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	0.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	0.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	0.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	0.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	0.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	0.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	0.00000	-2.80000		Point lies within an excavation.					*
		32.00000	0.00000	-2.80000		Point lies within an excavation.					*
		34.00000	0.00000	-2.80000		Point lies within an excavation.					*
		36.00000	0.00000	-2.80000	-4.2784	0.0	3.3007	-	-	-	*
		38.00000	0.00000	-2.80000	-2.2784	0.0	1.2184	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		40.00000	0.00000	-2.80000	-0.27844	0.0	0.13913	-	-	-	*
		42.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	0.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	2.00000	-2.80000	0.0	0.0	0.019578	-	-	-	*
		-8.00000	2.00000	-2.80000	0.0	0.0	0.31857	-	-	-	*
		-6.00000	2.00000	-2.80000	0.046265	0.0	0.58095	-	-	-	*
		-4.00000	2.00000	-2.80000	0.26737	0.0	0.78442	-	-	-	*
		-2.00000	2.00000	-2.80000	0.43610	0.0	0.88746	-	-	-	*
		0.00000	2.00000	-2.80000	0.48888	0.0	0.81319	-	-	-	*
		2.00000	2.00000	-2.80000	0.30659	0.0	0.45351	-	-	-	*
		4.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	2.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	2.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	2.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	2.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	2.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	2.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	2.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	2.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	2.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	2.00000	-2.80000		Point lies within an excavation.					*
		32.00000	2.00000	-2.80000		Point lies within an excavation.					*
		34.00000	2.00000	-2.80000		Point lies within an excavation.					*
		36.00000	2.00000	-2.80000	-2.6018	0.0	1.8938	-	-	-	*
		38.00000	2.00000	-2.80000	-0.60180	0.0	0.29345	-	-	-	*
		40.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	2.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	4.00000	-2.80000	0.0	0.0	0.10018	-	-	-	*
		-8.00000	4.00000	-2.80000	0.0	0.0	0.45007	-	-	-	*
		-6.00000	4.00000	-2.80000	0.14600	0.0	0.77968	-	-	-	*
		-4.00000	4.00000	-2.80000	0.44235	0.0	1.0740	-	-	-	*
		-2.00000	4.00000	-2.80000	0.73048	0.0	1.2988	-	-	-	*
		0.00000	4.00000	-2.80000	0.94424	0.0	1.3616	-	-	-	*
		2.00000	4.00000	-2.80000	0.77474	0.0	0.95862	-	-	-	*
		4.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	4.00000	-2.80000	0.0	0.0	0.40000	-	-	-	*
		14.00000	4.00000	-2.80000	0.0	0.0	0.80000	-	-	-	*
		16.00000	4.00000	-2.80000	0.26803	0.0	1.2028	-	-	-	*
		18.00000	4.00000	-2.80000	2.6407	0.0	2.5760	-	-	-	*
		20.00000	4.00000	-2.80000	5.0573	0.0	3.9974	-	-	-	*
		22.00000	4.00000	-2.80000	7.5429	0.0	5.6559	-	-	-	*
		24.00000	4.00000	-2.80000	10.123	0.0	7.7400	-	-	-	*
		26.00000	4.00000	-2.80000	12.822	0.0	10.439	-	-	-	*
		28.00000	4.00000	-2.80000	15.666	0.0	13.940	-	-	-	*
		30.00000	4.00000	-2.80000		Point lies within an excavation.					*
		32.00000	4.00000	-2.80000		Point lies within an excavation.					*
		34.00000	4.00000	-2.80000		Point lies within an excavation.					*
		36.00000	4.00000	-2.80000	-0.92515	0.0	0.56263	-	-	-	*
		38.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	4.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	6.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	6.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	6.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	6.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	6.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	6.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	6.00000	-2.80000	4.5122	0.0	5.0800	-	-	-	*
		4.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	6.00000	-2.80000	0.0	0.0	0.39467	-	-	-	*
		14.00000	6.00000	-2.80000	0.0	0.0	0.78845	-	-	-	*
		16.00000	6.00000	-2.80000	0.26310	0.0	1.1802	-	-	-	*
		18.00000	6.00000	-2.80000	1.9326	-0.019050	2.2147	-	-	-	*
		20.00000	6.00000	-2.80000	3.6270	-0.047657	3.2712	-	-	-	*
		22.00000	6.00000	-2.80000	5.3468	-0.095294	4.4649	-	-	-	*
		24.00000	6.00000	-2.80000	7.0508	-0.19036	5.8870	-	-	-	*
		26.00000	6.00000	-2.80000	8.4372	-0.47287	7.4902	-	-	-	*
		28.00000	6.00000	-2.80000	0.0	-7.8390	6.5769	-	-	-	*
		30.00000	6.00000	-2.80000	0.0	-8.5000	7.0629	-	-	-	*
		32.00000	6.00000	-2.80000	0.0	-5.3000	4.3139	-	-	-	*
		34.00000	6.00000	-2.80000	0.0	-2.1000	1.5863	-	-	-	*
		36.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	6.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	8.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	8.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	8.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	8.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	8.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	8.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	8.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	8.00000	-2.80000	0.0	0.0	0.33374	-	-	-	*
		14.00000	8.00000	-2.80000	0.0	0.0	0.68343	-	-	-	*
		16.00000	8.00000	-2.80000	0.20131	0.0	1.0169	-	-	-	*
		18.00000	8.00000	-2.80000	1.4600	-0.12513	1.8531	-	-	-	*
		20.00000	8.00000	-2.80000	2.7226	-0.32757	2.6999	-	-	-	*
		22.00000	8.00000	-2.80000	3.7422	-0.64951	3.5233	-	-	-	*
		24.00000	8.00000	-2.80000	4.1784	-1.2268	4.2200	-	-	-	*
		26.00000	8.00000	-2.80000	3.1509	-2.5715	4.4252	-	-	-	*
		28.00000	8.00000	-2.80000	0.0	-6.4990	4.5876	-	-	-	*
		30.00000	8.00000	-2.80000	0.0	-6.5000	4.2872	-	-	-	*
		32.00000	8.00000	-2.80000	0.0	-3.3000	1.9101	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		34.00000	8.00000	-2.80000	0.0	-0.10000	0.050383	-	-	-	*
		36.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	8.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	10.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	10.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	10.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	10.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	10.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	10.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	10.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	10.00000	-2.80000	0.0	0.0	0.23857	-	-	-	*
		14.00000	10.00000	-2.80000	0.0	0.0	0.54363	-	-	-	*
		16.00000	10.00000	-2.80000	0.10538	0.0	0.82044	-	-	-	*
		18.00000	10.00000	-2.80000	0.85462	-0.14409	1.3755	-	-	-	*
		20.00000	10.00000	-2.80000	1.7512	-0.45803	2.0274	-	-	-	*
		22.00000	10.00000	-2.80000	2.2828	-0.91411	2.5424	-	-	-	*
		24.00000	10.00000	-2.80000	2.2134	-1.6502	2.8573	-	-	-	*
		26.00000	10.00000	-2.80000	1.5309	-3.1730	3.1838	-	-	-	*
		28.00000	10.00000	-2.80000	0.0	-5.1590	3.1174	-	-	-	*
		30.00000	10.00000	-2.80000	0.0	-4.5000	2.4604	-	-	-	*
		32.00000	10.00000	-2.80000	0.0	-1.3000	0.63517	-	-	-	*
		34.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	10.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	12.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	12.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	12.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	12.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	12.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	12.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	12.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	12.00000	-2.80000	0.0	0.0	0.12246	-	-	-	*
		14.00000	12.00000	-2.80000	0.0	0.0	0.38700	-	-	-	*
		16.00000	12.00000	-2.80000	0.0	0.0	0.61564	-	-	-	*
		18.00000	12.00000	-2.80000	0.25985	-0.032380	0.84521	-	-	-	*
		20.00000	12.00000	-2.80000	0.91748	-0.38585	1.3662	-	-	-	*
		22.00000	12.00000	-2.80000	1.2378	-0.86803	1.7210	-	-	-	*
		24.00000	12.00000	-2.80000	1.2420	-1.6674	2.0208	-	-	-	*
		26.00000	12.00000	-2.80000	0.79864	-2.7254	2.1571	-	-	-	*
		28.00000	12.00000	-2.80000	0.0	-3.8190	2.0399	-	-	-	*
		30.00000	12.00000	-2.80000	0.0	-2.5000	1.2316	-	-	-	*
		32.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	12.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	14.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	14.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	14.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	14.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	14.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	14.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	14.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	14.00000	-2.80000	0.0	0.0	0.22740	-	-	-	*
		16.00000	14.00000	-2.80000	0.0	0.0	0.41918	-	-	-	*
		18.00000	14.00000	-2.80000	0.050869	0.0	0.55944	-	-	-	*
		20.00000	14.00000	-2.80000	0.28785	-0.12270	0.75213	-	-	-	*
		22.00000	14.00000	-2.80000	0.58699	-0.58956	1.0778	-	-	-	*
		24.00000	14.00000	-2.80000	0.62643	-1.1977	1.2822	-	-	-	*
		26.00000	14.00000	-2.80000	0.40204	-1.8820	1.3415	-	-	-	*
		28.00000	14.00000	-2.80000	0.0	-2.4790	1.2286	-	-	-	*
		30.00000	14.00000	-2.80000	0.0	-0.50000	0.24999	-	-	-	*
		32.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	14.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	16.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	16.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	16.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	16.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	16.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	16.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	16.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	16.00000	-2.80000	0.0	0.0	0.073840	-	-	-	*
		16.00000	16.00000	-2.80000	0.0	0.0	0.23975	-	-	-	*
		18.00000	16.00000	-2.80000	0.0	0.0	0.35756	-	-	-	*
		20.00000	16.00000	-2.80000	0.034840	0.0	0.41689	-	-	-	*
		22.00000	16.00000	-2.80000	0.10823	-0.030976	0.43229	-	-	-	*
		24.00000	16.00000	-2.80000	0.21615	-0.44858	0.60580	-	-	-	*
		26.00000	16.00000	-2.80000	0.15869	-0.85548	0.64791	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		28.00000	16.00000	-2.80000	0.0	-1.1390	0.55714	-	-	-	*
		30.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	16.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	18.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	18.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	18.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	18.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	18.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	18.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	18.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	18.00000	-2.80000	0.0	0.0	0.080317	-	-	-	*
		18.00000	18.00000	-2.80000	0.0	0.0	0.18668	-	-	-	*
		20.00000	18.00000	-2.80000	0.0	0.0	0.24429	-	-	-	*
		22.00000	18.00000	-2.80000	0.0	0.0	0.24932	-	-	-	*
		24.00000	18.00000	-2.80000	0.020396	0.0	0.20280	-	-	-	*
		26.00000	18.00000	-2.80000	0.019045	0.0	0.11367	-	-	-	*
		28.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	18.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	20.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	20.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	20.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	20.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	20.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	20.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	20.00000	-2.80000	2.2561	0.0	2.5400	-	-	-	*
		4.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	20.00000	-2.80000	0.0	0.0	0.042763	-	-	-	*
		20.00000	20.00000	-2.80000	0.0	0.0	0.10484	-	-	-	*
		22.00000	20.00000	-2.80000	0.0	0.0	0.12606	-	-	-	*
		24.00000	20.00000	-2.80000	0.0	0.0	0.10943	-	-	-	*
		26.00000	20.00000	-2.80000	0.0	0.0	0.063001	-	-	-	*
		28.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	20.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	22.00000	-2.80000	0.0	0.0	0.14000	-	-	-	*
		-8.00000	22.00000	-2.80000	0.0	0.0	0.54000	-	-	-	*
		-6.00000	22.00000	-2.80000	0.20546	0.0	0.94000	-	-	-	*
		-4.00000	22.00000	-2.80000	0.58248	0.0	1.3400	-	-	-	*
		-2.00000	22.00000	-2.80000	1.0230	0.0	1.7400	-	-	-	*
		0.00000	22.00000	-2.80000	1.5673	0.0	2.1400	-	-	-	*
		2.00000	22.00000	-2.80000	4.5122	0.0	5.0800	-	-	-	*
		4.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		20.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		22.00000	22.00000	-2.80000	0.0	0.0	0.028327	-	-	-	*
		24.00000	22.00000	-2.80000	0.0	0.0	0.037269	-	-	-	*
		26.00000	22.00000	-2.80000	0.0	0.0	0.024526	-	-	-	*
		28.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	22.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	24.00000	-2.80000	0.0	0.0	0.10018	-	-	-	*
		-8.00000	24.00000	-2.80000	0.0	0.0	0.45007	-	-	-	*
		-6.00000	24.00000	-2.80000	0.14600	0.0	0.77968	-	-	-	*
		-4.00000	24.00000	-2.80000	0.44235	0.0	1.0740	-	-	-	*
		-2.00000	24.00000	-2.80000	0.73048	0.0	1.2988	-	-	-	*
		0.00000	24.00000	-2.80000	0.94424	0.0	1.3616	-	-	-	*
		2.00000	24.00000	-2.80000	0.77474	0.0	0.95862	-	-	-	*
		4.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		20.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal displacement	Horizontal displacement	to x Axis	
		22.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		24.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		26.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		28.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	24.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	26.00000	-2.80000	0.0	0.0	0.019578	-	-	-	*
		-8.00000	26.00000	-2.80000	0.0	0.0	0.31857	-	-	-	*
		-6.00000	26.00000	-2.80000	0.046265	0.0	0.58095	-	-	-	*
		-4.00000	26.00000	-2.80000	0.26737	0.0	0.78442	-	-	-	*
		-2.00000	26.00000	-2.80000	0.43610	0.0	0.88746	-	-	-	*
		0.00000	26.00000	-2.80000	0.48888	0.0	0.81319	-	-	-	*
		2.00000	26.00000	-2.80000	0.30659	0.0	0.45351	-	-	-	*
		4.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		20.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		22.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		24.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		26.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		28.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	26.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	28.00000	-2.80000	0.0	0.0	0.17053	-	-	-	*
		-6.00000	28.00000	-2.80000	0.0	0.0	0.38020	-	-	-	*
		-4.00000	28.00000	-2.80000	0.10651	0.0	0.52428	-	-	-	*
		-2.00000	28.00000	-2.80000	0.21585	0.0	0.57253	-	-	-	*
		0.00000	28.00000	-2.80000	0.23411	0.0	0.48772	-	-	-	*
		2.00000	28.00000	-2.80000	0.13452	0.0	0.25001	-	-	-	*
		4.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		20.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		22.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		24.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		26.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		28.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	28.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-10.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		-8.00000	30.00000	-2.80000	0.0	0.0	0.023428	-	-	-	*
		-6.00000	30.00000	-2.80000	0.0	0.0	0.19741	-	-	-	*
		-4.00000	30.00000	-2.80000	0.0	0.0	0.31014	-	-	-	*
		-2.00000	30.00000	-2.80000	0.064502	0.0	0.34445	-	-	-	*
		0.00000	30.00000	-2.80000	0.090655	0.0	0.28712	-	-	-	*
		2.00000	30.00000	-2.80000	0.053922	0.0	0.14303	-	-	-	*
		4.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		6.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		8.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		10.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		12.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		14.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		16.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		18.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		20.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		22.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		24.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		26.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		28.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		30.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		32.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		34.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		36.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		38.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		40.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		42.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		44.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		46.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		48.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		50.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		52.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		54.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		56.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		58.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
		60.00000	30.00000	-2.80000	0.0	0.0	0.0	-	-	-	*
Law Bdg Infill	Line 1	2.00000	6.00000	-1.50000	3.0436	0.0	2.9672	3.0436	0.0	0.0	*
		1.0667	3.06667	6.00000	-1.50000	3.8839	0.0	3.3799	3.8839	0.0	0.0 *
		2.1333	4.13333	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		3.2000	5.20000	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		4.2667	6.26667	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		5.3333	7.33333	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		6.4000	8.40000	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		7.4667	9.46667	6.00000	-1.50000	0.0	0.0	0.0	0.0	0.0	0.0 *
		8.5333	10.53333	6.00000	-1.50000	0.0	0.0	0.10499	0.0	0.0	0.0 *
		9.6000	11.60000	6.00000	-1.50000	0.0	0.0	0.31573	0.0	0.0	0.0 *
		10.667	12.66667	6.00000	-1.50000	0.0	0.0	0.52611	0.0	0.0	0.0 *
		11.733	13.73333	6.00000	-1.50000	0.0	0.0	0.73605	0.0	0.0	0.0 *

Type/No. Name	Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
	12.800	14.80000	6.00000	-1.50000	0.053600	0.0	0.94544	0.053600	0.0	0.0	*
	13.867	15.86667	6.00000	-1.50000	0.23963	0.0	1.1541	0.23963	0.0	0.0	*
	14.933	16.93333	6.00000	-1.50000	1.0389	-0.0080166	1.6681	1.0389	-0.0080166	0.0	*
	16.000	18.00000	6.00000	-1.50000	1.9326	-0.019050	2.2147	1.9326	-0.019050	0.0	*
16 Chenies Line 2 Wst		2.00000	22.00000	-2.80000	4.5122	0.0	5.0800	4.5122	0.0	0.0	*
	1.1333	3.13333	22.00000	-2.80000	2.7258	0.0	2.7667	2.7258	0.0	0.0	*
	2.2667	4.26667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	3.4000	5.40000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	4.5333	6.53333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	5.6667	7.66667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	6.8000	8.80000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	7.9333	9.93333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	9.0667	11.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	10.200	12.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	11.333	13.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	12.467	14.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	13.600	15.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	14.733	16.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	15.867	17.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	17.000	19.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	18.133	20.13333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	19.267	21.26667	22.00000	-2.80000	0.0	0.0	0.018156	0.0	0.0	0.0	*
	20.400	22.40000	22.00000	-2.80000	0.0	0.0	0.032227	0.0	0.0	0.0	*
	21.533	23.53333	22.00000	-2.80000	0.0	0.0	0.037429	0.0	0.0	0.0	*
	22.667	24.66667	22.00000	-2.80000	0.0	0.0	0.034998	0.0	0.0	0.0	*
	23.800	25.80000	22.00000	-2.80000	0.0	0.0	0.026514	0.0	0.0	0.0	*
	24.933	26.93333	22.00000	-2.80000	0.0	0.0	0.013854	0.0	0.0	0.0	*
	26.067	28.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	27.200	29.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	28.333	30.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	29.467	31.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	30.600	32.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	31.733	33.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	32.867	34.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	34.000	36.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	35.133	37.13333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	36.267	38.26667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	37.400	39.40000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	38.533	40.53333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	39.667	41.66667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	40.800	42.80000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	41.933	43.93333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	43.067	45.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	44.200	46.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	45.333	47.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	46.467	48.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	47.600	49.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	48.733	50.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	49.867	51.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	51.000	53.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
16 Chenies Line 3 Sth		2.00000	21.90000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	1.0533	2.00000	20.84667	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	2.1067	2.00000	19.79333	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	3.1600	2.00000	18.74000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	4.2133	2.00000	17.68667	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	5.2667	2.00000	16.63333	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	6.3200	2.00000	15.58000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	7.3733	2.00000	14.52667	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	8.4267	2.00000	13.47333	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	9.4800	2.00000	12.42000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	10.533	2.00000	11.36667	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	11.587	2.00000	10.31333	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	12.640	2.00000	9.26000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	13.693	2.00000	8.20667	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	14.747	2.00000	7.15333	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
	15.800	2.00000	6.10000	-2.80000	2.2561	0.0	2.5400	0.0	2.2561	270.00	*
16 Chenies Line 4 Est		2.00000	6.00000	-2.80000	4.5122	0.0	5.0800	4.5122	0.0	0.0	*
	1.1333	3.13333	6.00000	-2.80000	2.7258	0.0	2.7667	2.7258	0.0	0.0	*
	2.2667	4.26667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	3.4000	5.40000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	4.5333	6.53333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	5.6667	7.66667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	6.8000	8.80000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	7.9333	9.93333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	9.0667	11.06667	6.00000	-2.80000	0.0	0.0	0.21040	0.0	0.0	0.0	*
	10.200	12.20000	6.00000	-2.80000	0.0	0.0	0.43412	0.0	0.0	0.0	*
	11.333	13.33333	6.00000	-2.80000	0.0	0.0	0.65738	0.0	0.0	0.0	*
	12.467	14.46667	6.00000	-2.80000	0.0	0.0	0.88007	0.0	0.0	0.0	*
	13.600	15.60000	6.00000	-2.80000	0.19288	0.0	1.1020	0.19288	0.0	0.0	*
	14.733	16.73333	6.00000	-2.80000	0.87194	-0.0061802	1.5649	0.87194	-0.0061802	0.0	*
	15.867	17.86667	6.00000	-2.80000	1.8206	-0.017544	2.1464	1.8206	-0.017544	0.0	*
	17.000	19.00000	6.00000	-2.80000	2.7764	-0.031766	2.7327	2.7764	-0.031766	0.0	*
	18.133	20.13333	6.00000	-2.80000	3.7410	-0.050081	3.3453	3.7410	-0.050081	0.0	*
	19.267	21.26667	6.00000	-2.80000	4.7141	-0.074548	4.0046	4.7141	-0.074548	0.0	*
	20.400	22.40000	6.00000	-2.80000	5.6918	-0.10889	4.7290	5.6918	-0.10889	0.0	*
	21.533	23.53333	6.00000	-2.80000	6.6611	-0.16060	5.5322	6.6611	-0.16060	0.0	*
	22.667	24.66667	6.00000	-2.80000	7.5854	-0.24723	6.4155	7.5854	-0.24723	0.0	*
	23.800	25.80000	6.00000	-2.80000	8.3455	-0.42189	7.3358	8.3455	-0.42189	0.0	*
	24.933	26.93333	6.00000	-2.80000	8.3246	-0.95054	7.9862	8.3246	-0.95054	0.0	*
	26.067	28.06667	6.00000	-2.80000	0.0	-11.593	9.7245	0.0	-11.593	0.0	*
	27.200	29.20000	6.00000	-2.80000	0.0	-9.7800	8.1640	0.0	-9.7800	0.0	*
	28.333	30.33333	6.00000	-2.80000	0.0	-7.9667	6.6043	0.0	-7.9667	0.0	*
	29.467	31.46667	6.00000	-2.80000	0.0	-6.1533	5.0462	0.0	-6.1533	0.0	*
	30.600	32.60000	6.00000	-2.80000	0.0	-4.3400	3.4914	0.0	-4.3400	0.0	*
	31.733	33.73333	6.00000	-2.80000	0.0	-2.5267	1.9462	0.0	-2.5267	0.0	*
	32.867	34.86667	6.00000	-2.80000	0.0	-0.71333	0.45550	0.0	-0.71333	0.0	*
	34.000	36.00000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	35.133	37.13333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	36.267	38.26667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	37.400	39.40000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	38.533	40.53333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	39.667	41.66667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	40.800	42.80000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	41.933	43.93333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	43.067	45.06667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	44.200	46.20000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	45.333	47.33333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	46.467	48.46667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	47.600	49.60000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	48.733	50.73333	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	49.867	51.86667	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
	51.000	53.00000	6.00000	-2.80000	0.0	0.0	0.0	0.0	0.0	0.0	*
16 Chenies Line 5 Nth		53.00000	21.90000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	1.0533	53.00000	20.84667	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	2.1067	53.00000	19.79333	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	3.1600	53.00000	18.74000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	4.2133	53.00000	17.68667	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	5.2667	53.00000	16.63333	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	6.3200	53.00000	15.58000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	7.3733	53.00000	14.52667	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	8.4267	53.00000	13.47333	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	9.4800	53.00000	12.42000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	10.533	53.00000	11.36667	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	11.587	53.00000	10.31333	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	12.640	53.00000	9.26000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	13.693	53.00000	8.20667	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	14.747	53.00000	7.15333	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
	15.800	53.00000	6.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	270.00	*
18 Chenies Line 6 Retained Wall		39.00000	-13.60000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	0.98000	39.00000	-12.62000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	1.9600	39.00000	-11.64000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	2.9400	39.00000	-10.66000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	3.9200	39.00000	-9.68000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	4.9000	39.00000	-8.70000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	5.8800	39.00000	-7.72000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*

Name	Type/No. Dist.	Coordinates x	y	z	Displacements x	y	z	Horizontal displacement	Horizontal displacement	Angle of Line to x Axis	
	6.8600	39.00000	-6.74000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	7.8400	39.00000	-5.76000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	8.8200	39.00000	-4.78000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	9.8000	39.00000	-3.80000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	10.780	39.00000	-2.82000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	11.760	39.00000	-1.84000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	12.740	39.00000	-0.86000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	13.720	39.00000	0.12000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	14.700	39.00000	1.10000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	15.680	39.00000	2.08000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	16.660	39.00000	3.06000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	17.640	39.00000	4.04000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	18.620	39.00000	5.02000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
	19.600	39.00000	6.00000	-3.50000	0.0	0.0	0.0	0.0	0.0	90.000	*
Law Bdg Nth	Line 7	21.60000	4.00000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	1.0500	21.60000	2.95000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	2.1000	21.60000	1.90000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	3.1500	21.60000	0.85000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	4.2000	21.60000	-0.20000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	5.2500	21.60000	-1.25000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	6.3000	21.60000	-2.30000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	7.3500	21.60000	-3.35000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	8.4000	21.60000	-4.40000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	9.4500	21.60000	-5.45000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	10.500	21.60000	-6.50000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	11.550	21.60000	-7.55000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	12.600	21.60000	-8.60000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	13.650	21.60000	-9.65000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	14.700	21.60000	-10.70000	-2.80000	7.0390	0.0	5.2962	0.0	7.0390	270.00	*
	15.750	21.60000	-11.75000	-2.80000	4.6979	0.31236	4.2110	-0.31236	4.6979	270.00	*
	16.800	21.60000	-12.80000	-2.80000	3.9371	0.70727	3.9866	-0.70727	3.9371	270.00	*
	17.850	21.60000	-13.85000	-2.80000	3.1720	1.0096	3.6944	-1.0096	3.1720	270.00	*
	18.900	21.60000	-14.90000	-2.80000	2.4640	1.1934	3.3617	-1.1934	2.4640	270.00	*
	19.950	21.60000	-15.95000	-2.80000	1.8453	1.2538	3.0090	-1.2538	1.8453	270.00	*
	21.000	21.60000	-17.00000	-2.80000	1.3255	1.2002	2.6491	-1.2002	1.3255	270.00	*
Law Bbg Est	Line 8	21.60000	-17.10000	-2.80000	1.2811	1.1897	2.6146	-1.2811	-1.1897	180.00	*
	1.0800	20.52000	-17.10000	-2.80000	1.1146	0.82026	2.2672	-1.1146	-0.82026	180.00	*
	2.1600	19.44000	-17.10000	-2.80000	0.83315	0.50719	1.8892	-0.83315	-0.50719	180.00	*
	3.2400	18.36000	-17.10000	-2.80000	0.45858	0.24113	1.4812	-0.45858	-0.24113	180.00	*
	4.3200	17.28000	-17.10000	-2.80000	0.13969	0.068598	1.1332	-0.13969	-0.068598	180.00	*
	5.4000	16.20000	-17.10000	-2.80000	0.028048	0.012236	0.94331	-0.028048	-0.012236	180.00	*
	6.4800	15.12000	-17.10000	-2.80000	0.0	0.0	0.74971	0.0	0.0	180.00	*
	7.5600	14.04000	-17.10000	-2.80000	0.0	0.0	0.55309	0.0	0.0	180.00	*
	8.6400	12.96000	-17.10000	-2.80000	0.0	0.0	0.35401	0.0	0.0	180.00	*
	9.7200	11.88000	-17.10000	-2.80000	0.0	0.0	0.15289	0.0	0.0	180.00	*
	10.800	10.80000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	11.880	9.72000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	12.960	8.64000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	14.040	7.56000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	15.120	6.48000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	16.200	5.40000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	17.280	4.32000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	18.360	3.24000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	19.440	2.16000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	20.520	1.08000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*
	21.600	0.00000	-17.10000	-2.80000	0.0	0.0	0.0	0.0	0.0	180.00	*

* Result includes imported displacement(s).

Specific Building Damage Results - Horizontal Displacements

Structure: Law Building | Sub-structure: Infill

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	2.00000	6.00000	-1.50000	3.0436	0.0	3.0436	0.0	d
1.0667	3.06667	6.00000	-1.50000	3.8839	0.0	3.8839	0.0	d
2.1333	4.13333	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
3.2000	5.20000	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
4.2667	6.26667	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
5.3333	7.33333	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
6.4000	8.40000	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
7.4667	9.46667	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
8.5333	10.53333	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
9.6000	11.60000	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
10.667	12.66667	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
11.733	13.73333	6.00000	-1.50000	0.0	0.0	0.0	0.0	d
12.800	14.80000	6.00000	-1.50000	0.053600	0.0	0.053600	0.0	d
13.867	15.86667	6.00000	-1.50000	0.23963	0.0	0.23963	0.0	d
14.933	16.93333	6.00000	-1.50000	1.0389	-0.0080166	1.0389	-0.0080166	d
16.000	18.00000	6.00000	-1.50000	1.9326	-0.019050	1.9326	-0.019050	d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: West

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line	
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	
0.0	2.00000	22.00000	-2.80000	4.5122	0.0	4.5122	0.0	d
1.1333	3.13333	22.00000	-2.80000	2.7258	0.0	2.7258	0.0	d
2.2667	4.26667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
3.4000	5.40000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
4.5333	6.53333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
5.6667	7.66667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
6.8000	8.80000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
7.9333	9.93333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
9.0667	11.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
10.200	12.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
11.333	13.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
12.467	14.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
13.600	15.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
14.733	16.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
15.867	17.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
17.000	19.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
18.133	20.13333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
19.267	21.26667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
20.400	22.40000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
21.533	23.53333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
22.667	24.66667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
23.800	25.80000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
24.933	26.93333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
26.067	28.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
27.200	29.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
28.333	30.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
29.467	31.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
30.600	32.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
31.733	33.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
32.867	34.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
34.000	36.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
35.133	37.13333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
36.267	38.26667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
37.400	39.40000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
38.533	40.53333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
39.667	41.66667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
40.800	42.80000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
41.933	43.93333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
43.067	45.06667	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
44.200	46.20000	22.00000	-2.80000	0.0	0.0	0.0	0.0	d
45.333	47.33333	22.00000	-2.80000	0.0	0.0	0.0	0.0	d

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the	Horizontal displacement perpendicular
46.467	48.46667	22.00000	-2.80000	0.0	0.0	0.0	0.0 d
47.600	49.60000	22.00000	-2.80000	0.0	0.0	0.0	0.0 d
48.733	50.73333	22.00000	-2.80000	0.0	0.0	0.0	0.0 d
49.867	51.86667	22.00000	-2.80000	0.0	0.0	0.0	0.0 d
51.000	53.00000	22.00000	-2.80000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: South

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	2.00000	21.90000	-2.80000	2.2561	0.0	0.0	2.2561 d
1.0533	2.00000	20.84667	-2.80000	2.2561	0.0	0.0	2.2561 d
2.1067	2.00000	19.79333	-2.80000	2.2561	0.0	0.0	2.2561 d
3.1600	2.00000	18.74000	-2.80000	2.2561	0.0	0.0	2.2561 d
4.2133	2.00000	17.68667	-2.80000	2.2561	0.0	0.0	2.2561 d
5.2667	2.00000	16.63333	-2.80000	2.2561	0.0	0.0	2.2561 d
6.3200	2.00000	15.58000	-2.80000	2.2561	0.0	0.0	2.2561 d
7.3733	2.00000	14.52667	-2.80000	2.2561	0.0	0.0	2.2561 d
8.4267	2.00000	13.47333	-2.80000	2.2561	0.0	0.0	2.2561 d
9.4800	2.00000	12.42000	-2.80000	2.2561	0.0	0.0	2.2561 d
10.533	2.00000	11.36667	-2.80000	2.2561	0.0	0.0	2.2561 d
11.587	2.00000	10.31333	-2.80000	2.2561	0.0	0.0	2.2561 d
12.640	2.00000	9.26000	-2.80000	2.2561	0.0	0.0	2.2561 d
13.693	2.00000	8.20667	-2.80000	2.2561	0.0	0.0	2.2561 d
14.747	2.00000	7.15333	-2.80000	2.2561	0.0	0.0	2.2561 d
15.800	2.00000	6.10000	-2.80000	2.2561	0.0	0.0	2.2561 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: East

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	2.00000	6.00000	-2.80000	4.5122	0.0	4.5122	0.0 d
1.1333	3.13333	6.00000	-2.80000	2.7258	0.0	2.7258	0.0 d
2.2667	4.26667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
3.4000	5.40000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
4.5333	6.53333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
5.6667	7.66667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
6.8000	8.80000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
7.9333	9.93333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
9.0667	11.06667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
10.200	12.20000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
11.333	13.33333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
12.467	14.46667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
13.600	15.60000	6.00000	-2.80000	0.19288	0.0	0.19288	0.0 d
14.733	16.73333	6.00000	-2.80000	0.87194	-0.0061802	0.87194	-0.0061802 d
15.867	17.86667	6.00000	-2.80000	1.8206	-0.017544	1.8206	-0.017544 d
17.000	19.00000	6.00000	-2.80000	2.7764	-0.031766	2.7764	-0.031766 d
18.133	20.13333	6.00000	-2.80000	3.7410	-0.050081	3.7410	-0.050081 d
19.267	21.26667	6.00000	-2.80000	4.7141	-0.074548	4.7141	-0.074548 d
20.400	22.40000	6.00000	-2.80000	5.6918	-0.10889	5.6918	-0.10889 d
21.533	23.53333	6.00000	-2.80000	6.6611	-0.16060	6.6611	-0.16060 d
22.667	24.66667	6.00000	-2.80000	7.5854	-0.24723	7.5854	-0.24723 d
23.800	25.80000	6.00000	-2.80000	8.3455	-0.42189	8.3455	-0.42189 d
24.933	26.93333	6.00000	-2.80000	8.3246	-0.95054	8.3246	-0.95054 d
26.067	28.06667	6.00000	-2.80000	0.0	-11.593	0.0	-11.593 d
27.200	29.20000	6.00000	-2.80000	0.0	-9.7800	0.0	-9.7800 d
28.333	30.33333	6.00000	-2.80000	0.0	-7.9667	0.0	-7.9667 d
29.467	31.46667	6.00000	-2.80000	0.0	-6.1533	0.0	-6.1533 d
30.600	32.60000	6.00000	-2.80000	0.0	-4.3400	0.0	-4.3400 d
31.733	33.73333	6.00000	-2.80000	0.0	-2.5267	0.0	-2.5267 d
32.867	34.86667	6.00000	-2.80000	0.0	-0.71333	0.0	-0.71333 d
34.000	36.00000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
35.133	37.13333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
36.267	38.26667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
37.400	39.40000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
38.533	40.53333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
39.667	41.66667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
40.800	42.80000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
41.933	43.93333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
43.067	45.06667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
44.200	46.20000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
45.333	47.33333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
46.467	48.46667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
47.600	49.60000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
48.733	50.73333	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
49.867	51.86667	6.00000	-2.80000	0.0	0.0	0.0	0.0 d
51.000	53.00000	6.00000	-2.80000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: North

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	53.00000	21.90000	-2.80000	0.0	0.0	0.0	0.0 d
1.0533	53.00000	20.84667	-2.80000	0.0	0.0	0.0	0.0 d
2.1067	53.00000	19.79333	-2.80000	0.0	0.0	0.0	0.0 d
3.1600	53.00000	18.74000	-2.80000	0.0	0.0	0.0	0.0 d
4.2133	53.00000	17.68667	-2.80000	0.0	0.0	0.0	0.0 d
5.2667	53.00000	16.63333	-2.80000	0.0	0.0	0.0	0.0 d
6.3200	53.00000	15.58000	-2.80000	0.0	0.0	0.0	0.0 d
7.3733	53.00000	14.52667	-2.80000	0.0	0.0	0.0	0.0 d
8.4267	53.00000	13.47333	-2.80000	0.0	0.0	0.0	0.0 d
9.4800	53.00000	12.42000	-2.80000	0.0	0.0	0.0	0.0 d
10.533	53.00000	11.36667	-2.80000	0.0	0.0	0.0	0.0 d
11.587	53.00000	10.31333	-2.80000	0.0	0.0	0.0	0.0 d
12.640	53.00000	9.26000	-2.80000	0.0	0.0	0.0	0.0 d
13.693	53.00000	8.20667	-2.80000	0.0	0.0	0.0	0.0 d
14.747	53.00000	7.15333	-2.80000	0.0	0.0	0.0	0.0 d
15.800	53.00000	6.10000	-2.80000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: 18 Chenies | Sub-structure: Retained Wall

Dist.	Coordinates x	y	z	Displacements x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	39.00000	-13.60000	-3.50000	0.0	0.0	0.0	0.0 d
0.98000	39.00000	-12.62000	-3.50000	0.0	0.0	0.0	0.0 d
1.9600	39.00000	-11.64000	-3.50000	0.0	0.0	0.0	0.0 d
2.9400	39.00000	-10.66000	-3.50000	0.0	0.0	0.0	0.0 d
3.9200	39.00000	-9.68000	-3.50000	0.0	0.0	0.0	0.0 d
4.9000	39.00000	-8.70000	-3.50000	0.0	0.0	0.0	0.0 d
5.8800	39.00000	-7.72000	-3.50000	0.0	0.0	0.0	0.0 d
6.8600	39.00000	-6.74000	-3.50000	0.0	0.0	0.0	0.0 d
7.8400	39.00000	-5.76000	-3.50000	0.0	0.0	0.0	0.0 d
8.8200	39.00000	-4.78000	-3.50000	0.0	0.0	0.0	0.0 d
9.8000	39.00000	-3.80000	-3.50000	0.0	0.0	0.0	0.0 d
10.780	39.00000	-2.82000	-3.50000	0.0	0.0	0.0	0.0 d

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the	Horizontal displacement perpendicular
11.760	39.00000	-1.84000	-3.50000	0.0	0.0	0.0	0.0 d
12.740	39.00000	-0.86000	-3.50000	0.0	0.0	0.0	0.0 d
13.720	39.00000	0.12000	-3.50000	0.0	0.0	0.0	0.0 d
14.700	39.00000	1.10000	-3.50000	0.0	0.0	0.0	0.0 d
15.680	39.00000	2.08000	-3.50000	0.0	0.0	0.0	0.0 d
16.660	39.00000	3.06000	-3.50000	0.0	0.0	0.0	0.0 d
17.640	39.00000	4.04000	-3.50000	0.0	0.0	0.0	0.0 d
18.620	39.00000	5.02000	-3.50000	0.0	0.0	0.0	0.0 d
19.600	39.00000	6.00000	-3.50000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Structure: Law Building | Sub-structure: North

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	21.60000	4.00000	-2.80000	7.0390	0.0	0.0	7.0390 d
1.0500	21.60000	2.95000	-2.80000	7.0390	0.0	0.0	7.0390 d
2.1000	21.60000	1.90000	-2.80000	7.0390	0.0	0.0	7.0390 d
3.1500	21.60000	0.85000	-2.80000	7.0390	0.0	0.0	7.0390 d
4.2000	21.60000	-0.20000	-2.80000	7.0390	0.0	0.0	7.0390 d
5.2500	21.60000	-1.25000	-2.80000	7.0390	0.0	0.0	7.0390 d
6.3000	21.60000	-2.30000	-2.80000	7.0390	0.0	0.0	7.0390 d
7.3500	21.60000	-3.35000	-2.80000	7.0390	0.0	0.0	7.0390 d
8.4000	21.60000	-4.40000	-2.80000	7.0390	0.0	0.0	7.0390 d
9.4500	21.60000	-5.45000	-2.80000	7.0390	0.0	0.0	7.0390 d
10.500	21.60000	-6.50000	-2.80000	7.0390	0.0	0.0	7.0390 d
11.550	21.60000	-7.55000	-2.80000	7.0390	0.0	0.0	7.0390 d
12.600	21.60000	-8.60000	-2.80000	7.0390	0.0	0.0	7.0390 d
13.650	21.60000	-9.65000	-2.80000	7.0390	0.0	0.0	7.0390 d
14.700	21.60000	-10.70000	-2.80000	7.0390	0.0	0.0	7.0390 d
15.750	21.60000	-11.75000	-2.80000	4.6979	0.31236	-0.31236	4.6979 d
16.800	21.60000	-12.80000	-2.80000	3.9371	0.70727	-0.70727	3.9371 d
17.850	21.60000	-13.85000	-2.80000	3.1720	1.0096	-1.0096	3.1720 d
18.900	21.60000	-14.90000	-2.80000	2.4640	1.1934	-1.1934	2.4640 d
19.950	21.60000	-15.95000	-2.80000	1.8453	1.2538	-1.2538	1.8453 d
21.000	21.60000	-17.00000	-2.80000	1.3255	1.2002	-1.2002	1.3255 d

d - Displacements include imported displacements.

Structure: Law Building | Sub-structure: East

Dist.	Coordinates			Displacements			
	x	y	z	x	y	Horizontal displacement along the Line	Horizontal displacement perpendicular to Line
[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]
0.0	21.60000	-17.10000	-2.80000	1.2811	1.1897	-1.2811	-1.1897 d
1.0800	20.52000	-17.10000	-2.80000	1.1146	0.82026	-1.1146	-0.82026 d
2.1600	19.44000	-17.10000	-2.80000	0.83315	0.50719	-0.83315	-0.50719 d
3.2400	18.36000	-17.10000	-2.80000	0.45858	0.24113	-0.45858	-0.24113 d
4.3200	17.28000	-17.10000	-2.80000	0.13969	0.068598	-0.13969	-0.068598 d
5.4000	16.20000	-17.10000	-2.80000	0.028048	0.012236	-0.028048	-0.012236 d
6.4800	15.12000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
7.5600	14.04000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
8.6400	12.96000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
9.7200	11.88000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
10.800	10.80000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
11.880	9.72000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
12.960	8.64000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
14.040	7.56000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
15.120	6.48000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
16.200	5.40000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
17.280	4.32000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
18.360	3.24000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
19.440	2.16000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
20.520	1.08000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d
21.600	0.00000	-17.10000	-2.80000	0.0	0.0	0.0	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - Vertical Displacements

Structure: Law Building | Sub-structure: Infill

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	2.00000	6.00000	-1.50000	2.9672 d
1.0667	3.06667	6.00000	-1.50000	3.3799 d
2.1333	4.13333	6.00000	-1.50000	0.0 d
3.2000	5.20000	6.00000	-1.50000	0.0 d
4.2667	6.26667	6.00000	-1.50000	0.0 d
5.3333	7.33333	6.00000	-1.50000	0.0 d
6.4000	8.40000	6.00000	-1.50000	0.0 d
7.4667	9.46667	6.00000	-1.50000	0.0 d
8.5333	10.53333	6.00000	-1.50000	0.10499 d
9.6000	11.60000	6.00000	-1.50000	0.31573 d
10.667	12.66667	6.00000	-1.50000	0.52611 d
11.733	13.73333	6.00000	-1.50000	0.73605 d
12.800	14.80000	6.00000	-1.50000	0.94544 d
13.867	15.86667	6.00000	-1.50000	1.1541 d
14.933	16.93333	6.00000	-1.50000	1.6681 d
16.000	18.00000	6.00000	-1.50000	2.2147 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: West

Dist.	Coordinates			Displacements
	x	y	z	z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	2.00000	22.00000	-2.80000	5.0800 d
1.1333	3.13333	22.00000	-2.80000	2.7667 d
2.2667	4.26667	22.00000	-2.80000	0.0 d
3.4000	5.40000	22.00000	-2.80000	0.0 d
4.5333	6.53333	22.00000	-2.80000	0.0 d
5.6667	7.66667	22.00000	-2.80000	0.0 d
6.8000	8.80000	22.00000	-2.80000	0.0 d
7.9333	9.93333	22.00000	-2.80000	0.0 d
9.0667	11.06667	22.00000	-2.80000	0.0 d
10.200	12.20000	22.00000	-2.80000	0.0 d
11.333	13.33333	22.00000	-2.80000	0.0 d
12.467	14.46667	22.00000	-2.80000	0.0 d
13.600	15.60000	22.00000	-2.80000	0.0 d
14.733	16.73333	22.00000	-2.80000	0.0 d
15.867	17.86667	22.00000	-2.80000	0.0 d
17.000	19.00000	22.00000	-2.80000	0.0 d
18.133	20.13333	22.00000	-2.80000	0.0 d
19.267	21.26667	22.00000	-2.80000	0.018156 d
20.400	22.40000	22.00000	-2.80000	0.032227 d
21.533	23.53333	22.00000	-2.80000	0.037429 d
22.667	24.66667	22.00000	-2.80000	0.034998 d
23.800	25.80000	22.00000	-2.80000	0.026514 d
24.933	26.93333	22.00000	-2.80000	0.013854 d
26.067	28.06667	22.00000	-2.80000	0.0 d
27.200	29.20000	22.00000	-2.80000	0.0 d
28.333	30.33333	22.00000	-2.80000	0.0 d
29.467	31.46667	22.00000	-2.80000	0.0 d

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
30.600	32.60000	22.00000	-2.80000	0.0 d
31.733	33.73333	22.00000	-2.80000	0.0 d
32.867	34.86667	22.00000	-2.80000	0.0 d
34.000	36.00000	22.00000	-2.80000	0.0 d
35.133	37.13333	22.00000	-2.80000	0.0 d
36.267	38.26667	22.00000	-2.80000	0.0 d
37.400	39.40000	22.00000	-2.80000	0.0 d
38.533	40.53333	22.00000	-2.80000	0.0 d
39.667	41.66667	22.00000	-2.80000	0.0 d
40.800	42.80000	22.00000	-2.80000	0.0 d
41.933	43.93333	22.00000	-2.80000	0.0 d
43.067	45.06667	22.00000	-2.80000	0.0 d
44.200	46.20000	22.00000	-2.80000	0.0 d
45.333	47.33333	22.00000	-2.80000	0.0 d
46.467	48.46667	22.00000	-2.80000	0.0 d
47.600	49.60000	22.00000	-2.80000	0.0 d
48.733	50.73333	22.00000	-2.80000	0.0 d
49.867	51.86667	22.00000	-2.80000	0.0 d
51.000	53.00000	22.00000	-2.80000	0.0 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: South

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	2.00000	21.90000	-2.80000	2.5400 d
1.0533	2.00000	20.84667	-2.80000	2.5400 d
2.1067	2.00000	19.79333	-2.80000	2.5400 d
3.1600	2.00000	18.74000	-2.80000	2.5400 d
4.2133	2.00000	17.68667	-2.80000	2.5400 d
5.2667	2.00000	16.63333	-2.80000	2.5400 d
6.3200	2.00000	15.58000	-2.80000	2.5400 d
7.3733	2.00000	14.52667	-2.80000	2.5400 d
8.4267	2.00000	13.47333	-2.80000	2.5400 d
9.4800	2.00000	12.42000	-2.80000	2.5400 d
10.533	2.00000	11.36667	-2.80000	2.5400 d
11.587	2.00000	10.31333	-2.80000	2.5400 d
12.640	2.00000	9.26000	-2.80000	2.5400 d
13.693	2.00000	8.20667	-2.80000	2.5400 d
14.747	2.00000	7.15333	-2.80000	2.5400 d
15.800	2.00000	6.10000	-2.80000	2.5400 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: East

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	2.00000	6.00000	-2.80000	5.0800 d
1.1333	3.13333	6.00000	-2.80000	2.7667 d
2.2667	4.26667	6.00000	-2.80000	0.0 d
3.4000	5.40000	6.00000	-2.80000	0.0 d
4.5333	6.53333	6.00000	-2.80000	0.0 d
5.6667	7.66667	6.00000	-2.80000	0.0 d
6.8000	8.80000	6.00000	-2.80000	0.0 d
7.9333	9.93333	6.00000	-2.80000	0.0 d
9.0667	11.06667	6.00000	-2.80000	0.21040 d
10.200	12.20000	6.00000	-2.80000	0.43412 d
11.333	13.33333	6.00000	-2.80000	0.65738 d
12.467	14.46667	6.00000	-2.80000	0.88007 d
13.600	15.60000	6.00000	-2.80000	1.1020 d
14.733	16.73333	6.00000	-2.80000	1.5649 d
15.867	17.86667	6.00000	-2.80000	2.1464 d
17.000	19.00000	6.00000	-2.80000	2.7327 d
18.133	20.13333	6.00000	-2.80000	3.3453 d
19.267	21.26667	6.00000	-2.80000	4.0046 d
20.400	22.40000	6.00000	-2.80000	4.7290 d
21.533	23.53333	6.00000	-2.80000	5.5322 d
22.667	24.66667	6.00000	-2.80000	6.4155 d
23.800	25.80000	6.00000	-2.80000	7.3358 d
24.933	26.93333	6.00000	-2.80000	7.9862 d
26.067	28.06667	6.00000	-2.80000	9.7245 d
27.200	29.20000	6.00000	-2.80000	8.1640 d
28.333	30.33333	6.00000	-2.80000	6.6043 d
29.467	31.46667	6.00000	-2.80000	5.0462 d
30.600	32.60000	6.00000	-2.80000	3.4914 d
31.733	33.73333	6.00000	-2.80000	1.9462 d
32.867	34.86667	6.00000	-2.80000	0.45550 d
34.000	36.00000	6.00000	-2.80000	0.0 d
35.133	37.13333	6.00000	-2.80000	0.0 d
36.267	38.26667	6.00000	-2.80000	0.0 d
37.400	39.40000	6.00000	-2.80000	0.0 d
38.533	40.53333	6.00000	-2.80000	0.0 d
39.667	41.66667	6.00000	-2.80000	0.0 d
40.800	42.80000	6.00000	-2.80000	0.0 d
41.933	43.93333	6.00000	-2.80000	0.0 d
43.067	45.06667	6.00000	-2.80000	0.0 d
44.200	46.20000	6.00000	-2.80000	0.0 d
45.333	47.33333	6.00000	-2.80000	0.0 d
46.467	48.46667	6.00000	-2.80000	0.0 d
47.600	49.60000	6.00000	-2.80000	0.0 d
48.733	50.73333	6.00000	-2.80000	0.0 d
49.867	51.86667	6.00000	-2.80000	0.0 d
51.000	53.00000	6.00000	-2.80000	0.0 d

d - Displacements include imported displacements.

Structure: 16 Chenies | Sub-structure: North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	53.00000	21.90000	-2.80000	0.0 d
1.0533	53.00000	20.84667	-2.80000	0.0 d
2.1067	53.00000	19.79333	-2.80000	0.0 d
3.1600	53.00000	18.74000	-2.80000	0.0 d
4.2133	53.00000	17.68667	-2.80000	0.0 d
5.2667	53.00000	16.63333	-2.80000	0.0 d
6.3200	53.00000	15.58000	-2.80000	0.0 d
7.3733	53.00000	14.52667	-2.80000	0.0 d
8.4267	53.00000	13.47333	-2.80000	0.0 d
9.4800	53.00000	12.42000	-2.80000	0.0 d
10.533	53.00000	11.36667	-2.80000	0.0 d
11.587	53.00000	10.31333	-2.80000	0.0 d
12.640	53.00000	9.26000	-2.80000	0.0 d
13.693	53.00000	8.20667	-2.80000	0.0 d
14.747	53.00000	7.15333	-2.80000	0.0 d
15.800	53.00000	6.10000	-2.80000	0.0 d

d - Displacements include imported displacements.

Structure: 18 Chenies | Sub-structure: Retained Wall

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]
Vertical Offset 1				
0.0	39.00000	-13.60000	-3.50000	0.0 d
0.98000	39.00000	-12.62000	-3.50000	0.0 d
1.9600	39.00000	-11.64000	-3.50000	0.0 d

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
2.9400	39.00000	-10.66000	-3.50000	0.0 d
3.9200	39.00000	-9.68000	-3.50000	0.0 d
4.9000	39.00000	-8.70000	-3.50000	0.0 d
5.8800	39.00000	-7.72000	-3.50000	0.0 d
6.8600	39.00000	-6.74000	-3.50000	0.0 d
7.8400	39.00000	-5.76000	-3.50000	0.0 d
8.8200	39.00000	-4.78000	-3.50000	0.0 d
9.8000	39.00000	-3.80000	-3.50000	0.0 d
10.780	39.00000	-2.82000	-3.50000	0.0 d
11.760	39.00000	-1.84000	-3.50000	0.0 d
12.740	39.00000	-0.86000	-3.50000	0.0 d
13.720	39.00000	0.12000	-3.50000	0.0 d
14.700	39.00000	1.10000	-3.50000	0.0 d
15.680	39.00000	2.08000	-3.50000	0.0 d
16.660	39.00000	3.06000	-3.50000	0.0 d
17.640	39.00000	4.04000	-3.50000	0.0 d
18.620	39.00000	5.02000	-3.50000	0.0 d
19.600	39.00000	6.00000	-3.50000	0.0 d

d - Displacements include imported displacements.

Structure: Law Building | Sub-structure: North

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1				
0.0	21.60000	4.00000	-2.80000	5.2962 d
1.0500	21.60000	2.95000	-2.80000	5.2962 d
2.1000	21.60000	1.90000	-2.80000	5.2962 d
3.1500	21.60000	0.85000	-2.80000	5.2962 d
4.2000	21.60000	-0.20000	-2.80000	5.2962 d
5.2500	21.60000	-1.25000	-2.80000	5.2962 d
6.3000	21.60000	-2.30000	-2.80000	5.2962 d
7.3500	21.60000	-3.35000	-2.80000	5.2962 d
8.4000	21.60000	-4.40000	-2.80000	5.2962 d
9.4500	21.60000	-5.45000	-2.80000	5.2962 d
10.500	21.60000	-6.50000	-2.80000	5.2962 d
11.550	21.60000	-7.55000	-2.80000	5.2962 d
12.600	21.60000	-8.60000	-2.80000	5.2962 d
13.650	21.60000	-9.65000	-2.80000	5.2962 d
14.700	21.60000	-10.70000	-2.80000	5.2962 d
15.750	21.60000	-11.75000	-2.80000	4.2110 d
16.800	21.60000	-12.80000	-2.80000	3.9866 d
17.850	21.60000	-13.85000	-2.80000	3.6944 d
18.900	21.60000	-14.90000	-2.80000	3.3617 d
19.950	21.60000	-15.95000	-2.80000	3.0090 d
21.000	21.60000	-17.00000	-2.80000	2.6491 d

d - Displacements include imported displacements.

Structure: Law Building | Sub-structure: East

Dist.	Coordinates x	y	z	Displacements z
[m]	[m]	[m]	[m]	[mm]	
Vertical Offset 1				
0.0	21.60000	-17.10000	-2.80000	2.6146 d
1.0800	20.52000	-17.10000	-2.80000	2.2672 d
2.1600	19.44000	-17.10000	-2.80000	1.8892 d
3.2400	18.36000	-17.10000	-2.80000	1.4812 d
4.3200	17.28000	-17.10000	-2.80000	1.1332 d
5.4000	16.20000	-17.10000	-2.80000	0.94331 d
6.4800	15.12000	-17.10000	-2.80000	0.74971 d
7.5600	14.04000	-17.10000	-2.80000	0.55309 d
8.6400	12.96000	-17.10000	-2.80000	0.35401 d
9.7200	11.88000	-17.10000	-2.80000	0.15289 d
10.800	10.80000	-17.10000	-2.80000	0.0 d
11.880	9.72000	-17.10000	-2.80000	0.0 d
12.960	8.64000	-17.10000	-2.80000	0.0 d
14.040	7.56000	-17.10000	-2.80000	0.0 d
15.120	6.48000	-17.10000	-2.80000	0.0 d
16.200	5.40000	-17.10000	-2.80000	0.0 d
17.280	4.32000	-17.10000	-2.80000	0.0 d
18.360	3.24000	-17.10000	-2.80000	0.0 d
19.440	2.16000	-17.10000	-2.80000	0.0 d
20.520	1.08000	-17.10000	-2.80000	0.0 d
21.600	0.00000	-17.10000	-2.80000	0.0 d

d - Displacements include imported displacements.

Specific Building Damage Results - All Segments

Structure: Law Building | Sub-structure: Infill

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	1.8443	Sagging	0.086364	-0.10796	0.064177	0.0036545	0.0031802	202.59	1 (Very Slight)
	2	1.8443	2.4224	Hogging	0.033244	-0.043452	0.024769	0.0036545	0.0031802	1340.6	0 (Negligible)
	3	4.2667	1.0667	None	0.0	0.0	0.0	0.0	-		0 (Negligible)
	4	5.3333	5.3153	Hogging	0.0039458	0.0	0.0038756	0.0	-197.57E-6	14397.	0 (Negligible)
	5	10.649	1.0927	Sagging	0.0	36.630E-6	36.728E-6	-50.248E-6	-197.23E-6	1.9991E+6	0 (Negligible)
	6	11.741	3.9318	Hogging	0.0073329	0.042177	0.044373	-837.12E-6	-512.01E-6	7129.7	0 (Negligible)
	7	15.673	0.22695	None	0.0	0.083782	0.083782	-837.12E-6	-512.01E-6	37662.	2 (Slight)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	0.88703	Hogging	0.0	-0.15762	0.031524	0.0015787	0.0020444	1014.5	0 (Negligible)
	2	0.88703	0.24630	None	0.0	-0.15762	0.031524	0.0024110	0.0024471	3653.6	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	15.700	None	0.0	0.0	0.0	0.0	0.0	-	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: East

Vertical Offset from Line for Vertical Movement	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	0.88703	Hogging	0.0	-0.15762	0.031524	0.0015787	0.0020444	1014.5	0 (Negligible)
	2	0.88703	3.6463	Hogging	0.055295	-0.085403	0.041091	0.0024110	0.0024471	1017.2	0 (Negligible)
	3	4.5333	1.1333	None	0.0	0.0	0.0	0.0	0.0	-	0 (Negligible)
	4	5.6667	5.4783	Hogging	0.0046819	0.0	0.0046469	0.0	-197.40E-6	11845.	0 (Negligible)
	5	11.145	0.19946	Sagging	2.6301E-6	0.0	2.6107E-6	0.0	-197.00E-6	2.1895E+6	0 (Negligible)
	6	11.344	10.989	Hogging	0.0071686	0.066554	0.070230	-861.90E-6	-778.69E-6	8696.3	1 (Very Slight)
	7	22.333	0.51468	Hogging	747.85E-6	0.076458	0.076477	-814.97E-6	-811.55E-6	44796.	2 (Slight)
	8	22.848	1.2945	Sagging	0.0045915	0.048839	0.049409	-670.21E-6	-811.55E-6	8565.2	0 (Negligible)
	9	24.142	4.1884	Sagging	0.061910	-0.19910	0.054421	0.0073996	-0.0015451	936.44	1 (Very Slight)
	10	28.331	4.5358	Hogging	0.0010230	0.0	0.0010178	0.0	0.0013762	1991.1	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 18 Chenies | Sub-structure: Retained Wall

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	All settlements are less than the Settlement Trough Limit Sensitivity.										

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Law Building | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	12.600	None	0.0	0.0	0.0	0.0	0.0	-	0 (Negligible)
	2	12.600	2.8320	Sagging	0.019699	-0.0076890	0.017075	297.57E-6	0.0010338	3373.2	0 (Negligible)
	3	15.432	2.2106	Hogging	0.0096362	-0.033120	0.0088344	376.25E-6	0.0010338	6441.5	0 (Negligible)
	4	17.643	3.2574	Sagging	675.60E-6	-0.0078406	0.0016159	288.05E-6	342.82E-6	26426.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: Law Building | Sub-structure: East

Vertical Offset from Line for Vertical Movement Calculations	Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]			[m]	
0.0	1	0.0	2.2779	Sagging	772.00E-6	0.021460	0.021583	-346.70E-6	377.62E-6	38013.	0 (Negligible)
	2	2.2779	4.1194	Hogging	0.0042649	0.019180	0.019942	-346.70E-6	377.62E-6	12549.	0 (Negligible)
	3	6.3973	1.3714	Sagging	31.871E-6	156.65E-6	161.90E-6	-25.969E-6	184.33E-6	381350.	0 (Negligible)
	4	7.7687	1.9513	Sagging	46.416E-6	0.0	46.313E-6	0.0	186.22E-6	18865.	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Specific Building Damage Results - Critical Values for All Segments within Each Sub-Structure

Structure: Law Building | Sub-structure: Infill

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.086364	-0.10796	0.0031802	3.3773	0.083782	0.0036545	0.0031802	1340.6	202.59	2 (Slight)

Structure: 16 Chenies | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	-0.15762	0.0024471	5.0800	0.031524	0.0024110	0.0024471	1014.5	-	0 (Negligible)

Structure: 16 Chenies | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0	0.0	0.0	2.5400	0.0	0.0	0.0	-	-	0 (Negligible)

Structure: 16 Chenies | Sub-structure: East

Vertical Offset from Line for Vertical	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category

Movement Calculations			Curve					
[m]	[%]	[%]	[mm]	[%]		[m]	[m]	
0.0	0.061910	-0.19910 0.0024471	9.7000	0.076477	0.0073996	0.0024471	1014.5	936.44 2 (Slight)

Structure: 16 Chenies | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	

Structure: 18 Chenies | Sub-structure: Retained Wall

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	

Structure: Law Building | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.019699	-0.033120 0.0010338		5.2962	0.017075	376.25E-6	0.0010338	6441.5	3373.2	0 (Negligible)

Structure: Law Building | Sub-structure: East

Vertical Offset from Line for Vertical Movement Calculations	Deflection Ratio	Average Horizontal Strain	Max Slope	Max Settlement	Max Tensile Strain	Max Gradient of Horizontal Displacement Curve	Max Gradient of Vertical Displacement Curve	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
[m]	[%]	[%]		[mm]	[%]			[m]	[m]	
0.0	0.0042649	0.021460 377.62E-6		2.6146	0.021583	-346.70E-6	377.62E-6	12549.	18865.	0 (Negligible)

Specific Building Damage Results - Critical Segments within Each Structure

Structure Name	Parameter	Critical Sub-Structure	Critical Segment	Start	End	Curvature	Max Slope	Max Settlement	Max Tensile Strain	Min Radius of Curvature (Hogging)	Min Radius of Curvature (Sagging)	Damage Category
				[m]	[m]			[mm]	[%]	[m]	[m]	
Law Building	Max Slope	Infill	1	0.0	1.8443	Sagging	**0.0031802**	3.3773	0.064177	-	202.59	1 (Very Slight)
	Max Settlement	North	1	0.0	12.600	Sagging	0.0	**5.2962**	0.0	-	-	0 (Negligible)
	Max Tensile Strain	Infill	7	15.673	15.900	Sagging	512.01E-6	2.1635	**0.083782**	-	37662.	2 (Slight)
	Min Radius of Curvature (Hogging)	Infill	2	1.8443	4.2667	Hogging	0.0031802	0.91597	0.024769	**1340.6**	-	0 (Negligible)
	Min Radius of Curvature (Sagging)	Infill	1	0.0	1.8443	Sagging	0.0031802	3.3773	0.064177	-	**202.59**	1 (Very Slight)
16 Chenies	Max Slope	West	2	0.88703	1.1333	Sagging	**0.0024471**	3.2694	0.031524	-	3653.6	0 (Negligible)
	Max Settlement	East	9	24.142	28.331	Sagging	0.0015451	**9.7000**	0.054421	-	936.44	1 (Very Slight)
	Max Tensile Strain	East	7	22.333	22.848	Hogging	811.55E-6	6.5626	**0.076477**	44796.	-	2 (Slight)
	Min Radius of Curvature (Hogging)	West	1	0.0	0.88703	Hogging	0.0020444	5.0800	0.031524	**1014.5**	-	0 (Negligible)
	Min Radius of Curvature (Sagging)	East	9	24.142	28.331	Sagging	0.0015451	9.7000	0.054421	-	**936.44**	1 (Very Slight)
18 Chenies	All settlements are less than the Settlement Trough Limit Sensitivity.											
	All settlements are less than the Settlement Trough Limit Sensitivity.											
	All settlements are less than the Settlement Trough Limit Sensitivity.											
	All settlements are less than the Settlement Trough Limit Sensitivity.											
	All settlements are less than the Settlement Trough Limit Sensitivity.											

Specific Building Damage Results - All Combined Segments

Structure: Law Building | Sub-structure: Infill

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	15.900	Hogging	0.017948	-0.0075142	0.013084	0 (Negligible)

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: West

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16 Chenies | Sub-structure: South

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 16 Chenies | Sub-structure: East

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
[m]		[m]	[m]		[%]	[%]	[%]	
0.0	1	0.0	32.867	Hogging	0.024687	-0.013729	0.016975	0 (Negligible)

Vertical Offset from Line for Vertical	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.

Structure: 16 Chenies | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: 18 Chenies | Sub-structure: Retained Wall

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

Structure: Law Building | Sub-structure: North

Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

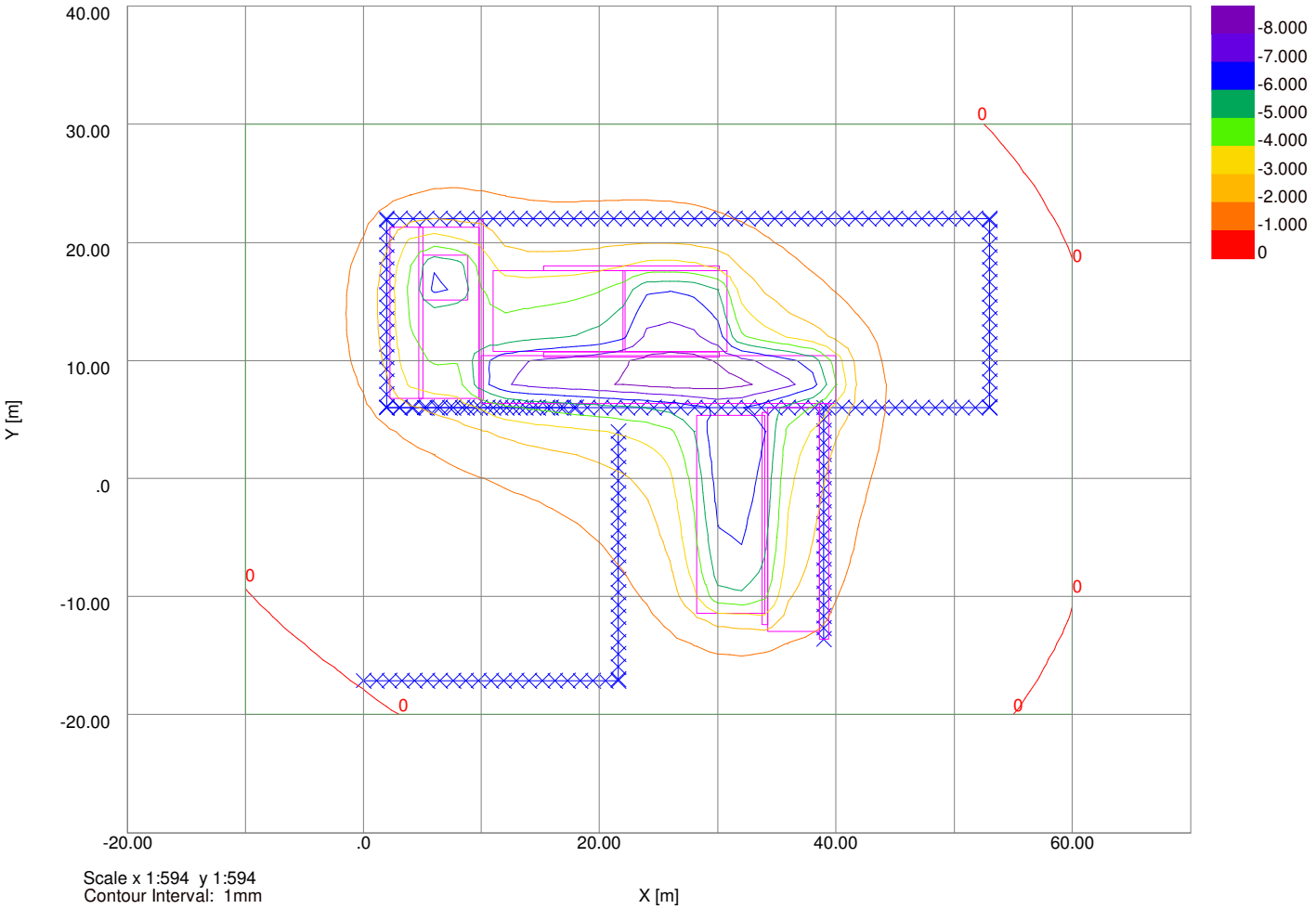
No structures have segments combined.

Structure: Law Building | Sub-structure: East

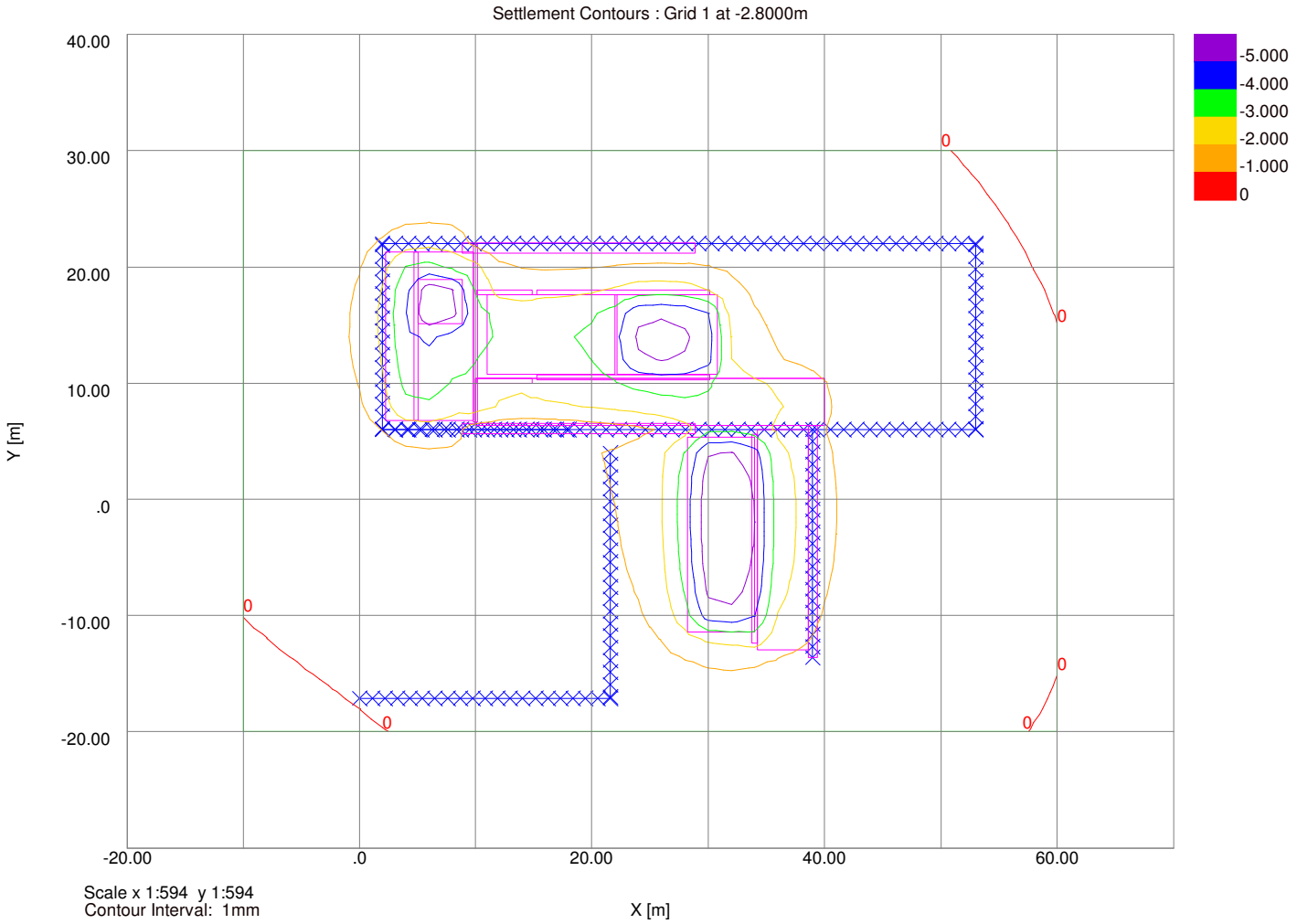
Vertical Offset from Line for Vertical Movement Calculations	Combined Segment	Start	Length	Curvature	Deflection Ratio	Average Horizontal Strain	Max Tensile Strain	Damage Category
		[m]	[m]		[%]	[%]	[%]	

No structures have segments combined.

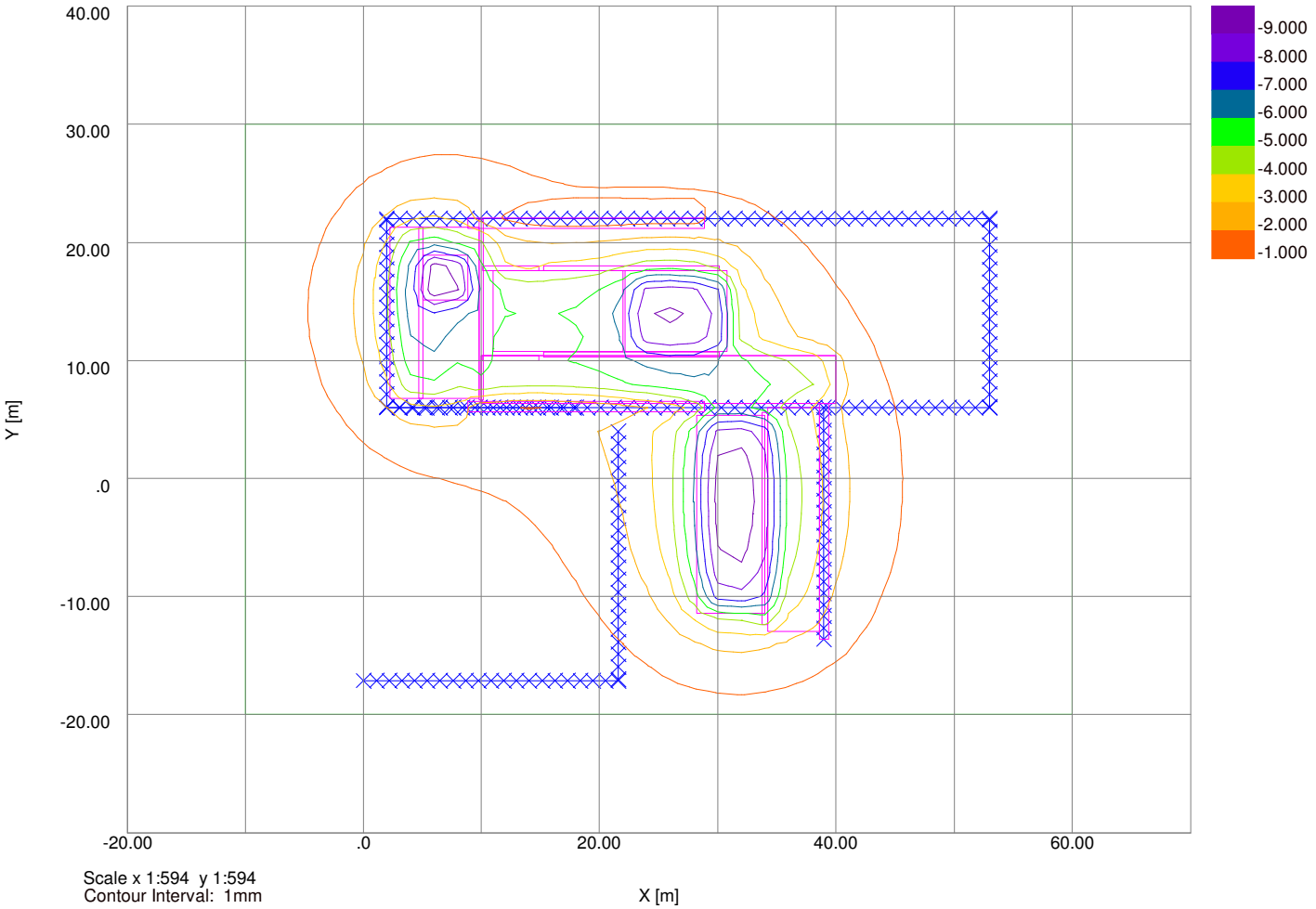
Settlement Contours : Grid 1 at -2.8000m



Scale x 1:594 y 1:594
Contour Interval: 1mm


Settlement Contours : Grid 1 at -2.8000m
40.00
30.00
20.00
10.00
.0
-10.00
-20.00
Y [m]
-20.00
.0
20.00
40.00
60.00
X [m]
-5.000
-4.000
-3.000
-2.000
-1.000
0
Scale x 1:594 y 1:594
Contour Interval: 1mm

Settlement Contours : Grid 1 at -2.8000m



Scale x 1:594 y 1:594
Contour Interval: 1mm

Oasys

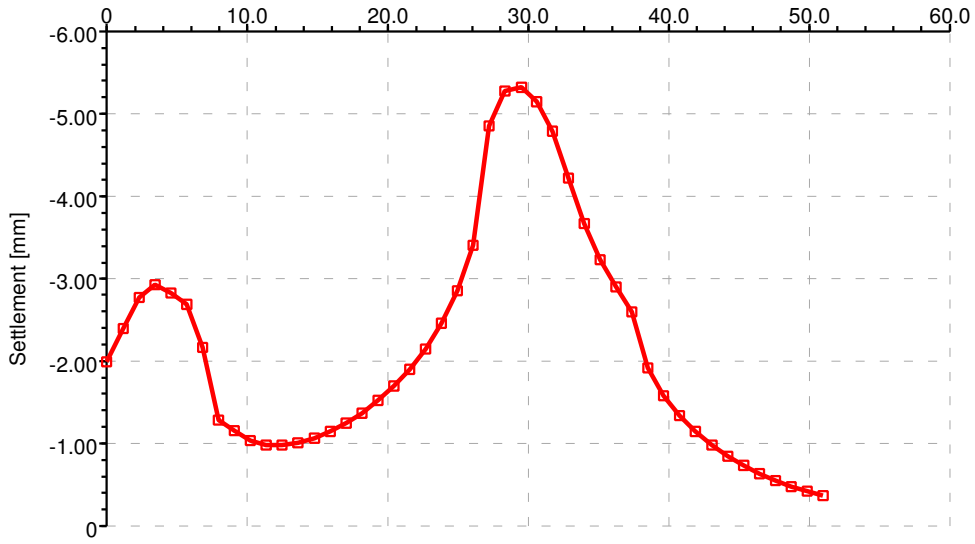
Royal Academy of Dramatic Arts
16-18 Chenies Street Development
Run 4 Total unloading and reloading

Job No.	Sheet No.	Rev.
J15215		
Drg. Ref.		
Made by MC	Date	Checked

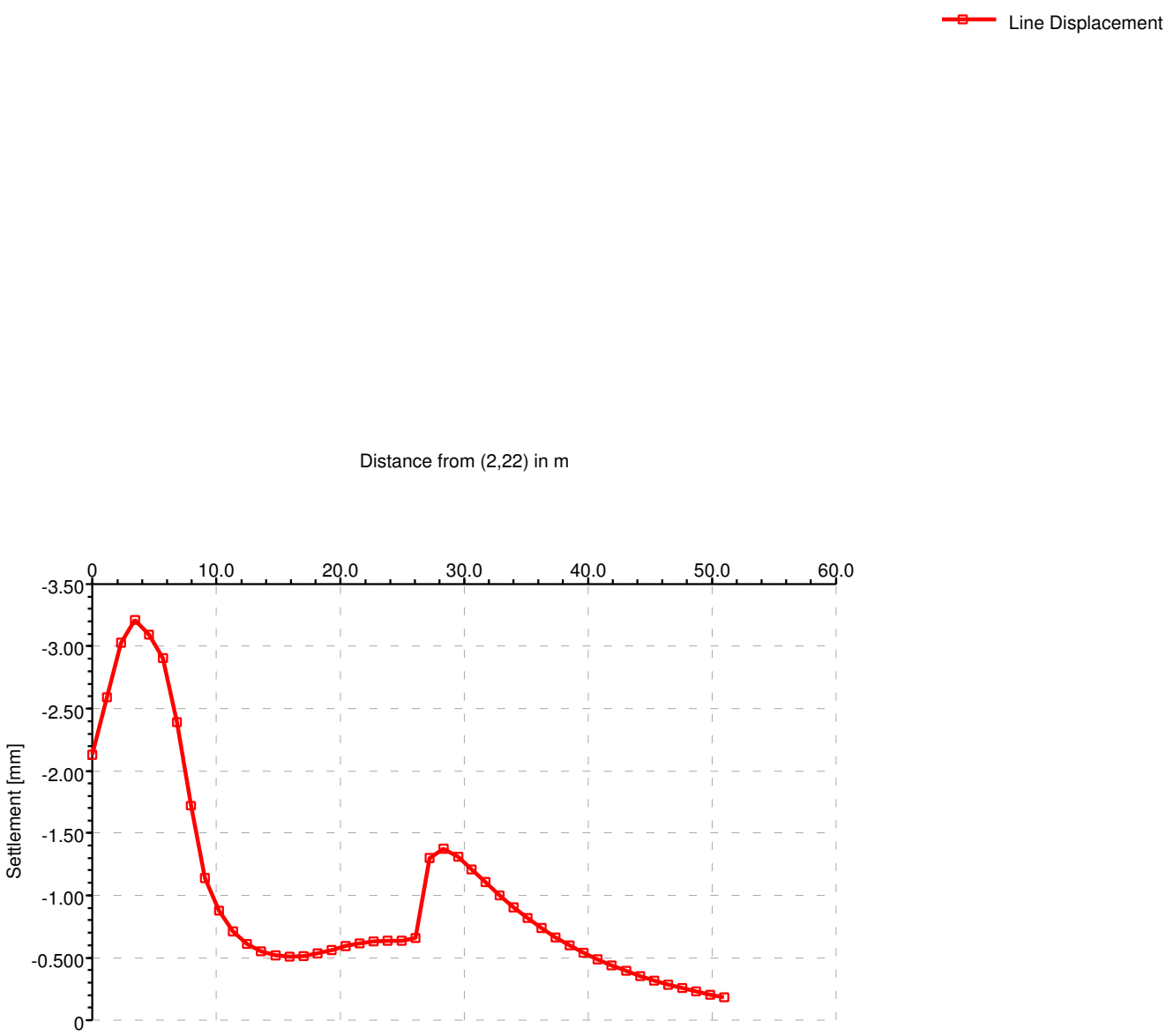
Displacement for 16 Chenies Est

Line Displacement

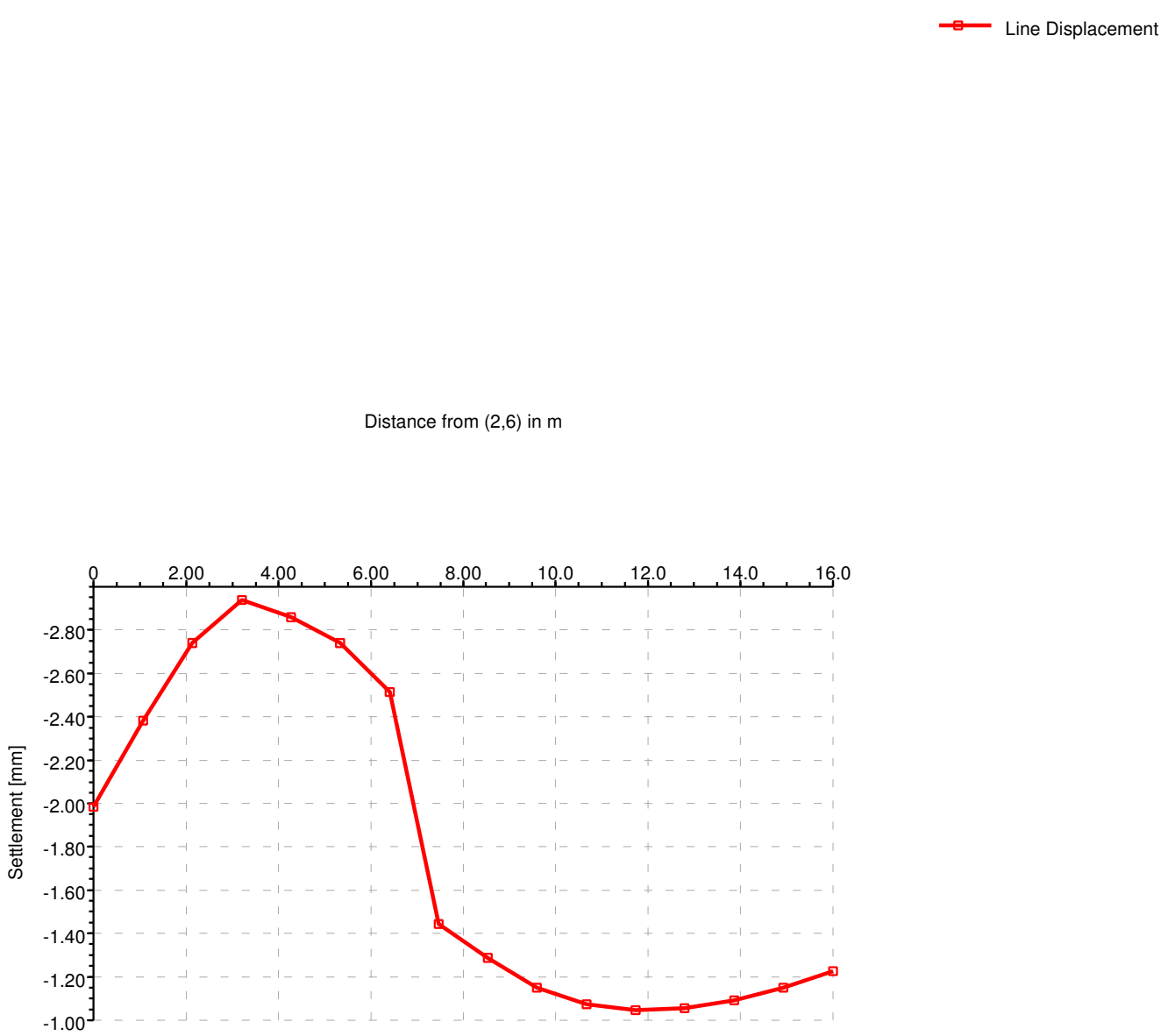
Distance from (2,6) in m



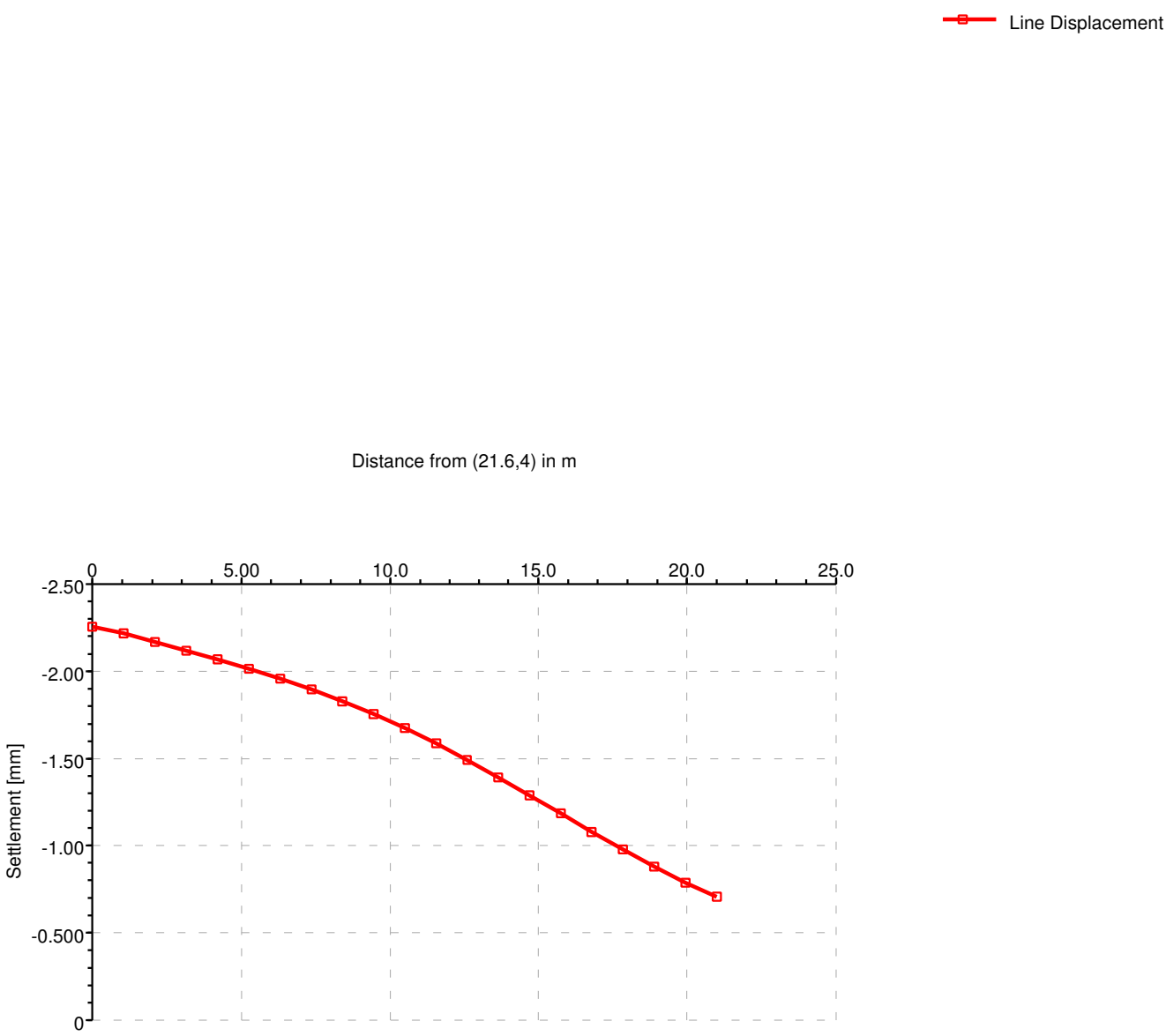
Displacement for 16 Chenies Wst



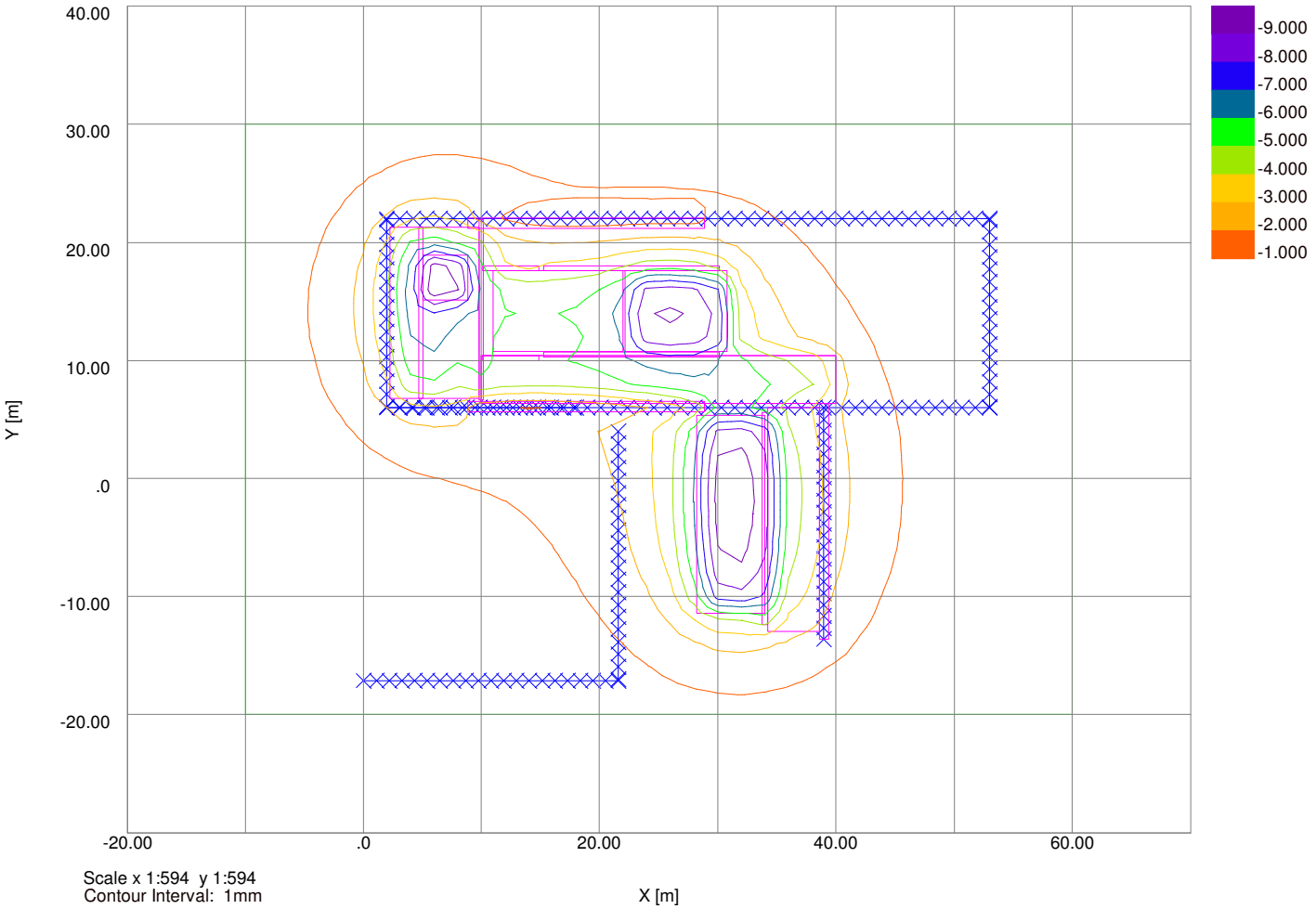
Displacement for Law Bdg Infill



Displacement for Law Bdg Nth



Settlement Contours : Grid 1 at -2.8000m



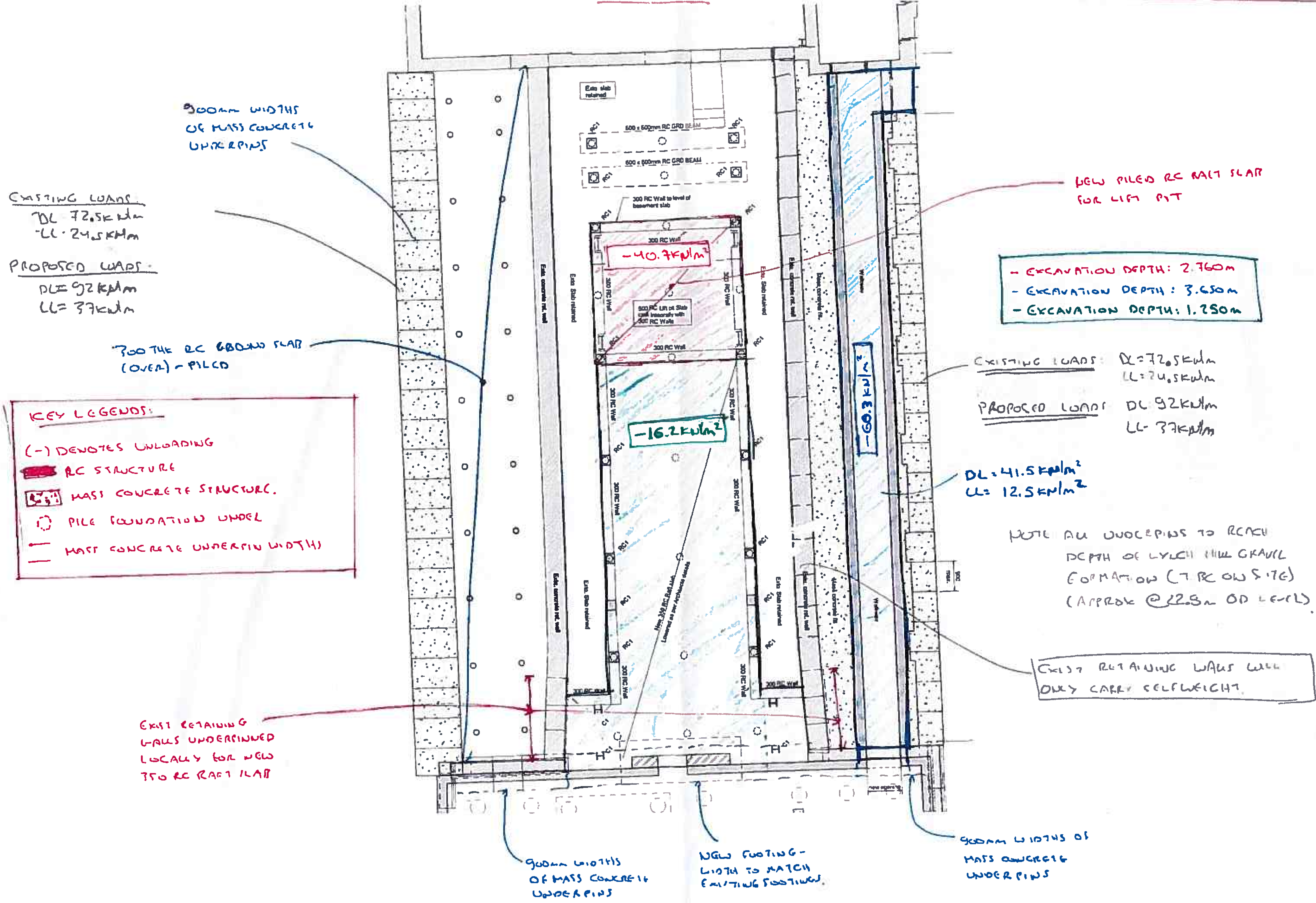
Scale x 1:594 y 1:594
Contour Interval: 1mm

BASEMENT PLAN AS PROPOSED

STRUCTURAL ALTERATIONS TO THEATRE

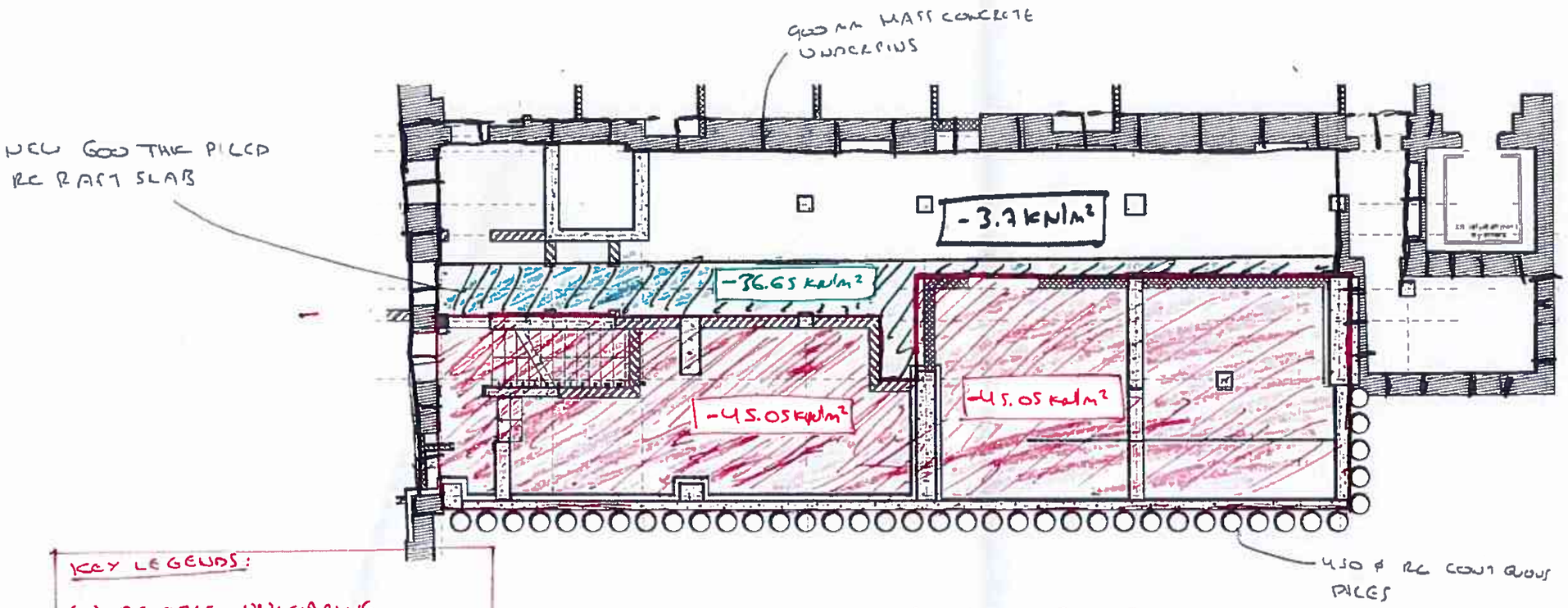
1:100 @ A3

NO 16-CHENIES STREET
RADA - "THE RICHARD ATTENBOROUGH THEATRE REDEVELOPMENT



No 18 CHENIES STREET
RADA - 'THE RICHARD ATTENBOROUGH' THEATRE REDEVELOPMENT

NOTE ALL UNDERPINS TO REACH DEPTH OF LYNCH HILL GRAVEL FORMATION TBC ON SITE (APPROX OD LEVEL 22.8m)



KEY LEGENDS:

(-) DENOTES UNLOADING

NEW RC CONCRETE STRUCTURE.

EXISTING WALL STRUCTURE

- EXCAVATION DEPTH : 3.33m
- EXCAVATION DEPTH: 2.82m
- EXCAVATION DEPTH: 0.27m

No 18 CHENIES STREET
REAR EXTENSION
1:100 @ A3

UNLOADING - UNFACTORED

BASEMENT PLAN AS PROPOSED

No 16 CHEVIES STREET
RADA – 'THE RICHARD ATTENBOROUGH' THEATRE REDEVELOPMENT

EXTENT OF WALL UNDERPINNED

EXISTING LOADS: DL: 108 kN/m
LL: 8.0 kN/m

PROPOSED LOADS: DL: 80 kN/m
LL: 2.0 kN/m

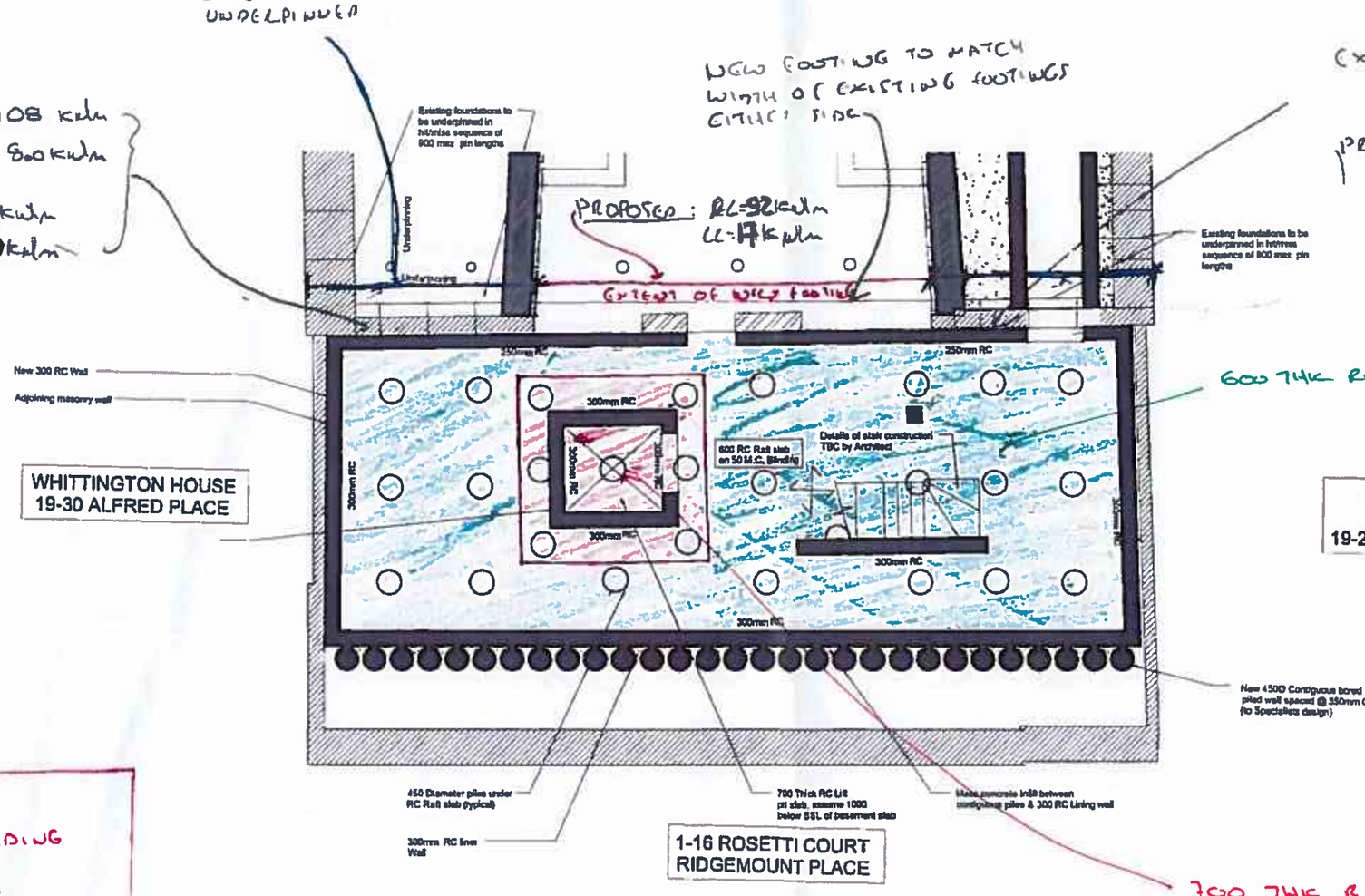
NEW FOOTING TO MATCH WIDTH OF EXISTING FOOTINGS EITHER SIDE

PROPOSED: DL=92 kN/m
LL=17 kN/m

EXTENT OF NEW FOOTING

EXISTING LOADS: DL: 108 kN/m
LL: 8 kN/m

PROPOSED LOADS: DL = 80 kN/m
LL = 2.0 kN/m



WHITTINGTON HOUSE
19-30 ALFRED PLACE

LANGUAGE STUDIOS INTERNATIONAL
19-21 RIDGEMOUNT STREET

1-16 ROSETTI COURT
RIDGEMOUNT PLACE

600 THK RC SLAB: −16.6 kN/m² UNLOADING.

700 THK RC LIFT AT SLAB: −38.2 kN/m²

KEY LEGENDS:
(−) DENOTES UNLOADING
RC STRUCTURE
EXISTING MASONRY
NEW MASONRY

- EXCAVATION DEPTH: 2.87m
- EXCAVATION DEPTH: 1.57m

BASEMENT PLAN AS PROPOSED
STRUCTURAL ALTERATIONS TO REAR –
NEW LIBRARY & OFFICE BUILDING
1:100 @ A3

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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where information can be found on all of the services that we offer.

GEA Geotechnical & Environmental Associates