CampbellReith
consulting engineers

10-11 Kings Mews
London WC1N 2ES
Basement Impact Assessment Audit

For

London Borough of Camden

Project Number: 12066-18

Revision: F1

November 2015

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Document History and Status

Revision	Date	Purpose/Status	File Ref	Author	Check	Review
D1	August 2015	Comment	AJMlt12066-18-280715-D1.doc	A Marlow	A Marlow	E Brown
F1	November 2015	Final for planning	AJMjw12066-18-091115-F1.doc	A Marlow	A Marlow	E Brown

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Document Details

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Project Partner	E M Brown, BSc MSc CGeol FGS
Project Number	12066-18
Project Name	10-11 Kings Mews, London WC1N 2ES
Planning Reference	2015/2393/P

Contents

Appendix

1.0 NON-TECHNICAL SUMMARY

1.1. CampbellReith was instructed by London Borough of Camden, (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 10-11 Kings Mews (planning reference 2015/2393/P). The basement is considered to fall within Category B as defined by the Terms of Reference.

1.2. The Audit reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development in accordance with LBC's policies and technical procedures.

1.3. CampbellReith was able to access LBC's Planning Portal and gain access to the latest revision of submitted documentation, together with supplementary information, and reviewed it against an agreed audit check list.

1.4. The BIA and SSE have been carried out by well-known firms of engineering consultants who have now provided information to show that their authors possess suitable qualifications and relevant experience.

1.5. The revised BIA has confirmed that the proposed basement will be founded within Made Ground and its foundations will need to be deepened to encounter the Lynch Hill Gravel below.

1.6. It has been confirmed that the ground water table will be encountered during basement excavation but that underpinning and sump pumping is a viable foundation solution, provided a suitably experienced contractor is engaged to carry out the construction. No indicative temporary works proposals are provided nor are any details of sump pumping of groundwater during excavation.

1.7. An acceptable Ground Movement Analysis and Damage Assessment has been carried out which shows Very Slight (Burland Category 1) damage to 8-9 Kings Mews and Negligible (Burland Category 0) to 12-13 Kings Mews.

1.8. Acceptable heave mitigation measures will be incorporated below the basement floor slab by the introduction of compressible void formers.

1.9. Acceptable proposals are now provided for a movement monitoring strategy during excavation and construction.

1.10. It has been confirmed that surface water drainage from the existing roof area flows towards John Street but no proposals to attenuate the flow have yet been made.

1.11. It is accepted that the surrounding slopes to the development site are stable.

1.12. It is accepted that the development will not impact on the wider hydrogeology of the area and is not in an area subject to flooding.

1.13. It is accepted that additional groundwater monitoring data and information regarding adjacent below ground basement structures has shown that the development is unlikely to have an impact on the local hydrogeological setting.

1.14. It is recommended that measures to deal with temporary works proposals, control of groundwater during excavation and construction and surface water attenuation are developed in a Basement Construction Plan.

2.0 INTRODUCTION

2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 26 June 2015 to carry out a Category B Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 10-11 Kings Mews, Camden Reference 2015/2393/P.

2.2. The Audit was carried out in accordance with the Terms of Reference set by LBC. It reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development.

2.3. A BIA is required for all planning applications with basements in Camden in general accordance with policies and technical procedures contained within

- Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.
- Camden Planning Guidance (CPG) 4: Basements and Lightwells.
- Camden Development Policy (DP) 27: Basements and Lightwells.
- Camden Development Policy (DP) 23: Water.

2.4. The BIA should demonstrate that schemes:

a) maintain the structural stability of the building and neighbouring properties;

b) avoid adversely affecting drainage and run off or causing other damage to the water environment; and,

c) avoid cumulative impacts upon structural stability or the water environment in the local area

and evaluate the impacts of the proposed basement considering the issues of hydrology, hydrogeology and land stability via the process described by the GSD and to make recommendations for the detailed design.

2.5. LBC's Audit Instruction described the planning proposal as *"Demolish two storey building and erection of 2 x 3 bedroom, four storey dwellings including a new basement floor."*

The Audit Instruction also confirmed 10-11 Kings Mews involved, or was a neighbour to, listed buildings.

2.6. CampbellReith accessed LBC's Planning Portal on 21 July 2015 and gained access to the following relevant documents for audit purposes:

- Design Study & Basement Impact Assessment Report (BIA)
- Structural Strategy Report (SSR)
- Planning Application Drawings consisting of
    - Location Plan
    - Existing Plans
    - Demolition Plans
    - Proposed Plans
- Design & Access Statement
- Planning Comments and Response

2.7. CampbellReith received a response from Fluid Structures, dated 21 October 2015, to the queries and requests for additional information in CampbellReith's revision D1 audit report allowing a further review to occur. This information is included in the revised audit report as Appendix 3.

2.8. CampbellReith's original report wording in the discussion (Section 4) has been maintained and updated to show how this additional information has affected the audit's findings.

3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	
Is data required by Cl.233 of the GSD presented?	Yes	BIA and SSR.
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	BIA Section 1.
Are suitable plan/maps included?	Yes	BIA Section 2.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 3.1.3.
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 3.1.2.
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 3.1.1.
Is a conceptual model presented?	Yes	BIA Section 7.0
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	BIA Section 4.1.

Item	**Yes/No/NA**	**Comment**
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	BIA Section 4.1.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	No Yes	Not required, consistent with screening outcome.
Is factual ground investigation data provided?	Yes	BIA Section 4.2.
Is monitoring data presented?	Yes	BIA Section 4.2.
Is the ground investigation informed by a desk study?	Yes	BIA Section 1.3.
Has a site walkover been undertaken?	Yes	BIA Section 1.3.
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	BIA Section 2.1.
Is a geotechnical interpretation presented?	Yes	BIA Section 5.0.
Does the geotechnical interpretation include information on retaining wall design?	Yes	BIA Section 8.1.
Are reports on other investigations required by screening and scoping presented?	Yes	Refer to Appendix 3.
Are baseline conditions described, based on the GSD?	Yes	
Do the base line conditions consider adjacent or nearby basements?	Yes	BIA Section 2.1.
Is an Impact Assessment provided?	Yes	BIA Section 9.0.
Are estimates of ground movement and structural impact presented?	Yes	Refer to Appendix 3.

Item	**Yes/No/NA**	**Comment**
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	Yes	
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	BIA Section 10.0.
Has the need for monitoring during construction been considered?	Yes	Refer to Appendix 3.
Have the residual (after mitigation) impacts been clearly identified?	Yes	BIA Section 10.0.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	Refer to Appendix 3. However, further information required with respect to temporary works, dewatering and surface water attenuation.
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	Refer to Appendix 3. However, further information required with respect to temporary works, dewatering and surface water attenuation.
Does report state that damage to surrounding buildings will be no worse than Burland Category 2?	Yes	Refer to Appendix 3.
Are non-technical summaries provided?	No	

4.0 DISCUSSION

4.1. The Basement Impact Assessment (BIA) has been carried out by a well-known firm of engineering consultants, Geotechnical & Environmental Associates (GEA) and the individuals concerned in its production have suitable qualifications.

4.2. The Structural Strategy Report (SSR) has similarly been carried out by a well-known firm of engineering consultants, Fluid Structures. The author and reviewer are both chartered structural engineers but no proof of expertise in engineering geology has been provided as required by CPG4.

A curriculum vitae has been provided for the author of the SSR which identifies suitable expertise in engineering geology.

4.3. The LBC Instruction to proceed with the audit identified that the basement proposal either involved a listed building or was adjacent to listed buildings but gave no details. The Design & Access Statement identified that 10-11 Kings Mews is located in the Bloomsbury Conservation Area and that John Street, to its rear, contains a majority of Grade II listed properties.

4.4. The proposed basement consists of a single storey construction formed by lowering an existing lower ground floor area at the rear of the development site by just over 2.0 metres and excavating the front portion of the site to the same level by the excavation of 3.0 metres of soil below an existing surface level car park. An existing extension to no. 6 John Street, also in the ownership of the Kings Mews owner, will be demolished on the rear section of the site to facilitate the development of 10-11 Kings Mews.

4.5. The BIA has identified that the reinforced concrete ground slab is underlain by Made Ground to a depth of 4.80 metres below which lies Lynch Hill Gravel, thickness 1.30 metres, below which lies the London Clay Formation.

4.6. It is clear that the BIA was written in October 2012 whilst the SSR was completed in April 2015. The BIA refers to basement depths of construction of 3.0 and 4.5 metres while the scheme developed in the SSR has reduced depths of basement of 2.0 and 3.0 metres. During this audit, an assumption has been made that the later SSR proposal is correct as this also agrees with an Architect's proposed section A-A drawing, no. 1008/211 dated 17 April 2015.

4.7. The SSR discusses in depth two alternative proposals to construct the basement. The preferred option is to underpin the perimeter walls, extending down into the gravel, requiring approximately 5.0 metre deep underpins, and encountering groundwater at a level of approximately 3.5 metres below existing ground level. The SSR indicates that surrounding walls to the site are typically supported on strip foundations which *"may well terminate in the* *existing Made Ground,"* although none of the three trial pits excavated proved this conclusively. The perimeter walls and underpins would be laterally propped, allowing basement excavation and reinforced concrete basement slab and walls to be constructed.

4.8. However the SSR states that *"the ground conditions are not considered ideal for the above approach given the depth of the gravels and the relatively shallow groundwater"* and proposes an alternative solution utilising contiguous or secant piled walls installed inside the site boundary walls, dependent upon the potential degree of groundwater inflow during excavation and construction. Again, an extensive system of temporary lateral props is proposed prior to excavation and basement construction.

4.9. The conclusions reached within both the BIA and, more particularly, the SSR appear undermined by the need for further investigation of the depth of Made Ground and monitoring of groundwater levels. Both documents agree that further investigation is required and, in particular, the SSR states *"The ground conditions are not considered ideal for the above approach given the depth of the gravels and the relatively shall groundwater. It is therefore recommended that measures be undertaken in advance to confirm the viability of the above construction method. These will include further groundwater monitoring, additional window sampling, and trial underpinning. In the event that these measures show underpinning not to be a suitable approach, an alternative basement construction method will be employed, utilising contiguous piled walls installed inside the site boundary walls"*.

4.10. The BIA warns that *"…. due to the thickness of Made Ground present on site, it is recommended that trial excavations are carried out in order to check the stability of the fill material and the depth of the natural soil. It is possible that this method may result in loss of ground from below existing foundations. This should not be an issue provided that the existing foundations are sufficiently able to bridge across any loose materials"*. These concerns will be exacerbated if groundwater flows are high and *"whether or not any groundwater inflows can be suitably controlled"*.

4.11. Irrespective of the adoption of either proposal, no assessment of vertical and horizontal ground movements has been produced, so no indication of potential damage to adjoining properties can be reviewed.

4.12. It is recommended that measures be undertaken, as indicated in 4.9, to allow confirmation of which construction methodology is viable and a Ground Movement Analysis be carried out in conjunction with the chosen solution. Further investigation of the foundations to the surrounding properties is also recommended. An assessment should also be provided of likely heave movements and measures to overcome these movements dependent upon the chosen system.

An additional soils investigation has been carried out by the installation of an extra borehole to 18 metres depth, together with a standpipe to monitor groundwater, as well as two no. trial pits to identify the depth of existing foundations to No. 12 Kings Mews and the existing extension to No. 5 John Street. The results of this investigation clarify that the existing buildings are founded in the Made Ground and that, although water seepages will be encountered, underpinning and sump pumping is a viable solution to form the proposed basement provided a suitably experienced Contractor is engaged to carry out the works. No temporary works proposals are provided for assessment although these were previously requested.

This has allowed a Ground Movement Analysis to be carried out by GEA using geotechnical modelling software and default values within CIRA report C580, which are acceptable, to represent the installation of the underpinned foundations. Computer runs have been generated for both the underpinning installation as well as the wall installation and excavation phases of the construction, as would be expected, resulting in the combined effect of the retaining wall installation and excavation generating between 10mm and 15mm maximum vertical settlements and horizontal movements.

The results of a heave analysis carried out using the software has indicated a compressible layer may need to be incorporated beneath the basement floor slab, which will require designing to resist potential uplift forces generated by movement of up to 5mm.

A damage assessment has subsequently been carried out using the principles contained in CIRIA C580 which identify Very Slight (Burland Category 1) damage to 8-9 Kings Mews and Negligible (Burland Category 0) damage to 12-13 Kings Mews, which is acceptable.

4.13. Further groundwater monitoring should also identify the direction of flow of groundwater and, together with a review of the proposed basement and other adjacent basements, allow an assessment to be made within the BIA of their impact on the local hydrogeology. The BIA states that *"Although the proposed basement is likely to encounter the groundwater table, the majority of the surrounding upstream buildings in this area already contain basement structures"*. No information is provided to verify this statement and it is not possible, at this time, to agree with the BIA Statement that *"the basement structure will have no adverse affect on the local hydrogeology"*.

Fluid Structures additional submission contains a letter from GEA, dated 23 September 2015, which provides additional information concerning the presence of basements, lower ground floor construction and swimming pools within surrounding properties to 10-11 Kings Mews. It also identified additional groundwater monitoring data for a development site at nearby 25 Kings Mews which GEA carried out contemporaneously with groundwater monitoring at No. 10-11 in 2012. It is accepted that this additional information shows that the proposed development is unlikely to have an impact on the local hydrogeological setting.

4.14. No proposals are provided for a movement monitoring strategy during excavation and construction.

The additional Ground Movement Analysis carried out by GEA is followed by a statement concerning the monitoring of ground movements during construction which confirms that proposals will be made and agreed with owners of adjacent properties during the Party Wall Act approval process. Fluid Structures have then provided a Boundary and Party Wall Movement Monitoring Notes paper, dated September 2015, which provide an acceptable strategy identifying locations of monitoring points together with trigger and action levels of movement.

4.15. It is accepted that the site currently is overlain with a concrete ground slab which appears to be in good condition. The area of new roof development on this front portion of the site does not impact on current rainwater discharges to the below ground surface water drainage system. The BIA should re-assess whether the existing roof area on the rear portion of the site currently discharges to no. 6 John Street, and its below ground surface water drainage system, in which case attenuation should be provided for this roof area and the rear lightwell.

Fluid Structures have confirmed that a CCTV inspection of the surface water drainage system of the existing roof area has been carried out which identified that it flows towards John Street. A statement is then made indicating that attenuation of the flow will be incorporated into the development but no details are provided.

4.16. The BIA has shown that although the development is close to a tributary of the “lost” River Fleet, it will not impact on the wider hydrogeology of the area, any other watercourses, springs or the Hampstead Heath Pond chain catchment area.

4.17. It is accepted that there are no slope stability concerns regarding the proposed development and it is not in an area prone to flooding.

4.18. In light of the outstanding input required from a suitably experience contractor into likely pumping of groundwater and temporary works proposals during the underpinning process, details of the proposed ground movement monitoring scheme and surface water attenuation proposals, it is recommended these are developed in a Basement Construction Plan prior to construction commencement.

5.0 CONCLUSIONS

5.1. The BIA and SSR have been carried out by well-known firms of engineering consultants who have now provided information to show that their authors possess suitable qualification and relevant experience.

5.2. The revised BIA has confirmed that the proposed basement will be founded within Made Ground and its foundations will need to be deepened to encounter the Lynch Hill Gravel below.

5.3. It has been confirmed that the ground water table will be encountered during basement excavation but that underpinning and sump pumping is a viable foundation solution provided a suitably experienced Contractor is engaged to carry out the construction. No indicative temporary works proposals are provided nor are any details of sump pumping of groundwater during excavation.

5.4. An acceptable Ground Movement Analysis and Damage Assessment has been carried out which shows Very Slight (Burland Category 1) damage to 8-9 Kings Mews and Negligible (Burland Category 0) to 12- 13 Kings Mews.

5.5. Acceptable heave mitigation measures will be incorporated below the basement floor slab by the introduction of compressible void formers.

5.6. Acceptable proposals are now provided for a movement monitoring strategy during excavation and construction.

5.7. It has been confirmed that surface water drainage from the existing roof area flows towards John Street but no proposals to attenuate the flow have yet been made.

5.8. It is accepted that the surrounding slopes to the development site are stable.

5.9. It is accepted that the development will not impact on the wider hydrogeology of the area and is not an area subject to flooding.

5.10. It is accepted that additional groundwater monitoring data and information regarding adjacent below ground basement structures has shown that the development is unlikely to have an impact on the local hydrogeological setting.

5.11. It is recommended that measures to deal with temporary works proposals, control of groundwater during excavation and construction and surface water attenuation are developed in a Basement Construction Plan.

Appendix 1: Resident's Consultation Comments

None

Appendix 2: Audit Query Tracker

Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	SSR Author CV	Required to show suitable expertise of engineering geology.	Additional information provided.	21.10.15
2	Additional soils, foundation and groundwater investigation	Required to inform decision on basement construction solution.	Additional information provided. No temporary works proposals. No groundwater control proposals.	23.09.15 Temporary works and ground water control to be developed in Basement Construction Plan
3	Ground movement analysis	Required to determine potential damage to neighbouring properties.	Additional information provided.	23.09.15
4	Heave analysis	Required to determine effect on basement floor slab.	Additional information provided.	23.09.15
5	Groundwater flow	Required to determine effect on local hydrogeology	Additional information provided.	23.09.15
6	Rear building roof drainage investigation	Required to determine potential need for attenuation.	Additional information provided. No surface water attenuation proposals.	21.10.15 Temporary works and ground water control to be developed in Basement Construction Plan

Appendix 3: Supplementary Supporting Documents

FLUID.STRUCTURES
ENGINEERS AND TECHNICAL DESIGNERS

24151/AU
21st October 2015

Mr. A. Marlow
Campbell Reith Hill LLP
Friars Bridge Court
41-45 Blackfriars Road
London, SE1 8NZ

Dear Mr Marlow,

Ref: 10 – 11 Kings Mews, London. Basement impact Assessment:
Response to Queries Raised in Campbell Reith Audit AJMlt12066-18-280715-D1.doc

Please find below our response to the queries raised within the Campbell Reith audit dated August 2015, revision D1 of the Basement Impact Assessment for the above project

- Audit Query reference 5.1; *Requirement for authors to show suitable expertise in engineering geology.*

  Please find attached the CV of the report author providing relevant previous experience.

- Audit Query reference 5.5; *Requirement for that further investigation of the below ground soils and neighbouring foundations is carried out, together with groundwater monitoring to allow a decision to be taken on construction methodology*

  Please find attached a letter from GEA dated 23rd September 2015 which sets out the additional ground investigation carried out to inform the construction methodology. The findings of these investigations support the current proposed construction methodology of underpinning.

  Further to the addition to the supplementary borehole, trial pitting and ground water monitoring outlined in the above letter a rising head test within the installed standpipe was subsequently carried out to enable an assessment of the potential ground water flows within the ground. The result of this test is appended to the above letter. The flow rate established in this test indicates local groundwater flows are within a suitable range to enable the local temporary dewatering of the planning underpinning excavations.

- Audit Query reference 5.6; *Requirement for ground movement analysis for the new single storey basement structure;*

  Please find attached the ground movement analysis report from GEA which sets out the anticipated horizontal and vertical ground movements and confirms that these are within acceptable limits

- Audit Query reference 5.7; *Requirement for the further soils investigation should be tailored to allow further consideration of any potential heave movements below the basement slab and likelihood of groundwater flow and direction affecting the local hydrogeology.*

  Consideration is given to potential heave movements within the above ground movement analysis report from GEA and confirms that these are within acceptable limits and can be offset by design measures to accommodate any potential long term movements such as a void or layer of proprietary compressible material incorporated below the basement slab. The impact of the development on local hydrogeology is covered in the attached a letter from GEA dated 23rd September 2013 which concludes that the proposed basement structure will not have an impact on the local hydrological or hydrogeological setting.

- Audit Query reference 5.8; *Requirement for a movement monitoring strategy during excavation and construction.*

  Please find attached the movement and monitoring strategy report relating to the proposed schedule of monitoring during the proposed works.

- Audit Query reference 5.9; *Requirement for further investigation to identify which surface water drainage system (Kings Mews or John Street) the present rear existing building roof discharges to, prior to demolition. If it currently flows to John Street, an attenuation system should be proposed to limit additional flows to Kings Mews.*

  A visual and CCTV inspection of the surface water drainage system to the existing extension roof area within the King’s Mews site has been carried out which indicates it drains back towards John St. As such it is proposed sufficient attenuation will be included within the Kings Mews development to limit additional outflows to the Kings Mews side to within acceptable levels.

We trust the above will provide sufficient information to enable the above queries to be closed however if you have any queries on the attached please do not hesitate to contact me

Yours sincerely

Andrew Urquhart
Associate

Managing Director of Fluid Structural Engineers & Technical Designers

David Crookes has been a practicing Structural Engineer since 1984 and has over 30 years of working experience. He was involved in teaching at the University of Westminster for 10 years (1997 - 2007) and is currently a visiting Fellow in Engineering at the South Bank University. He has considerable experience in the design of new basements and substructures work and has been involved in numerous schemes where piling or underpinning has been specified.

David Crookes
BSc, CEng
MI StructE, MIFE

Education

1979-1984	BSc (Hons) at Trinity College, Dublin
1979-1984	Diploma in Structural Engineering Bolton Street College of Technology, Dublin
1974-1979	Secondary School, Coolmine Community School, Dublin

Employment History

Nov 1999	Set up Fluid Structural Engineers & Technical Designers
1995 - 1999	Associate then partner at Alan Conisbee Associates London
1992 - 1995	Employed as senior engineer by Cameron Taylor Bedford
1984 - 1992	Various engineering positions, gained Chartered Engineer status in 1989

Teaching/ Publication/ Special Interests

2010 to date	Member of Southwark Design Review Panel
2015 to date	Member of Islington Design Review Panel
Teaching:	
2010 to date	Visiting Fellow in Engineering at London Southbank University
2011 - 2013	Technical tutor (fractional post) at Central St Martins.
Publications:	
2011	'Fluid Structures Adventures in Engineering' Watermark Publications (UK) Ltd

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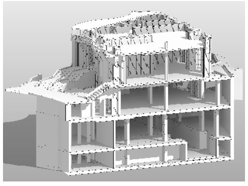
Key Projects



Egerton Place - Project cost: £15 million

Fluid Structures have been appointed as the Structural Engineers for the proposed works at Egerton Place. The proposed works include the construction of a basement level beneath both properties and structural alterations between lower ground floor level and first floor level.

Westheath Road - Project cost: £10 million

Westheath Road was a very high specification new build development of luxury apartments in Hampstead. The structure of the building consists of contiguous piles and waterproof concrete to achieve a deep basement for car parking and lower ground floor accommodation,

30 The Little Boltons - Project cost: £5 million

As the concept design developed the scheme resolved to an almost total redevelopment of the property, a 19th century semi-detached house with a generous rear garden. Key was the aim to double the internal floor area, primarily by downward development.

52 Clarendon Road - Project cost: £4 million

Fluid Structures are working with PTP architects on 52 Clarendon Road which is a 4 storey semi-detached Victorian property. The works involve the existing facade retention and construction of a new basement and complete new steel frame above a Thames Water Sewer running across the site.

Castlenau, Swimming Pool - Project cost: Confidential

The project involved the refurbishment and extension of an existing Victorian House. Which included deepening the basement beneath the whole property by 1.5m with all the external walls underpinned and adding a rear and side extensions with a swimming pool, sauna, steam room and plant rooms.

65 Clarendon Road - Project cost: £4 million

The project involved the refurbishment and extension of an existing Victorian House. This included deepening the basement and adding a side, front and rear extension with bedrooms, staff quarters and swimming pool and plant rooms.

Scarth Road - Project cost: £3 million

The project involved the refurbishment and rear extension of a Victorian house. Construction of a new basement, including two front light wells and rear external patio at basement level using contiguous piling along the sites in a very restricted area and with a very high water level.

46 Chepstow Place - Project cost: £1.2 million

The project involved the refurbishment and extension of an existing Victorian House. The works included deepening the basement beneath some of the property, adding an additional storey at roof level and removing the rear wall of the house to form a connection between the new rear extension at basement and ground floor level.

18 South End - Project cost: £1 million

This project included the excavation of a 4.0m deep basement under an existing mid-terrace mews house. In addition to this the first floor was replaced and the second floor refurbished to increase head heights to improve the existing terrace and internal volume.

54 Chepstow Villas - Project cost: £1.1 million

The work involved the whole sale refurbishment of a 5 storey Victorian London town house. The lower ground was under pinned so that the slab could be lowered and the headroom improved.

23 September 2015

Planning ref:	2015/2393/P
Your ref:	24286/DC
Our ref	J15275/ML/1

GEA Geotechnical & Environmental Associates

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Widbury Hill
Ware
SG12 7QE

tel 01727 824666
email mail@gea-ltd.co.uk
web www.gea-ltd.co.uk

Mr David Crookes
Fluid Structures
21 St George's Road
London
SE1 6ES

Dear David

Re: 10–11 KINGS MEWS, LONDON WC1N 2ES

Further to our instruction from of G & T John Street Ltd, we have now reviewed the comments made within the Basement Impact Assessment (BIA) Audit by Campbell Reith (ref: 12066-18, dated August 2015). This letter forms our formal response to each of the relevant points raised in the BIA Audit, with respect to our previous BIA (report ref: J12197 Issue 2, dated June 2015).

Additional Investigation Required to Inform Basement Construction Solution

Subsequent to our investigation, Soil Consultants carried out an additional cable percussion borehole to 18 m in order to provide additional information to inform the design of the proposed development. A copy of the Soil Consultants report has been provided to us for review, which has indicated that the additional borehole generally confirmed the ground conditions encountered during our investigation in that below the surface covering of hardstanding, a significant thickness of made ground was encountered to a depth of 3.90 m, whereupon the Lynch Hill Gravel extends to a depth of 5.90 m. Below this depth the London Clay was encountered and extended to the maximum depth investigated of 18.00 m.

A groundwater monitoring standpipe was installed in the borehole to a depth of 7.00 m. We have recently carried out a monitoring visit, which measured groundwater at depths of 3.28 m in the Soil Consultants borehole and 3.25 m in the standpipe that was installed in our previous borehole.

In addition to the above, in order to further investigate the foundations of the neighbouring properties, two trial pits have recently been excavated by on site contractors and inspected by an engineer from GEA. Trial Pit No 1A was excavated adjacent to the southern party wall and the rear elevation of the existing two-storey section of 6 John Street. The party wall was found to be of brick construction and founded on made ground at a depth of 2.80 m, whilst the rear elevation of 6 John Street was also of brick construction and founded on made ground at a depth of 2.60 m. Trial Pit No 2A was excavated adjacent to the northern party wall which was found to be supported by a concrete footing bearing on made ground at a depth of 2.30 m. The top of the footing was encountered at 1.80 m and it projected away from the wall by 250 mm. The borehole and trial pit records are enclosed with this letter, together with a site plan indicating the exploratory positions.

It is understood that the preferred option of constructing the basement retaining walls is through the conventional underpinning of existing foundations. On the basis of the most recent trial pit findings this option should be feasible, with the made ground noted to remain relatively stable, although due to safety requirements the trial pits were shored to allow safe entry.

The existing foundations will need to be underpinned down to the natural soil, which has been encountered at depths of between 3.90 m and 4.80 m. Groundwater has recently been recorded at a depth of approximately 3.25 m and therefore groundwater will be encountered during underpinning. An assessment will still need to be made on how groundwater can be suitably controlled and the approach for dealing with any instability within the Lynch Hill Gravel where groundwater is encountered will need to be detailed by the contractor, who should be suitably experienced in this type of work.

Ground Movement Assessment

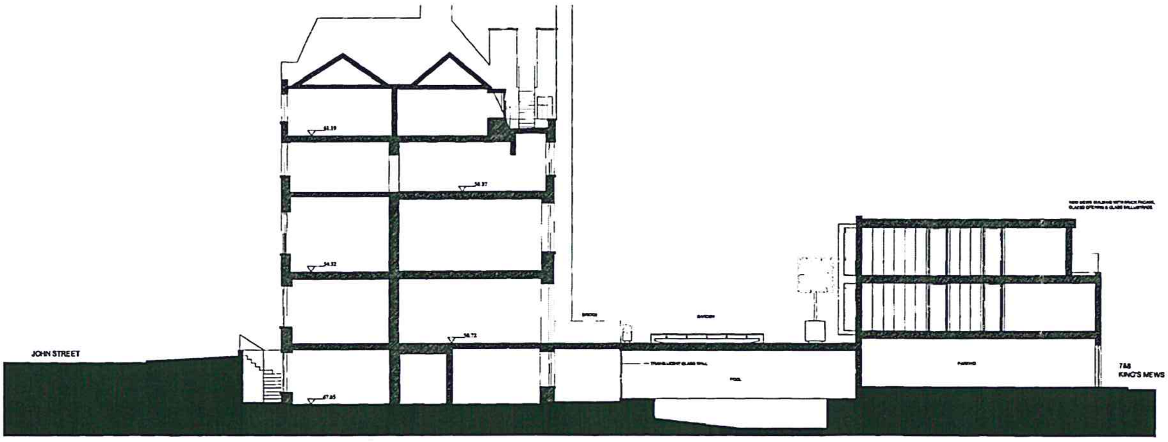
We are currently carrying out a ground movement analysis to provide a prediction of lateral and vertical movement and the results will be reported within a separate report.

Further Assessment on likely Groundwater Flow

Given that the site forms a relatively small area, it would not be possible to infer the likely groundwater flow direction from multiple groundwater monitoring wells. The recent groundwater monitoring has indicated that the two monitoring standpipes on site are in hydraulic continuity. However, as stated within our previous BIA, groundwater flow within the river terrace gravels would be expected to be dictated by the general topography. The topography of the surrounding area slopes down to the east, which is also in the direction of the former River Fleet, also a general indicator of present day and historical groundwater flow direction.

GEA has previously carried out a ground investigation at No 25 Kings Mews, approximately 20 m to the southeast of the site. This investigation was also carried out in 2012, approximately two months prior to the investigation carried out at the subject site. Groundwater monitoring carried out on both sites during the same time of year indicated a groundwater level of 3.20 m below 25 Kings Mews and a water level of 3.60 m below the subject site. Although not fully conclusive, the measured levels suggest that groundwater is flowing in a southeasterly / easterly direction, as would be expected.

Further information on the neighbouring and surrounding properties has indicated that whilst the majority of the properties fronting onto John Street to the west of the site have lower ground floors, they will not extend below the groundwater table. Nos 7–8 Kings Mews, which neighbours the site to the south, does not include a basement, although does have a swimming pool excavation that extends 2.5 m below the existing ground level of the site, as shown by the acquired cross-section below.



On the basis of the recent groundwater monitoring results, the pool excavation shown above does not extend below the groundwater table. In addition, No 12 Kings Mews to the north does not include a basement. Therefore there is considered to be sufficient space for groundwater to flow around the proposed basement such that there will not be a cumulative effect on groundwater flow. On the basis of all of the above, it is still concluded that the proposed basement structure will not have an impact on the local hydrological or hydrogeological setting.

I trust that the above satisfies your current requirements however should you need anything further then do not hesitate to contact us.

Yours sincerely
GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES

Matt Legg

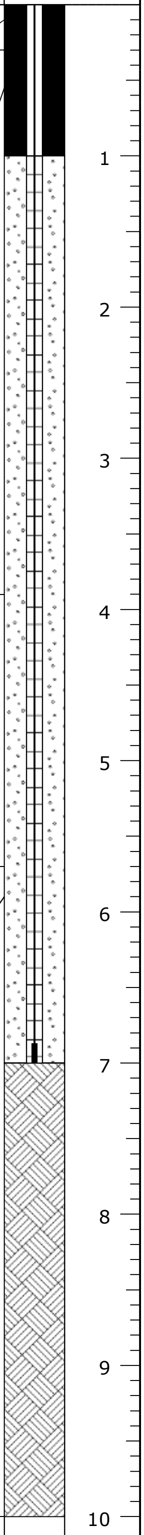
Encs

cc Tim Plaskow – G & T John Street Ltd

Site & Location:	**6 John Street** **London WC1N 2ES**
Borehole No:	**BH01**
Client:	**G&T John Street Ltd**
Coordinates:	530912E, 182014N
Sheet 1 of 2	
Engineer:	**Fluid Structures Ltd**
Ground Level:	+21.05mOD
Report No:	9764/MC

Progress & Observations	Samples & Tests		Field Test Results	Strata		Strata Descriptions
	Type	Depth (m)		Depth (m)	Level (m)	
Started: 20/03/15				0.10	20.95	MADE GROUND: Blacktop surfacing.
Chiselling between GL and 0.30m for 30 minutes				0.30	20.75	MADE GROUND: Reinforced concrete slab.
150mm diameter casing to 5.00m depth	E	0.45		0.55	20.50	MADE GROUND: Dark brown, sandy gravel as fragments of brick, concrete and flint, and occasional cobble-size pieces of brick masonry. Occasional small pieces of ash and clinker.
						MADE GROUND: Loose, reddish-brown, silty, very sandy, fine to coarse, angular to subangular, gravel as fragments of brick, concrete and flint.
	E	1.00				
	D	1.20				
	SPT/C	1.20	N=3 N_{60}=4			
	E	2.00				
	D	2.00				
	SPT/C	2.00	N=4 N_{60}=5			
	D	3.00				
	SPT/C	3.00	N=3 N_{60}=4			
				3.90	17.15	Medium dense, becoming dense below 4.5m, orange-brown, slightly silty, very sandy, fine and medium, subangular to subrounded, GRAVEL of flint.
	E	3.95				
	D	4.00				
	SPT/C	4.00	N=23 N_{60}=29			
	D	5.00				
Groundwater strike at 5.20m depth - slow inflow. Rose to 5.00m after 20 minutes. Sealed off at 6.00m.	SPT/C	5.00	N=29 N_{60}=37			
	D	5.70		5.70	15.35	Firm, orange-brown, slightly gravelly CLAY, with occasional pockets of sand. Gravel is of flint.
				5.90	15.15	Stiff, blockily fissured, dark grey-brown, locally slightly sandy, silty CLAY, with occasional small pockets of light grey silt.
	U	6.00				
	D	6.45				
	D	7.50				
	SPT/S	7.50	N=20 N_{60}=25			
	D	8.25				
	U	9.00				
	D	9.45				
				10.00	11.05	Continued on next sheet

Backfill / Installation



Key: U = Undisturbed B = Bulk D = Small disturbed W = Water ES = glass jar & plastic tub E = glass jar SPT/S = split spoon SPT/C = solid cone HV = Hand Vane [kPa]
PP = Pocket Penetrometer [kg/cm²] PID = Photo Ionisation Detector [ppmv] * = full SPT penetration not achieved - see summary sheet

Borehole type: Cable Percussion

Remarks: 50mm diameter standpipe installed on completion
Ground level and co-ordinates extrapolated from public domain data and are approximate.

Borehole No: **BH01**

Soil Consultants

Site & Location:	**6 John Street** **London WC1N 2ES**			Borehole No:	**BH01**
Client:	**G&T John Street Ltd**	Coordinates:	530912E, 182014N	Sheet 2 of 2	
Engineer:	**Fluid Structures Ltd**	Ground Level:	+21.05mOD	Report No:	9764/MC

Progress & Observations	Samples & Tests		Field Test Results	Strata		Legend	Strata Descriptions	Backfill / Installation
	Type	Depth (m)		Depth (m)	Level (m)			
							Very stiff, blockily fissured, dark grey-brown, locally slightly sandy, silty CLAY, with occasional small pockets of light grey silt.	
	D	10.50						
	SPT/S	10.50	N=26 N_{60}=33					
	D	11.25						
	U	12.00						
	D	12.45						
	D	13.50						
	SPT/S	13.50	N=30 N_{60}=38					
				13.80	7.25		Very stiff, very closely fissured, dark grey-brown, CLAY, with occasional white fossil shell debris and infilled burrows.	
	D	14.25						
	U	15.00						
	D	15.45						
	D	16.50						
	SPT/S	16.50	N=33 N_{60}=42					
				16.80	4.25		Very stiff, blockily fissured, dark grey-brown, slightly sandy, silty CLAY, with occasional small pockets of light grey silt.	
	D	17.00						
	U	17.50						
Finished: 20/03/15	D	17.95		18.00	3.05		End of borehole at 18.00m	

Key: U = Undisturbed B = Bulk D = Small disturbed W = Water ES = glass jar & plastic tub E = glass jar SPT/S = split spoon SPT/C = solid cone HV = Hand Vane [kPa]
PP = Pocket Penetrometer [kg/cm²] PID = Photo Ionisation Detector [ppmv] * = full SPT penetration not achieved - see summary sheet

Borehole type: Cable Percussion

Remarks: 50mm diameter standpipe installed on completion
Ground level and co-ordinates extrapolated from public domain data and are approximate.

Borehole No: **BH01**

GEA Geotechnical & Environmental Associates

Tyttenhanger House
Coursers Road
St Albans
AL4 0PG

Site 10 - 11 King's Mews, London, WC1N 2ES				**Borehole Number** **BH1**
Boring Method Cable Percussion	**Casing Diameter** 150mm cased to 6.50m	**Ground Level (mOD)** 21.09	**Client** Philip Laniado	**Job Number** J12197
	Location	**Dates** 13/08/2012	**Engineer** Fluid Structures	**Sheet** 1/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						(0.30)	Tarmac over concrete with 6 mm reinforcement	▨		▨
					20.79	0.30	Made ground (brown silty sand with crushed brick and concrete fragments)	▨		▨
1.20-1.65 1.20	CPT N=1 B1	1.00	DRY	1,0/0,0,1,0						
						(2.70)				
2.00-2.45 2.00	CPT N=3 B2	2.00	DRY	1,0/1,0,1,1						
3.00-3.45 3.00	CPT N=3 B3	3.00	DRY	1,2/1,0,1,1 Seepage(1) at 3.10m, no rise after 20 mins, sealed at 3.50m.	18.09	3.00	Made Ground (dark brown silty sandy clay with gravel, brick and coal fragments)	▨	▼1	
						(1.80)				
4.00-4.45 4.00	CPT N=6 B4	4.00	DRY	1,1/1,2,1,2						
					16.29	4.80	Medium dense brown slightly clayey sandy fine to coarse subrounded to angular GRAVEL	▨		
5.00-5.45 5.00	CPT N=15 B5	5.00	DRY	1,2/3,3,4,5						
						(1.30)				
6.00	B6			Seepage(2) at 6.00m, no rise after 20 mins, sealed at 6.50m.					▼*	
					14.99	6.10 (0.30)	Firm fissured brown silty CLAY with partings of bluish grey silt	▨		
6.00-6.45	CPT N=8	6.00	DRY	2,1/1,2,2,3	14.69	6.40	Stiff becoming very stiff fissured high strength to very high strength dark grey silty CLAY with partings of brownish grey silt and traces of selenite	▨	▼3	▨
6.70	D1									
7.50-7.95	U1									
8.00	D2									
9.00-9.45 9.00	SPT N=19 D3	6.50	DRY	3,3/4,4,5,6						

Remarks
Excavating services inspection pit from ground level to 1.2 m for 2 hrs.
Groundwater monitroing standpipe installed in borehole to a depth of 6.20 m.
30 mins spent tidying borehole area.

Scale (approx) 1:50	**Logged By** ML
Figure No. J12197.BH1	

Geotechnical & Environmental Associates

Tyttenhanger House
Coursers Road
St Albans
AL4 0PG

Site	10 - 11 King's Mews, London, WC1N 2ES			**Borehole Number** BH1
Boring Method Cable Percussion	**Casing Diameter** 150mm cased to 6.50m	**Ground Level (mOD)** 21.09	**Client** Philip Laniado	**Job Number** J12197
	Location	**Dates** 13/08/2012	**Engineer** Fluid Structures	**Sheet** 2/2

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.50-10.95	U2									
11.00	D4									
12.00-12.45 12.00	SPT N=26 D5	6.50	DRY	5,5/6,6,7,7						
						(8.60)				
13.50-13.95	U3									
				Slow(3) at 13.80m, rose to 6.50m in 20 mins.					∇3	
14.00	D6									
14.50-14.95 14.50	SPT N=31 D7	6.50	DRY	6,6/7,7,8,9						
					6.09	15.00				
							Complete at 15.00m			

Remarks

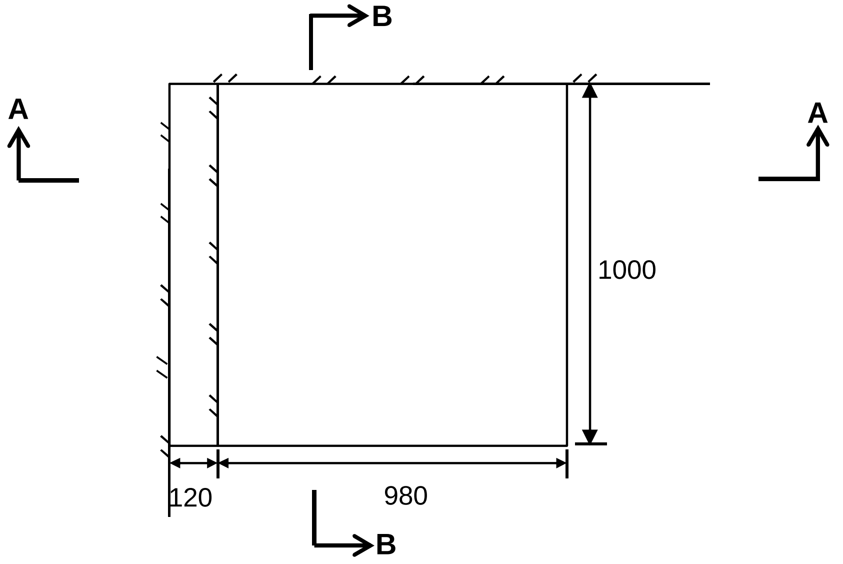
Scale (approx) 1:50	**Logged By** ML
Figure No. J12197.BH1	

Geotechnical &
Environmental
Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Excavation Method Manual	**Dimensions** 1000 x 1000 x 2800	**Ground Level (mOD)**	**Site** 10-11 Kings Mews, London WC1N 2ES	**Trial Pit Number** **1A**
			Client G&T John Street Ltd	**Job Number** J15275
	Location	**Dates** 02/09/2015	**Engineer** Fluid Structures	**Sheet** 1 / 3

Plan: -



Remarks:

All dimensions in millimetres

Sides of trial pit remained stable during excavation with aid of shoring

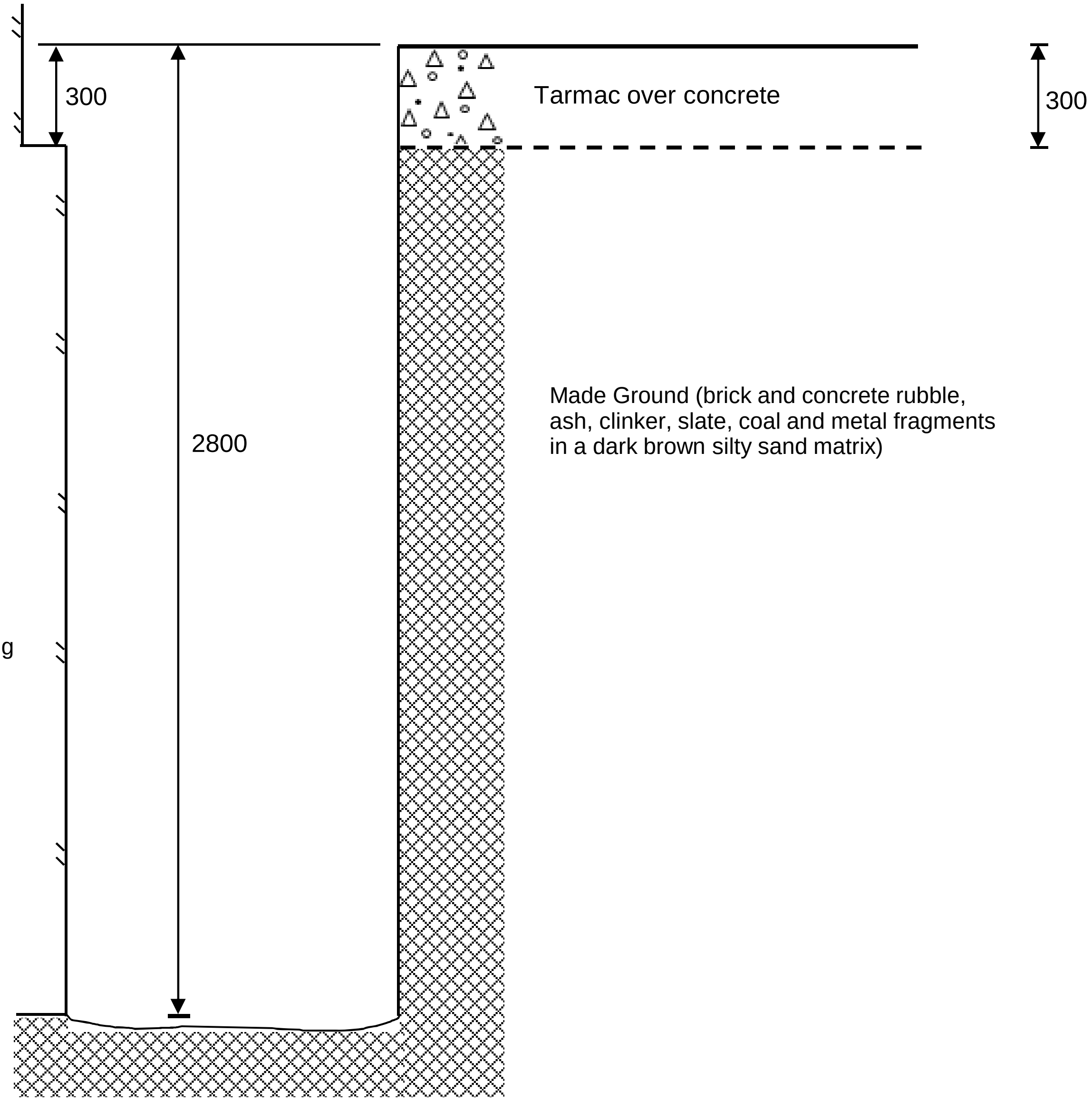
Groundwater: not encountered

Scale:
1:20

Logged by:
ML

Geotechnical & Environmental Associates		Widbury Barn Widbury Hill Ware Herts SG12 7QE	**Site** 10-11 Kings Mews, London WC1N 2ES	**Trial Pit Number** **1A**
Excavation Method Manual	**Dimensions** 1200 x 1100 x 2300	**Ground Level (mOD)**	**Client** G&T John Street Ltd	**Job Number** J15275
	Location	**Dates** 02/09/2015	**Engineer** Fluid Structures	**Sheet** 2 / 3

Section A - A: -



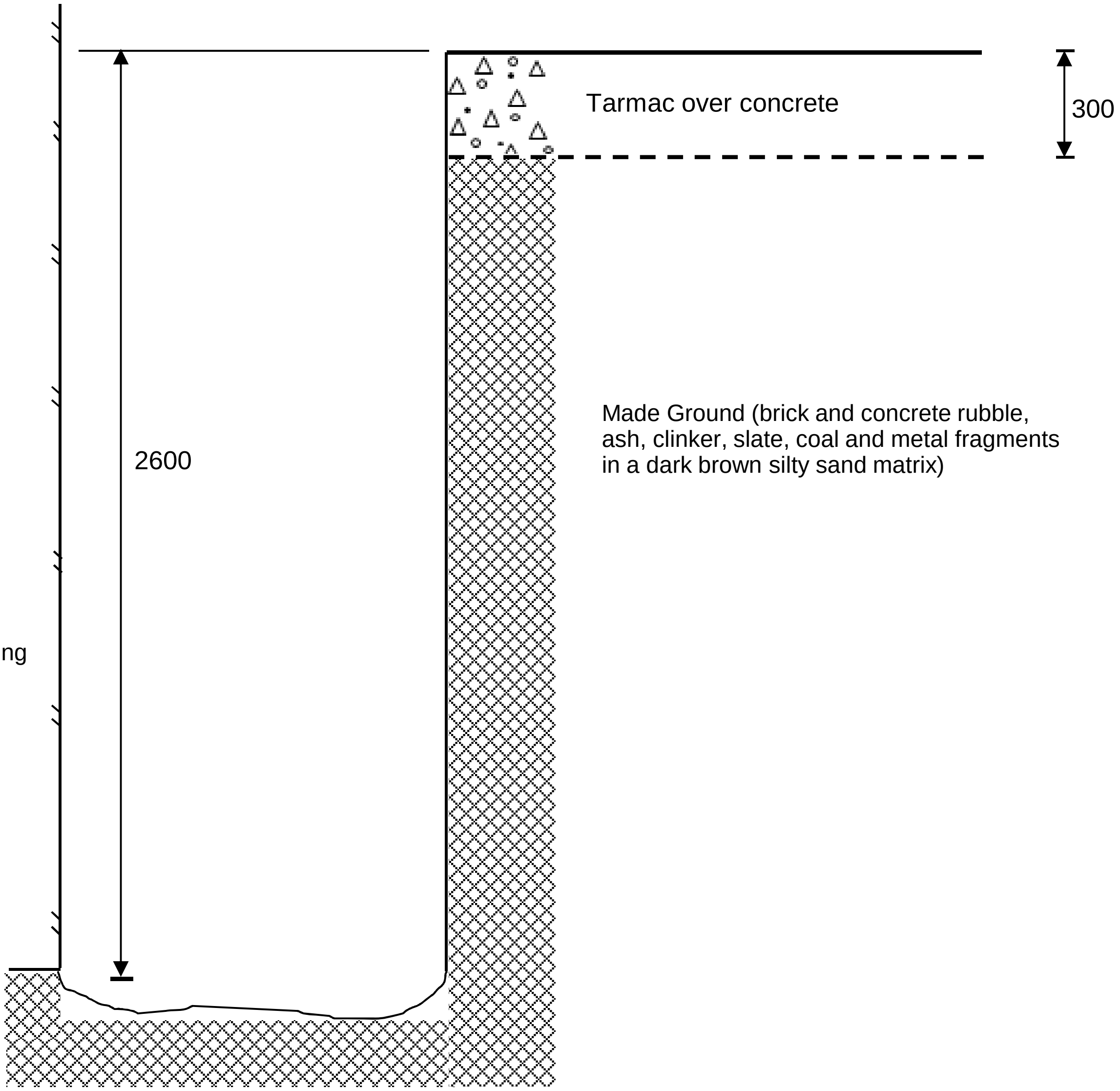
Remarks:	Scale:
All dimensions in millimetres	1:20
Sides of trial pit remained stable during excavation with aid of shoring	Logged by:
Groundwater: not encountered	ML

Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Excavation Method Manual	**Dimensions** 1000 x 1000 x 2800	**Ground Level (mOD)**	**Site** 10-11 Kings Mews, London WC1N 2ES	**Trial Pit Number** 1A
			Client G&T John Street Ltd	**Job Number** J15275
	Location	**Dates** 02/09/2015	**Engineer** Fluid Structures	**Sheet** 3 / 3

Section B - B: -



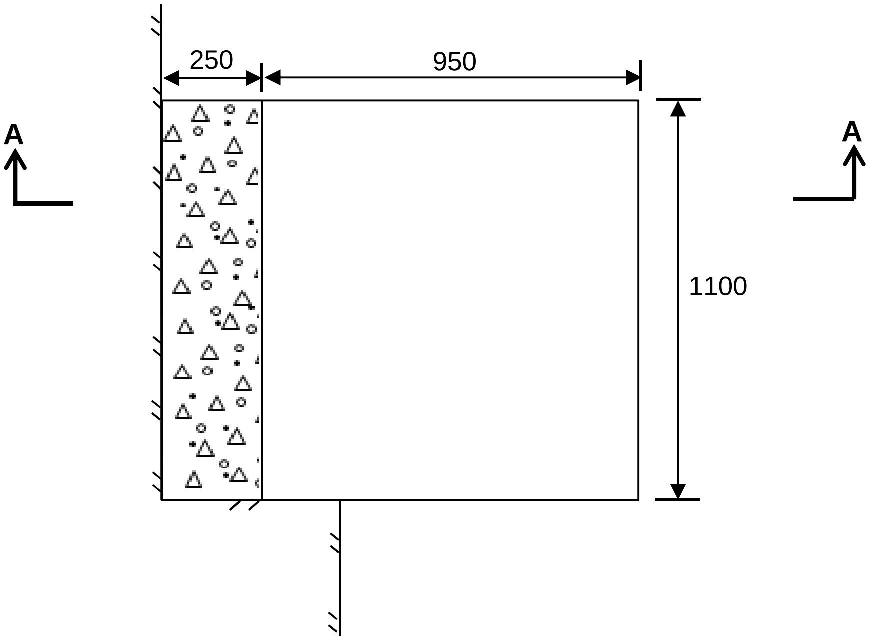
Remarks:	Scale:
All dimensions in millimetres	1:20
Sides of trial pit remained stable during excavation with aid of shoring	Logged by:
Groundwater: not encountered	ML

Geotechnical & Environmental Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Site	10-11 Kings Mews, London WC1N 2ES			**Trial Pit Number** **2A**
Excavation Method **Manual**	**Dimensions** 1200 x 1100 x 2300	**Ground Level (mOD)**	**Client** G&T John Street Ltd	**Job Number** J15275
	Location	**Dates** 02/09/2015	**Engineer** Fluid Structures	**Sheet** 1 / 2

Plan: -



Remarks:

All dimensions in millimetres

Sides of trial pit remained stable during excavation

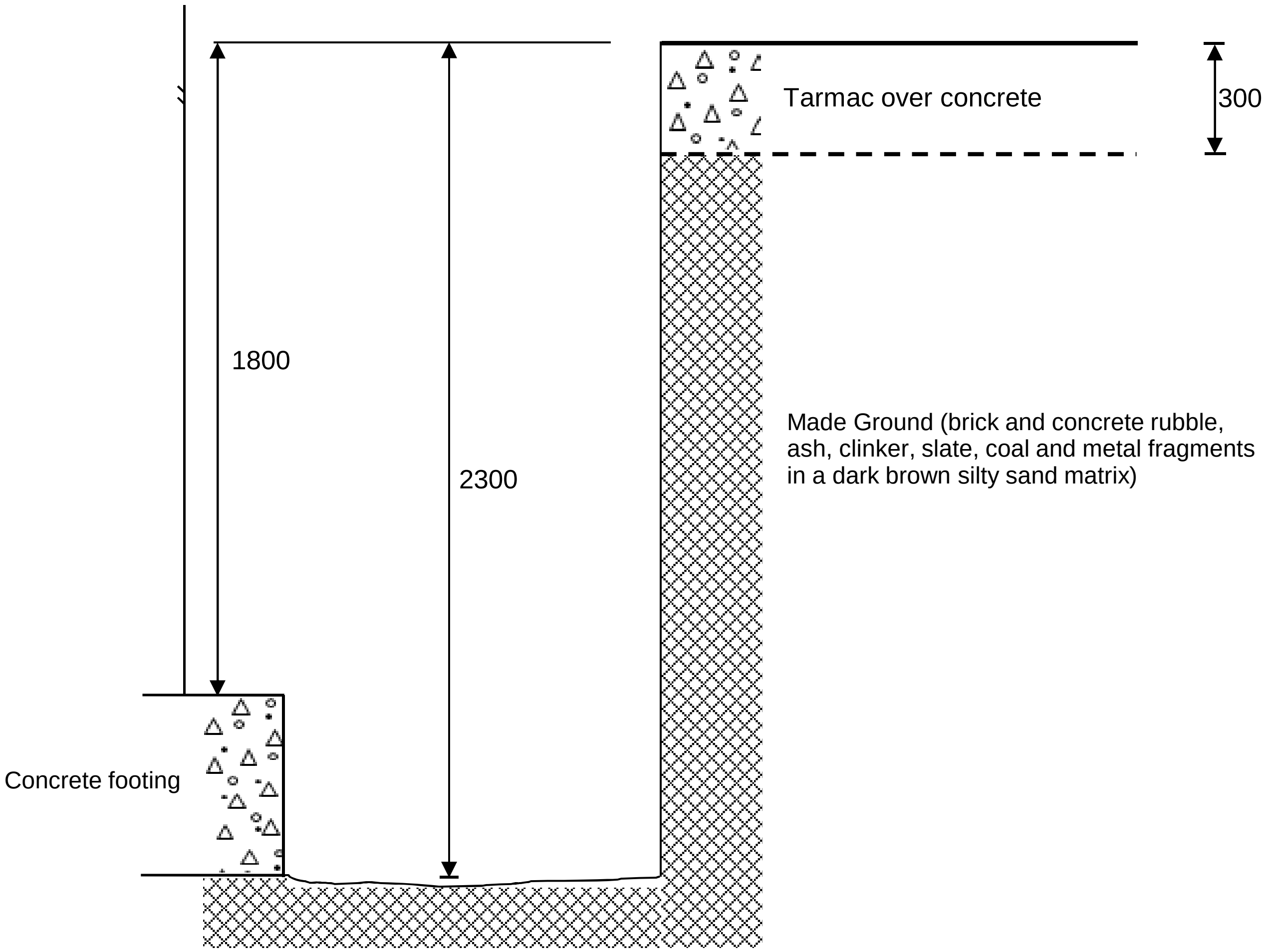
Groundwater: not encountered

Scale:
1:20

Logged by:
ML

Geotechnical & Environmental Associates Widbury Barn Widbury Hill Ware Herts SG12 7QE		**Site** 10-11 Kings Mews, London WC1N 2ES	**Trial Pit Number** **2A**
Excavation Method **Manual**	**Dimensions** 1200 x 1100 x 2300	**Ground Level (mOD)**	**Client** G&T John Street Ltd	**Job Number** J15275
	Location	**Dates** 02/09/2015	**Engineer** Fluid Structures	**Sheet** 2 / 2

Section A - A: -



Remarks:	Scale: 1:20
All dimensions in millimetres Sides of trial pit remained stable during excavation Groundwater: not encountered	Logged by: ML

Geotechnical &
Environmental
Associates

Widbury Barn
Widbury Hill
Ware
Herts SG12 7QE

Site Plan

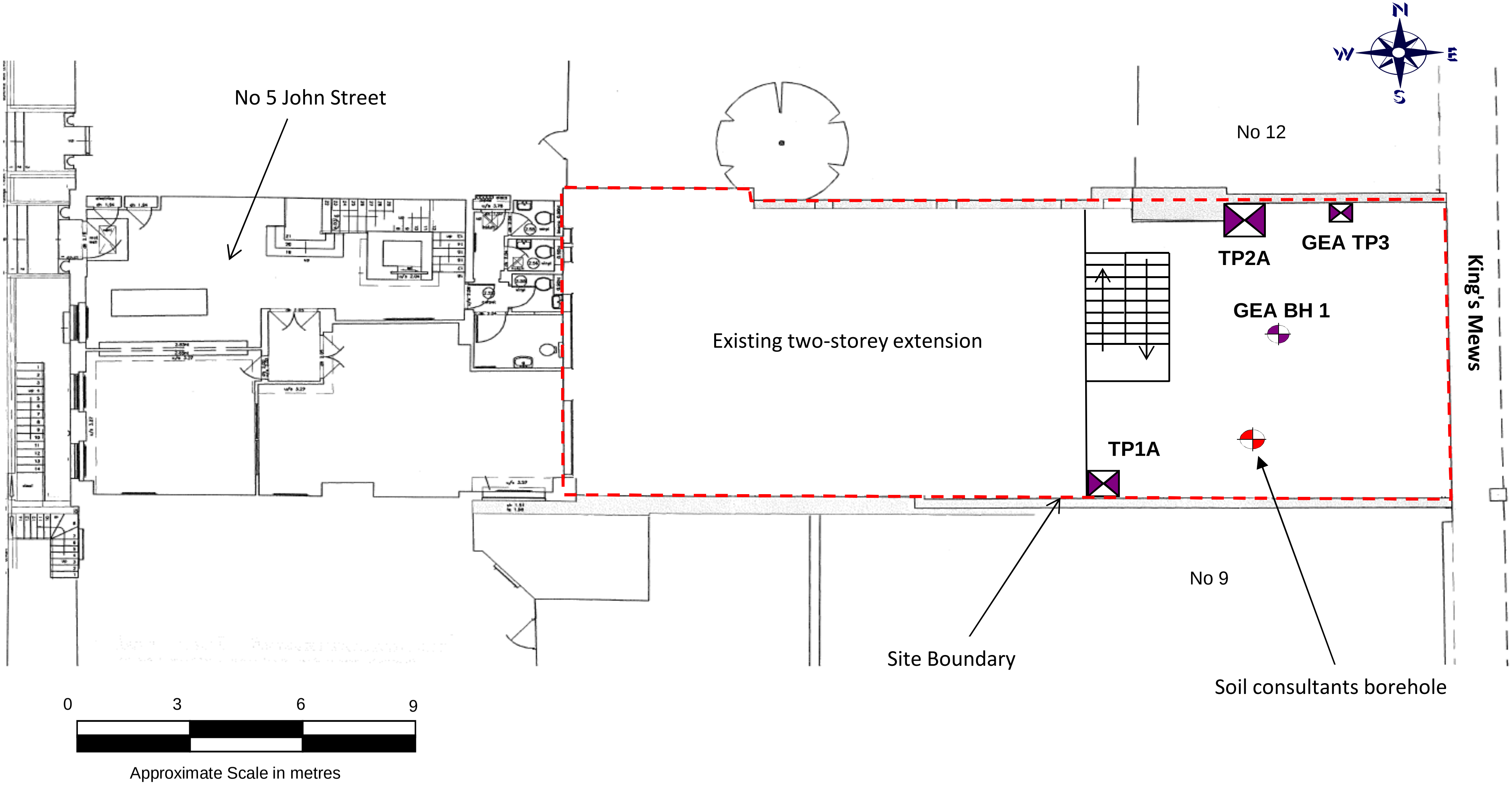
Site 10-11 Kings Mews, London WC1N 2ES

Client G&T John Street Ltd

Engineer Fluid Structures

Job Number J15275

Sheet 1 / 1



Borehole Rising Head Test

Site 10-11 Kings Mews, London WC1N 2ES

Client G&T John Street Ltd

Engineer Fluid Structures

Job Number J15275

Sheet 1/2

BOREHOLE No	1
TEST NO	1
DATE	06/10/2015

AT START OF TEST	
Standpipe Diameter (mm)	50
Standpipe Depth (m)	5.00
Depth to water on arrival (m)	3.22
Depth to water at start of test (m)	4.08

TIME	*WATER LEVEL (m)*
0 min	4.08
2 min	4.05
4 min	4.04
10 min	4.00
20 min	3.92
30 min	3.82
40 min	3.70
55 min	3.59
70 min	3.48
90 min	3.34
100 min	3.27
106 min	3.22

REMARKS

It was not possible to bailout the standpipe much beyond 4.0 m.

Borehole Rising Head Test

Site	10-11 Kings Mews, London WC1N 2ES	**Job Number**	J15275
Client	G&T John Street Ltd	**Sheet**	2/2
Engineer	Fluid Strcutures		

Date: 6th October 2015

Borehole No: 1 **Test No:** 1

Test Data

Before start of test:

Borehole depth (m): 6.20
Casing depth (m): N/A
Water level (m): 3.22

Time (mins)	Depth to Water (m)	Depth of Water (m)
0	4.08	2.12
2	4.05	2.15
4	4.04	2.16
10	4.00	2.20
20	3.92	2.28
30	3.82	2.38
40	3.70	2.50
55	3.59	2.61
70	3.48	2.72
90	3.34	2.86
100	3.22	2.98
106	3.22	2.98

Borehole depth (m): 6.20
Casing depth (m): N/A
Water level (m): 3.22

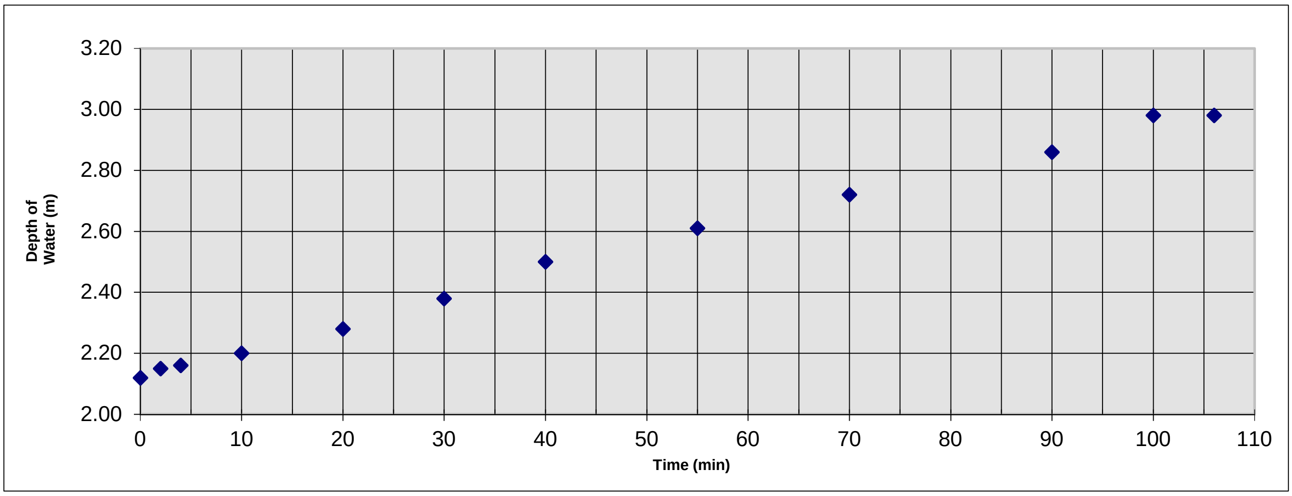
Soakage Calculation

Borehole Diameter (m)	0.0500
Borehole Area (m)	0.0020
Borehole Perimeter (m)	0.157

From Plot:	D1 (m)	2.12
	D2 (m)	2.98
	T1 (min)	0
	T2 (min)	106

Soakage Volume (m^3)	-0.002
Soakage Area (m^2)	0.40
Time (min)	106

Soakage rate (m/sec)	-6.5961E-07
Soakage rate (m/day)	-0.056990336



Remarks:

GROUND MOVEMENT ASSESSMENT REPORT

10-11 King’s Mews
London WC1

Client: Mr Philip Laniado

Engineer: Fluid Structures

J15275

October 2015

Document Control

Project title	10–11 King's Mews, London, WC1N 2ES		**Project ref**	J15275
Report prepared by	Martin Cooper BEng CEng MICE FGS			
Report checked and approved for issue by	Steve Branch BSc MSc CGeol FGS FRGS MIEnvSc			
Issue No	**Status**	**Date**	**Approved for Issue**	
1	Final	20 October 2015	SH	

This report has been issued by the GEA office indicated below. Any enquiries regarding the report should be directed to the office indicated or to Steve Branch in our Herts office.

☐	Hertfordshire	tel 01727 824666	mail@gea-ltd.co.uk
☑	Nottinghamshire	tel 01509 674888	midlands@gea-ltd.co.uk

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CONTENTS

1.0 INTRODUCTION

Geotechnical and Environmental Associates (GEA) has been commissioned by Fluid Structures, on behalf of Mr Philip Laniado, to complete a ground movement assessment for the proposed construction of two new mews houses with a single level basement at Nos 10 and 11 King's Mews, London, WC1N 2ES.

A Desk Study and Ground Investigation Report has previously been carried out by GEA (report ref J12197, dated October 2012, updated in June 2015) and the findings of these reports, along with an additional borehole by others, have been used in the derivation of parameters for use in this assessment.

The purpose of this assessment has been to assess any effects of the proposed basement construction upon nearby sensitive structures.

1.1 Proposed Development

It is proposed to demolish the existing two-storey rear extension to No 6 John Street and subsequently construct a three-storey house across the entire site, with a single level basement that will extend to depths of 3.00 m and 4.50 m and connect to a new building for Nos 10 and 11 King's Mews.

This report is specific to the King's Mews part of the proposed development and the advice herein should be reviewed once the development proposals have been finalised.

1.2 Limitations

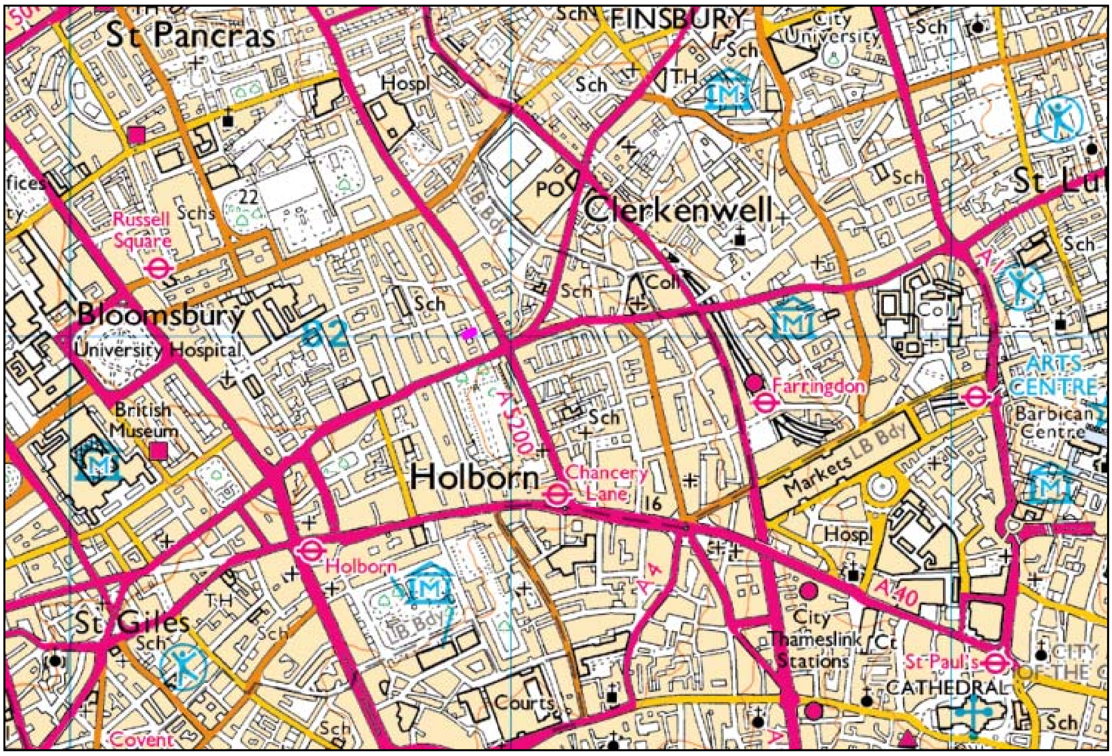
The conclusions and recommendations made in this report are limited to those that can be made on the basis of the investigation. The results of the work should be viewed in the context of the range of data sources consulted, the number of locations where the ground was sampled and the number of soil, 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 Central London, approximately 400 m north of Chancery Lane London Underground station and 600 m northwest of Farringdon railway station. It may be additionally located by National Grid Reference 530900,182000 and is shown on the map overleaf.

The site forms a rectangular area with dimensions of approximately 25 m east-west by 10 m north-south and is currently occupied by a two-storey rear extension to No 6 John Street and associated concrete driveway. The site as a whole fronts onto King's Mews to the east and is bordered to the north by No 12 King's Mews, a recently refurbished two-storey house and associated garden, to the south by the three-storey house and courtyard garden of No 9 King's Mews and to the west by No 6 John Street, a four-storey building with a mansard roof and single level basement that extends to depth of approximately 2.0 m below its ground level, approximately 1.0 m below the level of the site. The basement also extends to the same depth below the two-storey extension, which occupies the western half of the site and is currently used as offices. The eastern half of the site is covered in concrete hardstanding and used for parking by employees.



3.0 SUMMARY OF GROUND CONDITIONS

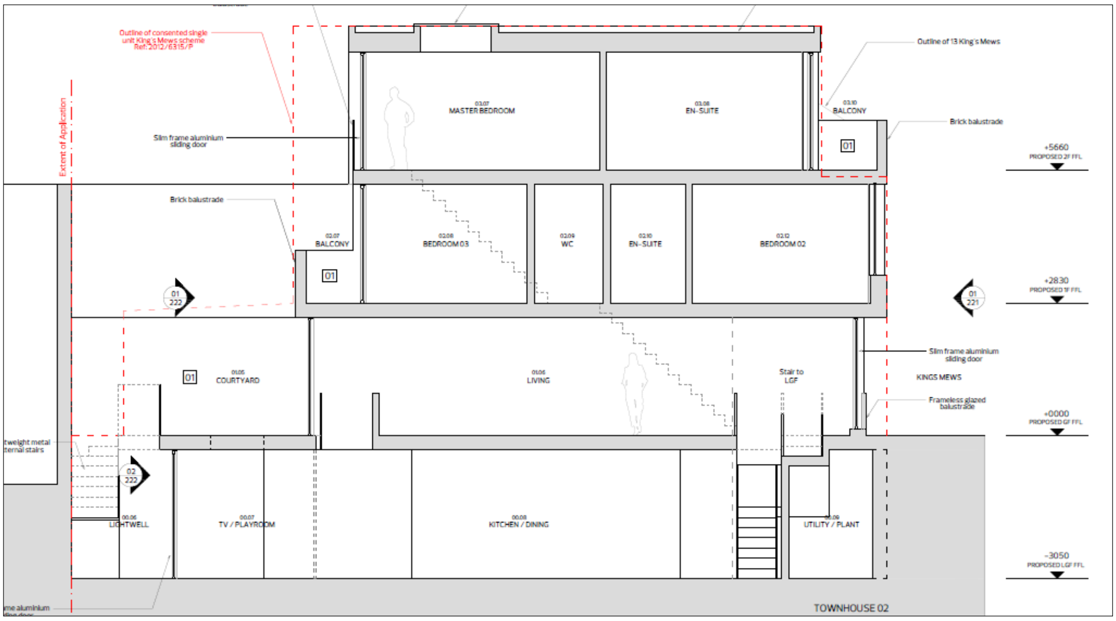
Below a surface covering of concrete hardstanding and a significant thickness of made ground, Lynch Hill Gravel was encountered and was in turn underlain by the London Clay Formation, which was proved to the maximum depth investigated.

The concrete was found to be 300 mm in thickness and reinforced with 6 mm reinforcement. The made ground extended to a depth of 4.80 m (16.29 m OD) and comprised a layer of brown silty sand with crushed brick and concrete fragments over dark brown silty sandy clay with gravel, brick, concrete and coal fragments. The underlying Lynch Hill Gravel comprised medium dense brown slightly clayey sandy fine to coarse sub-rounded to angular gravel and extended to a depth of 6.10 m (14.99 m OD). Below this depth, the London Clay comprised an initial weathered horizon of firm fissured brown silty clay with partings of bluish grey silt, which extended to a depth of 6.40 m (14.69 m OD). The initial horizon was found to be underlain by typical unweathered London Clay, comprising stiff becoming very stiff fissured high strength to very high strength dark grey silty clay with partings of brownish grey silt and traces of selenite, which was proved to the maximum depth investigated of 15.00 m (6.09 m OD).

Groundwater monitoring has recorded groundwater at depths of 3.50 m (17.59 m OD) and 3.60 m (17.49 m OD).

4.0 CONSTRUCTION SEQUENCE

A section through the proposed building including its basement is included below.



For the purposes of the ground movement assessment, the ground level has been taken as equivalent to the existing ground floor level and noted as 0.0 m. The proposed basement will be formed through traditional underpinning of the party walls to 3.9 m from the existing depths of 2.8 m for Nos 8–9 King's Mews and 2.5 m depth for Nos 12–13. For the purpose of this analysis, the overall depth of excavation and subsequent loading at basement level will be applied at a depth of 3.90 m below existing ground level.

The following sequence of operations has been assumed to enable analysis of the ground movements around the proposed basement both during and after construction.

1. Construct mass concrete underpins beneath the party walls. These are to be formed in a 'hit and miss' sequence using a trench box excavation, commonly sheet lined, shored and strutted; all temporary shoring and propping to be inspected by a suitably qualified person;

2. construct a new central spine wall using similar methods to support the wall between Nos 10 and 11 King's Mews; and

3. excavate the material between the underpinned walls and cast basement slab, lining walls and ground floor slabs to form a new reinforced concrete basement box.

The underpins will need to be laterally propped and dowelled together, the concrete cast and adequately cured prior to excavation of the basement and the subsequent removal of the formwork and falsework.

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 installation of the underpinning and excavation of the proposed basement. The ground movements include the settlement of the ground (vertical movement) and the lateral movement of soil behind the proposed retaining walls (horizontal movement).

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 19.3 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 perpendicular to King's Mews and the y-direction parallel with King's Mews. Vertical movement is in the z-direction.

Samples of the most relevant output movement contour plots are included within the appendix, and for evaluation purposes, the full data input and output documentation is included alongside this report.

5.1 Ground Movements – Surrounding the Basement

5.1.1 Model Used

For the X-Disp analysis, the soil movement relationships used for the embedded retaining walls are the default values within CIRIA report C580[1], which were derived from a number of historic case studies.

The analysis has adopted the values for 'installation of a planar diaphragm wall' to represent the installation of the underpinned foundations. This is considered a reasonable approximation to the panel-like construction methods but the depths considered relate to the thickness of soils between the underside of the existing walls and the proposed maximum depth of 3.9 m. The ground movement curves for 'excavations in front of a wall in sand' have been adopted as being considered most representative for the proposed excavation which will largely be within the made ground or the Lynch Hill Gravel.

5.1.2 Results

The predicted movements are based on the worst case of the individually analysed segments of 'hogging' and 'sagging' and these are summarised in the tables below. It should be noted that the combined effect of segments acting together typically improve the resultant movements and the values below are therefore deemed to be conservative.

Displacement Analysis Points:

The front elevations of Nos 8–9 and 12–13 King's Mews have been set as sensitive lines because, lying perpendicular to the excavation contours, they are likely to be the most susceptible to damage. The rear walls have not been analysed on account of the similarity

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[1] Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003) *Embedded retaining walls – guidance for economic design.* CIRIA Report C580.

between front and back and the recognition that any movement at the front of the property is likely to be mirrored at the rear. These lines are named as Line Nos 2 and 3 in the analysis respectively.

The results are presented to the degree of accuracy required to allow predicted variations in ground movements around the structure(s) to be illustrated, but may not reflect the anticipated accuracy of the predictions.

Underpinning Installation Phase:

Sensitive Structure	Elevation	Vertical Movement (Settlement) (mm)	Horizontal Movement (mm)
8 – 9 King's Mews	Front (East)	< 1	< 1
12 – 13 King's Mews	Front (East)	< 1	< 1

Wall Installation and Excavation Phases Combined:

Sensitive Structure	Elevation	Vertical Movement (Settlement) (mm)	Horizontal Movement (mm)
8 – 9 King's Mews	Front (East)	10 – 12	< 1
12 – 13 King's Mews	Front (East)	10 – 12	< 1

The analysis has indicated that the maximum vertical settlements and horizontal movements that will result from the new retaining wall construction are much less than 5 mm. Furthermore, the analysis has indicated that the maximum vertical settlements and horizontal movements that will result from the combined effect of the retaining wall installation and excavation are between 10 mm and 15 mm.

5.2 Movements within the Excavation (Heave)

5.2.1 Model Used

At this site the loading configuration supplied by Fluid indicates that the new foundations will support the underpinned foundation load as well as the load from the new structure. This will carry more load than previously although some of this will be off-set by the unloading due to the removal or nearly 4 m of overburden during the excavation of the basement. It follows that where the new foundations are to be placed there will be a net increase in loading intensity whilst between the foundations there will be a net decrease in loading. Where there is unloading of the London Clay, there will be a reduction in vertical stress in the short term 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 we have used a well-established method to provide our estimates. This relates values of E_u and E', the drained and undrained 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].

---

[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

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, and it is considered that the use of the more conservative values provides a sensible approach for this stage in the design.

The proposed 1.2 m wide foundations will impose new loadings 129 kN/m^2, 138 kN/m^2 and 134 kN/m^2 for the southern, middle and northern walls respectively whilst between them the excavation will result in a net unloading of around 60 kN/m^2.

A rigid boundary for the analysis has been set within the London Clay at a depth of 50 m below existing ground level, where nearby BGS records indicate that the base of this formation is likely to be present.

5.2.2 Results

The P-Disp analysis indicates that, by the time the basement construction is complete, around less than 5 mm of heave is likely to have taken place at the centre of the proposed excavations, whilst settlement in the order of 5 mm is predicted beneath the new foundations.

Following completion of the basement construction and application of new loads, some of the heave will be recovered as short term settlement and there will be an additional settlement of up to around 5 mm below the loaded underpins in the long term.

The results of the P-Disp analysis can be used to indicate the likely impact of the proposed basement construction beyond the site boundaries; about 2.5 m away from the excavation the total movements reducing to sensibly negligible movements. Movements outside the excavation will be constrained to a certain extent by the presence of the new retaining walls and the estimated movements obtained from the analysis may not occur in practice.

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 5 mm of 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 Table 2.5 of C580[1].

All structures are shown on the plan in Section 5.1.2.

6.1 Damage to Neighbouring Structures

The movements resulting from the combined underpinning and basement excavation phases have been calculated using the X-Disp modelling software to carry out an assessment of the likely damage to adjacent properties and the results are summarised in the table overleaf.

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[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

Sensitive Structure	Elevation	Category of Damage*
8–9 King's Mews	Front (East)	Cat 1 'Very Slight'
12–13 King's Mews	Front (East)	Cat 0 'Negligible'

**From Table 2.5 of C580[1]: Classification of visible damage to walls.*

The analysis has predicted that the proposed installation of the underpins and excavation of the proposed basement may generally result in the building damage for sensitive structures of between Category 0 (negligible) and Category 1 (very slight), which fall within acceptable limits according to the London Borough of Camden Planning Guidance. It is noted that the tensile strains induced in 8–9 King's Mews exceed the upper limit of Category 0 by less than 0.005 %.

There is a wealth of experience with respect to the construction of underpinned retaining walls, that suggests that ground movements should remain typically within the range of 2 mm to 5 mm following completion of the works and provided that they are installed by a reputable and experienced contractor in accordance with the guidelines published by the Association of Specialist Underpinning Contractors[6], which indicates that the predicted movements represent a conservative assessment of the likely movements.

Analysis of the line of cross sectional movement taken from the P-Disp analysis equally show that the long term maximum movement will generate either 'negligible' or 'very slight' damage with the deflection ratios shown as less than 4.1 x 10^{-4} % and tensile strains of between 0.06 % and 0.053 %.

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. 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.

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.

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[6] Haslam S, O'Connor L (2013) *Guidelines on safe and efficient basement construction directly below or near to existing structures* ASUC

7.0 CONCLUSIONS

The analysis has concluded that the predicted damage to the neighbouring properties from the construction of the underpins and basement excavation would be 'Negligible' to '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

Underpinning Installation

Contour Plots of Vertical Movements and Horizontal Movements

Underpinning Installation and Basement Excavation combined

Contour Plots of Combined Vertical Movements and Horizontal Movements

Tabular Output of Results

P-DISP ANALYSIS

Short Term Movement Contour Plots

Total (Long Term) Movement Contour Plots

Cross Section Line Plots

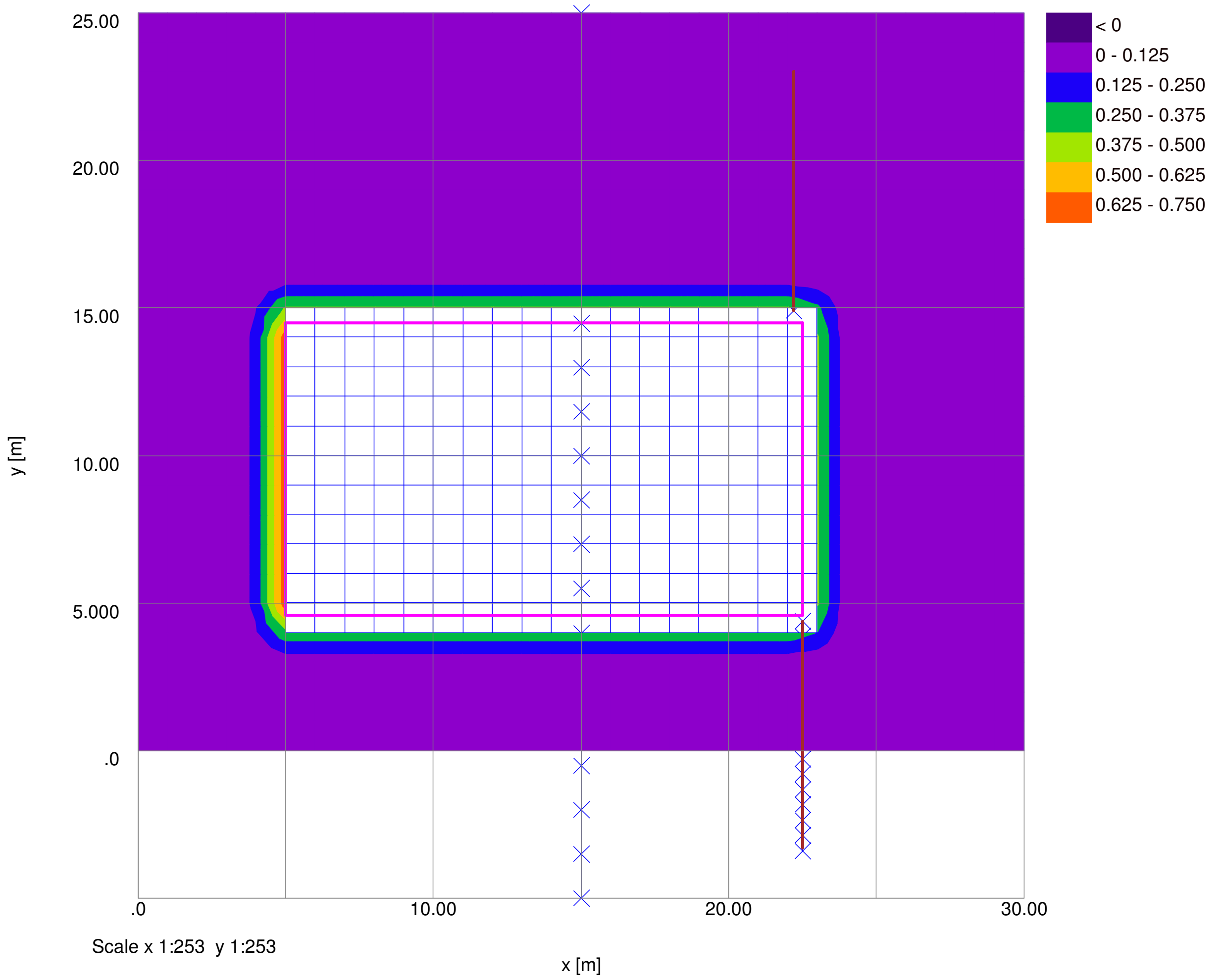
Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

10 - 11 King's Mews, London
Installation of Underpins

Job No. ***J15275***
Sheet No.
Rev.
Drg. Ref.
Made by ***MC***
Date ***19-Oct-2015***
Checked

Vertical Settlement Contours: Grid 2 (level -2.800m) (Interval 0.125mm)



Scale x 1:253 y 1:253

Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

10 - 11 King's Mews, London
Installation of Underpins

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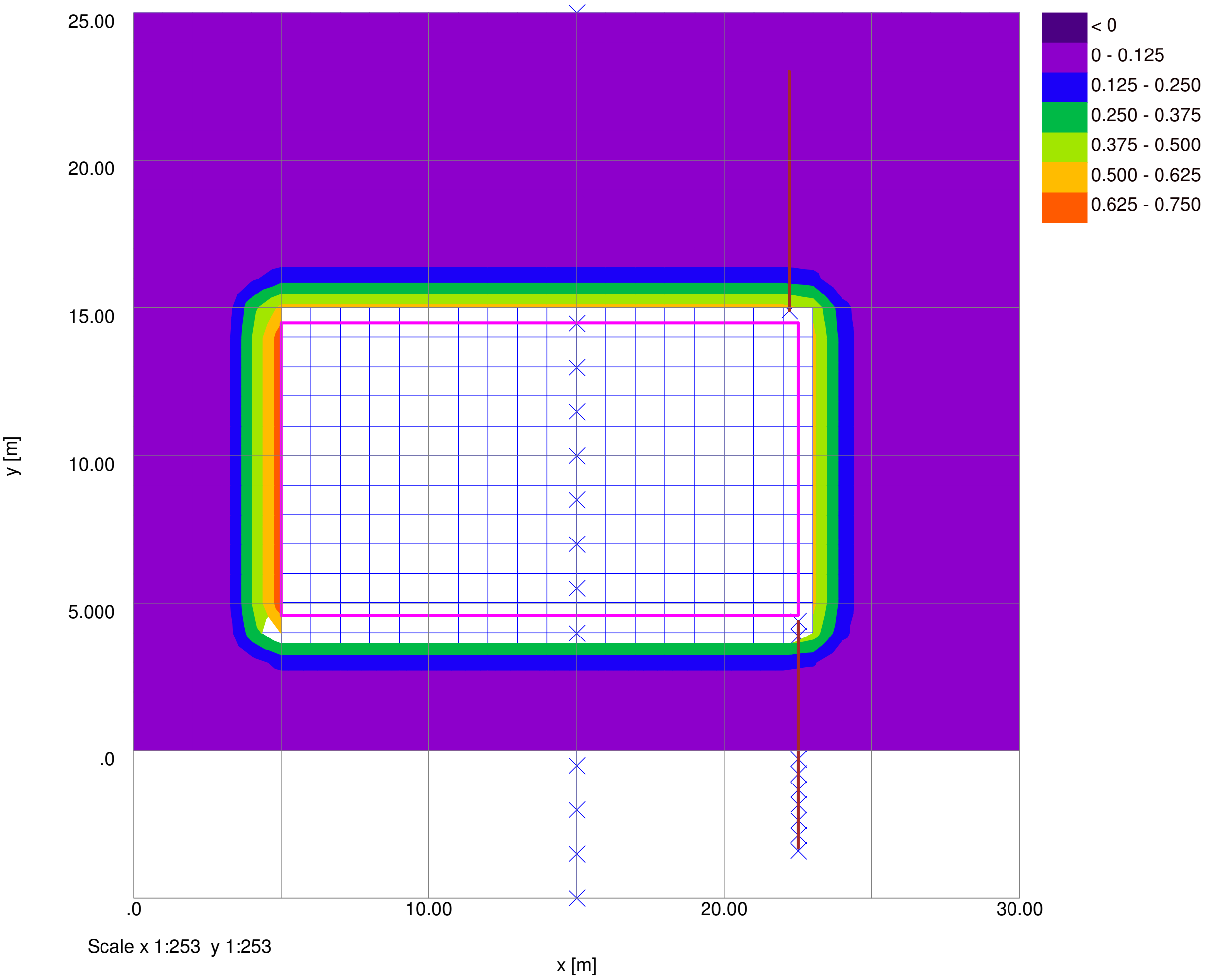
Drg. Ref.		
Made by ***MC***	***Date*** ***19-Oct-2015***	***Checked***

Horizontal Displacement Contours: Grid 2 (level -2.800m) Interval 0.125mm



Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

10 - 11 King's Mews, London
Underpinning and Excavation Combined

Job No.	**Sheet No.**	**Rev.**
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Drg. Ref.		
Made by **MC**	**Date** **20-Oct-2015**	**Checked**

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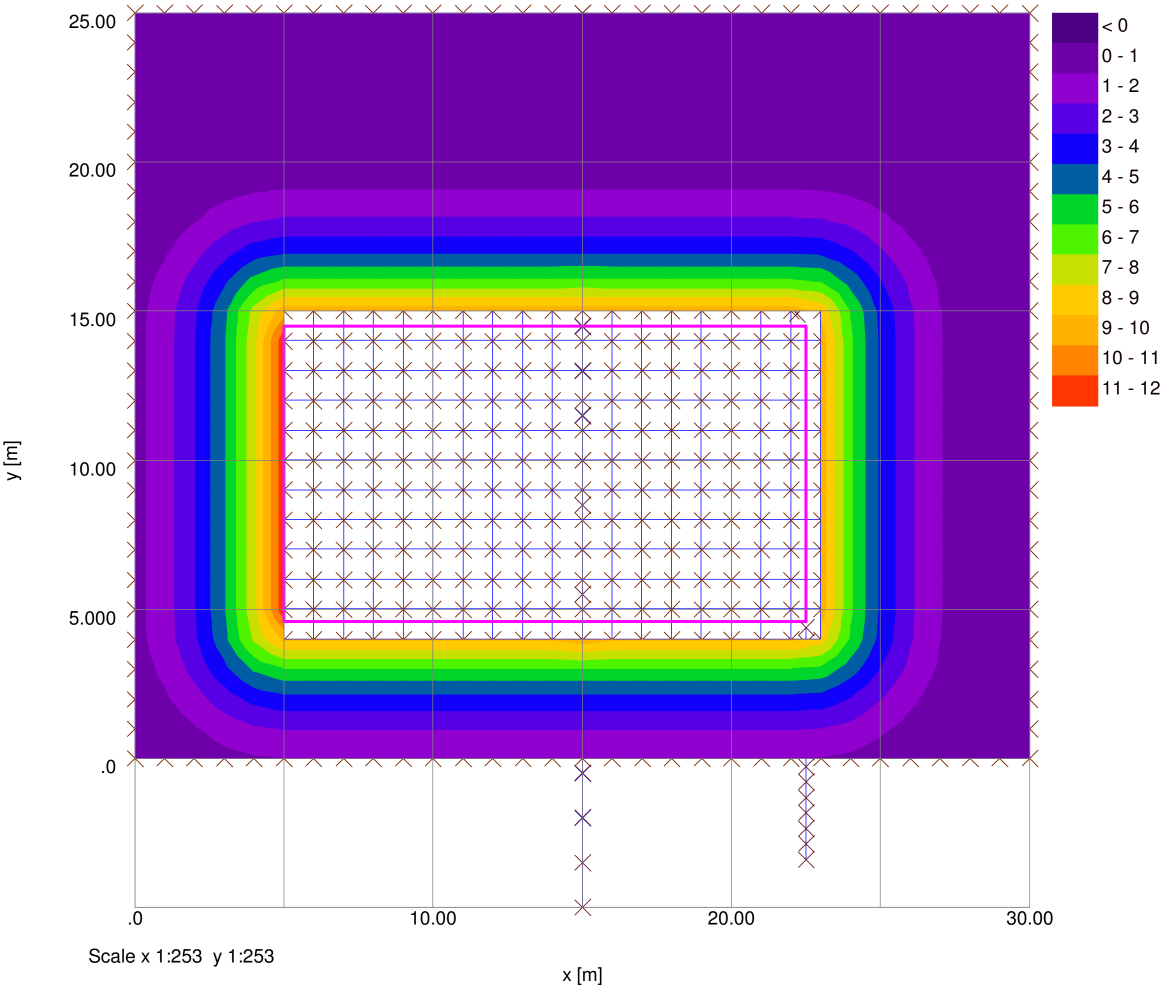


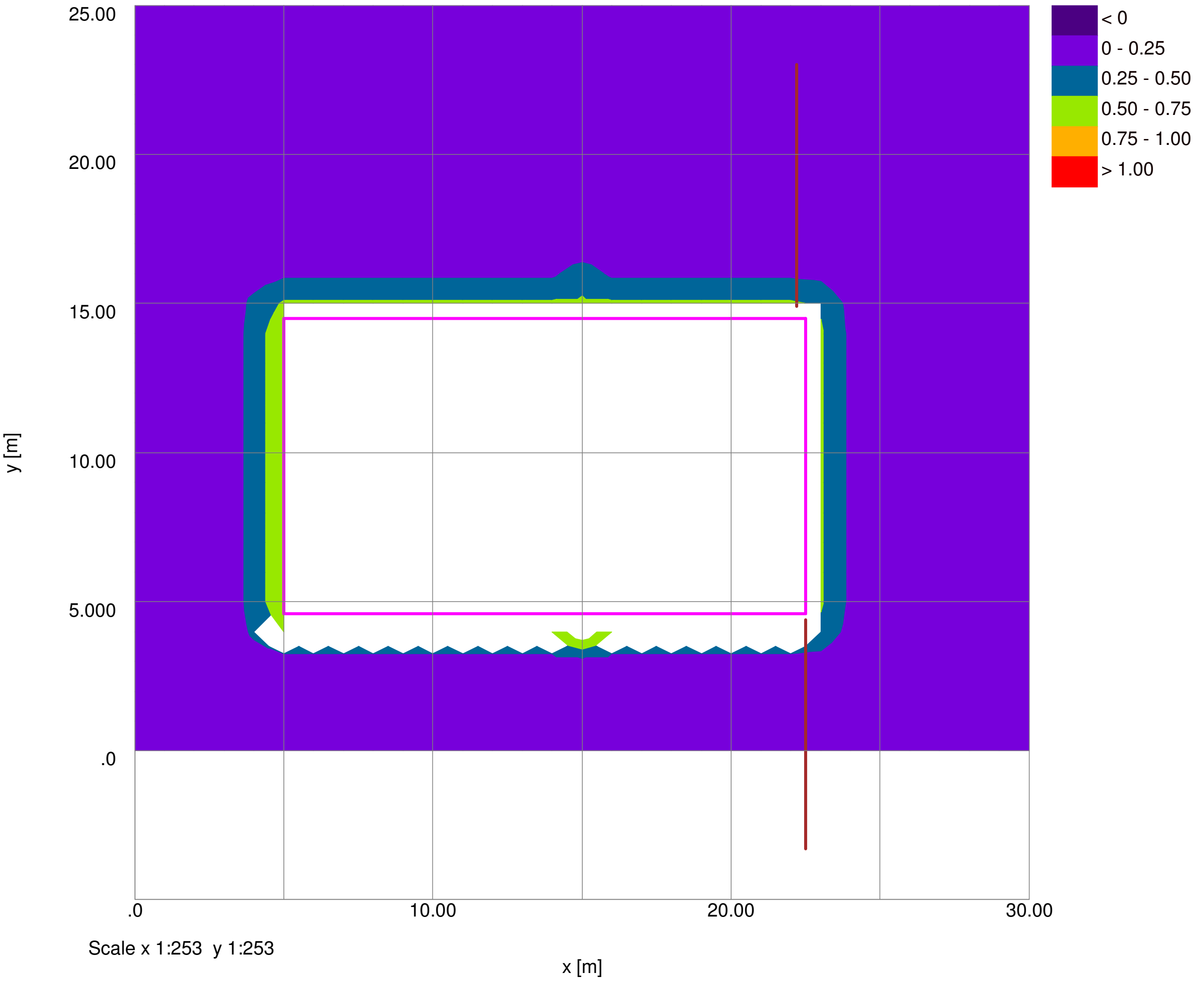
Oasys

GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

10 - 11 King's Mews, London
Underpinning and Excavation Combined

Job No.	**Sheet No.**	**Rev.**
J15275		
Drg. Ref.		
Made by **MC**	**Date** **20-Oct-2015**	**Checked**

Horizontal Displacement Contours: Grid 2 (level -2.800m) Interval 0.25mm



Problem Type

```
Problem Type : Tunnelling and Embedded Wall Excavations
```

Displacement Data

```
Type       Name       Direction             Point/Line/Line for extrusion               No. of     Extrusion  No. of   Calculate Surface
                         of                                                           intervals      depth   intervals             type
                      extrusion                                                         across                 along               for
                                                                                    extrusion/line           extrusion           tunnels
                                            First point              Second point
                                     X          Y      Z(level)     X         Y      Z(level)
                                    [m]        [m]       [m]       [m]       [m]       [m]                      [m]
Grid  Grid 1         Global X   0.00000  0.00000  0.00000     -      25.00000  0.00000             25  30.00000        30 Yes       Surface
Grid  Grid 2         Global X   0.00000  0.00000 -2.80000     -      25.00000 -2.80000             25  30.00000        30 Yes       Surface
Line  Line 1            -      15.00000 -5.00000 -2.80000 15.00000 25.00000 -2.80000             20     -           -     Yes       Surface
Line  Line 2            -      22.50000  4.40000 -2.80000 22.50000 -3.40000 -2.80000             15     -           -     Yes       Surface
Line  Line 3            -      22.20000 14.90000 -2.50000 22.20000 23.10000 -2.50000             15     -           -     Yes       Surface
```

Imported Displacements

```
The following data points and displacements were found in the import file Xdisp1 Underpinning T.csv.

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  2495 9.0000   3.0000     0.0      0.0       0.0       0.0              |
  2496 10.000   3.0000     0.0      0.0       0.0       0.0              |
  2497 11.000   3.0000     0.0      0.0       0.0       0.0              |
  2498 12.000   3.0000     0.0      0.0       0.0       0.0              |
  2499 13.000   3.0000     0.0      0.0       0.0       0.0              |
  2500 14.000   3.0000     0.0      0.0       0.0       0.0              |
  2501 15.000   3.0000     0.0      0.0       0.0       0.0              |
  2502 16.000   3.0000     0.0      0.0       0.0       0.0              |
  2503 17.000   3.0000     0.0      0.0       0.0       0.0              |
  2504 18.000   3.0000     0.0      0.0       0.0       0.0              |
  2505 19.000   3.0000     0.0      0.0       0.0       0.0              |
  2506 20.000   3.0000     0.0      0.0       0.0       0.0              |
  2507 21.000   3.0000     0.0      0.0       0.0       0.0              |
  2508 22.000   3.0000     0.0      0.0       0.0       0.0              |
  2509 23.000   3.0000     0.0      0.0       0.0       0.0              |
  2510 24.000   3.0000     0.0      0.0       0.0       0.0              |
  2511 25.000   3.0000     0.0      0.0       0.0       0.0              |
  2512 26.000   3.0000     0.0      0.0       0.0       0.0              |
  2513 27.000   3.0000     0.0      0.0       0.0       0.0              |
  2514 28.000   3.0000     0.0      0.0       0.0       0.0              |
  2515 29.000   3.0000     0.0      0.0       0.0       0.0              |
  2516 30.000   3.0000     0.0      0.0       0.0       0.0              |
  2517    0.0   4.0000     0.0      0.0       0.0       0.0              |
  2518 1.0000   4.0000     0.0      0.0       0.0       0.0              |
  2519 2.0000   4.0000     0.0      0.0       0.0       0.0              |
  2520 3.0000   4.0000     0.0      0.0       0.0       0.0              |
  2521 4.0000   4.0000     0.0      0.0       0.0       0.0              |
  2522 5.0000   4.0000     0.0      0.0       0.0       0.0              |
  2523 6.0000   4.0000     0.0      0.0       0.0       0.0              |
  2524 7.0000   4.0000     0.0      0.0       0.0       0.0              |
  2525 8.0000   4.0000     0.0      0.0       0.0       0.0              |
  2526 9.0000   4.0000     0.0      0.0       0.0       0.0              |
  2527 10.000   4.0000     0.0      0.0       0.0       0.0              |
  2528 11.000   4.0000     0.0      0.0       0.0       0.0              |
  2529 12.000   4.0000     0.0      0.0       0.0       0.0              |
  2530 13.000   4.0000     0.0      0.0       0.0       0.0              |
  2531 14.000   4.0000     0.0      0.0       0.0       0.0              |
  2532 15.000   4.0000     0.0      0.0       0.0       0.0              |
  2533 16.000   4.0000     0.0      0.0       0.0       0.0              |
  2534 17.000   4.0000     0.0      0.0       0.0       0.0              |
  2535 18.000   4.0000     0.0      0.0       0.0       0.0              |
  2536 19.000   4.0000     0.0      0.0       0.0       0.0              |
  2537 20.000   4.0000     0.0      0.0       0.0       0.0              |
  2538 21.000   4.0000     0.0      0.0       0.0       0.0              |
  2539 22.000   4.0000     0.0      0.0       0.0       0.0              |
  2540 23.000   4.0000     0.0      0.0       0.0       0.0              |
  2541 24.000   4.0000     0.0      0.0       0.0       0.0              |
  2542 25.000   4.0000     0.0      0.0       0.0       0.0              |
  2543 26.000   4.0000     0.0      0.0       0.0       0.0              |
  2544 27.000   4.0000     0.0      0.0       0.0       0.0              |
  2545 28.000   4.0000     0.0      0.0       0.0       0.0              |
  2546 29.000   4.0000     0.0      0.0       0.0       0.0              |
  2547 30.000   4.0000     0.0      0.0       0.0       0.0              |
  2548    0.0   5.0000     0.0      0.0       0.0       0.0              |
  2549 1.0000   5.0000     0.0      0.0       0.0       0.0              |
  2550 2.0000   5.0000     0.0      0.0       0.0       0.0              |
  2551 3.0000   5.0000     0.0      0.0       0.0       0.0              |
  2552 4.0000   5.0000     0.0      0.0       0.0       0.0              |
  2553 5.0000   5.0000     0.0      0.0       0.0       0.0              |
  2554 6.0000   5.0000     0.0      0.0       0.0       0.0              |
  2555 7.0000   5.0000     0.0      0.0       0.0       0.0              |
  2556 8.0000   5.0000     0.0      0.0       0.0       0.0              |
  2557 9.0000   5.0000     0.0      0.0       0.0       0.0              |
  2558 10.000   5.0000     0.0      0.0       0.0       0.0              |
  2559 11.000   5.0000     0.0      0.0       0.0       0.0              |
  2560 12.000   5.0000     0.0      0.0       0.0       0.0              |
  2561 13.000   5.0000     0.0      0.0       0.0       0.0              |
  2562 14.000   5.0000     0.0      0.0       0.0       0.0              |
  2563 15.000   5.0000     0.0      0.0       0.0       0.0              |
  2564 16.000   5.0000     0.0      0.0       0.0       0.0              |
  2565 17.000   5.0000     0.0      0.0       0.0       0.0              |
  2566 18.000   5.0000     0.0      0.0       0.0       0.0              |
  2567 19.000   5.0000     0.0      0.0       0.0       0.0              |
  2568 20.000   5.0000     0.0      0.0       0.0       0.0              |
  2569 21.000   5.0000     0.0      0.0       0.0       0.0              |
  2570 22.000   5.0000     0.0      0.0       0.0       0.0              |
  2571 23.000   5.0000     0.0      0.0       0.0       0.0              |
  2572 24.000   5.0000     0.0      0.0       0.0       0.0              |
  2573 25.000   5.0000     0.0      0.0       0.0       0.0              |
  2574 26.000   5.0000     0.0      0.0       0.0       0.0              |
  2575 27.000   5.0000     0.0      0.0       0.0       0.0              |
  2576 28.000   5.0000     0.0      0.0       0.0       0.0              |
  2577 29.000   5.0000     0.0      0.0       0.0       0.0              |
  2578 30.000   5.0000     0.0      0.0       0.0       0.0              |
  2579    0.0   6.0000     0.0      0.0       0.0       0.0              |
  2580 1.0000   6.0000     0.0      0.0       0.0       0.0              |
  2581 2.0000   6.0000     0.0      0.0       0.0       0.0              |
  2582 3.0000   6.0000     0.0      0.0       0.0       0.0              |
  2583 4.0000   6.0000     0.0      0.0       0.0       0.0              |
  2584 5.0000   6.0000     0.0      0.0       0.0       0.0              |
  2585 6.0000   6.0000     0.0      0.0       0.0       0.0              |
  2586 7.0000   6.0000     0.0      0.0       0.0       0.0              |
  2587 8.0000   6.0000     0.0      0.0       0.0       0.0              |
  2588 9.0000   6.0000     0.0      0.0       0.0       0.0              |
  2589 10.000   6.0000     0.0      0.0       0.0       0.0              |
  2590 11.000   6.0000     0.0      0.0       0.0       0.0              |
  2591 12.000   6.0000     0.0      0.0       0.0       0.0              |
  2592 13.000   6.0000     0.0      0.0       0.0       0.0              |
  2593 14.000   6.0000     0.0      0.0       0.0       0.0              |
  2594 15.000   6.0000     0.0      0.0       0.0       0.0              |
  2595 16.000   6.0000     0.0      0.0       0.0       0.0              |
  2596 17.000   6.0000     0.0      0.0       0.0       0.0              |
  2597 18.000   6.0000     0.0      0.0       0.0       0.0              |
  2598 19.000   6.0000     0.0      0.0       0.0       0.0              |
  2599 20.000   6.0000     0.0      0.0       0.0       0.0              |
  2600 21.000   6.0000     0.0      0.0       0.0       0.0              |
  2601 22.000   6.0000     0.0      0.0       0.0       0.0              |
  2602 23.000   6.0000     0.0      0.0       0.0       0.0              |
  2603 24.000   6.0000     0.0      0.0       0.0       0.0              |
  2604 25.000   6.0000     0.0      0.0       0.0       0.0              |
  2605 26.000   6.0000     0.0      0.0       0.0       0.0              |
  2606 27.000   6.0000     0.0      0.0       0.0       0.0              |
  2607 28.000   6.0000     0.0      0.0       0.0       0.0              |
  2608 29.000   6.0000     0.0      0.0       0.0       0.0              |
  2609 30.000   6.0000     0.0      0.0       0.0       0.0              |
  2610    0.0   7.0000     0.0      0.0       0.0       0.0              |
  2611 1.0000   7.0000     0.0      0.0       0.0       0.0              |
  2612 2.0000   7.0000     0.0      0.0       0.0       0.0              |
  2613 3.0000   7.0000     0.0      0.0       0.0       0.0              |
  2614 4.0000   7.0000     0.0      0.0       0.0       0.0              |
  2615 5.0000   7.0000     0.0      0.0       0.0       0.0              |
  2616 6.0000   7.0000     0.0      0.0       0.0       0.0              |
  2617 7.0000   7.0000     0.0      0.0       0.0       0.0              |
  2618 8.0000   7.0000     0.0      0.0       0.0       0.0              |
  2619 9.0000   7.0000     0.0      0.0       0.0       0.0              |
  2620 10.000   7.0000     0.0      0.0       0.0       0.0              |
```

Line No.	Coordinates			Displacements			
	x [m]	y [m]	z [m]	x [mm]	y [mm]	z [mm]	
2621	11.000	7.0000	0.0	0.0	0.0	0.0	1
2622	12.000	7.0000	0.0	0.0	0.0	0.0	1
2623	13.000	7.0000	0.0	0.0	0.0	0.0	1
2624	14.000	7.0000	0.0	0.0	0.0	0.0	1
2625	15.000	7.0000	0.0	0.0	0.0	0.0	1
2626	16.000	7.0000	0.0	0.0	0.0	0.0	1
2627	17.000	7.0000	0.0	0.0	0.0	0.0	1
2628	18.000	7.0000	0.0	0.0	0.0	0.0	1
2629	19.000	7.0000	0.0	0.0	0.0	0.0	1
2630	20.000	7.0000	0.0	0.0	0.0	0.0	1
2631	21.000	7.0000	0.0	0.0	0.0	0.0	1
2632	22.000	7.0000	0.0	0.0	0.0	0.0	1
2633	23.000	7.0000	0.0	0.0	0.0	0.0	1
2634	24.000	7.0000	0.0	0.0	0.0	0.0	1
2635	25.000	7.0000	0.0	0.0	0.0	0.0	1
2636	26.000	7.0000	0.0	0.0	0.0	0.0	1
2637	27.000	7.0000	0.0	0.0	0.0	0.0	1
2638	28.000	7.0000	0.0	0.0	0.0	0.0	1
2639	29.000	7.0000	0.0	0.0	0.0	0.0	1
2640	30.000	7.0000	0.0	0.0	0.0	0.0	1
2641	0.0	8.0000	0.0	0.0	0.0	0.0	1
2642	1.0000	8.0000	0.0	0.0	0.0	0.0	1
2643	2.0000	8.0000	0.0	0.0	0.0	0.0	1
2644	3.0000	8.0000	0.0	0.0	0.0	0.0	1
2645	4.0000	8.0000	0.0	0.0	0.0	0.0	1
2646	5.0000	8.0000	0.0	0.0	0.0	0.0	1
2647	6.0000	8.0000	0.0	0.0	0.0	0.0	1
2648	7.0000	8.0000	0.0	0.0	0.0	0.0	1
2649	8.0000	8.0000	0.0	0.0	0.0	0.0	1
2650	9.0000	8.0000	0.0	0.0	0.0	0.0	1
2651	10.000	8.0000	0.0	0.0	0.0	0.0	1
2652	11.000	8.0000	0.0	0.0	0.0	0.0	1
2653	12.000	8.0000	0.0	0.0	0.0	0.0	1
2654	13.000	8.0000	0.0	0.0	0.0	0.0	1
2655	14.000	8.0000	0.0	0.0	0.0	0.0	1
2656	15.000	8.0000	0.0	0.0	0.0	0.0	1
2657	16.000	8.0000	0.0	0.0	0.0	0.0	1
2658	17.000	8.0000	0.0	0.0	0.0	0.0	1
2659	18.000	8.0000	0.0	0.0	0.0	0.0	1
2660	19.000	8.0000	0.0	0.0	0.0	0.0	1
2661	20.000	8.0000	0.0	0.0	0.0	0.0	1
2662	21.000	8.0000	0.0	0.0	0.0	0.0	1
2663	22.000	8.0000	0.0	0.0	0.0	0.0	1
2664	23.000	8.0000	0.0	0.0	0.0	0.0	1
2665	24.000	8.0000	0.0	0.0	0.0	0.0	1
2666	25.000	8.0000	0.0	0.0	0.0	0.0	1
2667	26.000	8.0000	0.0	0.0	0.0	0.0	1
2668	27.000	8.0000	0.0	0.0	0.0	0.0	1
2669	28.000	8.0000	0.0	0.0	0.0	0.0	1
2670	29.000	8.0000	0.0	0.0	0.0	0.0	1
2671	30.000	8.0000	0.0	0.0	0.0	0.0	1
2672	0.0	9.0000	0.0	0.0	0.0	0.0	1
2673	1.0000	9.0000	0.0	0.0	0.0	0.0	1
2674	2.0000	9.0000	0.0	0.0	0.0	0.0	1
2675	3.0000	9.0000	0.0	0.0	0.0	0.0	1
2676	4.0000	9.0000	0.0	0.0	0.0	0.0	1
2677	5.0000	9.0000	0.0	0.0	0.0	0.0	1
2678	6.0000	9.0000	0.0	0.0	0.0	0.0	1
2679	7.0000	9.0000	0.0	0.0	0.0	0.0	1
2680	8.0000	9.0000	0.0	0.0	0.0	0.0	1
2681	9.0000	9.0000	0.0	0.0	0.0	0.0	1
2682	10.000	9.0000	0.0	0.0	0.0	0.0	1
2683	11.000	9.0000	0.0	0.0	0.0	0.0	1
2684	12.000	9.0000	0.0	0.0	0.0	0.0	1
2685	13.000	9.0000	0.0	0.0	0.0	0.0	1
2686	14.000	9.0000	0.0	0.0	0.0	0.0	1
2687	15.000	9.0000	0.0	0.0	0.0	0.0	1
2688	16.000	9.0000	0.0	0.0	0.0	0.0	1
2689	17.000	9.0000	0.0	0.0	0.0	0.0	1
2690	18.000	9.0000	0.0	0.0	0.0	0.0	1
2691	19.000	9.0000	0.0	0.0	0.0	0.0	1
2692	20.000	9.0000	0.0	0.0	0.0	0.0	1
2693	21.000	9.0000	0.0	0.0	0.0	0.0	1
2694	22.000	9.0000	0.0	0.0	0.0	0.0	1
2695	23.000	9.0000	0.0	0.0	0.0	0.0	1
2696	24.000	9.0000	0.0	0.0	0.0	0.0	1
2697	25.000	9.0000	0.0	0.0	0.0	0.0	1
2698	26.000	9.0000	0.0	0.0	0.0	0.0	1
2699	27.000	9.0000	0.0	0.0	0.0	0.0	1
2700	28.000	9.0000	0.0	0.0	0.0	0.0	1
2701	29.000	9.0000	0.0	0.0	0.0	0.0	1
2702	30.000	9.0000	0.0	0.0	0.0	0.0	1
2703	0.0	10.000	0.0	0.0	0.0	0.0	1
2704	1.0000	10.000	0.0	0.0	0.0	0.0	1
2705	2.0000	10.000	0.0	0.0	0.0	0.0	1
2706	3.0000	10.000	0.0	0.0	0.0	0.0	1
2707	4.0000	10.000	0.0	0.0	0.0	0.0	1
2708	5.0000	10.000	0.0	0.0	0.0	0.0	1
2709	6.0000	10.000	0.0	0.0	0.0	0.0	1
2710	7.0000	10.000	0.0	0.0	0.0	0.0	1
2711	8.0000	10.000	0.0	0.0	0.0	0.0	1
2712	9.0000	10.000	0.0	0.0	0.0	0.0	1
2713	10.000	10.000	0.0	0.0	0.0	0.0	1
2714	11.000	10.000	0.0	0.0	0.0	0.0	1
2715	12.000	10.000	0.0	0.0	0.0	0.0	1
2716	13.000	10.000	0.0	0.0	0.0	0.0	1
2717	14.000	10.000	0.0	0.0	0.0	0.0	1
2718	15.000	10.000	0.0	0.0	0.0	0.0	1
2719	16.000	10.000	0.0	0.0	0.0	0.0	1
2720	17.000	10.000	0.0	0.0	0.0	0.0	1
2721	18.000	10.000	0.0	0.0	0.0	0.0	1
2722	19.000	10.000	0.0	0.0	0.0	0.0	1
2723	20.000	10.000	0.0	0.0	0.0	0.0	1
2724	21.000	10.000	0.0	0.0	0.0	0.0	1
2725	22.000	10.000	0.0	0.0	0.0	0.0	1
2726	23.000	10.000	0.0	0.0	0.0	0.0	1
2727	24.000	10.000	0.0	0.0	0.0	0.0	1
2728	25.000	10.000	0.0	0.0	0.0	0.0	1
2729	26.000	10.000	0.0	0.0	0.0	0.0	1
2730	27.000	10.000	0.0	0.0	0.0	0.0	1
2731	28.000	10.000	0.0	0.0	0.0	0.0	1
2732	29.000	10.000	0.0	0.0	0.0	0.0	1
2733	30.000	10.000	0.0	0.0	0.0	0.0	1
2734	0.0	11.000	0.0	0.0	0.0	0.0	1
2735	1.0000	11.000	0.0	0.0	0.0	0.0	1
2736	2.0000	11.000	0.0	0.0	0.0	0.0	1
2737	3.0000	11.000	0.0	0.0	0.0	0.0	1
2738	4.0000	11.000	0.0	0.0	0.0	0.0	1
2739	5.0000	11.000	0.0	0.0	0.0	0.0	1
2740	6.0000	11.000	0.0	0.0	0.0	0.0	1
2741	7.0000	11.000	0.0	0.0	0.0	0.0	1
2742	8.0000	11.000	0.0	0.0	0.0	0.0	1
2743	9.0000	11.000	0.0	0.0	0.0	0.0	1
2744	10.000	11.000	0.0	0.0	0.0	0.0	1
2745	11.000	11.000	0.0	0.0	0.0	0.0	1
2746	12.000	11.000	0.0	0.0	0.0	0.0	1
2747	13.000	11.000	0.0	0.0	0.0	0.0	1
2748	14.000	11.000	0.0	0.0	0.0	0.0	1

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 Line        Coordinates               Displacements
  No.
        x        y        z        x          y         z
       [m]      [m]      [m]     [mm]       [mm]      [mm]
  2749 15.000   11.000    0.0       0.0        0.0       0.0              |
  2750 16.000   11.000    0.0       0.0        0.0       0.0              |
  2751 17.000   11.000    0.0       0.0        0.0       0.0              |
  2752 18.000   11.000    0.0       0.0        0.0       0.0              |
  2753 19.000   11.000    0.0       0.0        0.0       0.0              |
  2754 20.000   11.000    0.0       0.0        0.0       0.0              |
  2755 21.000   11.000    0.0       0.0        0.0       0.0              |
  2756 22.000   11.000    0.0       0.0        0.0       0.0              |
  2757 23.000   11.000    0.0       0.0        0.0       0.0              |
  2758 24.000   11.000    0.0       0.0        0.0       0.0              |
  2759 25.000   11.000    0.0       0.0        0.0       0.0              |
  2760 26.000   11.000    0.0       0.0        0.0       0.0              |
  2761 27.000   11.000    0.0       0.0        0.0       0.0              |
  2762 28.000   11.000    0.0       0.0        0.0       0.0              |
  2763 29.000   11.000    0.0       0.0        0.0       0.0              |
  2764 30.000   11.000    0.0       0.0        0.0       0.0              |
  2765    0.0   12.000    0.0       0.0        0.0       0.0              |
  2766 1.0000   12.000    0.0       0.0        0.0       0.0              |
  2767 2.0000   12.000    0.0       0.0        0.0       0.0              |
  2768 3.0000   12.000    0.0       0.0        0.0       0.0              |
  2769 4.0000   12.000    0.0       0.0        0.0       0.0              |
  2770 5.0000   12.000    0.0       0.0        0.0       0.0              |
  2771 6.0000   12.000    0.0       0.0        0.0       0.0              |
  2772 7.0000   12.000    0.0       0.0        0.0       0.0              |
  2773 8.0000   12.000    0.0       0.0        0.0       0.0              |
  2774 9.0000   12.000    0.0       0.0        0.0       0.0              |
  2775 10.000   12.000    0.0       0.0        0.0       0.0              |
  2776 11.000   12.000    0.0       0.0        0.0       0.0              |
  2777 12.000   12.000    0.0       0.0        0.0       0.0              |
  2778 13.000   12.000    0.0       0.0        0.0       0.0              |
  2779 14.000   12.000    0.0       0.0        0.0       0.0              |
  2780 15.000   12.000    0.0       0.0        0.0       0.0              |
  2781 16.000   12.000    0.0       0.0        0.0       0.0              |
  2782 17.000   12.000    0.0       0.0        0.0       0.0              |
  2783 18.000   12.000    0.0       0.0        0.0       0.0              |
  2784 19.000   12.000    0.0       0.0        0.0       0.0              |
  2785 20.000   12.000    0.0       0.0        0.0       0.0              |
  2786 21.000   12.000    0.0       0.0        0.0       0.0              |
  2787 22.000   12.000    0.0       0.0        0.0       0.0              |
  2788 23.000   12.000    0.0       0.0        0.0       0.0              |
  2789 24.000   12.000    0.0       0.0        0.0       0.0              |
  2790 25.000   12.000    0.0       0.0        0.0       0.0              |
  2791 26.000   12.000    0.0       0.0        0.0       0.0              |
  2792 27.000   12.000    0.0       0.0        0.0       0.0              |
  2793 28.000   12.000    0.0       0.0        0.0       0.0              |
  2794 29.000   12.000    0.0       0.0        0.0       0.0              |
  2795 30.000   12.000    0.0       0.0        0.0       0.0              |
  2796    0.0   13.000    0.0       0.0        0.0       0.0              |
  2797 1.0000   13.000    0.0       0.0        0.0       0.0              |
  2798 2.0000   13.000    0.0       0.0        0.0       0.0              |
  2799 3.0000   13.000    0.0       0.0        0.0       0.0              |
  2800 4.0000   13.000    0.0       0.0        0.0       0.0              |
  2801 5.0000   13.000    0.0       0.0        0.0       0.0              |
  2802 6.0000   13.000    0.0       0.0        0.0       0.0              |
  2803 7.0000   13.000    0.0       0.0        0.0       0.0              |
  2804 8.0000   13.000    0.0       0.0        0.0       0.0              |
  2805 9.0000   13.000    0.0       0.0        0.0       0.0              |
  2806 10.000   13.000    0.0       0.0        0.0       0.0              |
  2807 11.000   13.000    0.0       0.0        0.0       0.0              |
  2808 12.000   13.000    0.0       0.0        0.0       0.0              |
  2809 13.000   13.000    0.0       0.0        0.0       0.0              |
  2810 14.000   13.000    0.0       0.0        0.0       0.0              |
  2811 15.000   13.000    0.0       0.0        0.0       0.0              |
  2812 16.000   13.000    0.0       0.0        0.0       0.0              |
  2813 17.000   13.000    0.0       0.0        0.0       0.0              |
  2814 18.000   13.000    0.0       0.0        0.0       0.0              |
  2815 19.000   13.000    0.0       0.0        0.0       0.0              |
  2816 20.000   13.000    0.0       0.0        0.0       0.0              |
  2817 21.000   13.000    0.0       0.0        0.0       0.0              |
  2818 22.000   13.000    0.0       0.0        0.0       0.0              |
  2819 23.000   13.000    0.0       0.0        0.0       0.0              |
  2820 24.000   13.000    0.0       0.0        0.0       0.0              |
  2821 25.000   13.000    0.0       0.0        0.0       0.0              |
  2822 26.000   13.000    0.0       0.0        0.0       0.0              |
  2823 27.000   13.000    0.0       0.0        0.0       0.0              |
  2824 28.000   13.000    0.0       0.0        0.0       0.0              |
  2825 29.000   13.000    0.0       0.0        0.0       0.0              |
  2826 30.000   13.000    0.0       0.0        0.0       0.0              |
  2827    0.0   14.000    0.0       0.0        0.0       0.0              |
  2828 1.0000   14.000    0.0       0.0        0.0       0.0              |
  2829 2.0000   14.000    0.0       0.0        0.0       0.0              |
  2830 3.0000   14.000    0.0       0.0        0.0       0.0              |
  2831 4.0000   14.000    0.0       0.0        0.0       0.0              |
  2832 5.0000   14.000    0.0       0.0        0.0       0.0              |
  2833 6.0000   14.000    0.0       0.0        0.0       0.0              |
  2834 7.0000   14.000    0.0       0.0        0.0       0.0              |
  2835 8.0000   14.000    0.0       0.0        0.0       0.0              |
  2836 9.0000   14.000    0.0       0.0        0.0       0.0              |
  2837 10.000   14.000    0.0       0.0        0.0       0.0              |
  2838 11.000   14.000    0.0       0.0        0.0       0.0              |
  2839 12.000   14.000    0.0       0.0        0.0       0.0              |
  2840 13.000   14.000    0.0       0.0        0.0       0.0              |
  2841 14.000   14.000    0.0       0.0        0.0       0.0              |
  2842 15.000   14.000    0.0       0.0        0.0       0.0              |
  2843 16.000   14.000    0.0       0.0        0.0       0.0              |
  2844 17.000   14.000    0.0       0.0        0.0       0.0              |
  2845 18.000   14.000    0.0       0.0        0.0       0.0              |
  2846 19.000   14.000    0.0       0.0        0.0       0.0              |
  2847 20.000   14.000    0.0       0.0        0.0       0.0              |
  2848 21.000   14.000    0.0       0.0        0.0       0.0              |
  2849 22.000   14.000    0.0       0.0        0.0       0.0              |
  2850 23.000   14.000    0.0       0.0        0.0       0.0              |
  2851 24.000   14.000    0.0       0.0        0.0       0.0              |
  2852 25.000   14.000    0.0       0.0        0.0       0.0              |
  2853 26.000   14.000    0.0       0.0        0.0       0.0              |
  2854 27.000   14.000    0.0       0.0        0.0       0.0              |
  2855 28.000   14.000    0.0       0.0        0.0       0.0              |
  2856 29.000   14.000    0.0       0.0        0.0       0.0              |
  2857 30.000   14.000    0.0       0.0        0.0       0.0              |
  2858    0.0   15.000    0.0       0.0        0.0       0.0              |
  2859 1.0000   15.000    0.0       0.0        0.0       0.0              |
  2860 2.0000   15.000    0.0       0.0        0.0       0.0              |
  2861 3.0000   15.000    0.0       0.0        0.0       0.0              |
  2862 4.0000   15.000    0.0       0.0        0.0       0.0              |
  2863 5.0000   15.000    0.0       0.0        0.0       0.0              |
  2864 6.0000   15.000    0.0       0.0        0.0       0.0              |
  2865 7.0000   15.000    0.0       0.0        0.0       0.0              |
  2866 8.0000   15.000    0.0       0.0        0.0       0.0              |
  2867 9.0000   15.000    0.0       0.0        0.0       0.0              |
  2868 10.000   15.000    0.0       0.0        0.0       0.0              |
  2869 11.000   15.000    0.0       0.0        0.0       0.0              |
  2870 12.000   15.000    0.0       0.0        0.0       0.0              |
  2871 13.000   15.000    0.0       0.0        0.0       0.0              |
  2872 14.000   15.000    0.0       0.0        0.0       0.0              |
  2873 15.000   15.000    0.0       0.0        0.0       0.0              |
  2874 16.000   15.000    0.0       0.0        0.0       0.0              |
  2875 17.000   15.000    0.0       0.0        0.0       0.0              |
  2876 18.000   15.000    0.0       0.0        0.0       0.0              |
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Line        Coordinates                 Displacements
 No.
       x        y        z        x          y          z
      [m]      [m]      [m]     [mm]       [mm]       [mm]
 2877 19.000   15.000     0.0       0.0        0.0       0.0             1
 2878 20.000   15.000     0.0       0.0        0.0       0.0             1
 2879 21.000   15.000     0.0       0.0        0.0       0.0             1
 2880 22.000   15.000     0.0       0.0        0.0       0.0             1
 2881 23.000   15.000     0.0       0.0        0.0       0.0             1
 2882 24.000   15.000     0.0       0.0        0.0       0.0             1
 2883 25.000   15.000     0.0       0.0        0.0       0.0             1
 2884 26.000   15.000     0.0       0.0        0.0       0.0             1
 2885 27.000   15.000     0.0       0.0        0.0       0.0             1
 2886 28.000   15.000     0.0       0.0        0.0       0.0             1
 2887 29.000   15.000     0.0       0.0        0.0       0.0             1
 2888 30.000   15.000     0.0       0.0        0.0       0.0             1
 2889    0.0   16.000     0.0       0.0        0.0       0.0             1
 2890 1.0000   16.000     0.0       0.0        0.0       0.0             1
 2891 2.0000   16.000     0.0       0.0        0.0       0.0             1
 2892 3.0000   16.000     0.0       0.0        0.0       0.0             1
 2893 4.0000   16.000     0.0       0.0        0.0       0.0             1
 2894 5.0000   16.000     0.0       0.0        0.0       0.0             1
 2895 6.0000   16.000     0.0       0.0        0.0       0.0             1
 2896 7.0000   16.000     0.0       0.0        0.0       0.0             1
 2897 8.0000   16.000     0.0       0.0        0.0       0.0             1
 2898 9.0000   16.000     0.0       0.0        0.0       0.0             1
 2899 10.000   16.000     0.0       0.0        0.0       0.0             1
 2900 11.000   16.000     0.0       0.0        0.0       0.0             1
 2901 12.000   16.000     0.0       0.0        0.0       0.0             1
 2902 13.000   16.000     0.0       0.0        0.0       0.0             1
 2903 14.000   16.000     0.0       0.0        0.0       0.0             1
 2904 15.000   16.000     0.0       0.0        0.0       0.0             1
 2905 16.000   16.000     0.0       0.0        0.0       0.0             1
 2906 17.000   16.000     0.0       0.0        0.0       0.0             1
 2907 18.000   16.000     0.0       0.0        0.0       0.0             1
 2908 19.000   16.000     0.0       0.0        0.0       0.0             1
 2909 20.000   16.000     0.0       0.0        0.0       0.0             1
 2910 21.000   16.000     0.0       0.0        0.0       0.0             1
 2911 22.000   16.000     0.0       0.0        0.0       0.0             1
 2912 23.000   16.000     0.0       0.0        0.0       0.0             1
 2913 24.000   16.000     0.0       0.0        0.0       0.0             1
 2914 25.000   16.000     0.0       0.0        0.0       0.0             1
 2915 26.000   16.000     0.0       0.0        0.0       0.0             1
 2916 27.000   16.000     0.0       0.0        0.0       0.0             1
 2917 28.000   16.000     0.0       0.0        0.0       0.0             1
 2918 29.000   16.000     0.0       0.0        0.0       0.0             1
 2919 30.000   16.000     0.0       0.0        0.0       0.0             1
 2920    0.0   17.000     0.0       0.0        0.0       0.0             1
 2921 1.0000   17.000     0.0       0.0        0.0       0.0             1
 2922 2.0000   17.000     0.0       0.0        0.0       0.0             1
 2923 3.0000   17.000     0.0       0.0        0.0       0.0             1
 2924 4.0000   17.000     0.0       0.0        0.0       0.0             1
 2925 5.0000   17.000     0.0       0.0        0.0       0.0             1
 2926 6.0000   17.000     0.0       0.0        0.0       0.0             1
 2927 7.0000   17.000     0.0       0.0        0.0       0.0             1
 2928 8.0000   17.000     0.0       0.0        0.0       0.0             1
 2929 9.0000   17.000     0.0       0.0        0.0       0.0             1
 2930 10.000   17.000     0.0       0.0        0.0       0.0             1
 2931 11.000   17.000     0.0       0.0        0.0       0.0             1
 2932 12.000   17.000     0.0       0.0        0.0       0.0             1
 2933 13.000   17.000     0.0       0.0        0.0       0.0             1
 2934 14.000   17.000     0.0       0.0        0.0       0.0             1
 2935 15.000   17.000     0.0       0.0        0.0       0.0             1
 2936 16.000   17.000     0.0       0.0        0.0       0.0             1
 2937 17.000   17.000     0.0       0.0        0.0       0.0             1
 2938 18.000   17.000     0.0       0.0        0.0       0.0             1
 2939 19.000   17.000     0.0       0.0        0.0       0.0             1
 2940 20.000   17.000     0.0       0.0        0.0       0.0             1
 2941 21.000   17.000     0.0       0.0        0.0       0.0             1
 2942 22.000   17.000     0.0       0.0        0.0       0.0             1
 2943 23.000   17.000     0.0       0.0        0.0       0.0             1
 2944 24.000   17.000     0.0       0.0        0.0       0.0             1
 2945 25.000   17.000     0.0       0.0        0.0       0.0             1
 2946 26.000   17.000     0.0       0.0        0.0       0.0             1
 2947 27.000   17.000     0.0       0.0        0.0       0.0             1
 2948 28.000   17.000     0.0       0.0        0.0       0.0             1
 2949 29.000   17.000     0.0       0.0        0.0       0.0             1
 2950 30.000   17.000     0.0       0.0        0.0       0.0             1
 2951    0.0   18.000     0.0       0.0        0.0       0.0             1
 2952 1.0000   18.000     0.0       0.0        0.0       0.0             1
 2953 2.0000   18.000     0.0       0.0        0.0       0.0             1
 2954 3.0000   18.000     0.0       0.0        0.0       0.0             1
 2955 4.0000   18.000     0.0       0.0        0.0       0.0             1
 2956 5.0000   18.000     0.0       0.0        0.0       0.0             1
 2957 6.0000   18.000     0.0       0.0        0.0       0.0             1
 2958 7.0000   18.000     0.0       0.0        0.0       0.0             1
 2959 8.0000   18.000     0.0       0.0        0.0       0.0             1
 2960 9.0000   18.000     0.0       0.0        0.0       0.0             1
 2961 10.000   18.000     0.0       0.0        0.0       0.0             1
 2962 11.000   18.000     0.0       0.0        0.0       0.0             1
 2963 12.000   18.000     0.0       0.0        0.0       0.0             1
 2964 13.000   18.000     0.0       0.0        0.0       0.0             1
 2965 14.000   18.000     0.0       0.0        0.0       0.0             1
 2966 15.000   18.000     0.0       0.0        0.0       0.0             1
 2967 16.000   18.000     0.0       0.0        0.0       0.0             1
 2968 17.000   18.000     0.0       0.0        0.0       0.0             1
 2969 18.000   18.000     0.0       0.0        0.0       0.0             1
 2970 19.000   18.000     0.0       0.0        0.0       0.0             1
 2971 20.000   18.000     0.0       0.0        0.0       0.0             1
 2972 21.000   18.000     0.0       0.0        0.0       0.0             1
 2973 22.000   18.000     0.0       0.0        0.0       0.0             1
 2974 23.000   18.000     0.0       0.0        0.0       0.0             1
 2975 24.000   18.000     0.0       0.0        0.0       0.0             1
 2976 25.000   18.000     0.0       0.0        0.0       0.0             1
 2977 26.000   18.000     0.0       0.0        0.0       0.0             1
 2978 27.000   18.000     0.0       0.0        0.0       0.0             1
 2979 28.000   18.000     0.0       0.0        0.0       0.0             1
 2980 29.000   18.000     0.0       0.0        0.0       0.0             1
 2981 30.000   18.000     0.0       0.0        0.0       0.0             1
 2982    0.0   19.000     0.0       0.0        0.0       0.0             1
 2983 1.0000   19.000     0.0       0.0        0.0       0.0             1
 2984 2.0000   19.000     0.0       0.0        0.0       0.0             1
 2985 3.0000   19.000     0.0       0.0        0.0       0.0             1
 2986 4.0000   19.000     0.0       0.0        0.0       0.0             1
 2987 5.0000   19.000     0.0       0.0        0.0       0.0             1
 2988 6.0000   19.000     0.0       0.0        0.0       0.0             1
 2989 7.0000   19.000     0.0       0.0        0.0       0.0             1
 2990 8.0000   19.000     0.0       0.0        0.0       0.0             1
 2991 9.0000   19.000     0.0       0.0        0.0       0.0             1
 2992 10.000   19.000     0.0       0.0        0.0       0.0             1
 2993 11.000   19.000     0.0       0.0        0.0       0.0             1
 2994 12.000   19.000     0.0       0.0        0.0       0.0             1
 2995 13.000   19.000     0.0       0.0        0.0       0.0             1
 2996 14.000   19.000     0.0       0.0        0.0       0.0             1
 2997 15.000   19.000     0.0       0.0        0.0       0.0             1
 2998 16.000   19.000     0.0       0.0        0.0       0.0             1
 2999 17.000   19.000     0.0       0.0        0.0       0.0             1
 3000 18.000   19.000     0.0       0.0        0.0       0.0             1
 3001 19.000   19.000     0.0       0.0        0.0       0.0             1
 3002 20.000   19.000     0.0       0.0        0.0       0.0             1
 3003 21.000   19.000     0.0       0.0        0.0       0.0             1
 3004 22.000   19.000     0.0       0.0        0.0       0.0             1
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Line No.	Coordinates			Displacements		
	x [m]	y [m]	z [m]	x [mm]	y [mm]	z [mm]
3005	23.000	19.000	0.0	0.0	0.0	0.0
3006	24.000	19.000	0.0	0.0	0.0	0.0
3007	25.000	19.000	0.0	0.0	0.0	0.0
3008	26.000	19.000	0.0	0.0	0.0	0.0
3009	27.000	19.000	0.0	0.0	0.0	0.0
3010	28.000	19.000	0.0	0.0	0.0	0.0
3011	29.000	19.000	0.0	0.0	0.0	0.0
3012	30.000	19.000	0.0	0.0	0.0	0.0
3013	0.0	20.000	0.0	0.0	0.0	0.0
3014	1.0000	20.000	0.0	0.0	0.0	0.0
3015	2.0000	20.000	0.0	0.0	0.0	0.0
3016	3.0000	20.000	0.0	0.0	0.0	0.0
3017	4.0000	20.000	0.0	0.0	0.0	0.0
3018	5.0000	20.000	0.0	0.0	0.0	0.0
3019	6.0000	20.000	0.0	0.0	0.0	0.0
3020	7.0000	20.000	0.0	0.0	0.0	0.0
3021	8.0000	20.000	0.0	0.0	0.0	0.0
3022	9.0000	20.000	0.0	0.0	0.0	0.0
3023	10.000	20.000	0.0	0.0	0.0	0.0
3024	11.000	20.000	0.0	0.0	0.0	0.0
3025	12.000	20.000	0.0	0.0	0.0	0.0
3026	13.000	20.000	0.0	0.0	0.0	0.0
3027	14.000	20.000	0.0	0.0	0.0	0.0
3028	15.000	20.000	0.0	0.0	0.0	0.0
3029	16.000	20.000	0.0	0.0	0.0	0.0
3030	17.000	20.000	0.0	0.0	0.0	0.0
3031	18.000	20.000	0.0	0.0	0.0	0.0
3032	19.000	20.000	0.0	0.0	0.0	0.0
3033	20.000	20.000	0.0	0.0	0.0	0.0
3034	21.000	20.000	0.0	0.0	0.0	0.0
3035	22.000	20.000	0.0	0.0	0.0	0.0
3036	23.000	20.000	0.0	0.0	0.0	0.0
3037	24.000	20.000	0.0	0.0	0.0	0.0
3038	25.000	20.000	0.0	0.0	0.0	0.0
3039	26.000	20.000	0.0	0.0	0.0	0.0
3040	27.000	20.000	0.0	0.0	0.0	0.0
3041	28.000	20.000	0.0	0.0	0.0	0.0
3042	29.000	20.000	0.0	0.0	0.0	0.0
3043	30.000	20.000	0.0	0.0	0.0	0.0
3044	0.0	21.000	0.0	0.0	0.0	0.0
3045	1.0000	21.000	0.0	0.0	0.0	0.0
3046	2.0000	21.000	0.0	0.0	0.0	0.0
3047	3.0000	21.000	0.0	0.0	0.0	0.0
3048	4.0000	21.000	0.0	0.0	0.0	0.0
3049	5.0000	21.000	0.0	0.0	0.0	0.0
3050	6.0000	21.000	0.0	0.0	0.0	0.0
3051	7.0000	21.000	0.0	0.0	0.0	0.0
3052	8.0000	21.000	0.0	0.0	0.0	0.0
3053	9.0000	21.000	0.0	0.0	0.0	0.0
3054	10.000	21.000	0.0	0.0	0.0	0.0
3055	11.000	21.000	0.0	0.0	0.0	0.0
3056	12.000	21.000	0.0	0.0	0.0	0.0
3057	13.000	21.000	0.0	0.0	0.0	0.0
3058	14.000	21.000	0.0	0.0	0.0	0.0
3059	15.000	21.000	0.0	0.0	0.0	0.0
3060	16.000	21.000	0.0	0.0	0.0	0.0
3061	17.000	21.000	0.0	0.0	0.0	0.0
3062	18.000	21.000	0.0	0.0	0.0	0.0
3063	19.000	21.000	0.0	0.0	0.0	0.0
3064	20.000	21.000	0.0	0.0	0.0	0.0
3065	21.000	21.000	0.0	0.0	0.0	0.0
3066	22.000	21.000	0.0	0.0	0.0	0.0
3067	23.000	21.000	0.0	0.0	0.0	0.0
3068	24.000	21.000	0.0	0.0	0.0	0.0
3069	25.000	21.000	0.0	0.0	0.0	0.0
3070	26.000	21.000	0.0	0.0	0.0	0.0
3071	27.000	21.000	0.0	0.0	0.0	0.0
3072	28.000	21.000	0.0	0.0	0.0	0.0
3073	29.000	21.000	0.0	0.0	0.0	0.0
3074	30.000	21.000	0.0	0.0	0.0	0.0
3075	0.0	22.000	0.0	0.0	0.0	0.0
3076	1.0000	22.000	0.0	0.0	0.0	0.0
3077	2.0000	22.000	0.0	0.0	0.0	0.0
3078	3.0000	22.000	0.0	0.0	0.0	0.0
3079	4.0000	22.000	0.0	0.0	0.0	0.0
3080	5.0000	22.000	0.0	0.0	0.0	0.0
3081	6.0000	22.000	0.0	0.0	0.0	0.0
3082	7.0000	22.000	0.0	0.0	0.0	0.0
3083	8.0000	22.000	0.0	0.0	0.0	0.0
3084	9.0000	22.000	0.0	0.0	0.0	0.0
3085	10.000	22.000	0.0	0.0	0.0	0.0
3086	11.000	22.000	0.0	0.0	0.0	0.0
3087	12.000	22.000	0.0	0.0	0.0	0.0
3088	13.000	22.000	0.0	0.0	0.0	0.0
3089	14.000	22.000	0.0	0.0	0.0	0.0
3090	15.000	22.000	0.0	0.0	0.0	0.0
3091	16.000	22.000	0.0	0.0	0.0	0.0
3092	17.000	22.000	0.0	0.0	0.0	0.0
3093	18.000	22.000	0.0	0.0	0.0	0.0
3094	19.000	22.000	0.0	0.0	0.0	0.0
3095	20.000	22.000	0.0	0.0	0.0	0.0
3096	21.000	22.000	0.0	0.0	0.0	0.0
3097	22.000	22.000	0.0	0.0	0.0	0.0
3098	23.000	22.000	0.0	0.0	0.0	0.0
3099	24.000	22.000	0.0	0.0	0.0	0.0
3100	25.000	22.000	0.0	0.0	0.0	0.0
3101	26.000	22.000	0.0	0.0	0.0	0.0
3102	27.000	22.000	0.0	0.0	0.0	0.0
3103	28.000	22.000	0.0	0.0	0.0	0.0
3104	29.000	22.000	0.0	0.0	0.0	0.0
3105	30.000	22.000	0.0	0.0	0.0	0.0
3106	0.0	23.000	0.0	0.0	0.0	0.0
3107	1.0000	23.000	0.0	0.0	0.0	0.0
3108	2.0000	23.000	0.0	0.0	0.0	0.0
3109	3.0000	23.000	0.0	0.0	0.0	0.0
3110	4.0000	23.000	0.0	0.0	0.0	0.0
3111	5.0000	23.000	0.0	0.0	0.0	0.0
3112	6.0000	23.000	0.0	0.0	0.0	0.0
3113	7.0000	23.000	0.0	0.0	0.0	0.0
3114	8.0000	23.000	0.0	0.0	0.0	0.0
3115	9.0000	23.000	0.0	0.0	0.0	0.0
3116	10.000	23.000	0.0	0.0	0.0	0.0
3117	11.000	23.000	0.0	0.0	0.0	0.0
3118	12.000	23.000	0.0	0.0	0.0	0.0
3119	13.000	23.000	0.0	0.0	0.0	0.0
3120	14.000	23.000	0.0	0.0	0.0	0.0
3121	15.000	23.000	0.0	0.0	0.0	0.0
3122	16.000	23.000	0.0	0.0	0.0	0.0
3123	17.000	23.000	0.0	0.0	0.0	0.0
3124	18.000	23.000	0.0	0.0	0.0	0.0
3125	19.000	23.000	0.0	0.0	0.0	0.0
3126	20.000	23.000	0.0	0.0	0.0	0.0
3127	21.000	23.000	0.0	0.0	0.0	0.0
3128	22.000	23.000	0.0	0.0	0.0	0.0
3129	23.000	23.000	0.0	0.0	0.0	0.0
3130	24.000	23.000	0.0	0.0	0.0	0.0
3131	25.000	23.000	0.0	0.0	0.0	0.0
3132	26.000	23.000	0.0	0.0	0.0	0.0

```
Line        Coordinates              Displacements
 No.
        x        y       z        x          y         z
       [m]      [m]     [m]      [mm]       [mm]      [mm]
3133 27.000   23.000     0.0       0.0        0.0       0.0              1
3134 28.000   23.000     0.0       0.0        0.0       0.0              1
3135 29.000   23.000     0.0       0.0        0.0       0.0              1
3136 30.000   23.000     0.0       0.0        0.0       0.0              1
3137    0.0   24.000     0.0       0.0        0.0       0.0              1
3138 1.0000   24.000     0.0       0.0        0.0       0.0              1
3139 2.0000   24.000     0.0       0.0        0.0       0.0              1
3140 3.0000   24.000     0.0       0.0        0.0       0.0              1
3141 4.0000   24.000     0.0       0.0        0.0       0.0              1
3142 5.0000   24.000     0.0       0.0        0.0       0.0              1
3143 6.0000   24.000     0.0       0.0        0.0       0.0              1
3144 7.0000   24.000     0.0       0.0        0.0       0.0              1
3145 8.0000   24.000     0.0       0.0        0.0       0.0              1
3146 9.0000   24.000     0.0       0.0        0.0       0.0              1
3147 10.000   24.000     0.0       0.0        0.0       0.0              1
3148 11.000   24.000     0.0       0.0        0.0       0.0              1
3149 12.000   24.000     0.0       0.0        0.0       0.0              1
3150 13.000   24.000     0.0       0.0        0.0       0.0              1
3151 14.000   24.000     0.0       0.0        0.0       0.0              1
3152 15.000   24.000     0.0       0.0        0.0       0.0              1
3153 16.000   24.000     0.0       0.0        0.0       0.0              1
3154 17.000   24.000     0.0       0.0        0.0       0.0              1
3155 18.000   24.000     0.0       0.0        0.0       0.0              1
3156 19.000   24.000     0.0       0.0        0.0       0.0              1
3157 20.000   24.000     0.0       0.0        0.0       0.0              1
3158 21.000   24.000     0.0       0.0        0.0       0.0              1
3159 22.000   24.000     0.0       0.0        0.0       0.0              1
3160 23.000   24.000     0.0       0.0        0.0       0.0              1
3161 24.000   24.000     0.0       0.0        0.0       0.0              1
3162 25.000   24.000     0.0       0.0        0.0       0.0              1
3163 26.000   24.000     0.0       0.0        0.0       0.0              1
3164 27.000   24.000     0.0       0.0        0.0       0.0              1
3165 28.000   24.000     0.0       0.0        0.0       0.0              1
3166 29.000   24.000     0.0       0.0        0.0       0.0              1
3167 30.000   24.000     0.0       0.0        0.0       0.0              1
3168    0.0   25.000     0.0       0.0        0.0       0.0              1
3169 1.0000   25.000     0.0       0.0        0.0       0.0              1
3170 2.0000   25.000     0.0       0.0        0.0       0.0              1
3171 3.0000   25.000     0.0       0.0        0.0       0.0              1
3172 4.0000   25.000     0.0       0.0        0.0       0.0              1
3173 5.0000   25.000     0.0       0.0        0.0       0.0              1
3174 6.0000   25.000     0.0       0.0        0.0       0.0              1
3175 7.0000   25.000     0.0       0.0        0.0       0.0              1
3176 8.0000   25.000     0.0       0.0        0.0       0.0              1
3177 9.0000   25.000     0.0       0.0        0.0       0.0              1
3178 10.000   25.000     0.0       0.0        0.0       0.0              1
3179 11.000   25.000     0.0       0.0        0.0       0.0              1
3180 12.000   25.000     0.0       0.0        0.0       0.0              1
3181 13.000   25.000     0.0       0.0        0.0       0.0              1
3182 14.000   25.000     0.0       0.0        0.0       0.0              1
3183 15.000   25.000     0.0       0.0        0.0       0.0              1
3184 16.000   25.000     0.0       0.0        0.0       0.0              1
3185 17.000   25.000     0.0       0.0        0.0       0.0              1
3186 18.000   25.000     0.0       0.0        0.0       0.0              1
3187 19.000   25.000     0.0       0.0        0.0       0.0              1
3188 20.000   25.000     0.0       0.0        0.0       0.0              1
3189 21.000   25.000     0.0       0.0        0.0       0.0              1
3190 22.000   25.000     0.0       0.0        0.0       0.0              1
3191 23.000   25.000     0.0       0.0        0.0       0.0              1
3192 24.000   25.000     0.0       0.0        0.0       0.0              1
3193 25.000   25.000     0.0       0.0        0.0       0.0              1
3194 26.000   25.000     0.0       0.0        0.0       0.0              1
3195 27.000   25.000     0.0       0.0        0.0       0.0              1
3196 28.000   25.000     0.0       0.0        0.0       0.0              1
3197 29.000   25.000     0.0       0.0        0.0       0.0              1
3198 30.000   25.000     0.0       0.0        0.0       0.0              1
3199    0.0      0.0 -2.8000       0.0        0.0       0.0              1
3200 1.0000      0.0 -2.8000       0.0        0.0       0.0              1
3201 2.0000      0.0 -2.8000       0.0        0.0       0.0              1
3202 3.0000      0.0 -2.8000       0.0        0.0       0.0              1
3203 4.0000      0.0 -2.8000       0.0        0.0       0.0              1
3204 5.0000      0.0 -2.8000       0.0        0.0       0.0              1
3205 6.0000      0.0 -2.8000       0.0        0.0       0.0              1
3206 7.0000      0.0 -2.8000       0.0        0.0       0.0              1
3207 8.0000      0.0 -2.8000       0.0        0.0       0.0              1
3208 9.0000      0.0 -2.8000       0.0        0.0       0.0              1
3209 10.000      0.0 -2.8000       0.0        0.0       0.0              1
3210 11.000      0.0 -2.8000       0.0        0.0       0.0              1
3211 12.000      0.0 -2.8000       0.0        0.0       0.0              1
3212 13.000      0.0 -2.8000       0.0        0.0       0.0              1
3213 14.000      0.0 -2.8000       0.0        0.0       0.0              1
3214 15.000      0.0 -2.8000       0.0        0.0       0.0              1
3215 16.000      0.0 -2.8000       0.0        0.0       0.0              1
3216 17.000      0.0 -2.8000       0.0        0.0       0.0              1
3217 18.000      0.0 -2.8000       0.0        0.0       0.0              1
3218 19.000      0.0 -2.8000       0.0        0.0       0.0              1
3219 20.000      0.0 -2.8000       0.0        0.0       0.0              1
3220 21.000      0.0 -2.8000       0.0        0.0       0.0              1
3221 22.000      0.0 -2.8000       0.0        0.0       0.0              1
3222 23.000      0.0 -2.8000       0.0        0.0       0.0              1
3223 24.000      0.0 -2.8000       0.0        0.0       0.0              1
3224 25.000      0.0 -2.8000       0.0        0.0       0.0              1
3225 26.000      0.0 -2.8000       0.0        0.0       0.0              1
3226 27.000      0.0 -2.8000       0.0        0.0       0.0              1
3227 28.000      0.0 -2.8000       0.0        0.0       0.0              1
3228 29.000      0.0 -2.8000       0.0        0.0       0.0              1
3229 30.000      0.0 -2.8000       0.0        0.0       0.0              1
3230    0.0   1.0000 -2.8000       0.0        0.0       0.0              1
3231 1.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3232 2.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3233 3.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3234 4.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3235 5.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3236 6.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3237 7.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3238 8.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3239 9.0000   1.0000 -2.8000       0.0        0.0       0.0              1
3240 10.000   1.0000 -2.8000       0.0        0.0       0.0              1
3241 11.000   1.0000 -2.8000       0.0        0.0       0.0              1
3242 12.000   1.0000 -2.8000       0.0        0.0       0.0              1
3243 13.000   1.0000 -2.8000       0.0        0.0       0.0              1
3244 14.000   1.0000 -2.8000       0.0        0.0       0.0              1
3245 15.000   1.0000 -2.8000       0.0        0.0       0.0              1
3246 16.000   1.0000 -2.8000       0.0        0.0       0.0              1
3247 17.000   1.0000 -2.8000       0.0        0.0       0.0              1
3248 18.000   1.0000 -2.8000       0.0        0.0       0.0              1
3249 19.000   1.0000 -2.8000       0.0        0.0       0.0              1
3250 20.000   1.0000 -2.8000       0.0        0.0       0.0              1
3251 21.000   1.0000 -2.8000       0.0        0.0       0.0              1
3252 22.000   1.0000 -2.8000       0.0        0.0       0.0              1
3253 23.000   1.0000 -2.8000       0.0        0.0       0.0              1
3254 24.000   1.0000 -2.8000       0.0        0.0       0.0              1
3255 25.000   1.0000 -2.8000       0.0        0.0       0.0              1
3256 26.000   1.0000 -2.8000       0.0        0.0       0.0              1
3257 27.000   1.0000 -2.8000       0.0        0.0       0.0              1
3258 28.000   1.0000 -2.8000       0.0        0.0       0.0              1
3259 29.000   1.0000 -2.8000       0.0        0.0       0.0              1
3260 30.000   1.0000 -2.8000       0.0        0.0       0.0              1
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 Line        Coordinates               Displacements
  No.
         x         y         z         x          y          z
        [m]       [m]       [m]      [mm]       [mm]       [mm]
 3261    0.0   2.0000 -2.8000       0.0       0.0       0.0          1
 3262 1.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3263 2.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3264 3.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3265 4.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3266 5.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3267 6.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3268 7.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3269 8.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3270 9.0000   2.0000 -2.8000       0.0       0.0       0.0          1
 3271 10.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3272 11.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3273 12.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3274 13.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3275 14.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3276 15.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3277 16.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3278 17.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3279 18.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3280 19.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3281 20.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3282 21.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3283 22.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3284 23.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3285 24.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3286 25.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3287 26.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3288 27.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3289 28.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3290 29.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3291 30.000   2.0000 -2.8000       0.0       0.0       0.0          1
 3292    0.0   3.0000 -2.8000       0.0       0.0       0.0          1
 3293 1.0000   3.0000 -2.8000       0.0       0.0       0.0          1
 3294 2.0000   3.0000 -2.8000       0.0       0.0       0.0          1
 3295 3.0000   3.0000 -2.8000       0.0       0.0       0.0          1
 3296 4.0000   3.0000 -2.8000  0.037666  0.060265  0.010740          1
 3297 5.0000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3298 6.0000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3299 7.0000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3300 8.0000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3301 9.0000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3302 10.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3303 11.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3304 12.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3305 13.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3306 14.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3307 15.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3308 16.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3309 17.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3310 18.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3311 19.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3312 20.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3313 21.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3314 22.000   3.0000 -2.8000       0.0   0.16667  0.029570          1
 3315 23.000   3.0000 -2.8000 -0.042126   0.13480  0.023030          1
 3316 24.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3317 25.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3318 26.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3319 27.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3320 28.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3321 29.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3322 30.000   3.0000 -2.8000       0.0       0.0       0.0          1
 3323    0.0   4.0000 -2.8000       0.0       0.0       0.0          1
 3324 1.0000   4.0000 -2.8000       0.0       0.0       0.0          1
 3325 2.0000   4.0000 -2.8000       0.0       0.0       0.0          1
 3326 3.0000   4.0000 -2.8000 0.0038117 0.0011435 863.69E-6          1
 3327 4.0000   4.0000 -2.8000   0.26691   0.16015   0.10496          1
 3328 5.0000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3329 6.0000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3330 7.0000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3331 8.0000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3332 9.0000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3333 10.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3334 11.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3335 12.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3336 13.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3337 14.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3338 15.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3339 16.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3340 17.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3341 18.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3342 19.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3343 20.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3344 21.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3345 22.000   4.0000 -2.8000       0.0   0.50000   0.33121          1
 3346 23.000   4.0000 -2.8000  -0.28146   0.33775   0.24261          1
 3347 24.000   4.0000 -2.8000  -0.14993  0.059973  0.028115          1
 3348 25.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3349 26.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3350 27.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3351 28.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3352 29.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3353 30.000   4.0000 -2.8000       0.0       0.0       0.0          1
 3354    0.0   5.0000 -2.8000       0.0       0.0       0.0          1
 3355 1.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3356 2.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3357 3.0000   5.0000 -2.8000  0.033333       0.0 0.0054977          1
 3358 4.0000   5.0000 -2.8000   0.36667       0.0   0.15560          1
 3359 5.0000   5.0000 -2.8000   0.70000       0.0   0.69982          1
 3360 6.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3361 7.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3362 8.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3363 9.0000   5.0000 -2.8000       0.0       0.0       0.0          1
 3364 10.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3365 11.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3366 12.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3367 13.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3368 14.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3369 15.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3370 16.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3371 17.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3372 18.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3373 19.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3374 20.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3375 21.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3376 22.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3377 23.000   5.0000 -2.8000  -0.53333       0.0   0.38596          1
 3378 24.000   5.0000 -2.8000  -0.20000       0.0  0.040656          1
 3379 25.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3380 26.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3381 27.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3382 28.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3383 29.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3384 30.000   5.0000 -2.8000       0.0       0.0       0.0          1
 3385    0.0   6.0000 -2.8000       0.0       0.0       0.0          1
 3386 1.0000   6.0000 -2.8000       0.0       0.0       0.0          1
 3387 2.0000   6.0000 -2.8000       0.0       0.0       0.0          1
 3388 3.0000   6.0000 -2.8000  0.033333       0.0 0.0054977          1
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 Line       Coordinates              Displacements
  No.
         x        y        z        x          y         z
        [m]      [m]      [m]      [mm]       [mm]      [mm]

 3389 4.0000   6.0000 -2.8000   0.36667        0.0   0.15560                1
 3390 5.0000   6.0000 -2.8000   0.70000        0.0   0.69982                1
 3391 6.0000   6.0000 -2.8000       0.0        0.0       0.0                1
 3392 7.0000   6.0000 -2.8000       0.0        0.0       0.0                1
 3393 8.0000   6.0000 -2.8000       0.0        0.0       0.0                1
 3394 9.0000   6.0000 -2.8000       0.0        0.0       0.0                1
 3395 10.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3396 11.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3397 12.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3398 13.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3399 14.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3400 15.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3401 16.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3402 17.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3403 18.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3404 19.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3405 20.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3406 21.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3407 22.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3408 23.000   6.0000 -2.8000  -0.53333        0.0   0.38596                1
 3409 24.000   6.0000 -2.8000  -0.20000        0.0  0.040656                1
 3410 25.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3411 26.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3412 27.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3413 28.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3414 29.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3415 30.000   6.0000 -2.8000       0.0        0.0       0.0                1
 3416    0.0   7.0000 -2.8000       0.0        0.0       0.0                1
 3417 1.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3418 2.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3419 3.0000   7.0000 -2.8000  0.033333        0.0 0.0054977                1
 3420 4.0000   7.0000 -2.8000   0.36667        0.0   0.15560                1
 3421 5.0000   7.0000 -2.8000   0.70000        0.0   0.69982                1
 3422 6.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3423 7.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3424 8.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3425 9.0000   7.0000 -2.8000       0.0        0.0       0.0                1
 3426 10.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3427 11.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3428 12.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3429 13.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3430 14.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3431 15.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3432 16.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3433 17.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3434 18.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3435 19.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3436 20.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3437 21.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3438 22.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3439 23.000   7.0000 -2.8000  -0.53333        0.0   0.38596                1
 3440 24.000   7.0000 -2.8000  -0.20000        0.0  0.040656                1
 3441 25.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3442 26.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3443 27.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3444 28.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3445 29.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3446 30.000   7.0000 -2.8000       0.0        0.0       0.0                1
 3447    0.0   8.0000 -2.8000       0.0        0.0       0.0                1
 3448 1.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3449 2.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3450 3.0000   8.0000 -2.8000  0.033333        0.0 0.0054977                1
 3451 4.0000   8.0000 -2.8000   0.36667        0.0   0.15560                1
 3452 5.0000   8.0000 -2.8000   0.70000        0.0   0.69982                1
 3453 6.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3454 7.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3455 8.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3456 9.0000   8.0000 -2.8000       0.0        0.0       0.0                1
 3457 10.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3458 11.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3459 12.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3460 13.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3461 14.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3462 15.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3463 16.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3464 17.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3465 18.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3466 19.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3467 20.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3468 21.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3469 22.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3470 23.000   8.0000 -2.8000  -0.53333        0.0   0.38596                1
 3471 24.000   8.0000 -2.8000  -0.20000        0.0  0.040656                1
 3472 25.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3473 26.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3474 27.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3475 28.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3476 29.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3477 30.000   8.0000 -2.8000       0.0        0.0       0.0                1
 3478    0.0   9.0000 -2.8000       0.0        0.0       0.0                1
 3479 1.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3480 2.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3481 3.0000   9.0000 -2.8000  0.033333        0.0 0.0054977                1
 3482 4.0000   9.0000 -2.8000   0.36667        0.0   0.15560                1
 3483 5.0000   9.0000 -2.8000   0.70000        0.0   0.69982                1
 3484 6.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3485 7.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3486 8.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3487 9.0000   9.0000 -2.8000       0.0        0.0       0.0                1
 3488 10.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3489 11.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3490 12.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3491 13.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3492 14.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3493 15.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3494 16.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3495 17.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3496 18.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3497 19.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3498 20.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3499 21.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3500 22.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3501 23.000   9.0000 -2.8000  -0.53333        0.0   0.38596                1
 3502 24.000   9.0000 -2.8000  -0.20000        0.0  0.040656                1
 3503 25.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3504 26.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3505 27.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3506 28.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3507 29.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3508 30.000   9.0000 -2.8000       0.0        0.0       0.0                1
 3509    0.0   10.000 -2.8000       0.0        0.0       0.0                1
 3510 1.0000   10.000 -2.8000       0.0        0.0       0.0                1
 3511 2.0000   10.000 -2.8000       0.0        0.0       0.0                1
 3512 3.0000   10.000 -2.8000  0.033333        0.0 0.0054977                1
 3513 4.0000   10.000 -2.8000   0.36667        0.0   0.15560                1
 3514 5.0000   10.000 -2.8000   0.70000        0.0   0.69982                1
 3515 6.0000   10.000 -2.8000       0.0        0.0       0.0                1
 3516 7.0000   10.000 -2.8000       0.0        0.0       0.0                1
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 Line        Coordinates               Displacements
  No.
         x         y        z        x          y          z
        [m]       [m]      [m]      [mm]       [mm]       [mm]
  3517 8.0000   10.000 -2.8000       0.0        0.0       0.0            1
  3518 9.0000   10.000 -2.8000       0.0        0.0       0.0            1
  3519 10.000   10.000 -2.8000       0.0        0.0       0.0            1
  3520 11.000   10.000 -2.8000       0.0        0.0       0.0            1
  3521 12.000   10.000 -2.8000       0.0        0.0       0.0            1
  3522 13.000   10.000 -2.8000       0.0        0.0       0.0            1
  3523 14.000   10.000 -2.8000       0.0        0.0       0.0            1
  3524 15.000   10.000 -2.8000       0.0        0.0       0.0            1
  3525 16.000   10.000 -2.8000       0.0        0.0       0.0            1
  3526 17.000   10.000 -2.8000       0.0        0.0       0.0            1
  3527 18.000   10.000 -2.8000       0.0        0.0       0.0            1
  3528 19.000   10.000 -2.8000       0.0        0.0       0.0            1
  3529 20.000   10.000 -2.8000       0.0        0.0       0.0            1
  3530 21.000   10.000 -2.8000       0.0        0.0       0.0            1
  3531 22.000   10.000 -2.8000       0.0        0.0       0.0            1
  3532 23.000   10.000 -2.8000  -0.53333        0.0   0.38596            1
  3533 24.000   10.000 -2.8000  -0.20000        0.0  0.040656            1
  3534 25.000   10.000 -2.8000       0.0        0.0       0.0            1
  3535 26.000   10.000 -2.8000       0.0        0.0       0.0            1
  3536 27.000   10.000 -2.8000       0.0        0.0       0.0            1
  3537 28.000   10.000 -2.8000       0.0        0.0       0.0            1
  3538 29.000   10.000 -2.8000       0.0        0.0       0.0            1
  3539 30.000   10.000 -2.8000       0.0        0.0       0.0            1
  3540    0.0   11.000 -2.8000       0.0        0.0       0.0            1
  3541 1.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3542 2.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3543 3.0000   11.000 -2.8000  0.033333        0.0 0.0054977            1
  3544 4.0000   11.000 -2.8000   0.36667        0.0   0.15560            1
  3545 5.0000   11.000 -2.8000   0.70000        0.0   0.69982            1
  3546 6.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3547 7.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3548 8.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3549 9.0000   11.000 -2.8000       0.0        0.0       0.0            1
  3550 10.000   11.000 -2.8000       0.0        0.0       0.0            1
  3551 11.000   11.000 -2.8000       0.0        0.0       0.0            1
  3552 12.000   11.000 -2.8000       0.0        0.0       0.0            1
  3553 13.000   11.000 -2.8000       0.0        0.0       0.0            1
  3554 14.000   11.000 -2.8000       0.0        0.0       0.0            1
  3555 15.000   11.000 -2.8000       0.0        0.0       0.0            1
  3556 16.000   11.000 -2.8000       0.0        0.0       0.0            1
  3557 17.000   11.000 -2.8000       0.0        0.0       0.0            1
  3558 18.000   11.000 -2.8000       0.0        0.0       0.0            1
  3559 19.000   11.000 -2.8000       0.0        0.0       0.0            1
  3560 20.000   11.000 -2.8000       0.0        0.0       0.0            1
  3561 21.000   11.000 -2.8000       0.0        0.0       0.0            1
  3562 22.000   11.000 -2.8000       0.0        0.0       0.0            1
  3563 23.000   11.000 -2.8000  -0.53333        0.0   0.38596            1
  3564 24.000   11.000 -2.8000  -0.20000        0.0  0.040656            1
  3565 25.000   11.000 -2.8000       0.0        0.0       0.0            1
  3566 26.000   11.000 -2.8000       0.0        0.0       0.0            1
  3567 27.000   11.000 -2.8000       0.0        0.0       0.0            1
  3568 28.000   11.000 -2.8000       0.0        0.0       0.0            1
  3569 29.000   11.000 -2.8000       0.0        0.0       0.0            1
  3570 30.000   11.000 -2.8000       0.0        0.0       0.0            1
  3571    0.0   12.000 -2.8000       0.0        0.0       0.0            1
  3572 1.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3573 2.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3574 3.0000   12.000 -2.8000  0.033333        0.0 0.0054977            1
  3575 4.0000   12.000 -2.8000   0.36667        0.0   0.15560            1
  3576 5.0000   12.000 -2.8000   0.70000        0.0   0.69982            1
  3577 6.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3578 7.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3579 8.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3580 9.0000   12.000 -2.8000       0.0        0.0       0.0            1
  3581 10.000   12.000 -2.8000       0.0        0.0       0.0            1
  3582 11.000   12.000 -2.8000       0.0        0.0       0.0            1
  3583 12.000   12.000 -2.8000       0.0        0.0       0.0            1
  3584 13.000   12.000 -2.8000       0.0        0.0       0.0            1
  3585 14.000   12.000 -2.8000       0.0        0.0       0.0            1
  3586 15.000   12.000 -2.8000       0.0        0.0       0.0            1
  3587 16.000   12.000 -2.8000       0.0        0.0       0.0            1
  3588 17.000   12.000 -2.8000       0.0        0.0       0.0            1
  3589 18.000   12.000 -2.8000       0.0        0.0       0.0            1
  3590 19.000   12.000 -2.8000       0.0        0.0       0.0            1
  3591 20.000   12.000 -2.8000       0.0        0.0       0.0            1
  3592 21.000   12.000 -2.8000       0.0        0.0       0.0            1
  3593 22.000   12.000 -2.8000       0.0        0.0       0.0            1
  3594 23.000   12.000 -2.8000  -0.53333        0.0   0.38596            1
  3595 24.000   12.000 -2.8000  -0.20000        0.0  0.040656            1
  3596 25.000   12.000 -2.8000       0.0        0.0       0.0            1
  3597 26.000   12.000 -2.8000       0.0        0.0       0.0            1
  3598 27.000   12.000 -2.8000       0.0        0.0       0.0            1
  3599 28.000   12.000 -2.8000       0.0        0.0       0.0            1
  3600 29.000   12.000 -2.8000       0.0        0.0       0.0            1
  3601 30.000   12.000 -2.8000       0.0        0.0       0.0            1
  3602    0.0   13.000 -2.8000       0.0        0.0       0.0            1
  3603 1.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3604 2.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3605 3.0000   13.000 -2.8000  0.033333        0.0 0.0054977            1
  3606 4.0000   13.000 -2.8000   0.36667        0.0   0.15560            1
  3607 5.0000   13.000 -2.8000   0.70000        0.0   0.69982            1
  3608 6.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3609 7.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3610 8.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3611 9.0000   13.000 -2.8000       0.0        0.0       0.0            1
  3612 10.000   13.000 -2.8000       0.0        0.0       0.0            1
  3613 11.000   13.000 -2.8000       0.0        0.0       0.0            1
  3614 12.000   13.000 -2.8000       0.0        0.0       0.0            1
  3615 13.000   13.000 -2.8000       0.0        0.0       0.0            1
  3616 14.000   13.000 -2.8000       0.0        0.0       0.0            1
  3617 15.000   13.000 -2.8000       0.0        0.0       0.0            1
  3618 16.000   13.000 -2.8000       0.0        0.0       0.0            1
  3619 17.000   13.000 -2.8000       0.0        0.0       0.0            1
  3620 18.000   13.000 -2.8000       0.0        0.0       0.0            1
  3621 19.000   13.000 -2.8000       0.0        0.0       0.0            1
  3622 20.000   13.000 -2.8000       0.0        0.0       0.0            1
  3623 21.000   13.000 -2.8000       0.0        0.0       0.0            1
  3624 22.000   13.000 -2.8000       0.0        0.0       0.0            1
  3625 23.000   13.000 -2.8000  -0.53333        0.0   0.38596            1
  3626 24.000   13.000 -2.8000  -0.20000        0.0  0.040656            1
  3627 25.000   13.000 -2.8000       0.0        0.0       0.0            1
  3628 26.000   13.000 -2.8000       0.0        0.0       0.0            1
  3629 27.000   13.000 -2.8000       0.0        0.0       0.0            1
  3630 28.000   13.000 -2.8000       0.0        0.0       0.0            1
  3631 29.000   13.000 -2.8000       0.0        0.0       0.0            1
  3632 30.000   13.000 -2.8000       0.0        0.0       0.0            1
  3633    0.0   14.000 -2.8000       0.0        0.0       0.0            1
  3634 1.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3635 2.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3636 3.0000   14.000 -2.8000  0.033333        0.0 0.0054977            1
  3637 4.0000   14.000 -2.8000   0.36667        0.0   0.15560            1
  3638 5.0000   14.000 -2.8000   0.70000        0.0   0.69982            1
  3639 6.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3640 7.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3641 8.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3642 9.0000   14.000 -2.8000       0.0        0.0       0.0            1
  3643 10.000   14.000 -2.8000       0.0        0.0       0.0            1
  3644 11.000   14.000 -2.8000       0.0        0.0       0.0            1
```

```
 Line        Coordinates                Displacements
  No.
         x          y          z          x          y          z
        [m]        [m]        [m]       [mm]       [mm]       [mm]
 3645 12.000   14.000 -2.8000       0.0        0.0       0.0             1
 3646 13.000   14.000 -2.8000       0.0        0.0       0.0             1
 3647 14.000   14.000 -2.8000       0.0        0.0       0.0             1
 3648 15.000   14.000 -2.8000       0.0        0.0       0.0             1
 3649 16.000   14.000 -2.8000       0.0        0.0       0.0             1
 3650 17.000   14.000 -2.8000       0.0        0.0       0.0             1
 3651 18.000   14.000 -2.8000       0.0        0.0       0.0             1
 3652 19.000   14.000 -2.8000       0.0        0.0       0.0             1
 3653 20.000   14.000 -2.8000       0.0        0.0       0.0             1
 3654 21.000   14.000 -2.8000       0.0        0.0       0.0             1
 3655 22.000   14.000 -2.8000       0.0        0.0       0.0             1
 3656 23.000   14.000 -2.8000  -0.53333        0.0   0.38596             1
 3657 24.000   14.000 -2.8000  -0.20000        0.0  0.040656             1
 3658 25.000   14.000 -2.8000       0.0        0.0       0.0             1
 3659 26.000   14.000 -2.8000       0.0        0.0       0.0             1
 3660 27.000   14.000 -2.8000       0.0        0.0       0.0             1
 3661 28.000   14.000 -2.8000       0.0        0.0       0.0             1
 3662 29.000   14.000 -2.8000       0.0        0.0       0.0             1
 3663 30.000   14.000 -2.8000       0.0        0.0       0.0             1
 3664    0.0   15.000 -2.8000       0.0        0.0       0.0             1
 3665 1.0000   15.000 -2.8000       0.0        0.0       0.0             1
 3666 2.0000   15.000 -2.8000       0.0        0.0       0.0             1
 3667 3.0000   15.000 -2.8000  0.012433 -0.0031083 0.0023624             1
 3668 4.0000   15.000 -2.8000   0.29277   -0.14638   0.11828             1
 3669 5.0000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3670 6.0000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3671 7.0000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3672 8.0000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3673 9.0000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3674 10.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3675 11.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3676 12.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3677 13.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3678 14.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3679 15.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3680 16.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3681 17.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3682 18.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3683 19.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3684 20.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3685 21.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3686 22.000   15.000 -2.8000       0.0   -0.53333   0.38596             1
 3687 23.000   15.000 -2.8000  -0.32831   -0.32831   0.27705             1
 3688 24.000   15.000 -2.8000  -0.16408  -0.054693  0.031427             1
 3689 25.000   15.000 -2.8000       0.0        0.0       0.0             1
 3690 26.000   15.000 -2.8000       0.0        0.0       0.0             1
 3691 27.000   15.000 -2.8000       0.0        0.0       0.0             1
 3692 28.000   15.000 -2.8000       0.0        0.0       0.0             1
 3693 29.000   15.000 -2.8000       0.0        0.0       0.0             1
 3694 30.000   15.000 -2.8000       0.0        0.0       0.0             1
 3695    0.0   16.000 -2.8000       0.0        0.0       0.0             1
 3696 1.0000   16.000 -2.8000       0.0        0.0       0.0             1
 3697 2.0000   16.000 -2.8000       0.0        0.0       0.0             1
 3698 3.0000   16.000 -2.8000       0.0        0.0       0.0             1
 3699 4.0000   16.000 -2.8000  0.054957  -0.082435  0.014926             1
 3700 5.0000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3701 6.0000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3702 7.0000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3703 8.0000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3704 9.0000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3705 10.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3706 11.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3707 12.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3708 13.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3709 14.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3710 15.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3711 16.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3712 17.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3713 18.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3714 19.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3715 20.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3716 21.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3717 22.000   16.000 -2.8000       0.0   -0.20000  0.040656             1
 3718 23.000   16.000 -2.8000 -0.054693   -0.16408  0.031427             1
 3719 24.000   16.000 -2.8000       0.0        0.0       0.0             1
 3720 25.000   16.000 -2.8000       0.0        0.0       0.0             1
 3721 26.000   16.000 -2.8000       0.0        0.0       0.0             1
 3722 27.000   16.000 -2.8000       0.0        0.0       0.0             1
 3723 28.000   16.000 -2.8000       0.0        0.0       0.0             1
 3724 29.000   16.000 -2.8000       0.0        0.0       0.0             1
 3725 30.000   16.000 -2.8000       0.0        0.0       0.0             1
 3726    0.0   17.000 -2.8000       0.0        0.0       0.0             1
 3727 1.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3728 2.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3729 3.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3730 4.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3731 5.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3732 6.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3733 7.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3734 8.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3735 9.0000   17.000 -2.8000       0.0        0.0       0.0             1
 3736 10.000   17.000 -2.8000       0.0        0.0       0.0             1
 3737 11.000   17.000 -2.8000       0.0        0.0       0.0             1
 3738 12.000   17.000 -2.8000       0.0        0.0       0.0             1
 3739 13.000   17.000 -2.8000       0.0        0.0       0.0             1
 3740 14.000   17.000 -2.8000       0.0        0.0       0.0             1
 3741 15.000   17.000 -2.8000       0.0        0.0       0.0             1
 3742 16.000   17.000 -2.8000       0.0        0.0       0.0             1
 3743 17.000   17.000 -2.8000       0.0        0.0       0.0             1
 3744 18.000   17.000 -2.8000       0.0        0.0       0.0             1
 3745 19.000   17.000 -2.8000       0.0        0.0       0.0             1
 3746 20.000   17.000 -2.8000       0.0        0.0       0.0             1
 3747 21.000   17.000 -2.8000       0.0        0.0       0.0             1
 3748 22.000   17.000 -2.8000       0.0        0.0       0.0             1
 3749 23.000   17.000 -2.8000       0.0        0.0       0.0             1
 3750 24.000   17.000 -2.8000       0.0        0.0       0.0             1
 3751 25.000   17.000 -2.8000       0.0        0.0       0.0             1
 3752 26.000   17.000 -2.8000       0.0        0.0       0.0             1
 3753 27.000   17.000 -2.8000       0.0        0.0       0.0             1
 3754 28.000   17.000 -2.8000       0.0        0.0       0.0             1
 3755 29.000   17.000 -2.8000       0.0        0.0       0.0             1
 3756 30.000   17.000 -2.8000       0.0        0.0       0.0             1
 3757    0.0   18.000 -2.8000       0.0        0.0       0.0             1
 3758 1.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3759 2.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3760 3.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3761 4.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3762 5.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3763 6.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3764 7.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3765 8.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3766 9.0000   18.000 -2.8000       0.0        0.0       0.0             1
 3767 10.000   18.000 -2.8000       0.0        0.0       0.0             1
 3768 11.000   18.000 -2.8000       0.0        0.0       0.0             1
 3769 12.000   18.000 -2.8000       0.0        0.0       0.0             1
 3770 13.000   18.000 -2.8000       0.0        0.0       0.0             1
 3771 14.000   18.000 -2.8000       0.0        0.0       0.0             1
 3772 15.000   18.000 -2.8000       0.0        0.0       0.0             1
```

```
Line        Coordinates                Displacements
 No.
        x        y         z         x          y         z
       [m]      [m]       [m]      [mm]       [mm]      [mm]
 3773 16.000   18.000 -2.8000      0.0        0.0       0.0              |
 3774 17.000   18.000 -2.8000      0.0        0.0       0.0              |
 3775 18.000   18.000 -2.8000      0.0        0.0       0.0              |
 3776 19.000   18.000 -2.8000      0.0        0.0       0.0              |
 3777 20.000   18.000 -2.8000      0.0        0.0       0.0              |
 3778 21.000   18.000 -2.8000      0.0        0.0       0.0              |
 3779 22.000   18.000 -2.8000      0.0        0.0       0.0              |
 3780 23.000   18.000 -2.8000      0.0        0.0       0.0              |
 3781 24.000   18.000 -2.8000      0.0        0.0       0.0              |
 3782 25.000   18.000 -2.8000      0.0        0.0       0.0              |
 3783 26.000   18.000 -2.8000      0.0        0.0       0.0              |
 3784 27.000   18.000 -2.8000      0.0        0.0       0.0              |
 3785 28.000   18.000 -2.8000      0.0        0.0       0.0              |
 3786 29.000   18.000 -2.8000      0.0        0.0       0.0              |
 3787 30.000   18.000 -2.8000      0.0        0.0       0.0              |
 3788    0.0   19.000 -2.8000      0.0        0.0       0.0              |
 3789 1.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3790 2.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3791 3.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3792 4.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3793 5.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3794 6.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3795 7.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3796 8.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3797 9.0000   19.000 -2.8000      0.0        0.0       0.0              |
 3798 10.000   19.000 -2.8000      0.0        0.0       0.0              |
 3799 11.000   19.000 -2.8000      0.0        0.0       0.0              |
 3800 12.000   19.000 -2.8000      0.0        0.0       0.0              |
 3801 13.000   19.000 -2.8000      0.0        0.0       0.0              |
 3802 14.000   19.000 -2.8000      0.0        0.0       0.0              |
 3803 15.000   19.000 -2.8000      0.0        0.0       0.0              |
 3804 16.000   19.000 -2.8000      0.0        0.0       0.0              |
 3805 17.000   19.000 -2.8000      0.0        0.0       0.0              |
 3806 18.000   19.000 -2.8000      0.0        0.0       0.0              |
 3807 19.000   19.000 -2.8000      0.0        0.0       0.0              |
 3808 20.000   19.000 -2.8000      0.0        0.0       0.0              |
 3809 21.000   19.000 -2.8000      0.0        0.0       0.0              |
 3810 22.000   19.000 -2.8000      0.0        0.0       0.0              |
 3811 23.000   19.000 -2.8000      0.0        0.0       0.0              |
 3812 24.000   19.000 -2.8000      0.0        0.0       0.0              |
 3813 25.000   19.000 -2.8000      0.0        0.0       0.0              |
 3814 26.000   19.000 -2.8000      0.0        0.0       0.0              |
 3815 27.000   19.000 -2.8000      0.0        0.0       0.0              |
 3816 28.000   19.000 -2.8000      0.0        0.0       0.0              |
 3817 29.000   19.000 -2.8000      0.0        0.0       0.0              |
 3818 30.000   19.000 -2.8000      0.0        0.0       0.0              |
 3819    0.0   20.000 -2.8000      0.0        0.0       0.0              |
 3820 1.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3821 2.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3822 3.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3823 4.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3824 5.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3825 6.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3826 7.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3827 8.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3828 9.0000   20.000 -2.8000      0.0        0.0       0.0              |
 3829 10.000   20.000 -2.8000      0.0        0.0       0.0              |
 3830 11.000   20.000 -2.8000      0.0        0.0       0.0              |
 3831 12.000   20.000 -2.8000      0.0        0.0       0.0              |
 3832 13.000   20.000 -2.8000      0.0        0.0       0.0              |
 3833 14.000   20.000 -2.8000      0.0        0.0       0.0              |
 3834 15.000   20.000 -2.8000      0.0        0.0       0.0              |
 3835 16.000   20.000 -2.8000      0.0        0.0       0.0              |
 3836 17.000   20.000 -2.8000      0.0        0.0       0.0              |
 3837 18.000   20.000 -2.8000      0.0        0.0       0.0              |
 3838 19.000   20.000 -2.8000      0.0        0.0       0.0              |
 3839 20.000   20.000 -2.8000      0.0        0.0       0.0              |
 3840 21.000   20.000 -2.8000      0.0        0.0       0.0              |
 3841 22.000   20.000 -2.8000      0.0        0.0       0.0              |
 3842 23.000   20.000 -2.8000      0.0        0.0       0.0              |
 3843 24.000   20.000 -2.8000      0.0        0.0       0.0              |
 3844 25.000   20.000 -2.8000      0.0        0.0       0.0              |
 3845 26.000   20.000 -2.8000      0.0        0.0       0.0              |
 3846 27.000   20.000 -2.8000      0.0        0.0       0.0              |
 3847 28.000   20.000 -2.8000      0.0        0.0       0.0              |
 3848 29.000   20.000 -2.8000      0.0        0.0       0.0              |
 3849 30.000   20.000 -2.8000      0.0        0.0       0.0              |
 3850    0.0   21.000 -2.8000      0.0        0.0       0.0              |
 3851 1.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3852 2.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3853 3.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3854 4.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3855 5.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3856 6.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3857 7.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3858 8.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3859 9.0000   21.000 -2.8000      0.0        0.0       0.0              |
 3860 10.000   21.000 -2.8000      0.0        0.0       0.0              |
 3861 11.000   21.000 -2.8000      0.0        0.0       0.0              |
 3862 12.000   21.000 -2.8000      0.0        0.0       0.0              |
 3863 13.000   21.000 -2.8000      0.0        0.0       0.0              |
 3864 14.000   21.000 -2.8000      0.0        0.0       0.0              |
 3865 15.000   21.000 -2.8000      0.0        0.0       0.0              |
 3866 16.000   21.000 -2.8000      0.0        0.0       0.0              |
 3867 17.000   21.000 -2.8000      0.0        0.0       0.0              |
 3868 18.000   21.000 -2.8000      0.0        0.0       0.0              |
 3869 19.000   21.000 -2.8000      0.0        0.0       0.0              |
 3870 20.000   21.000 -2.8000      0.0        0.0       0.0              |
 3871 21.000   21.000 -2.8000      0.0        0.0       0.0              |
 3872 22.000   21.000 -2.8000      0.0        0.0       0.0              |
 3873 23.000   21.000 -2.8000      0.0        0.0       0.0              |
 3874 24.000   21.000 -2.8000      0.0        0.0       0.0              |
 3875 25.000   21.000 -2.8000      0.0        0.0       0.0              |
 3876 26.000   21.000 -2.8000      0.0        0.0       0.0              |
 3877 27.000   21.000 -2.8000      0.0        0.0       0.0              |
 3878 28.000   21.000 -2.8000      0.0        0.0       0.0              |
 3879 29.000   21.000 -2.8000      0.0        0.0       0.0              |
 3880 30.000   21.000 -2.8000      0.0        0.0       0.0              |
 3881    0.0   22.000 -2.8000      0.0        0.0       0.0              |
 3882 1.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3883 2.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3884 3.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3885 4.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3886 5.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3887 6.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3888 7.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3889 8.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3890 9.0000   22.000 -2.8000      0.0        0.0       0.0              |
 3891 10.000   22.000 -2.8000      0.0        0.0       0.0              |
 3892 11.000   22.000 -2.8000      0.0        0.0       0.0              |
 3893 12.000   22.000 -2.8000      0.0        0.0       0.0              |
 3894 13.000   22.000 -2.8000      0.0        0.0       0.0              |
 3895 14.000   22.000 -2.8000      0.0        0.0       0.0              |
 3896 15.000   22.000 -2.8000      0.0        0.0       0.0              |
 3897 16.000   22.000 -2.8000      0.0        0.0       0.0              |
 3898 17.000   22.000 -2.8000      0.0        0.0       0.0              |
 3899 18.000   22.000 -2.8000      0.0        0.0       0.0              |
 3900 19.000   22.000 -2.8000      0.0        0.0       0.0              |
```

```
 Line        Coordinates              Displacements
  No.
         x        y        z        x          y          z
        [m]      [m]      [m]     [mm]       [mm]       [mm]
 3901 20.000   22.000 -2.8000        0.0        0.0       0.0             1
 3902 21.000   22.000 -2.8000        0.0        0.0       0.0             1
 3903 22.000   22.000 -2.8000        0.0        0.0       0.0             1
 3904 23.000   22.000 -2.8000        0.0        0.0       0.0             1
 3905 24.000   22.000 -2.8000        0.0        0.0       0.0             1
 3906 25.000   22.000 -2.8000        0.0        0.0       0.0             1
 3907 26.000   22.000 -2.8000        0.0        0.0       0.0             1
 3908 27.000   22.000 -2.8000        0.0        0.0       0.0             1
 3909 28.000   22.000 -2.8000        0.0        0.0       0.0             1
 3910 29.000   22.000 -2.8000        0.0        0.0       0.0             1
 3911 30.000   22.000 -2.8000        0.0        0.0       0.0             1
 3912    0.0   23.000 -2.8000        0.0        0.0       0.0             1
 3913 1.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3914 2.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3915 3.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3916 4.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3917 5.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3918 6.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3919 7.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3920 8.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3921 9.0000   23.000 -2.8000        0.0        0.0       0.0             1
 3922 10.000   23.000 -2.8000        0.0        0.0       0.0             1
 3923 11.000   23.000 -2.8000        0.0        0.0       0.0             1
 3924 12.000   23.000 -2.8000        0.0        0.0       0.0             1
 3925 13.000   23.000 -2.8000        0.0        0.0       0.0             1
 3926 14.000   23.000 -2.8000        0.0        0.0       0.0             1
 3927 15.000   23.000 -2.8000        0.0        0.0       0.0             1
 3928 16.000   23.000 -2.8000        0.0        0.0       0.0             1
 3929 17.000   23.000 -2.8000        0.0        0.0       0.0             1
 3930 18.000   23.000 -2.8000        0.0        0.0       0.0             1
 3931 19.000   23.000 -2.8000        0.0        0.0       0.0             1
 3932 20.000   23.000 -2.8000        0.0        0.0       0.0             1
 3933 21.000   23.000 -2.8000        0.0        0.0       0.0             1
 3934 22.000   23.000 -2.8000        0.0        0.0       0.0             1
 3935 23.000   23.000 -2.8000        0.0        0.0       0.0             1
 3936 24.000   23.000 -2.8000        0.0        0.0       0.0             1
 3937 25.000   23.000 -2.8000        0.0        0.0       0.0             1
 3938 26.000   23.000 -2.8000        0.0        0.0       0.0             1
 3939 27.000   23.000 -2.8000        0.0        0.0       0.0             1
 3940 28.000   23.000 -2.8000        0.0        0.0       0.0             1
 3941 29.000   23.000 -2.8000        0.0        0.0       0.0             1
 3942 30.000   23.000 -2.8000        0.0        0.0       0.0             1
 3943    0.0   24.000 -2.8000        0.0        0.0       0.0             1
 3944 1.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3945 2.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3946 3.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3947 4.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3948 5.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3949 6.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3950 7.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3951 8.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3952 9.0000   24.000 -2.8000        0.0        0.0       0.0             1
 3953 10.000   24.000 -2.8000        0.0        0.0       0.0             1
 3954 11.000   24.000 -2.8000        0.0        0.0       0.0             1
 3955 12.000   24.000 -2.8000        0.0        0.0       0.0             1
 3956 13.000   24.000 -2.8000        0.0        0.0       0.0             1
 3957 14.000   24.000 -2.8000        0.0        0.0       0.0             1
 3958 15.000   24.000 -2.8000        0.0        0.0       0.0             1
 3959 16.000   24.000 -2.8000        0.0        0.0       0.0             1
 3960 17.000   24.000 -2.8000        0.0        0.0       0.0             1
 3961 18.000   24.000 -2.8000        0.0        0.0       0.0             1
 3962 19.000   24.000 -2.8000        0.0        0.0       0.0             1
 3963 20.000   24.000 -2.8000        0.0        0.0       0.0             1
 3964 21.000   24.000 -2.8000        0.0        0.0       0.0             1
 3965 22.000   24.000 -2.8000        0.0        0.0       0.0             1
 3966 23.000   24.000 -2.8000        0.0        0.0       0.0             1
 3967 24.000   24.000 -2.8000        0.0        0.0       0.0             1
 3968 25.000   24.000 -2.8000        0.0        0.0       0.0             1
 3969 26.000   24.000 -2.8000        0.0        0.0       0.0             1
 3970 27.000   24.000 -2.8000        0.0        0.0       0.0             1
 3971 28.000   24.000 -2.8000        0.0        0.0       0.0             1
 3972 29.000   24.000 -2.8000        0.0        0.0       0.0             1
 3973 30.000   24.000 -2.8000        0.0        0.0       0.0             1
 3974    0.0   25.000 -2.8000        0.0        0.0       0.0             1
 3975 1.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3976 2.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3977 3.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3978 4.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3979 5.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3980 6.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3981 7.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3982 8.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3983 9.0000   25.000 -2.8000        0.0        0.0       0.0             1
 3984 10.000   25.000 -2.8000        0.0        0.0       0.0             1
 3985 11.000   25.000 -2.8000        0.0        0.0       0.0             1
 3986 12.000   25.000 -2.8000        0.0        0.0       0.0             1
 3987 13.000   25.000 -2.8000        0.0        0.0       0.0             1
 3988 14.000   25.000 -2.8000        0.0        0.0       0.0             1
 3989 15.000   25.000 -2.8000        0.0        0.0       0.0             1
 3990 16.000   25.000 -2.8000        0.0        0.0       0.0             1
 3991 17.000   25.000 -2.8000        0.0        0.0       0.0             1
 3992 18.000   25.000 -2.8000        0.0        0.0       0.0             1
 3993 19.000   25.000 -2.8000        0.0        0.0       0.0             1
 3994 20.000   25.000 -2.8000        0.0        0.0       0.0             1
 3995 21.000   25.000 -2.8000        0.0        0.0       0.0             1
 3996 22.000   25.000 -2.8000        0.0        0.0       0.0             1
 3997 23.000   25.000 -2.8000        0.0        0.0       0.0             1
 3998 24.000   25.000 -2.8000        0.0        0.0       0.0             1
 3999 25.000   25.000 -2.8000        0.0        0.0       0.0             1
 4000 26.000   25.000 -2.8000        0.0        0.0       0.0             1
 4001 27.000   25.000 -2.8000        0.0        0.0       0.0             1
 4002 28.000   25.000 -2.8000        0.0        0.0       0.0             1
 4003 29.000   25.000 -2.8000        0.0        0.0       0.0             1
 4004 30.000   25.000 -2.8000        0.0        0.0       0.0             1
 4005 15.000  -5.0000 -2.8000        0.0        0.0       0.0             1
 4006 15.000  -3.5000 -2.8000        0.0        0.0       0.0             1
 4007 15.000  -2.0000 -2.8000        0.0        0.0       0.0             1
 4008 15.000 -0.50000 -2.8000        0.0        0.0       0.0             1
 4009 15.000   1.0000 -2.8000        0.0        0.0       0.0             1
 4010 15.000   2.5000 -2.8000        0.0        0.0 150.64E-6             1
 4011 15.000   4.0000 -2.8000        0.0    0.50000   0.33121             1
 4012 15.000   5.5000 -2.8000        0.0        0.0       0.0             1
 4013 15.000   7.0000 -2.8000        0.0        0.0       0.0             1
 4014 15.000   8.5000 -2.8000        0.0        0.0       0.0             1
 4015 15.000   10.000 -2.8000        0.0        0.0       0.0             1
 4016 15.000   11.500 -2.8000        0.0        0.0       0.0             1
 4017 15.000   13.000 -2.8000        0.0        0.0       0.0             1
 4018 15.000   14.500 -2.8000        0.0   -0.70000   0.69982             1
 4019 15.000   16.000 -2.8000        0.0   -0.20000  0.040656             1
 4020 15.000   17.500 -2.8000        0.0        0.0       0.0             1
 4021 15.000   19.000 -2.8000        0.0        0.0       0.0             1
 4022 15.000   20.500 -2.8000        0.0        0.0       0.0             1
 4023 15.000   22.000 -2.8000        0.0        0.0       0.0             1
 4024 15.000   23.500 -2.8000        0.0        0.0       0.0             1
 4025 15.000   25.000 -2.8000        0.0        0.0       0.0             1
 4026 22.500   4.4000 -2.8000        0.0    0.63333   0.56910 1,2,6
 4027 22.500   3.8800 -2.8000        0.0    0.46000   0.27087 1,2,6
 4028 22.500   3.3600 -2.8000        0.0    0.28667  0.086636 1,2,6
```

```
Line        Coordinates               Displacements
 No.
        x        y        z        x         y         z
       [m]      [m]      [m]     [mm]      [mm]      [mm]
 4029 22.500   2.8400 -2.8000      0.0    0.11333  0.017360 1,2,6
 4030 22.500   2.3200 -2.8000      0.0        0.0       0.0 1,2,6
 4031 22.500   1.8000 -2.8000      0.0        0.0       0.0 1,2,6
 4032 22.500   1.2800 -2.8000      0.0        0.0       0.0 1,2,6
 4033 22.500  0.76000 -2.8000      0.0        0.0       0.0 1,2,6
 4034 22.500  0.24000 -2.8000      0.0        0.0       0.0 1,2,6
 4035 22.500 -0.28000 -2.8000      0.0        0.0       0.0 1,2,6
 4036 22.500 -0.80000 -2.8000      0.0        0.0       0.0 1,2,6
 4037 22.500  -1.3200 -2.8000      0.0        0.0       0.0 1,2,6
 4038 22.500  -1.8400 -2.8000      0.0        0.0       0.0 1,2,6
 4039 22.500  -2.3600 -2.8000      0.0        0.0       0.0 1,2,6
 4040 22.500  -2.8800 -2.8000      0.0        0.0       0.0 1,2,6
 4041 22.500  -3.4000 -2.8000      0.0        0.0       0.0 1,2,6
 4042 22.200   14.900 -2.5000      0.0   -0.56667   0.44426 1,2,6
 4043 22.200   15.447 -2.5000      0.0   -0.38444   0.17467 1,2,6
 4044 22.200   15.993 -2.5000      0.0   -0.20222  0.041510 1,2,6
 4045 22.200   16.540 -2.5000      0.0  -0.020000 0.0035071 1,2,6
 4046 22.200   17.087 -2.5000      0.0        0.0       0.0 1,2,6
 4047 22.200   17.633 -2.5000      0.0        0.0       0.0 1,2,6
 4048 22.200   18.180 -2.5000      0.0        0.0       0.0 1,2,6
 4049 22.200   18.727 -2.5000      0.0        0.0       0.0 1,2,6
 4050 22.200   19.273 -2.5000      0.0        0.0       0.0 1,2,6
 4051 22.200   19.820 -2.5000      0.0        0.0       0.0 1,2,6
 4052 22.200   20.367 -2.5000      0.0        0.0       0.0 1,2,6
 4053 22.200   20.913 -2.5000      0.0        0.0       0.0 1,2,6
 4054 22.200   21.460 -2.5000      0.0        0.0       0.0 1,2,6
 4055 22.200   22.007 -2.5000      0.0        0.0       0.0 1,2,6
 4056 22.200   22.553 -2.5000      0.0        0.0       0.0 1,2,6
 4057 22.200   23.100 -2.5000      0.0        0.0       0.0 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

```
Curve Name:       Excavation in front of wall in sand (CIRIA 580 Fig. 2.12)
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)(%)]
                  [0.000,0.000,0.305][0.100,0.000,0.268][0.200,0.000,0.234][0.300,0.000,0.203]
                  [0.400,0.000,0.174][0.500,0.000,0.148][0.600,0.000,0.125][0.700,0.000,0.105]
                  [0.800,0.000,0.086][0.900,0.000,0.070][1.000,0.000,0.056][1.100,0.000,0.044]
                  [1.200,0.000,0.034][1.300,0.000,0.025][1.400,0.000,0.018][1.500,0.000,0.012]
                  [1.600,0.000,0.008][1.700,0.000,0.004][1.800,0.000,0.002][1.900,0.000,0.001]
                  [2.000,0.000,0.000]
Curve Fitting     Polynomial
Method:
x Order:          3
y Order:          0
```

Polynomial: z = $-2.18E-2x^3 + 1.62E-1x^2 - 3.89E-1x + 3.05E-1$

```
Coeff. of         1.00
Determination:
```

Horizontal Ground Movement Curves

```
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     Polynomial
Method:
x Order:          0
y Order:          0
Polynomial: z =   0.0
Coeff. of         -2147483648.E+2147483647
Determination:
```

Polygonal Excavations

```
Excavation Name:                      New Excavation
Surface level [m]:                    0.0
Contribution:                         Positive
Enabled:                              Yes
Surface movement curves which are     -3.6000
selected are applied between
surface and [m]:

Corner   x       y      Base   Stiffened Previous Side    Next Side
                        Level             d    p1  p2*   d    p1  p2*
        [m]     [m]      [m]             [m]  [%]  [%]  [m]  [%]  [%]
     1 5.0000 4.6000 -3.6000    No        -    -    -    -    -    -
     2 5.0000 14.500 -3.6000    No        -    -    -    -    -    -
     3 22.500 14.500 -3.6000    No        -    -    -    -    -    -
     4 22.500 4.6000 -3.6000    No        -    -    -    -    -    -

Side      Corner 1          Corner 2                       Ground Movement Curve
        x        y        x        y                  Vertical                    Horizontal
       [m]      [m]      [m]      [m]
   1   5.0000   4.6000   5.0000   14.500 Excavation in front of wall in No horizontal ground movement
                                         sand (CIRIA 580 Fig. 2.12)
   2   5.0000   14.500   22.500   14.500 Excavation in front of wall in No horizontal ground movement
                                         sand (CIRIA 580 Fig. 2.12)
   3   22.500   14.500   22.500   4.6000 Excavation in front of wall in No horizontal ground movement
                                         sand (CIRIA 580 Fig. 2.12)
   4   22.500   4.6000   5.0000   4.6000 Excavation in front of wall in No horizontal ground movement
                                         sand (CIRIA 580 Fig. 2.12)
```

Damage Category Strains

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

Specific Structures - Geometry

```
Structure Name   Sub-Structure   Displacement    Start     End       Vertical       Vertical    Damage Category Strains  Poisson's  E/G
                     Name            Line       Distance Distance  Offsets from   Displacement                              Ratio
                                                 Along    Along     Line for         Limit
                                                 Line     Line      Vertical      Sensitivity
                                                                    Movement
                                                                  Calculations
                                                  [m]      [m]         [m]           [mm]
8 - 9 King's    Front Wall      Line 2          0.00000  7.70000       0.0          0.10000 Burland Strain Limits       0.20000 2.6000
Mews
12 - 13 King's  Front Wall      Line 3          0.00000  8.10000       0.0          0.10000 Burland Strain Limits       0.20000 2.6000
Mews
```

Specific Structures - Bending Parameters

```
Structure Name   Sub-Structure  Height  Default               Hogging                              Sagging
                     Name              Properties
                                                2nd Moment  Distance   Distance  2nd Moment  Distance   Distance
                                                 of Area   of Bending  of N.A.    of Area   of Bending  of N.A.
                                                (per unit    Strain   from Edge  (per unit    Strain   from Edge
                                                  width)   from N.A.  of Beam in   width)   from N.A.  of Beam in
                                                                       Tension                          Tension
```

```
                             [m]                [m³]       [m]        [m]        [m³]       [m]        [m]
8 - 9 King's    Front Wall      11.000 Yes           443.67     11.000     11.000     110.92     5.5000     5.5000
Mews
12 - 13 King's  Front Wall      9.0000 Yes           243.00     9.0000     9.0000     60.750     4.5000     4.5000
Mews
```

Building Segment Combinations

```
Structure Name   Sub-Structure    Vertical   Segment Start Length Curvature Combined
                      Name       Offset from                                Segment
                                  Line for
                                  Vertical
                                  Movement
                                 Calculations
                                     [m]               [m]    [m]
No structures have segments combined.
```

Warnings

```
None
```

Displacement and Strain Results

```
      Type/No.              Coordinates                            Displacements                          Angle of
                                                                                                            Line
   Name      Dist.       x         y         z         x         y         z      Horizontal   Horizontal   to x Axis
                                                                                dispalcement displacement
                                                                                 along the   perpendicular
                                                                                    Line        to Line
             [m]        [m]       [m]       [m]       [mm]      [mm]      [mm]      [mm]         [mm]          [°]
  Grid 1   Grid 1     0.00000   0.00000   0.00000       0.0       0.0  0.030957      -            -            -     *
                      1.00000   0.00000   0.00000       0.0       0.0   0.16533      -            -            -     *
                      2.00000   0.00000   0.00000       0.0       0.0   0.39211      -            -            -     *
                      3.00000   0.00000   0.00000       0.0       0.0   0.65835      -            -            -     *
                      4.00000   0.00000   0.00000       0.0       0.0   0.87789      -            -            -     *
                      5.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                      6.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                      7.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                      8.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                      9.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     10.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     11.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     12.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     13.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     14.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     15.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     16.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     17.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     18.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     19.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     20.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     21.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     22.00000   0.00000   0.00000       0.0       0.0   0.96368      -            -            -     *
                     23.00000   0.00000   0.00000       0.0       0.0   0.94158      -            -            -     *
                     24.00000   0.00000   0.00000       0.0       0.0   0.77995      -            -            -     *
                     25.00000   0.00000   0.00000       0.0       0.0   0.52514      -            -            -     *
                     26.00000   0.00000   0.00000       0.0       0.0   0.26952      -            -            -     *
                     27.00000   0.00000   0.00000       0.0       0.0  0.084884      -            -            -     *
                     28.00000   0.00000   0.00000       0.0       0.0 0.0039187      -            -            -     *
                     29.00000   0.00000   0.00000       0.0       0.0       0.0      -            -            -     *
                     30.00000   0.00000   0.00000       0.0       0.0       0.0      -            -            -     *
                      0.00000   1.00000   0.00000       0.0       0.0   0.14743      -            -            -     *
                      1.00000   1.00000   0.00000       0.0       0.0   0.44650      -            -            -     *
                      2.00000   1.00000   0.00000       0.0       0.0   0.89450      -            -            -     *
                      3.00000   1.00000   0.00000       0.0       0.0    1.4119      -            -            -     *
                      4.00000   1.00000   0.00000       0.0       0.0    1.8466      -            -            -     *
                      5.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                      6.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                      7.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                      8.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                      9.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     10.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     11.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     12.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     13.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     14.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     15.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     16.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     17.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     18.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     19.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     20.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     21.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     22.00000   1.00000   0.00000       0.0       0.0    2.0199      -            -            -     *
                     23.00000   1.00000   0.00000       0.0       0.0    1.9751      -            -            -     *
                     24.00000   1.00000   0.00000       0.0       0.0    1.6513      -            -            -     *
                     25.00000   1.00000   0.00000       0.0       0.0    1.1525      -            -            -     *
                     26.00000   1.00000   0.00000       0.0       0.0   0.65512      -            -            -     *
                     27.00000   1.00000   0.00000       0.0       0.0   0.27612      -            -            -     *
                     28.00000   1.00000   0.00000       0.0       0.0  0.060543      -            -            -     *
                     29.00000   1.00000   0.00000       0.0       0.0       0.0      -            -            -     *
                     30.00000   1.00000   0.00000       0.0       0.0       0.0      -            -            -     *
                      0.00000   2.00000   0.00000       0.0       0.0   0.32754      -            -            -     *
                      1.00000   2.00000   0.00000       0.0       0.0   0.82965      -            -            -     *
                      2.00000   2.00000   0.00000       0.0       0.0    1.5721      -            -            -     *
                      3.00000   2.00000   0.00000       0.0       0.0    2.4661      -            -            -     *
                      4.00000   2.00000   0.00000       0.0       0.0    3.2718      -            -            -     *
                      5.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                      6.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                      7.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                      8.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                      9.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     10.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     11.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     12.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     13.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     14.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     15.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     16.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     17.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     18.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     19.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     20.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     21.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     22.00000   2.00000   0.00000       0.0       0.0    3.6128      -            -            -     *
                     23.00000   2.00000   0.00000       0.0       0.0    3.5232      -            -            -     *
                     24.00000   2.00000   0.00000       0.0       0.0    2.9020      -            -            -     *
                     25.00000   2.00000   0.00000       0.0       0.0    2.0109      -            -            -     *
                     26.00000   2.00000   0.00000       0.0       0.0    1.1736      -            -            -     *
                     27.00000   2.00000   0.00000       0.0       0.0   0.54709      -            -            -     *
                     28.00000   2.00000   0.00000       0.0       0.0   0.16884      -            -            -     *
                     29.00000   2.00000   0.00000       0.0       0.0  0.012707      -            -            -     *
                     30.00000   2.00000   0.00000       0.0       0.0       0.0      -            -            -     *
                      0.00000   3.00000   0.00000       0.0       0.0   0.51709      -            -            -     *
                      1.00000   3.00000   0.00000       0.0       0.0    1.2225      -            -            -     *
                      2.00000   3.00000   0.00000       0.0       0.0    2.2923      -            -            -     *
                      3.00000   3.00000   0.00000       0.0       0.0    3.6867      -            -            -     *
                      4.00000   3.00000   0.00000       0.0       0.0    5.1325      -            -            -     *
                      5.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                      6.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                      7.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                      8.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                      9.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                     10.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
                     11.00000   3.00000   0.00000       0.0       0.0    5.8433      -            -            -     *
```

```
     Type/No.                Coordinates                                  Displacements                          Angle of
                                                                                                                   Line
   Name      Dist.        x          y          z          x          y          z      Horizontal   Horizontal   to x Axis
                                                                                      dispalcement displacement
                      12.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      13.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      14.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      15.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      16.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      17.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      18.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      19.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      20.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      21.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      22.00000   3.00000   0.00000       0.0        0.0    5.8433      -            -           -     *
                      23.00000   3.00000   0.00000       0.0        0.0    5.6484      -            -           -     *
                      24.00000   3.00000   0.00000       0.0        0.0    4.4376      -            -           -     *
                      25.00000   3.00000   0.00000       0.0        0.0    2.9575      -            -           -     *
                      26.00000   3.00000   0.00000       0.0        0.0    1.7114      -            -           -     *
                      27.00000   3.00000   0.00000       0.0        0.0   0.82573      -            -           -     *
                      28.00000   3.00000   0.00000       0.0        0.0   0.28967      -            -           -     *
                      29.00000   3.00000   0.00000       0.0        0.0  0.043022      -            -           -     *
                      30.00000   3.00000   0.00000       0.0        0.0       0.0      -            -           -     *
                       0.00000   4.00000   0.00000       0.0        0.0   0.64551      -            -           -     *
                       1.00000   4.00000   0.00000       0.0        0.0    1.4899      -            -           -     *
                       2.00000   4.00000   0.00000       0.0        0.0    2.8079      -            -           -     *
                       3.00000   4.00000   0.00000       0.0        0.0    4.6686      -            -           -     *
                       4.00000   4.00000   0.00000       0.0        0.0    7.0348      -            -           -     *
                       5.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                       6.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                       7.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                       8.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                       9.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      10.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      11.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      12.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      13.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      14.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      15.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      16.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      17.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      18.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      19.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      20.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      21.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      22.00000   4.00000   0.00000       0.0        0.0    8.8127      -            -           -     *
                      23.00000   4.00000   0.00000       0.0        0.0    8.2159      -            -           -     *
                      24.00000   4.00000   0.00000       0.0        0.0    5.8032      -            -           -     *
                      25.00000   4.00000   0.00000       0.0        0.0    3.6680      -            -           -     *
                      26.00000   4.00000   0.00000       0.0        0.0    2.0846      -            -           -     *
                      27.00000   4.00000   0.00000       0.0        0.0    1.0139      -            -           -     *
                      28.00000   4.00000   0.00000       0.0        0.0   0.37307      -            -           -     *
                      29.00000   4.00000   0.00000       0.0        0.0  0.068086      -            -           -     *
                      30.00000   4.00000   0.00000       0.0        0.0       0.0      -            -           -     *
                       0.00000   5.00000   0.00000       0.0        0.0   0.66877      -            -           -     *
                       1.00000   5.00000   0.00000       0.0        0.0    1.5387      -            -           -     *
                       2.00000   5.00000   0.00000       0.0        0.0    2.9048      -            -           -     *
                       3.00000   5.00000   0.00000       0.0        0.0    4.8681      -            -           -     *
                       4.00000   5.00000   0.00000       0.0        0.0    7.5298      -            -           -     *
                       5.00000   5.00000   0.00000       0.0        0.0    10.991      -            -           -     *
                       6.00000   5.00000   0.00000                  Point lies within an excavation.               *
                       7.00000   5.00000   0.00000                  Point lies within an excavation.               *
                       8.00000   5.00000   0.00000                  Point lies within an excavation.               *
                       9.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      10.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      11.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      12.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      13.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      14.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      15.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      16.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      17.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      18.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      19.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      20.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      21.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      22.00000   5.00000   0.00000                  Point lies within an excavation.               *
                      23.00000   5.00000   0.00000       0.0        0.0    9.1542      -            -           -     *
                      24.00000   5.00000   0.00000       0.0        0.0    6.1053      -            -           -     *
                      25.00000   5.00000   0.00000       0.0        0.0    3.8055      -            -           -     *
                      26.00000   5.00000   0.00000       0.0        0.0    2.1534      -            -           -     *
                      27.00000   5.00000   0.00000       0.0        0.0    1.0480      -            -           -     *
                      28.00000   5.00000   0.00000       0.0        0.0   0.38825      -            -           -     *
                      29.00000   5.00000   0.00000       0.0        0.0  0.072881      -            -           -     *
                      30.00000   5.00000   0.00000       0.0        0.0       0.0      -            -           -     *
                       0.00000   6.00000   0.00000       0.0        0.0   0.66877      -            -           -     *
                       1.00000   6.00000   0.00000       0.0        0.0    1.5387      -            -           -     *
                       2.00000   6.00000   0.00000       0.0        0.0    2.9048      -            -           -     *
                       3.00000   6.00000   0.00000       0.0        0.0    4.8681      -            -           -     *
                       4.00000   6.00000   0.00000       0.0        0.0    7.5298      -            -           -     *
                       5.00000   6.00000   0.00000       0.0        0.0    10.991      -            -           -     *
                       6.00000   6.00000   0.00000                  Point lies within an excavation.               *
                       7.00000   6.00000   0.00000                  Point lies within an excavation.               *
                       8.00000   6.00000   0.00000                  Point lies within an excavation.               *
                       9.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      10.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      11.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      12.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      13.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      14.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      15.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      16.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      17.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      18.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      19.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      20.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      21.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      22.00000   6.00000   0.00000                  Point lies within an excavation.               *
                      23.00000   6.00000   0.00000       0.0        0.0    9.1542      -            -           -     *
                      24.00000   6.00000   0.00000       0.0        0.0    6.1053      -            -           -     *
                      25.00000   6.00000   0.00000       0.0        0.0    3.8055      -            -           -     *
                      26.00000   6.00000   0.00000       0.0        0.0    2.1534      -            -           -     *
                      27.00000   6.00000   0.00000       0.0        0.0    1.0480      -            -           -     *
                      28.00000   6.00000   0.00000       0.0        0.0   0.38825      -            -           -     *
                      29.00000   6.00000   0.00000       0.0        0.0  0.072881      -            -           -     *
                      30.00000   6.00000   0.00000       0.0        0.0       0.0      -            -           -     *
                       0.00000   7.00000   0.00000       0.0        0.0   0.66877      -            -           -     *
                       1.00000   7.00000   0.00000       0.0        0.0    1.5387      -            -           -     *
                       2.00000   7.00000   0.00000       0.0        0.0    2.9048      -            -           -     *
                       3.00000   7.00000   0.00000       0.0        0.0    4.8681      -            -           -     *
                       4.00000   7.00000   0.00000       0.0        0.0    7.5298      -            -           -     *
                       5.00000   7.00000   0.00000       0.0        0.0    10.991      -            -           -     *
                       6.00000   7.00000   0.00000                  Point lies within an excavation.               *
                       7.00000   7.00000   0.00000                  Point lies within an excavation.               *
                       8.00000   7.00000   0.00000                  Point lies within an excavation.               *
                       9.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      10.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      11.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      12.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      13.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      14.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      15.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      16.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      17.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      18.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      19.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      20.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      21.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      22.00000   7.00000   0.00000                  Point lies within an excavation.               *
                      23.00000   7.00000   0.00000       0.0        0.0    9.1542      -            -           -     *
                      24.00000   7.00000   0.00000       0.0        0.0    6.1053      -            -           -     *
                      25.00000   7.00000   0.00000       0.0        0.0    3.8055      -            -           -     *
                      26.00000   7.00000   0.00000       0.0        0.0    2.1534      -            -           -     *
                      27.00000   7.00000   0.00000       0.0        0.0    1.0480      -            -           -     *
                      28.00000   7.00000   0.00000       0.0        0.0   0.38825      -            -           -     *
```

```
      Type/No.              Coordinates                                Displacements                        Angle of
                                                                                                               Line
   Name      Dist.        x         y         z         x          y          z     Horizontal   Horizontal  to x Axis
                                                                                 dispalcement displacement
                    29.00000   7.00000  0.00000       0.0        0.0  0.072881     -            -           -     *
                    30.00000   7.00000  0.00000       0.0        0.0       0.0     -            -           -     *
                     0.00000   8.00000  0.00000       0.0        0.0   0.66877     -            -           -     *
                     1.00000   8.00000  0.00000       0.0        0.0    1.5387     -            -           -     *
                     2.00000   8.00000  0.00000       0.0        0.0    2.9048     -            -           -     *
                     3.00000   8.00000  0.00000       0.0        0.0    4.8681     -            -           -     *
                     4.00000   8.00000  0.00000       0.0        0.0    7.5298     -            -           -     *
                     5.00000   8.00000  0.00000       0.0        0.0    10.991     -            -           -     *
                     6.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                     7.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                     8.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                     9.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    10.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    11.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    12.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    13.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    14.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    15.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    16.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    17.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    18.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    19.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    20.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    21.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    22.00000   8.00000  0.00000                  Point lies within an excavation.                 *
                    23.00000   8.00000  0.00000       0.0        0.0    9.1542     -            -           -     *
                    24.00000   8.00000  0.00000       0.0        0.0    6.1053     -            -           -     *
                    25.00000   8.00000  0.00000       0.0        0.0    3.8055     -            -           -     *
                    26.00000   8.00000  0.00000       0.0        0.0    2.1534     -            -           -     *
                    27.00000   8.00000  0.00000       0.0        0.0    1.0480     -            -           -     *
                    28.00000   8.00000  0.00000       0.0        0.0   0.38825     -            -           -     *
                    29.00000   8.00000  0.00000       0.0        0.0  0.072881     -            -           -     *
                    30.00000   8.00000  0.00000       0.0        0.0       0.0     -            -           -     *
                     0.00000   9.00000  0.00000       0.0        0.0   0.66877     -            -           -     *
                     1.00000   9.00000  0.00000       0.0        0.0    1.5387     -            -           -     *
                     2.00000   9.00000  0.00000       0.0        0.0    2.9048     -            -           -     *
                     3.00000   9.00000  0.00000       0.0        0.0    4.8681     -            -           -     *
                     4.00000   9.00000  0.00000       0.0        0.0    7.5298     -            -           -     *
                     5.00000   9.00000  0.00000       0.0        0.0    10.991     -            -           -     *
                     6.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                     7.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                     8.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                     9.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    10.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    11.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    12.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    13.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    14.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    15.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    16.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    17.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    18.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    19.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    20.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    21.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    22.00000   9.00000  0.00000                  Point lies within an excavation.                 *
                    23.00000   9.00000  0.00000       0.0        0.0    9.1542     -            -           -     *
                    24.00000   9.00000  0.00000       0.0        0.0    6.1053     -            -           -     *
                    25.00000   9.00000  0.00000       0.0        0.0    3.8055     -            -           -     *
                    26.00000   9.00000  0.00000       0.0        0.0    2.1534     -            -           -     *
                    27.00000   9.00000  0.00000       0.0        0.0    1.0480     -            -           -     *
                    28.00000   9.00000  0.00000       0.0        0.0   0.38825     -            -           -     *
                    29.00000   9.00000  0.00000       0.0        0.0  0.072881     -            -           -     *
                    30.00000   9.00000  0.00000       0.0        0.0       0.0     -            -           -     *
                     0.00000  10.00000  0.00000       0.0        0.0   0.66877     -            -           -     *
                     1.00000  10.00000  0.00000       0.0        0.0    1.5387     -            -           -     *
                     2.00000  10.00000  0.00000       0.0        0.0    2.9048     -            -           -     *
                     3.00000  10.00000  0.00000       0.0        0.0    4.8681     -            -           -     *
                     4.00000  10.00000  0.00000       0.0        0.0    7.5298     -            -           -     *
                     5.00000  10.00000  0.00000       0.0        0.0    10.991     -            -           -     *
                     6.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                     7.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                     8.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                     9.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    10.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    11.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    12.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    13.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    14.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    15.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    16.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    17.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    18.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    19.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    20.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    21.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    22.00000  10.00000  0.00000                  Point lies within an excavation.                 *
                    23.00000  10.00000  0.00000       0.0        0.0    9.1542     -            -           -     *
                    24.00000  10.00000  0.00000       0.0        0.0    6.1053     -            -           -     *
                    25.00000  10.00000  0.00000       0.0        0.0    3.8055     -            -           -     *
                    26.00000  10.00000  0.00000       0.0        0.0    2.1534     -            -           -     *
                    27.00000  10.00000  0.00000       0.0        0.0    1.0480     -            -           -     *
                    28.00000  10.00000  0.00000       0.0        0.0   0.38825     -            -           -     *
                    29.00000  10.00000  0.00000       0.0        0.0  0.072881     -            -           -     *
                    30.00000  10.00000  0.00000       0.0        0.0       0.0     -            -           -     *
                     0.00000  11.00000  0.00000       0.0        0.0   0.66877     -            -           -     *
                     1.00000  11.00000  0.00000       0.0        0.0    1.5387     -            -           -     *
                     2.00000  11.00000  0.00000       0.0        0.0    2.9048     -            -           -     *
                     3.00000  11.00000  0.00000       0.0        0.0    4.8681     -            -           -     *
                     4.00000  11.00000  0.00000       0.0        0.0    7.5298     -            -           -     *
                     5.00000  11.00000  0.00000       0.0        0.0    10.991     -            -           -     *
                     6.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                     7.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                     8.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                     9.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    10.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    11.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    12.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    13.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    14.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    15.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    16.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    17.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    18.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    19.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    20.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    21.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    22.00000  11.00000  0.00000                  Point lies within an excavation.                 *
                    23.00000  11.00000  0.00000       0.0        0.0    9.1542     -            -           -     *
                    24.00000  11.00000  0.00000       0.0        0.0    6.1053     -            -           -     *
                    25.00000  11.00000  0.00000       0.0        0.0    3.8055     -            -           -     *
                    26.00000  11.00000  0.00000       0.0        0.0    2.1534     -            -           -     *
                    27.00000  11.00000  0.00000       0.0        0.0    1.0480     -            -           -     *
                    28.00000  11.00000  0.00000       0.0        0.0   0.38825     -            -           -     *
                    29.00000  11.00000  0.00000       0.0        0.0  0.072881     -            -           -     *
                    30.00000  11.00000  0.00000       0.0        0.0       0.0     -            -           -     *
                     0.00000  12.00000  0.00000       0.0        0.0   0.66877     -            -           -     *
                     1.00000  12.00000  0.00000       0.0        0.0    1.5387     -            -           -     *
                     2.00000  12.00000  0.00000       0.0        0.0    2.9048     -            -           -     *
                     3.00000  12.00000  0.00000       0.0        0.0    4.8681     -            -           -     *
                     4.00000  12.00000  0.00000       0.0        0.0    7.5298     -            -           -     *
                     5.00000  12.00000  0.00000       0.0        0.0    10.991     -            -           -     *
                     6.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                     7.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                     8.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                     9.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                    10.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                    11.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                    12.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                    13.00000  12.00000  0.00000                  Point lies within an excavation.                 *
                    14.00000  12.00000  0.00000                  Point lies within an excavation.                 *
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```
      Type/No.              Coordinates                              Displacements                         Angle of
                                                                                                              Line
   Name      Dist.       x         y          z          x         y          z     Horizontal   Horizontal  to x Axis
                                                                                   dispalcement displacement
                 15.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 16.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 17.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 18.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 19.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 20.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 21.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 22.00000  12.00000  0.00000                   Point lies within an excavation.               *
                 23.00000  12.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 24.00000  12.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 25.00000  12.00000  0.00000         0.0       0.0    3.8055     -             -         -    *
                 26.00000  12.00000  0.00000         0.0       0.0    2.1534     -             -         -    *
                 27.00000  12.00000  0.00000         0.0       0.0    1.0480     -             -         -    *
                 28.00000  12.00000  0.00000         0.0       0.0   0.38825     -             -         -    *
                 29.00000  12.00000  0.00000         0.0       0.0  0.072881     -             -         -    *
                 30.00000  12.00000  0.00000         0.0       0.0       0.0     -             -         -    *
                  0.00000  13.00000  0.00000         0.0       0.0   0.66877     -             -         -    *
                  1.00000  13.00000  0.00000         0.0       0.0    1.5387     -             -         -    *
                  2.00000  13.00000  0.00000         0.0       0.0    2.9048     -             -         -    *
                  3.00000  13.00000  0.00000         0.0       0.0    4.8681     -             -         -    *
                  4.00000  13.00000  0.00000         0.0       0.0    7.5298     -             -         -    *
                  5.00000  13.00000  0.00000         0.0       0.0    10.991     -             -         -    *
                  6.00000  13.00000  0.00000                   Point lies within an excavation.               *
                  7.00000  13.00000  0.00000                   Point lies within an excavation.               *
                  8.00000  13.00000  0.00000                   Point lies within an excavation.               *
                  9.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 10.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 11.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 12.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 13.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 14.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 15.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 16.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 17.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 18.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 19.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 20.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 21.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 22.00000  13.00000  0.00000                   Point lies within an excavation.               *
                 23.00000  13.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 24.00000  13.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 25.00000  13.00000  0.00000         0.0       0.0    3.8055     -             -         -    *
                 26.00000  13.00000  0.00000         0.0       0.0    2.1534     -             -         -    *
                 27.00000  13.00000  0.00000         0.0       0.0    1.0480     -             -         -    *
                 28.00000  13.00000  0.00000         0.0       0.0   0.38825     -             -         -    *
                 29.00000  13.00000  0.00000         0.0       0.0  0.072881     -             -         -    *
                 30.00000  13.00000  0.00000         0.0       0.0       0.0     -             -         -    *
                  0.00000  14.00000  0.00000         0.0       0.0   0.66877     -             -         -    *
                  1.00000  14.00000  0.00000         0.0       0.0    1.5387     -             -         -    *
                  2.00000  14.00000  0.00000         0.0       0.0    2.9048     -             -         -    *
                  3.00000  14.00000  0.00000         0.0       0.0    4.8681     -             -         -    *
                  4.00000  14.00000  0.00000         0.0       0.0    7.5298     -             -         -    *
                  5.00000  14.00000  0.00000         0.0       0.0    10.991     -             -         -    *
                  6.00000  14.00000  0.00000                   Point lies within an excavation.               *
                  7.00000  14.00000  0.00000                   Point lies within an excavation.               *
                  8.00000  14.00000  0.00000                   Point lies within an excavation.               *
                  9.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 10.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 11.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 12.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 13.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 14.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 15.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 16.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 17.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 18.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 19.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 20.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 21.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 22.00000  14.00000  0.00000                   Point lies within an excavation.               *
                 23.00000  14.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 24.00000  14.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 25.00000  14.00000  0.00000         0.0       0.0    3.8055     -             -         -    *
                 26.00000  14.00000  0.00000         0.0       0.0    2.1534     -             -         -    *
                 27.00000  14.00000  0.00000         0.0       0.0    1.0480     -             -         -    *
                 28.00000  14.00000  0.00000         0.0       0.0   0.38825     -             -         -    *
                 29.00000  14.00000  0.00000         0.0       0.0  0.072881     -             -         -    *
                 30.00000  14.00000  0.00000         0.0       0.0       0.0     -             -         -    *
                  0.00000  15.00000  0.00000         0.0       0.0   0.65254     -             -         -    *
                  1.00000  15.00000  0.00000         0.0       0.0    1.5047     -             -         -    *
                  2.00000  15.00000  0.00000         0.0       0.0    2.8371     -             -         -    *
                  3.00000  15.00000  0.00000         0.0       0.0    4.7281     -             -         -    *
                  4.00000  15.00000  0.00000         0.0       0.0    7.1760     -             -         -    *
                  5.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                  6.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                  7.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                  8.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                  9.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 10.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 11.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 12.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 13.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 14.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 15.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 16.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 17.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 18.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 19.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 20.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 21.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 22.00000  15.00000  0.00000         0.0       0.0    9.1542     -             -         -    *
                 23.00000  15.00000  0.00000         0.0       0.0    8.4563     -             -         -    *
                 24.00000  15.00000  0.00000         0.0       0.0    5.8922     -             -         -    *
                 25.00000  15.00000  0.00000         0.0       0.0    3.7093     -             -         -    *
                 26.00000  15.00000  0.00000         0.0       0.0    2.1054     -             -         -    *
                 27.00000  15.00000  0.00000         0.0       0.0    1.0242     -             -         -    *
                 28.00000  15.00000  0.00000         0.0       0.0   0.37766     -             -         -    *
                 29.00000  15.00000  0.00000         0.0       0.0  0.069530     -             -         -    *
                 30.00000  15.00000  0.00000         0.0       0.0       0.0     -             -         -    *
                  0.00000  16.00000  0.00000         0.0       0.0   0.53383     -             -         -    *
                  1.00000  16.00000  0.00000         0.0       0.0    1.2572     -             -         -    *
                  2.00000  16.00000  0.00000         0.0       0.0    2.3580     -             -         -    *
                  3.00000  16.00000  0.00000         0.0       0.0    3.8055     -             -         -    *
                  4.00000  16.00000  0.00000         0.0       0.0    5.3346     -             -         -    *
                  5.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                  6.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                  7.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                  8.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                  9.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 10.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 11.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 12.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 13.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 14.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 15.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 16.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 17.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 18.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 19.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 20.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 21.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 22.00000  16.00000  0.00000         0.0       0.0    6.1053     -             -         -    *
                 23.00000  16.00000  0.00000         0.0       0.0    5.8922     -             -         -    *
                 24.00000  16.00000  0.00000         0.0       0.0    4.5947     -             -         -    *
                 25.00000  16.00000  0.00000         0.0       0.0    3.0462     -             -         -    *
                 26.00000  16.00000  0.00000         0.0       0.0    1.7595     -             -         -    *
                 27.00000  16.00000  0.00000         0.0       0.0   0.85027     -             -         -    *
                 28.00000  16.00000  0.00000         0.0       0.0   0.30050     -             -         -    *
                 29.00000  16.00000  0.00000         0.0       0.0  0.046133     -             -         -    *
                 30.00000  16.00000  0.00000         0.0       0.0       0.0     -             -         -    *
                  0.00000  17.00000  0.00000         0.0       0.0   0.34719     -             -         -    *
```

```
   Type/No.             Coordinates                                   Displacements                          Angle of
                                                                                                               Line
Name       Dist.      x         y          z          x          y          z      Horizontal   Horizontal   to x Axis
                                                                                  dispalcement displacement
                   1.00000  17.00000  0.00000      0.0      0.0   0.87050      -            -           -    *
                   2.00000  17.00000  0.00000      0.0      0.0    1.6454      -            -           -    *
                   3.00000  17.00000  0.00000      0.0      0.0    2.5846      -            -           -    *
                   4.00000  17.00000  0.00000      0.0      0.0    3.4401      -            -           -    *
                   5.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                   6.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                   7.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                   8.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                   9.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  10.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  11.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  12.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  13.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  14.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  15.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  16.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  17.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  18.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  19.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  20.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  21.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  22.00000  17.00000  0.00000      0.0      0.0    3.8055      -            -           -    *
                  23.00000  17.00000  0.00000      0.0      0.0    3.7093      -            -           -    *
                  24.00000  17.00000  0.00000      0.0      0.0    3.0462      -            -           -    *
                  25.00000  17.00000  0.00000      0.0      0.0    2.1054      -            -           -    *
                  26.00000  17.00000  0.00000      0.0      0.0    1.2291      -            -           -    *
                  27.00000  17.00000  0.00000      0.0      0.0   0.57612      -            -           -    *
                  28.00000  17.00000  0.00000      0.0      0.0   0.18116      -            -           -    *
                  29.00000  17.00000  0.00000      0.0      0.0  0.015309      -            -           -    *
                  30.00000  17.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   0.00000  18.00000  0.00000      0.0      0.0   0.16324      -            -           -    *
                   1.00000  18.00000  0.00000      0.0      0.0   0.48129      -            -           -    *
                   2.00000  18.00000  0.00000      0.0      0.0   0.95567      -            -           -    *
                   3.00000  18.00000  0.00000      0.0      0.0    1.5047      -            -           -    *
                   4.00000  18.00000  0.00000      0.0      0.0    1.9680      -            -           -    *
                   5.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                   6.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                   7.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                   8.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                   9.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  10.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  11.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  12.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  13.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  14.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  15.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  16.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  17.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  18.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  19.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  20.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  21.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  22.00000  18.00000  0.00000      0.0      0.0    2.1534      -            -           -    *
                  23.00000  18.00000  0.00000      0.0      0.0    2.1054      -            -           -    *
                  24.00000  18.00000  0.00000      0.0      0.0    1.7595      -            -           -    *
                  25.00000  18.00000  0.00000      0.0      0.0    1.2291      -            -           -    *
                  26.00000  18.00000  0.00000      0.0      0.0   0.70221      -            -           -    *
                  27.00000  18.00000  0.00000      0.0      0.0   0.30050      -            -           -    *
                  28.00000  18.00000  0.00000      0.0      0.0  0.069530      -            -           -    *
                  29.00000  18.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                  30.00000  18.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   0.00000  19.00000  0.00000      0.0      0.0  0.038828      -            -           -    *
                   1.00000  19.00000  0.00000      0.0      0.0   0.18742      -            -           -    *
                   2.00000  19.00000  0.00000      0.0      0.0   0.43286      -            -           -    *
                   3.00000  19.00000  0.00000      0.0      0.0   0.71945      -            -           -    *
                   4.00000  19.00000  0.00000      0.0      0.0   0.95567      -            -           -    *
                   5.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                   6.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                   7.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                   8.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                   9.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  10.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  11.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  12.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  13.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  14.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  15.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  16.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  17.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  18.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  19.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  20.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  21.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  22.00000  19.00000  0.00000      0.0      0.0    1.0480      -            -           -    *
                  23.00000  19.00000  0.00000      0.0      0.0    1.0242      -            -           -    *
                  24.00000  19.00000  0.00000      0.0      0.0   0.85027      -            -           -    *
                  25.00000  19.00000  0.00000      0.0      0.0   0.57612      -            -           -    *
                  26.00000  19.00000  0.00000      0.0      0.0   0.30050      -            -           -    *
                  27.00000  19.00000  0.00000      0.0      0.0  0.099235      -            -           -    *
                  28.00000  19.00000  0.00000      0.0      0.0 0.0066088      -            -           -    *
                  29.00000  19.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                  30.00000  19.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   0.00000  20.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   1.00000  20.00000  0.00000      0.0      0.0  0.030236      -            -           -    *
                   2.00000  20.00000  0.00000      0.0      0.0   0.12138      -            -           -    *
                   3.00000  20.00000  0.00000      0.0      0.0   0.24303      -            -           -    *
                   4.00000  20.00000  0.00000      0.0      0.0   0.34719      -            -           -    *
                   5.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                   6.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                   7.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                   8.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                   9.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  10.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  11.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  12.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  13.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  14.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  15.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  16.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  17.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  18.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  19.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  20.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  21.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  22.00000  20.00000  0.00000      0.0      0.0   0.38825      -            -           -    *
                  23.00000  20.00000  0.00000      0.0      0.0   0.37766      -            -           -    *
                  24.00000  20.00000  0.00000      0.0      0.0   0.30050      -            -           -    *
                  25.00000  20.00000  0.00000      0.0      0.0   0.18116      -            -           -    *
                  26.00000  20.00000  0.00000      0.0      0.0  0.069530      -            -           -    *
                  27.00000  20.00000  0.00000      0.0      0.0 0.0066088      -            -           -    *
                  28.00000  20.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                  29.00000  20.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                  30.00000  20.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   0.00000  21.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   1.00000  21.00000  0.00000      0.0      0.0       0.0      -            -           -    *
                   2.00000  21.00000  0.00000      0.0      0.0 0.0043377      -            -           -    *
                   3.00000  21.00000  0.00000      0.0      0.0  0.030236      -            -           -    *
                   4.00000  21.00000  0.00000      0.0      0.0  0.060060      -            -           -    *
                   5.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                   6.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                   7.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                   8.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                   9.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  10.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  11.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  12.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  13.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  14.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  15.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  16.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
                  17.00000  21.00000  0.00000      0.0      0.0  0.072881      -            -           -    *
```

Type/No.		Coordinates			Displacements					Angle of Line	
Name	Dist.	x	y	z	x	y	z	Horizontal dispalcement	Horizontal displacement	to x Axis	
		18.00000	21.00000	0.00000	0.0	0.0	0.072881	-	-	-	*
		19.00000	21.00000	0.00000	0.0	0.0	0.072881	-	-	-	*
		20.00000	21.00000	0.00000	0.0	0.0	0.072881	-	-	-	*
		21.00000	21.00000	0.00000	0.0	0.0	0.072881	-	-	-	*
		22.00000	21.00000	0.00000	0.0	0.0	0.072881	-	-	-	*
		23.00000	21.00000	0.00000	0.0	0.0	0.069530	-	-	-	*
		24.00000	21.00000	0.00000	0.0	0.0	0.046133	-	-	-	*
		25.00000	21.00000	0.00000	0.0	0.0	0.015309	-	-	-	*
		26.00000	21.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		27.00000	21.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		28.00000	21.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		29.00000	21.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		30.00000	21.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		0.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		1.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		2.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		3.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		4.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		5.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		6.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		7.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		8.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		9.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		10.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		11.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		12.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		13.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		14.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		15.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		16.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		17.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		18.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		19.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		21.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		22.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		23.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		24.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		25.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		26.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		27.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		28.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		29.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		30.00000	22.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		0.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		1.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		2.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		3.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		4.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		5.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		6.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		7.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		8.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		9.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		10.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		11.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		12.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		13.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		14.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		15.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		16.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		17.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		18.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		19.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		21.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		22.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		23.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		24.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		25.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		26.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		27.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		28.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		29.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		30.00000	23.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		0.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		1.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		2.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		3.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		4.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		5.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		6.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		7.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		8.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		9.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		10.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		11.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		12.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		13.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		14.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		15.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		16.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		17.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		18.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		19.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		21.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		22.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		23.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		24.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		25.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		26.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		27.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		28.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		29.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		30.00000	24.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		0.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		1.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		2.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		3.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		4.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		5.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		6.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		7.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		8.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		9.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		10.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		11.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		12.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		13.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		14.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		15.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		16.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		17.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		18.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		19.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		20.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		21.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		22.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		23.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		24.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		25.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		26.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		27.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		28.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		29.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
		30.00000	25.00000	0.00000	0.0	0.0	0.0	-	-	-	*
Grid 2	Grid 2	0.00000	0.00000	-2.80000	0.0	0.0	0.030957	-	-	-	*
		1.00000	0.00000	-2.80000	0.0	0.0	0.16533	-	-	-	*
		2.00000	0.00000	-2.80000	0.0	0.0	0.39211	-	-	-	*
		3.00000	0.00000	-2.80000	0.0	0.0	0.65835	-	-	-	*

```
    Type/No.            Coordinates                               Displacements                              Angle of
                                                                                                               Line
  Name      Dist.      x         y         z          x          y          z       Horizontal   Horizontal   to x Axis
                                                                                  dispalcement displacement
                   4.00000   0.00000  -2.80000        0.0        0.0    0.87789        -            -           -     *
                   5.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                   6.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                   7.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                   8.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                   9.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  10.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  11.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  12.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  13.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  14.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  15.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  16.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  17.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  18.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  19.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  20.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  21.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  22.00000   0.00000  -2.80000        0.0        0.0    0.96368        -            -           -     *
                  23.00000   0.00000  -2.80000        0.0        0.0    0.94158        -            -           -     *
                  24.00000   0.00000  -2.80000        0.0        0.0    0.77995        -            -           -     *
                  25.00000   0.00000  -2.80000        0.0        0.0    0.52514        -            -           -     *
                  26.00000   0.00000  -2.80000        0.0        0.0    0.26952        -            -           -     *
                  27.00000   0.00000  -2.80000        0.0        0.0   0.084884        -            -           -     *
                  28.00000   0.00000  -2.80000        0.0        0.0  0.0039187        -            -           -     *
                  29.00000   0.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                  30.00000   0.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                   0.00000   1.00000  -2.80000        0.0        0.0    0.14743        -            -           -     *
                   1.00000   1.00000  -2.80000        0.0        0.0    0.44650        -            -           -     *
                   2.00000   1.00000  -2.80000        0.0        0.0    0.89450        -            -           -     *
                   3.00000   1.00000  -2.80000        0.0        0.0     1.4119        -            -           -     *
                   4.00000   1.00000  -2.80000        0.0        0.0     1.8466        -            -           -     *
                   5.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                   6.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                   7.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                   8.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                   9.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  10.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  11.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  12.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  13.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  14.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  15.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  16.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  17.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  18.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  19.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  20.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  21.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  22.00000   1.00000  -2.80000        0.0        0.0     2.0199        -            -           -     *
                  23.00000   1.00000  -2.80000        0.0        0.0     1.9751        -            -           -     *
                  24.00000   1.00000  -2.80000        0.0        0.0     1.6513        -            -           -     *
                  25.00000   1.00000  -2.80000        0.0        0.0     1.1525        -            -           -     *
                  26.00000   1.00000  -2.80000        0.0        0.0    0.65512        -            -           -     *
                  27.00000   1.00000  -2.80000        0.0        0.0    0.27612        -            -           -     *
                  28.00000   1.00000  -2.80000        0.0        0.0   0.060543        -            -           -     *
                  29.00000   1.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                  30.00000   1.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                   0.00000   2.00000  -2.80000        0.0        0.0    0.32754        -            -           -     *
                   1.00000   2.00000  -2.80000        0.0        0.0    0.82965        -            -           -     *
                   2.00000   2.00000  -2.80000        0.0        0.0     1.5721        -            -           -     *
                   3.00000   2.00000  -2.80000        0.0        0.0     2.4661        -            -           -     *
                   4.00000   2.00000  -2.80000        0.0        0.0     3.2718        -            -           -     *
                   5.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                   6.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                   7.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                   8.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                   9.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  10.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  11.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  12.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  13.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  14.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  15.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  16.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  17.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  18.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  19.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  20.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  21.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  22.00000   2.00000  -2.80000        0.0        0.0     3.6128        -            -           -     *
                  23.00000   2.00000  -2.80000        0.0        0.0     3.5232        -            -           -     *
                  24.00000   2.00000  -2.80000        0.0        0.0     2.9020        -            -           -     *
                  25.00000   2.00000  -2.80000        0.0        0.0     2.0109        -            -           -     *
                  26.00000   2.00000  -2.80000        0.0        0.0     1.1736        -            -           -     *
                  27.00000   2.00000  -2.80000        0.0        0.0    0.54709        -            -           -     *
                  28.00000   2.00000  -2.80000        0.0        0.0    0.16884        -            -           -     *
                  29.00000   2.00000  -2.80000        0.0        0.0   0.012707        -            -           -     *
                  30.00000   2.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                   0.00000   3.00000  -2.80000        0.0        0.0    0.51709        -            -           -     *
                   1.00000   3.00000  -2.80000        0.0        0.0     1.2225        -            -           -     *
                   2.00000   3.00000  -2.80000        0.0        0.0     2.2923        -            -           -     *
                   3.00000   3.00000  -2.80000        0.0        0.0     3.6867        -            -           -     *
                   4.00000   3.00000  -2.80000   0.037666   0.060265     5.1432        -            -           -     *
                   5.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                   6.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                   7.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                   8.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                   9.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  10.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  11.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  12.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  13.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  14.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  15.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  16.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  17.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  18.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  19.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  20.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  21.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  22.00000   3.00000  -2.80000        0.0    0.16667     5.8729        -            -           -     *
                  23.00000   3.00000  -2.80000  -0.042126    0.13480     5.6714        -            -           -     *
                  24.00000   3.00000  -2.80000        0.0        0.0     4.4376        -            -           -     *
                  25.00000   3.00000  -2.80000        0.0        0.0     2.9575        -            -           -     *
                  26.00000   3.00000  -2.80000        0.0        0.0     1.7114        -            -           -     *
                  27.00000   3.00000  -2.80000        0.0        0.0    0.82573        -            -           -     *
                  28.00000   3.00000  -2.80000        0.0        0.0    0.28967        -            -           -     *
                  29.00000   3.00000  -2.80000        0.0        0.0   0.043022        -            -           -     *
                  30.00000   3.00000  -2.80000        0.0        0.0        0.0        -            -           -     *
                   0.00000   4.00000  -2.80000        0.0        0.0    0.64551        -            -           -     *
                   1.00000   4.00000  -2.80000        0.0        0.0     1.4899        -            -           -     *
                   2.00000   4.00000  -2.80000        0.0        0.0     2.8079        -            -           -     *
                   3.00000   4.00000  -2.80000  0.0038117  0.0011435     4.6695        -            -           -     *
                   4.00000   4.00000  -2.80000    0.26691    0.16015     7.1398        -            -           -     *
                   5.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                   6.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                   7.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                   8.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                   9.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  10.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  11.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  12.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  13.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  14.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  15.00000   4.00000  -2.80000        0.0     1.0000     9.4752        -            -           -     *
                  16.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  17.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  18.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  19.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
                  20.00000   4.00000  -2.80000        0.0    0.50000     9.1439        -            -           -     *
```

```
     Type/No.               Coordinates                                     Displacements                         Angle of
                                                                                                                    Line
   Name       Dist.        x          y          z          x          y          z      Horizontal  Horizontal   to x Axis
                                                                                        dispalcement displacement
                       21.00000   4.00000  -2.80000       0.0   0.50000    9.1439        -              -           -     *
                       22.00000   4.00000  -2.80000       0.0   0.50000    9.1439        -              -           -     *
                       23.00000   4.00000  -2.80000  -0.28146   0.33775    8.4585        -              -           -     *
                       24.00000   4.00000  -2.80000  -0.14993  0.059973    5.8314        -              -           -     *
                       25.00000   4.00000  -2.80000       0.0       0.0    3.6680        -              -           -     *
                       26.00000   4.00000  -2.80000       0.0       0.0    2.0846        -              -           -     *
                       27.00000   4.00000  -2.80000       0.0       0.0    1.0139        -              -           -     *
                       28.00000   4.00000  -2.80000       0.0       0.0   0.37307        -              -           -     *
                       29.00000   4.00000  -2.80000       0.0       0.0  0.068086        -              -           -     *
                       30.00000   4.00000  -2.80000       0.0       0.0       0.0        -              -           -     *
                        0.00000   5.00000  -2.80000       0.0       0.0   0.66877        -              -           -     *
                        1.00000   5.00000  -2.80000       0.0       0.0    1.5387        -              -           -     *
                        2.00000   5.00000  -2.80000       0.0       0.0    2.9048        -              -           -     *
                        3.00000   5.00000  -2.80000  0.033333       0.0    4.8736        -              -           -     *
                        4.00000   5.00000  -2.80000   0.36667       0.0    7.6854        -              -           -     *
                        5.00000   5.00000  -2.80000   0.70000       0.0    11.691        -              -           -     *
                        6.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                        7.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                        8.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                        9.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       10.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       11.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       12.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       13.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       14.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       15.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       16.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       17.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       18.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       19.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       20.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       21.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       22.00000   5.00000  -2.80000                     Point lies within an excavation.                  *
                       23.00000   5.00000  -2.80000  -0.53333       0.0    9.5402        -              -           -     *
                       24.00000   5.00000  -2.80000  -0.20000       0.0    6.1460        -              -           -     *
                       25.00000   5.00000  -2.80000       0.0       0.0    3.8055        -              -           -     *
                       26.00000   5.00000  -2.80000       0.0       0.0    2.1534        -              -           -     *
                       27.00000   5.00000  -2.80000       0.0       0.0    1.0480        -              -           -     *
                       28.00000   5.00000  -2.80000       0.0       0.0   0.38825        -              -           -     *
                       29.00000   5.00000  -2.80000       0.0       0.0  0.072881        -              -           -     *
                       30.00000   5.00000  -2.80000       0.0       0.0       0.0        -              -           -     *
                        0.00000   6.00000  -2.80000       0.0       0.0   0.66877        -              -           -     *
                        1.00000   6.00000  -2.80000       0.0       0.0    1.5387        -              -           -     *
                        2.00000   6.00000  -2.80000       0.0       0.0    2.9048        -              -           -     *
                        3.00000   6.00000  -2.80000  0.033333       0.0    4.8736        -              -           -     *
                        4.00000   6.00000  -2.80000   0.36667       0.0    7.6854        -              -           -     *
                        5.00000   6.00000  -2.80000   0.70000       0.0    11.691        -              -           -     *
                        6.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                        7.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                        8.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                        9.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       10.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       11.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       12.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       13.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       14.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       15.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       16.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       17.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       18.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       19.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       20.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       21.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       22.00000   6.00000  -2.80000                     Point lies within an excavation.                  *
                       23.00000   6.00000  -2.80000  -0.53333       0.0    9.5402        -              -           -     *
                       24.00000   6.00000  -2.80000  -0.20000       0.0    6.1460        -              -           -     *
                       25.00000   6.00000  -2.80000       0.0       0.0    3.8055        -              -           -     *
                       26.00000   6.00000  -2.80000       0.0       0.0    2.1534        -              -           -     *
                       27.00000   6.00000  -2.80000       0.0       0.0    1.0480        -              -           -     *
                       28.00000   6.00000  -2.80000       0.0       0.0   0.38825        -              -           -     *
                       29.00000   6.00000  -2.80000       0.0       0.0  0.072881        -              -           -     *
                       30.00000   6.00000  -2.80000       0.0       0.0       0.0        -              -           -     *
                        0.00000   7.00000  -2.80000       0.0       0.0   0.66877        -              -           -     *
                        1.00000   7.00000  -2.80000       0.0       0.0    1.5387        -              -           -     *
                        2.00000   7.00000  -2.80000       0.0       0.0    2.9048        -              -           -     *
                        3.00000   7.00000  -2.80000  0.033333       0.0    4.8736        -              -           -     *
                        4.00000   7.00000  -2.80000   0.36667       0.0    7.6854        -              -           -     *
                        5.00000   7.00000  -2.80000   0.70000       0.0    11.691        -              -           -     *
                        6.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                        7.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                        8.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                        9.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       10.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       11.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       12.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       13.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       14.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       15.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       16.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       17.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       18.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       19.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       20.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       21.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       22.00000   7.00000  -2.80000                     Point lies within an excavation.                  *
                       23.00000   7.00000  -2.80000  -0.53333       0.0    9.5402        -              -           -     *
                       24.00000   7.00000  -2.80000  -0.20000       0.0    6.1460        -              -           -     *
                       25.00000   7.00000  -2.80000       0.0       0.0    3.8055        -              -           -     *
                       26.00000   7.00000  -2.80000       0.0       0.0    2.1534        -              -           -     *
                       27.00000   7.00000  -2.80000       0.0       0.0    1.0480        -              -           -     *
                       28.00000   7.00000  -2.80000       0.0       0.0   0.38825        -              -           -     *
                       29.00000   7.00000  -2.80000       0.0       0.0  0.072881        -              -           -     *
                       30.00000   7.00000  -2.80000       0.0       0.0       0.0        -              -           -     *
                        0.00000   8.00000  -2.80000       0.0       0.0   0.66877        -              -           -     *
                        1.00000   8.00000  -2.80000       0.0       0.0    1.5387        -              -           -     *
                        2.00000   8.00000  -2.80000       0.0       0.0    2.9048        -              -           -     *
                        3.00000   8.00000  -2.80000  0.033333       0.0    4.8736        -              -           -     *
                        4.00000   8.00000  -2.80000   0.36667       0.0    7.6854        -              -           -     *
                        5.00000   8.00000  -2.80000   0.70000       0.0    11.691        -              -           -     *
                        6.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                        7.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                        8.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                        9.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       10.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       11.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       12.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       13.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       14.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       15.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       16.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       17.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       18.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       19.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       20.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       21.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       22.00000   8.00000  -2.80000                     Point lies within an excavation.                  *
                       23.00000   8.00000  -2.80000  -0.53333       0.0    9.5402        -              -           -     *
                       24.00000   8.00000  -2.80000  -0.20000       0.0    6.1460        -              -           -     *
                       25.00000   8.00000  -2.80000       0.0       0.0    3.8055        -              -           -     *
                       26.00000   8.00000  -2.80000       0.0       0.0    2.1534        -              -           -     *
                       27.00000   8.00000  -2.80000       0.0       0.0    1.0480        -              -           -     *
                       28.00000   8.00000  -2.80000       0.0       0.0   0.38825        -              -           -     *
                       29.00000   8.00000  -2.80000       0.0       0.0  0.072881        -              -           -     *
                       30.00000   8.00000  -2.80000       0.0       0.0       0.0        -              -           -     *
                        0.00000   9.00000  -2.80000       0.0       0.0   0.66877        -              -           -     *
                        1.00000   9.00000  -2.80000       0.0       0.0    1.5387        -              -           -     *
                        2.00000   9.00000  -2.80000       0.0       0.0    2.9048        -              -           -     *
                        3.00000   9.00000  -2.80000  0.033333       0.0    4.8736        -              -           -     *
                        4.00000   9.00000  -2.80000   0.36667       0.0    7.6854        -              -           -     *
                        5.00000   9.00000  -2.80000   0.70000       0.0    11.691        -              -           -     *
                        6.00000   9.00000  -2.80000                     Point lies within an excavation.                  *
```

```
   Type/No.                Coordinates                                 Displacements                       Angle of
                                                                                                             Line
Name      Dist.        x         y         z         x         y          z      Horizontal   Horizontal   to x Axis
                                                                                dispalcement displacement
                     7.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                     8.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                     9.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    10.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    11.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    12.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    13.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    14.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    15.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    16.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    17.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    18.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    19.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    20.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    21.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    22.00000   9.00000  -2.80000                  Point lies within an excavation.                    *
                    23.00000   9.00000  -2.80000  -0.53333        0.0    9.5402      -             -            -     *
                    24.00000   9.00000  -2.80000  -0.20000        0.0    6.1460      -             -            -     *
                    25.00000   9.00000  -2.80000       0.0        0.0    3.8055      -             -            -     *
                    26.00000   9.00000  -2.80000       0.0        0.0    2.1534      -             -            -     *
                    27.00000   9.00000  -2.80000       0.0        0.0    1.0480      -             -            -     *
                    28.00000   9.00000  -2.80000       0.0        0.0   0.38825      -             -            -     *
                    29.00000   9.00000  -2.80000       0.0        0.0  0.072881      -             -            -     *
                    30.00000   9.00000  -2.80000       0.0        0.0       0.0      -             -            -     *
                     0.00000  10.00000  -2.80000       0.0        0.0   0.66877      -             -            -     *
                     1.00000  10.00000  -2.80000       0.0        0.0    1.5387      -             -            -     *
                     2.00000  10.00000  -2.80000       0.0        0.0    2.9048      -             -            -     *
                     3.00000  10.00000  -2.80000  0.033333        0.0    4.8736      -             -            -     *
                     4.00000  10.00000  -2.80000   0.36667        0.0    7.6854      -             -            -     *
                     5.00000  10.00000  -2.80000   0.70000        0.0    11.691      -             -            -     *
                     6.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                     7.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                     8.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                     9.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    10.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    11.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    12.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    13.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    14.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    15.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    16.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    17.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    18.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    19.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    20.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    21.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    22.00000  10.00000  -2.80000                  Point lies within an excavation.                    *
                    23.00000  10.00000  -2.80000  -0.53333        0.0    9.5402      -             -            -     *
                    24.00000  10.00000  -2.80000  -0.20000        0.0    6.1460      -             -            -     *
                    25.00000  10.00000  -2.80000       0.0        0.0    3.8055      -             -            -     *
                    26.00000  10.00000  -2.80000       0.0        0.0    2.1534      -             -            -     *
                    27.00000  10.00000  -2.80000       0.0        0.0    1.0480      -             -            -     *
                    28.00000  10.00000  -2.80000       0.0        0.0   0.38825      -             -            -     *
                    29.00000  10.00000  -2.80000       0.0        0.0  0.072881      -             -            -     *
                    30.00000  10.00000  -2.80000       0.0        0.0       0.0      -             -            -     *
                     0.00000  11.00000  -2.80000       0.0        0.0   0.66877      -             -            -     *
                     1.00000  11.00000  -2.80000       0.0        0.0    1.5387      -             -            -     *
                     2.00000  11.00000  -2.80000       0.0        0.0    2.9048      -             -            -     *
                     3.00000  11.00000  -2.80000  0.033333        0.0    4.8736      -             -            -     *
                     4.00000  11.00000  -2.80000   0.36667        0.0    7.6854      -             -            -     *
                     5.00000  11.00000  -2.80000   0.70000        0.0    11.691      -             -            -     *
                     6.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                     7.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                     8.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                     9.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    10.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    11.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    12.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    13.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    14.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    15.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    16.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    17.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    18.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    19.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    20.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    21.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    22.00000  11.00000  -2.80000                  Point lies within an excavation.                    *
                    23.00000  11.00000  -2.80000  -0.53333        0.0    9.5402      -             -            -     *
                    24.00000  11.00000  -2.80000  -0.20000        0.0    6.1460      -             -            -     *
                    25.00000  11.00000  -2.80000       0.0        0.0    3.8055      -             -            -     *
                    26.00000  11.00000  -2.80000       0.0        0.0    2.1534      -             -            -     *
                    27.00000  11.00000  -2.80000       0.0        0.0    1.0480      -             -            -     *
                    28.00000  11.00000  -2.80000       0.0        0.0   0.38825      -             -            -     *
                    29.00000  11.00000  -2.80000       0.0        0.0  0.072881      -             -            -     *
                    30.00000  11.00000  -2.80000       0.0        0.0       0.0      -             -            -     *
                     0.00000  12.00000  -2.80000       0.0        0.0   0.66877      -             -            -     *
                     1.00000  12.00000  -2.80000       0.0        0.0    1.5387      -             -            -     *
                     2.00000  12.00000  -2.80000       0.0        0.0    2.9048      -             -            -     *
                     3.00000  12.00000  -2.80000  0.033333        0.0    4.8736      -             -            -     *
                     4.00000  12.00000  -2.80000   0.36667        0.0    7.6854      -             -            -     *
                     5.00000  12.00000  -2.80000   0.70000        0.0    11.691      -             -            -     *
                     6.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                     7.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                     8.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                     9.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    10.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    11.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    12.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    13.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    14.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    15.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    16.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    17.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    18.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    19.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    20.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    21.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    22.00000  12.00000  -2.80000                  Point lies within an excavation.                    *
                    23.00000  12.00000  -2.80000  -0.53333        0.0    9.5402      -             -            -     *
                    24.00000  12.00000  -2.80000  -0.20000        0.0    6.1460      -             -            -     *
                    25.00000  12.00000  -2.80000       0.0        0.0    3.8055      -             -            -     *
                    26.00000  12.00000  -2.80000       0.0        0.0    2.1534      -             -            -     *
                    27.00000  12.00000  -2.80000       0.0        0.0    1.0480      -             -            -     *
                    28.00000  12.00000  -2.80000       0.0        0.0   0.38825      -             -            -     *
                    29.00000  12.00000  -2.80000       0.0        0.0  0.072881      -             -            -     *
                    30.00000  12.00000  -2.80000       0.0        0.0       0.0      -             -            -     *
                     0.00000  13.00000  -2.80000       0.0        0.0   0.66877      -             -            -     *
                     1.00000  13.00000  -2.80000       0.0        0.0    1.5387      -             -            -     *
                     2.00000  13.00000  -2.80000       0.0        0.0    2.9048      -             -            -     *
                     3.00000  13.00000  -2.80000  0.033333        0.0    4.8736      -             -            -     *
                     4.00000  13.00000  -2.80000   0.36667        0.0    7.6854      -             -            -     *
                     5.00000  13.00000  -2.80000   0.70000        0.0    11.691      -             -            -     *
                     6.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                     7.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                     8.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                     9.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    10.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    11.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    12.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    13.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    14.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    15.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    16.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    17.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    18.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    19.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    20.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    21.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    22.00000  13.00000  -2.80000                  Point lies within an excavation.                    *
                    23.00000  13.00000  -2.80000  -0.53333        0.0    9.5402      -             -            -     *
```

```
      Type/No.                 Coordinates                                 Displacements                         Angle of
                                                                                                                   Line
   Name      Dist.         x         y         z         x          y         z    Horizontal   Horizontal     to x Axis
                                                                                   dispalcement displacement
                 24.00000  13.00000  -2.80000  -0.20000        0.0    6.1460      -          -          -    *
                 25.00000  13.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 26.00000  13.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                 27.00000  13.00000  -2.80000       0.0        0.0    1.0480      -          -          -    *
                 28.00000  13.00000  -2.80000       0.0        0.0   0.38825      -          -          -    *
                 29.00000  13.00000  -2.80000       0.0        0.0  0.072881      -          -          -    *
                 30.00000  13.00000  -2.80000       0.0        0.0       0.0      -          -          -    *
                  0.00000  14.00000  -2.80000       0.0        0.0   0.66877      -          -          -    *
                  1.00000  14.00000  -2.80000       0.0        0.0    1.5387      -          -          -    *
                  2.00000  14.00000  -2.80000       0.0        0.0    2.9048      -          -          -    *
                  3.00000  14.00000  -2.80000  0.033333        0.0    4.8736      -          -          -    *
                  4.00000  14.00000  -2.80000   0.36667        0.0    7.6854      -          -          -    *
                  5.00000  14.00000  -2.80000   0.70000        0.0    11.691      -          -          -    *
                  6.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                  7.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                  8.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                  9.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 10.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 11.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 12.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 13.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 14.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 15.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 16.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 17.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 18.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 19.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 20.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 21.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 22.00000  14.00000  -2.80000            Point lies within an excavation.                    *
                 23.00000  14.00000  -2.80000  -0.53333        0.0    9.5402      -          -          -    *
                 24.00000  14.00000  -2.80000  -0.20000        0.0    6.1460      -          -          -    *
                 25.00000  14.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 26.00000  14.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                 27.00000  14.00000  -2.80000       0.0        0.0    1.0480      -          -          -    *
                 28.00000  14.00000  -2.80000       0.0        0.0   0.38825      -          -          -    *
                 29.00000  14.00000  -2.80000       0.0        0.0  0.072881      -          -          -    *
                 30.00000  14.00000  -2.80000       0.0        0.0       0.0      -          -          -    *
                  0.00000  15.00000  -2.80000       0.0        0.0   0.65254      -          -          -    *
                  1.00000  15.00000  -2.80000       0.0        0.0    1.5047      -          -          -    *
                  2.00000  15.00000  -2.80000       0.0        0.0    2.8371      -          -          -    *
                  3.00000  15.00000  -2.80000  0.012433 -0.0031083    4.7305      -          -          -    *
                  4.00000  15.00000  -2.80000   0.29277   -0.14638    7.2943      -          -          -    *
                  5.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                  6.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                  7.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                  8.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                  9.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 10.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 11.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 12.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 13.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 14.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 15.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 16.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 17.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 18.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 19.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 20.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 21.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 22.00000  15.00000  -2.80000       0.0   -0.53333    9.5402      -          -          -    *
                 23.00000  15.00000  -2.80000  -0.32831   -0.32831    8.7334      -          -          -    *
                 24.00000  15.00000  -2.80000  -0.16408  -0.054693    5.9236      -          -          -    *
                 25.00000  15.00000  -2.80000       0.0        0.0    3.7093      -          -          -    *
                 26.00000  15.00000  -2.80000       0.0        0.0    2.1054      -          -          -    *
                 27.00000  15.00000  -2.80000       0.0        0.0    1.0242      -          -          -    *
                 28.00000  15.00000  -2.80000       0.0        0.0   0.37766      -          -          -    *
                 29.00000  15.00000  -2.80000       0.0        0.0  0.069530      -          -          -    *
                 30.00000  15.00000  -2.80000       0.0        0.0       0.0      -          -          -    *
                  0.00000  16.00000  -2.80000       0.0        0.0   0.53383      -          -          -    *
                  1.00000  16.00000  -2.80000       0.0        0.0    1.2572      -          -          -    *
                  2.00000  16.00000  -2.80000       0.0        0.0    2.3580      -          -          -    *
                  3.00000  16.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                  4.00000  16.00000  -2.80000  0.054957  -0.082435    5.3495      -          -          -    *
                  5.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                  6.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                  7.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                  8.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                  9.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 10.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 11.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 12.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 13.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 14.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 15.00000  16.00000  -2.80000       0.0   -0.40000    6.1867      -          -          -    *
                 16.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 17.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 18.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 19.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 20.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 21.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 22.00000  16.00000  -2.80000       0.0   -0.20000    6.1460      -          -          -    *
                 23.00000  16.00000  -2.80000 -0.054693   -0.16408    5.9236      -          -          -    *
                 24.00000  16.00000  -2.80000       0.0        0.0    4.5947      -          -          -    *
                 25.00000  16.00000  -2.80000       0.0        0.0    3.0462      -          -          -    *
                 26.00000  16.00000  -2.80000       0.0        0.0    1.7595      -          -          -    *
                 27.00000  16.00000  -2.80000       0.0        0.0   0.85027      -          -          -    *
                 28.00000  16.00000  -2.80000       0.0        0.0   0.30050      -          -          -    *
                 29.00000  16.00000  -2.80000       0.0        0.0  0.046133      -          -          -    *
                 30.00000  16.00000  -2.80000       0.0        0.0       0.0      -          -          -    *
                  0.00000  17.00000  -2.80000       0.0        0.0   0.34719      -          -          -    *
                  1.00000  17.00000  -2.80000       0.0        0.0   0.87050      -          -          -    *
                  2.00000  17.00000  -2.80000       0.0        0.0    1.6454      -          -          -    *
                  3.00000  17.00000  -2.80000       0.0        0.0    2.5846      -          -          -    *
                  4.00000  17.00000  -2.80000       0.0        0.0    3.4401      -          -          -    *
                  5.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                  6.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                  7.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                  8.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                  9.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 10.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 11.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 12.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 13.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 14.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 15.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 16.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 17.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 18.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 19.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 20.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 21.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 22.00000  17.00000  -2.80000       0.0        0.0    3.8055      -          -          -    *
                 23.00000  17.00000  -2.80000       0.0        0.0    3.7093      -          -          -    *
                 24.00000  17.00000  -2.80000       0.0        0.0    3.0462      -          -          -    *
                 25.00000  17.00000  -2.80000       0.0        0.0    2.1054      -          -          -    *
                 26.00000  17.00000  -2.80000       0.0        0.0    1.2291      -          -          -    *
                 27.00000  17.00000  -2.80000       0.0        0.0   0.57612      -          -          -    *
                 28.00000  17.00000  -2.80000       0.0        0.0   0.18116      -          -          -    *
                 29.00000  17.00000  -2.80000       0.0        0.0  0.015309      -          -          -    *
                 30.00000  17.00000  -2.80000       0.0        0.0       0.0      -          -          -    *
                  0.00000  18.00000  -2.80000       0.0        0.0   0.16324      -          -          -    *
                  1.00000  18.00000  -2.80000       0.0        0.0   0.48129      -          -          -    *
                  2.00000  18.00000  -2.80000       0.0        0.0   0.95567      -          -          -    *
                  3.00000  18.00000  -2.80000       0.0        0.0    1.5047      -          -          -    *
                  4.00000  18.00000  -2.80000       0.0        0.0    1.9680      -          -          -    *
                  5.00000  18.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                  6.00000  18.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                  7.00000  18.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                  8.00000  18.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
                  9.00000  18.00000  -2.80000       0.0        0.0    2.1534      -          -          -    *
```

```
   Type/No.            Coordinates                          Displacements                               Angle of
                                                                                                          Line
 Name     Dist.     x         y         z           x          y         z     Horizontal   Horizontal   to x Axis
                                                                              dispalcement displacement
            10.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            11.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            12.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            13.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            14.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            15.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            16.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            17.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            18.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            19.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            20.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            21.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            22.00000  18.00000  -2.80000        0.0        0.0    2.1534      -            -            -     *
            23.00000  18.00000  -2.80000        0.0        0.0    2.1054      -            -            -     *
            24.00000  18.00000  -2.80000        0.0        0.0    1.7595      -            -            -     *
            25.00000  18.00000  -2.80000        0.0        0.0    1.2291      -            -            -     *
            26.00000  18.00000  -2.80000        0.0        0.0   0.70221      -            -            -     *
            27.00000  18.00000  -2.80000        0.0        0.0   0.30050      -            -            -     *
            28.00000  18.00000  -2.80000        0.0        0.0  0.069530      -            -            -     *
            29.00000  18.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            30.00000  18.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             0.00000  19.00000  -2.80000        0.0        0.0  0.038828      -            -            -     *
             1.00000  19.00000  -2.80000        0.0        0.0   0.18742      -            -            -     *
             2.00000  19.00000  -2.80000        0.0        0.0   0.43286      -            -            -     *
             3.00000  19.00000  -2.80000        0.0        0.0   0.71945      -            -            -     *
             4.00000  19.00000  -2.80000        0.0        0.0   0.95567      -            -            -     *
             5.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
             6.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
             7.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
             8.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
             9.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            10.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            11.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            12.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            13.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            14.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            15.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            16.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            17.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            18.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            19.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            20.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            21.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            22.00000  19.00000  -2.80000        0.0        0.0    1.0480      -            -            -     *
            23.00000  19.00000  -2.80000        0.0        0.0    1.0242      -            -            -     *
            24.00000  19.00000  -2.80000        0.0        0.0   0.85027      -            -            -     *
            25.00000  19.00000  -2.80000        0.0        0.0   0.57612      -            -            -     *
            26.00000  19.00000  -2.80000        0.0        0.0   0.30050      -            -            -     *
            27.00000  19.00000  -2.80000        0.0        0.0  0.099235      -            -            -     *
            28.00000  19.00000  -2.80000        0.0        0.0 0.0066088      -            -            -     *
            29.00000  19.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            30.00000  19.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             0.00000  20.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             1.00000  20.00000  -2.80000        0.0        0.0  0.030236      -            -            -     *
             2.00000  20.00000  -2.80000        0.0        0.0   0.12138      -            -            -     *
             3.00000  20.00000  -2.80000        0.0        0.0   0.24303      -            -            -     *
             4.00000  20.00000  -2.80000        0.0        0.0   0.34719      -            -            -     *
             5.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
             6.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
             7.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
             8.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
             9.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            10.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            11.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            12.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            13.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            14.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            15.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            16.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            17.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            18.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            19.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            20.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            21.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            22.00000  20.00000  -2.80000        0.0        0.0   0.38825      -            -            -     *
            23.00000  20.00000  -2.80000        0.0        0.0   0.37766      -            -            -     *
            24.00000  20.00000  -2.80000        0.0        0.0   0.30050      -            -            -     *
            25.00000  20.00000  -2.80000        0.0        0.0   0.18116      -            -            -     *
            26.00000  20.00000  -2.80000        0.0        0.0  0.069530      -            -            -     *
            27.00000  20.00000  -2.80000        0.0        0.0 0.0066088      -            -            -     *
            28.00000  20.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            29.00000  20.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            30.00000  20.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             0.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             1.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             2.00000  21.00000  -2.80000        0.0        0.0 0.0043377      -            -            -     *
             3.00000  21.00000  -2.80000        0.0        0.0  0.030236      -            -            -     *
             4.00000  21.00000  -2.80000        0.0        0.0  0.060060      -            -            -     *
             5.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
             6.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
             7.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
             8.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
             9.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            10.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            11.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            12.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            13.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            14.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            15.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            16.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            17.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            18.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            19.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            20.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            21.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            22.00000  21.00000  -2.80000        0.0        0.0  0.072881      -            -            -     *
            23.00000  21.00000  -2.80000        0.0        0.0  0.069530      -            -            -     *
            24.00000  21.00000  -2.80000        0.0        0.0  0.046133      -            -            -     *
            25.00000  21.00000  -2.80000        0.0        0.0  0.015309      -            -            -     *
            26.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            27.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            28.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            29.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            30.00000  21.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             0.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             1.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             2.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             3.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             4.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             5.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             6.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             7.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             8.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
             9.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            10.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            11.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            12.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            13.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            14.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            15.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            16.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            17.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            18.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            19.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            20.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            21.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            22.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            23.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            24.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            25.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
            26.00000  22.00000  -2.80000        0.0        0.0       0.0      -            -            -     *
```

```
      Type/No.               Coordinates                                   Displacements                          Angle of
                                                                                                                    Line
   Name      Dist.        x         y         z         x         y         z       Horizontal   Horizontal    to x Axis
                                                                                   dispalcement displacement
                 27.00000  22.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 28.00000  22.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 29.00000  22.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 30.00000  22.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  0.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  1.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  2.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  3.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  4.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  5.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  6.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  7.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  8.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  9.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 10.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 11.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 12.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 13.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 14.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 15.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 16.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 17.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 18.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 19.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 20.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 21.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 22.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 23.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 24.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 25.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 26.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 27.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 28.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 29.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 30.00000  23.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  0.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  1.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  2.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  3.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  4.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  5.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  6.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  7.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  8.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  9.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 10.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 11.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 12.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 13.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 14.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 15.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 16.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 17.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 18.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 19.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 20.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 21.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 22.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 23.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 24.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 25.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 26.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 27.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 28.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 29.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 30.00000  24.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  0.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  1.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  2.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  3.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  4.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  5.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  6.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  7.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  8.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                  9.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 10.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 11.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 12.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 13.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 14.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 15.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 16.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 17.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 18.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 19.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 20.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 21.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 22.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 23.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 24.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 25.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 26.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 27.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 28.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 29.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
                 30.00000  25.00000  -2.80000      0.0       0.0       0.0    -              -            -    *
 Line 1   Line 1   15.00000  -5.00000  -2.80000      0.0       0.0       0.0          0.0          0.0    90.000 *
            1.5000 15.00000  -3.50000  -2.80000      0.0       0.0       0.0          0.0          0.0    90.000 *
            3.0000 15.00000  -2.00000  -2.80000      0.0       0.0  0.056394          0.0          0.0    90.000 *
            4.5000 15.00000  -0.50000  -2.80000      0.0       0.0   0.60517          0.0          0.0    90.000 *
            6.0000 15.00000   1.00000  -2.80000      0.0       0.0    2.0199          0.0          0.0    90.000 *
            7.5000 15.00000   2.50000  -2.80000      0.0       0.0    4.6422          0.0          0.0    90.000 *
            9.0000 15.00000   4.00000  -2.80000      0.0    1.0000    9.4752       1.0000          0.0    90.000 *
            10.500 15.00000   5.50000  -2.80000              Point lies within an excavation.                   *
            12.000 15.00000   7.00000  -2.80000              Point lies within an excavation.                   *
            13.500 15.00000   8.50000  -2.80000              Point lies within an excavation.                   *
            15.000 15.00000  10.00000  -2.80000              Point lies within an excavation.                   *
            16.500 15.00000  11.50000  -2.80000              Point lies within an excavation.                   *
            18.000 15.00000  13.00000  -2.80000              Point lies within an excavation.                   *
            19.500 15.00000  14.50000  -2.80000      0.0  -0.70000    11.691     -0.70000          0.0    90.000 *
            21.000 15.00000  16.00000  -2.80000      0.0  -0.40000    6.1867     -0.40000          0.0    90.000 *
            22.500 15.00000  17.50000  -2.80000      0.0       0.0    2.9048          0.0          0.0    90.000 *
            24.000 15.00000  19.00000  -2.80000      0.0       0.0    1.0480          0.0          0.0    90.000 *
            25.500 15.00000  20.50000  -2.80000      0.0       0.0   0.19383          0.0          0.0    90.000 *
            27.000 15.00000  22.00000  -2.80000      0.0       0.0       0.0          0.0          0.0    90.000 *
            28.500 15.00000  23.50000  -2.80000      0.0       0.0       0.0          0.0          0.0    90.000 *
            30.000 15.00000  25.00000  -2.80000      0.0       0.0       0.0          0.0          0.0    90.000 *
 Line 2   Line 2   22.50000   4.40000  -2.80000      0.0   0.63333    10.799     -0.63333          0.0    270.00 *
           0.52000 22.50000   3.88000  -2.80000      0.0   0.46000    8.6849     -0.46000          0.0    270.00 *
            1.0400 22.50000   3.36000  -2.80000      0.0   0.28667    6.9085     -0.28667          0.0    270.00 *
            1.5600 22.50000   2.84000  -2.80000      0.0   0.11333    5.4568     -0.11333          0.0    270.00 *
            2.0800 22.50000   2.32000  -2.80000      0.0       0.0    4.2523          0.0          0.0    270.00 *
            2.6000 22.50000   1.80000  -2.80000      0.0       0.0    3.2464          0.0          0.0    270.00 *
            3.1200 22.50000   1.28000  -2.80000      0.0       0.0    2.4075          0.0          0.0    270.00 *
            3.6400 22.50000   0.76000  -2.80000      0.0       0.0    1.7213          0.0          0.0    270.00 *
            4.1600 22.50000   0.24000  -2.80000      0.0       0.0    1.1737          0.0          0.0    270.00 *
            4.6800 22.50000  -0.28000  -2.80000      0.0       0.0   0.75031          0.0          0.0    270.00 *
            5.2000 22.50000  -0.80000  -2.80000      0.0       0.0   0.43706          0.0          0.0    270.00 *
            5.7200 22.50000  -1.32000  -2.80000      0.0       0.0   0.21967          0.0          0.0    270.00 *
            6.2400 22.50000  -1.84000  -2.80000      0.0       0.0  0.083934          0.0          0.0    270.00 *
            6.7600 22.50000  -2.36000  -2.80000      0.0       0.0  0.015624          0.0          0.0    270.00 *
            7.2800 22.50000  -2.88000  -2.80000      0.0       0.0       0.0          0.0          0.0    270.00 *
            7.8000 22.50000  -3.40000  -2.80000      0.0       0.0       0.0          0.0          0.0    270.00 *
 Line 3   Line 3   22.20000  14.90000  -2.50000      0.0  -0.56667    9.9484     -0.56667          0.0    90.000 *
           0.54667 22.20000  15.44667  -2.50000      0.0  -0.38444    7.8680     -0.38444          0.0    90.000 *
            1.0933 22.20000  15.99333  -2.50000      0.0  -0.20222    6.1646     -0.20222          0.0    90.000 *
            1.6400 22.20000  16.54000  -2.50000      0.0 -0.020000    4.7803    -0.020000          0.0    90.000 *
            2.1867 22.20000  17.08667  -2.50000      0.0       0.0    3.6381          0.0          0.0    90.000 *
            2.7333 22.20000  17.63333  -2.50000      0.0       0.0    2.6903          0.0          0.0    90.000 *
            3.2800 22.20000  18.18000  -2.50000      0.0       0.0    1.9170          0.0          0.0    90.000 *
```

```
      Type/No.                Coordinates                                 Displacements                    Angle of
                                                                                                             Line
   Name      Dist.       x         y          z          x         y         z      Horizontal  Horizontal  to x Axis
                                                                                 dispalcement displacement
              3.8267  22.20000  18.72667  -2.50000       0.0       0.0    1.3017         0.0          0.0    90.000 *
              4.3733  22.20000  19.27333  -2.50000       0.0       0.0   0.82771         0.0          0.0    90.000 *
              4.9200  22.20000  19.82000  -2.50000       0.0       0.0   0.47865         0.0          0.0    90.000 *
              5.4667  22.20000  20.36667  -2.50000       0.0       0.0   0.23797         0.0          0.0    90.000 *
              6.0133  22.20000  20.91333  -2.50000       0.0       0.0  0.089134         0.0          0.0    90.000 *
              6.5600  22.20000  21.46000  -2.50000       0.0       0.0  0.015624         0.0          0.0    90.000 *
              7.1067  22.20000  22.00667  -2.50000       0.0       0.0       0.0         0.0          0.0    90.000 *
              7.6533  22.20000  22.55333  -2.50000       0.0       0.0       0.0         0.0          0.0    90.000 *
              8.2000  22.20000  23.10000  -2.50000       0.0       0.0       0.0         0.0          0.0    90.000 *
```

* Result includes imported displacement(s).

Specific Building Damage Results - Horizontal Displacements

```
Structure: 8 - 9 King's Mews | Sub-structure: Front Wall

 Dist.         Coordinates                            Displacements
          x        y        z      x      y     Horizontal   Horizontal
                                                displacement displacement
                                                 along the   perpendicular
                                                   Line        to Line
  [m]      [m]      [m]      [m]    [mm]  [mm]      [mm]        [mm]
    0.0 22.50000  4.40000 -2.80000  0.0 0.63333     -0.63333           0.0 d
0.52000 22.50000  3.88000 -2.80000  0.0 0.46000     -0.46000           0.0 d
 1.0400 22.50000  3.36000 -2.80000  0.0 0.28667     -0.28667           0.0 d
 1.5600 22.50000  2.84000 -2.80000  0.0 0.11333     -0.11333           0.0 d
 2.0800 22.50000  2.32000 -2.80000  0.0     0.0          0.0           0.0 d
 2.6000 22.50000  1.80000 -2.80000  0.0     0.0          0.0           0.0 d
 3.1200 22.50000  1.28000 -2.80000  0.0     0.0          0.0           0.0 d
 3.6400 22.50000  0.76000 -2.80000  0.0     0.0          0.0           0.0 d
 4.1600 22.50000  0.24000 -2.80000  0.0     0.0          0.0           0.0 d
 4.6800 22.50000 -0.28000 -2.80000  0.0     0.0          0.0           0.0 d
 5.2000 22.50000 -0.80000 -2.80000  0.0     0.0          0.0           0.0 d
 5.7200 22.50000 -1.32000 -2.80000  0.0     0.0          0.0           0.0 d
 6.2400 22.50000 -1.84000 -2.80000  0.0     0.0          0.0           0.0 d
 6.7600 22.50000 -2.36000 -2.80000  0.0     0.0          0.0           0.0 d
 7.2800 22.50000 -2.88000 -2.80000  0.0     0.0          0.0           0.0 d
 7.8000 22.50000 -3.40000 -2.80000  0.0     0.0          0.0           0.0 d
d - Displacements include imported displacements.
```

```
Structure: 12 - 13 King's Mews | Sub-structure: Front Wall

 Dist.         Coordinates                              Displacements
          x        y        z      x       y         Horizontal   Horizontal
                                                    displacement displacement
                                                     along the   perpendicular
                                                       Line        to Line
  [m]      [m]      [m]      [m]    [mm]    [mm]        [mm]        [mm]
    0.0 22.20000 14.90000 -2.50000  0.0  -0.56667     -0.56667           0.0 d
0.54667 22.20000 15.44667 -2.50000  0.0  -0.38444     -0.38444           0.0 d
 1.0933 22.20000 15.99333 -2.50000  0.0  -0.20222     -0.20222           0.0 d
 1.6400 22.20000 16.54000 -2.50000  0.0 -0.020000    -0.020000           0.0 d
 2.1867 22.20000 17.08667 -2.50000  0.0       0.0          0.0           0.0 d
 2.7333 22.20000 17.63333 -2.50000  0.0       0.0          0.0           0.0 d
 3.2800 22.20000 18.18000 -2.50000  0.0       0.0          0.0           0.0 d
 3.8267 22.20000 18.72667 -2.50000  0.0       0.0          0.0           0.0 d
 4.3733 22.20000 19.27333 -2.50000  0.0       0.0          0.0           0.0 d
 4.9200 22.20000 19.82000 -2.50000  0.0       0.0          0.0           0.0 d
 5.4667 22.20000 20.36667 -2.50000  0.0       0.0          0.0           0.0 d
 6.0133 22.20000 20.91333 -2.50000  0.0       0.0          0.0           0.0 d
 6.5600 22.20000 21.46000 -2.50000  0.0       0.0          0.0           0.0 d
 7.1067 22.20000 22.00667 -2.50000  0.0       0.0          0.0           0.0 d
 7.6533 22.20000 22.55333 -2.50000  0.0       0.0          0.0           0.0 d
 8.2000 22.20000 23.10000 -2.50000  0.0       0.0          0.0           0.0 d
d - Displacements include imported displacements.
```

Specific Building Damage Results - Vertical Displacements

```
Structure: 8 - 9 King's Mews | Sub-structure: Front Wall

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

Vertical Offset 1
    0.0 22.50000  4.40000 -2.80000   10.799 d
0.52000 22.50000  3.88000 -2.80000   8.6849 d
 1.0400 22.50000  3.36000 -2.80000   6.9085 d
 1.5600 22.50000  2.84000 -2.80000   5.4568 d
 2.0800 22.50000  2.32000 -2.80000   4.2523 d
 2.6000 22.50000  1.80000 -2.80000   3.2464 d
 3.1200 22.50000  1.28000 -2.80000   2.4075 d
 3.6400 22.50000  0.76000 -2.80000   1.7213 d
 4.1600 22.50000  0.24000 -2.80000   1.1737 d
 4.6800 22.50000 -0.28000 -2.80000  0.75031 d
 5.2000 22.50000 -0.80000 -2.80000  0.43706 d
 5.7200 22.50000 -1.32000 -2.80000  0.21967 d
 6.2400 22.50000 -1.84000 -2.80000 0.083934 d
 6.7600 22.50000 -2.36000 -2.80000 0.015624 d
 7.2800 22.50000 -2.88000 -2.80000      0.0 d
 7.8000 22.50000 -3.40000 -2.80000      0.0 d
d - Displacements include imported displacements.
```

```
Structure: 12 - 13 King's Mews | Sub-structure: Front Wall

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

Vertical Offset 1
    0.0 22.20000 14.90000 -2.50000   9.9484 d
0.54667 22.20000 15.44667 -2.50000   7.8680 d
 1.0933 22.20000 15.99333 -2.50000   6.1646 d
 1.6400 22.20000 16.54000 -2.50000   4.7803 d
 2.1867 22.20000 17.08667 -2.50000   3.6381 d
 2.7333 22.20000 17.63333 -2.50000   2.6903 d
 3.2800 22.20000 18.18000 -2.50000   1.9170 d
 3.8267 22.20000 18.72667 -2.50000   1.3017 d
 4.3733 22.20000 19.27333 -2.50000  0.82771 d
 4.9200 22.20000 19.82000 -2.50000  0.47865 d
 5.4667 22.20000 20.36667 -2.50000  0.23797 d
 6.0133 22.20000 20.91333 -2.50000 0.089134 d
 6.5600 22.20000 21.46000 -2.50000 0.015624 d
 7.1067 22.20000 22.00667 -2.50000      0.0 d
 7.6533 22.20000 22.55333 -2.50000      0.0 d
 8.2000 22.20000 23.10000 -2.50000      0.0 d
d - Displacements include imported displacements.
```

Specific Building Damage Results - All Segments

```
Structure: 8 - 9 King's Mews | Sub-structure: Front Wall

Vertical Offset     Segment      Start Length Curvature Deflection  Average     Max.     Maximum      Maximum       Min.     Damage
 from Line for                                            Ratio    Horizontal Tensile  Gradient of  Gradient of  Radius of Category
   Vertical                                                          Strain    Strain   Horizontal    Vertical   Curvature
   Movement                                                                            Displacement Displacement
 Calculations                                                                              Curve        Curve
      [m]                     [m]   [m]                   [%]        [%]       [%]                                 [m]
      0.0                 1    0.0 5.7200 Hogging      0.047953   0.011072 0.052031    -333.22E-6    0.0040645    793.08 1 (Very
                                                                                                                          Slight)
Tensile horizontal strains are +ve, compressive horizontal strains are -ve.
```

```
Vertical Offset     Segment     Start Length Curvature Deflection  Average     Max.     Maximum      Maximum      Min.     Damage
 from Line for                                           Ratio    Horizontal Tensile  Gradient of  Gradient of  Radius of Category
   Vertical                                                         Strain    Strain   Horizontal    Vertical   Curvature
   Movement                                                                          Displacement Displacement

Structure: 12 - 13 King's Mews | Sub-structure: Front Wall

Vertical Offset     Segment     Start Length Curvature Deflection  Average     Max.     Maximum      Maximum      Min.       Damage
 from Line for                                           Ratio    Horizontal Tensile  Gradient of  Gradient of  Radius of   Category
   Vertical                                                         Strain    Strain   Horizontal    Vertical   Curvature
   Movement                                                                          Displacement Displacement
 Calculations                                                                            Curve        Curve
     [m]                          [m]   [m]                 [%]        [%]       [%]                                  [m]
     0.0                     1    0.0 5.4667 Hogging      0.044348   0.010366 0.047914   -333.22E-6    0.0038044    764.00             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: 8 - 9 King's Mews | Sub-structure: Front Wall

  Vertical   Deflection  Average     Maximum   Maximum      Max.     Maximum      Maximum       Min.      Min.      Damage Category
Offset from    Ratio    Horizontal    Slope   Settlement  Tensile  Gradient of  Gradient of  Radius of Radius of
  Line for                Strain                          Strain   Horizontal    Vertical    Curvature Curvature
  Vertical                                                        Displacement Displacement  (Hogging) (Sagging)
  Movement                                                           Curve        Curve
Calculations
    [m]          [%]        [%]                 [mm]       [%]                                   [m]       [m]
    0.0        0.047953   0.011072 0.0040645     10.799 0.052031   -333.22E-6    0.0040645    793.08          - 1 (Very Slight)

Structure: 12 - 13 King's Mews | Sub-structure: Front Wall

  Vertical   Deflection  Average     Maximum   Maximum      Max.     Maximum      Maximum       Min.      Min.      Damage Category
Offset from    Ratio    Horizontal    Slope   Settlement  Tensile  Gradient of  Gradient of  Radius of Radius of
  Line for                Strain                          Strain   Horizontal    Vertical    Curvature Curvature
  Vertical                                                        Displacement Displacement  (Hogging) (Sagging)
  Movement                                                           Curve        Curve
Calculations
    [m]          [%]        [%]                 [mm]       [%]                                   [m]       [m]
    0.0        0.044348   0.010366 0.0038044     9.9484 0.047914   -333.22E-6    0.0038044    764.00          - 0 (Negligible)
```

Specific Building Damage Results - Critical Segments within Each Structure

```
Structure Name     Parameter       Critical     Critical Start  End   Curvature  Maximum   Maximum     Max.     Min.      Min.          Damage Category
                                 Sub-Structure  Segment                           Slope   Settlement Tensile Radius of Radius of
                                                                                                     Strain  Curvature Curvature
                                                                                                            (Hogging) (Sagging)
                                                             [m]   [m]                       [mm]      [%]      [m]       [m]
8 - 9 King's    Maximum Slope   Front Wall            1   0.0 5.7200 Hogging   0.0040645     10.799 0.052031   793.08          - 1 (Very Slight)
Mews
                Maximum         Front Wall            1   0.0 5.7200 Hogging   0.0040645     10.799 0.052031   793.08          - 1 (Very Slight)
                Settlement
                Max. Tensile    Front Wall            1   0.0 5.7200 Hogging   0.0040645     10.799 0.052031   793.08          - 1 (Very Slight)
                Strain
                Min. Radius of  Front Wall            1   0.0 5.7200 Hogging   0.0040645     10.799 0.052031   793.08          - 1 (Very Slight)
                Curvature
                (Hogging)
                Min. Radius of                        -     -      - -                 -          -        -        -          - -
                Curvature
                (Sagging)
12 - 13 King's  Maximum Slope   Front Wall            1   0.0 5.4667 Hogging   0.0038044     9.9484 0.047914   764.00          - 0 (Negligible)
Mews
                Maximum         Front Wall            1   0.0 5.4667 Hogging   0.0038044     9.9484 0.047914   764.00          - 0 (Negligible)
                Settlement
                Max. Tensile    Front Wall            1   0.0 5.4667 Hogging   0.0038044     9.9484 0.047914   764.00          - 0 (Negligible)
                Strain
                Min. Radius of  Front Wall            1   0.0 5.4667 Hogging   0.0038044     9.9484 0.047914   764.00          - 0 (Negligible)
                Curvature
                (Hogging)
                Min. Radius of                        -     -      - -                 -          -        -        -          - -
                Curvature
                (Sagging)
```

Specific Building Damage Results - All Combined Segments

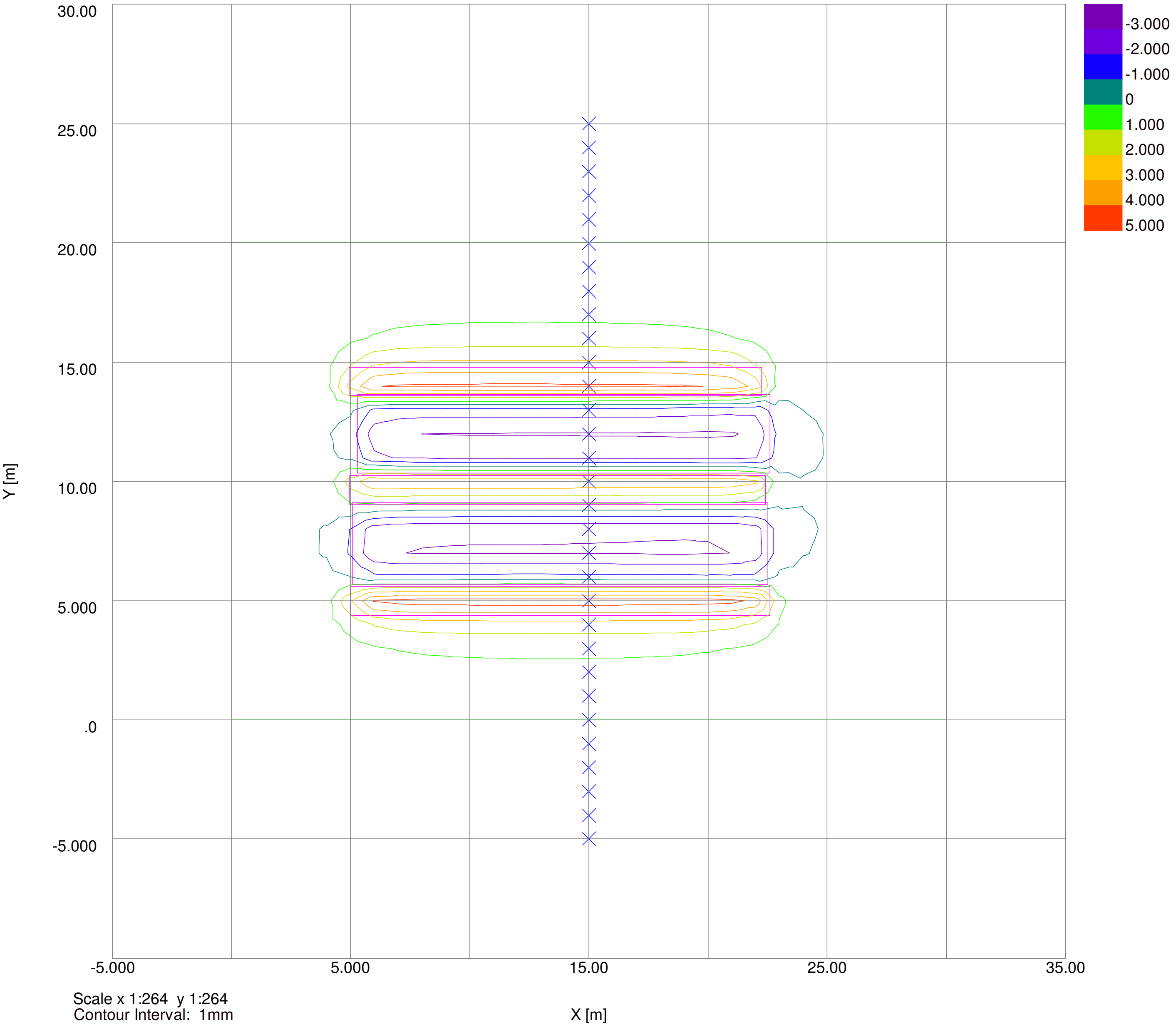
```
Structure: 8 - 9 King's Mews | Sub-structure: Front Wall

  Vertical   Combined Start Length Curvature Deflection  Average     Max.     Damage Category
Offset from  Segment                            Ratio    Horizontal Tensile
  Line for                                                 Strain   Strain
  Vertical
  Movement
Calculations
    [m]               [m]   [m]                 [%]        [%]       [%]
No structures have segments combined.

Structure: 12 - 13 King's Mews | Sub-structure: Front Wall

  Vertical   Combined Start Length Curvature Deflection  Average     Max.     Damage Category
Offset from  Segment                            Ratio    Horizontal Tensile
  Line for                                                 Strain   Strain
  Vertical
  Movement
Calculations
    [m]               [m]   [m]                 [%]        [%]       [%]
No structures have segments combined.
```

Settlement Contours : Grid 2 at -2.5000m



Scale x 1:264 y 1:264
Contour Interval: 1mm

Oasys

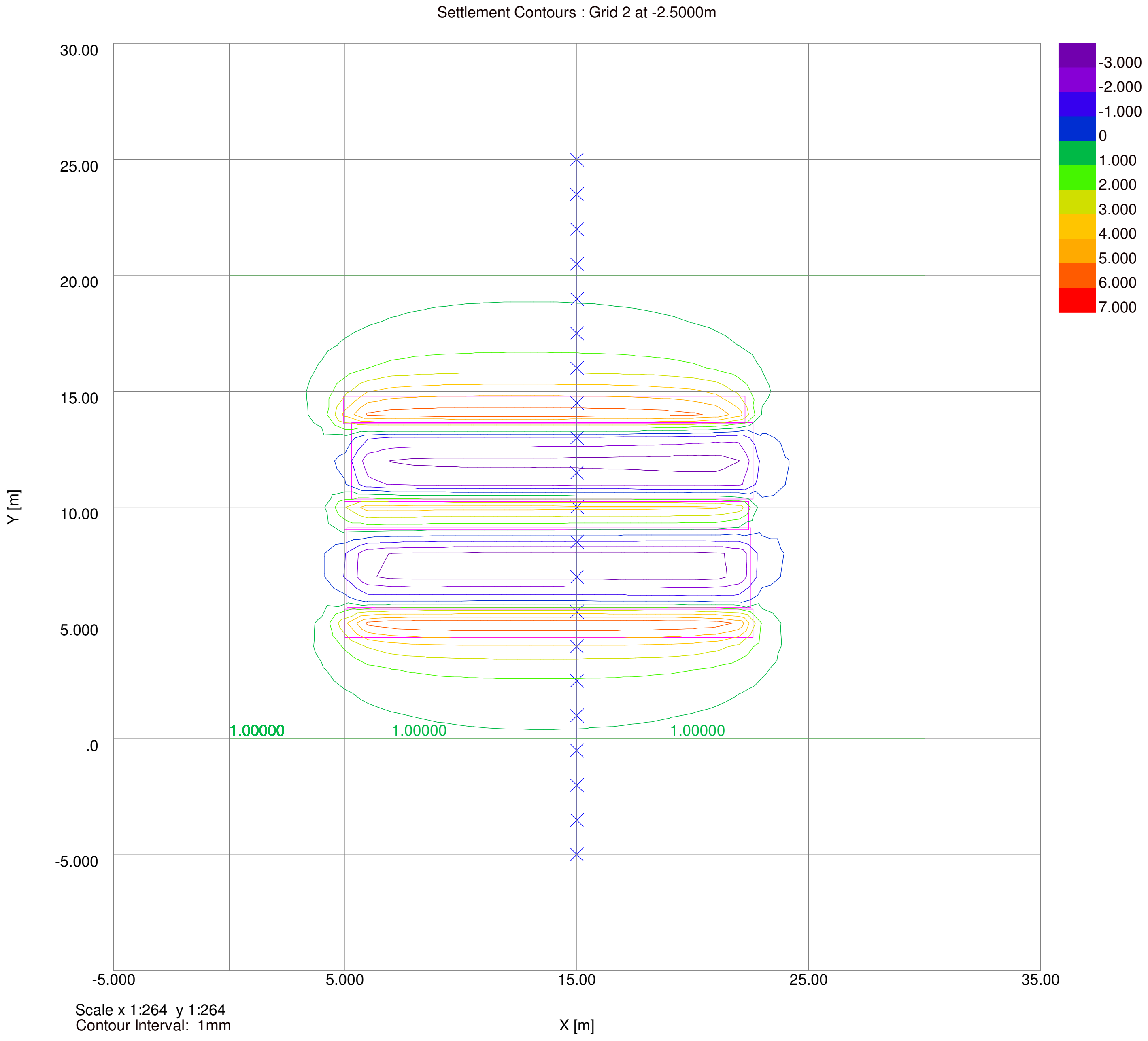
GEA LIMITED
(GEOTECHNICAL &ENV ASSOC)

10-11 King's Mews, London WC1N 2ES
Long Term

Job No.	Sheet No.	Rev.
J15275		

Drg. Ref.

Made by	Date	Checked
MC		



Analysis Options

```
Analysis: Boussinesq
Global Poisson's ratio: 0.20
Maximum allowable ratio between values of E:  1.5
Horizontal rigid boundary level: -50.00  [m OD]
Displacements at area centroids calculated.
```

Soil ProfilesUndrained

```
Layer  Level at   Number of     Youngs Modulus    Poissons Non-linear
         top    intermediate                       ratio     curve
                displacement
                   levels
                                 Top      Btm
        [mOD]                  [kN/m²]  [kN/m²]
    1      0.0              5   12000.   12000.  0.20000        None
    2  -3.9000             10   32000.   32000.  0.20000        None
    3  -6.0000             50   37500.   95000.  0.50000        None
    4  -15.000             20   95000.   95000.  0.50000        None
```

Soil ProfilesDrained

```
Layer  Level at   Number of     Youngs Modulus    Poissons Non-linear
         top    intermediate                       ratio     curve
                displacement
                   levels
                                 Top      Btm
        [mOD]                  [kN/m²]  [kN/m²]
    1      0.0              5   12000.   12000.  0.20000        None
    2  -3.9000             10   32000.   32000.  0.20000        None
    3  -6.0000             50   22500.   57000.  0.20000        None
    4  -15.000             20   57000.   57000.  0.20000        None
```

Soil Zones

```
Zone    Name     X coordinates     Y coordinates       Profile
                 min      max      min      max
                 [m]      [m]      [m]      [m]
   1      Soil      0.0   30.000      0.0   20.000             Drained
     Zone 1
```

Load Data

```
Load      Name                                             Load position                                                                                         Load value
ref.                 Shape     Orientation        Centre of load      Angle of  Width x  Length y               Polygon                             Number    Normal       Tangential
                                   of               (Global)          local x     or                          Coordinates          Rectangle     of     (local z) (local x) (local y)
                                 Plane        X          Y        Z     from    Radius                                            tolerance rectangles
                                                                   (level)
                                             [m]        [m]      [m]   [Degrees]   [m]      [m]                  [m]                                      [kN/m²]   [kN/m²]   [kN/m²]
    1 Wall 1       Rectangular  Horizontal   13.800   5.0000  -3.9000       0.0   17.600   1.2000 N/A                                    N/A          1    129.00       0.0       0.0
    2 Wall 3       Rectangular  Horizontal   13.700   9.6500  -3.9000       0.0   17.450   1.2000 N/A                                    N/A          1    138.00       0.0       0.0
    3 Wall 2       Rectangular  Horizontal   13.600   14.200  -3.9000       0.0   17.300   1.2000 N/A                                    N/A          1    134.00       0.0       0.0
    4 Unload 10    Rectangular  Horizontal   13.800   7.4000  -3.9000       0.0   17.450   3.4500 N/A                                    N/A          1   -59.500       0.0       0.0
    5 Unload 11    Rectangular  Horizontal   13.950   12.000  -3.9000       0.0   17.300   3.3000 N/A                                    N/A          1   -59.500       0.0       0.0
```

Displacement Data

```
                       Direction              Line/Line for extrusion                 No. of intrvls           No. of intrvls            Show
Ref.   Type     Name      of           First point               Second point           across     Extrusion    along      Calculate Detailed
                       Extrusion    X        Y     Z(level)    X        Y    Z(level) extrusion/line   Depth     extrusion              results
                                   [m]      [m]      [m]      [m]      [m]      [m]                     [m]
   1   Grid   Grid 1  Global X      0.0      0.0      0.0      N/A   25.000      0.0              25   30.000              30       Yes       Yes
   2   Grid   Grid 2  Global X      0.0      0.0  -2.5000      N/A   25.000  -2.5000              25   30.000              30       Yes       Yes
   3   Line   Line 1       N/A   15.000  -5.0000  -2.8000   15.000   25.000  -2.8000              20      N/A             N/A       Yes       Yes
```

Warnings

```
1     The following displacement locations lie wide of all soil zones. The first soil
     Coordinates [19.000, [20.000, [21.000, [22.000, [23.000, [24.000, [25.000, [26.000, [27.000, [28.000, [29.000, [30.000, [0.000, [1.000, [2.000, [3.000, [4.000, [5.000, [6.000, [7.000,
[8.000, [9.000, [10.000, [11.000, [12.000,
      profile will be used.

 Displacement Data                                                           Index (m)
 1       21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000,  21.000, 21.000, 21.000, 21.000, 21.000, 21.000, 21.000, 21.000, 21.000,
21.000, 21.000,  21.000,  21.000,
                                                                                                                          0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
  0.000]
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 0.000]
 0.000]
 0.000]
 0.000]
 0.000]
 0.000]
 0.000]
 0.000]
  0.000]
  0.000]
 The
                                                                                                                               1        1        1        1        1        1        1        1        1
1        1        1       1       1       1       1       1       1       1       1       1       1        1        1 same warning

applies to

other

displacement

points. Only

25 are

listed

here.
```

RESULTS FOR GRIDS

```
Analysis: Boussinesq
Global Poisson's ratio: 0.20
Horizontal rigid boundary level: -50.00  [m OD]

The maximum displacement difference between
Boussinesq method (6.8516mm) and Mindlin method (1.6457mm)
occurs at point X=19.000m Y=5.0000m Level 0.0mOD and is 5.2059mm

     Name                   Location                                                  Stresses
                    X            Y          Z[Level]        Z         Calc Level  Vert Stress   Sum Princ   Vert Strain
                   [m]          [m]          [mOD]        [mm]          [mOD]       [kN/m²]      [kN/m²]       [-]
```

10-11 King's Mews, London WC1N 2ES

Long Term

Name	Location					Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
Wall 1	13.80000	5.00000	-3.90000	7.0029	-3.9955	128.75	273.54	0.0031185
Wall 3	13.70000	9.65000	-3.90000	5.0066	-3.9955	137.67	286.86	0.0033697
Wall 2	13.60000	14.20000	-3.90000	7.1656	-3.9955	133.71	282.97	0.0032457
Unload 10	13.80000	7.40000	-3.90000	-3.5931	-3.9955	-59.488	-133.67	-0.0013954
Unload 11	13.95000	12.00000	-3.90000	-3.2827	-3.9955	-59.487	-133.22	-0.0013982
Grid 1	0.00000	0.00000	0.00000	0.28082	-0.32500	0.0	0.0	0.0
	1.00000	0.00000	0.00000	0.32278	-0.32500	0.0	0.0	0.0
	2.00000	0.00000	0.00000	0.37385	-0.32500	0.0	0.0	0.0
	3.00000	0.00000	0.00000	0.43497	-0.32500	0.0	0.0	0.0
	4.00000	0.00000	0.00000	0.50517	-0.32500	0.0	0.0	0.0
	5.00000	0.00000	0.00000	0.58050	-0.32500	0.0	0.0	0.0
	6.00000	0.00000	0.00000	0.65450	-0.32500	0.0	0.0	0.0
	7.00000	0.00000	0.00000	0.72077	-0.32500	0.0	0.0	0.0
	8.00000	0.00000	0.00000	0.77552	-0.32500	0.0	0.0	0.0
	9.00000	0.00000	0.00000	0.81793	-0.32500	0.0	0.0	0.0
	10.00000	0.00000	0.00000	0.84907	-0.32500	0.0	0.0	0.0
	11.00000	0.00000	0.00000	0.87056	-0.32500	0.0	0.0	0.0
	12.00000	0.00000	0.00000	0.88390	-0.32500	0.0	0.0	0.0
	13.00000	0.00000	0.00000	0.89016	-0.32500	0.0	0.0	0.0
	14.00000	0.00000	0.00000	0.88996	-0.32500	0.0	0.0	0.0
	15.00000	0.00000	0.00000	0.88347	-0.32500	0.0	0.0	0.0
	16.00000	0.00000	0.00000	0.87042	-0.32500	0.0	0.0	0.0
	17.00000	0.00000	0.00000	0.85006	-0.32500	0.0	0.0	0.0
	18.00000	0.00000	0.00000	0.82124	-0.32500	0.0	0.0	0.0
	19.00000	0.00000	0.00000	0.78243	-0.32500	0.0	0.0	0.0
	20.00000	0.00000	0.00000	0.73222	-0.32500	0.0	0.0	0.0
	21.00000	0.00000	0.00000	0.67021	-0.32500	0.0	0.0	0.0
	22.00000	0.00000	0.00000	0.59839	-0.32500	0.0	0.0	0.0
	23.00000	0.00000	0.00000	0.52182	-0.32500	0.0	0.0	0.0
	24.00000	0.00000	0.00000	0.44728	-0.32500	0.0	0.0	0.0
	25.00000	0.00000	0.00000	0.38039	-0.32500	0.0	0.0	0.0
	26.00000	0.00000	0.00000	0.32377	-0.32500	0.0	0.0	0.0
	27.00000	0.00000	0.00000	0.27736	-0.32500	0.0	0.0	0.0
	28.00000	0.00000	0.00000	0.23972	-0.32500	0.0	0.0	0.0
	29.00000	0.00000	0.00000	0.20910	-0.32500	0.0	0.0	0.0
	30.00000	0.00000	0.00000	0.18391	-0.32500	0.0	0.0	0.0
	0.00000	1.00000	0.00000	0.30088	-0.32500	0.0	0.0	0.0
	1.00000	1.00000	0.00000	0.35165	-0.32500	0.0	0.0	0.0
	2.00000	1.00000	0.00000	0.41721	-0.32500	0.0	0.0	0.0
	3.00000	1.00000	0.00000	0.50131	-0.32500	0.0	0.0	0.0
	4.00000	1.00000	0.00000	0.60469	-0.32500	0.0	0.0	0.0
	5.00000	1.00000	0.00000	0.72070	-0.32500	0.0	0.0	0.0
	6.00000	1.00000	0.00000	0.83505	-0.32500	0.0	0.0	0.0
	7.00000	1.00000	0.00000	0.93359	-0.32500	0.0	0.0	0.0
	8.00000	1.00000	0.00000	1.0101	-0.32500	0.0	0.0	0.0
	9.00000	1.00000	0.00000	1.0655	-0.32500	0.0	0.0	0.0
	10.00000	1.00000	0.00000	1.1040	-0.32500	0.0	0.0	0.0
	11.00000	1.00000	0.00000	1.1294	-0.32500	0.0	0.0	0.0
	12.00000	1.00000	0.00000	1.1446	-0.32500	0.0	0.0	0.0
	13.00000	1.00000	0.00000	1.1516	-0.32500	0.0	0.0	0.0
	14.00000	1.00000	0.00000	1.1512	-0.32500	0.0	0.0	0.0
	15.00000	1.00000	0.00000	1.1437	-0.32500	0.0	0.0	0.0
	16.00000	1.00000	0.00000	1.1287	-0.32500	0.0	0.0	0.0
	17.00000	1.00000	0.00000	1.1049	-0.32500	0.0	0.0	0.0
	18.00000	1.00000	0.00000	1.0702	-0.32500	0.0	0.0	0.0
	19.00000	1.00000	0.00000	1.0214	-0.32500	0.0	0.0	0.0
	20.00000	1.00000	0.00000	0.95435	-0.32500	0.0	0.0	0.0
	21.00000	1.00000	0.00000	0.86594	-0.32500	0.0	0.0	0.0
	22.00000	1.00000	0.00000	0.75765	-0.32500	0.0	0.0	0.0
	23.00000	1.00000	0.00000	0.63937	-0.32500	0.0	0.0	0.0
	24.00000	1.00000	0.00000	0.52654	-0.32500	0.0	0.0	0.0
	25.00000	1.00000	0.00000	0.43083	-0.32500	0.0	0.0	0.0
	26.00000	1.00000	0.00000	0.35535	-0.32500	0.0	0.0	0.0
	27.00000	1.00000	0.00000	0.29753	-0.32500	0.0	0.0	0.0
	28.00000	1.00000	0.00000	0.25319	-0.32500	0.0	0.0	0.0
	29.00000	1.00000	0.00000	0.21859	-0.32500	0.0	0.0	0.0
	30.00000	1.00000	0.00000	0.19098	-0.32500	0.0	0.0	0.0
	0.00000	2.00000	0.00000	0.31852	-0.32500	0.0	0.0	0.0
	1.00000	2.00000	0.00000	0.37860	-0.32500	0.0	0.0	0.0
	2.00000	2.00000	0.00000	0.46205	-0.32500	0.0	0.0	0.0
	3.00000	2.00000	0.00000	0.58014	-0.32500	0.0	0.0	0.0
	4.00000	2.00000	0.00000	0.74205	-0.32500	0.0	0.0	0.0
	5.00000	2.00000	0.00000	0.93893	-0.32500	0.0	0.0	0.0
	6.00000	2.00000	0.00000	1.1335	-0.32500	0.0	0.0	0.0
	7.00000	2.00000	0.00000	1.2890	-0.32500	0.0	0.0	0.0
	8.00000	2.00000	0.00000	1.3974	-0.32500	0.0	0.0	0.0
	9.00000	2.00000	0.00000	1.4687	-0.32500	0.0	0.0	0.0
	10.00000	2.00000	0.00000	1.5146	-0.32500	0.0	0.0	0.0
	11.00000	2.00000	0.00000	1.5432	-0.32500	0.0	0.0	0.0
	12.00000	2.00000	0.00000	1.5598	-0.32500	0.0	0.0	0.0
	13.00000	2.00000	0.00000	1.5670	-0.32500	0.0	0.0	0.0
	14.00000	2.00000	0.00000	1.5662	-0.32500	0.0	0.0	0.0
	15.00000	2.00000	0.00000	1.5578	-0.32500	0.0	0.0	0.0
	16.00000	2.00000	0.00000	1.5412	-0.32500	0.0	0.0	0.0
	17.00000	2.00000	0.00000	1.5144	-0.32500	0.0	0.0	0.0
	18.00000	2.00000	0.00000	1.4741	-0.32500	0.0	0.0	0.0
	19.00000	2.00000	0.00000	1.4142	-0.32500	0.0	0.0	0.0
	20.00000	2.00000	0.00000	1.3251	-0.32500	0.0	0.0	0.0
	21.00000	2.00000	0.00000	1.1948	-0.32500	0.0	0.0	0.0
	22.00000	2.00000	0.00000	1.0185	-0.32500	0.0	0.0	0.0
	23.00000	2.00000	0.00000	0.81601	-0.32500	0.0	0.0	0.0
	24.00000	2.00000	0.00000	0.62980	-0.32500	0.0	0.0	0.0
	25.00000	2.00000	0.00000	0.48655	-0.32500	0.0	0.0	0.0
	26.00000	2.00000	0.00000	0.38526	-0.32500	0.0	0.0	0.0
	27.00000	2.00000	0.00000	0.31442	-0.32500	0.0	0.0	0.0
	28.00000	2.00000	0.00000	0.26356	-0.32500	0.0	0.0	0.0
	29.00000	2.00000	0.00000	0.22562	-0.32500	0.0	0.0	0.0
	30.00000	2.00000	0.00000	0.19618	-0.32500	0.0	0.0	0.0
	0.00000	3.00000	0.00000	0.33131	-0.32500	0.0	0.0	0.0
	1.00000	3.00000	0.00000	0.39892	-0.32500	0.0	0.0	0.0
	2.00000	3.00000	0.00000	0.50049	-0.32500	0.0	0.0	0.0
	3.00000	3.00000	0.00000	0.66390	-0.32500	0.0	0.0	0.0
	4.00000	3.00000	0.00000	0.93190	-0.32500	0.0	0.0	0.0
	5.00000	3.00000	0.00000	1.3167	-0.32500	0.0	0.0	0.0
	6.00000	3.00000	0.00000	1.6978	-0.32500	0.0	0.0	0.0
	7.00000	3.00000	0.00000	1.9561	-0.32500	0.0	0.0	0.0
	8.00000	3.00000	0.00000	2.1063	-0.32500	0.0	0.0	0.0
	9.00000	3.00000	0.00000	2.1926	-0.32500	0.0	0.0	0.0
	10.00000	3.00000	0.00000	2.2433	-0.32500	0.0	0.0	0.0
	11.00000	3.00000	0.00000	2.2733	-0.32500	0.0	0.0	0.0
	12.00000	3.00000	0.00000	2.2899	-0.32500	0.0	0.0	0.0
	13.00000	3.00000	0.00000	2.2967	-0.32500	0.0	0.0	0.0
	14.00000	3.00000	0.00000	2.2954	-0.32500	0.0	0.0	0.0
	15.00000	3.00000	0.00000	2.2862	-0.32500	0.0	0.0	0.0
	16.00000	3.00000	0.00000	2.2685	-0.32500	0.0	0.0	0.0
	17.00000	3.00000	0.00000	2.2400	-0.32500	0.0	0.0	0.0
	18.00000	3.00000	0.00000	2.1960	-0.32500	0.0	0.0	0.0
	19.00000	3.00000	0.00000	2.1268	-0.32500	0.0	0.0	0.0
	20.00000	3.00000	0.00000	2.0136	-0.32500	0.0	0.0	0.0
	21.00000	3.00000	0.00000	1.8212	-0.32500	0.0	0.0	0.0
	22.00000	3.00000	0.00000	1.5065	-0.32500	0.0	0.0	0.0
	23.00000	3.00000	0.00000	1.1011	-0.32500	0.0	0.0	0.0
	24.00000	3.00000	0.00000	0.75748	-0.32500	0.0	0.0	0.0
	25.00000	3.00000	0.00000	0.53819	-0.32500	0.0	0.0	0.0
	26.00000	3.00000	0.00000	0.40652	-0.32500	0.0	0.0	0.0
	27.00000	3.00000	0.00000	0.32412	-0.32500	0.0	0.0	0.0
	28.00000	3.00000	0.00000	0.26886	-0.32500	0.0	0.0	0.0
	29.00000	3.00000	0.00000	0.22918	-0.32500	0.0	0.0	0.0
	30.00000	3.00000	0.00000	0.19902	-0.32500	0.0	0.0	0.0
	0.00000	4.00000	0.00000	0.33683	-0.32500	0.0	0.0	0.0
	1.00000	4.00000	0.00000	0.40637	-0.32500	0.0	0.0	0.0
	2.00000	4.00000	0.00000	0.51677	-0.32500	0.0	0.0	0.0
	3.00000	4.00000	0.00000	0.71874	-0.32500	0.0	0.0	0.0
	4.00000	4.00000	0.00000	1.1495	-0.32500	0.0	0.0	0.0
	5.00000	4.00000	0.00000	2.1252	-0.32500	0.0	0.0	0.0
	6.00000	4.00000	0.00000	3.0928	-0.32500	0.0	0.0	0.0
	7.00000	4.00000	0.00000	3.5059	-0.32500	0.0	0.0	0.0
	8.00000	4.00000	0.00000	3.6879	-0.32500	0.0	0.0	0.0
	9.00000	4.00000	0.00000	3.7781	-0.32500	0.0	0.0	0.0
	10.00000	4.00000	0.00000	3.8273	-0.32500	0.0	0.0	0.0
	11.00000	4.00000	0.00000	3.8550	-0.32500	0.0	0.0	0.0

Name	Location					Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	12.00000	4.00000	0.00000	3.8698	-0.32500	0.0	0.0	0.0
	13.00000	4.00000	0.00000	3.8753	-0.32500	0.0	0.0	0.0
	14.00000	4.00000	0.00000	3.8731	-0.32500	0.0	0.0	0.0
	15.00000	4.00000	0.00000	3.8635	-0.32500	0.0	0.0	0.0
	16.00000	4.00000	0.00000	3.8457	-0.32500	0.0	0.0	0.0
	17.00000	4.00000	0.00000	3.8174	-0.32500	0.0	0.0	0.0
	18.00000	4.00000	0.00000	3.7736	-0.32500	0.0	0.0	0.0
	19.00000	4.00000	0.00000	3.7029	-0.32500	0.0	0.0	0.0
	20.00000	4.00000	0.00000	3.5772	-0.32500	0.0	0.0	0.0
	21.00000	4.00000	0.00000	3.3216	-0.32500	0.0	0.0	0.0
	22.00000	4.00000	0.00000	2.7285	-0.32500	0.0	0.0	0.0
	23.00000	4.00000	0.00000	1.5838	-0.32500	0.0	0.0	0.0
	24.00000	4.00000	0.00000	0.86866	-0.32500	0.0	0.0	0.0
	25.00000	4.00000	0.00000	0.55898	-0.32500	0.0	0.0	0.0
	26.00000	4.00000	0.00000	0.40757	-0.32500	0.0	0.0	0.0
	27.00000	4.00000	0.00000	0.32206	-0.32500	0.0	0.0	0.0
	28.00000	4.00000	0.00000	0.26728	-0.32500	0.0	0.0	0.0
	29.00000	4.00000	0.00000	0.22858	-0.32500	0.0	0.0	0.0
	30.00000	4.00000	0.00000	0.19921	-0.32500	0.0	0.0	0.0
	0.00000	5.00000	0.00000	0.33430	-0.32500	0.0	0.0	0.0
	1.00000	5.00000	0.00000	0.39690	-0.32500	0.0	0.0	0.0
	2.00000	5.00000	0.00000	0.49377	-0.32500	0.0	0.0	0.0
	3.00000	5.00000	0.00000	0.67507	-0.32500	0.0	0.0	0.0
	4.00000	5.00000	0.00000	1.1337	-0.32500	0.0	0.0	0.0
	5.00000	5.00000	0.00000	3.7293	-0.32500	0.0	0.0	0.0
	6.00000	5.00000	0.00000	6.2939	-0.32500	0.0	0.0	0.0
	7.00000	5.00000	0.00000	6.7131	-0.32500	0.0	0.0	0.0
	8.00000	5.00000	0.00000	6.8624	-0.32500	0.0	0.0	0.0
	9.00000	5.00000	0.00000	6.9320	-0.32500	0.0	0.0	0.0
	10.00000	5.00000	0.00000	6.9696	-0.32500	0.0	0.0	0.0
	11.00000	5.00000	0.00000	6.9908	-0.32500	0.0	0.0	0.0
	12.00000	5.00000	0.00000	7.0018	-0.32500	0.0	0.0	0.0
	13.00000	5.00000	0.00000	7.0051	-0.32500	0.0	0.0	0.0
	14.00000	5.00000	0.00000	7.0017	-0.32500	0.0	0.0	0.0
	15.00000	5.00000	0.00000	6.9918	-0.32500	0.0	0.0	0.0
	16.00000	5.00000	0.00000	6.9748	-0.32500	0.0	0.0	0.0
	17.00000	5.00000	0.00000	6.9490	-0.32500	0.0	0.0	0.0
	18.00000	5.00000	0.00000	6.9108	-0.32500	0.0	0.0	0.0
	19.00000	5.00000	0.00000	6.8516	-0.32500	0.0	0.0	0.0
	20.00000	5.00000	0.00000	6.7482	-0.32500	0.0	0.0	0.0
	21.00000	5.00000	0.00000	6.5220	-0.32500	0.0	0.0	0.0
	22.00000	5.00000	0.00000	5.7931	-0.32500	0.0	0.0	0.0
	23.00000	5.00000	0.00000	1.8409	-0.32500	0.0	0.0	0.0
	24.00000	5.00000	0.00000	0.80379	-0.32500	0.0	0.0	0.0
	25.00000	5.00000	0.00000	0.50776	-0.32500	0.0	0.0	0.0
	26.00000	5.00000	0.00000	0.37800	-0.32500	0.0	0.0	0.0
	27.00000	5.00000	0.00000	0.30569	-0.32500	0.0	0.0	0.0
	28.00000	5.00000	0.00000	0.25834	-0.32500	0.0	0.0	0.0
	29.00000	5.00000	0.00000	0.22384	-0.32500	0.0	0.0	0.0
	30.00000	5.00000	0.00000	0.19690	-0.32500	0.0	0.0	0.0
	0.00000	6.00000	0.00000	0.32610	-0.32500	0.0	0.0	0.0
	1.00000	6.00000	0.00000	0.37468	-0.32500	0.0	0.0	0.0
	2.00000	6.00000	0.00000	0.43628	-0.32500	0.0	0.0	0.0
	3.00000	6.00000	0.00000	0.51687	-0.32500	0.0	0.0	0.0
	4.00000	6.00000	0.00000	0.62034	-0.32500	0.0	0.0	0.0
	5.00000	6.00000	0.00000	0.40634	-0.32500	0.0	0.0	0.0
	6.00000	6.00000	0.00000	-0.36501	-0.32500	0.0	0.0	0.0
	7.00000	6.00000	0.00000	-0.34458	-0.32500	0.0	0.0	0.0
	8.00000	6.00000	0.00000	-0.31288	-0.32500	0.0	0.0	0.0
	9.00000	6.00000	0.00000	-0.28761	-0.32500	0.0	0.0	0.0
	10.00000	6.00000	0.00000	-0.26964	-0.32500	0.0	0.0	0.0
	11.00000	6.00000	0.00000	-0.25817	-0.32500	0.0	0.0	0.0
	12.00000	6.00000	0.00000	-0.25246	-0.32500	0.0	0.0	0.0
	13.00000	6.00000	0.00000	-0.25205	-0.32500	0.0	0.0	0.0
	14.00000	6.00000	0.00000	-0.25681	-0.32500	0.0	0.0	0.0
	15.00000	6.00000	0.00000	-0.26686	-0.32500	0.0	0.0	0.0
	16.00000	6.00000	0.00000	-0.28254	-0.32500	0.0	0.0	0.0
	17.00000	6.00000	0.00000	-0.30447	-0.32500	0.0	0.0	0.0
	18.00000	6.00000	0.00000	-0.33353	-0.32500	0.0	0.0	0.0
	19.00000	6.00000	0.00000	-0.37063	-0.32500	0.0	0.0	0.0
	20.00000	6.00000	0.00000	-0.41577	-0.32500	0.0	0.0	0.0
	21.00000	6.00000	0.00000	-0.46368	-0.32500	0.0	0.0	0.0
	22.00000	6.00000	0.00000	-0.45092	-0.32500	0.0	0.0	0.0
	23.00000	6.00000	0.00000	0.52980	-0.32500	0.0	0.0	0.0
	24.00000	6.00000	0.00000	0.46467	-0.32500	0.0	0.0	0.0
	25.00000	6.00000	0.00000	0.38130	-0.32500	0.0	0.0	0.0
	26.00000	6.00000	0.00000	0.32203	-0.32500	0.0	0.0	0.0
	27.00000	6.00000	0.00000	0.27810	-0.32500	0.0	0.0	0.0
	28.00000	6.00000	0.00000	0.24385	-0.32500	0.0	0.0	0.0
	29.00000	6.00000	0.00000	0.21603	-0.32500	0.0	0.0	0.0
	30.00000	6.00000	0.00000	0.19273	-0.32500	0.0	0.0	0.0
	0.00000	7.00000	0.00000	0.31727	-0.32500	0.0	0.0	0.0
	1.00000	7.00000	0.00000	0.35239	-0.32500	0.0	0.0	0.0
	2.00000	7.00000	0.00000	0.38065	-0.32500	0.0	0.0	0.0
	3.00000	7.00000	0.00000	0.36672	-0.32500	0.0	0.0	0.0
	4.00000	7.00000	0.00000	0.16243	-0.32500	0.0	0.0	0.0
	5.00000	7.00000	0.00000	-1.0512	-0.32500	0.0	0.0	0.0
	6.00000	7.00000	0.00000	-2.8787	-0.32500	0.0	0.0	0.0
	7.00000	7.00000	0.00000	-3.1986	-0.32500	0.0	0.0	0.0
	8.00000	7.00000	0.00000	-3.2782	-0.32500	0.0	0.0	0.0
	9.00000	7.00000	0.00000	-3.2962	-0.32500	0.0	0.0	0.0
	10.00000	7.00000	0.00000	-3.2980	-0.32500	0.0	0.0	0.0
	11.00000	7.00000	0.00000	-3.2966	-0.32500	0.0	0.0	0.0
	12.00000	7.00000	0.00000	-3.2964	-0.32500	0.0	0.0	0.0
	13.00000	7.00000	0.00000	-3.2990	-0.32500	0.0	0.0	0.0
	14.00000	7.00000	0.00000	-3.3053	-0.32500	0.0	0.0	0.0
	15.00000	7.00000	0.00000	-3.3156	-0.32500	0.0	0.0	0.0
	16.00000	7.00000	0.00000	-3.3301	-0.32500	0.0	0.0	0.0
	17.00000	7.00000	0.00000	-3.3485	-0.32500	0.0	0.0	0.0
	18.00000	7.00000	0.00000	-3.3693	-0.32500	0.0	0.0	0.0
	19.00000	7.00000	0.00000	-3.3867	-0.32500	0.0	0.0	0.0
	20.00000	7.00000	0.00000	-3.3801	-0.32500	0.0	0.0	0.0
	21.00000	7.00000	0.00000	-3.2706	-0.32500	0.0	0.0	0.0
	22.00000	7.00000	0.00000	-2.7204	-0.32500	0.0	0.0	0.0
	23.00000	7.00000	0.00000	-0.45998	-0.32500	0.0	0.0	0.0
	24.00000	7.00000	0.00000	0.13117	-0.32500	0.0	0.0	0.0
	25.00000	7.00000	0.00000	0.25044	-0.32500	0.0	0.0	0.0
	26.00000	7.00000	0.00000	0.26230	-0.32500	0.0	0.0	0.0
	27.00000	7.00000	0.00000	0.24784	-0.32500	0.0	0.0	0.0
	28.00000	7.00000	0.00000	0.22756	-0.32500	0.0	0.0	0.0
	29.00000	7.00000	0.00000	0.20699	-0.32500	0.0	0.0	0.0
	30.00000	7.00000	0.00000	0.18767	-0.32500	0.0	0.0	0.0
	0.00000	8.00000	0.00000	0.31254	-0.32500	0.0	0.0	0.0
	1.00000	8.00000	0.00000	0.34177	-0.32500	0.0	0.0	0.0
	2.00000	8.00000	0.00000	0.36103	-0.32500	0.0	0.0	0.0
	3.00000	8.00000	0.00000	0.33950	-0.32500	0.0	0.0	0.0
	4.00000	8.00000	0.00000	0.15405	-0.32500	0.0	0.0	0.0
	5.00000	8.00000	0.00000	-0.96818	-0.32500	0.0	0.0	0.0
	6.00000	8.00000	0.00000	-2.7152	-0.32500	0.0	0.0	0.0
	7.00000	8.00000	0.00000	-3.0356	-0.32500	0.0	0.0	0.0
	8.00000	8.00000	0.00000	-3.1387	-0.32500	0.0	0.0	0.0
	9.00000	8.00000	0.00000	-3.1766	-0.32500	0.0	0.0	0.0
	10.00000	8.00000	0.00000	-3.1912	-0.32500	0.0	0.0	0.0
	11.00000	8.00000	0.00000	-3.1976	-0.32500	0.0	0.0	0.0
	12.00000	8.00000	0.00000	-3.2020	-0.32500	0.0	0.0	0.0
	13.00000	8.00000	0.00000	-3.2073	-0.32500	0.0	0.0	0.0
	14.00000	8.00000	0.00000	-3.2150	-0.32500	0.0	0.0	0.0
	15.00000	8.00000	0.00000	-3.2258	-0.32500	0.0	0.0	0.0
	16.00000	8.00000	0.00000	-3.2399	-0.32500	0.0	0.0	0.0
	17.00000	8.00000	0.00000	-3.2566	-0.32500	0.0	0.0	0.0
	18.00000	8.00000	0.00000	-3.2737	-0.32500	0.0	0.0	0.0
	19.00000	8.00000	0.00000	-3.2852	-0.32500	0.0	0.0	0.0
	20.00000	8.00000	0.00000	-3.2730	-0.32500	0.0	0.0	0.0
	21.00000	8.00000	0.00000	-3.1735	-0.32500	0.0	0.0	0.0
	22.00000	8.00000	0.00000	-2.6919	-0.32500	0.0	0.0	0.0
	23.00000	8.00000	0.00000	-0.53758	-0.32500	0.0	0.0	0.0
	24.00000	8.00000	0.00000	0.036000	-0.32500	0.0	0.0	0.0
	25.00000	8.00000	0.00000	0.18287	-0.32500	0.0	0.0	0.0
	26.00000	8.00000	0.00000	0.22085	-0.32500	0.0	0.0	0.0
	27.00000	8.00000	0.00000	0.22346	-0.32500	0.0	0.0	0.0
	28.00000	8.00000	0.00000	0.21335	-0.32500	0.0	0.0	0.0

Name		Location				Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	29.00000	8.00000	0.00000	0.19870	-0.32500	0.0	0.0	0.0
	30.00000	8.00000	0.00000	0.18282	-0.32500	0.0	0.0	0.0
	0.00000	9.00000	0.00000	0.31365	-0.32500	0.0	0.0	0.0
	1.00000	9.00000	0.00000	0.34462	-0.32500	0.0	0.0	0.0
	2.00000	9.00000	0.00000	0.37564	-0.32500	0.0	0.0	0.0
	3.00000	9.00000	0.00000	0.41445	-0.32500	0.0	0.0	0.0
	4.00000	9.00000	0.00000	0.52499	-0.32500	0.0	0.0	0.0
	5.00000	9.00000	0.00000	1.1744	-0.32500	0.0	0.0	0.0
	6.00000	9.00000	0.00000	1.1376	-0.32500	0.0	0.0	0.0
	7.00000	9.00000	0.00000	1.0856	-0.32500	0.0	0.0	0.0
	8.00000	9.00000	0.00000	1.0215	-0.32500	0.0	0.0	0.0
	9.00000	9.00000	0.00000	0.98243	-0.32500	0.0	0.0	0.0
	10.00000	9.00000	0.00000	0.96190	-0.32500	0.0	0.0	0.0
	11.00000	9.00000	0.00000	0.95090	-0.32500	0.0	0.0	0.0
	12.00000	9.00000	0.00000	0.94349	-0.32500	0.0	0.0	0.0
	13.00000	9.00000	0.00000	0.93624	-0.32500	0.0	0.0	0.0
	14.00000	9.00000	0.00000	0.92723	-0.32500	0.0	0.0	0.0
	15.00000	9.00000	0.00000	0.91552	-0.32500	0.0	0.0	0.0
	16.00000	9.00000	0.00000	0.90085	-0.32500	0.0	0.0	0.0
	17.00000	9.00000	0.00000	0.88367	-0.32500	0.0	0.0	0.0
	18.00000	9.00000	0.00000	0.86534	-0.32500	0.0	0.0	0.0
	19.00000	9.00000	0.00000	0.84793	-0.32500	0.0	0.0	0.0
	20.00000	9.00000	0.00000	0.83071	-0.32500	0.0	0.0	0.0
	21.00000	9.00000	0.00000	0.78765	-0.32500	0.0	0.0	0.0
	22.00000	9.00000	0.00000	0.53273	-0.32500	0.0	0.0	0.0
	23.00000	9.00000	0.00000	0.15610	-0.32500	0.0	0.0	0.0
	24.00000	9.00000	0.00000	0.12611	-0.32500	0.0	0.0	0.0
	25.00000	9.00000	0.00000	0.17213	-0.32500	0.0	0.0	0.0
	26.00000	9.00000	0.00000	0.20056	-0.32500	0.0	0.0	0.0
	27.00000	9.00000	0.00000	0.20827	-0.32500	0.0	0.0	0.0
	28.00000	9.00000	0.00000	0.20354	-0.32500	0.0	0.0	0.0
	29.00000	9.00000	0.00000	0.19260	-0.32500	0.0	0.0	0.0
	30.00000	9.00000	0.00000	0.17906	-0.32500	0.0	0.0	0.0
	0.00000	10.00000	0.00000	0.31966	-0.32500	0.0	0.0	0.0
	1.00000	10.00000	0.00000	0.35523	-0.32500	0.0	0.0	0.0
	2.00000	10.00000	0.00000	0.39720	-0.32500	0.0	0.0	0.0
	3.00000	10.00000	0.00000	0.46778	-0.32500	0.0	0.0	0.0
	4.00000	10.00000	0.00000	0.70327	-0.32500	0.0	0.0	0.0
	5.00000	10.00000	0.00000	2.9774	-0.32500	0.0	0.0	0.0
	6.00000	10.00000	0.00000	4.5367	-0.32500	0.0	0.0	0.0
	7.00000	10.00000	0.00000	4.5314	-0.32500	0.0	0.0	0.0
	8.00000	10.00000	0.00000	4.4655	-0.32500	0.0	0.0	0.0
	9.00000	10.00000	0.00000	4.4219	-0.32500	0.0	0.0	0.0
	10.00000	10.00000	0.00000	4.3982	-0.32500	0.0	0.0	0.0
	11.00000	10.00000	0.00000	4.3852	-0.32500	0.0	0.0	0.0
	12.00000	10.00000	0.00000	4.3765	-0.32500	0.0	0.0	0.0
	13.00000	10.00000	0.00000	4.3682	-0.32500	0.0	0.0	0.0
	14.00000	10.00000	0.00000	4.3582	-0.32500	0.0	0.0	0.0
	15.00000	10.00000	0.00000	4.3454	-0.32500	0.0	0.0	0.0
	16.00000	10.00000	0.00000	4.3292	-0.32500	0.0	0.0	0.0
	17.00000	10.00000	0.00000	4.3097	-0.32500	0.0	0.0	0.0
	18.00000	10.00000	0.00000	4.2876	-0.32500	0.0	0.0	0.0
	19.00000	10.00000	0.00000	4.2629	-0.32500	0.0	0.0	0.0
	20.00000	10.00000	0.00000	4.2290	-0.32500	0.0	0.0	0.0
	21.00000	10.00000	0.00000	4.1322	-0.32500	0.0	0.0	0.0
	22.00000	10.00000	0.00000	3.5597	-0.32500	0.0	0.0	0.0
	23.00000	10.00000	0.00000	0.39091	-0.32500	0.0	0.0	0.0
	24.00000	10.00000	0.00000	0.13966	-0.32500	0.0	0.0	0.0
	25.00000	10.00000	0.00000	0.16281	-0.32500	0.0	0.0	0.0
	26.00000	10.00000	0.00000	0.19105	-0.32500	0.0	0.0	0.0
	27.00000	10.00000	0.00000	0.20138	-0.32500	0.0	0.0	0.0
	28.00000	10.00000	0.00000	0.19886	-0.32500	0.0	0.0	0.0
	29.00000	10.00000	0.00000	0.18945	-0.32500	0.0	0.0	0.0
	30.00000	10.00000	0.00000	0.17692	-0.32500	0.0	0.0	0.0
	0.00000	11.00000	0.00000	0.32933	-0.32500	0.0	0.0	0.0
	1.00000	11.00000	0.00000	0.37034	-0.32500	0.0	0.0	0.0
	2.00000	11.00000	0.00000	0.41541	-0.32500	0.0	0.0	0.0
	3.00000	11.00000	0.00000	0.45933	-0.32500	0.0	0.0	0.0
	4.00000	11.00000	0.00000	0.46734	-0.32500	0.0	0.0	0.0
	5.00000	11.00000	0.00000	0.083306	-0.32500	0.0	0.0	0.0
	6.00000	11.00000	0.00000	-1.7139	-0.32500	0.0	0.0	0.0
	7.00000	11.00000	0.00000	-2.0769	-0.32500	0.0	0.0	0.0
	8.00000	11.00000	0.00000	-2.2069	-0.32500	0.0	0.0	0.0
	9.00000	11.00000	0.00000	-2.2614	-0.32500	0.0	0.0	0.0
	10.00000	11.00000	0.00000	-2.2857	-0.32500	0.0	0.0	0.0
	11.00000	11.00000	0.00000	-2.2979	-0.32500	0.0	0.0	0.0
	12.00000	11.00000	0.00000	-2.3061	-0.32500	0.0	0.0	0.0
	13.00000	11.00000	0.00000	-2.3143	-0.32500	0.0	0.0	0.0
	14.00000	11.00000	0.00000	-2.3249	-0.32500	0.0	0.0	0.0
	15.00000	11.00000	0.00000	-2.3390	-0.32500	0.0	0.0	0.0
	16.00000	11.00000	0.00000	-2.3574	-0.32500	0.0	0.0	0.0
	17.00000	11.00000	0.00000	-2.3807	-0.32500	0.0	0.0	0.0
	18.00000	11.00000	0.00000	-2.4085	-0.32500	0.0	0.0	0.0
	19.00000	11.00000	0.00000	-2.4391	-0.32500	0.0	0.0	0.0
	20.00000	11.00000	0.00000	-2.4654	-0.32500	0.0	0.0	0.0
	21.00000	11.00000	0.00000	-2.4592	-0.32500	0.0	0.0	0.0
	22.00000	11.00000	0.00000	-2.2522	-0.32500	0.0	0.0	0.0
	23.00000	11.00000	0.00000	-0.48746	-0.32500	0.0	0.0	0.0
	24.00000	11.00000	0.00000	0.0013171	-0.32500	0.0	0.0	0.0
	25.00000	11.00000	0.00000	0.14085	-0.32500	0.0	0.0	0.0
	26.00000	11.00000	0.00000	0.18963	-0.32500	0.0	0.0	0.0
	27.00000	11.00000	0.00000	0.20251	-0.32500	0.0	0.0	0.0
	28.00000	11.00000	0.00000	0.19953	-0.32500	0.0	0.0	0.0
	29.00000	11.00000	0.00000	0.18950	-0.32500	0.0	0.0	0.0
	30.00000	11.00000	0.00000	0.17657	-0.32500	0.0	0.0	0.0
	0.00000	12.00000	0.00000	0.34191	-0.32500	0.0	0.0	0.0
	1.00000	12.00000	0.00000	0.39190	-0.32500	0.0	0.0	0.0
	2.00000	12.00000	0.00000	0.44853	-0.32500	0.0	0.0	0.0
	3.00000	12.00000	0.00000	0.49259	-0.32500	0.0	0.0	0.0
	4.00000	12.00000	0.00000	0.41624	-0.32500	0.0	0.0	0.0
	5.00000	12.00000	0.00000	-0.32696	-0.32500	0.0	0.0	0.0
	6.00000	12.00000	0.00000	-2.5462	-0.32500	0.0	0.0	0.0
	7.00000	12.00000	0.00000	-3.0406	-0.32500	0.0	0.0	0.0
	8.00000	12.00000	0.00000	-3.1867	-0.32500	0.0	0.0	0.0
	9.00000	12.00000	0.00000	-3.2351	-0.32500	0.0	0.0	0.0
	10.00000	12.00000	0.00000	-3.2525	-0.32500	0.0	0.0	0.0
	11.00000	12.00000	0.00000	-3.2600	-0.32500	0.0	0.0	0.0
	12.00000	12.00000	0.00000	-3.2656	-0.32500	0.0	0.0	0.0
	13.00000	12.00000	0.00000	-3.2727	-0.32500	0.0	0.0	0.0
	14.00000	12.00000	0.00000	-3.2833	-0.32500	0.0	0.0	0.0
	15.00000	12.00000	0.00000	-3.2987	-0.32500	0.0	0.0	0.0
	16.00000	12.00000	0.00000	-3.3199	-0.32500	0.0	0.0	0.0
	17.00000	12.00000	0.00000	-3.3484	-0.32500	0.0	0.0	0.0
	18.00000	12.00000	0.00000	-3.3851	-0.32500	0.0	0.0	0.0
	19.00000	12.00000	0.00000	-3.4292	-0.32500	0.0	0.0	0.0
	20.00000	12.00000	0.00000	-3.4689	-0.32500	0.0	0.0	0.0
	21.00000	12.00000	0.00000	-3.4377	-0.32500	0.0	0.0	0.0
	22.00000	12.00000	0.00000	-3.0117	-0.32500	0.0	0.0	0.0
	23.00000	12.00000	0.00000	-0.76149	-0.32500	0.0	0.0	0.0
	24.00000	12.00000	0.00000	-0.031375	-0.32500	0.0	0.0	0.0
	25.00000	12.00000	0.00000	0.15662	-0.32500	0.0	0.0	0.0
	26.00000	12.00000	0.00000	0.20632	-0.32500	0.0	0.0	0.0
	27.00000	12.00000	0.00000	0.21330	-0.32500	0.0	0.0	0.0
	28.00000	12.00000	0.00000	0.20553	-0.32500	0.0	0.0	0.0
	29.00000	12.00000	0.00000	0.19249	-0.32500	0.0	0.0	0.0
	30.00000	12.00000	0.00000	0.17784	-0.32500	0.0	0.0	0.0
	0.00000	13.00000	0.00000	0.35548	-0.32500	0.0	0.0	0.0
	1.00000	13.00000	0.00000	0.41911	-0.32500	0.0	0.0	0.0
	2.00000	13.00000	0.00000	0.50569	-0.32500	0.0	0.0	0.0
	3.00000	13.00000	0.00000	0.62602	-0.32500	0.0	0.0	0.0
	4.00000	13.00000	0.00000	0.77720	-0.32500	0.0	0.0	0.0
	5.00000	13.00000	0.00000	0.66072	-0.32500	0.0	0.0	0.0
	6.00000	13.00000	0.00000	-0.89029	-0.32500	0.0	0.0	0.0
	7.00000	13.00000	0.00000	-1.1201	-0.32500	0.0	0.0	0.0
	8.00000	13.00000	0.00000	-1.1741	-0.32500	0.0	0.0	0.0
	9.00000	13.00000	0.00000	-1.1855	-0.32500	0.0	0.0	0.0
	10.00000	13.00000	0.00000	-1.1857	-0.32500	0.0	0.0	0.0
	11.00000	13.00000	0.00000	-1.1847	-0.32500	0.0	0.0	0.0
	12.00000	13.00000	0.00000	-1.1859	-0.32500	0.0	0.0	0.0
	13.00000	13.00000	0.00000	-1.1910	-0.32500	0.0	0.0	0.0
	14.00000	13.00000	0.00000	-1.2012	-0.32500	0.0	0.0	0.0

Name	Location					Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	15.00000	13.00000	0.00000	-1.2176	-0.32500	0.0	0.0	0.0
	16.00000	13.00000	0.00000	-1.2418	-0.32500	0.0	0.0	0.0
	17.00000	13.00000	0.00000	-1.2762	-0.32500	0.0	0.0	0.0
	18.00000	13.00000	0.00000	-1.3249	-0.32500	0.0	0.0	0.0
	19.00000	13.00000	0.00000	-1.3945	-0.32500	0.0	0.0	0.0
	20.00000	13.00000	0.00000	-1.4952	-0.32500	0.0	0.0	0.0
	21.00000	13.00000	0.00000	-1.6340	-0.32500	0.0	0.0	0.0
	22.00000	13.00000	0.00000	-1.7023	-0.32500	0.0	0.0	0.0
	23.00000	13.00000	0.00000	-0.20386	-0.32500	0.0	0.0	0.0
	24.00000	13.00000	0.00000	0.17073	-0.32500	0.0	0.0	0.0
	25.00000	13.00000	0.00000	0.24059	-0.32500	0.0	0.0	0.0
	26.00000	13.00000	0.00000	0.24592	-0.32500	0.0	0.0	0.0
	27.00000	13.00000	0.00000	0.23322	-0.32500	0.0	0.0	0.0
	28.00000	13.00000	0.00000	0.21572	-0.32500	0.0	0.0	0.0
	29.00000	13.00000	0.00000	0.19758	-0.32500	0.0	0.0	0.0
	30.00000	13.00000	0.00000	0.18017	-0.32500	0.0	0.0	0.0
	0.00000	14.00000	0.00000	0.36601	-0.32500	0.0	0.0	0.0
	1.00000	14.00000	0.00000	0.44288	-0.32500	0.0	0.0	0.0
	2.00000	14.00000	0.00000	0.56228	-0.32500	0.0	0.0	0.0
	3.00000	14.00000	0.00000	0.77927	-0.32500	0.0	0.0	0.0
	4.00000	14.00000	0.00000	1.2947	-0.32500	0.0	0.0	0.0
	5.00000	14.00000	0.00000	4.2803	-0.32500	0.0	0.0	0.0
	6.00000	14.00000	0.00000	6.1546	-0.32500	0.0	0.0	0.0
	7.00000	14.00000	0.00000	6.4181	-0.32500	0.0	0.0	0.0
	8.00000	14.00000	0.00000	6.5035	-0.32500	0.0	0.0	0.0
	9.00000	14.00000	0.00000	6.5425	-0.32500	0.0	0.0	0.0
	10.00000	14.00000	0.00000	6.5636	-0.32500	0.0	0.0	0.0
	11.00000	14.00000	0.00000	6.5748	-0.32500	0.0	0.0	0.0
	12.00000	14.00000	0.00000	6.5787	-0.32500	0.0	0.0	0.0
	13.00000	14.00000	0.00000	6.5761	-0.32500	0.0	0.0	0.0
	14.00000	14.00000	0.00000	6.5667	-0.32500	0.0	0.0	0.0
	15.00000	14.00000	0.00000	6.5497	-0.32500	0.0	0.0	0.0
	16.00000	14.00000	0.00000	6.5232	-0.32500	0.0	0.0	0.0
	17.00000	14.00000	0.00000	6.4837	-0.32500	0.0	0.0	0.0
	18.00000	14.00000	0.00000	6.4238	-0.32500	0.0	0.0	0.0
	19.00000	14.00000	0.00000	6.3281	-0.32500	0.0	0.0	0.0
	20.00000	14.00000	0.00000	6.1566	-0.32500	0.0	0.0	0.0
	21.00000	14.00000	0.00000	5.7785	-0.32500	0.0	0.0	0.0
	22.00000	14.00000	0.00000	4.4313	-0.32500	0.0	0.0	0.0
	23.00000	14.00000	0.00000	0.89457	-0.32500	0.0	0.0	0.0
	24.00000	14.00000	0.00000	0.47889	-0.32500	0.0	0.0	0.0
	25.00000	14.00000	0.00000	0.35486	-0.32500	0.0	0.0	0.0
	26.00000	14.00000	0.00000	0.29529	-0.32500	0.0	0.0	0.0
	27.00000	14.00000	0.00000	0.25665	-0.32500	0.0	0.0	0.0
	28.00000	14.00000	0.00000	0.22731	-0.32500	0.0	0.0	0.0
	29.00000	14.00000	0.00000	0.20325	-0.32500	0.0	0.0	0.0
	30.00000	14.00000	0.00000	0.18272	-0.32500	0.0	0.0	0.0
	0.00000	15.00000	0.00000	0.36906	-0.32500	0.0	0.0	0.0
	1.00000	15.00000	0.00000	0.45179	-0.32500	0.0	0.0	0.0
	2.00000	15.00000	0.00000	0.58329	-0.32500	0.0	0.0	0.0
	3.00000	15.00000	0.00000	0.82309	-0.32500	0.0	0.0	0.0
	4.00000	15.00000	0.00000	1.3448	-0.32500	0.0	0.0	0.0
	5.00000	15.00000	0.00000	2.7257	-0.32500	0.0	0.0	0.0
	6.00000	15.00000	0.00000	3.9386	-0.32500	0.0	0.0	0.0
	7.00000	15.00000	0.00000	4.3384	-0.32500	0.0	0.0	0.0
	8.00000	15.00000	0.00000	4.4950	-0.32500	0.0	0.0	0.0
	9.00000	15.00000	0.00000	4.5672	-0.32500	0.0	0.0	0.0
	10.00000	15.00000	0.00000	4.6045	-0.32500	0.0	0.0	0.0
	11.00000	15.00000	0.00000	4.6241	-0.32500	0.0	0.0	0.0
	12.00000	15.00000	0.00000	4.6324	-0.32500	0.0	0.0	0.0
	13.00000	15.00000	0.00000	4.6321	-0.32500	0.0	0.0	0.0
	14.00000	15.00000	0.00000	4.6239	-0.32500	0.0	0.0	0.0
	15.00000	15.00000	0.00000	4.6070	-0.32500	0.0	0.0	0.0
	16.00000	15.00000	0.00000	4.5795	-0.32500	0.0	0.0	0.0
	17.00000	15.00000	0.00000	4.5374	-0.32500	0.0	0.0	0.0
	18.00000	15.00000	0.00000	4.4723	-0.32500	0.0	0.0	0.0
	19.00000	15.00000	0.00000	4.3659	-0.32500	0.0	0.0	0.0
	20.00000	15.00000	0.00000	4.1738	-0.32500	0.0	0.0	0.0
	21.00000	15.00000	0.00000	3.7719	-0.32500	0.0	0.0	0.0
	22.00000	15.00000	0.00000	2.7470	-0.32500	0.0	0.0	0.0
	23.00000	15.00000	0.00000	1.1989	-0.32500	0.0	0.0	0.0
	24.00000	15.00000	0.00000	0.64472	-0.32500	0.0	0.0	0.0
	25.00000	15.00000	0.00000	0.43317	-0.32500	0.0	0.0	0.0
	26.00000	15.00000	0.00000	0.33315	-0.32500	0.0	0.0	0.0
	27.00000	15.00000	0.00000	0.27550	-0.32500	0.0	0.0	0.0
	28.00000	15.00000	0.00000	0.23672	-0.32500	0.0	0.0	0.0
	29.00000	15.00000	0.00000	0.20773	-0.32500	0.0	0.0	0.0
	30.00000	15.00000	0.00000	0.18453	-0.32500	0.0	0.0	0.0
	0.00000	16.00000	0.00000	0.36263	-0.32500	0.0	0.0	0.0
	1.00000	16.00000	0.00000	0.44181	-0.32500	0.0	0.0	0.0
	2.00000	16.00000	0.00000	0.56140	-0.32500	0.0	0.0	0.0
	3.00000	16.00000	0.00000	0.75541	-0.32500	0.0	0.0	0.0
	4.00000	16.00000	0.00000	1.0798	-0.32500	0.0	0.0	0.0
	5.00000	16.00000	0.00000	1.5537	-0.32500	0.0	0.0	0.0
	6.00000	16.00000	0.00000	2.0012	-0.32500	0.0	0.0	0.0
	7.00000	16.00000	0.00000	2.2757	-0.32500	0.0	0.0	0.0
	8.00000	16.00000	0.00000	2.4219	-0.32500	0.0	0.0	0.0
	9.00000	16.00000	0.00000	2.5005	-0.32500	0.0	0.0	0.0
	10.00000	16.00000	0.00000	2.5441	-0.32500	0.0	0.0	0.0
	11.00000	16.00000	0.00000	2.5681	-0.32500	0.0	0.0	0.0
	12.00000	16.00000	0.00000	2.5793	-0.32500	0.0	0.0	0.0
	13.00000	16.00000	0.00000	2.5808	-0.32500	0.0	0.0	0.0
	14.00000	16.00000	0.00000	2.5737	-0.32500	0.0	0.0	0.0
	15.00000	16.00000	0.00000	2.5576	-0.32500	0.0	0.0	0.0
	16.00000	16.00000	0.00000	2.5307	-0.32500	0.0	0.0	0.0
	17.00000	16.00000	0.00000	2.4895	-0.32500	0.0	0.0	0.0
	18.00000	16.00000	0.00000	2.4265	-0.32500	0.0	0.0	0.0
	19.00000	16.00000	0.00000	2.3278	-0.32500	0.0	0.0	0.0
	20.00000	16.00000	0.00000	2.1652	-0.32500	0.0	0.0	0.0
	21.00000	16.00000	0.00000	1.8885	-0.32500	0.0	0.0	0.0
	22.00000	16.00000	0.00000	1.4514	-0.32500	0.0	0.0	0.0
	23.00000	16.00000	0.00000	0.96731	-0.32500	0.0	0.0	0.0
	24.00000	16.00000	0.00000	0.63603	-0.32500	0.0	0.0	0.0
	25.00000	16.00000	0.00000	0.45182	-0.32500	0.0	0.0	0.0
	26.00000	16.00000	0.00000	0.34812	-0.32500	0.0	0.0	0.0
	27.00000	16.00000	0.00000	0.28443	-0.32500	0.0	0.0	0.0
	28.00000	16.00000	0.00000	0.24131	-0.32500	0.0	0.0	0.0
	29.00000	16.00000	0.00000	0.20962	-0.32500	0.0	0.0	0.0
	30.00000	16.00000	0.00000	0.18481	-0.32500	0.0	0.0	0.0
	0.00000	17.00000	0.00000	0.34789	-0.32500	0.0	0.0	0.0
	1.00000	17.00000	0.00000	0.41744	-0.32500	0.0	0.0	0.0
	2.00000	17.00000	0.00000	0.51465	-0.32500	0.0	0.0	0.0
	3.00000	17.00000	0.00000	0.65321	-0.32500	0.0	0.0	0.0
	4.00000	17.00000	0.00000	0.84453	-0.32500	0.0	0.0	0.0
	5.00000	17.00000	0.00000	1.0763	-0.32500	0.0	0.0	0.0
	6.00000	17.00000	0.00000	1.2986	-0.32500	0.0	0.0	0.0
	7.00000	17.00000	0.00000	1.4669	-0.32500	0.0	0.0	0.0
	8.00000	17.00000	0.00000	1.5775	-0.32500	0.0	0.0	0.0
	9.00000	17.00000	0.00000	1.6464	-0.32500	0.0	0.0	0.0
	10.00000	17.00000	0.00000	1.6884	-0.32500	0.0	0.0	0.0
	11.00000	17.00000	0.00000	1.7129	-0.32500	0.0	0.0	0.0
	12.00000	17.00000	0.00000	1.7252	-0.32500	0.0	0.0	0.0
	13.00000	17.00000	0.00000	1.7278	-0.32500	0.0	0.0	0.0
	14.00000	17.00000	0.00000	1.7218	-0.32500	0.0	0.0	0.0
	15.00000	17.00000	0.00000	1.7071	-0.32500	0.0	0.0	0.0
	16.00000	17.00000	0.00000	1.6823	-0.32500	0.0	0.0	0.0
	17.00000	17.00000	0.00000	1.6446	-0.32500	0.0	0.0	0.0
	18.00000	17.00000	0.00000	1.5890	-0.32500	0.0	0.0	0.0
	19.00000	17.00000	0.00000	1.5071	-0.32500	0.0	0.0	0.0
	20.00000	17.00000	0.00000	1.3862	-0.32500	0.0	0.0	0.0
	21.00000	17.00000	0.00000	1.2129	-0.32500	0.0	0.0	0.0
	22.00000	17.00000	0.00000	0.98919	-0.32500	0.0	0.0	0.0
	23.00000	17.00000	0.00000	0.75553	-0.32500	0.0	0.0	0.0
	24.00000	17.00000	0.00000	0.56450	-0.32500	0.0	0.0	0.0
	25.00000	17.00000	0.00000	0.43133	-0.32500	0.0	0.0	0.0
	26.00000	17.00000	0.00000	0.34289	-0.32500	0.0	0.0	0.0
	27.00000	17.00000	0.00000	0.28294	-0.32500	0.0	0.0	0.0
	28.00000	17.00000	0.00000	0.24029	-0.32500	0.0	0.0	0.0
	29.00000	17.00000	0.00000	0.20830	-0.32500	0.0	0.0	0.0
	30.00000	17.00000	0.00000	0.18315	-0.32500	0.0	0.0	0.0
	0.00000	18.00000	0.00000	0.32769	-0.32500	0.0	0.0	0.0

Name	Location					Stresses		
	X [m]	Y [m]	Z[Level] [mOD]	Z [mm]	Calc Level [mOD]	Vert Stress [kN/m²]	Sum Princ [kN/m²]	Vert Strain [-]
	1.00000	18.00000	0.00000	0.38585	-0.32500	0.0	0.0	0.0
	2.00000	18.00000	0.00000	0.46128	-0.32500	0.0	0.0	0.0
	3.00000	18.00000	0.00000	0.55839	-0.32500	0.0	0.0	0.0
	4.00000	18.00000	0.00000	0.67778	-0.32500	0.0	0.0	0.0
	5.00000	18.00000	0.00000	0.81063	-0.32500	0.0	0.0	0.0
	6.00000	18.00000	0.00000	0.93871	-0.32500	0.0	0.0	0.0
	7.00000	18.00000	0.00000	1.0453	-0.32500	0.0	0.0	0.0
	8.00000	18.00000	0.00000	1.1247	-0.32500	0.0	0.0	0.0
	9.00000	18.00000	0.00000	1.1799	-0.32500	0.0	0.0	0.0
	10.00000	18.00000	0.00000	1.2164	-0.32500	0.0	0.0	0.0
	11.00000	18.00000	0.00000	1.2390	-0.32500	0.0	0.0	0.0
	12.00000	18.00000	0.00000	1.2509	-0.32500	0.0	0.0	0.0
	13.00000	18.00000	0.00000	1.2539	-0.32500	0.0	0.0	0.0
	14.00000	18.00000	0.00000	1.2490	-0.32500	0.0	0.0	0.0
	15.00000	18.00000	0.00000	1.2360	-0.32500	0.0	0.0	0.0
	16.00000	18.00000	0.00000	1.2140	-0.32500	0.0	0.0	0.0
	17.00000	18.00000	0.00000	1.1813	-0.32500	0.0	0.0	0.0
	18.00000	18.00000	0.00000	1.1348	-0.32500	0.0	0.0	0.0
	19.00000	18.00000	0.00000	1.0705	-0.32500	0.0	0.0	0.0
	20.00000	18.00000	0.00000	0.98378	-0.32500	0.0	0.0	0.0
	21.00000	18.00000	0.00000	0.87231	-0.32500	0.0	0.0	0.0
	22.00000	18.00000	0.00000	0.74161	-0.32500	0.0	0.0	0.0
	23.00000	18.00000	0.00000	0.60780	-0.32500	0.0	0.0	0.0
	24.00000	18.00000	0.00000	0.48944	-0.32500	0.0	0.0	0.0
	25.00000	18.00000	0.00000	0.39575	-0.32500	0.0	0.0	0.0
	26.00000	18.00000	0.00000	0.32561	-0.32500	0.0	0.0	0.0
	27.00000	18.00000	0.00000	0.27361	-0.32500	0.0	0.0	0.0
	28.00000	18.00000	0.00000	0.23437	-0.32500	0.0	0.0	0.0
	29.00000	18.00000	0.00000	0.20390	-0.32500	0.0	0.0	0.0
	30.00000	18.00000	0.00000	0.17950	-0.32500	0.0	0.0	0.0
	0.00000	19.00000	0.00000	0.30488	-0.32500	0.0	0.0	0.0
	1.00000	19.00000	0.00000	0.35245	-0.32500	0.0	0.0	0.0
	2.00000	19.00000	0.00000	0.41048	-0.32500	0.0	0.0	0.0
	3.00000	19.00000	0.00000	0.47998	-0.32500	0.0	0.0	0.0
	4.00000	19.00000	0.00000	0.55955	-0.32500	0.0	0.0	0.0
	5.00000	19.00000	0.00000	0.64414	-0.32500	0.0	0.0	0.0
	6.00000	19.00000	0.00000	0.72581	-0.32500	0.0	0.0	0.0
	7.00000	19.00000	0.00000	0.79713	-0.32500	0.0	0.0	0.0
	8.00000	19.00000	0.00000	0.85426	-0.32500	0.0	0.0	0.0
	9.00000	19.00000	0.00000	0.89701	-0.32500	0.0	0.0	0.0
	10.00000	19.00000	0.00000	0.92709	-0.32500	0.0	0.0	0.0
	11.00000	19.00000	0.00000	0.94664	-0.32500	0.0	0.0	0.0
	12.00000	19.00000	0.00000	0.95738	-0.32500	0.0	0.0	0.0
	13.00000	19.00000	0.00000	0.96044	-0.32500	0.0	0.0	0.0
	14.00000	19.00000	0.00000	0.95638	-0.32500	0.0	0.0	0.0
	15.00000	19.00000	0.00000	0.94520	-0.32500	0.0	0.0	0.0
	16.00000	19.00000	0.00000	0.92638	-0.32500	0.0	0.0	0.0
	17.00000	19.00000	0.00000	0.89890	-0.32500	0.0	0.0	0.0
	18.00000	19.00000	0.00000	0.86125	-0.32500	0.0	0.0	0.0
	19.00000	19.00000	0.00000	0.81170	-0.32500	0.0	0.0	0.0
	20.00000	19.00000	0.00000	0.74898	-0.32500	0.0	0.0	0.0
	21.00000	19.00000	0.00000	0.67361	-0.32500	0.0	0.0	0.0
	22.00000	19.00000	0.00000	0.58951	-0.32500	0.0	0.0	0.0
	23.00000	19.00000	0.00000	0.50402	-0.32500	0.0	0.0	0.0
	24.00000	19.00000	0.00000	0.42510	-0.32500	0.0	0.0	0.0
	25.00000	19.00000	0.00000	0.35776	-0.32500	0.0	0.0	0.0
	26.00000	19.00000	0.00000	0.30307	-0.32500	0.0	0.0	0.0
	27.00000	19.00000	0.00000	0.25956	-0.32500	0.0	0.0	0.0
	28.00000	19.00000	0.00000	0.22492	-0.32500	0.0	0.0	0.0
	29.00000	19.00000	0.00000	0.19700	-0.32500	0.0	0.0	0.0
	30.00000	19.00000	0.00000	0.17410	-0.32500	0.0	0.0	0.0
	0.00000	20.00000	0.00000	0.28148	-0.32500	0.0	0.0	0.0
	1.00000	20.00000	0.00000	0.32019	-0.32500	0.0	0.0	0.0
	2.00000	20.00000	0.00000	0.36523	-0.32500	0.0	0.0	0.0
	3.00000	20.00000	0.00000	0.41649	-0.32500	0.0	0.0	0.0
	4.00000	20.00000	0.00000	0.47260	-0.32500	0.0	0.0	0.0
	5.00000	20.00000	0.00000	0.53061	-0.32500	0.0	0.0	0.0
	6.00000	20.00000	0.00000	0.58656	-0.32500	0.0	0.0	0.0
	7.00000	20.00000	0.00000	0.63671	-0.32500	0.0	0.0	0.0
	8.00000	20.00000	0.00000	0.67865	-0.32500	0.0	0.0	0.0
	9.00000	20.00000	0.00000	0.71157	-0.32500	0.0	0.0	0.0
	10.00000	20.00000	0.00000	0.73579	-0.32500	0.0	0.0	0.0
	11.00000	20.00000	0.00000	0.75212	-0.32500	0.0	0.0	0.0
	12.00000	20.00000	0.00000	0.76137	-0.32500	0.0	0.0	0.0
	13.00000	20.00000	0.00000	0.76416	-0.32500	0.0	0.0	0.0
	14.00000	20.00000	0.00000	0.76084	-0.32500	0.0	0.0	0.0
	15.00000	20.00000	0.00000	0.75141	-0.32500	0.0	0.0	0.0
	16.00000	20.00000	0.00000	0.73564	-0.32500	0.0	0.0	0.0
	17.00000	20.00000	0.00000	0.71301	-0.32500	0.0	0.0	0.0
	18.00000	20.00000	0.00000	0.68288	-0.32500	0.0	0.0	0.0
	19.00000	20.00000	0.00000	0.64470	-0.32500	0.0	0.0	0.0
	20.00000	20.00000	0.00000	0.59838	-0.32500	0.0	0.0	0.0
	21.00000	20.00000	0.00000	0.54494	-0.32500	0.0	0.0	0.0
	22.00000	20.00000	0.00000	0.48688	-0.32500	0.0	0.0	0.0
	23.00000	20.00000	0.00000	0.42795	-0.32500	0.0	0.0	0.0
	24.00000	20.00000	0.00000	0.37209	-0.32500	0.0	0.0	0.0
	25.00000	20.00000	0.00000	0.32212	-0.32500	0.0	0.0	0.0
	26.00000	20.00000	0.00000	0.27923	-0.32500	0.0	0.0	0.0
	27.00000	20.00000	0.00000	0.24325	-0.32500	0.0	0.0	0.0
	28.00000	20.00000	0.00000	0.21332	-0.32500	0.0	0.0	0.0
	29.00000	20.00000	0.00000	0.18834	-0.32500	0.0	0.0	0.0
	30.00000	20.00000	0.00000	0.16734	-0.32500	0.0	0.0	0.0
	0.00000	21.00000	0.00000	0.12194	-0.32500	0.0	0.0	0.0 !
	1.00000	21.00000	0.00000	0.13840	-0.32500	0.0	0.0	0.0 !
	2.00000	21.00000	0.00000	0.15698	-0.32500	0.0	0.0	0.0 !
	3.00000	21.00000	0.00000	0.17749	-0.32500	0.0	0.0	0.0 !
	4.00000	21.00000	0.00000	0.19937	-0.32500	0.0	0.0	0.0 !
	5.00000	21.00000	0.00000	0.22163	-0.32500	0.0	0.0	0.0 !
	6.00000	21.00000	0.00000	0.24307	-0.32500	0.0	0.0	0.0 !
	7.00000	21.00000	0.00000	0.26253	-0.32500	0.0	0.0	0.0 !
	8.00000	21.00000	0.00000	0.27918	-0.32500	0.0	0.0	0.0 !
	9.00000	21.00000	0.00000	0.29261	-0.32500	0.0	0.0	0.0 !
	10.00000	21.00000	0.00000	0.30276	-0.32500	0.0	0.0	0.0 !
	11.00000	21.00000	0.00000	0.30977	-0.32500	0.0	0.0	0.0 !
	12.00000	21.00000	0.00000	0.31382	-0.32500	0.0	0.0	0.0 !
	13.00000	21.00000	0.00000	0.31508	-0.32500	0.0	0.0	0.0 !
	14.00000	21.00000	0.00000	0.31367	-0.32500	0.0	0.0	0.0 !
	15.00000	21.00000	0.00000	0.30960	-0.32500	0.0	0.0	0.0 !
	16.00000	21.00000	0.00000	0.30281	-0.32500	0.0	0.0	0.0 !
	17.00000	21.00000	0.00000	0.29319	-0.32500	0.0	0.0	0.0 !
	18.00000	21.00000	0.00000	0.28061	-0.32500	0.0	0.0	0.0 !
	19.00000	21.00000	0.00000	0.26502	-0.32500	0.0	0.0	0.0 !
	20.00000	21.00000	0.00000	0.24656	-0.32500	0.0	0.0	0.0 !
	21.00000	21.00000	0.00000	0.22571	-0.32500	0.0	0.0	0.0 !
	22.00000	21.00000	0.00000	0.20334	-0.32500	0.0	0.0	0.0 !
	23.00000	21.00000	0.00000	0.18061	-0.32500	0.0	0.0	0.0 !
	24.00000	21.00000	0.00000	0.15872	-0.32500	0.0	0.0	0.0 !
	25.00000	21.00000	0.00000	0.13860	-0.32500	0.0	0.0	0.0 !
	26.00000	21.00000	0.00000	0.12074	-0.32500	0.0	0.0	0.0 !
	27.00000	21.00000	0.00000	0.10525	-0.32500	0.0	0.0	0.0 !
	28.00000	21.00000	0.00000	0.091966	-0.32500	0.0	0.0	0.0 !
	29.00000	21.00000	0.00000	0.080612	-0.32500	0.0	0.0	0.0 !
	30.00000	21.00000	0.00000	0.070883	-0.32500	0.0	0.0	0.0 !
	0.00000	22.00000	0.00000	0.11076	-0.32500	0.0	0.0	0.0 !
	1.00000	22.00000	0.00000	0.12422	-0.32500	0.0	0.0	0.0 !
	2.00000	22.00000	0.00000	0.13897	-0.32500	0.0	0.0	0.0 !
	3.00000	22.00000	0.00000	0.15480	-0.32500	0.0	0.0	0.0 !
	4.00000	22.00000	0.00000	0.17130	-0.32500	0.0	0.0	0.0 !
	5.00000	22.00000	0.00000	0.18785	-0.32500	0.0	0.0	0.0 !
	6.00000	22.00000	0.00000	0.20374	-0.32500	0.0	0.0	0.0 !
	7.00000	22.00000	0.00000	0.21828	-0.32500	0.0	0.0	0.0 !
	8.00000	22.00000	0.00000	0.23092	-0.32500	0.0	0.0	0.0 !
	9.00000	22.00000	0.00000	0.24134	-0.32500	0.0	0.0	0.0 !
	10.00000	22.00000	0.00000	0.24939	-0.32500	0.0	0.0	0.0 !
	11.00000	22.00000	0.00000	0.25505	-0.32500	0.0	0.0	0.0 !
	12.00000	22.00000	0.00000	0.25838	-0.32500	0.0	0.0	0.0 !

Name		Location				Stresses			
	X [m]	Y [m]	Z[Level] [mOD]	Z [mm]	Calc Level [mOD]	Vert Stress [kN/m²]	Sum Princ [kN/m²]	Vert Strain [-]	
	13.00000	22.00000	0.00000	0.25943	-0.32500	0.0	0.0	0.0	!
	14.00000	22.00000	0.00000	0.25827	-0.32500	0.0	0.0	0.0	!
	15.00000	22.00000	0.00000	0.25491	-0.32500	0.0	0.0	0.0	!
	16.00000	22.00000	0.00000	0.24935	-0.32500	0.0	0.0	0.0	!
	17.00000	22.00000	0.00000	0.24156	-0.32500	0.0	0.0	0.0	!
	18.00000	22.00000	0.00000	0.23155	-0.32500	0.0	0.0	0.0	!
	19.00000	22.00000	0.00000	0.21938	-0.32500	0.0	0.0	0.0	!
	20.00000	22.00000	0.00000	0.20526	-0.32500	0.0	0.0	0.0	!
	21.00000	22.00000	0.00000	0.18957	-0.32500	0.0	0.0	0.0	!
	22.00000	22.00000	0.00000	0.17287	-0.32500	0.0	0.0	0.0	!
	23.00000	22.00000	0.00000	0.15587	-0.32500	0.0	0.0	0.0	!
	24.00000	22.00000	0.00000	0.13926	-0.32500	0.0	0.0	0.0	!
	25.00000	22.00000	0.00000	0.12362	-0.32500	0.0	0.0	0.0	!
	26.00000	22.00000	0.00000	0.10933	-0.32500	0.0	0.0	0.0	!
	27.00000	22.00000	0.00000	0.096543	-0.32500	0.0	0.0	0.0	!
	28.00000	22.00000	0.00000	0.085248	-0.32500	0.0	0.0	0.0	!
	29.00000	22.00000	0.00000	0.075340	-0.32500	0.0	0.0	0.0	!
	30.00000	22.00000	0.00000	0.066665	-0.32500	0.0	0.0	0.0	!
	0.00000	23.00000	0.00000	0.10043	-0.32500	0.0	0.0	0.0	!
	1.00000	23.00000	0.00000	0.11153	-0.32500	0.0	0.0	0.0	!
	2.00000	23.00000	0.00000	0.12344	-0.32500	0.0	0.0	0.0	!
	3.00000	23.00000	0.00000	0.13596	-0.32500	0.0	0.0	0.0	!
	4.00000	23.00000	0.00000	0.14878	-0.32500	0.0	0.0	0.0	!
	5.00000	23.00000	0.00000	0.16151	-0.32500	0.0	0.0	0.0	!
	6.00000	23.00000	0.00000	0.17369	-0.32500	0.0	0.0	0.0	!
	7.00000	23.00000	0.00000	0.18487	-0.32500	0.0	0.0	0.0	!
	8.00000	23.00000	0.00000	0.19469	-0.32500	0.0	0.0	0.0	!
	9.00000	23.00000	0.00000	0.20289	-0.32500	0.0	0.0	0.0	!
	10.00000	23.00000	0.00000	0.20930	-0.32500	0.0	0.0	0.0	!
	11.00000	23.00000	0.00000	0.21387	-0.32500	0.0	0.0	0.0	!
	12.00000	23.00000	0.00000	0.21659	-0.32500	0.0	0.0	0.0	!
	13.00000	23.00000	0.00000	0.21745	-0.32500	0.0	0.0	0.0	!
	14.00000	23.00000	0.00000	0.21649	-0.32500	0.0	0.0	0.0	!
	15.00000	23.00000	0.00000	0.21373	-0.32500	0.0	0.0	0.0	!
	16.00000	23.00000	0.00000	0.20917	-0.32500	0.0	0.0	0.0	!
	17.00000	23.00000	0.00000	0.20285	-0.32500	0.0	0.0	0.0	!
	18.00000	23.00000	0.00000	0.19483	-0.32500	0.0	0.0	0.0	!
	19.00000	23.00000	0.00000	0.18520	-0.32500	0.0	0.0	0.0	!
	20.00000	23.00000	0.00000	0.17416	-0.32500	0.0	0.0	0.0	!
	21.00000	23.00000	0.00000	0.16201	-0.32500	0.0	0.0	0.0	!
	22.00000	23.00000	0.00000	0.14913	-0.32500	0.0	0.0	0.0	!
	23.00000	23.00000	0.00000	0.13597	-0.32500	0.0	0.0	0.0	!
	24.00000	23.00000	0.00000	0.12297	-0.32500	0.0	0.0	0.0	!
	25.00000	23.00000	0.00000	0.11053	-0.32500	0.0	0.0	0.0	!
	26.00000	23.00000	0.00000	0.098900	-0.32500	0.0	0.0	0.0	!
	27.00000	23.00000	0.00000	0.088251	-0.32500	0.0	0.0	0.0	!
	28.00000	23.00000	0.00000	0.078626	-0.32500	0.0	0.0	0.0	!
	29.00000	23.00000	0.00000	0.070003	-0.32500	0.0	0.0	0.0	!
	30.00000	23.00000	0.00000	0.062312	-0.32500	0.0	0.0	0.0	!
	0.00000	24.00000	0.00000	0.090938	-0.32500	0.0	0.0	0.0	!
	1.00000	24.00000	0.00000	0.10018	-0.32500	0.0	0.0	0.0	!
	2.00000	24.00000	0.00000	0.10993	-0.32500	0.0	0.0	0.0	!
	3.00000	24.00000	0.00000	0.12003	-0.32500	0.0	0.0	0.0	!
	4.00000	24.00000	0.00000	0.13023	-0.32500	0.0	0.0	0.0	!
	5.00000	24.00000	0.00000	0.14028	-0.32500	0.0	0.0	0.0	!
	6.00000	24.00000	0.00000	0.14985	-0.32500	0.0	0.0	0.0	!
	7.00000	24.00000	0.00000	0.15864	-0.32500	0.0	0.0	0.0	!
	8.00000	24.00000	0.00000	0.16641	-0.32500	0.0	0.0	0.0	!
	9.00000	24.00000	0.00000	0.17293	-0.32500	0.0	0.0	0.0	!
	10.00000	24.00000	0.00000	0.17809	-0.32500	0.0	0.0	0.0	!
	11.00000	24.00000	0.00000	0.18179	-0.32500	0.0	0.0	0.0	!
	12.00000	24.00000	0.00000	0.18399	-0.32500	0.0	0.0	0.0	!
	13.00000	24.00000	0.00000	0.18470	-0.32500	0.0	0.0	0.0	!
	14.00000	24.00000	0.00000	0.18390	-0.32500	0.0	0.0	0.0	!
	15.00000	24.00000	0.00000	0.18162	-0.32500	0.0	0.0	0.0	!
	16.00000	24.00000	0.00000	0.17789	-0.32500	0.0	0.0	0.0	!
	17.00000	24.00000	0.00000	0.17274	-0.32500	0.0	0.0	0.0	!
	18.00000	24.00000	0.00000	0.16625	-0.32500	0.0	0.0	0.0	!
	19.00000	24.00000	0.00000	0.15854	-0.32500	0.0	0.0	0.0	!
	20.00000	24.00000	0.00000	0.14975	-0.32500	0.0	0.0	0.0	!
	21.00000	24.00000	0.00000	0.14013	-0.32500	0.0	0.0	0.0	!
	22.00000	24.00000	0.00000	0.12995	-0.32500	0.0	0.0	0.0	!
	23.00000	24.00000	0.00000	0.11950	-0.32500	0.0	0.0	0.0	!
	24.00000	24.00000	0.00000	0.10910	-0.32500	0.0	0.0	0.0	!
	25.00000	24.00000	0.00000	0.098997	-0.32500	0.0	0.0	0.0	!
	26.00000	24.00000	0.00000	0.089410	-0.32500	0.0	0.0	0.0	!
	27.00000	24.00000	0.00000	0.080468	-0.32500	0.0	0.0	0.0	!
	28.00000	24.00000	0.00000	0.072238	-0.32500	0.0	0.0	0.0	!
	29.00000	24.00000	0.00000	0.064737	-0.32500	0.0	0.0	0.0	!
	30.00000	24.00000	0.00000	0.057942	-0.32500	0.0	0.0	0.0	!
	0.00000	25.00000	0.00000	0.082257	-0.32500	0.0	0.0	0.0	!
	1.00000	25.00000	0.00000	0.090020	-0.32500	0.0	0.0	0.0	!
	2.00000	25.00000	0.00000	0.098097	-0.32500	0.0	0.0	0.0	!
	3.00000	25.00000	0.00000	0.10636	-0.32500	0.0	0.0	0.0	!
	4.00000	25.00000	0.00000	0.11463	-0.32500	0.0	0.0	0.0	!
	5.00000	25.00000	0.00000	0.12270	-0.32500	0.0	0.0	0.0	!
	6.00000	25.00000	0.00000	0.13037	-0.32500	0.0	0.0	0.0	!
	7.00000	25.00000	0.00000	0.13741	-0.32500	0.0	0.0	0.0	!
	8.00000	25.00000	0.00000	0.14364	-0.32500	0.0	0.0	0.0	!
	9.00000	25.00000	0.00000	0.14890	-0.32500	0.0	0.0	0.0	!
	10.00000	25.00000	0.00000	0.15307	-0.32500	0.0	0.0	0.0	!
	11.00000	25.00000	0.00000	0.15608	-0.32500	0.0	0.0	0.0	!
	12.00000	25.00000	0.00000	0.15788	-0.32500	0.0	0.0	0.0	!
	13.00000	25.00000	0.00000	0.15845	-0.32500	0.0	0.0	0.0	!
	14.00000	25.00000	0.00000	0.15779	-0.32500	0.0	0.0	0.0	!
	15.00000	25.00000	0.00000	0.15591	-0.32500	0.0	0.0	0.0	!
	16.00000	25.00000	0.00000	0.15283	-0.32500	0.0	0.0	0.0	!
	17.00000	25.00000	0.00000	0.14862	-0.32500	0.0	0.0	0.0	!
	18.00000	25.00000	0.00000	0.14333	-0.32500	0.0	0.0	0.0	!
	19.00000	25.00000	0.00000	0.13707	-0.32500	0.0	0.0	0.0	!
	20.00000	25.00000	0.00000	0.12999	-0.32500	0.0	0.0	0.0	!
	21.00000	25.00000	0.00000	0.12224	-0.32500	0.0	0.0	0.0	!
	22.00000	25.00000	0.00000	0.11403	-0.32500	0.0	0.0	0.0	!
	23.00000	25.00000	0.00000	0.10558	-0.32500	0.0	0.0	0.0	!
	24.00000	25.00000	0.00000	0.097098	-0.32500	0.0	0.0	0.0	!
	25.00000	25.00000	0.00000	0.088783	-0.32500	0.0	0.0	0.0	!
	26.00000	25.00000	0.00000	0.080788	-0.32500	0.0	0.0	0.0	!
	27.00000	25.00000	0.00000	0.073224	-0.32500	0.0	0.0	0.0	!
	28.00000	25.00000	0.00000	0.066162	-0.32500	0.0	0.0	0.0	!
	29.00000	25.00000	0.00000	0.059632	-0.32500	0.0	0.0	0.0	!
	30.00000	25.00000	0.00000	0.053639	-0.32500	0.0	0.0	0.0	!
Grid 2	0.00000	0.00000	-2.50000	0.28082	-2.8500	0.0	0.0	0.0	
	1.00000	0.00000	-2.50000	0.32278	-2.8500	0.0	0.0	0.0	
	2.00000	0.00000	-2.50000	0.37385	-2.8500	0.0	0.0	0.0	
	3.00000	0.00000	-2.50000	0.43497	-2.8500	0.0	0.0	0.0	
	4.00000	0.00000	-2.50000	0.50517	-2.8500	0.0	0.0	0.0	
	5.00000	0.00000	-2.50000	0.58050	-2.8500	0.0	0.0	0.0	
	6.00000	0.00000	-2.50000	0.65450	-2.8500	0.0	0.0	0.0	
	7.00000	0.00000	-2.50000	0.72077	-2.8500	0.0	0.0	0.0	
	8.00000	0.00000	-2.50000	0.77552	-2.8500	0.0	0.0	0.0	
	9.00000	0.00000	-2.50000	0.81793	-2.8500	0.0	0.0	0.0	
	10.00000	0.00000	-2.50000	0.84907	-2.8500	0.0	0.0	0.0	
	11.00000	0.00000	-2.50000	0.87056	-2.8500	0.0	0.0	0.0	
	12.00000	0.00000	-2.50000	0.88390	-2.8500	0.0	0.0	0.0	
	13.00000	0.00000	-2.50000	0.89016	-2.8500	0.0	0.0	0.0	
	14.00000	0.00000	-2.50000	0.88996	-2.8500	0.0	0.0	0.0	
	15.00000	0.00000	-2.50000	0.88347	-2.8500	0.0	0.0	0.0	
	16.00000	0.00000	-2.50000	0.87042	-2.8500	0.0	0.0	0.0	
	17.00000	0.00000	-2.50000	0.85006	-2.8500	0.0	0.0	0.0	
	18.00000	0.00000	-2.50000	0.82124	-2.8500	0.0	0.0	0.0	

Name		Location				Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	19.00000	0.00000	-2.50000	0.78243	-2.8500	0.0	0.0	0.0
	20.00000	0.00000	-2.50000	0.73222	-2.8500	0.0	0.0	0.0
	21.00000	0.00000	-2.50000	0.67021	-2.8500	0.0	0.0	0.0
	22.00000	0.00000	-2.50000	0.59839	-2.8500	0.0	0.0	0.0
	23.00000	0.00000	-2.50000	0.52182	-2.8500	0.0	0.0	0.0
	24.00000	0.00000	-2.50000	0.44728	-2.8500	0.0	0.0	0.0
	25.00000	0.00000	-2.50000	0.38039	-2.8500	0.0	0.0	0.0
	26.00000	0.00000	-2.50000	0.32377	-2.8500	0.0	0.0	0.0
	27.00000	0.00000	-2.50000	0.27736	-2.8500	0.0	0.0	0.0
	28.00000	0.00000	-2.50000	0.23972	-2.8500	0.0	0.0	0.0
	29.00000	0.00000	-2.50000	0.20910	-2.8500	0.0	0.0	0.0
	30.00000	0.00000	-2.50000	0.18391	-2.8500	0.0	0.0	0.0
	0.00000	1.00000	-2.50000	0.30088	-2.8500	0.0	0.0	0.0
	1.00000	1.00000	-2.50000	0.35165	-2.8500	0.0	0.0	0.0
	2.00000	1.00000	-2.50000	0.41721	-2.8500	0.0	0.0	0.0
	3.00000	1.00000	-2.50000	0.50131	-2.8500	0.0	0.0	0.0
	4.00000	1.00000	-2.50000	0.60469	-2.8500	0.0	0.0	0.0
	5.00000	1.00000	-2.50000	0.72070	-2.8500	0.0	0.0	0.0
	6.00000	1.00000	-2.50000	0.83505	-2.8500	0.0	0.0	0.0
	7.00000	1.00000	-2.50000	0.93359	-2.8500	0.0	0.0	0.0
	8.00000	1.00000	-2.50000	1.0101	-2.8500	0.0	0.0	0.0
	9.00000	1.00000	-2.50000	1.0655	-2.8500	0.0	0.0	0.0
	10.00000	1.00000	-2.50000	1.1040	-2.8500	0.0	0.0	0.0
	11.00000	1.00000	-2.50000	1.1294	-2.8500	0.0	0.0	0.0
	12.00000	1.00000	-2.50000	1.1446	-2.8500	0.0	0.0	0.0
	13.00000	1.00000	-2.50000	1.1516	-2.8500	0.0	0.0	0.0
	14.00000	1.00000	-2.50000	1.1512	-2.8500	0.0	0.0	0.0
	15.00000	1.00000	-2.50000	1.1437	-2.8500	0.0	0.0	0.0
	16.00000	1.00000	-2.50000	1.1287	-2.8500	0.0	0.0	0.0
	17.00000	1.00000	-2.50000	1.1049	-2.8500	0.0	0.0	0.0
	18.00000	1.00000	-2.50000	1.0702	-2.8500	0.0	0.0	0.0
	19.00000	1.00000	-2.50000	1.0214	-2.8500	0.0	0.0	0.0
	20.00000	1.00000	-2.50000	0.95435	-2.8500	0.0	0.0	0.0
	21.00000	1.00000	-2.50000	0.86594	-2.8500	0.0	0.0	0.0
	22.00000	1.00000	-2.50000	0.75765	-2.8500	0.0	0.0	0.0
	23.00000	1.00000	-2.50000	0.63937	-2.8500	0.0	0.0	0.0
	24.00000	1.00000	-2.50000	0.52654	-2.8500	0.0	0.0	0.0
	25.00000	1.00000	-2.50000	0.43083	-2.8500	0.0	0.0	0.0
	26.00000	1.00000	-2.50000	0.35535	-2.8500	0.0	0.0	0.0
	27.00000	1.00000	-2.50000	0.29753	-2.8500	0.0	0.0	0.0
	28.00000	1.00000	-2.50000	0.25319	-2.8500	0.0	0.0	0.0
	29.00000	1.00000	-2.50000	0.21859	-2.8500	0.0	0.0	0.0
	30.00000	1.00000	-2.50000	0.19098	-2.8500	0.0	0.0	0.0
	0.00000	2.00000	-2.50000	0.31852	-2.8500	0.0	0.0	0.0
	1.00000	2.00000	-2.50000	0.37860	-2.8500	0.0	0.0	0.0
	2.00000	2.00000	-2.50000	0.46205	-2.8500	0.0	0.0	0.0
	3.00000	2.00000	-2.50000	0.58014	-2.8500	0.0	0.0	0.0
	4.00000	2.00000	-2.50000	0.74205	-2.8500	0.0	0.0	0.0
	5.00000	2.00000	-2.50000	0.93893	-2.8500	0.0	0.0	0.0
	6.00000	2.00000	-2.50000	1.1335	-2.8500	0.0	0.0	0.0
	7.00000	2.00000	-2.50000	1.2890	-2.8500	0.0	0.0	0.0
	8.00000	2.00000	-2.50000	1.3974	-2.8500	0.0	0.0	0.0
	9.00000	2.00000	-2.50000	1.4687	-2.8500	0.0	0.0	0.0
	10.00000	2.00000	-2.50000	1.5146	-2.8500	0.0	0.0	0.0
	11.00000	2.00000	-2.50000	1.5432	-2.8500	0.0	0.0	0.0
	12.00000	2.00000	-2.50000	1.5598	-2.8500	0.0	0.0	0.0
	13.00000	2.00000	-2.50000	1.5670	-2.8500	0.0	0.0	0.0
	14.00000	2.00000	-2.50000	1.5662	-2.8500	0.0	0.0	0.0
	15.00000	2.00000	-2.50000	1.5578	-2.8500	0.0	0.0	0.0
	16.00000	2.00000	-2.50000	1.5412	-2.8500	0.0	0.0	0.0
	17.00000	2.00000	-2.50000	1.5144	-2.8500	0.0	0.0	0.0
	18.00000	2.00000	-2.50000	1.4741	-2.8500	0.0	0.0	0.0
	19.00000	2.00000	-2.50000	1.4142	-2.8500	0.0	0.0	0.0
	20.00000	2.00000	-2.50000	1.3251	-2.8500	0.0	0.0	0.0
	21.00000	2.00000	-2.50000	1.1948	-2.8500	0.0	0.0	0.0
	22.00000	2.00000	-2.50000	1.0185	-2.8500	0.0	0.0	0.0
	23.00000	2.00000	-2.50000	0.81601	-2.8500	0.0	0.0	0.0
	24.00000	2.00000	-2.50000	0.62980	-2.8500	0.0	0.0	0.0
	25.00000	2.00000	-2.50000	0.48655	-2.8500	0.0	0.0	0.0
	26.00000	2.00000	-2.50000	0.38526	-2.8500	0.0	0.0	0.0
	27.00000	2.00000	-2.50000	0.31442	-2.8500	0.0	0.0	0.0
	28.00000	2.00000	-2.50000	0.26356	-2.8500	0.0	0.0	0.0
	29.00000	2.00000	-2.50000	0.22562	-2.8500	0.0	0.0	0.0
	30.00000	2.00000	-2.50000	0.19618	-2.8500	0.0	0.0	0.0
	0.00000	3.00000	-2.50000	0.33131	-2.8500	0.0	0.0	0.0
	1.00000	3.00000	-2.50000	0.39892	-2.8500	0.0	0.0	0.0
	2.00000	3.00000	-2.50000	0.50049	-2.8500	0.0	0.0	0.0
	3.00000	3.00000	-2.50000	0.66390	-2.8500	0.0	0.0	0.0
	4.00000	3.00000	-2.50000	0.93190	-2.8500	0.0	0.0	0.0
	5.00000	3.00000	-2.50000	1.3167	-2.8500	0.0	0.0	0.0
	6.00000	3.00000	-2.50000	1.6978	-2.8500	0.0	0.0	0.0
	7.00000	3.00000	-2.50000	1.9561	-2.8500	0.0	0.0	0.0
	8.00000	3.00000	-2.50000	2.1063	-2.8500	0.0	0.0	0.0
	9.00000	3.00000	-2.50000	2.1926	-2.8500	0.0	0.0	0.0
	10.00000	3.00000	-2.50000	2.2433	-2.8500	0.0	0.0	0.0
	11.00000	3.00000	-2.50000	2.2733	-2.8500	0.0	0.0	0.0
	12.00000	3.00000	-2.50000	2.2899	-2.8500	0.0	0.0	0.0
	13.00000	3.00000	-2.50000	2.2967	-2.8500	0.0	0.0	0.0
	14.00000	3.00000	-2.50000	2.2954	-2.8500	0.0	0.0	0.0
	15.00000	3.00000	-2.50000	2.2862	-2.8500	0.0	0.0	0.0
	16.00000	3.00000	-2.50000	2.2685	-2.8500	0.0	0.0	0.0
	17.00000	3.00000	-2.50000	2.2400	-2.8500	0.0	0.0	0.0
	18.00000	3.00000	-2.50000	2.1960	-2.8500	0.0	0.0	0.0
	19.00000	3.00000	-2.50000	2.1268	-2.8500	0.0	0.0	0.0
	20.00000	3.00000	-2.50000	2.0136	-2.8500	0.0	0.0	0.0
	21.00000	3.00000	-2.50000	1.8212	-2.8500	0.0	0.0	0.0
	22.00000	3.00000	-2.50000	1.5065	-2.8500	0.0	0.0	0.0
	23.00000	3.00000	-2.50000	1.1011	-2.8500	0.0	0.0	0.0
	24.00000	3.00000	-2.50000	0.75748	-2.8500	0.0	0.0	0.0
	25.00000	3.00000	-2.50000	0.53819	-2.8500	0.0	0.0	0.0
	26.00000	3.00000	-2.50000	0.40652	-2.8500	0.0	0.0	0.0
	27.00000	3.00000	-2.50000	0.32412	-2.8500	0.0	0.0	0.0
	28.00000	3.00000	-2.50000	0.26886	-2.8500	0.0	0.0	0.0
	29.00000	3.00000	-2.50000	0.22918	-2.8500	0.0	0.0	0.0
	30.00000	3.00000	-2.50000	0.19902	-2.8500	0.0	0.0	0.0
	0.00000	4.00000	-2.50000	0.33683	-2.8500	0.0	0.0	0.0
	1.00000	4.00000	-2.50000	0.40637	-2.8500	0.0	0.0	0.0
	2.00000	4.00000	-2.50000	0.51677	-2.8500	0.0	0.0	0.0
	3.00000	4.00000	-2.50000	0.71874	-2.8500	0.0	0.0	0.0
	4.00000	4.00000	-2.50000	1.1495	-2.8500	0.0	0.0	0.0
	5.00000	4.00000	-2.50000	2.1252	-2.8500	0.0	0.0	0.0
	6.00000	4.00000	-2.50000	3.0928	-2.8500	0.0	0.0	0.0
	7.00000	4.00000	-2.50000	3.5059	-2.8500	0.0	0.0	0.0
	8.00000	4.00000	-2.50000	3.6879	-2.8500	0.0	0.0	0.0
	9.00000	4.00000	-2.50000	3.7781	-2.8500	0.0	0.0	0.0
	10.00000	4.00000	-2.50000	3.8273	-2.8500	0.0	0.0	0.0
	11.00000	4.00000	-2.50000	3.8550	-2.8500	0.0	0.0	0.0
	12.00000	4.00000	-2.50000	3.8698	-2.8500	0.0	0.0	0.0
	13.00000	4.00000	-2.50000	3.8753	-2.8500	0.0	0.0	0.0
	14.00000	4.00000	-2.50000	3.8731	-2.8500	0.0	0.0	0.0
	15.00000	4.00000	-2.50000	3.8635	-2.8500	0.0	0.0	0.0
	16.00000	4.00000	-2.50000	3.8457	-2.8500	0.0	0.0	0.0
	17.00000	4.00000	-2.50000	3.8174	-2.8500	0.0	0.0	0.0
	18.00000	4.00000	-2.50000	3.7736	-2.8500	0.0	0.0	0.0
	19.00000	4.00000	-2.50000	3.7029	-2.8500	0.0	0.0	0.0
	20.00000	4.00000	-2.50000	3.5772	-2.8500	0.0	0.0	0.0
	21.00000	4.00000	-2.50000	3.3216	-2.8500	0.0	0.0	0.0
	22.00000	4.00000	-2.50000	2.7285	-2.8500	0.0	0.0	0.0
	23.00000	4.00000	-2.50000	1.5838	-2.8500	0.0	0.0	0.0
	24.00000	4.00000	-2.50000	0.86866	-2.8500	0.0	0.0	0.0
	25.00000	4.00000	-2.50000	0.55898	-2.8500	0.0	0.0	0.0
	26.00000	4.00000	-2.50000	0.40757	-2.8500	0.0	0.0	0.0
	27.00000	4.00000	-2.50000	0.32206	-2.8500	0.0	0.0	0.0
	28.00000	4.00000	-2.50000	0.26728	-2.8500	0.0	0.0	0.0
	29.00000	4.00000	-2.50000	0.22858	-2.8500	0.0	0.0	0.0
	30.00000	4.00000	-2.50000	0.19921	-2.8500	0.0	0.0	0.0
	0.00000	5.00000	-2.50000	0.33430	-2.8500	0.0	0.0	0.0
	1.00000	5.00000	-2.50000	0.39690	-2.8500	0.0	0.0	0.0
	2.00000	5.00000	-2.50000	0.49377	-2.8500	0.0	0.0	0.0
	3.00000	5.00000	-2.50000	0.67507	-2.8500	0.0	0.0	0.0
	4.00000	5.00000	-2.50000	1.1337	-2.8500	0.0	0.0	0.0

Name	Location					Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	5.00000	5.00000	-2.50000	3.7293	-2.8500	0.0	0.0	0.0
	6.00000	5.00000	-2.50000	6.2939	-2.8500	0.0	0.0	0.0
	7.00000	5.00000	-2.50000	6.7131	-2.8500	0.0	0.0	0.0
	8.00000	5.00000	-2.50000	6.8624	-2.8500	0.0	0.0	0.0
	9.00000	5.00000	-2.50000	6.9320	-2.8500	0.0	0.0	0.0
	10.00000	5.00000	-2.50000	6.9696	-2.8500	0.0	0.0	0.0
	11.00000	5.00000	-2.50000	6.9908	-2.8500	0.0	0.0	0.0
	12.00000	5.00000	-2.50000	7.0018	-2.8500	0.0	0.0	0.0
	13.00000	5.00000	-2.50000	7.0051	-2.8500	0.0	0.0	0.0
	14.00000	5.00000	-2.50000	7.0017	-2.8500	0.0	0.0	0.0
	15.00000	5.00000	-2.50000	6.9918	-2.8500	0.0	0.0	0.0
	16.00000	5.00000	-2.50000	6.9748	-2.8500	0.0	0.0	0.0
	17.00000	5.00000	-2.50000	6.9490	-2.8500	0.0	0.0	0.0
	18.00000	5.00000	-2.50000	6.9108	-2.8500	0.0	0.0	0.0
	19.00000	5.00000	-2.50000	6.8516	-2.8500	0.0	0.0	0.0
	20.00000	5.00000	-2.50000	6.7482	-2.8500	0.0	0.0	0.0
	21.00000	5.00000	-2.50000	6.5220	-2.8500	0.0	0.0	0.0
	22.00000	5.00000	-2.50000	5.7931	-2.8500	0.0	0.0	0.0
	23.00000	5.00000	-2.50000	1.8409	-2.8500	0.0	0.0	0.0
	24.00000	5.00000	-2.50000	0.80379	-2.8500	0.0	0.0	0.0
	25.00000	5.00000	-2.50000	0.50776	-2.8500	0.0	0.0	0.0
	26.00000	5.00000	-2.50000	0.37800	-2.8500	0.0	0.0	0.0
	27.00000	5.00000	-2.50000	0.30569	-2.8500	0.0	0.0	0.0
	28.00000	5.00000	-2.50000	0.25834	-2.8500	0.0	0.0	0.0
	29.00000	5.00000	-2.50000	0.22384	-2.8500	0.0	0.0	0.0
	30.00000	5.00000	-2.50000	0.19690	-2.8500	0.0	0.0	0.0
	0.00000	6.00000	-2.50000	0.32610	-2.8500	0.0	0.0	0.0
	1.00000	6.00000	-2.50000	0.37468	-2.8500	0.0	0.0	0.0
	2.00000	6.00000	-2.50000	0.43628	-2.8500	0.0	0.0	0.0
	3.00000	6.00000	-2.50000	0.51687	-2.8500	0.0	0.0	0.0
	4.00000	6.00000	-2.50000	0.62034	-2.8500	0.0	0.0	0.0
	5.00000	6.00000	-2.50000	0.40634	-2.8500	0.0	0.0	0.0
	6.00000	6.00000	-2.50000	-0.36501	-2.8500	0.0	0.0	0.0
	7.00000	6.00000	-2.50000	-0.34458	-2.8500	0.0	0.0	0.0
	8.00000	6.00000	-2.50000	-0.31288	-2.8500	0.0	0.0	0.0
	9.00000	6.00000	-2.50000	-0.28761	-2.8500	0.0	0.0	0.0
	10.00000	6.00000	-2.50000	-0.26964	-2.8500	0.0	0.0	0.0
	11.00000	6.00000	-2.50000	-0.25817	-2.8500	0.0	0.0	0.0
	12.00000	6.00000	-2.50000	-0.25246	-2.8500	0.0	0.0	0.0
	13.00000	6.00000	-2.50000	-0.25205	-2.8500	0.0	0.0	0.0
	14.00000	6.00000	-2.50000	-0.25681	-2.8500	0.0	0.0	0.0
	15.00000	6.00000	-2.50000	-0.26686	-2.8500	0.0	0.0	0.0
	16.00000	6.00000	-2.50000	-0.28254	-2.8500	0.0	0.0	0.0
	17.00000	6.00000	-2.50000	-0.30447	-2.8500	0.0	0.0	0.0
	18.00000	6.00000	-2.50000	-0.33353	-2.8500	0.0	0.0	0.0
	19.00000	6.00000	-2.50000	-0.37063	-2.8500	0.0	0.0	0.0
	20.00000	6.00000	-2.50000	-0.41577	-2.8500	0.0	0.0	0.0
	21.00000	6.00000	-2.50000	-0.46368	-2.8500	0.0	0.0	0.0
	22.00000	6.00000	-2.50000	-0.45092	-2.8500	0.0	0.0	0.0
	23.00000	6.00000	-2.50000	0.52980	-2.8500	0.0	0.0	0.0
	24.00000	6.00000	-2.50000	0.46467	-2.8500	0.0	0.0	0.0
	25.00000	6.00000	-2.50000	0.38130	-2.8500	0.0	0.0	0.0
	26.00000	6.00000	-2.50000	0.32203	-2.8500	0.0	0.0	0.0
	27.00000	6.00000	-2.50000	0.27810	-2.8500	0.0	0.0	0.0
	28.00000	6.00000	-2.50000	0.24385	-2.8500	0.0	0.0	0.0
	29.00000	6.00000	-2.50000	0.21603	-2.8500	0.0	0.0	0.0
	30.00000	6.00000	-2.50000	0.19273	-2.8500	0.0	0.0	0.0
	0.00000	7.00000	-2.50000	0.31727	-2.8500	0.0	0.0	0.0
	1.00000	7.00000	-2.50000	0.35239	-2.8500	0.0	0.0	0.0
	2.00000	7.00000	-2.50000	0.38065	-2.8500	0.0	0.0	0.0
	3.00000	7.00000	-2.50000	0.36672	-2.8500	0.0	0.0	0.0
	4.00000	7.00000	-2.50000	0.16243	-2.8500	0.0	0.0	0.0
	5.00000	7.00000	-2.50000	-1.0512	-2.8500	0.0	0.0	0.0
	6.00000	7.00000	-2.50000	-2.8787	-2.8500	0.0	0.0	0.0
	7.00000	7.00000	-2.50000	-3.1986	-2.8500	0.0	0.0	0.0
	8.00000	7.00000	-2.50000	-3.2782	-2.8500	0.0	0.0	0.0
	9.00000	7.00000	-2.50000	-3.2962	-2.8500	0.0	0.0	0.0
	10.00000	7.00000	-2.50000	-3.2980	-2.8500	0.0	0.0	0.0
	11.00000	7.00000	-2.50000	-3.2966	-2.8500	0.0	0.0	0.0
	12.00000	7.00000	-2.50000	-3.2964	-2.8500	0.0	0.0	0.0
	13.00000	7.00000	-2.50000	-3.2990	-2.8500	0.0	0.0	0.0
	14.00000	7.00000	-2.50000	-3.3053	-2.8500	0.0	0.0	0.0
	15.00000	7.00000	-2.50000	-3.3156	-2.8500	0.0	0.0	0.0
	16.00000	7.00000	-2.50000	-3.3301	-2.8500	0.0	0.0	0.0
	17.00000	7.00000	-2.50000	-3.3485	-2.8500	0.0	0.0	0.0
	18.00000	7.00000	-2.50000	-3.3693	-2.8500	0.0	0.0	0.0
	19.00000	7.00000	-2.50000	-3.3867	-2.8500	0.0	0.0	0.0
	20.00000	7.00000	-2.50000	-3.3801	-2.8500	0.0	0.0	0.0
	21.00000	7.00000	-2.50000	-3.2706	-2.8500	0.0	0.0	0.0
	22.00000	7.00000	-2.50000	-2.7204	-2.8500	0.0	0.0	0.0
	23.00000	7.00000	-2.50000	-0.45998	-2.8500	0.0	0.0	0.0
	24.00000	7.00000	-2.50000	0.13117	-2.8500	0.0	0.0	0.0
	25.00000	7.00000	-2.50000	0.25044	-2.8500	0.0	0.0	0.0
	26.00000	7.00000	-2.50000	0.26230	-2.8500	0.0	0.0	0.0
	27.00000	7.00000	-2.50000	0.24784	-2.8500	0.0	0.0	0.0
	28.00000	7.00000	-2.50000	0.22756	-2.8500	0.0	0.0	0.0
	29.00000	7.00000	-2.50000	0.20699	-2.8500	0.0	0.0	0.0
	30.00000	7.00000	-2.50000	0.18767	-2.8500	0.0	0.0	0.0
	0.00000	8.00000	-2.50000	0.31254	-2.8500	0.0	0.0	0.0
	1.00000	8.00000	-2.50000	0.34177	-2.8500	0.0	0.0	0.0
	2.00000	8.00000	-2.50000	0.36103	-2.8500	0.0	0.0	0.0
	3.00000	8.00000	-2.50000	0.33950	-2.8500	0.0	0.0	0.0
	4.00000	8.00000	-2.50000	0.15405	-2.8500	0.0	0.0	0.0
	5.00000	8.00000	-2.50000	-0.96818	-2.8500	0.0	0.0	0.0
	6.00000	8.00000	-2.50000	-2.7152	-2.8500	0.0	0.0	0.0
	7.00000	8.00000	-2.50000	-3.0356	-2.8500	0.0	0.0	0.0
	8.00000	8.00000	-2.50000	-3.1387	-2.8500	0.0	0.0	0.0
	9.00000	8.00000	-2.50000	-3.1766	-2.8500	0.0	0.0	0.0
	10.00000	8.00000	-2.50000	-3.1912	-2.8500	0.0	0.0	0.0
	11.00000	8.00000	-2.50000	-3.1976	-2.8500	0.0	0.0	0.0
	12.00000	8.00000	-2.50000	-3.2020	-2.8500	0.0	0.0	0.0
	13.00000	8.00000	-2.50000	-3.2073	-2.8500	0.0	0.0	0.0
	14.00000	8.00000	-2.50000	-3.2150	-2.8500	0.0	0.0	0.0
	15.00000	8.00000	-2.50000	-3.2258	-2.8500	0.0	0.0	0.0
	16.00000	8.00000	-2.50000	-3.2399	-2.8500	0.0	0.0	0.0
	17.00000	8.00000	-2.50000	-3.2566	-2.8500	0.0	0.0	0.0
	18.00000	8.00000	-2.50000	-3.2737	-2.8500	0.0	0.0	0.0
	19.00000	8.00000	-2.50000	-3.2852	-2.8500	0.0	0.0	0.0
	20.00000	8.00000	-2.50000	-3.2730	-2.8500	0.0	0.0	0.0
	21.00000	8.00000	-2.50000	-3.1735	-2.8500	0.0	0.0	0.0
	22.00000	8.00000	-2.50000	-2.6919	-2.8500	0.0	0.0	0.0
	23.00000	8.00000	-2.50000	-0.53758	-2.8500	0.0	0.0	0.0
	24.00000	8.00000	-2.50000	0.036000	-2.8500	0.0	0.0	0.0
	25.00000	8.00000	-2.50000	0.18287	-2.8500	0.0	0.0	0.0
	26.00000	8.00000	-2.50000	0.22085	-2.8500	0.0	0.0	0.0
	27.00000	8.00000	-2.50000	0.22346	-2.8500	0.0	0.0	0.0
	28.00000	8.00000	-2.50000	0.21335	-2.8500	0.0	0.0	0.0
	29.00000	8.00000	-2.50000	0.19870	-2.8500	0.0	0.0	0.0
	30.00000	8.00000	-2.50000	0.18282	-2.8500	0.0	0.0	0.0
	0.00000	9.00000	-2.50000	0.31365	-2.8500	0.0	0.0	0.0
	1.00000	9.00000	-2.50000	0.34462	-2.8500	0.0	0.0	0.0
	2.00000	9.00000	-2.50000	0.37564	-2.8500	0.0	0.0	0.0
	3.00000	9.00000	-2.50000	0.41445	-2.8500	0.0	0.0	0.0
	4.00000	9.00000	-2.50000	0.52499	-2.8500	0.0	0.0	0.0
	5.00000	9.00000	-2.50000	1.1744	-2.8500	0.0	0.0	0.0
	6.00000	9.00000	-2.50000	1.1376	-2.8500	0.0	0.0	0.0
	7.00000	9.00000	-2.50000	1.0856	-2.8500	0.0	0.0	0.0
	8.00000	9.00000	-2.50000	1.0215	-2.8500	0.0	0.0	0.0
	9.00000	9.00000	-2.50000	0.98243	-2.8500	0.0	0.0	0.0
	10.00000	9.00000	-2.50000	0.96190	-2.8500	0.0	0.0	0.0
	11.00000	9.00000	-2.50000	0.95090	-2.8500	0.0	0.0	0.0
	12.00000	9.00000	-2.50000	0.94349	-2.8500	0.0	0.0	0.0
	13.00000	9.00000	-2.50000	0.93624	-2.8500	0.0	0.0	0.0
	14.00000	9.00000	-2.50000	0.92723	-2.8500	0.0	0.0	0.0
	15.00000	9.00000	-2.50000	0.91552	-2.8500	0.0	0.0	0.0
	16.00000	9.00000	-2.50000	0.90085	-2.8500	0.0	0.0	0.0
	17.00000	9.00000	-2.50000	0.88367	-2.8500	0.0	0.0	0.0
	18.00000	9.00000	-2.50000	0.86534	-2.8500	0.0	0.0	0.0
	19.00000	9.00000	-2.50000	0.84793	-2.8500	0.0	0.0	0.0
	20.00000	9.00000	-2.50000	0.83071	-2.8500	0.0	0.0	0.0
	21.00000	9.00000	-2.50000	0.78765	-2.8500	0.0	0.0	0.0

Name		Location					Stresses	
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	22.00000	9.00000	-2.50000	0.53273	-2.8500	0.0	0.0	0.0
	23.00000	9.00000	-2.50000	0.15610	-2.8500	0.0	0.0	0.0
	24.00000	9.00000	-2.50000	0.12611	-2.8500	0.0	0.0	0.0
	25.00000	9.00000	-2.50000	0.17213	-2.8500	0.0	0.0	0.0
	26.00000	9.00000	-2.50000	0.20056	-2.8500	0.0	0.0	0.0
	27.00000	9.00000	-2.50000	0.20827	-2.8500	0.0	0.0	0.0
	28.00000	9.00000	-2.50000	0.20354	-2.8500	0.0	0.0	0.0
	29.00000	9.00000	-2.50000	0.19260	-2.8500	0.0	0.0	0.0
	30.00000	9.00000	-2.50000	0.17906	-2.8500	0.0	0.0	0.0
	0.00000	10.00000	-2.50000	0.31966	-2.8500	0.0	0.0	0.0
	1.00000	10.00000	-2.50000	0.35523	-2.8500	0.0	0.0	0.0
	2.00000	10.00000	-2.50000	0.39720	-2.8500	0.0	0.0	0.0
	3.00000	10.00000	-2.50000	0.46778	-2.8500	0.0	0.0	0.0
	4.00000	10.00000	-2.50000	0.70327	-2.8500	0.0	0.0	0.0
	5.00000	10.00000	-2.50000	2.9774	-2.8500	0.0	0.0	0.0
	6.00000	10.00000	-2.50000	4.5367	-2.8500	0.0	0.0	0.0
	7.00000	10.00000	-2.50000	4.5314	-2.8500	0.0	0.0	0.0
	8.00000	10.00000	-2.50000	4.4655	-2.8500	0.0	0.0	0.0
	9.00000	10.00000	-2.50000	4.4219	-2.8500	0.0	0.0	0.0
	10.00000	10.00000	-2.50000	4.3982	-2.8500	0.0	0.0	0.0
	11.00000	10.00000	-2.50000	4.3852	-2.8500	0.0	0.0	0.0
	12.00000	10.00000	-2.50000	4.3765	-2.8500	0.0	0.0	0.0
	13.00000	10.00000	-2.50000	4.3682	-2.8500	0.0	0.0	0.0
	14.00000	10.00000	-2.50000	4.3582	-2.8500	0.0	0.0	0.0
	15.00000	10.00000	-2.50000	4.3454	-2.8500	0.0	0.0	0.0
	16.00000	10.00000	-2.50000	4.3292	-2.8500	0.0	0.0	0.0
	17.00000	10.00000	-2.50000	4.3097	-2.8500	0.0	0.0	0.0
	18.00000	10.00000	-2.50000	4.2876	-2.8500	0.0	0.0	0.0
	19.00000	10.00000	-2.50000	4.2629	-2.8500	0.0	0.0	0.0
	20.00000	10.00000	-2.50000	4.2290	-2.8500	0.0	0.0	0.0
	21.00000	10.00000	-2.50000	4.1322	-2.8500	0.0	0.0	0.0
	22.00000	10.00000	-2.50000	3.5597	-2.8500	0.0	0.0	0.0
	23.00000	10.00000	-2.50000	0.39091	-2.8500	0.0	0.0	0.0
	24.00000	10.00000	-2.50000	0.13966	-2.8500	0.0	0.0	0.0
	25.00000	10.00000	-2.50000	0.16281	-2.8500	0.0	0.0	0.0
	26.00000	10.00000	-2.50000	0.19105	-2.8500	0.0	0.0	0.0
	27.00000	10.00000	-2.50000	0.20138	-2.8500	0.0	0.0	0.0
	28.00000	10.00000	-2.50000	0.19886	-2.8500	0.0	0.0	0.0
	29.00000	10.00000	-2.50000	0.18945	-2.8500	0.0	0.0	0.0
	30.00000	10.00000	-2.50000	0.17692	-2.8500	0.0	0.0	0.0
	0.00000	11.00000	-2.50000	0.32933	-2.8500	0.0	0.0	0.0
	1.00000	11.00000	-2.50000	0.37034	-2.8500	0.0	0.0	0.0
	2.00000	11.00000	-2.50000	0.41541	-2.8500	0.0	0.0	0.0
	3.00000	11.00000	-2.50000	0.45933	-2.8500	0.0	0.0	0.0
	4.00000	11.00000	-2.50000	0.46734	-2.8500	0.0	0.0	0.0
	5.00000	11.00000	-2.50000	0.083306	-2.8500	0.0	0.0	0.0
	6.00000	11.00000	-2.50000	-1.7139	-2.8500	0.0	0.0	0.0
	7.00000	11.00000	-2.50000	-2.0769	-2.8500	0.0	0.0	0.0
	8.00000	11.00000	-2.50000	-2.2069	-2.8500	0.0	0.0	0.0
	9.00000	11.00000	-2.50000	-2.2614	-2.8500	0.0	0.0	0.0
	10.00000	11.00000	-2.50000	-2.2857	-2.8500	0.0	0.0	0.0
	11.00000	11.00000	-2.50000	-2.2979	-2.8500	0.0	0.0	0.0
	12.00000	11.00000	-2.50000	-2.3061	-2.8500	0.0	0.0	0.0
	13.00000	11.00000	-2.50000	-2.3143	-2.8500	0.0	0.0	0.0
	14.00000	11.00000	-2.50000	-2.3249	-2.8500	0.0	0.0	0.0
	15.00000	11.00000	-2.50000	-2.3390	-2.8500	0.0	0.0	0.0
	16.00000	11.00000	-2.50000	-2.3574	-2.8500	0.0	0.0	0.0
	17.00000	11.00000	-2.50000	-2.3807	-2.8500	0.0	0.0	0.0
	18.00000	11.00000	-2.50000	-2.4085	-2.8500	0.0	0.0	0.0
	19.00000	11.00000	-2.50000	-2.4391	-2.8500	0.0	0.0	0.0
	20.00000	11.00000	-2.50000	-2.4654	-2.8500	0.0	0.0	0.0
	21.00000	11.00000	-2.50000	-2.4592	-2.8500	0.0	0.0	0.0
	22.00000	11.00000	-2.50000	-2.2522	-2.8500	0.0	0.0	0.0
	23.00000	11.00000	-2.50000	-0.48746	-2.8500	0.0	0.0	0.0
	24.00000	11.00000	-2.50000	0.0013171	-2.8500	0.0	0.0	0.0
	25.00000	11.00000	-2.50000	0.14085	-2.8500	0.0	0.0	0.0
	26.00000	11.00000	-2.50000	0.18963	-2.8500	0.0	0.0	0.0
	27.00000	11.00000	-2.50000	0.20251	-2.8500	0.0	0.0	0.0
	28.00000	11.00000	-2.50000	0.19953	-2.8500	0.0	0.0	0.0
	29.00000	11.00000	-2.50000	0.18950	-2.8500	0.0	0.0	0.0
	30.00000	11.00000	-2.50000	0.17657	-2.8500	0.0	0.0	0.0
	0.00000	12.00000	-2.50000	0.34191	-2.8500	0.0	0.0	0.0
	1.00000	12.00000	-2.50000	0.39190	-2.8500	0.0	0.0	0.0
	2.00000	12.00000	-2.50000	0.44853	-2.8500	0.0	0.0	0.0
	3.00000	12.00000	-2.50000	0.49259	-2.8500	0.0	0.0	0.0
	4.00000	12.00000	-2.50000	0.41624	-2.8500	0.0	0.0	0.0
	5.00000	12.00000	-2.50000	-0.32696	-2.8500	0.0	0.0	0.0
	6.00000	12.00000	-2.50000	-2.5462	-2.8500	0.0	0.0	0.0
	7.00000	12.00000	-2.50000	-3.0406	-2.8500	0.0	0.0	0.0
	8.00000	12.00000	-2.50000	-3.1867	-2.8500	0.0	0.0	0.0
	9.00000	12.00000	-2.50000	-3.2351	-2.8500	0.0	0.0	0.0
	10.00000	12.00000	-2.50000	-3.2525	-2.8500	0.0	0.0	0.0
	11.00000	12.00000	-2.50000	-3.2600	-2.8500	0.0	0.0	0.0
	12.00000	12.00000	-2.50000	-3.2656	-2.8500	0.0	0.0	0.0
	13.00000	12.00000	-2.50000	-3.2727	-2.8500	0.0	0.0	0.0
	14.00000	12.00000	-2.50000	-3.2833	-2.8500	0.0	0.0	0.0
	15.00000	12.00000	-2.50000	-3.2987	-2.8500	0.0	0.0	0.0
	16.00000	12.00000	-2.50000	-3.3199	-2.8500	0.0	0.0	0.0
	17.00000	12.00000	-2.50000	-3.3484	-2.8500	0.0	0.0	0.0
	18.00000	12.00000	-2.50000	-3.3851	-2.8500	0.0	0.0	0.0
	19.00000	12.00000	-2.50000	-3.4292	-2.8500	0.0	0.0	0.0
	20.00000	12.00000	-2.50000	-3.4689	-2.8500	0.0	0.0	0.0
	21.00000	12.00000	-2.50000	-3.4377	-2.8500	0.0	0.0	0.0
	22.00000	12.00000	-2.50000	-3.0117	-2.8500	0.0	0.0	0.0
	23.00000	12.00000	-2.50000	-0.76149	-2.8500	0.0	0.0	0.0
	24.00000	12.00000	-2.50000	-0.031375	-2.8500	0.0	0.0	0.0
	25.00000	12.00000	-2.50000	0.15662	-2.8500	0.0	0.0	0.0
	26.00000	12.00000	-2.50000	0.20632	-2.8500	0.0	0.0	0.0
	27.00000	12.00000	-2.50000	0.21330	-2.8500	0.0	0.0	0.0
	28.00000	12.00000	-2.50000	0.20553	-2.8500	0.0	0.0	0.0
	29.00000	12.00000	-2.50000	0.19249	-2.8500	0.0	0.0	0.0
	30.00000	12.00000	-2.50000	0.17784	-2.8500	0.0	0.0	0.0
	0.00000	13.00000	-2.50000	0.35548	-2.8500	0.0	0.0	0.0
	1.00000	13.00000	-2.50000	0.41911	-2.8500	0.0	0.0	0.0
	2.00000	13.00000	-2.50000	0.50569	-2.8500	0.0	0.0	0.0
	3.00000	13.00000	-2.50000	0.62602	-2.8500	0.0	0.0	0.0
	4.00000	13.00000	-2.50000	0.77720	-2.8500	0.0	0.0	0.0
	5.00000	13.00000	-2.50000	0.66072	-2.8500	0.0	0.0	0.0
	6.00000	13.00000	-2.50000	-0.89029	-2.8500	0.0	0.0	0.0
	7.00000	13.00000	-2.50000	-1.1201	-2.8500	0.0	0.0	0.0
	8.00000	13.00000	-2.50000	-1.1741	-2.8500	0.0	0.0	0.0
	9.00000	13.00000	-2.50000	-1.1855	-2.8500	0.0	0.0	0.0
	10.00000	13.00000	-2.50000	-1.1857	-2.8500	0.0	0.0	0.0
	11.00000	13.00000	-2.50000	-1.1847	-2.8500	0.0	0.0	0.0
	12.00000	13.00000	-2.50000	-1.1859	-2.8500	0.0	0.0	0.0
	13.00000	13.00000	-2.50000	-1.1910	-2.8500	0.0	0.0	0.0
	14.00000	13.00000	-2.50000	-1.2012	-2.8500	0.0	0.0	0.0
	15.00000	13.00000	-2.50000	-1.2176	-2.8500	0.0	0.0	0.0
	16.00000	13.00000	-2.50000	-1.2418	-2.8500	0.0	0.0	0.0
	17.00000	13.00000	-2.50000	-1.2762	-2.8500	0.0	0.0	0.0
	18.00000	13.00000	-2.50000	-1.3249	-2.8500	0.0	0.0	0.0
	19.00000	13.00000	-2.50000	-1.3945	-2.8500	0.0	0.0	0.0
	20.00000	13.00000	-2.50000	-1.4952	-2.8500	0.0	0.0	0.0
	21.00000	13.00000	-2.50000	-1.6340	-2.8500	0.0	0.0	0.0
	22.00000	13.00000	-2.50000	-1.7023	-2.8500	0.0	0.0	0.0
	23.00000	13.00000	-2.50000	-0.20386	-2.8500	0.0	0.0	0.0
	24.00000	13.00000	-2.50000	0.17073	-2.8500	0.0	0.0	0.0
	25.00000	13.00000	-2.50000	0.24059	-2.8500	0.0	0.0	0.0
	26.00000	13.00000	-2.50000	0.24592	-2.8500	0.0	0.0	0.0
	27.00000	13.00000	-2.50000	0.23322	-2.8500	0.0	0.0	0.0
	28.00000	13.00000	-2.50000	0.21572	-2.8500	0.0	0.0	0.0
	29.00000	13.00000	-2.50000	0.19758	-2.8500	0.0	0.0	0.0
	30.00000	13.00000	-2.50000	0.18017	-2.8500	0.0	0.0	0.0
	0.00000	14.00000	-2.50000	0.36601	-2.8500	0.0	0.0	0.0
	1.00000	14.00000	-2.50000	0.44288	-2.8500	0.0	0.0	0.0
	2.00000	14.00000	-2.50000	0.56228	-2.8500	0.0	0.0	0.0
	3.00000	14.00000	-2.50000	0.77927	-2.8500	0.0	0.0	0.0
	4.00000	14.00000	-2.50000	1.2947	-2.8500	0.0	0.0	0.0
	5.00000	14.00000	-2.50000	4.2803	-2.8500	0.0	0.0	0.0
	6.00000	14.00000	-2.50000	6.1546	-2.8500	0.0	0.0	0.0
	7.00000	14.00000	-2.50000	6.4181	-2.8500	0.0	0.0	0.0

Name	Location					Stresses		
	X [m]	Y [m]	Z[Level] [mOD]	Z [mm]	Calc Level [mOD]	Vert Stress [kN/m²]	Sum Princ [kN/m²]	Vert Strain [-]
	8.00000	14.00000	-2.50000	6.5035	-2.8500	0.0	0.0	0.0
	9.00000	14.00000	-2.50000	6.5425	-2.8500	0.0	0.0	0.0
	10.00000	14.00000	-2.50000	6.5636	-2.8500	0.0	0.0	0.0
	11.00000	14.00000	-2.50000	6.5748	-2.8500	0.0	0.0	0.0
	12.00000	14.00000	-2.50000	6.5787	-2.8500	0.0	0.0	0.0
	13.00000	14.00000	-2.50000	6.5761	-2.8500	0.0	0.0	0.0
	14.00000	14.00000	-2.50000	6.5667	-2.8500	0.0	0.0	0.0
	15.00000	14.00000	-2.50000	6.5497	-2.8500	0.0	0.0	0.0
	16.00000	14.00000	-2.50000	6.5232	-2.8500	0.0	0.0	0.0
	17.00000	14.00000	-2.50000	6.4837	-2.8500	0.0	0.0	0.0
	18.00000	14.00000	-2.50000	6.4238	-2.8500	0.0	0.0	0.0
	19.00000	14.00000	-2.50000	6.3281	-2.8500	0.0	0.0	0.0
	20.00000	14.00000	-2.50000	6.1566	-2.8500	0.0	0.0	0.0
	21.00000	14.00000	-2.50000	5.7785	-2.8500	0.0	0.0	0.0
	22.00000	14.00000	-2.50000	4.4313	-2.8500	0.0	0.0	0.0
	23.00000	14.00000	-2.50000	0.89457	-2.8500	0.0	0.0	0.0
	24.00000	14.00000	-2.50000	0.47889	-2.8500	0.0	0.0	0.0
	25.00000	14.00000	-2.50000	0.35486	-2.8500	0.0	0.0	0.0
	26.00000	14.00000	-2.50000	0.29529	-2.8500	0.0	0.0	0.0
	27.00000	14.00000	-2.50000	0.25665	-2.8500	0.0	0.0	0.0
	28.00000	14.00000	-2.50000	0.22731	-2.8500	0.0	0.0	0.0
	29.00000	14.00000	-2.50000	0.20325	-2.8500	0.0	0.0	0.0
	30.00000	14.00000	-2.50000	0.18272	-2.8500	0.0	0.0	0.0
	0.00000	15.00000	-2.50000	0.36906	-2.8500	0.0	0.0	0.0
	1.00000	15.00000	-2.50000	0.45179	-2.8500	0.0	0.0	0.0
	2.00000	15.00000	-2.50000	0.58329	-2.8500	0.0	0.0	0.0
	3.00000	15.00000	-2.50000	0.82309	-2.8500	0.0	0.0	0.0
	4.00000	15.00000	-2.50000	1.3448	-2.8500	0.0	0.0	0.0
	5.00000	15.00000	-2.50000	2.7257	-2.8500	0.0	0.0	0.0
	6.00000	15.00000	-2.50000	3.9386	-2.8500	0.0	0.0	0.0
	7.00000	15.00000	-2.50000	4.3384	-2.8500	0.0	0.0	0.0
	8.00000	15.00000	-2.50000	4.4950	-2.8500	0.0	0.0	0.0
	9.00000	15.00000	-2.50000	4.5672	-2.8500	0.0	0.0	0.0
	10.00000	15.00000	-2.50000	4.6045	-2.8500	0.0	0.0	0.0
	11.00000	15.00000	-2.50000	4.6241	-2.8500	0.0	0.0	0.0
	12.00000	15.00000	-2.50000	4.6324	-2.8500	0.0	0.0	0.0
	13.00000	15.00000	-2.50000	4.6321	-2.8500	0.0	0.0	0.0
	14.00000	15.00000	-2.50000	4.6239	-2.8500	0.0	0.0	0.0
	15.00000	15.00000	-2.50000	4.6070	-2.8500	0.0	0.0	0.0
	16.00000	15.00000	-2.50000	4.5795	-2.8500	0.0	0.0	0.0
	17.00000	15.00000	-2.50000	4.5374	-2.8500	0.0	0.0	0.0
	18.00000	15.00000	-2.50000	4.4723	-2.8500	0.0	0.0	0.0
	19.00000	15.00000	-2.50000	4.3659	-2.8500	0.0	0.0	0.0
	20.00000	15.00000	-2.50000	4.1738	-2.8500	0.0	0.0	0.0
	21.00000	15.00000	-2.50000	3.7719	-2.8500	0.0	0.0	0.0
	22.00000	15.00000	-2.50000	2.7470	-2.8500	0.0	0.0	0.0
	23.00000	15.00000	-2.50000	1.1989	-2.8500	0.0	0.0	0.0
	24.00000	15.00000	-2.50000	0.64472	-2.8500	0.0	0.0	0.0
	25.00000	15.00000	-2.50000	0.43317	-2.8500	0.0	0.0	0.0
	26.00000	15.00000	-2.50000	0.33315	-2.8500	0.0	0.0	0.0
	27.00000	15.00000	-2.50000	0.27550	-2.8500	0.0	0.0	0.0
	28.00000	15.00000	-2.50000	0.23672	-2.8500	0.0	0.0	0.0
	29.00000	15.00000	-2.50000	0.20773	-2.8500	0.0	0.0	0.0
	30.00000	15.00000	-2.50000	0.18453	-2.8500	0.0	0.0	0.0
	0.00000	16.00000	-2.50000	0.36263	-2.8500	0.0	0.0	0.0
	1.00000	16.00000	-2.50000	0.44181	-2.8500	0.0	0.0	0.0
	2.00000	16.00000	-2.50000	0.56140	-2.8500	0.0	0.0	0.0
	3.00000	16.00000	-2.50000	0.75541	-2.8500	0.0	0.0	0.0
	4.00000	16.00000	-2.50000	1.0798	-2.8500	0.0	0.0	0.0
	5.00000	16.00000	-2.50000	1.5537	-2.8500	0.0	0.0	0.0
	6.00000	16.00000	-2.50000	2.0012	-2.8500	0.0	0.0	0.0
	7.00000	16.00000	-2.50000	2.2757	-2.8500	0.0	0.0	0.0
	8.00000	16.00000	-2.50000	2.4219	-2.8500	0.0	0.0	0.0
	9.00000	16.00000	-2.50000	2.5005	-2.8500	0.0	0.0	0.0
	10.00000	16.00000	-2.50000	2.5441	-2.8500	0.0	0.0	0.0
	11.00000	16.00000	-2.50000	2.5681	-2.8500	0.0	0.0	0.0
	12.00000	16.00000	-2.50000	2.5793	-2.8500	0.0	0.0	0.0
	13.00000	16.00000	-2.50000	2.5808	-2.8500	0.0	0.0	0.0
	14.00000	16.00000	-2.50000	2.5737	-2.8500	0.0	0.0	0.0
	15.00000	16.00000	-2.50000	2.5576	-2.8500	0.0	0.0	0.0
	16.00000	16.00000	-2.50000	2.5307	-2.8500	0.0	0.0	0.0
	17.00000	16.00000	-2.50000	2.4895	-2.8500	0.0	0.0	0.0
	18.00000	16.00000	-2.50000	2.4265	-2.8500	0.0	0.0	0.0
	19.00000	16.00000	-2.50000	2.3278	-2.8500	0.0	0.0	0.0
	20.00000	16.00000	-2.50000	2.1652	-2.8500	0.0	0.0	0.0
	21.00000	16.00000	-2.50000	1.8885	-2.8500	0.0	0.0	0.0
	22.00000	16.00000	-2.50000	1.4514	-2.8500	0.0	0.0	0.0
	23.00000	16.00000	-2.50000	0.96731	-2.8500	0.0	0.0	0.0
	24.00000	16.00000	-2.50000	0.63603	-2.8500	0.0	0.0	0.0
	25.00000	16.00000	-2.50000	0.45182	-2.8500	0.0	0.0	0.0
	26.00000	16.00000	-2.50000	0.34812	-2.8500	0.0	0.0	0.0
	27.00000	16.00000	-2.50000	0.28443	-2.8500	0.0	0.0	0.0
	28.00000	16.00000	-2.50000	0.24131	-2.8500	0.0	0.0	0.0
	29.00000	16.00000	-2.50000	0.20962	-2.8500	0.0	0.0	0.0
	30.00000	16.00000	-2.50000	0.18481	-2.8500	0.0	0.0	0.0
	0.00000	17.00000	-2.50000	0.34789	-2.8500	0.0	0.0	0.0
	1.00000	17.00000	-2.50000	0.41744	-2.8500	0.0	0.0	0.0
	2.00000	17.00000	-2.50000	0.51465	-2.8500	0.0	0.0	0.0
	3.00000	17.00000	-2.50000	0.65321	-2.8500	0.0	0.0	0.0
	4.00000	17.00000	-2.50000	0.84453	-2.8500	0.0	0.0	0.0
	5.00000	17.00000	-2.50000	1.0763	-2.8500	0.0	0.0	0.0
	6.00000	17.00000	-2.50000	1.2986	-2.8500	0.0	0.0	0.0
	7.00000	17.00000	-2.50000	1.4669	-2.8500	0.0	0.0	0.0
	8.00000	17.00000	-2.50000	1.5775	-2.8500	0.0	0.0	0.0
	9.00000	17.00000	-2.50000	1.6464	-2.8500	0.0	0.0	0.0
	10.00000	17.00000	-2.50000	1.6884	-2.8500	0.0	0.0	0.0
	11.00000	17.00000	-2.50000	1.7129	-2.8500	0.0	0.0	0.0
	12.00000	17.00000	-2.50000	1.7252	-2.8500	0.0	0.0	0.0
	13.00000	17.00000	-2.50000	1.7278	-2.8500	0.0	0.0	0.0
	14.00000	17.00000	-2.50000	1.7218	-2.8500	0.0	0.0	0.0
	15.00000	17.00000	-2.50000	1.7071	-2.8500	0.0	0.0	0.0
	16.00000	17.00000	-2.50000	1.6823	-2.8500	0.0	0.0	0.0
	17.00000	17.00000	-2.50000	1.6446	-2.8500	0.0	0.0	0.0
	18.00000	17.00000	-2.50000	1.5890	-2.8500	0.0	0.0	0.0
	19.00000	17.00000	-2.50000	1.5071	-2.8500	0.0	0.0	0.0
	20.00000	17.00000	-2.50000	1.3862	-2.8500	0.0	0.0	0.0
	21.00000	17.00000	-2.50000	1.2129	-2.8500	0.0	0.0	0.0
	22.00000	17.00000	-2.50000	0.98919	-2.8500	0.0	0.0	0.0
	23.00000	17.00000	-2.50000	0.75553	-2.8500	0.0	0.0	0.0
	24.00000	17.00000	-2.50000	0.56450	-2.8500	0.0	0.0	0.0
	25.00000	17.00000	-2.50000	0.43133	-2.8500	0.0	0.0	0.0
	26.00000	17.00000	-2.50000	0.34289	-2.8500	0.0	0.0	0.0
	27.00000	17.00000	-2.50000	0.28294	-2.8500	0.0	0.0	0.0
	28.00000	17.00000	-2.50000	0.24029	-2.8500	0.0	0.0	0.0
	29.00000	17.00000	-2.50000	0.20830	-2.8500	0.0	0.0	0.0
	30.00000	17.00000	-2.50000	0.18315	-2.8500	0.0	0.0	0.0
	0.00000	18.00000	-2.50000	0.32769	-2.8500	0.0	0.0	0.0
	1.00000	18.00000	-2.50000	0.38585	-2.8500	0.0	0.0	0.0
	2.00000	18.00000	-2.50000	0.46128	-2.8500	0.0	0.0	0.0
	3.00000	18.00000	-2.50000	0.55839	-2.8500	0.0	0.0	0.0
	4.00000	18.00000	-2.50000	0.67778	-2.8500	0.0	0.0	0.0
	5.00000	18.00000	-2.50000	0.81063	-2.8500	0.0	0.0	0.0
	6.00000	18.00000	-2.50000	0.93871	-2.8500	0.0	0.0	0.0
	7.00000	18.00000	-2.50000	1.0453	-2.8500	0.0	0.0	0.0
	8.00000	18.00000	-2.50000	1.1247	-2.8500	0.0	0.0	0.0
	9.00000	18.00000	-2.50000	1.1799	-2.8500	0.0	0.0	0.0
	10.00000	18.00000	-2.50000	1.2164	-2.8500	0.0	0.0	0.0
	11.00000	18.00000	-2.50000	1.2390	-2.8500	0.0	0.0	0.0
	12.00000	18.00000	-2.50000	1.2509	-2.8500	0.0	0.0	0.0
	13.00000	18.00000	-2.50000	1.2539	-2.8500	0.0	0.0	0.0
	14.00000	18.00000	-2.50000	1.2490	-2.8500	0.0	0.0	0.0
	15.00000	18.00000	-2.50000	1.2360	-2.8500	0.0	0.0	0.0
	16.00000	18.00000	-2.50000	1.2140	-2.8500	0.0	0.0	0.0
	17.00000	18.00000	-2.50000	1.1813	-2.8500	0.0	0.0	0.0
	18.00000	18.00000	-2.50000	1.1348	-2.8500	0.0	0.0	0.0
	19.00000	18.00000	-2.50000	1.0705	-2.8500	0.0	0.0	0.0
	20.00000	18.00000	-2.50000	0.98378	-2.8500	0.0	0.0	0.0
	21.00000	18.00000	-2.50000	0.87231	-2.8500	0.0	0.0	0.0
	22.00000	18.00000	-2.50000	0.74161	-2.8500	0.0	0.0	0.0
	23.00000	18.00000	-2.50000	0.60780	-2.8500	0.0	0.0	0.0
	24.00000	18.00000	-2.50000	0.48944	-2.8500	0.0	0.0	0.0

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      Name                      Location                                            Stresses
                       X           Y      Z[Level]          Z     Calc Level Vert Stress  Sum Princ  Vert Strain
                      [m]         [m]       [mOD]         [mm]       [mOD]     [kN/m²]     [kN/m²]        [-]

                    25.00000    18.00000    -2.50000     0.39575     -2.8500         0.0         0.0         0.0
                    26.00000    18.00000    -2.50000     0.32561     -2.8500         0.0         0.0         0.0
                    27.00000    18.00000    -2.50000     0.27361     -2.8500         0.0         0.0         0.0
                    28.00000    18.00000    -2.50000     0.23437     -2.8500         0.0         0.0         0.0
                    29.00000    18.00000    -2.50000     0.20390     -2.8500         0.0         0.0         0.0
                    30.00000    18.00000    -2.50000     0.17950     -2.8500         0.0         0.0         0.0
                     0.00000    19.00000    -2.50000     0.30488     -2.8500         0.0         0.0         0.0
                     1.00000    19.00000    -2.50000     0.35245     -2.8500         0.0         0.0         0.0
                     2.00000    19.00000    -2.50000     0.41048     -2.8500         0.0         0.0         0.0
                     3.00000    19.00000    -2.50000     0.47998     -2.8500         0.0         0.0         0.0
                     4.00000    19.00000    -2.50000     0.55955     -2.8500         0.0         0.0         0.0
                     5.00000    19.00000    -2.50000     0.64414     -2.8500         0.0         0.0         0.0
                     6.00000    19.00000    -2.50000     0.72581     -2.8500         0.0         0.0         0.0
                     7.00000    19.00000    -2.50000     0.79713     -2.8500         0.0         0.0         0.0
                     8.00000    19.00000    -2.50000     0.85426     -2.8500         0.0         0.0         0.0
                     9.00000    19.00000    -2.50000     0.89701     -2.8500         0.0         0.0         0.0
                    10.00000    19.00000    -2.50000     0.92709     -2.8500         0.0         0.0         0.0
                    11.00000    19.00000    -2.50000     0.94664     -2.8500         0.0         0.0         0.0
                    12.00000    19.00000    -2.50000     0.95738     -2.8500         0.0         0.0         0.0
                    13.00000    19.00000    -2.50000     0.96044     -2.8500         0.0         0.0         0.0
                    14.00000    19.00000    -2.50000     0.95638     -2.8500         0.0         0.0         0.0
                    15.00000    19.00000    -2.50000     0.94520     -2.8500         0.0         0.0         0.0
                    16.00000    19.00000    -2.50000     0.92638     -2.8500         0.0         0.0         0.0
                    17.00000    19.00000    -2.50000     0.89890     -2.8500         0.0         0.0         0.0
                    18.00000    19.00000    -2.50000     0.86125     -2.8500         0.0         0.0         0.0
                    19.00000    19.00000    -2.50000     0.81170     -2.8500         0.0         0.0         0.0
                    20.00000    19.00000    -2.50000     0.74898     -2.8500         0.0         0.0         0.0
                    21.00000    19.00000    -2.50000     0.67361     -2.8500         0.0         0.0         0.0
                    22.00000    19.00000    -2.50000     0.58951     -2.8500         0.0         0.0         0.0
                    23.00000    19.00000    -2.50000     0.50402     -2.8500         0.0         0.0         0.0
                    24.00000    19.00000    -2.50000     0.42510     -2.8500         0.0         0.0         0.0
                    25.00000    19.00000    -2.50000     0.35776     -2.8500         0.0         0.0         0.0
                    26.00000    19.00000    -2.50000     0.30307     -2.8500         0.0         0.0         0.0
                    27.00000    19.00000    -2.50000     0.25956     -2.8500         0.0         0.0         0.0
                    28.00000    19.00000    -2.50000     0.22492     -2.8500         0.0         0.0         0.0
                    29.00000    19.00000    -2.50000     0.19700     -2.8500         0.0         0.0         0.0
                    30.00000    19.00000    -2.50000     0.17410     -2.8500         0.0         0.0         0.0
                     0.00000    20.00000    -2.50000     0.28148     -2.8500         0.0         0.0         0.0
                     1.00000    20.00000    -2.50000     0.32019     -2.8500         0.0         0.0         0.0
                     2.00000    20.00000    -2.50000     0.36523     -2.8500         0.0         0.0         0.0
                     3.00000    20.00000    -2.50000     0.41649     -2.8500         0.0         0.0         0.0
                     4.00000    20.00000    -2.50000     0.47260     -2.8500         0.0         0.0         0.0
                     5.00000    20.00000    -2.50000     0.53061     -2.8500         0.0         0.0         0.0
                     6.00000    20.00000    -2.50000     0.58656     -2.8500         0.0         0.0         0.0
                     7.00000    20.00000    -2.50000     0.63671     -2.8500         0.0         0.0         0.0
                     8.00000    20.00000    -2.50000     0.67865     -2.8500         0.0         0.0         0.0
                     9.00000    20.00000    -2.50000     0.71157     -2.8500         0.0         0.0         0.0
                    10.00000    20.00000    -2.50000     0.73579     -2.8500         0.0         0.0         0.0
                    11.00000    20.00000    -2.50000     0.75212     -2.8500         0.0         0.0         0.0
                    12.00000    20.00000    -2.50000     0.76137     -2.8500         0.0         0.0         0.0
                    13.00000    20.00000    -2.50000     0.76416     -2.8500         0.0         0.0         0.0
                    14.00000    20.00000    -2.50000     0.76084     -2.8500         0.0         0.0         0.0
                    15.00000    20.00000    -2.50000     0.75141     -2.8500         0.0         0.0         0.0
                    16.00000    20.00000    -2.50000     0.73564     -2.8500         0.0         0.0         0.0
                    17.00000    20.00000    -2.50000     0.71301     -2.8500         0.0         0.0         0.0
                    18.00000    20.00000    -2.50000     0.68288     -2.8500         0.0         0.0         0.0
                    19.00000    20.00000    -2.50000     0.64470     -2.8500         0.0         0.0         0.0
                    20.00000    20.00000    -2.50000     0.59838     -2.8500         0.0         0.0         0.0
                    21.00000    20.00000    -2.50000     0.54494     -2.8500         0.0         0.0         0.0
                    22.00000    20.00000    -2.50000     0.48688     -2.8500         0.0         0.0         0.0
                    23.00000    20.00000    -2.50000     0.42795     -2.8500         0.0         0.0         0.0
                    24.00000    20.00000    -2.50000     0.37209     -2.8500         0.0         0.0         0.0
                    25.00000    20.00000    -2.50000     0.32212     -2.8500         0.0         0.0         0.0
                    26.00000    20.00000    -2.50000     0.27923     -2.8500         0.0         0.0         0.0
                    27.00000    20.00000    -2.50000     0.24325     -2.8500         0.0         0.0         0.0
                    28.00000    20.00000    -2.50000     0.21332     -2.8500         0.0         0.0         0.0
                    29.00000    20.00000    -2.50000     0.18834     -2.8500         0.0         0.0         0.0
                    30.00000    20.00000    -2.50000     0.16734     -2.8500         0.0         0.0         0.0
                     0.00000    21.00000    -2.50000     0.12194     -2.8500         0.0         0.0         0.0 !
                     1.00000    21.00000    -2.50000     0.13840     -2.8500         0.0         0.0         0.0 !
                     2.00000    21.00000    -2.50000     0.15698     -2.8500         0.0         0.0         0.0 !
                     3.00000    21.00000    -2.50000     0.17749     -2.8500         0.0         0.0         0.0 !
                     4.00000    21.00000    -2.50000     0.19937     -2.8500         0.0         0.0         0.0 !
                     5.00000    21.00000    -2.50000     0.22163     -2.8500         0.0         0.0         0.0 !
                     6.00000    21.00000    -2.50000     0.24307     -2.8500         0.0         0.0         0.0 !
                     7.00000    21.00000    -2.50000     0.26253     -2.8500         0.0         0.0         0.0 !
                     8.00000    21.00000    -2.50000     0.27918     -2.8500         0.0         0.0         0.0 !
                     9.00000    21.00000    -2.50000     0.29261     -2.8500         0.0         0.0         0.0 !
                    10.00000    21.00000    -2.50000     0.30276     -2.8500         0.0         0.0         0.0 !
                    11.00000    21.00000    -2.50000     0.30977     -2.8500         0.0         0.0         0.0 !
                    12.00000    21.00000    -2.50000     0.31382     -2.8500         0.0         0.0         0.0 !
                    13.00000    21.00000    -2.50000     0.31508     -2.8500         0.0         0.0         0.0 !
                    14.00000    21.00000    -2.50000     0.31367     -2.8500         0.0         0.0         0.0 !
                    15.00000    21.00000    -2.50000     0.30960     -2.8500         0.0         0.0         0.0 !
                    16.00000    21.00000    -2.50000     0.30281     -2.8500         0.0         0.0         0.0 !
                    17.00000    21.00000    -2.50000     0.29319     -2.8500         0.0         0.0         0.0 !
                    18.00000    21.00000    -2.50000     0.28061     -2.8500         0.0         0.0         0.0 !
                    19.00000    21.00000    -2.50000     0.26502     -2.8500         0.0         0.0         0.0 !
                    20.00000    21.00000    -2.50000     0.24656     -2.8500         0.0         0.0         0.0 !
                    21.00000    21.00000    -2.50000     0.22571     -2.8500         0.0         0.0         0.0 !
                    22.00000    21.00000    -2.50000     0.20334     -2.8500         0.0         0.0         0.0 !
                    23.00000    21.00000    -2.50000     0.18061     -2.8500         0.0         0.0         0.0 !
                    24.00000    21.00000    -2.50000     0.15872     -2.8500         0.0         0.0         0.0 !
                    25.00000    21.00000    -2.50000     0.13860     -2.8500         0.0         0.0         0.0 !
                    26.00000    21.00000    -2.50000     0.12074     -2.8500         0.0         0.0         0.0 !
                    27.00000    21.00000    -2.50000     0.10525     -2.8500         0.0         0.0         0.0 !
                    28.00000    21.00000    -2.50000    0.091966     -2.8500         0.0         0.0         0.0 !
                    29.00000    21.00000    -2.50000    0.080612     -2.8500         0.0         0.0         0.0 !
                    30.00000    21.00000    -2.50000    0.070883     -2.8500         0.0         0.0         0.0 !
                     0.00000    22.00000    -2.50000     0.11076     -2.8500         0.0         0.0         0.0 !
                     1.00000    22.00000    -2.50000     0.12422     -2.8500         0.0         0.0         0.0 !
                     2.00000    22.00000    -2.50000     0.13897     -2.8500         0.0         0.0         0.0 !
                     3.00000    22.00000    -2.50000     0.15480     -2.8500         0.0         0.0         0.0 !
                     4.00000    22.00000    -2.50000     0.17130     -2.8500         0.0         0.0         0.0 !
                     5.00000    22.00000    -2.50000     0.18785     -2.8500         0.0         0.0         0.0 !
                     6.00000    22.00000    -2.50000     0.20374     -2.8500         0.0         0.0         0.0 !
                     7.00000    22.00000    -2.50000     0.21828     -2.8500         0.0         0.0         0.0 !
                     8.00000    22.00000    -2.50000     0.23092     -2.8500         0.0         0.0         0.0 !
                     9.00000    22.00000    -2.50000     0.24134     -2.8500         0.0         0.0         0.0 !
                    10.00000    22.00000    -2.50000     0.24939     -2.8500         0.0         0.0         0.0 !
                    11.00000    22.00000    -2.50000     0.25505     -2.8500         0.0         0.0         0.0 !
                    12.00000    22.00000    -2.50000     0.25838     -2.8500         0.0         0.0         0.0 !
                    13.00000    22.00000    -2.50000     0.25943     -2.8500         0.0         0.0         0.0 !
                    14.00000    22.00000    -2.50000     0.25827     -2.8500         0.0         0.0         0.0 !
                    15.00000    22.00000    -2.50000     0.25491     -2.8500         0.0         0.0         0.0 !
                    16.00000    22.00000    -2.50000     0.24935     -2.8500         0.0         0.0         0.0 !
                    17.00000    22.00000    -2.50000     0.24156     -2.8500         0.0         0.0         0.0 !
                    18.00000    22.00000    -2.50000     0.23155     -2.8500         0.0         0.0         0.0 !
                    19.00000    22.00000    -2.50000     0.21938     -2.8500         0.0         0.0         0.0 !
                    20.00000    22.00000    -2.50000     0.20526     -2.8500         0.0         0.0         0.0 !
                    21.00000    22.00000    -2.50000     0.18957     -2.8500         0.0         0.0         0.0 !
                    22.00000    22.00000    -2.50000     0.17287     -2.8500         0.0         0.0         0.0 !
                    23.00000    22.00000    -2.50000     0.15587     -2.8500         0.0         0.0         0.0 !
                    24.00000    22.00000    -2.50000     0.13926     -2.8500         0.0         0.0         0.0 !
                    25.00000    22.00000    -2.50000     0.12362     -2.8500         0.0         0.0         0.0 !
                    26.00000    22.00000    -2.50000     0.10933     -2.8500         0.0         0.0         0.0 !
                    27.00000    22.00000    -2.50000    0.096543     -2.8500         0.0         0.0         0.0 !
                    28.00000    22.00000    -2.50000    0.085248     -2.8500         0.0         0.0         0.0 !
                    29.00000    22.00000    -2.50000    0.075340     -2.8500         0.0         0.0         0.0 !
                    30.00000    22.00000    -2.50000    0.066665     -2.8500         0.0         0.0         0.0 !
                     0.00000    23.00000    -2.50000     0.10043     -2.8500         0.0         0.0         0.0 !
                     1.00000    23.00000    -2.50000     0.11153     -2.8500         0.0         0.0         0.0 !
                     2.00000    23.00000    -2.50000     0.12344     -2.8500         0.0         0.0         0.0 !
                     3.00000    23.00000    -2.50000     0.13596     -2.8500         0.0         0.0         0.0 !
```
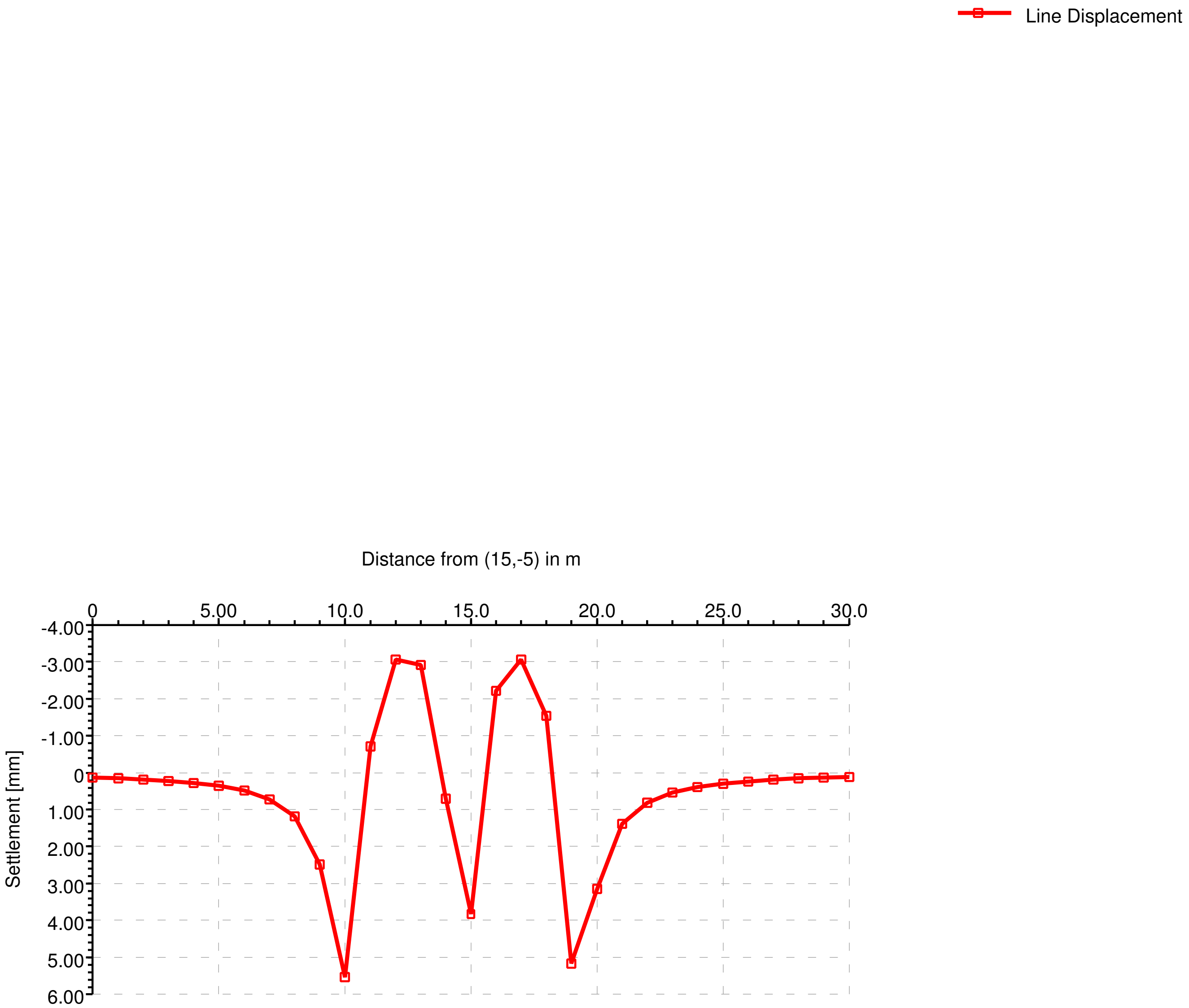

Name	Location					Stresses		
	X	Y	Z[Level]	Z	Calc Level	Vert Stress	Sum Princ	Vert Strain
	[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[-]
	4.00000	23.00000	-2.50000	0.14878	-2.8500	0.0	0.0	0.0 !
	5.00000	23.00000	-2.50000	0.16151	-2.8500	0.0	0.0	0.0 !
	6.00000	23.00000	-2.50000	0.17369	-2.8500	0.0	0.0	0.0 !
	7.00000	23.00000	-2.50000	0.18487	-2.8500	0.0	0.0	0.0 !
	8.00000	23.00000	-2.50000	0.19469	-2.8500	0.0	0.0	0.0 !
	9.00000	23.00000	-2.50000	0.20289	-2.8500	0.0	0.0	0.0 !
	10.00000	23.00000	-2.50000	0.20930	-2.8500	0.0	0.0	0.0 !
	11.00000	23.00000	-2.50000	0.21387	-2.8500	0.0	0.0	0.0 !
	12.00000	23.00000	-2.50000	0.21659	-2.8500	0.0	0.0	0.0 !
	13.00000	23.00000	-2.50000	0.21745	-2.8500	0.0	0.0	0.0 !
	14.00000	23.00000	-2.50000	0.21649	-2.8500	0.0	0.0	0.0 !
	15.00000	23.00000	-2.50000	0.21373	-2.8500	0.0	0.0	0.0 !
	16.00000	23.00000	-2.50000	0.20917	-2.8500	0.0	0.0	0.0 !
	17.00000	23.00000	-2.50000	0.20285	-2.8500	0.0	0.0	0.0 !
	18.00000	23.00000	-2.50000	0.19483	-2.8500	0.0	0.0	0.0 !
	19.00000	23.00000	-2.50000	0.18520	-2.8500	0.0	0.0	0.0 !
	20.00000	23.00000	-2.50000	0.17416	-2.8500	0.0	0.0	0.0 !
	21.00000	23.00000	-2.50000	0.16201	-2.8500	0.0	0.0	0.0 !
	22.00000	23.00000	-2.50000	0.14913	-2.8500	0.0	0.0	0.0 !
	23.00000	23.00000	-2.50000	0.13597	-2.8500	0.0	0.0	0.0 !
	24.00000	23.00000	-2.50000	0.12297	-2.8500	0.0	0.0	0.0 !
	25.00000	23.00000	-2.50000	0.11053	-2.8500	0.0	0.0	0.0 !
	26.00000	23.00000	-2.50000	0.098900	-2.8500	0.0	0.0	0.0 !
	27.00000	23.00000	-2.50000	0.088251	-2.8500	0.0	0.0	0.0 !
	28.00000	23.00000	-2.50000	0.078626	-2.8500	0.0	0.0	0.0 !
	29.00000	23.00000	-2.50000	0.070003	-2.8500	0.0	0.0	0.0 !
	30.00000	23.00000	-2.50000	0.062312	-2.8500	0.0	0.0	0.0 !
	0.00000	24.00000	-2.50000	0.090938	-2.8500	0.0	0.0	0.0 !
	1.00000	24.00000	-2.50000	0.10018	-2.8500	0.0	0.0	0.0 !
	2.00000	24.00000	-2.50000	0.10993	-2.8500	0.0	0.0	0.0 !
	3.00000	24.00000	-2.50000	0.12003	-2.8500	0.0	0.0	0.0 !
	4.00000	24.00000	-2.50000	0.13023	-2.8500	0.0	0.0	0.0 !
	5.00000	24.00000	-2.50000	0.14028	-2.8500	0.0	0.0	0.0 !
	6.00000	24.00000	-2.50000	0.14985	-2.8500	0.0	0.0	0.0 !
	7.00000	24.00000	-2.50000	0.15864	-2.8500	0.0	0.0	0.0 !
	8.00000	24.00000	-2.50000	0.16641	-2.8500	0.0	0.0	0.0 !
	9.00000	24.00000	-2.50000	0.17293	-2.8500	0.0	0.0	0.0 !
	10.00000	24.00000	-2.50000	0.17809	-2.8500	0.0	0.0	0.0 !
	11.00000	24.00000	-2.50000	0.18179	-2.8500	0.0	0.0	0.0 !
	12.00000	24.00000	-2.50000	0.18399	-2.8500	0.0	0.0	0.0 !
	13.00000	24.00000	-2.50000	0.18470	-2.8500	0.0	0.0	0.0 !
	14.00000	24.00000	-2.50000	0.18390	-2.8500	0.0	0.0	0.0 !
	15.00000	24.00000	-2.50000	0.18162	-2.8500	0.0	0.0	0.0 !
	16.00000	24.00000	-2.50000	0.17789	-2.8500	0.0	0.0	0.0 !
	17.00000	24.00000	-2.50000	0.17274	-2.8500	0.0	0.0	0.0 !
	18.00000	24.00000	-2.50000	0.16625	-2.8500	0.0	0.0	0.0 !
	19.00000	24.00000	-2.50000	0.15854	-2.8500	0.0	0.0	0.0 !
	20.00000	24.00000	-2.50000	0.14975	-2.8500	0.0	0.0	0.0 !
	21.00000	24.00000	-2.50000	0.14013	-2.8500	0.0	0.0	0.0 !
	22.00000	24.00000	-2.50000	0.12995	-2.8500	0.0	0.0	0.0 !
	23.00000	24.00000	-2.50000	0.11950	-2.8500	0.0	0.0	0.0 !
	24.00000	24.00000	-2.50000	0.10910	-2.8500	0.0	0.0	0.0 !
	25.00000	24.00000	-2.50000	0.098997	-2.8500	0.0	0.0	0.0 !
	26.00000	24.00000	-2.50000	0.089410	-2.8500	0.0	0.0	0.0 !
	27.00000	24.00000	-2.50000	0.080468	-2.8500	0.0	0.0	0.0 !
	28.00000	24.00000	-2.50000	0.072238	-2.8500	0.0	0.0	0.0 !
	29.00000	24.00000	-2.50000	0.064737	-2.8500	0.0	0.0	0.0 !
	30.00000	24.00000	-2.50000	0.057942	-2.8500	0.0	0.0	0.0 !
	0.00000	25.00000	-2.50000	0.082257	-2.8500	0.0	0.0	0.0 !
	1.00000	25.00000	-2.50000	0.090020	-2.8500	0.0	0.0	0.0 !
	2.00000	25.00000	-2.50000	0.098097	-2.8500	0.0	0.0	0.0 !
	3.00000	25.00000	-2.50000	0.10636	-2.8500	0.0	0.0	0.0 !
	4.00000	25.00000	-2.50000	0.11463	-2.8500	0.0	0.0	0.0 !
	5.00000	25.00000	-2.50000	0.12270	-2.8500	0.0	0.0	0.0 !
	6.00000	25.00000	-2.50000	0.13037	-2.8500	0.0	0.0	0.0 !
	7.00000	25.00000	-2.50000	0.13741	-2.8500	0.0	0.0	0.0 !
	8.00000	25.00000	-2.50000	0.14364	-2.8500	0.0	0.0	0.0 !
	9.00000	25.00000	-2.50000	0.14890	-2.8500	0.0	0.0	0.0 !
	10.00000	25.00000	-2.50000	0.15307	-2.8500	0.0	0.0	0.0 !
	11.00000	25.00000	-2.50000	0.15608	-2.8500	0.0	0.0	0.0 !
	12.00000	25.00000	-2.50000	0.15788	-2.8500	0.0	0.0	0.0 !
	13.00000	25.00000	-2.50000	0.15845	-2.8500	0.0	0.0	0.0 !
	14.00000	25.00000	-2.50000	0.15779	-2.8500	0.0	0.0	0.0 !
	15.00000	25.00000	-2.50000	0.15591	-2.8500	0.0	0.0	0.0 !
	16.00000	25.00000	-2.50000	0.15283	-2.8500	0.0	0.0	0.0 !
	17.00000	25.00000	-2.50000	0.14862	-2.8500	0.0	0.0	0.0 !
	18.00000	25.00000	-2.50000	0.14333	-2.8500	0.0	0.0	0.0 !
	19.00000	25.00000	-2.50000	0.13707	-2.8500	0.0	0.0	0.0 !
	20.00000	25.00000	-2.50000	0.12999	-2.8500	0.0	0.0	0.0 !
	21.00000	25.00000	-2.50000	0.12224	-2.8500	0.0	0.0	0.0 !
	22.00000	25.00000	-2.50000	0.11403	-2.8500	0.0	0.0	0.0 !
	23.00000	25.00000	-2.50000	0.10558	-2.8500	0.0	0.0	0.0 !
	24.00000	25.00000	-2.50000	0.097098	-2.8500	0.0	0.0	0.0 !
	25.00000	25.00000	-2.50000	0.088783	-2.8500	0.0	0.0	0.0 !
	26.00000	25.00000	-2.50000	0.080788	-2.8500	0.0	0.0	0.0 !
	27.00000	25.00000	-2.50000	0.073224	-2.8500	0.0	0.0	0.0 !
	28.00000	25.00000	-2.50000	0.066162	-2.8500	0.0	0.0	0.0 !
	29.00000	25.00000	-2.50000	0.059632	-2.8500	0.0	0.0	0.0 !
	30.00000	25.00000	-2.50000	0.053639	-2.8500	0.0	0.0	0.0 !
Line 1	15.00000	-5.00000	-2.80000	0.17316	-3.0750	0.0	0.0	0.0 !
	15.00000	-3.50000	-2.80000	0.22119	-3.0750	0.0	0.0	0.0 !
	15.00000	-2.00000	-2.80000	0.29207	-3.0750	0.0	0.0	0.0 !
	15.00000	-0.50000	-2.80000	0.40649	-3.0750	0.0	0.0	0.0 !
	15.00000	1.00000	-2.80000	1.1437	-3.0750	0.0	0.0	0.0
	15.00000	2.50000	-2.80000	1.8658	-3.0750	0.0	0.0	0.0
	15.00000	4.00000	-2.80000	3.8635	-3.0750	0.0	0.0	0.0
	15.00000	5.50000	-2.80000	4.6750	-3.0750	0.0	0.0	0.0
	15.00000	7.00000	-2.80000	-3.3156	-3.0750	0.0	0.0	0.0
	15.00000	8.50000	-2.80000	-2.0171	-3.0750	0.0	0.0	0.0
	15.00000	10.00000	-2.80000	4.3454	-3.0750	0.0	0.0	0.0
	15.00000	11.50000	-2.80000	-3.2060	-3.0750	0.0	0.0	0.0
	15.00000	13.00000	-2.80000	-1.2176	-3.0750	0.0	0.0	0.0
	15.00000	14.50000	-2.80000	7.2337	-3.0750	0.0	0.0	0.0
	15.00000	16.00000	-2.80000	2.5576	-3.0750	0.0	0.0	0.0
	15.00000	17.50000	-2.80000	1.4408	-3.0750	0.0	0.0	0.0
	15.00000	19.00000	-2.80000	0.94520	-3.0750	0.0	0.0	0.0
	15.00000	20.50000	-2.80000	0.34421	-3.0750	0.0	0.0	0.0 !
	15.00000	22.00000	-2.80000	0.25491	-3.0750	0.0	0.0	0.0 !
	15.00000	23.50000	-2.80000	0.19674	-3.0750	0.0	0.0	0.0 !
	15.00000	25.00000	-2.80000	0.15591	-3.0750	0.0	0.0	0.0 !

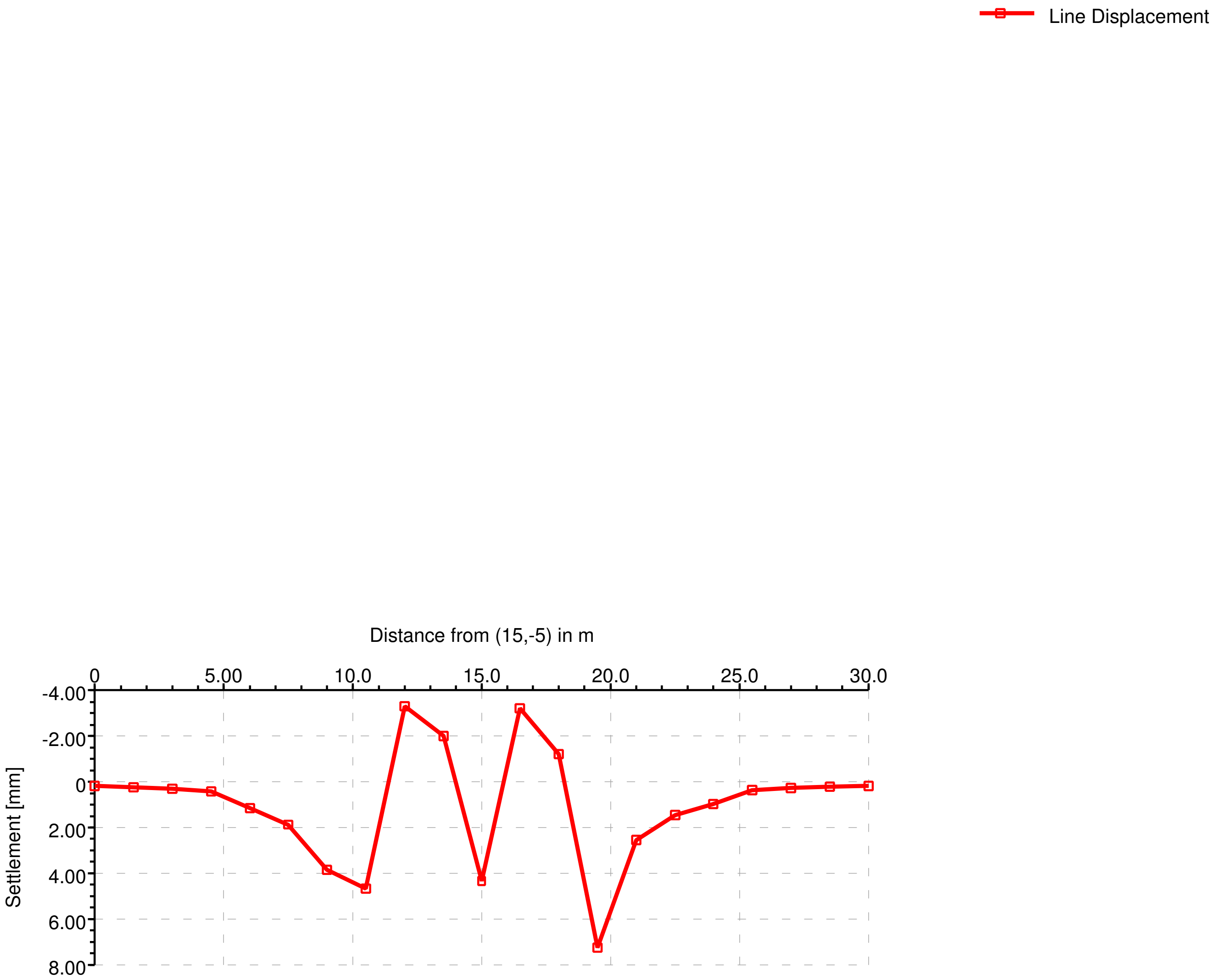
! Point lies outside soil zones. Results calculated for this point assume a soil zone with properties of the first soil profile.

Job No.	Sheet No.	Rev.
J15275		
Drg. Ref.		
Made by MC	Date	Checked

Displacement for Line 1



Displacement for Line 1



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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GEA Geotechnical & Environmental Associates

10-11 Kings Mews

Boundary and Party Wall Movement Monitoring Notes

Ref No: 24151

Date: September 2015

FLUID.STRUCTURES
Structural Engineers & Technical Designers

Quality management

Job No	24151
Location	10-11 Kings Mews, London
Title	Wall Movement Monitoring
Document Status	For Information
Date	September 2015
Prepared By	Andrew Urquhart
Checked By	Hiep Pham

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Revision Status/ History

Rev	Date	Issue/ Purpose/ Comment	Prepared	Checked	Authorised
P1	Sept 15	For Information	AU	HP	DC

BOUNDARY AND PARTY WALL MOVEMENT MONITORING

In order to monitor any movement to the adjacent structures during the works at 10-11 Kings Mews, it is proposed that any monitoring of movement should take the form of targets set up on the adjacent existing walls with levels read from a fixed station. The fixed stations should be in suitable locations away from the area of the works so as not to be affected by any local ground movements (exact locations to be agreed on site with the Contractor, Engineer and the Party Wall Surveyors, if applicable). During excavation, targets should be set up on the Party Walls of the adjacent building structures each side of the site and along the party/boundary garden walls at the rear of the building to ascertain whether any vertical or lateral movements are in the walls occur. It is suggested that the monitoring is carried out as follows;

- Initial visit for set up and datum readings, prior to any demolition works being carried out.
- Weekly visits from initial installation of monitoring to start of demolition. Ideally a number of initial readings should be taken over a period of several weeks, at least, before construction work starts.
- At least weekly during the demolition and fortnightly during construction of new structure until existing structures are tied into new structure.
- Monthly visits during the remaining construction time thereafter until 3 months after the completion of the new structure.

Should any significant level differences or movements be observed or found in readings, then it is recommended that monitoring is carried out at closer intervals. The frequency should also be increased if movements appear to be accelerating or if the established trend of movements appears to be changing unexpectedly. Additional readings should also be taken after severe storms and after any impact on the temporary structure.

Movements to be recorded should include:

- Displacements (x/y/z directions)
- Verticality/tilt
- Width of existing cracks (where present)

All readings are to be forwarded by the Contractor to the Project Team on a regular basis together with a covering statement commenting on any issues that arise.

It is proposed that the **trigger** and **action** levels for lateral movement of the retained walls are set at **H/800** and **H/600** respectively. For total vertical movements, the structural threshold values of 5mm trigger and 10mm action level would be appropriate.

- An amber (trigger) level reading would allow structural alteration works to continue on site under the guidance that temporary works will be reviewed by the temporary works designers and the contractor and that any necessary adjustments to the temporary works are implemented by the contractor within 24 hours.
- A red (action) level reading would result in works on site being stopped (subject to ensuring that the building is made safe with any required temporary works put in place) and the temporary works to be reviewed by the temporary works designers and the contractor. No work is to re-start on site until a proposal has been agreed and accepted by all parties.

Please note that these threshold levels are based on structural criteria and not from the point of view of finishes (i.e. cracking to plaster or internal finishes may occur below amber trigger level), however, these are considered to be practical levels of movement within which a competent Contractor should be able to undertake the works. The trigger and action levels are to be discussed and agreed upon between the Contractor, Engineer, and the relevant Party Wall Surveyors, prior to commencing of the works.

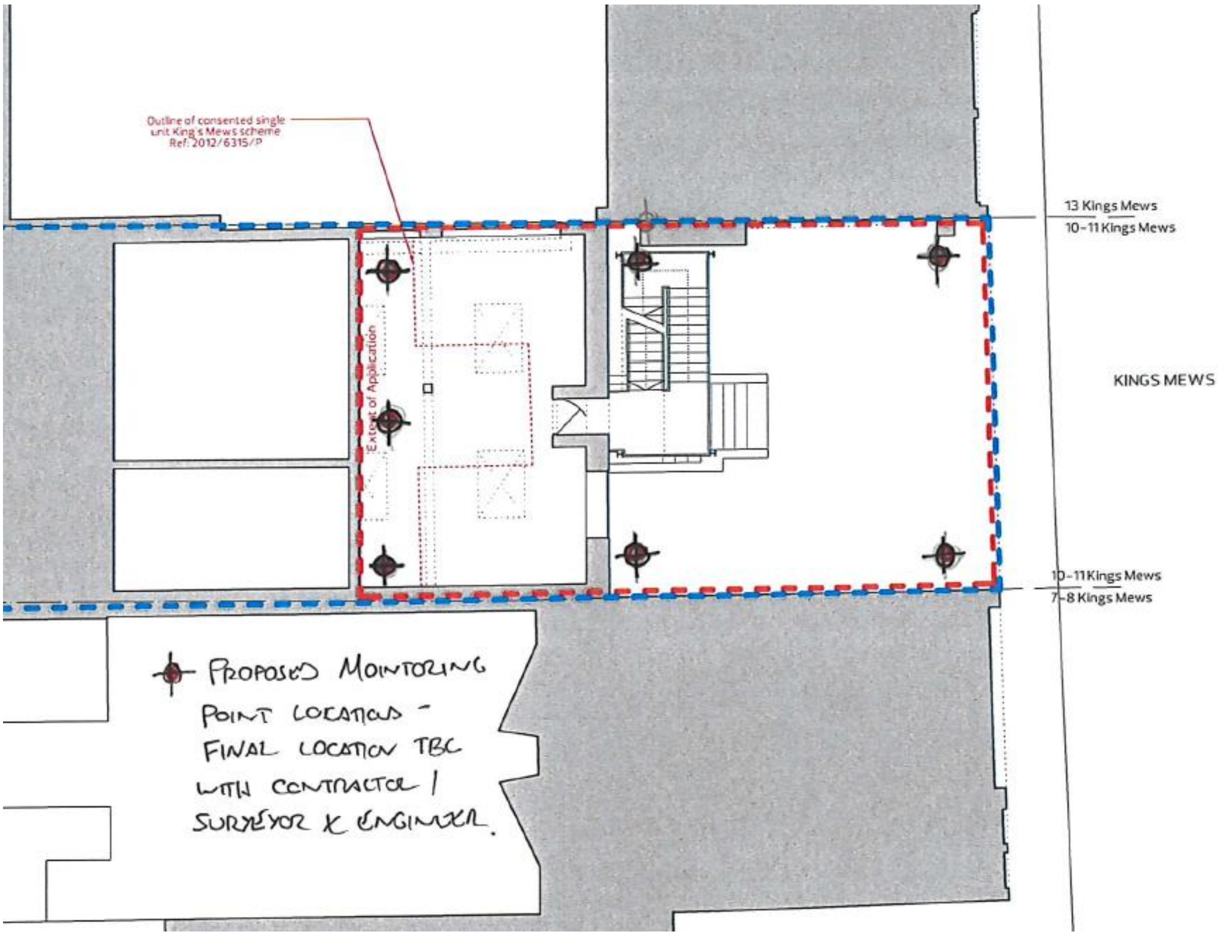

Figure 1: Suggested Locations of Target Points.