Rocco Ventures Limited

70–86 Royal College Street, London, NW1 0TH

Thames Water Asset Assessment Report

Project no. 371944 – 03 (01)

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RSK GENERAL NOTES

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Environment Ltd.

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1 INTRODUCTION

1.1 Instructions

RSK Environment Limited (RSK) was commissioned by Rocco Ventures Ltd ('the client') to assess the likely ground movements and associated potential impact to local Thames Water (TW) sewer assets resulting from the proposed redevelopment of the site located at 70-86 Royal College Street, London, NW1 0TH.

It is understood that the site is to be demolished, the existing foundations grubbed out, a basement constructed followed by the construction of a six-storey health care building.

This report is subject to the RSK service constraints given in Appendix A.

1.2 Background

By way of background to the current project, a preliminary risk assessment (PRA) and ground investigation report (GIR) has been undertaken for the site by RSK (report ref. 371944-01 (00), dated September 2019). This report included a review of geological, hydrogeological and hydrological information, commercially available environmental data, historical plans and a site walkover, followed by an intrusive investigation and subsequent geotechnical and geo-environmental assessments with regards to the proposed development.

The current assessment draws on the results of this report. For full details, reference should be made to the original report.

1.3 Project Brief

The work undertaken for the current project included the following tasks:

- Liaison with the structural engineer (HTS) for the project;
- A review of all salient information contained within the above mentioned report;
- A review of the local ground conditions, hydrology and hydrogeology of the site; and
- An assessment of the potential impacts of the proposed development on the Thames Water Sewer Assets which run around the site along Royal College Street and Pratt Street.

1.4 Standards and Limitations

The opinions expressed in this report and the comments and recommendations given, are based on the information obtained from the desk study assessment and historic site investigation data available in the local vicinity.

This report should be considered in the light of any changes in legislation, statutory requirement or industry practices that may have occurred subsequent to the date of issue.

2 THE SITE

2.1 Site location and description

The site is situated on Royal College Street, London, at national grid reference 529397, 183863, as shown on **Figure 1**.

The site covers an area of 0.14 hectares and is currently occupied by a vacant former ATS tyre centre, comprising a large two storey warehouse/garage buildings and a small single storey tyre storage building.

The area around the site is predominantly a mix of residential and commercial as detailed in **Table 1**.

Table 1: Site setting

To the north:	The Golden Lion Public House bounds the site to the north.
To the east:	An area of open hardstanding used for car parking bounds the site to the east.
To the south:	An access road into the car park bounds the site to the south, beyond which a Parcel Force courier depot is present.
To the west:	Royal College Street bounds the site to the west, beyond which three storey terraced townhouses are present.

2.2 Details of Development

It is understood that the proposed development includes the demolition of the existing vacant buildings on site followed by the construction of a six-storey health care building with a single storey basement.

The construction sequence is likely to comprise the following sequence:

1. Demolition of the existing buildings on site;
2. Removal of any existing tanks and shallow foundations;
3. Installation of a secant piled retaining wall around the perimeter of the site with male load bearing piles extending below basement level essentially forming a contiguous piled wall at depth;
4. Undertake excavation for new basement level (approx. 9.44m) and isolated lift pits (approx. 11.7m) whilst sequentially installing temporary propping;
5. Install new foundation arrangement for proposed building;

6. Cast basement slab;

7. Cast reinforced concrete lining walls to form basement. Propping to be removed and replaced in front of the liner wall in sequence;

8. Cast ground floor slab and remove propping.

The proposed development plans and sections are included within **Appendix E**.

2.3 Ground Conditions

The published 1:50,000 scale (Sheet 256, North London, dated 2006) and 1:10,560 scale (Sheet TQ28NE, dated 1982) geological maps of the area indicate that the site is underlain directly by the London Clay Formation. No superficial deposits are shown in the site area.

Reference to the 1:10,000 scale geological map indicates that the site lies over an area of potentially worked ground, as such, the presence of made or reworked ground cannot be discounted.

An intrusive site investigation was undertaken by RSK in August 2019 (report ref. 371944 – 01 (00)) and comprised two cable percussive boreholes drilled to a maximum depth of 30.00 m below the existing ground level, three windowless sampling boreholes drilled to a maximum depth of 5.00 m and three hand excavated trial pits to a maximum depth of 1.42 m in order to determine existing foundation details. The boreholes were installed with 35mm and 50mm diameter gas/groundwater monitoring installations and monitored over a period of 6 weeks.

For the purposes of discussion, the ground conditions summarised in **Table 2** and discussed below.

Table 2: General succession of strata encountered

Strata	Exploratory holes encountered	Depth to top of stratum m bgl	Thickness (m)
Made Ground	All Positions	Ground Level	1.00 – 3.40
Possible reworked London Clay Formation	BH2 and WS2	1.20 – 1.30	1.80 – 2.00
London Clay Formation	BH1, BH2, WS2 and WS3	1.00 – 3.40	Proven to 30.45m bgl

3 ASSESSMENT APPROACH

3.1 Scope of Works

The approach to the assessment has been broadly split up into two stages based on those recommendations made by Dr Barry New during the Harding Lecture of 2017 and subsequently published in the paper “Tunnel Construction Impacts on Utility Pipelines” in 2019. Stage 1 suggest a first pass assessment is undertaken and those assets within the 1mm displacement contour zone are highlighted for further analysis. Stage 2 comprises a more detailed analysis of those assets not eliminated during Stage 1 and includes the presentation of charts of displacement, strain, joint rotation, pull out and curvature.

In order to implement the above mention assessment methodology the following processes have been undertaken:

1. Model the construction sequence on site from demolition through to the proposed development using OASYS PDISP 20.0.0.15 elastic analysis package.

2. Output displacements along the line of the existing TW assets within the 1mm contour zone around the site.

3. Estimate the likely ground movements resulting from excavation of the proposed basement and secant and contiguous piled wall installation based on the empirical information contained in CIRIA C760 Embedded Retaining Wall using the OASYS XDISP Pro 20.1.1.20 software.

4. Use the program XDISP to combine the ground displacements determined from the numerical analyses PDISP and the CIRIA C760 assessment.

5. From the resulting displacements determine the associated exceedances of the assessment criteria observed along each TW asset in line with the TW guidance as defined in the document “Working Near Our Assets”.

6. Production of report summarising our findings for review by TW.

3.2 Utilities to be Assessed

The details of the sewer assets considered for the assessment have been obtained from the records provided by the Thames Water and presented in Appendix B.

The results from the Stage 1 assessment are presented in **Figures 2** to **3** and include contour plots for the sewers and water pipes surrounding the site. The affected utilities are summarised in **Table 3** below.

Table 3: Existing Thames Water Assets included in the assessment

Utility type	Diameter (mm)	Wall thickness (mm)	Metres below ground level (mbgl)	Location
BP[2] (TW Main-1)	180	5	0.9	Pratt Street
HPPE (TW Main-2)	180	5	0.9	Royal College Street
HPPE ((TW Main-3)	180	5	0.9	Royal College Street
HPPE (TW Main-4)	180	5	0.9	Royal College Street
Brick sewer (TW Foul-1)	1372 x 762[1]	200	6.0	Pratt Street
Brick sewer (TW Foul-2)	2134 to 1829[3]	200	6.0	Royal College Street

Notes:
[1] Egg shaped sewer.
[2] BP understood to indicate "Barrier Pipe" and has been therefore assumed to have the same material properties as HPPE.
[3] Dimensions are noted to vary as such largest diameter has been adopted for purpose of assessment.

Each of these assets has been broken down into segments for the assessment. A plan showing the locations of these segments is shown on **Figure 4**.

3.3 Condition of Existing Assets

A pre-commencement survey has been carried out for the length of existing sewer to the north of the site along Pratt Street and the west of the site along Royal College Street. There was largely an absence of any significant defects identified along the sections of both sewers, bar observations noted at 15m south east of the junction between the two assets beneath Royal College Street. The survey observed multiple cracks from 8 o'clock to 11 o'clock, no mortar in joints and displaced bricks over a section of some 0.5m in length.

The condition surveys completed to date are included within **Appendix F**.

3.4 Ground Model Parameters

For the purpose of the analyses a distribution of Young's modulus with depth has been derived from information contained within the borehole logs from the Ground Investigation Report and experiences investigating other sites in the local vicinity and across London.

The undrained Young's Modulus (E_u) has been obtained using a relationship of $E_u = 400c_u$ for the cohesive London Clay. The drained Young's Modulus (E') has been obtained using the relationship of $E' = 0.8E_u$. The undrained Young's Modulus (E_u) for the Lambeth Group has been conservatively obtained using a relationship of $E_u = 400c_u$ and $E' = 0.8E_u$.

The resulting distribution of undrained and drained modulus values are presented in **Figures 5** and **6**.

The parameters adopted for the ground movement assessment in PDISP are summarised below in **Table 4**.

Table 4: Ground Model Parameters – Drained and Undrained

Material	Young's Modulus (kN/m^2)	Young's Modulus – Increase with Depth ($kN/m^2/m$)	Poisson's Ratio
Made Ground / Reworked London Clay Formation - Undrained	20,000	-	0.5
Made Ground / Reworked London Clay Formation - Drained	20,000	-	0.2
London Clay Formation - Undrained	44,000	4,661	0.5
London Clay Formation - Drained	35,000	3,759	0.2

3.5 Adopted Ground Profile

The ground profile adopted for the ground movement assessment in PDISP is summarised below in **Table 5**.

Table 5: Ground Profile

Material	Top of Stratum (mbgl	Thickness (m)
Made Ground / Reworked London Clay Formation	0	3.40
London Clay Formation	3.40	26.60

3.6 PDISP - Ground Model Construction

A settlement / heave analysis has been completed adopting the PDISP software produced by ARUP to assess the likely ground movements to be expected from the demolition and proposed development activities.

The PDISP computer package adopts the Boussinesq method of elastic analysis to calculate the stresses and strains generated within the soil, due to an applied loading

and determines the associated displacements by integrating the vertical strains. Settlements are defined as positive movements and heave as negative movements.

The loads applied in the PDISP model are split into two elements; negative loads to represent unloading or demolition and positive loads to represent reloading or construction.

The loads applied in the PDISP model are split into various elements, those applied from unloading of the existing building shallow spread foundations to replicate demolition and those applied from loading of the proposed development. The application of loads to represent excavation is completed by applying negative load at the base of excavation, whereas the loads applied from reloading or construction are applied by inducing a positive load, in this case for the piles and contiguous piled wall at 2/3 the depth of embedment below basement level, over the zone of actively contributing skin friction assuming a 1 horizontal to 4 vertical load spread and at the base of the raft.

For the purpose of the model a rigid boundary layer was assumed to be at 30.00m bgl below which no movement is considered to occur.

The following PDISP analyses have been undertaken to determine the ground movements at key stages in the constructions process. Both undrained and drained conditions have been considered for the appropriate stages.

- **Demolition of existing building – Short Term and Long Term:** This has been carried out by calculating the ground movements that would result from unloading the existing building foundations assuming undrained and drained soil parameters. Detailed information concerning existing building foundations and the existing building load take down has not been provided and as such has been assumed to comprise a site wide unloading of 50kN/m^2.

- **Basement excavation – Short Term and Long Term:** This has been calculated by the removal of an overburden pressure for the proposed basement excavation. For the proposed development, there is envisaged to be approximately 9.44m of material removed across the basement (188.8kN/m^2). The localised excavation of the lifts pits modelled is likely to result in a further 45.5kN/m^2 of upward force at a level of 11.70m. This stage has been analysed using undrained and drained soil parameters.

- **Loading from the proposed new superstructure – Long Term:** The loads provided by HTS have been modelled across the base of the raft and at 2/3 the length of the piled wall below the basement formation level of 9.44m bgl. This loading case has been considered in the long term case using drained parameters.

The analysis has considered both undrained and drained soil conditions to give an indication of the immediate short term and the maximum expected long term ground movements resulting from the proposed development.

In order to model these conditions two analyses have been carried out, the first considering undrained ground stiffness parameters and a Poisson's ratio of 0.50 and the second considering a drained modulus and a Poisson's ratio of 0.20. The first of these analyses allows an assessment of the immediate elastic heave that would result from demolition of the existing structure and removal of overburden from the excavation of the basement. The second analysis allows for long term net movements following construction of the new development to be determined, which will include the total heave that would develop in the long term and settlement following consolidation of the underlying clay due to the construction of the new building. The fully drained (long term) conditions would typically take many years to develop (10 years or more).

The ground movements have been isolated based on the particular phases of development in addition to the anticipated time frames of which any movements are anticipated to be realised, i.e. short term / long term. These movements have then been used in the empirical building damage assessment, using OASYS XDISP Pro 20.1.1.20.

4 ASSESSMENT OF UTILITY DEFORMATIONS

The deformations and associated potential damage of the TW assets in question has been determined at the end of the stages of construction presented in **Table 6**.

Table 6: Stages of Construction at which Building Damage is Assessed

No.	Construction Stage	Short / Long Term	Cumulative Effect
1	Demolition of existing structure	Short	(A)
2	Demolition and basement construction	Short	(A) + (C) + (D)
3	Demolition, basement construction and proposed development	Long	(B) + (C) + (D) + {(F) – (E)} + (H)

The various elements of work used to determine the utility deformations at the various stages of construction are given in **Table 7**. This table also defines how the associated movements have been determined and whether they are long or short term.

Table 7: Construction Sequence

Element	Construction Component	Calculation Method	Short or Long Term
A	Demolition of existing structure	PDISP	Short Term
B	Demolition of existing structure	PDISP	Long Term
C	Basement wall installation	CIRIA C760 (XDISP)	Short Term
D	Basement excavation	CIRIA C760 (XDISP)	Short Term
E	Basement excavation	PDISP	Short Term
F	Basement excavation	PDISP	Long Term
G	Loading of new structure	PDISP	Short Term
H	Loading of new structure	PDISP	Long Term

The utility deformations following each of these stages of construction have been derived by combining the deformations calculated for the various elements of work carried out. For example, the long term utility movements after construction of the proposed building have been calculated by summing the displacements resulting from the long term movements from the demolition of the existing structure (B), installation of the piled wall, as estimated from CIRIA C760 (C), the short term movements resulting from excavation estimated from CIRIA C760 (D), the short term movements resulting from excavation of the basement (E) deducted from and the long term movements

resulting from excavation of the basement (F) and the settlements resulting from loading of the building as calculated by PDISP (H).

The assessment has been undertaken using XDISP Pro 20.1.1.20 computer package supplied by OASYS, which uses the empirical approach outlined in CIRIA C760 to assess vertical and horizontal ground movements resulting from installation of embedded retaining walls and excavation in front of walls.

The empirical approach is well described in CIRIA C760 “Guidance on Embedded Retaining Wall Design” 2017. This document provides charts of vertical and horizontal ground movements resulting from installation of embedded retaining walls and excavation in front of the walls. These charts have been normalised with wall length and excavation depth to facilitate their use for new development.

The analysis undertaken assesses the ground movements for the assets identified in Section 3.2 (horizontal and vertical) around the site resulting from the installation of the secant and contiguous piled retaining wall during the basement excavation, followed by the propping and excavation of the basement.

4.1 Assessment approach

As part of the assessment process, a staged approach has been undertaken to investigate the displacements to the assets surrounding the site as a result of the proposed development works. The following stages have been implemented:

- Stage 1: A 1mm displacement contour plot of vertical and horizontal movements from the phase of the development likely to be the most onerous on the Thames Water assets (in this case assumed to be basement construction). These plots are overlain on the assets plans for the sewers and water pipes surrounding the site to determine which assets fall within the zone that requires further, more detailed analysis. This stage has been used to identify the assets noted in Section 3.2.
- Stage 2a: The model is then run using the assessment approach outlined in Section 4 to determine if there are exceedances over and above the prescribed Thames Water assessment criteria. If the analysis indicates there are no exceedances along the length of that particular asset, then no further action is considered to be required. However, if any particular asset highlights possible exceedances then a further stage of analysis is undertaken.
- Stage 2b: Those assets that are shown to exceed the TW assessment criteria in Stage 2a may be further assessed and consideration be given to marginal “smoothing” of the displacement data broadly in line with the discussions outlined in “The Prediction of Ground Movements Adjacent to Box Excavations” (Latham (2014)). The requirement to undertake this smoothing exercise is a function of the simplistic nature that the XDISP software applies displacements resulting from wall installation and basement excavation to the assets surrounding the site. The interpretation of displacements often leads to a series of peaks, troughs and sharp inflections that result in overly conservative estimations of strain, joint rotation, pull out and curvature within the assets. The smoothing process involves the importing

of the displacement data from XDISP into an excel file prior to interrogation of the data points prior to reimporting back into XDISP and the assessment reanalysed at each of the impacted stages with the influence of the polygonal excavations removed.

5 USE OF XDISP TO COMBINE DISPLACEMENTS

In order to combine the horizontal and vertical utility movements caused by demolition, basement excavation and loading of the proposed building the XDISP software package has been used.

This package allows the ground movements caused by basement excavation (short term) as presented in CIRIA C760 to be automatically calculated at the location of the various TW services. The utility movements determined by PDISP for the other stages of construction can then be imported into the software and combined with the CIRIA C760 movements. In order to achieve this, it is necessary to adopt exactly the same coordinate system in both pieces of software.

Using the resulting deformations the software determines the associated axial and flexural strains induced in the utilities, from which the maximum tensile and compressions strains are calculated. In addition to this the software also calculates the pull out and rotation at each joint specified in a pipe. For this project the assessment has been carried out for the sewer and water pipes with joints at a spacing of 3m for the HPPE pipes.

The XDISP software allows the user to define various "Utility Acceptance Criteria" which essentially represent levels of change of strain and joint rotation below which the risk of significant damage is negligible. For this project the utility acceptance criteria in **Table 8** have been adopted, most of these have been taken from the TW guidance document "Guidance on piling, heavy loads, excavations, tunnelling and dewatering".

Table 8: Utility Acceptance Criteria

Utility Material	Internal Dia. (mm)	Wall Thickness (mm)	Allowable Increase in Strain		Allowable Joint Movement	
			Tension (με)	Compression (με)	Rotation (^{0})	Pull Out (mm)
Brick	1372 to 2134 [1]	200	500	1000	n/a	n/a
HPPE	180	5	9000	9000	n/a	n/a
Notes: [1] Maximum dimensions for the brick sewers						

Finally, the XDISP software allows the axial strains calculated in the various utilities to be downgraded using what is termed the Strain Reduction Factor (SRF). This allows the strain developed in a specific utility to be downgraded to take into consideration the difference in stiffness between the utility and the surrounding soils.

For most material types the stiffness of the utility is significantly greater than that of the surrounding soils and as such the strain transferred between the soil and utility is relatively low. Therefore, an SRF of 0.2 has been adopted in both tension and compression (Attewell 1986).

In addition to the above it is noted that where brick sewers run beneath the site an assessment of the confinement / pressure ratio (CPR) should be undertaken. As noted in New (2019) the compressive stress exerted on a masonry asset from any surcharge load at the sewer axis should be compared with the hydrostatic pressure within. Generally speaking, a CPR of 1.33 is likely to be acceptable if it is assumed the sewer is in good condition.

6 INTERPRETATION OF RESULTS

Two specific issues with the way in which the XDISP software worked have formerly caused some difficulties with interpreting the results. To start with the software shows an overall failure of a utility if any of the acceptance criteria are exceeded. In the case of a jointed pipe such as a concrete sewer on site, which is relatively stiff, this is not necessarily the case as if the allowable joint rotation is not exceeded then no flexural stress can develop in the pipe. Therefore, if there is not a joint rotation failure there cannot be a flexural failure.

Secondly the way in which earlier versions of XDISP combined axial and tensile strains (simply add the two together) was not considered appropriate for TW utility assessment purposes as has been formerly noted by the Geotechnical Consulting Group (GCG).

For those assets which can sustain tension under flexure (e.g. metal pipes, HPPE, MDPE and reinforced concrete) the possible axial compressive and tensile strains cannot be relied on to reduce flexural tensile and compressive strains respectively. Therefore, the following method of combination needs to be adopted,

a. Combined tensile strain should be taken from one of the following;
    i. Axial tensile strain x SRF + Flexural tensile strain
    ii. Axial compressive strain x 0 + Flexural tensile strain
b. Combined compressive strain should be taken as one of the following;
    i. Axial compressive strain x SRF + Flexural compressive strain
    ii. Axial tensile strain x 0 + Flexural compressive strain

For those assets which cannot sustain tension under flexure (e.g. unreinforced concrete or vitrified clay) the lever arm is assumed to be the full external diameter and hence there will be no flexural compressive strain. The possible axial compressive strains cannot be relied on to reduce flexural tensile strains. Therefore, the following method of combination needs to be adopted,

d. Combined tensile strain should be taken from one of the following;
    i. Axial tensile strain x SRF + Flexural tensile strain x 2 [1)]
    ii. Axial compressive strain x 0 + Flexural tensile strain x 2 [1)]
e. Combined compressive strain equals the axial compressive strain x SRF (note: there is no flexural compressive strain)

1) Factor applied to take into consideration the fact that the flexural tensile strain developed in an asset that cannot sustain tension is calculated assuming a lever arm equal to the outer diameter of the asset rather than the radius which is the case for an asset that can resist tension.

For brick sewers the lever arm is assumed to be the full external diameter / height and hence there will be no flexural compressive strain. The possible axial compressive strains cannot be relied on to reduce flexural tensile strains.

f. Combined tensile strain should be taken from one of the following;
    I. Axial tensile strain x 1.0 (SRF for brick) + Flexural tensile strain,
    II. Axial compressive strain x 0 + Flexural tensile strain

g. Combined compressive strain = Axial compressive strain x 1.0 (SRF for brick) (note: there is no flexural compressive strain)

The results from XDISP for both Stage 2a and 2b are presented in **Appendix D**.

7 RESULTS, DISCUSSIONS AND CONCLUSIONS

7.1 Stage 2a Assessment

Table 9 to **Table 11** present the results from the initial Stage 2a assessment of the data and indicate any areas of failure.

Table 9: Summary of Maximum Values – Demolition

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
BP (TW Main-1)	180mm Dia. HPPE	None	-0.045	0.045	0.00	0.00
HPPE (TW Main-2)	180mm Dia. HPPE	None	-0.049	0.049	0.00	0.00
HPPE ((TW Main-3)	180mm Dia. HPPE	None	-0.044	0.044	0.00	0.00
HPPE (TW Main-4)	180mm Dia. HPPE	None	-0.017	0.017	0.00	0.00
Brick sewer (TW Foul-1)	1372mm Dia. Brick sewer	None	-1.527	3.054	0.00	0.00
Brick sewer (TW Foul-2)	2134mm Dia. Brick sewer	None	-2.706	5.413	0.00	0.00
Notes: Numbers highlighted red are observed to be exceedances based on the adopted acceptance criteria.						

Table 10: Summary of Maximum Values – Basement Construction

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
BP (TW Main-1)	180mm Dia. HPPE	None	-85.90	74.84	0.241	0.050
HPPE (TW Main-2)	180mm Dia. HPPE	None	-63.03	60.52	0.167	0.047
HPPE ((TW Main-3)	180mm Dia. HPPE	None	-1.09	2.13	0.015	0.000

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
HPPE (TW Main-4)	180mm Dia. HPPE	None	-75.84	56.12	0.323	0.053
Brick sewer (TW Foul-1)	1372mm Dia. Brick sewer	Fail (tension)	-753.588	1375.26	1.381	0.044
Brick sewer (TW Foul-2)	2134mm Dia. Brick sewer	Fail (tension / compress)	-1260.72	2531.82	2.553	0.057
Notes: Numbers highlighted red are observed to be exceedances based on the adopted acceptance criteria.						

Table 11: Summary of Maximum Values – Final Loading

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
BP (TW Main-1)	180mm Dia. HPPE	None	-85.77	74.65	0.241	0.049
HPPE (TW Main-2)	180mm Dia. HPPE	None	-63.00	60.48	0.166	0.047
HPPE ((TW Main-3)	180mm Dia. HPPE	None	-1.23	2.18	0.015	0.000
HPPE (TW Main-4)	180mm Dia. HPPE	None	-75.75	56.20	0.323	0.053
Brick sewer (TW Foul-1)	1372mm Dia. Brick sewer	Fail (tension)	-751.84	1371.19	1.377	0.044
Brick sewer (TW Foul-2)	2134mm Dia. Brick sewer	Fail (tension / compress)	-1261.19	2532.75	2.554	0.057
Notes: Numbers highlighted red are observed to be exceedances based on the adopted acceptance criteria.						

All tabular and graphical results for Stage 2a are included within **Appendix D**.

From the above results it is noted that there are a number of pipes which display exceedances in tensile strain above their respective acceptable limits as stipulated by TW. An interrogation of the data shows that these exceedances are generally restricted to small sections of the pipes that coincide with the edges of the basement excavation and occur at abrupt changes in the modelled displacement profiles resulting from the simplistic modelling approach adopted in the XDISP analysis.

As such, the following two assets which show tensile strain exceedances in the basement construction and final loading stages are to be progressed to Stage 2b where the erroneous displacement data will be appropriately smoothed and reassessed:

- Brick sewer (TW Foul-1)
- Brick sewer (TW Foul-2)

It is noted that due the absence of any masonry assets beneath the site consideration has not been given to assessing CPR for those brick sewers around the site beneath Pratt Street and Royal College Street.

7.2 Stage 2b Assessment

Table 12 and **Table 13** present the results of the assessment of the smoothed data on those assets previously failing during basement construction and final loading.

Table 12: Summary of Maximum Values – Basement Construction

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
Brick sewer (TW Foul-1)	1372mm Dia. Brick sewer	None	-354.61	442.62	0.474	0.013
Brick sewer (TW Foul-2)	2134mm Dia. Brick sewer	None	-374.93	415.53	0.417	0.009

Table 13: Summary of Maximum Values – Final Loading

Pipe Location	Pipe Type	Failure Type	Calculated Strain (με)		Pull Out (mm)	Joint Rotation (°)
			Comp.	Tensile	Max.	Max.
Brick sewer (TW Foul-1)	1372mm Dia. Brick sewer	None	-335.68	277.60	0.361	0.008
Brick sewer (TW Foul-2)	2134mm Dia. Brick sewer	None	-373.33	450.60	0.452	0.010

7.3 Discussion

Following the smoothing and reanalysis exercise of the two assets previously identified within Stage 2a it is noted that no further exceedances of tensile strain or any other assessment criteria have been breached for any of the assets assessed.

With reference to the existing asset damage noted at 15m along the sewer beneath Royal College Street, it is considered likely that the proposed development has the potential to result in limited further displacement of this asset, albeit within the realms of acceptability based on the prescribed assessment criteria. The findings from the

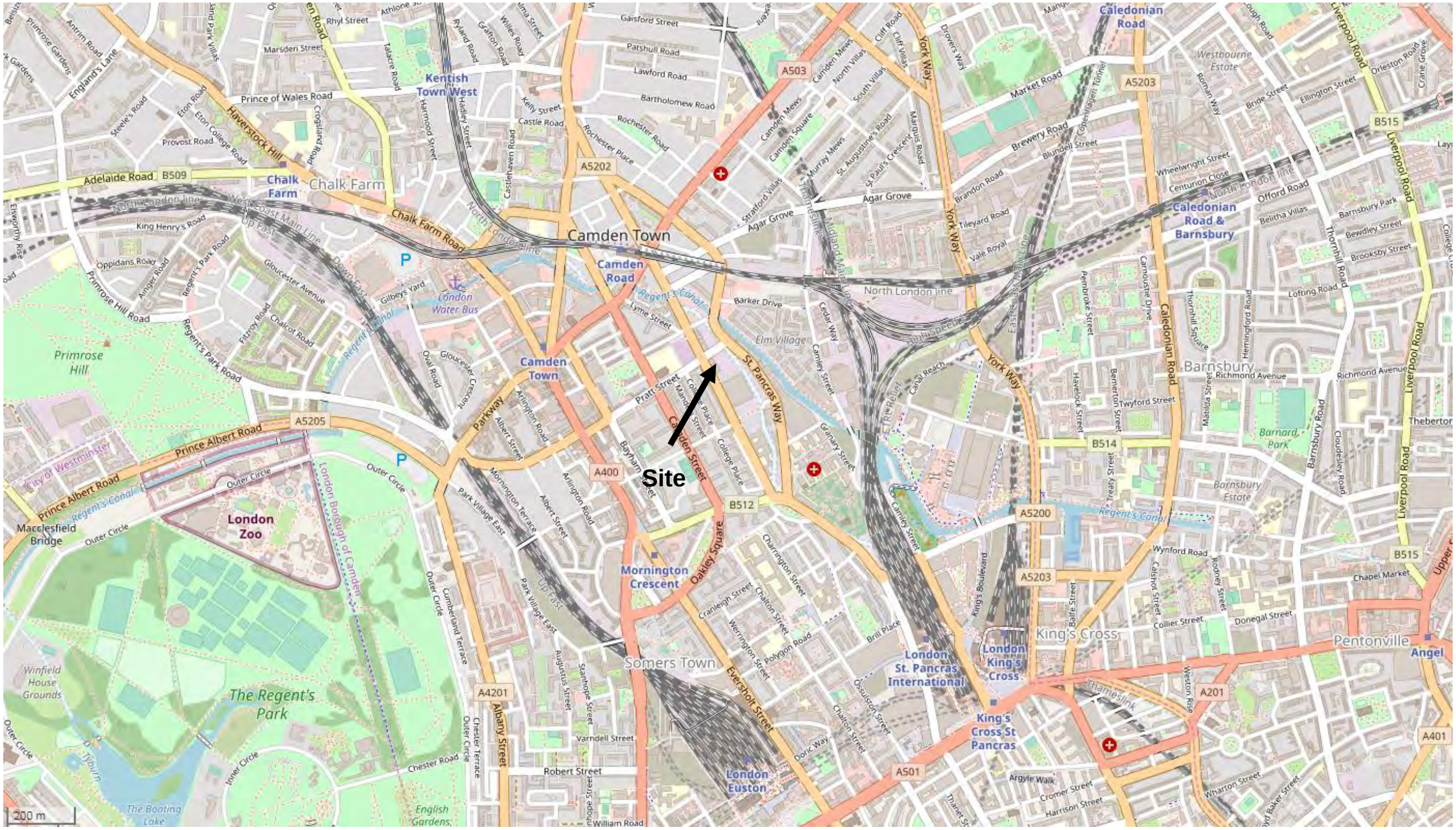
smoothing exercise suggest that some 0.45mm of pull out displacement could be realised. It is therefore recommended that consideration be given to reinstating the missing mortar and adjustment of the displaced bricks following the works to coincide with the post works condition survey.

8 CONCLUSIONS

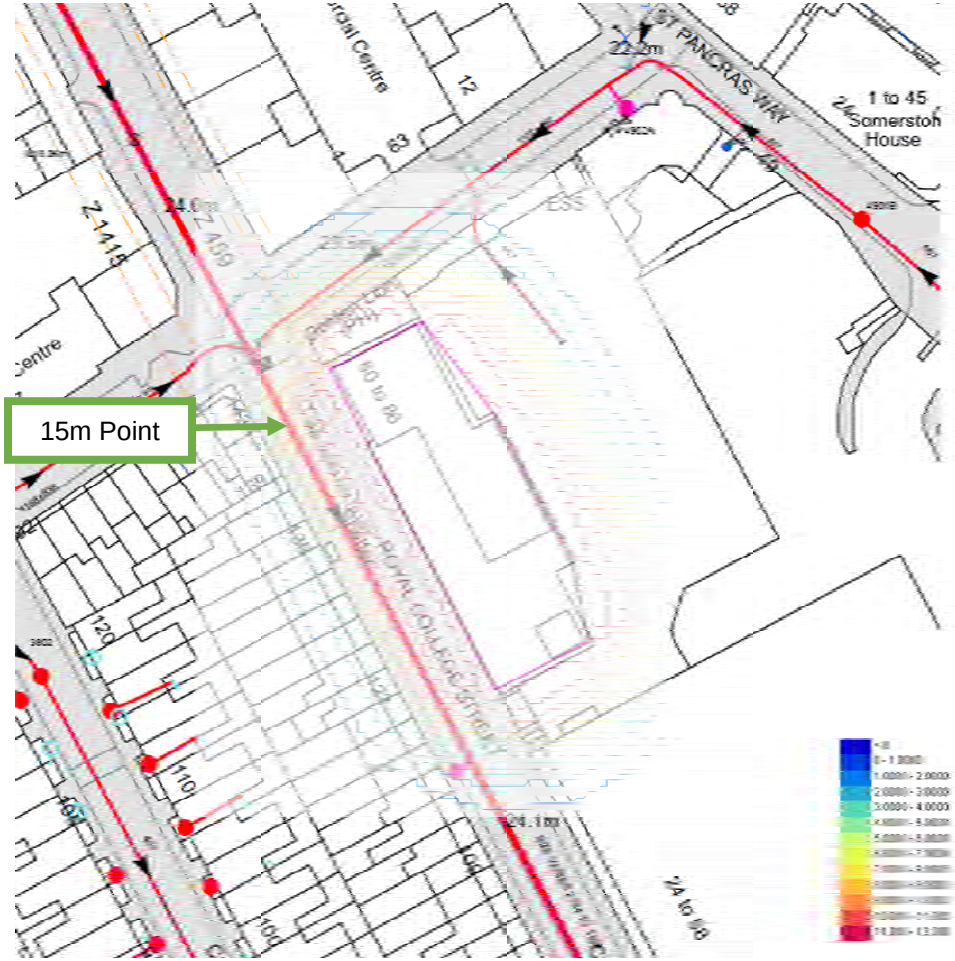
Although it is noted that isolated TW asset sections exhibit tensile strains over and above the prescribed limits at the various stages of construction, this appears to be the result of the simplistic modelling approach adopted by the XDISP software. Through the appropriate smoothing of the displacement profiles of those assets exhibiting erroneous readings the reanalysis has removed these localised issues.

Based on the above assessment it is considered that the proposed development is unlikely to lead to any future damage to the existing, or indeed proposed, Thames Water utilities on and surrounding the site providing that the construction works are carried out with due consideration to their presence.

FIGURES



RSK	**Site Location Plan**	**Client:**	Rocco Ventures Ltd.	**Figure No:**	1
		Site:	60 – 86 Royal College Street, London	**Job No:**	371944
		Scale:	NTS	**Source:**	OpenStreetMap



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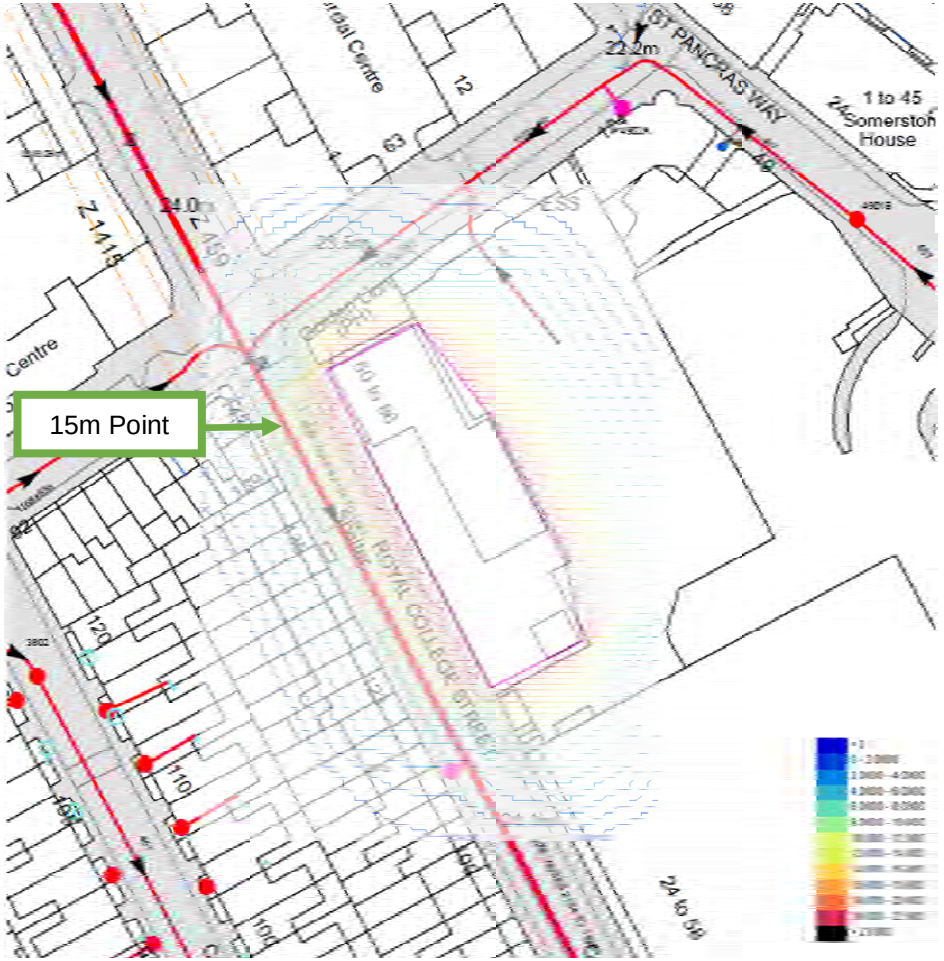
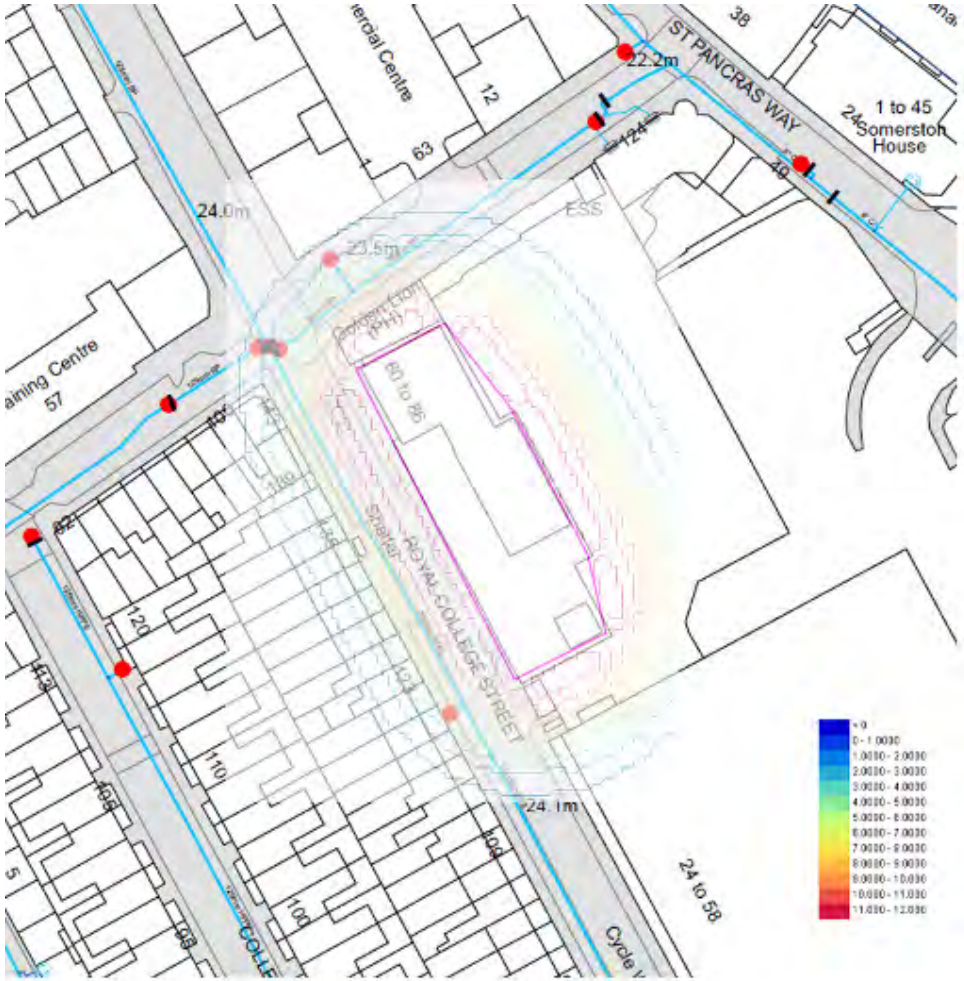


Horizontal

RSK	**THAMES WATER ASSETS PLAN (SEWERS)**	**Client:**	Rocco Ventures Limited	**Figure No:** 2
		Site:	Royal College Street	**Job No:** 371944
		Scale:	NTS	**Source:** TW Statutory service plan



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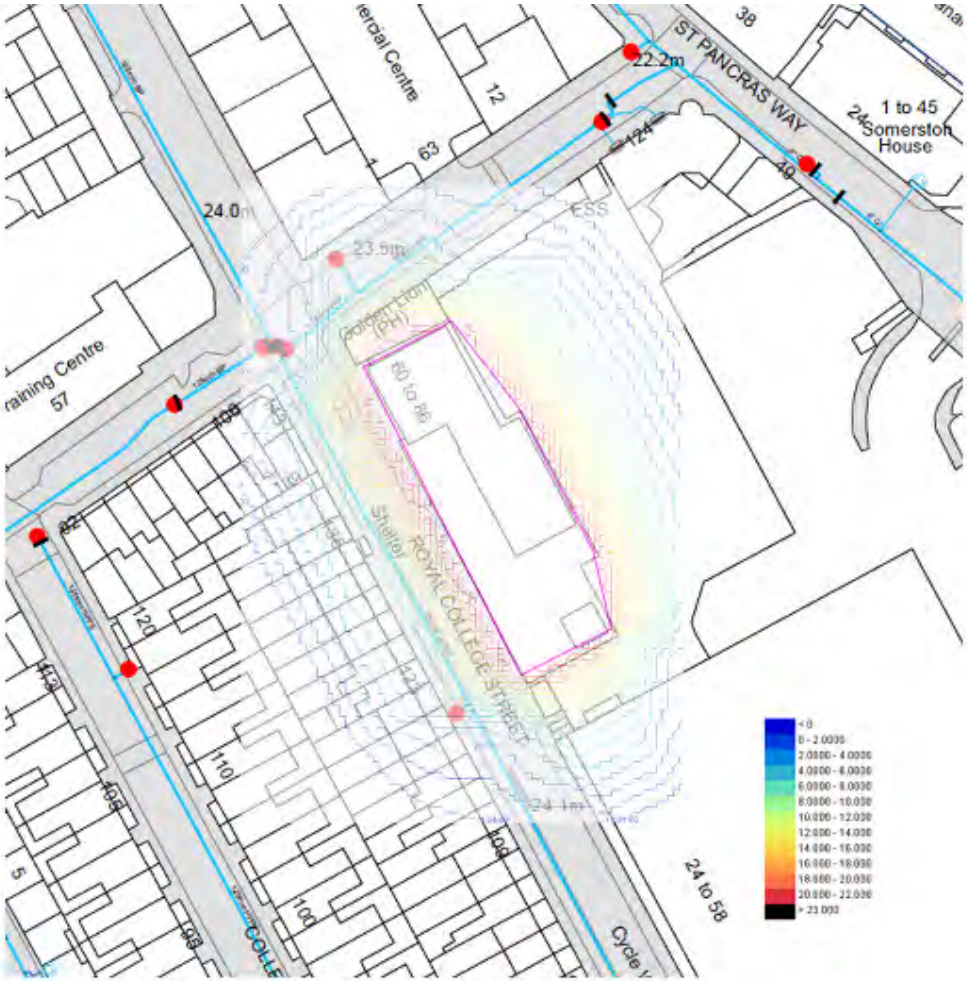
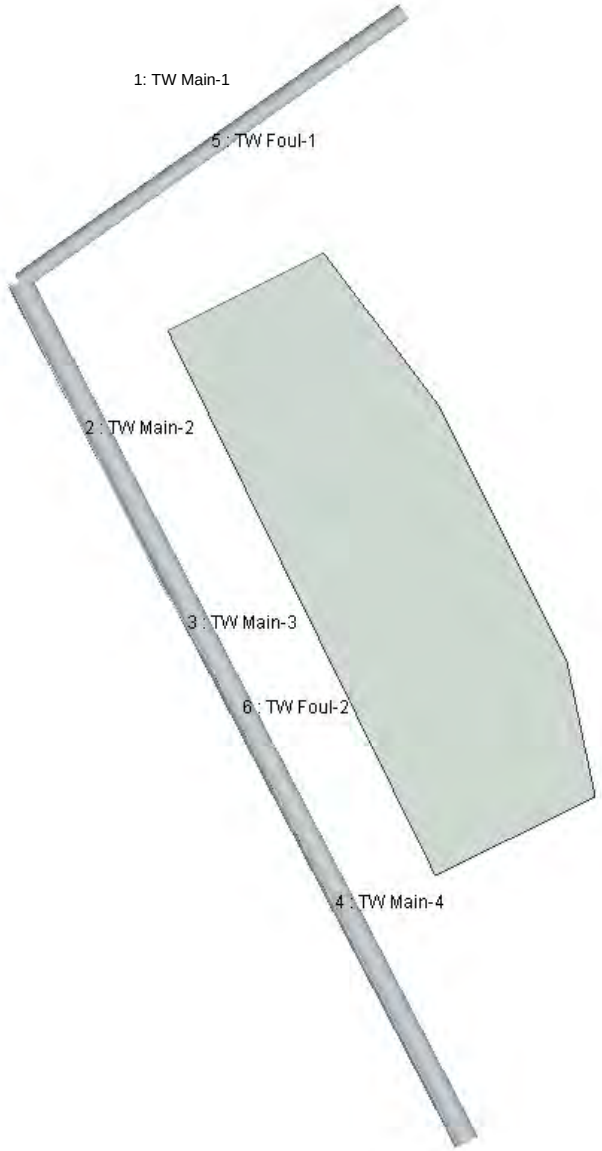


Horizontal

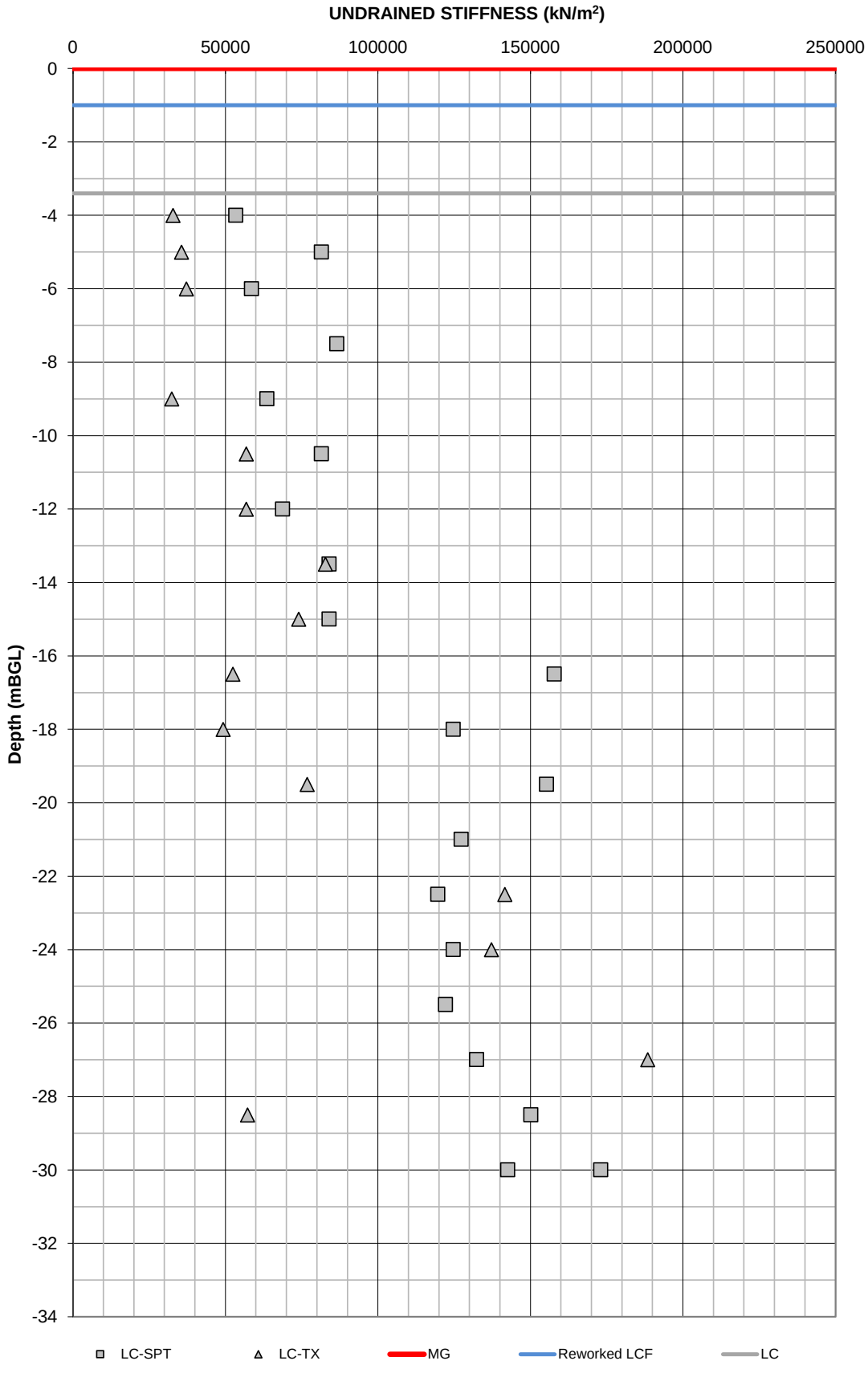
RSK	**THAMES WATER ASSETS PLAN (WATER)**	**Client:** Rocco Ventures Limited	**Figure No:** 3
		Site: Royal College Street	**Job No:** 371944
		Scale: NTS	**Source:** TW Statutory service plan



RSK	**XDISP ASSESSMENT LINES**	**Client:**	Rocco Ventures Limited	**Figure No:**	4
		Site:	Royal College Street	**Job No:**	371944
		Scale:	NTS	**Source:**	XDISP

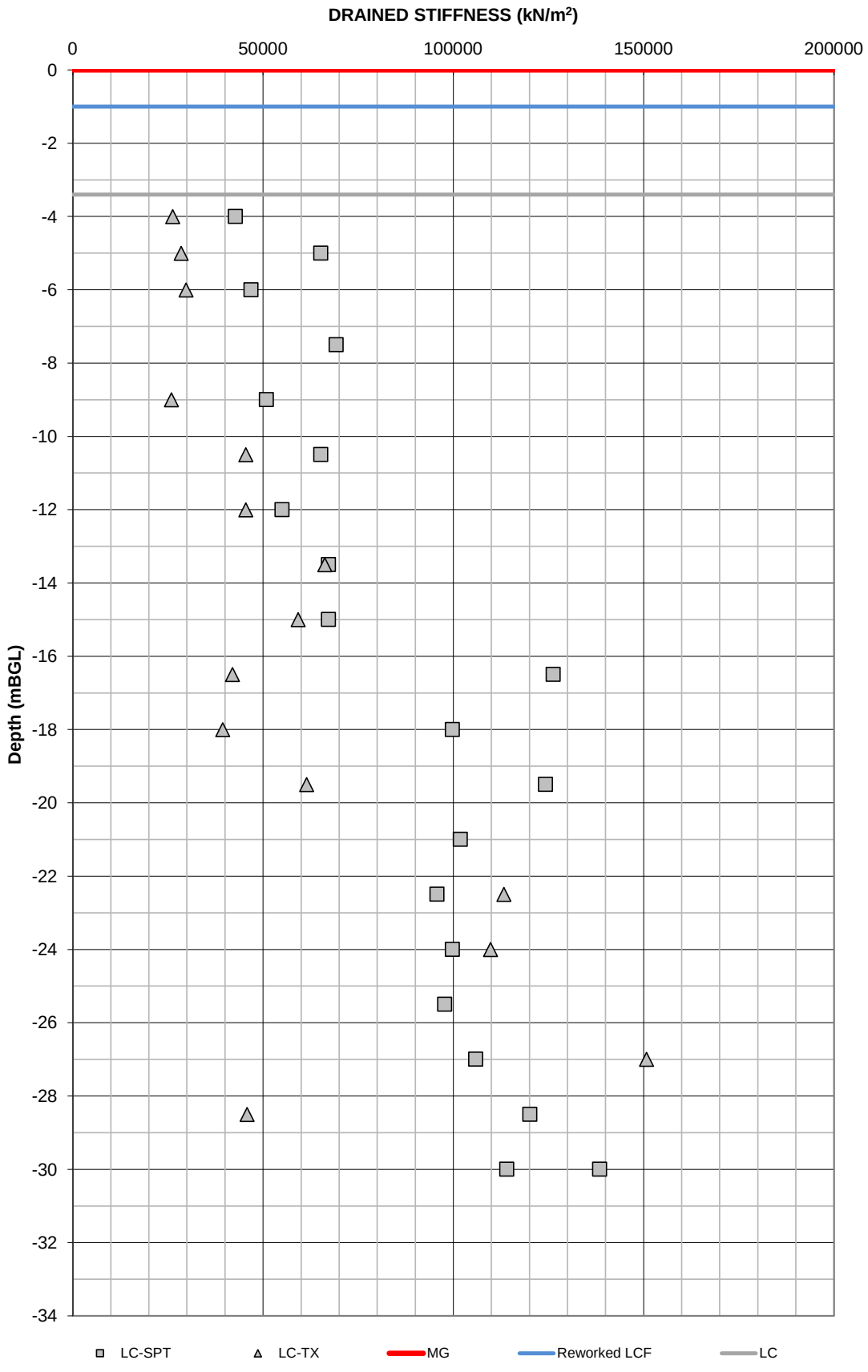
UNDRAINED YOUNG'S MODULUS vs DEPTH

Site:	Client:	Job Number:	371944
60-86 Royal College Street	Rocco Ventures Ltd.	Figure	5



DRAINED YOUNG'S MODULUS vs DEPTH

Site:	Client:	Job Number:	371944
60-86 Royal College Street	Rocco Ventures Ltd.	Figure	6



APPENDIX A
SERVICE CONSTRAINTS

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Rocco Ventures Ltd. (the "Client") in accordance with the terms of a contract [RSK Environment Standard Terms and Conditions] between RSK and the Client. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by an environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.

2. Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.

3. Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. **Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.**

4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK 's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.

5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the Client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.

6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials, unless specifically identified in the Services.

7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services or accreditation system (such as UKAS ISO 17020:2012 clause 7.1.6):

    a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.

    b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.

    c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services.

    RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the Client and RSK.

8. The intrusive environmental site investigation aspects of the Services are a limited sampling of the site at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on

the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope between the client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species are not present.

9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

10. The comments given in this report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

11. Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works.

12. Unless stated otherwise, only preliminary geotechnical recommendations are presented in this report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed.

APPENDIX B
THAMES WATER ASSET INFORMATION

Asset location search

Thames Water Property Searches

RSK Environment LTD

HEMEL HEMPSTEAD
HP3 9RT

Search address supplied

A T S Euromaster
70-86
Royal College Street
London
NW1 0TH

Your reference 371944

Our reference ALS/ALS Standard/2019_4046642

Search date 25 July 2019

Keeping you up-to-date

Notification of Price Changes

From 1 September 2018 Thames Water Property Searches will be increasing the price of its Asset Location Search in line with RPI at 3.23%.

For further details on the price increase please visit our website: www.thameswater-propertysearches.co.uk
Please note that any orders received with a higher payment prior to the 1 September 2018 will be non-refundable.

Thames Water Utilities Ltd
Property Searches, PO Box 3189, Slough SL1 4WW
DX 151280 Slough 13

searches@thameswater.co.uk
www.thameswater-propertysearches.co.uk

0845 070 9148

Asset location search

Property Searches

Search address supplied: A T S Euromaster, 70-86, Royal College Street, London, NW1 0TH

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This searchprovides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd
Property Searches
PO Box 3189
Slough
SL1 4WW

Email: searches@thameswater.co.uk
Web: www.thameswater-propertysearches.co.uk

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an ‘as constructed’ record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and

pressure test to be carried out for a fee.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

A charge will be added to your suppliers account.

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

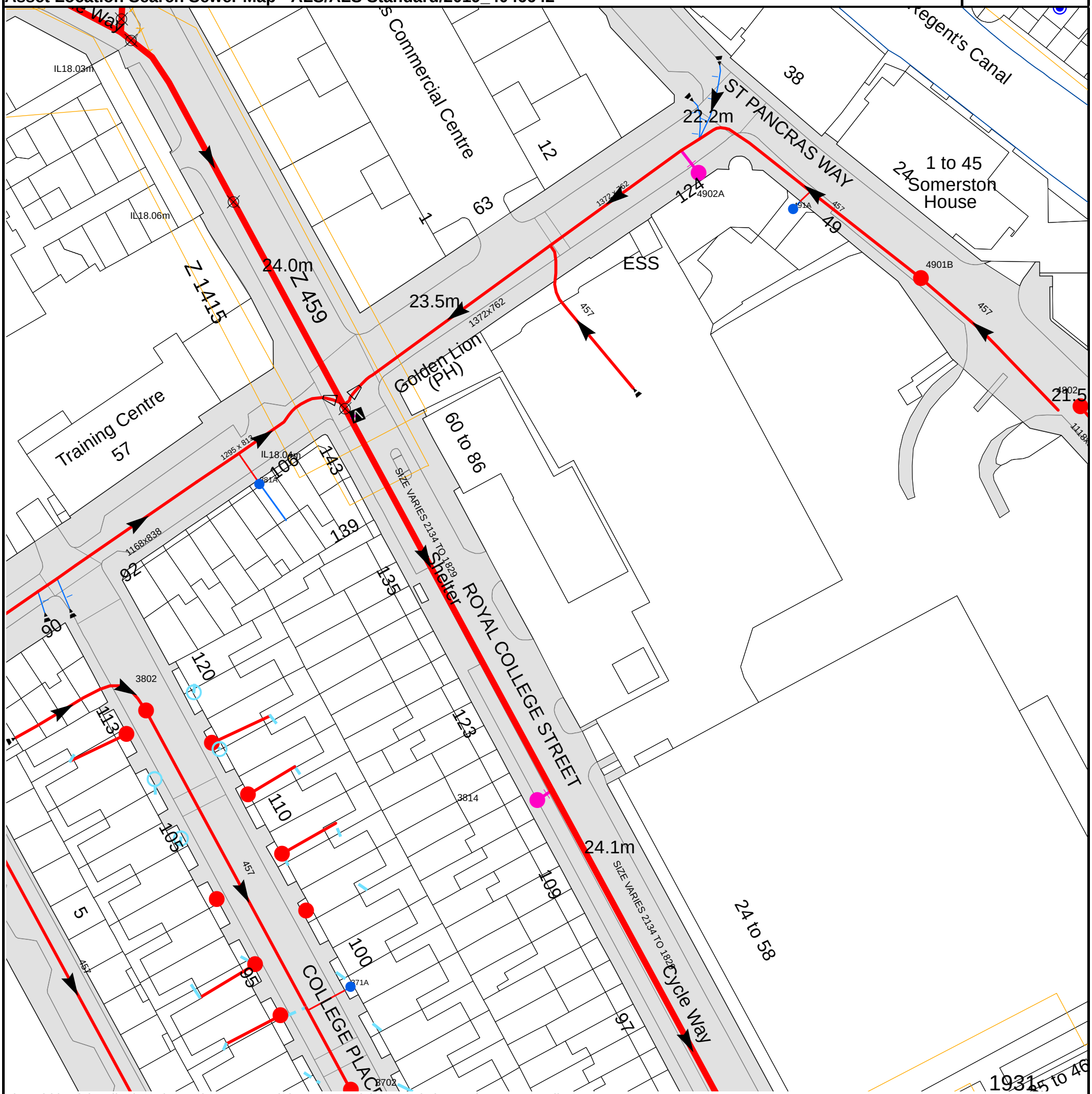
Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2019_4046642



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 529397,183863

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
491A	n/a	n/a
4802	21.26	17.29
4901B	21.24	19.17
3702	24.74	19.9
37JE	n/a	n/a
371A	n/a	n/a
37JH	n/a	n/a
3703	n/a	n/a
37AH	n/a	n/a
38CI	n/a	n/a
38CA	n/a	n/a
3814	23.94	n/a
38EI	n/a	n/a
38DF	n/a	n/a
38FD	n/a	n/a
38FE	n/a	n/a
38DI	n/a	n/a
3802	n/a	n/a
38GA	n/a	n/a
4902A	n/a	n/a

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

Trunk Surface Water

Trunk Foul

Storm Relief

Trunk Combined

Vent Pipe

Bio-solids (Sludge)

Proposed Thames Surface Water Sewer

Proposed Thames Water Foul Sewer

Gallery

Foul Rising Main

Surface Water Rising Main

Combined Rising Main

Sludge Rising Main

Proposed Thames Water Rising Main

Vacuum

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

Outfall

Undefined End

Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

Public/Private Pumping Station

Change of characteristic indicator (C.O.C.I.)

Invert Level

Summit

Areas

Lines denoting areas of underground surveys, etc.

Agreement

Operational Site

Chamber

Tunnel

Conduit Bridge

Other Sewer Types (Not Operated or Maintained by Thames Water)

Foul Sewer

Surface Water Sewer

Combined Sewer

Gulley

Culverted Watercourse

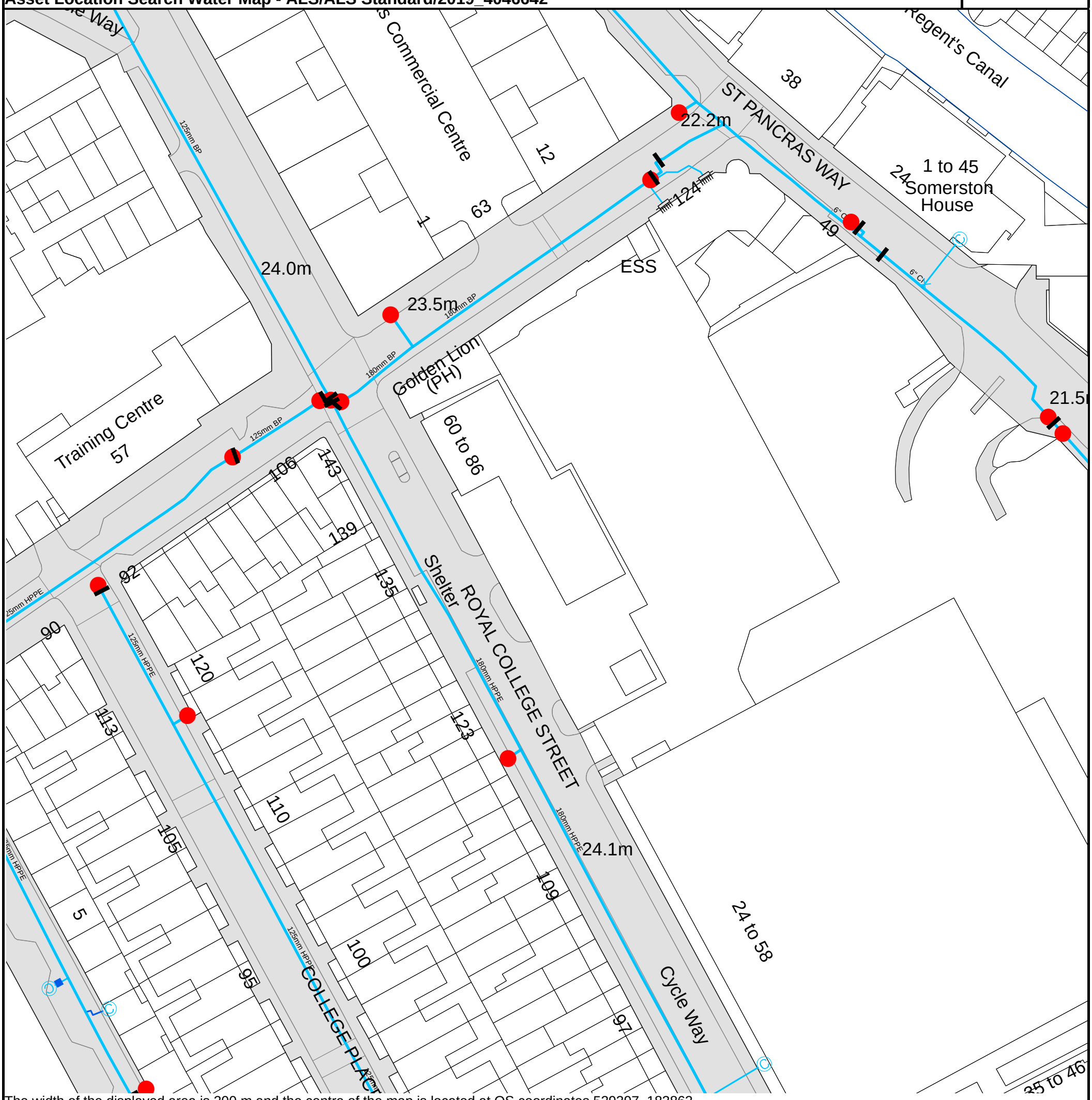
Proposed

Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.
2) All measurements on the plans are metric.
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
5) 'na' or '0' on a manhole level indicates that data is unavailable.
6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Asset Location Search Water Map - ALS/ALS Standard/2019_4046642



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 529397, 183863.

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

4"

Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

16"

Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

3" SUPPLY

Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties.

3" FIRE

Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

3" METERED

Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

Hydrants

- Single Hydrant

Meters

- Meter

End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

Other Symbols

- Data Logger

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL`s terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to her at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

Credit Card	**BACS Payment**	**Telephone Banking**	**Cheque**
Call **0845 070 9148** quoting your invoice number starting CBA or ADS / OSS	Account number **90478703** Sort code **60-00-01** A remittance advice must be sent to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW.** or email **ps.billing@thameswater.co.uk**	By calling your bank and quoting: Account number **90478703** Sort code **60-00-01** and your invoice number	Made payable to '**Thames Water Utilities Ltd**' Write your Thames Water account number on the back. Send to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW** or by DX to **151280 Slough 13**

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.

Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if the Ombudsman finds that you have suffered actual loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Web site: www.tpos.co.uk
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE

APPENDIX C
PDISP OUTPUTS

Titles

Job No.: 371944
Job Title: Royal College Street
Sub-title:
Calculation Heading: Basement Excavation - Undrained
Initials: AT
Checker:
Date Saved:
Date Checked:
Notes:
File Name: Demolition - Undrained.pdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\PDISP\Thames Water\02

History

Date	Time	By	Notes
22-Apr-2020	11:12	TYLER_A	New
22-Apr-2020	11:23	TYLER_A	
22-Apr-2020	14:00	TYLER_A	
22-Apr-2020	15:16	TYLER_A	
16-Jun-2020	16:16	TYLER_A	
18-Jun-2020	12:40	TYLER_A	
18-Jun-2020	16:11	TYLER_A	
22-Jun-2020	11:34	TYLER_A	
22-Jun-2020	12:07	TYLER_A	
22-Jun-2020	12:25	TYLER_A	
22-Jun-2020	14:22	TYLER_A	
26-Jun-2020	09:25	TYLER_A	
29-Jun-2020	14:06	TYLER_A	
29-Jun-2020	15:06	TYLER_A	
16-Jul-2020	16:21	TYLER_A	
17-Jul-2020	10:32	TYLER_A	
12-Nov-2020	15:05	SAlHilly	
20-Nov-2020	16:15	SAlHilly	
02-Dec-2020	16:27	TYLER_A	
04-Mar-2021	09:36	TYLER_A	

Analysis Options

General
Global Poisson's ratio: 0.50
Maximum allowable ratio between values of E: 1.5
Horizontal rigid boundary level: -30.00 [m OD]
Displacements at load centroids: Yes
GSA piled raft data : No

Elastic
Elastic : Yes
Analysis: Boussinesq
Stiffness for horizontal displacement calculations: Weighted average
Using legacy heave correction factor: Yes

Consolidation
Consolidation : No

Soil ProfilesSoil Profile 1

Layer ref.	Name	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus : Top [kN/m²]	Youngs Modulus : Btm. [kN/m²]	Poissons ratio	Non-linear curve
1	MG / RWLCF	0.0	10	20000.	20000.	0.50000	None
2	LCF	-3.4000	10	44000.	168000.	0.50000	None
3	LCF2	-29.900	5	168000.	168000.	0.50000	None

Soil Zones

Zone	Name	X min [m]	X max [m]	Y min [m]	Y max [m]	Profile
1	SZ1	15.000	140.00	-35.000	120.00	Soil Profile 1

Polygonal Load Data

Load ref.	Name	Position : Level [m]	Position : Polygon : Coords. [m]	Position : Polygon : Rect. tolerance [%]	No. of Rectangles	Value : Normal (local z) [kN/m²]
1	Demolition	0.0	(67.3,90.3) (53.1,82.9) (60.3,69.2) (67.4,72.9) (79.7,49) (89.9,54.4) (80,73.3) (77,71.7)	10.000	3	-50.000

Polygonal Loads' Rectangles

No.	Centre : x [m]	Centre : y [m]	Angle of local x from global X [Degrees]	Width x [m]	Depth y [m]
Load 1 : Demolition					
(Edge 2 optimal)					
1	63.8	79.7	-62.314	15.431	15.959
2	72.2	72.3	-62.314	5.4970	7.9504
3	79.9	61.2	-62.314	21.332	11.479

Displacement Lines

Name	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals [No.]	Calculate	Detailed Results
TW Main-1	76.8	113.7	-0.9	37.2	86.2	-0.9	48	Yes	Yes
TW Main-2	37.2	86.2	-0.9	53.1	56.1	-0.9	34	Yes	Yes
TW Main-3	53.1	56.1	-0.9	58.4	47.6	-0.9	10	Yes	Yes
TW Main-4	58.4	47.6	-0.9	83.8	0.2	-0.9	54	Yes	Yes
TW Foul-1	76.5	114.1	-6.0	38.3	86.3	-6.0	47	Yes	Yes
TW Foul-2	38.3	86.3	-6.0	84.7	0.6	-6.0	97	Yes	Yes

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Grid	Global X	15.0	-35.0	-1.0	-	120.0	-1.0	50	125.0	50	No	No

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x	y	z	δz	Stress:	Stress:	Stress:	Vert.

					Calc. Level	Vertical	Sum Princ.	Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	Demolition	71.8	70.6	0.0	-7.2	-0.15455	-49.998	-146.39	-89.996E-6

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	TW Main-1	76.8	113.7	-0.9	0.2	-1.0562	-164.68E-6	-0.19962	4.9781E-6
1	TW Main-1	75.9	113.1	-0.9	0.2	-1.0562	-184.57E-6	-0.21227	5.2928E-6
1	TW Main-1	75.1	112.6	-0.9	0.2	-1.0562	-207.31E-6	-0.22592	5.6324E-6
1	TW Main-1	74.3	112.0	-0.9	0.2	-1.0562	-233.35E-6	-0.24066	5.9990E-6
1	TW Main-1	73.5	111.4	-0.9	0.2	-1.0562	-263.21E-6	-0.25658	6.3948E-6
1	TW Main-1	72.6	110.9	-0.9	0.2	-1.0562	-297.50E-6	-0.27379	6.8224E-6
1	TW Main-1	71.8	110.3	-0.9	0.2	-1.0562	-336.91E-6	-0.29238	7.2843E-6
1	TW Main-1	71.0	109.7	-0.9	0.2	-1.0562	-382.25E-6	-0.31246	7.7830E-6
1	TW Main-1	70.2	109.1	-0.9	0.2	-1.0562	-434.40E-6	-0.33415	8.3211E-6
1	TW Main-1	69.3	108.6	-0.9	0.2	-1.0562	-494.38E-6	-0.35753	8.9012E-6
1	TW Main-1	68.5	108.0	-0.9	0.2	-1.0562	-563.25E-6	-0.38271	9.5256E-6
1	TW Main-1	67.7	107.4	-0.9	0.2	-1.0562	-642.19E-6	-0.40978	10.196E-6
1	TW Main-1	66.9	106.8	-0.9	0.2	-1.0562	-732.36E-6	-0.43878	10.914E-6
1	TW Main-1	66.0	106.3	-0.9	0.2	-1.0562	-834.89E-6	-0.46974	11.681E-6
1	TW Main-1	65.2	105.7	-0.9	0.2	-1.0562	-950.80E-6	-0.50265	12.495E-6
1	TW Main-1	64.4	105.1	-0.9	0.2	-1.0562	-0.0010808	-0.53743	13.355E-6
1	TW Main-1	63.6	104.6	-0.9	0.2	-1.0562	-0.0012253	-0.57392	14.256E-6
1	TW Main-1	62.8	104.0	-0.9	0.2	-1.0562	-0.0013842	-0.61190	15.194E-6
1	TW Main-1	61.9	103.4	-0.9	0.2	-1.0562	-0.0015564	-0.65104	16.159E-6
1	TW Main-1	61.1	102.8	-0.9	0.2	-1.0562	-0.0017403	-0.69091	17.142E-6
1	TW Main-1	60.3	102.3	-0.9	0.2	-1.0562	-0.0019334	-0.73099	18.130E-6
1	TW Main-1	59.5	101.7	-0.9	0.2	-1.0562	-0.0021322	-0.77066	19.106E-6
1	TW Main-1	58.6	101.1	-0.9	0.2	-1.0562	-0.0023328	-0.80923	20.056E-6
1	TW Main-1	57.8	100.5	-0.9	0.2	-1.0562	-0.0025306	-0.84598	20.960E-6
1	TW Main-1	57.0	100.0	-0.9	0.2	-1.0562	-0.0027206	-0.88015	21.800E-6
1	TW Main-1	56.2	99.4	-0.9	0.2	-1.0562	-0.0028981	-0.91099	22.557E-6
1	TW Main-1	55.3	98.8	-0.9	0.2	-1.0562	-0.0030581	-0.93778	23.215E-6
1	TW Main-1	54.5	98.3	-0.9	0.2	-1.0562	-0.0031961	-0.95987	23.757E-6
1	TW Main-1	53.7	97.7	-0.9	0.2	-1.0562	-0.0033077	-0.97666	24.168E-6
1	TW Main-1	52.9	97.1	-0.9	0.2	-1.0562	-0.0033890	-0.98766	24.437E-6
1	TW Main-1	52.1	96.5	-0.9	0.2	-1.0562	-0.0034362	-0.99250	24.555E-6
1	TW Main-1	51.2	96.0	-0.9	0.2	-1.0562	-0.0034466	-0.99091	24.514E-6
1	TW Main-1	50.4	95.4	-0.9	0.2	-1.0562	-0.0034179	-0.98280	24.314E-6
1	TW Main-1	49.6	94.8	-0.9	0.2	-1.0562	-0.0033492	-0.96824	23.955E-6
1	TW Main-1	48.8	94.2	-0.9	0.2	-1.0562	-0.0032414	-0.94751	23.445E-6
1	TW Main-1	47.9	93.7	-0.9	0.2	-1.0562	-0.0030971	-0.92108	22.795E-6
1	TW Main-1	47.1	93.1	-0.9	0.2	-1.0562	-0.0029210	-0.88960	22.021E-6
1	TW Main-1	46.3	92.5	-0.9	0.2	-1.0562	-0.0027198	-0.85392	21.144E-6
1	TW Main-1	45.5	92.0	-0.9	0.2	-1.0562	-0.0025015	-0.81496	20.186E-6
1	TW Main-1	44.6	91.4	-0.9	0.2	-1.0562	-0.0022744	-0.77373	19.173E-6
1	TW Main-1	43.8	90.8	-0.9	0.2	-1.0562	-0.0020468	-0.73120	18.126E-6
1	TW Main-1	43.0	90.2	-0.9	0.2	-1.0562	-0.0018257	-0.68827	17.070E-6
1	TW Main-1	42.2	89.7	-0.9	0.2	-1.0562	-0.0016164	-0.64574	16.022E-6
1	TW Main-1	41.4	89.1	-0.9	0.2	-1.0562	-0.0014228	-0.60425	14.999E-6
1	TW Main-1	40.5	88.5	-0.9	0.2	-1.0562	-0.0012468	-0.56427	14.013E-6
1	TW Main-1	39.7	87.9	-0.9	0.2	-1.0562	-0.0010891	-0.52615	13.072E-6
1	TW Main-1	38.9	87.4	-0.9	0.2	-1.0562	-949.48E-6	-0.49011	12.182E-6
1	TW Main-1	38.1	86.8	-0.9	0.2	-1.0562	-826.89E-6	-0.45627	11.345E-6
1	TW Main-1	37.2	86.2	-0.9	0.2	-1.0562	-719.96E-6	-0.42465	10.562E-6
2	TW Main-2	37.2	86.2	-0.9	0.2	-1.0562	-719.96E-6	-0.42465	10.562E-6
2	TW Main-2	37.7	85.3	-0.9	0.2	-1.0562	-828.86E-6	-0.45829	11.395E-6
2	TW Main-2	38.2	84.5	-0.9	0.2	-1.0562	-953.69E-6	-0.49446	12.290E-6
2	TW Main-2	38.6	83.6	-0.9	0.2	-1.0562	-0.0010958	-0.53316	13.247E-6
2	TW Main-2	39.1	82.7	-0.9	0.2	-1.0562	-0.0012562	-0.57431	14.264E-6
2	TW Main-2	39.6	81.8	-0.9	0.2	-1.0562	-0.0014353	-0.61773	15.336E-6
2	TW Main-2	40.0	80.9	-0.9	0.2	-1.0562	-0.0016324	-0.66313	16.456E-6
2	TW Main-2	40.5	80.0	-0.9	0.2	-1.0562	-0.0018458	-0.71008	17.614E-6
2	TW Main-2	41.0	79.1	-0.9	0.2	-1.0562	-0.0020723	-0.75801	18.795E-6
2	TW Main-2	41.4	78.2	-0.9	0.2	-1.0562	-0.0023075	-0.80624	19.983E-6
2	TW Main-2	41.9	77.4	-0.9	0.2	-1.0562	-0.0025455	-0.85395	21.158E-6
2	TW Main-2	42.4	76.5	-0.9	0.2	-1.0562	-0.0027796	-0.90028	22.298E-6
2	TW Main-2	42.9	75.6	-0.9	0.2	-1.0562	-0.0030028	-0.94430	23.382E-6
2	TW Main-2	43.3	74.7	-0.9	0.2	-1.0562	-0.0032081	-0.98515	24.388E-6
2	TW Main-2	43.8	73.8	-0.9	0.2	-1.0562	-0.0033894	-1.0220	25.295E-6
2	TW Main-2	44.3	72.9	-0.9	0.2	-1.0562	-0.0035415	-1.0541	26.087E-6
2	TW Main-2	44.7	72.0	-0.9	0.2	-1.0562	-0.0036605	-1.0809	26.748E-6
2	TW Main-2	45.2	71.1	-0.9	0.2	-1.0562	-0.0037436	-1.1020	27.269E-6
2	TW Main-2	45.7	70.3	-0.9	0.2	-1.0562	-0.0037891	-1.1170	27.641E-6
2	TW Main-2	46.1	69.4	-0.9	0.2	-1.0562	-0.0037963	-1.1259	27.863E-6
2	TW Main-2	46.6	68.5	-0.9	0.2	-1.0562	-0.0037656	-1.1286	27.933E-6
2	TW Main-2	47.1	67.6	-0.9	0.2	-1.0562	-0.0036983	-1.1254	27.857E-6
2	TW Main-2	47.5	66.7	-0.9	0.2	-1.0562	-0.0035967	-1.1165	27.642E-6
2	TW Main-2	48.0	65.8	-0.9	0.2	-1.0562	-0.0034645	-1.1024	27.299E-6
2	TW Main-2	48.5	64.9	-0.9	0.2	-1.0562	-0.0033065	-1.0837	26.845E-6
2	TW Main-2	48.9	64.0	-0.9	0.2	-1.0562	-0.0031284	-1.0612	26.295E-6
2	TW Main-2	49.4	63.2	-0.9	0.2	-1.0562	-0.0029370	-1.0356	25.669E-6
2	TW Main-2	49.9	62.3	-0.9	0.2	-1.0562	-0.0027392	-1.0077	24.987E-6
2	TW Main-2	50.3	61.4	-0.9	0.2	-1.0562	-0.0025415	-0.97835	24.268E-6
2	TW Main-2	50.8	60.5	-0.9	0.3	-1.0562	-0.0023496	-0.94826	23.530E-6
2	TW Main-2	51.3	59.6	-0.9	0.3	-1.0562	-0.0021681	-0.91804	22.788E-6
2	TW Main-2	51.7	58.7	-0.9	0.3	-1.0562	-0.0020002	-0.88820	22.055E-6
2	TW Main-2	52.2	57.8	-0.9	0.3	-1.0562	-0.0018474	-0.85911	21.339E-6
2	TW Main-2	52.7	56.9	-0.9	0.3	-1.0562	-0.0017105	-0.83100	20.647E-6
2	TW Main-2	53.1	56.1	-0.9	0.3	-1.0562	-0.0015889	-0.80402	19.981E-6
3	TW Main-3	53.1	56.1	-0.9	0.3	-1.0562	-0.0015889	-0.80402	19.981E-6
3	TW Main-3	53.7	55.2	-0.9	0.3	-1.0562	-0.0015012	-0.78404	19.488E-6
3	TW Main-3	54.2	54.4	-0.9	0.3	-1.0562	-0.0014234	-0.76468	19.010E-6
3	TW Main-3	54.7	53.5	-0.9	0.3	-1.0562	-0.0013547	-0.74596	18.547E-6
3	TW Main-3	55.2	52.7	-0.9	0.3	-1.0562	-0.0012938	-0.72783	18.099E-6
3	TW Main-3	55.8	51.8	-0.9	0.3	-1.0562	-0.0012399	-0.71020	17.662E-6
3	TW Main-3	56.3	51.0	-0.9	0.3	-1.0562	-0.0011915	-0.69298	17.235E-6
3	TW Main-3	56.8	50.1	-0.9	0.3	-1.0562	-0.0011477	-0.67605	16.815E-6
3	TW Main-3	57.3	49.3	-0.9	0.3	-1.0562	-0.0011074	-0.65930	16.399E-6
3	TW Main-3	57.9	48.4	-0.9	0.3	-1.0562	-0.0010694	-0.64261	15.985E-6
3	TW Main-3	58.4	47.6	-0.9	0.3	-1.0562	-0.0010331	-0.62587	15.569E-6
4	TW Main-4	58.4	47.6	-0.9	0.3	-1.0562	-0.0010331	-0.62587	15.569E-6
4	TW Main-4	58.9	46.7	-0.9	0.3	-1.0562	-986.83E-6	-0.60535	15.060E-6
4	TW Main-4	59.3	45.8	-0.9	0.2	-1.0562	-941.58E-6	-0.58488	14.551E-6
4	TW Main-4	59.8	45.0	-0.9	0.2	-1.0562	-896.94E-6	-0.56442	14.043E-6
4	TW Main-4	60.3	44.1	-0.9	0.2	-1.0562	-852.57E-6	-0.54393	13.534E-6
4	TW Main-4	60.7	43.2	-0.9	0.2	-1.0562	-808.31E-6	-0.52342	13.025E-6
4	TW Main-4	61.2	42.3	-0.9	0.2	-1.0562	-764.09E-6	-0.50290	12.515E-6
4	TW Main-4	61.7	41.4	-0.9	0.2	-1.0562	-719.96E-6	-0.48240	12.006E-6
4	TW Main-4	62.2	40.6	-0.9	0.2	-1.0562	-676.05E-6	-0.46199	11.499E-6
4	TW Main-4	62.6	39.7	-0.9	0.2	-1.0562	-632.56E-6	-0.44171	10.995E-6
4	TW Main-4	63.1	38.8	-0.9	0.2	-1.0562	-589.74E-6	-0.42163	10.497E-6
4	TW Main-4	63.6	37.9	-0.9	0.2	-1.0562	-547.85E-6	-0.40185	10.005E-6
4	TW Main-4	64.0	37.1	-0.9	0.2	-1.0562	-507.17E-6	-0.38242	9.5225E-6
4	TW Main-4	64.5	36.2	-0.9	0.2	-1.0562	-467.95E-6	-0.36343	9.0506E-6
4	TW Main-4	65.0	35.3	-0.9	0.2	-1.0562	-430.41E-6	-0.34494	8.5911E-6
4	TW Main-4	65.4	34.4	-0.9	0.2	-1.0562	-394.74E-6	-0.32701	8.1456E-6
4	TW Main-4	65.9	33.5	-0.9	0.2	-1.0562	-361.09E-6	-0.30970	7.7153E-6
4	TW Main-4	66.4	32.7	-0.9	0.2	-1.0562	-329.54E-6	-0.29304	7.3014E-6
4	TW Main-4	66.9	31.8	-0.9	0.2	-1.0562	-300.14E-6	-0.27708	6.9045E-6
4	TW Main-4	67.3	30.9	-0.9	0.2	-1.0562	-272.90E-6	-0.26182	6.5252E-6
4	TW Main-4	67.8	30.0	-0.9	0.2	-1.0562	-247.78E-6	-0.24729	6.1637E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
4	TW Main-4	68.3	29.2	-0.9	0.2	-1.0562	-224.72E-6	-0.23349	5.8203E-6
4	TW Main-4	68.7	28.3	-0.9	0.2	-1.0562	-203.63E-6	-0.22040	5.4947E-6
4	TW Main-4	69.2	27.4	-0.9	0.2	-1.0562	-184.41E-6	-0.20802	5.1867E-6
4	TW Main-4	69.7	26.5	-0.9	0.2	-1.0562	-166.93E-6	-0.19633	4.8958E-6
4	TW Main-4	70.2	25.6	-0.9	0.2	-1.0562	-151.09E-6	-0.18531	4.6215E-6
4	TW Main-4	70.6	24.8	-0.9	0.1	-1.0562	-136.76E-6	-0.17494	4.3633E-6
4	TW Main-4	71.1	23.9	-0.9	0.1	-1.0562	-123.81E-6	-0.16519	4.1204E-6
4	TW Main-4	71.6	23.0	-0.9	0.1	-1.0562	-112.12E-6	-0.15602	3.8921E-6
4	TW Main-4	72.0	22.1	-0.9	0.1	-1.0562	-101.58E-6	-0.14741	3.6778E-6
4	TW Main-4	72.5	21.3	-0.9	0.1	-1.0562	-92.090E-6	-0.13934	3.4766E-6
4	TW Main-4	73.0	20.4	-0.9	0.1	-1.0562	-83.541E-6	-0.13176	3.2878E-6
4	TW Main-4	73.5	19.5	-0.9	0.1	-1.0562	-75.844E-6	-0.12466	3.1108E-6
4	TW Main-4	73.9	18.6	-0.9	0.1	-1.0562	-68.914E-6	-0.11800	2.9448E-6
4	TW Main-4	74.4	17.7	-0.9	0.1	-1.0562	-62.673E-6	-0.11175	2.7891E-6
4	TW Main-4	74.9	16.9	-0.9	0.1	-1.0562	-57.051E-6	-0.10589	2.6431E-6
4	TW Main-4	75.3	16.0	-0.9	0.1	-1.0562	-51.984E-6	-0.10040	2.5061E-6
4	TW Main-4	75.8	15.1	-0.9	0.1	-1.0562	-47.415E-6	-0.095249	2.3777E-6
4	TW Main-4	76.3	14.2	-0.9	0.1	-1.0562	-43.293E-6	-0.090415	2.2571E-6
4	TW Main-4	76.7	13.4	-0.9	0.1	-1.0562	-39.572E-6	-0.085877	2.1440E-6
4	TW Main-4	77.2	12.5	-0.9	0.1	-1.0562	-36.209E-6	-0.081617	2.0377E-6
4	TW Main-4	77.7	11.6	-0.9	0.1	-1.0562	-33.168E-6	-0.077614	1.9379E-6
4	TW Main-4	78.2	10.7	-0.9	0.1	-1.0562	-30.415E-6	-0.073853	1.8441E-6
4	TW Main-4	78.6	9.9	-0.9	0.1	-1.0562	-27.921E-6	-0.070317	1.7558E-6
4	TW Main-4	79.1	9.0	-0.9	0.1	-1.0562	-25.659E-6	-0.066991	1.6728E-6
4	TW Main-4	79.6	8.1	-0.9	0.1	-1.0562	-23.606E-6	-0.063860	1.5947E-6
4	TW Main-4	80.0	7.2	-0.9	0.1	-1.0562	-21.741E-6	-0.060911	1.5212E-6
4	TW Main-4	80.5	6.3	-0.9	0.1	-1.0562	-20.044E-6	-0.058133	1.4518E-6
4	TW Main-4	81.0	5.5	-0.9	0.1	-1.0562	-18.499E-6	-0.055515	1.3865E-6
4	TW Main-4	81.5	4.6	-0.9	0.1	-1.0562	-17.091E-6	-0.053044	1.3248E-6
4	TW Main-4	81.9	3.7	-0.9	0.1	-1.0562	-15.807E-6	-0.050712	1.2666E-6
4	TW Main-4	82.4	2.8	-0.9	0.1	-1.0562	-14.634E-6	-0.048510	1.2117E-6
4	TW Main-4	82.9	2.0	-0.9	0.1	-1.0562	-13.561E-6	-0.046430	1.1597E-6
4	TW Main-4	83.3	1.1	-0.9	0.1	-1.0562	-12.579E-6	-0.044462	1.1106E-6
4	TW Main-4	83.8	0.2	-0.9	0.1	-1.0562	-11.680E-6	-0.042601	1.0642E-6
5	TW Foul-1	76.5	114.1	-6.0	0.1	-7.0272	-0.042215	-1.2316	9.0796E-6
5	TW Foul-1	75.6	113.5	-6.0	0.1	-7.0272	-0.047059	-1.3064	9.5754E-6
5	TW Foul-1	74.8	112.9	-6.0	0.1	-7.0272	-0.052549	-1.3868	10.101E-6
5	TW Foul-1	74.0	112.3	-6.0	0.1	-7.0272	-0.058778	-1.4732	10.657E-6
5	TW Foul-1	73.2	111.8	-6.0	0.1	-7.0272	-0.065851	-1.5660	11.246E-6
5	TW Foul-1	72.4	111.2	-6.0	0.1	-7.0272	-0.073889	-1.6658	11.867E-6
5	TW Foul-1	71.6	110.6	-6.0	0.1	-7.0272	-0.083026	-1.7728	12.521E-6
5	TW Foul-1	70.8	110.0	-6.0	0.1	-7.0272	-0.093411	-1.8877	13.210E-6
5	TW Foul-1	70.0	109.4	-6.0	0.1	-7.0272	-0.10521	-2.0109	13.931E-6
5	TW Foul-1	69.2	108.8	-6.0	0.1	-7.0272	-0.11860	-2.1428	14.685E-6
5	TW Foul-1	68.3	108.2	-6.0	0.1	-7.0272	-0.13376	-2.2838	15.469E-6
5	TW Foul-1	67.5	107.6	-6.0	0.1	-7.0272	-0.15089	-2.4341	16.282E-6
5	TW Foul-1	66.7	107.0	-6.0	0.1	-7.0272	-0.17017	-2.5938	17.119E-6
5	TW Foul-1	65.9	106.4	-6.0	0.1	-7.0272	-0.19177	-2.7629	17.976E-6
5	TW Foul-1	65.1	105.8	-6.0	0.1	-7.0272	-0.21583	-2.9412	18.848E-6
5	TW Foul-1	64.3	105.2	-6.0	0.1	-7.0272	-0.24244	-3.1281	19.728E-6
5	TW Foul-1	63.5	104.6	-6.0	0.1	-7.0272	-0.27160	-3.3227	20.608E-6
5	TW Foul-1	62.7	104.0	-6.0	0.1	-7.0272	-0.30326	-3.5238	21.480E-6
5	TW Foul-1	61.9	103.5	-6.0	0.1	-7.0272	-0.33722	-3.7297	22.336E-6
5	TW Foul-1	61.0	102.9	-6.0	0.1	-7.0272	-0.37316	-3.9385	23.165E-6
5	TW Foul-1	60.2	102.3	-6.0	0.0	-7.0272	-0.41064	-4.1475	23.958E-6
5	TW Foul-1	59.4	101.7	-6.0	0.0	-7.0272	-0.44907	-4.3539	24.707E-6
5	TW Foul-1	58.6	101.1	-6.0	0.0	-7.0272	-0.48775	-4.5544	25.402E-6
5	TW Foul-1	57.8	100.5	-6.0	0.0	-7.0272	-0.52590	-4.7458	26.034E-6
5	TW Foul-1	57.0	99.9	-6.0	0.0	-7.0272	-0.56264	-4.9244	26.596E-6
5	TW Foul-1	56.2	99.3	-6.0	-0.0	-7.0272	-0.59710	-5.0866	27.079E-6
5	TW Foul-1	55.4	98.7	-6.0	-0.0	-7.0272	-0.62837	-5.2290	27.478E-6
5	TW Foul-1	54.6	98.1	-6.0	-0.0	-7.0272	-0.65559	-5.3484	27.788E-6
5	TW Foul-1	53.8	97.5	-6.0	-0.0	-7.0272	-0.67794	-5.4418	28.005E-6
5	TW Foul-1	52.9	96.9	-6.0	-0.0	-7.0272	-0.69466	-5.5067	28.126E-6
5	TW Foul-1	52.1	96.3	-6.0	-0.0	-7.0272	-0.70511	-5.5413	28.153E-6
5	TW Foul-1	51.3	95.8	-6.0	-0.0	-7.0272	-0.70875	-5.5441	28.086E-6
5	TW Foul-1	50.5	95.2	-6.0	-0.0	-7.0272	-0.70526	-5.5147	27.931E-6
5	TW Foul-1	49.7	94.6	-6.0	-0.0	-7.0272	-0.69448	-5.4532	27.691E-6
5	TW Foul-1	48.9	94.0	-6.0	-0.0	-7.0272	-0.67657	-5.3608	27.373E-6
5	TW Foul-1	48.1	93.4	-6.0	-0.0	-7.0272	-0.65195	-5.2392	26.981E-6
5	TW Foul-1	47.3	92.8	-6.0	-0.0	-7.0272	-0.62136	-5.0914	26.521E-6
5	TW Foul-1	46.5	92.2	-6.0	0.0	-7.0272	-0.58581	-4.9209	25.996E-6
5	TW Foul-1	45.6	91.6	-6.0	0.0	-7.0272	-0.54652	-4.7316	25.408E-6
5	TW Foul-1	44.8	91.0	-6.0	0.0	-7.0272	-0.50484	-4.5279	24.762E-6
5	TW Foul-1	44.0	90.4	-6.0	0.0	-7.0272	-0.46210	-4.3142	24.060E-6
5	TW Foul-1	43.2	89.8	-6.0	0.0	-7.0272	-0.41953	-4.0949	23.307E-6
5	TW Foul-1	42.4	89.2	-6.0	0.1	-7.0272	-0.37817	-3.8738	22.510E-6
5	TW Foul-1	41.6	88.6	-6.0	0.1	-7.0272	-0.33884	-3.6543	21.676E-6
5	TW Foul-1	40.8	88.0	-6.0	0.1	-7.0272	-0.30211	-3.4393	20.814E-6
5	TW Foul-1	40.0	87.5	-6.0	0.1	-7.0272	-0.26832	-3.2309	19.935E-6
5	TW Foul-1	39.2	86.9	-6.0	0.1	-7.0272	-0.23761	-3.0307	19.047E-6
5	TW Foul-1	38.3	86.3	-6.0	0.1	-7.0272	-0.20998	-2.8400	18.161E-6
6	TW Foul-2	38.3	86.3	-6.0	0.1	-7.0272	-0.20998	-2.8400	18.161E-6
6	TW Foul-2	38.8	85.4	-6.0	0.1	-7.0272	-0.24048	-3.0596	19.214E-6
6	TW Foul-2	39.3	84.5	-6.0	0.1	-7.0272	-0.27507	-3.2945	20.291E-6
6	TW Foul-2	39.8	83.6	-6.0	0.1	-7.0272	-0.31402	-3.5443	21.384E-6
6	TW Foul-2	40.3	82.7	-6.0	0.1	-7.0272	-0.35743	-3.8083	22.483E-6
6	TW Foul-2	40.7	81.9	-6.0	0.0	-7.0272	-0.40527	-4.0850	23.577E-6
6	TW Foul-2	41.2	81.0	-6.0	0.0	-7.0272	-0.45722	-4.3722	24.657E-6
6	TW Foul-2	41.7	80.1	-6.0	0.0	-7.0272	-0.51273	-4.6672	25.713E-6
6	TW Foul-2	42.2	79.2	-6.0	0.0	-7.0272	-0.57091	-4.9664	26.736E-6
6	TW Foul-2	42.6	78.3	-6.0	0.0	-7.0272	-0.63058	-5.2653	27.722E-6
6	TW Foul-2	43.1	77.4	-6.0	-0.0	-7.0272	-0.69031	-5.5593	28.665E-6
6	TW Foul-2	43.6	76.5	-6.0	-0.0	-7.0272	-0.74851	-5.8431	29.563E-6
6	TW Foul-2	44.1	75.7	-6.0	-0.0	-7.0272	-0.80355	-6.1116	30.412E-6
6	TW Foul-2	44.6	74.8	-6.0	-0.0	-7.0272	-0.85387	-6.3597	31.211E-6
6	TW Foul-2	45.0	73.9	-6.0	-0.1	-7.0272	-0.89805	-6.5829	31.956E-6
6	TW Foul-2	45.5	73.0	-6.0	-0.1	-7.0272	-0.93490	-6.7770	32.642E-6
6	TW Foul-2	46.0	72.1	-6.0	-0.1	-7.0272	-0.96351	-6.9389	33.268E-6
6	TW Foul-2	46.5	71.2	-6.0	-0.1	-7.0272	-0.98323	-7.0662	33.827E-6
6	TW Foul-2	46.9	70.4	-6.0	-0.1	-7.0272	-0.99364	-7.1571	34.318E-6
6	TW Foul-2	47.4	69.5	-6.0	-0.1	-7.0272	-0.99462	-7.2113	34.739E-6
6	TW Foul-2	47.9	68.6	-6.0	-0.1	-7.0272	-0.98627	-7.2288	35.089E-6
6	TW Foul-2	48.4	67.7	-6.0	-0.1	-7.0272	-0.96898	-7.2110	35.368E-6
6	TW Foul-2	48.9	66.8	-6.0	-0.1	-7.0272	-0.94342	-7.1598	35.578E-6
6	TW Foul-2	49.3	65.9	-6.0	-0.1	-7.0272	-0.91055	-7.0784	35.719E-6
6	TW Foul-2	49.8	65.1	-6.0	-0.0	-7.0272	-0.87163	-6.9703	35.790E-6
6	TW Foul-2	50.3	64.2	-6.0	-0.0	-7.0272	-0.82812	-6.8397	35.790E-6
6	TW Foul-2	50.8	63.3	-6.0	-0.0	-7.0272	-0.78163	-6.6913	35.716E-6
6	TW Foul-2	51.3	62.4	-6.0	-0.0	-7.0272	-0.73378	-6.5296	35.567E-6
6	TW Foul-2	51.7	61.5	-6.0	0.0	-7.0272	-0.68609	-6.3592	35.343E-6
6	TW Foul-2	52.2	60.6	-6.0	0.0	-7.0272	-0.63985	-6.1841	35.044E-6
6	TW Foul-2	52.7	59.8	-6.0	0.0	-7.0272	-0.59608	-6.0077	34.673E-6
6	TW Foul-2	53.2	58.9	-6.0	0.0	-7.0272	-0.55546	-5.8328	34.237E-6
6	TW Foul-2	53.6	58.0	-6.0	0.0	-7.0272	-0.51836	-5.6613	33.743E-6
6	TW Foul-2	54.1	57.1	-6.0	0.1	-7.0272	-0.48491	-5.4947	33.198E-6
6	TW Foul-2	54.6	56.2	-6.0	0.1	-7.0272	-0.45500	-5.3336	32.611E-6
6	TW Foul-2	55.1	55.3	-6.0	0.1	-7.0272	-0.42840	-5.1782	31.990E-6
6	TW Foul-2	55.6	54.5	-6.0	0.1	-7.0272	-0.40478	-5.0283	31.341E-6
6	TW Foul-2	56.0	53.6	-6.0	0.1	-7.0272	-0.38374	-4.8836	30.671E-6
6	TW Foul-2	56.5	52.7	-6.0	0.1	-7.0272	-0.36490	-4.7433	29.982E-6
6	TW Foul-2	57.0	51.8	-6.0	0.1	-7.0272	-0.34788	-4.6067	29.279E-6
6	TW Foul-2	57.5	50.9	-6.0	0.1	-7.0272	-0.33232	-4.4731	28.565E-6
6	TW Foul-2	57.9	50.0	-6.0	0.1	-7.0272	-0.31789	-4.3416	27.840E-6
6	TW Foul-2	58.4	49.2	-6.0	0.1	-7.0272	-0.30432	-4.2115	27.106E-6
6	TW Foul-2	58.9	48.3	-6.0	0.1	-7.0272	-0.29135	-4.0823	26.364E-6
6	TW Foul-2	59.4	47.4	-6.0	0.1	-7.0272	-0.27880	-3.9534	25.614E-6
6	TW Foul-2	59.9	46.5	-6.0	0.1	-7.0272	-0.26650	-3.8243	24.856E-6
6	TW Foul-2	60.3	45.6	-6.0	0.1	-7.0272	-0.25433	-3.6949	24.093E-6
6	TW Foul-2	60.8	44.7	-6.0	0.1	-7.0272	-0.24220	-3.5649	23.324E-6
6	TW Foul-2	61.3	43.9	-6.0	0.1	-7.0272	-0.23007	-3.4345	22.551E-6
6	TW Foul-2	61.8	43.0	-6.0	0.1	-7.0272	-0.21792	-3.3036	21.775E-6
6	TW Foul-2	62.3	42.1	-6.0	0.1	-7.0272	-0.20575	-3.1725	20.997E-6
6	TW Foul-2	62.7	41.2	-6.0	0.1	-7.0272	-0.19360	-3.0415	20.220E-6
6	TW Foul-2	63.2	40.3	-6.0	0.1	-7.0272	-0.18153	-2.9110	19.446E-6
6	TW Foul-2	63.7	39.4	-6.0	0.1	-7.0272	-0.16960	-2.7816	18.677E-6
6	TW Foul-2	64.2	38.6	-6.0	0.1	-7.0272	-0.15788	-2.6536	17.914E-6
6	TW Foul-2	64.6	37.7	-6.0	0.1	-7.0272	-0.14645	-2.5277	17.161E-6
6	TW Foul-2	65.1	36.8	-6.0	0.1	-7.0272	-0.13539	-2.4042	16.419E-6
6	TW Foul-2	65.6	35.9	-6.0	0.1	-7.0272	-0.12477	-2.2837	15.691E-6
6	TW Foul-2	66.1	35.0	-6.0	0.1	-7.0272	-0.11463	-2.1666	14.978E-6

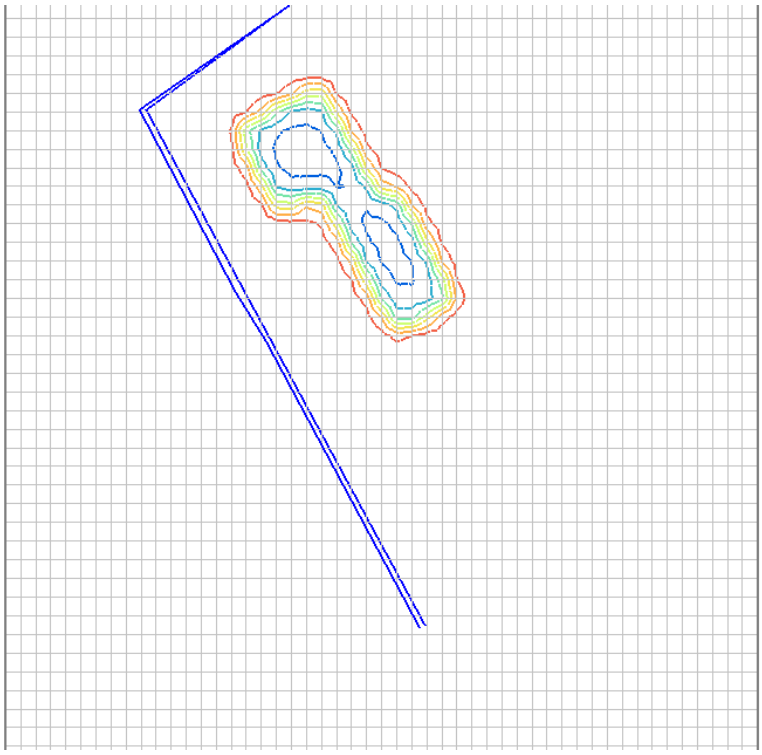
Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
6	TW Foul-2	66.6	34.1	-6.0	0.1	-7.0272	-0.10504	-2.0533	14.284E-6
6	TW Foul-2	67.0	33.3	-6.0	0.1	-7.0272	-0.096007	-1.9441	13.608E-6
6	TW Foul-2	67.5	32.4	-6.0	0.1	-7.0272	-0.087565	-1.8391	12.954E-6
6	TW Foul-2	68.0	31.5	-6.0	0.1	-7.0272	-0.079718	-1.7387	12.322E-6
6	TW Foul-2	68.5	30.6	-6.0	0.1	-7.0272	-0.072461	-1.6428	11.713E-6
6	TW Foul-2	68.9	29.7	-6.0	0.1	-7.0272	-0.065782	-1.5516	11.128E-6
6	TW Foul-2	69.4	28.8	-6.0	0.1	-7.0272	-0.059658	-1.4650	10.568E-6
6	TW Foul-2	69.9	27.9	-6.0	0.1	-7.0272	-0.054065	-1.3830	10.032E-6
6	TW Foul-2	70.4	27.1	-6.0	0.1	-7.0272	-0.048971	-1.3055	9.5203E-6
6	TW Foul-2	70.9	26.2	-6.0	0.1	-7.0272	-0.044345	-1.2323	9.0332E-6
6	TW Foul-2	71.3	25.3	-6.0	0.1	-7.0272	-0.040153	-1.1634	8.5702E-6
6	TW Foul-2	71.8	24.4	-6.0	0.1	-7.0272	-0.036360	-1.0985	8.1307E-6
6	TW Foul-2	72.3	23.5	-6.0	0.1	-7.0272	-0.032933	-1.0375	7.7140E-6
6	TW Foul-2	72.8	22.6	-6.0	0.1	-7.0272	-0.029841	-0.98024	7.3194E-6
6	TW Foul-2	73.3	21.8	-6.0	0.1	-7.0272	-0.027053	-0.92645	6.9461E-6
6	TW Foul-2	73.7	20.9	-6.0	0.1	-7.0272	-0.024541	-0.87597	6.5933E-6
6	TW Foul-2	74.2	20.0	-6.0	0.1	-7.0272	-0.022278	-0.82863	6.2600E-6
6	TW Foul-2	74.7	19.1	-6.0	0.1	-7.0272	-0.020239	-0.78422	5.9453E-6
6	TW Foul-2	75.2	18.2	-6.0	0.1	-7.0272	-0.018403	-0.74257	5.6484E-6
6	TW Foul-2	75.6	17.3	-6.0	0.1	-7.0272	-0.016748	-0.70352	5.3682E-6
6	TW Foul-2	76.1	16.5	-6.0	0.1	-7.0272	-0.015257	-0.66689	5.1040E-6
6	TW Foul-2	76.6	15.6	-6.0	0.1	-7.0272	-0.013912	-0.63253	4.8548E-6
6	TW Foul-2	77.1	14.7	-6.0	0.1	-7.0272	-0.012699	-0.60029	4.6198E-6
6	TW Foul-2	77.6	13.8	-6.0	0.1	-7.0272	-0.011603	-0.57003	4.3981E-6
6	TW Foul-2	78.0	12.9	-6.0	0.1	-7.0272	-0.010613	-0.54162	4.1891E-6
6	TW Foul-2	78.5	12.0	-6.0	0.1	-7.0272	-0.0097185	-0.51494	3.9919E-6
6	TW Foul-2	79.0	11.2	-6.0	0.1	-7.0272	-0.0089086	-0.48986	3.8058E-6
6	TW Foul-2	79.5	10.3	-6.0	0.1	-7.0272	-0.0081750	-0.46629	3.6302E-6
6	TW Foul-2	79.9	9.4	-6.0	0.1	-7.0272	-0.0075099	-0.44413	3.4644E-6
6	TW Foul-2	80.4	8.5	-6.0	0.1	-7.0272	-0.0069063	-0.42326	3.3079E-6
6	TW Foul-2	80.9	7.6	-6.0	0.1	-7.0272	-0.0063580	-0.40362	3.1600E-6
6	TW Foul-2	81.4	6.7	-6.0	0.1	-7.0272	-0.0058595	-0.38512	3.0203E-6
6	TW Foul-2	81.9	5.9	-6.0	0.1	-7.0272	-0.0054058	-0.36768	2.8881E-6
6	TW Foul-2	82.3	5.0	-6.0	0.1	-7.0272	-0.0049924	-0.35123	2.7632E-6
6	TW Foul-2	82.8	4.1	-6.0	0.1	-7.0272	-0.0046153	-0.33571	2.6449E-6
6	TW Foul-2	83.3	3.2	-6.0	0.1	-7.0272	-0.0042711	-0.32106	2.5330E-6
6	TW Foul-2	83.8	2.3	-6.0	0.1	-7.0272	-0.0039565	-0.30721	2.4270E-6
6	TW Foul-2	84.2	1.4	-6.0	0.1	-7.0272	-0.0036687	-0.29413	2.3265E-6
6	TW Foul-2	84.7	0.6	-6.0	0.1	-7.0272	-0.0034051	-0.28175	2.2313E-6

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None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-7.000 mm
-6.000 mm
-5.000 mm
-4.000 mm
-3.000 mm
-2.000 mm
-1.000 mm
Displacement Grids
Displacement Lines
y
z
x

Name	Extrusion: Direction	X1	Y1	Z1	X2	Y2	Z2	Intervals Along Line	Extrusion: Distance	Extrusion: Intervals Along	Calculate Detailed Results
		[m]	[m]	[m]	[m]	[m]	[m]	[No.]	[m]	[No.]	

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	Demolition	71.8	70.6	0.0	-14.9	-0.15455	-49.998	-117.11	-0.0018287

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x	y	z	δz	Stress: Calc. Level	Stress: Vertical	Stress: Sum Princ.	Vert. Strain
		[m]	[m]	[mOD]	[mm]	[mOD]	[kN/m²]	[kN/m²]	[μ]
1	TW Main-1	76.8	113.7	-0.9	-0.0	-1.0562	-164.68E-6	-0.15969	1.5871E-6
1	TW Main-1	75.9	113.1	-0.9	-0.0	-1.0562	-184.57E-6	-0.16981	1.6871E-6
1	TW Main-1	75.1	112.6	-0.9	-0.0	-1.0562	-207.31E-6	-0.18073	1.7949E-6
1	TW Main-1	74.3	112.0	-0.9	-0.0	-1.0562	-233.35E-6	-0.19253	1.9113E-6
1	TW Main-1	73.5	111.4	-0.9	-0.0	-1.0562	-263.21E-6	-0.20527	2.0369E-6
1	TW Main-1	72.6	110.9	-0.9	-0.1	-1.0562	-297.50E-6	-0.21903	2.1725E-6
1	TW Main-1	71.8	110.3	-0.9	-0.1	-1.0562	-336.91E-6	-0.23390	2.3188E-6
1	TW Main-1	71.0	109.7	-0.9	-0.1	-1.0562	-382.25E-6	-0.24997	2.4768E-6
1	TW Main-1	70.2	109.1	-0.9	-0.1	-1.0562	-434.40E-6	-0.26732	2.6471E-6
1	TW Main-1	69.3	108.6	-0.9	-0.1	-1.0562	-494.38E-6	-0.28603	2.8306E-6
1	TW Main-1	68.5	108.0	-0.9	-0.1	-1.0562	-563.25E-6	-0.30617	3.0279E-6
1	TW Main-1	67.7	107.4	-0.9	-0.1	-1.0562	-642.19E-6	-0.32782	3.2397E-6
1	TW Main-1	66.9	106.8	-0.9	-0.1	-1.0562	-732.36E-6	-0.35102	3.4663E-6
1	TW Main-1	66.0	106.3	-0.9	-0.1	-1.0562	-834.89E-6	-0.37579	3.7078E-6
1	TW Main-1	65.2	105.7	-0.9	-0.2	-1.0562	-950.80E-6	-0.40212	3.9641E-6
1	TW Main-1	64.4	105.1	-0.9	-0.2	-1.0562	-0.0010808	-0.42994	4.2346E-6
1	TW Main-1	63.6	104.6	-0.9	-0.2	-1.0562	-0.0012253	-0.45914	4.5178E-6
1	TW Main-1	62.8	104.0	-0.9	-0.2	-1.0562	-0.0013842	-0.48952	4.8122E-6
1	TW Main-1	61.9	103.4	-0.9	-0.2	-1.0562	-0.0015564	-0.52083	5.1150E-6
1	TW Main-1	61.1	102.8	-0.9	-0.3	-1.0562	-0.0017403	-0.55273	5.4229E-6
1	TW Main-1	60.3	102.3	-0.9	-0.3	-1.0562	-0.0019334	-0.58479	5.7319E-6
1	TW Main-1	59.5	101.7	-0.9	-0.3	-1.0562	-0.0021322	-0.61652	6.0373E-6
1	TW Main-1	58.6	101.1	-0.9	-0.3	-1.0562	-0.0023328	-0.64738	6.3339E-6
1	TW Main-1	57.8	100.5	-0.9	-0.3	-1.0562	-0.0025306	-0.67678	6.6160E-6
1	TW Main-1	57.0	100.0	-0.9	-0.4	-1.0562	-0.0027206	-0.70412	6.8779E-6
1	TW Main-1	56.2	99.4	-0.9	-0.4	-1.0562	-0.0028981	-0.72879	7.1140E-6
1	TW Main-1	55.3	98.8	-0.9	-0.4	-1.0562	-0.0030581	-0.75022	7.3188E-6
1	TW Main-1	54.5	98.3	-0.9	-0.4	-1.0562	-0.0031961	-0.76789	7.4872E-6
1	TW Main-1	53.7	97.7	-0.9	-0.4	-1.0562	-0.0033077	-0.78133	7.6148E-6
1	TW Main-1	52.9	97.1	-0.9	-0.4	-1.0562	-0.0033890	-0.79013	7.6980E-6
1	TW Main-1	52.1	96.5	-0.9	-0.4	-1.0562	-0.0034362	-0.79400	7.7338E-6
1	TW Main-1	51.2	96.0	-0.9	-0.4	-1.0562	-0.0034466	-0.79273	7.7205E-6
1	TW Main-1	50.4	95.4	-0.9	-0.4	-1.0562	-0.0034179	-0.78624	7.6573E-6
1	TW Main-1	49.6	94.8	-0.9	-0.4	-1.0562	-0.0033492	-0.77459	7.5450E-6
1	TW Main-1	48.8	94.2	-0.9	-0.4	-1.0562	-0.0032414	-0.75901	7.3956E-6
1	TW Main-1	47.9	93.7	-0.9	-0.4	-1.0562	-0.0030971	-0.73686	7.1828E-6
1	TW Main-1	47.1	93.1	-0.9	-0.4	-1.0562	-0.0029210	-0.71168	6.9416E-6
1	TW Main-1	46.3	92.5	-0.9	-0.3	-1.0562	-0.0027198	-0.68313	6.6681E-6
1	TW Main-1	45.5	92.0	-0.9	-0.3	-1.0562	-0.0025015	-0.65197	6.3696E-6
1	TW Main-1	44.6	91.4	-0.9	-0.3	-1.0562	-0.0022744	-0.61898	6.0533E-6
1	TW Main-1	43.8	90.8	-0.9	-0.3	-1.0562	-0.0020468	-0.58496	5.7268E-6
1	TW Main-1	43.0	90.2	-0.9	-0.3	-1.0562	-0.0018257	-0.55062	5.3966E-6
1	TW Main-1	42.2	89.7	-0.9	-0.2	-1.0562	-0.0016164	-0.51660	5.0690E-6
1	TW Main-1	41.4	89.1	-0.9	-0.2	-1.0562	-0.0014228	-0.48340	4.7486E-6
1	TW Main-1	40.5	88.5	-0.9	-0.2	-1.0562	-0.0012468	-0.45141	4.4393E-6
1	TW Main-1	39.7	87.9	-0.9	-0.2	-1.0562	-0.0010891	-0.42092	4.1438E-6
1	TW Main-1	38.9	87.4	-0.9	-0.2	-1.0562	-949.48E-6	-0.39209	3.8639E-6
1	TW Main-1	38.1	86.8	-0.9	-0.1	-1.0562	-826.89E-6	-0.36501	3.6005E-6
1	TW Main-1	37.2	86.2	-0.9	-0.1	-1.0562	-719.96E-6	-0.33972	3.3540E-6
2	TW Main-2	37.2	86.2	-0.9	-0.1	-1.0562	-719.96E-6	-0.33972	3.3540E-6
2	TW Main-2	37.7	85.3	-0.9	-0.1	-1.0562	-828.86E-6	-0.36663	3.6166E-6
2	TW Main-2	38.2	84.5	-0.9	-0.2	-1.0562	-953.69E-6	-0.39557	3.8985E-6
2	TW Main-2	38.6	83.6	-0.9	-0.2	-1.0562	-0.0010958	-0.42653	4.1996E-6
2	TW Main-2	39.1	82.7	-0.9	-0.2	-1.0562	-0.0012562	-0.45945	4.5191E-6
2	TW Main-2	39.6	81.8	-0.9	-0.2	-1.0562	-0.0014353	-0.49419	4.8558E-6
2	TW Main-2	40.0	80.9	-0.9	-0.2	-1.0562	-0.0016324	-0.53051	5.2071E-6
2	TW Main-2	40.5	80.0	-0.9	-0.3	-1.0562	-0.0018458	-0.56806	5.5699E-6
2	TW Main-2	41.0	79.1	-0.9	-0.3	-1.0562	-0.0020723	-0.60641	5.9398E-6
2	TW Main-2	41.4	78.2	-0.9	-0.3	-1.0562	-0.0023075	-0.64499	6.3115E-6
2	TW Main-2	41.9	77.4	-0.9	-0.3	-1.0562	-0.0025455	-0.68316	6.6789E-6
2	TW Main-2	42.4	76.5	-0.9	-0.4	-1.0562	-0.0027796	-0.72022	7.0354E-6
2	TW Main-2	42.9	75.6	-0.9	-0.4	-1.0562	-0.0030028	-0.75544	7.3743E-6
2	TW Main-2	43.3	74.7	-0.9	-0.4	-1.0562	-0.0032081	-0.78812	7.6887E-6
2	TW Main-2	43.8	73.8	-0.9	-0.4	-1.0562	-0.0033894	-0.81759	7.9725E-6
2	TW Main-2	44.3	72.9	-0.9	-0.4	-1.0562	-0.0035415	-0.84328	8.2203E-6
2	TW Main-2	44.7	72.0	-0.9	-0.4	-1.0562	-0.0036605	-0.86473	8.4277E-6
2	TW Main-2	45.2	71.1	-0.9	-0.4	-1.0562	-0.0037436	-0.88159	8.5913E-6
2	TW Main-2	45.7	70.3	-0.9	-0.5	-1.0562	-0.0037891	-0.89362	8.7088E-6
2	TW Main-2	46.1	69.4	-0.9	-0.5	-1.0562	-0.0037963	-0.90071	8.7794E-6
2	TW Main-2	46.6	68.5	-0.9	-0.5	-1.0562	-0.0037656	-0.90289	8.8030E-6
2	TW Main-2	47.1	67.6	-0.9	-0.5	-1.0562	-0.0036983	-0.90029	8.7810E-6
2	TW Main-2	47.5	66.7	-0.9	-0.5	-1.0562	-0.0035967	-0.89316	8.7158E-6
2	TW Main-2	48.0	65.8	-0.9	-0.4	-1.0562	-0.0034645	-0.88189	8.6111E-6
2	TW Main-2	48.5	64.9	-0.9	-0.4	-1.0562	-0.0033065	-0.86697	8.4713E-6
2	TW Main-2	48.9	64.0	-0.9	-0.4	-1.0562	-0.0031284	-0.84894	8.3017E-6
2	TW Main-2	49.4	63.2	-0.9	-0.4	-1.0562	-0.0029370	-0.82846	8.1084E-6
2	TW Main-2	49.9	62.3	-0.9	-0.4	-1.0562	-0.0027392	-0.80616	7.8973E-6
2	TW Main-2	50.3	61.4	-0.9	-0.4	-1.0562	-0.0025415	-0.78268	7.6743E-6
2	TW Main-2	50.8	60.5	-0.9	-0.4	-1.0562	-0.0023496	-0.75861	7.4451E-6
2	TW Main-2	51.3	59.6	-0.9	-0.4	-1.0562	-0.0021681	-0.73443	7.2142E-6
2	TW Main-2	51.7	58.7	-0.9	-0.3	-1.0562	-0.0020002	-0.71056	6.9856E-6
2	TW Main-2	52.2	57.8	-0.9	-0.3	-1.0562	-0.0018474	-0.68728	6.7620E-6
2	TW Main-2	52.7	56.9	-0.9	-0.3	-1.0562	-0.0017105	-0.66480	6.5454E-6
2	TW Main-2	53.1	56.1	-0.9	-0.3	-1.0562	-0.0015889	-0.64322	6.3369E-6
3	TW Main-3	53.1	56.1	-0.9	-0.3	-1.0562	-0.0015889	-0.64322	6.3369E-6
3	TW Main-3	53.7	55.2	-0.9	-0.3	-1.0562	-0.0015012	-0.62723	6.1822E-6
3	TW Main-3	54.2	54.4	-0.9	-0.3	-1.0562	-0.0014234	-0.61175	6.0321E-6
3	TW Main-3	54.7	53.5	-0.9	-0.3	-1.0562	-0.0013547	-0.59677	5.8864E-6
3	TW Main-3	55.2	52.7	-0.9	-0.3	-1.0562	-0.0012938	-0.58226	5.7450E-6
3	TW Main-3	55.8	51.8	-0.9	-0.3	-1.0562	-0.0012399	-0.56816	5.6072E-6
3	TW Main-3	56.3	51.0	-0.9	-0.2	-1.0562	-0.0011915	-0.55439	5.4724E-6
3	TW Main-3	56.8	50.1	-0.9	-0.2	-1.0562	-0.0011477	-0.54084	5.3396E-6
3	TW Main-3	57.3	49.3	-0.9	-0.2	-1.0562	-0.0011074	-0.52744	5.2080E-6
3	TW Main-3	57.9	48.4	-0.9	-0.2	-1.0562	-0.0010694	-0.51409	5.0767E-6
3	TW Main-3	58.4	47.6	-0.9	-0.2	-1.0562	-0.0010331	-0.50070	4.9450E-6
4	TW Main-4	58.4	47.6	-0.9	-0.2	-1.0562	-0.0010331	-0.50070	4.9450E-6
4	TW Main-4	58.9	46.7	-0.9	-0.2	-1.0562	-986.83E-6	-0.48428	4.7836E-6
4	TW Main-4	59.3	45.8	-0.9	-0.2	-1.0562	-941.58E-6	-0.46790	4.6225E-6
4	TW Main-4	59.8	45.0	-0.9	-0.2	-1.0562	-896.94E-6	-0.45153	4.4615E-6
4	TW Main-4	60.3	44.1	-0.9	-0.2	-1.0562	-852.57E-6	-0.43514	4.3003E-6
4	TW Main-4	60.7	43.2	-0.9	-0.2	-1.0562	-808.31E-6	-0.41873	4.1389E-6
4	TW Main-4	61.2	42.3	-0.9	-0.2	-1.0562	-764.09E-6	-0.40232	3.9773E-6
4	TW Main-4	61.7	41.4	-0.9	-0.1	-1.0562	-719.96E-6	-0.38592	3.8160E-6
4	TW Main-4	62.2	40.6	-0.9	-0.1	-1.0562	-676.05E-6	-0.36959	3.6553E-6
4	TW Main-4	62.6	39.7	-0.9	-0.1	-1.0562	-632.56E-6	-0.35337	3.4957E-6
4	TW Main-4	63.1	38.8	-0.9	-0.1	-1.0562	-589.74E-6	-0.33731	3.3377E-6
4	TW Main-4	63.6	37.9	-0.9	-0.1	-1.0562	-547.85E-6	-0.32148	3.1819E-6
4	TW Main-4	64.0	37.1	-0.9	-0.1	-1.0562	-507.17E-6	-0.30594	3.0289E-6
4	TW Main-4	64.5	36.2	-0.9	-0.1	-1.0562	-467.95E-6	-0.29074	2.8793E-6

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
4	TW Main-4	65.0	35.3	-0.9	-0.1	-1.0562	-430.41E-6	-0.27595	2.7337E-6
4	TW Main-4	65.4	34.4	-0.9	-0.1	-1.0562	-394.74E-6	-0.26161	2.5924E-6
4	TW Main-4	65.9	33.5	-0.9	-0.1	-1.0562	-361.09E-6	-0.24776	2.4559E-6
4	TW Main-4	66.4	32.7	-0.9	-0.1	-1.0562	-329.54E-6	-0.23443	2.3246E-6
4	TW Main-4	66.9	31.8	-0.9	-0.1	-1.0562	-300.14E-6	-0.22166	2.1986E-6
4	TW Main-4	67.3	30.9	-0.9	-0.0	-1.0562	-272.90E-6	-0.20946	2.0782E-6
4	TW Main-4	67.8	30.0	-0.9	-0.0	-1.0562	-247.78E-6	-0.19783	1.9635E-6
4	TW Main-4	68.3	29.2	-0.9	-0.0	-1.0562	-224.72E-6	-0.18679	1.8544E-6
4	TW Main-4	68.7	28.3	-0.9	-0.0	-1.0562	-203.63E-6	-0.17632	1.7510E-6
4	TW Main-4	69.2	27.4	-0.9	-0.0	-1.0562	-184.41E-6	-0.16642	1.6531E-6
4	TW Main-4	69.7	26.5	-0.9	-0.0	-1.0562	-166.93E-6	-0.15707	1.5606E-6
4	TW Main-4	70.2	25.6	-0.9	-0.0	-1.0562	-151.09E-6	-0.14825	1.4735E-6
4	TW Main-4	70.6	24.8	-0.9	-0.0	-1.0562	-136.76E-6	-0.13995	1.3913E-6
4	TW Main-4	71.1	23.9	-0.9	-0.0	-1.0562	-123.81E-6	-0.13215	1.3141E-6
4	TW Main-4	71.6	23.0	-0.9	-0.0	-1.0562	-112.12E-6	-0.12482	1.2414E-6
4	TW Main-4	72.0	22.1	-0.9	-0.0	-1.0562	-101.58E-6	-0.11793	1.1732E-6
4	TW Main-4	72.5	21.3	-0.9	0.0	-1.0562	-92.090E-6	-0.11147	1.1092E-6
4	TW Main-4	73.0	20.4	-0.9	0.0	-1.0562	-83.541E-6	-0.10541	1.0491E-6
4	TW Main-4	73.5	19.5	-0.9	0.0	-1.0562	-75.844E-6	-0.099727	0.0
4	TW Main-4	73.9	18.6	-0.9	0.0	-1.0562	-68.914E-6	-0.094398	0.0
4	TW Main-4	74.4	17.7	-0.9	0.0	-1.0562	-62.673E-6	-0.089401	0.0
4	TW Main-4	74.9	16.9	-0.9	0.0	-1.0562	-57.051E-6	-0.084716	0.0
4	TW Main-4	75.3	16.0	-0.9	0.0	-1.0562	-51.984E-6	-0.080321	0.0
4	TW Main-4	75.8	15.1	-0.9	0.0	-1.0562	-47.415E-6	-0.076199	0.0
4	TW Main-4	76.3	14.2	-0.9	0.0	-1.0562	-43.293E-6	-0.072332	0.0
4	TW Main-4	76.7	13.4	-0.9	0.0	-1.0562	-39.572E-6	-0.068702	0.0
4	TW Main-4	77.2	12.5	-0.9	0.0	-1.0562	-36.209E-6	-0.065293	0.0
4	TW Main-4	77.7	11.6	-0.9	0.0	-1.0562	-33.168E-6	-0.062092	0.0
4	TW Main-4	78.2	10.7	-0.9	0.0	-1.0562	-30.415E-6	-0.059083	0.0
4	TW Main-4	78.6	9.9	-0.9	0.0	-1.0562	-27.921E-6	-0.056254	0.0
4	TW Main-4	79.1	9.0	-0.9	0.0	-1.0562	-25.659E-6	-0.053592	0.0
4	TW Main-4	79.6	8.1	-0.9	0.0	-1.0562	-23.606E-6	-0.051088	0.0
4	TW Main-4	80.0	7.2	-0.9	0.0	-1.0562	-21.741E-6	-0.048729	0.0
4	TW Main-4	80.5	6.3	-0.9	0.0	-1.0562	-20.044E-6	-0.046507	0.0
4	TW Main-4	81.0	5.5	-0.9	0.0	-1.0562	-18.499E-6	-0.044412	0.0
4	TW Main-4	81.5	4.6	-0.9	0.0	-1.0562	-17.091E-6	-0.042435	0.0
4	TW Main-4	81.9	3.7	-0.9	0.0	-1.0562	-15.807E-6	-0.040570	0.0
4	TW Main-4	82.4	2.8	-0.9	0.0	-1.0562	-14.634E-6	-0.038808	0.0
4	TW Main-4	82.9	2.0	-0.9	0.0	-1.0562	-13.561E-6	-0.037144	0.0
4	TW Main-4	83.3	1.1	-0.9	0.0	-1.0562	-12.579E-6	-0.035570	0.0
4	TW Main-4	83.8	0.2	-0.9	0.0	-1.0562	-11.680E-6	-0.034081	0.0
5	TW Foul-1	76.5	114.1	-6.0	-0.0	-7.0266	-0.042205	-0.98517	3.0132E-6
5	TW Foul-1	75.6	113.5	-6.0	-0.0	-7.0266	-0.047048	-1.0451	3.1401E-6
5	TW Foul-1	74.8	112.9	-6.0	-0.0	-7.0266	-0.052537	-1.1094	3.2694E-6
5	TW Foul-1	74.0	112.3	-6.0	-0.1	-7.0266	-0.058764	-1.1785	3.4000E-6
5	TW Foul-1	73.2	111.8	-6.0	-0.1	-7.0266	-0.065836	-1.2527	3.5310E-6
5	TW Foul-1	72.4	111.2	-6.0	-0.1	-7.0266	-0.073872	-1.3325	3.6609E-6
5	TW Foul-1	71.6	110.6	-6.0	-0.1	-7.0266	-0.083007	-1.4182	3.7879E-6
5	TW Foul-1	70.8	110.0	-6.0	-0.1	-7.0266	-0.093390	-1.5101	3.9099E-6
5	TW Foul-1	70.0	109.4	-6.0	-0.1	-7.0266	-0.10519	-1.6086	4.0242E-6
5	TW Foul-1	69.2	108.8	-6.0	-0.1	-7.0266	-0.11857	-1.7142	4.1279E-6
5	TW Foul-1	68.3	108.2	-6.0	-0.1	-7.0266	-0.13373	-1.8269	4.2177E-6
5	TW Foul-1	67.5	107.6	-6.0	-0.1	-7.0266	-0.15086	-1.9471	4.2895E-6
5	TW Foul-1	66.7	107.0	-6.0	-0.2	-7.0266	-0.17013	-2.0749	4.3394E-6
5	TW Foul-1	65.9	106.4	-6.0	-0.2	-7.0266	-0.19173	-2.2102	4.3629E-6
5	TW Foul-1	65.1	105.8	-6.0	-0.2	-7.0266	-0.21578	-2.3528	4.3559E-6
5	TW Foul-1	64.3	105.2	-6.0	-0.2	-7.0266	-0.24238	-2.5023	4.3143E-6
5	TW Foul-1	63.5	104.6	-6.0	-0.2	-7.0266	-0.27155	-2.6580	4.2348E-6
5	TW Foul-1	62.7	104.0	-6.0	-0.3	-7.0266	-0.30320	-2.8189	4.1154E-6
5	TW Foul-1	61.9	103.5	-6.0	-0.3	-7.0266	-0.33715	-2.9836	3.9550E-6
5	TW Foul-1	61.0	102.9	-6.0	-0.3	-7.0266	-0.37308	-3.1506	3.7548E-6
5	TW Foul-1	60.2	102.3	-6.0	-0.3	-7.0266	-0.41055	-3.3178	3.5175E-6
5	TW Foul-1	59.4	101.7	-6.0	-0.3	-7.0266	-0.44898	-3.4829	3.2482E-6
5	TW Foul-1	58.6	101.1	-6.0	-0.4	-7.0266	-0.48765	-3.6433	2.9534E-6
5	TW Foul-1	57.8	100.5	-6.0	-0.4	-7.0266	-0.52579	-3.7964	2.6416E-6
5	TW Foul-1	57.0	99.9	-6.0	-0.4	-7.0266	-0.56253	-3.9393	2.3223E-6
5	TW Foul-1	56.2	99.3	-6.0	-0.4	-7.0266	-0.59698	-4.0691	2.0056E-6
5	TW Foul-1	55.4	98.7	-6.0	-0.4	-7.0266	-0.62825	-4.1830	1.7022E-6
5	TW Foul-1	54.6	98.1	-6.0	-0.5	-7.0266	-0.65547	-4.2785	1.4230E-6
5	TW Foul-1	53.8	97.5	-6.0	-0.5	-7.0266	-0.67781	-4.3532	1.1787E-6
5	TW Foul-1	52.9	96.9	-6.0	-0.5	-7.0266	-0.69453	-4.4051	0.0
5	TW Foul-1	52.1	96.3	-6.0	-0.5	-7.0266	-0.70497	-4.4328	0.0
5	TW Foul-1	51.3	95.8	-6.0	-0.5	-7.0266	-0.70862	-4.4351	0.0
5	TW Foul-1	50.5	95.2	-6.0	-0.5	-7.0266	-0.70512	-4.4116	0.0
5	TW Foul-1	49.7	94.6	-6.0	-0.5	-7.0266	-0.69435	-4.3624	0.0
5	TW Foul-1	48.9	94.0	-6.0	-0.5	-7.0266	-0.67644	-4.2884	0.0
5	TW Foul-1	48.1	93.4	-6.0	-0.4	-7.0266	-0.65183	-4.1912	1.1536E-6
5	TW Foul-1	47.3	92.8	-6.0	-0.4	-7.0266	-0.62124	-4.0729	1.4224E-6
5	TW Foul-1	46.5	92.2	-6.0	-0.4	-7.0266	-0.58569	-3.9365	1.7386E-6
5	TW Foul-1	45.6	91.6	-6.0	-0.4	-7.0266	-0.54642	-3.7850	2.0853E-6
5	TW Foul-1	44.8	91.0	-6.0	-0.4	-7.0266	-0.50474	-3.6221	2.4438E-6
5	TW Foul-1	44.0	90.4	-6.0	-0.3	-7.0266	-0.46201	-3.4512	2.7958E-6
5	TW Foul-1	43.2	89.8	-6.0	-0.3	-7.0266	-0.41944	-3.2757	3.1249E-6
5	TW Foul-1	42.4	89.2	-6.0	-0.3	-7.0266	-0.37810	-3.0989	3.4181E-6
5	TW Foul-1	41.6	88.6	-6.0	-0.3	-7.0266	-0.33877	-2.9233	3.6665E-6
5	TW Foul-1	40.8	88.0	-6.0	-0.2	-7.0266	-0.30205	-2.7512	3.8654E-6
5	TW Foul-1	40.0	87.5	-6.0	-0.2	-7.0266	-0.26826	-2.5845	4.0136E-6
5	TW Foul-1	39.2	86.9	-6.0	-0.2	-7.0266	-0.23756	-2.4244	4.1129E-6
5	TW Foul-1	38.3	86.3	-6.0	-0.2	-7.0266	-0.20994	-2.2718	4.1670E-6
6	TW Foul-2	38.3	86.3	-6.0	-0.2	-7.0266	-0.20994	-2.2718	4.1670E-6
6	TW Foul-2	38.8	85.4	-6.0	-0.2	-7.0266	-0.24043	-2.4475	4.1371E-6
6	TW Foul-2	39.3	84.5	-6.0	-0.2	-7.0266	-0.27502	-2.6354	4.0562E-6
6	TW Foul-2	39.8	83.6	-6.0	-0.3	-7.0266	-0.31395	-2.8353	3.9173E-6
6	TW Foul-2	40.3	82.7	-6.0	-0.3	-7.0266	-0.35736	-3.0464	3.7144E-6
6	TW Foul-2	40.7	81.9	-6.0	-0.3	-7.0266	-0.40518	-3.2678	3.4443E-6
6	TW Foul-2	41.2	81.0	-6.0	-0.3	-7.0266	-0.45713	-3.4976	3.1072E-6
6	TW Foul-2	41.7	80.1	-6.0	-0.4	-7.0266	-0.51263	-3.7336	2.7079E-6
6	TW Foul-2	42.2	79.2	-6.0	-0.4	-7.0266	-0.57080	-3.9729	2.2562E-6
6	TW Foul-2	42.6	78.3	-6.0	-0.4	-7.0266	-0.63046	-4.2120	1.7671E-6
6	TW Foul-2	43.1	77.4	-6.0	-0.5	-7.0266	-0.69018	-4.4472	1.2601E-6
6	TW Foul-2	43.6	76.5	-6.0	-0.5	-7.0266	-0.74837	-4.6742	0.0
6	TW Foul-2	44.1	75.7	-6.0	-0.5	-7.0266	-0.80341	-4.8890	0.0
6	TW Foul-2	44.6	74.8	-6.0	-0.6	-7.0266	-0.85371	-5.0875	0.0
6	TW Foul-2	45.0	73.9	-6.0	-0.6	-7.0266	-0.89788	-5.2660	0.0
6	TW Foul-2	45.5	73.0	-6.0	-0.6	-7.0266	-0.93473	-5.4214	0.0
6	TW Foul-2	46.0	72.1	-6.0	-0.6	-7.0266	-0.96334	-5.5509	0.0
6	TW Foul-2	46.5	71.2	-6.0	-0.6	-7.0266	-0.98305	-5.6526	-1.0112E-6
6	TW Foul-2	46.9	70.4	-6.0	-0.6	-7.0266	-0.99346	-5.7254	0.0
6	TW Foul-2	47.4	69.5	-6.0	-0.6	-7.0266	-0.99444	-5.7687	0.0
6	TW Foul-2	47.9	68.6	-6.0	-0.6	-7.0266	-0.98609	-5.7828	0.0
6	TW Foul-2	48.4	67.7	-6.0	-0.6	-7.0266	-0.96880	-5.7685	0.0
6	TW Foul-2	48.9	66.8	-6.0	-0.6	-7.0266	-0.94324	-5.7276	0.0
6	TW Foul-2	49.3	65.9	-6.0	-0.6	-7.0266	-0.91038	-5.6624	0.0
6	TW Foul-2	49.8	65.1	-6.0	-0.6	-7.0266	-0.87147	-5.5759	1.4289E-6
6	TW Foul-2	50.3	64.2	-6.0	-0.6	-7.0266	-0.82796	-5.4715	2.0735E-6
6	TW Foul-2	50.8	63.3	-6.0	-0.6	-7.0266	-0.78148	-5.3527	2.7328E-6
6	TW Foul-2	51.3	62.4	-6.0	-0.6	-7.0266	-0.73364	-5.2234	3.3822E-6
6	TW Foul-2	51.7	61.5	-6.0	-0.5	-7.0266	-0.68595	-5.0871	3.9988E-6
6	TW Foul-2	52.2	60.6	-6.0	-0.5	-7.0266	-0.63973	-4.9470	4.5639E-6
6	TW Foul-2	52.7	59.8	-6.0	-0.5	-7.0266	-0.59596	-4.8059	5.0640E-6
6	TW Foul-2	53.2	58.9	-6.0	-0.5	-7.0266	-0.55534	-4.6659	5.4912E-6
6	TW Foul-2	53.6	58.0	-6.0	-0.5	-7.0266	-0.51825	-4.5288	5.8427E-6
6	TW Foul-2	54.1	57.1	-6.0	-0.4	-7.0266	-0.48481	-4.3955	6.1201E-6
6	TW Foul-2	54.6	56.2	-6.0	-0.4	-7.0266	-0.45491	-4.2666	6.3280E-6
6	TW Foul-2	55.1	55.3	-6.0	-0.4	-7.0266	-0.42831	-4.1423	6.4731E-6
6	TW Foul-2	55.6	54.5	-6.0	-0.4	-7.0266	-0.40469	-4.0224	6.5632E-6
6	TW Foul-2	56.0	53.6	-6.0	-0.4	-7.0266	-0.38366	-3.9066	6.6060E-6
6	TW Foul-2	56.5	52.7	-6.0	-0.4	-7.0266	-0.36482	-3.7944	6.6092E-6
6	TW Foul-2	57.0	51.8	-6.0	-0.3	-7.0266	-0.34780	-3.6851	6.5798E-6
6	TW Foul-2	57.5	50.9	-6.0	-0.3	-7.0266	-0.33224	-3.5782	6.5240E-6
6	TW Foul-2	57.9	50.0	-6.0	-0.3	-7.0266	-0.31782	-3.4730	6.4473E-6
6	TW Foul-2	58.4	49.2	-6.0	-0.3	-7.0266	-0.30425	-3.3690	6.3542E-6
6	TW Foul-2	58.9	48.3	-6.0	-0.3	-7.0266	-0.29129	-3.2656	6.2487E-6
6	TW Foul-2	59.4	47.4	-6.0	-0.3	-7.0266	-0.27874	-3.1625	6.1341E-6
6	TW Foul-2	59.9	46.5	-6.0	-0.3	-7.0266	-0.26644	-3.0593	6.0129E-6
6	TW Foul-2	60.3	45.6	-6.0	-0.3	-7.0266	-0.25427	-2.9557	5.8872E-6
6	TW Foul-2	60.8	44.7	-6.0	-0.2	-7.0266	-0.24215	-2.8518	5.7587E-6
6	TW Foul-2	61.3	43.9	-6.0	-0.2	-7.0266	-0.23002	-2.7474	5.6286E-6
6	TW Foul-2	61.8	43.0	-6.0	-0.2	-7.0266	-0.21787	-2.6427	5.4977E-6
6	TW Foul-2	62.3	42.1	-6.0	-0.2	-7.0266	-0.20570	-2.5378	5.3664E-6
6	TW Foul-2	62.7	41.2	-6.0	-0.2	-7.0266	-0.19356	-2.4330	5.2351E-6

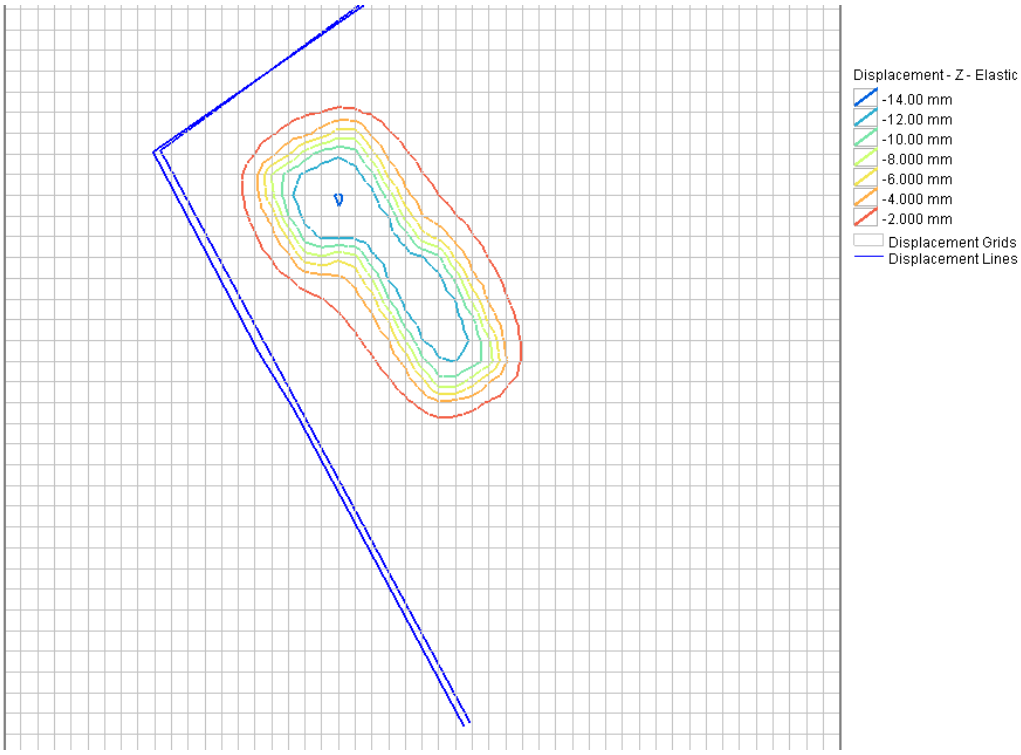
Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
6	TW Foul-2	63.2	40.3	-6.0	-0.2	-7.0266	-0.18149	-2.3287	5.1037E-6
6	TW Foul-2	63.7	39.4	-6.0	-0.2	-7.0266	-0.16956	-2.2251	4.9720E-6
6	TW Foul-2	64.2	38.6	-6.0	-0.2	-7.0266	-0.15784	-2.1228	4.8400E-6
6	TW Foul-2	64.6	37.7	-6.0	-0.1	-7.0266	-0.14642	-2.0220	4.7074E-6
6	TW Foul-2	65.1	36.8	-6.0	-0.1	-7.0266	-0.13536	-1.9232	4.5739E-6
6	TW Foul-2	65.6	35.9	-6.0	-0.1	-7.0266	-0.12474	-1.8269	4.4395E-6
6	TW Foul-2	66.1	35.0	-6.0	-0.1	-7.0266	-0.11461	-1.7332	4.3042E-6
6	TW Foul-2	66.6	34.1	-6.0	-0.1	-7.0266	-0.10501	-1.6425	4.1680E-6
6	TW Foul-2	67.0	33.3	-6.0	-0.1	-7.0266	-0.095985	-1.5551	4.0312E-6
6	TW Foul-2	67.5	32.4	-6.0	-0.1	-7.0266	-0.087545	-1.4712	3.8941E-6
6	TW Foul-2	68.0	31.5	-6.0	-0.1	-7.0266	-0.079700	-1.3908	3.7570E-6
6	TW Foul-2	68.5	30.6	-6.0	-0.1	-7.0266	-0.072444	-1.3141	3.6205E-6
6	TW Foul-2	68.9	29.7	-6.0	-0.1	-7.0266	-0.065766	-1.2412	3.4851E-6
6	TW Foul-2	69.4	28.8	-6.0	-0.1	-7.0266	-0.059644	-1.1719	3.3511E-6
6	TW Foul-2	69.9	27.9	-6.0	-0.0	-7.0266	-0.054052	-1.1063	3.2192E-6
6	TW Foul-2	70.4	27.1	-6.0	-0.0	-7.0266	-0.048960	-1.0443	3.0897E-6
6	TW Foul-2	70.9	26.2	-6.0	-0.0	-7.0266	-0.044335	-0.98577	2.9631E-6
6	TW Foul-2	71.3	25.3	-6.0	-0.0	-7.0266	-0.040143	-0.93064	2.8396E-6
6	TW Foul-2	71.8	24.4	-6.0	-0.0	-7.0266	-0.036351	-0.87875	2.7197E-6
6	TW Foul-2	72.3	23.5	-6.0	-0.0	-7.0266	-0.032925	-0.82996	2.6034E-6
6	TW Foul-2	72.8	22.6	-6.0	-0.0	-7.0266	-0.029834	-0.78413	2.4911E-6
6	TW Foul-2	73.3	21.8	-6.0	-0.0	-7.0266	-0.027047	-0.74110	2.3828E-6
6	TW Foul-2	73.7	20.9	-6.0	-0.0	-7.0266	-0.024535	-0.70073	2.2787E-6
6	TW Foul-2	74.2	20.0	-6.0	-0.0	-7.0266	-0.022273	-0.66285	2.1786E-6
6	TW Foul-2	74.7	19.1	-6.0	-0.0	-7.0266	-0.020234	-0.62733	2.0827E-6
6	TW Foul-2	75.2	18.2	-6.0	-0.0	-7.0266	-0.018398	-0.59401	1.9909E-6
6	TW Foul-2	75.6	17.3	-6.0	-0.0	-7.0266	-0.016744	-0.56277	1.9032E-6
6	TW Foul-2	76.1	16.5	-6.0	0.0	-7.0266	-0.015253	-0.53347	1.8194E-6
6	TW Foul-2	76.6	15.6	-6.0	0.0	-7.0266	-0.013909	-0.50598	1.7394E-6
6	TW Foul-2	77.1	14.7	-6.0	0.0	-7.0266	-0.012696	-0.48019	1.6632E-6
6	TW Foul-2	77.6	13.8	-6.0	0.0	-7.0266	-0.011600	-0.45599	1.5906E-6
6	TW Foul-2	78.0	12.9	-6.0	0.0	-7.0266	-0.010611	-0.43326	1.5215E-6
6	TW Foul-2	78.5	12.0	-6.0	0.0	-7.0266	-0.0097161	-0.41192	1.4558E-6
6	TW Foul-2	79.0	11.2	-6.0	0.0	-7.0266	-0.0089064	-0.39186	1.3932E-6
6	TW Foul-2	79.5	10.3	-6.0	0.0	-7.0266	-0.0081730	-0.37301	1.3337E-6
6	TW Foul-2	79.9	9.4	-6.0	0.0	-7.0266	-0.0075080	-0.35527	1.2771E-6
6	TW Foul-2	80.4	8.5	-6.0	0.0	-7.0266	-0.0069046	-0.33858	1.2233E-6
6	TW Foul-2	80.9	7.6	-6.0	0.0	-7.0266	-0.0063565	-0.32287	1.1722E-6
6	TW Foul-2	81.4	6.7	-6.0	0.0	-7.0266	-0.0058581	-0.30807	1.1235E-6
6	TW Foul-2	81.9	5.9	-6.0	0.0	-7.0266	-0.0054044	-0.29412	1.0773E-6
6	TW Foul-2	82.3	5.0	-6.0	0.0	-7.0266	-0.0049911	-0.28096	1.0334E-6
6	TW Foul-2	82.8	4.1	-6.0	0.0	-7.0266	-0.0046142	-0.26855	0.0
6	TW Foul-2	83.3	3.2	-6.0	0.0	-7.0266	-0.0042700	-0.25683	0.0
6	TW Foul-2	83.8	2.3	-6.0	0.0	-7.0266	-0.0039555	-0.24575	0.0
6	TW Foul-2	84.2	1.4	-6.0	0.0	-7.0266	-0.0036678	-0.23528	0.0
6	TW Foul-2	84.7	0.6	-6.0	0.0	-7.0266	-0.0034043	-0.22538	0.0

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None


Displacement - Z - Elastic
-14.00 mm
-12.00 mm
-10.00 mm
-8.000 mm
-6.000 mm
-4.000 mm
-2.000 mm
Displacement Grids
Displacement Lines
y
z
x

Name	X1	Y1	Z1	X2	Y2	Z2	Intervals	Calculate Detailed Results
	[m]	[m]	[m]	[m]	[m]	[m]	[No.]	

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Grid	Global X	15.0	-35.0	-1.0	-	120.0	-1.0	50	125.0	50	No	No

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Basement Lower	75.9	58.6	-9.4	-13.6	-10.390	-188.74	-531.51	-226.49E-6
2	Lift Pit1	60.1	84.0	-11.7	-8.3	-12.599	-152.86	-304.79	-884.01E-6
3	Lift Pit2	91.8	33.7	-11.7	-7.7	-12.599	-145.95	-290.17	-848.92E-6

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	TW Main-1	76.8	113.7	-0.9	0.5	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.9	113.1	-0.9	0.5	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.1	112.6	-0.9	0.5	-1.0562	0.0	0.0	0.0
1	TW Main-1	74.3	112.0	-0.9	0.5	-1.0562	0.0	0.0	0.0
1	TW Main-1	73.5	111.4	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	72.6	110.9	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.8	110.3	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.0	109.7	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	70.2	109.1	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	69.3	108.6	-0.9	0.6	-1.0562	0.0	0.0	0.0
1	TW Main-1	68.5	108.0	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	67.7	107.4	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.9	106.8	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.0	106.3	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	65.2	105.7	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	64.4	105.1	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	63.6	104.6	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	62.8	104.0	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.9	103.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.1	102.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	60.3	102.3	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	59.5	101.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	58.6	101.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.8	100.5	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.0	100.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	56.2	99.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	55.3	98.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	54.5	98.3	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	53.7	97.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.9	97.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.1	96.5	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	51.2	96.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	50.4	95.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	49.6	94.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	48.8	94.2	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.9	93.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.1	93.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	46.3	92.5	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	45.5	92.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	44.6	91.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.8	90.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.0	90.2	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	42.2	89.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	41.4	89.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
1	TW Main-1	40.5	88.5	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	39.7	87.9	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.9	87.4	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.1	86.8	-0.9	0.7	-1.0562	0.0	0.0	0.0
1	TW Main-1	37.2	86.2	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.2	86.2	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.7	85.3	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	38.2	84.5	-0.9	0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	38.6	83.6	-0.9	0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.1	82.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.6	81.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.0	80.9	-0.9	0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.5	80.0	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.0	79.1	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.4	78.2	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.9	77.4	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.4	76.5	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.9	75.6	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.3	74.7	-0.9	0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.8	73.8	-0.9	1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.3	72.9	-0.9	1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.7	72.0	-0.9	1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.2	71.1	-0.9	1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.7	70.3	-0.9	1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.1	69.4	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.6	68.5	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.1	67.6	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.5	66.7	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.0	65.8	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.5	64.9	-0.9	1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.9	64.0	-0.9	1.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.4	63.2	-0.9	1.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.9	62.3	-0.9	1.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.3	61.4	-0.9	1.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.8	60.5	-0.9	1.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.3	59.6	-0.9	1.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.7	58.7	-0.9	1.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.2	57.8	-0.9	1.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.7	56.9	-0.9	1.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	53.1	56.1	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.1	56.1	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.7	55.2	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.2	54.4	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.7	53.5	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.2	52.7	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.8	51.8	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.3	51.0	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.8	50.1	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	57.3	49.3	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	57.9	48.4	-0.9	1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	58.4	47.6	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	58.4	47.6	-0.9	1.3	-1.0562	0.0	0.0	0.0

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
4	TW Main-4	58.9	46.7	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.3	45.8	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.8	45.0	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.3	44.1	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.7	43.2	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.2	42.3	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.7	41.4	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.2	40.6	-0.9	1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.6	39.7	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.1	38.8	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.6	37.9	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.0	37.1	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.5	36.2	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.0	35.3	-0.9	1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.4	34.4	-0.9	1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.9	33.5	-0.9	1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.4	32.7	-0.9	1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.9	31.8	-0.9	1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.3	30.9	-0.9	1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.8	30.0	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.3	29.2	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.7	28.3	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.2	27.4	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.7	26.5	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.2	25.6	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.6	24.8	-0.9	1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.1	23.9	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.6	23.0	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.0	22.1	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.5	21.3	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.0	20.4	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.5	19.5	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.9	18.6	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.4	17.7	-0.9	0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.9	16.9	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.3	16.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.8	15.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.3	14.2	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.7	13.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.2	12.5	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.7	11.6	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.2	10.7	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.6	9.9	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.1	9.0	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.6	8.1	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.0	7.2	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.5	6.3	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.0	5.5	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.5	4.6	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.9	3.7	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.4	2.8	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.9	2.0	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.3	1.1	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.8	0.2	-0.9	0.4	-1.0562	0.0	0.0	0.0
5	TW Foul-1	76.5	114.1	-6.0	0.5	-7.0272	0.0	0.0	0.0
5	TW Foul-1	75.6	113.5	-6.0	0.5	-7.0272	0.0	0.0	0.0
5	TW Foul-1	74.8	112.9	-6.0	0.5	-7.0272	0.0	0.0	0.0
5	TW Foul-1	74.0	112.3	-6.0	0.5	-7.0272	0.0	0.0	0.0
5	TW Foul-1	73.2	111.8	-6.0	0.5	-7.0272	0.0	0.0	0.0
5	TW Foul-1	72.4	111.2	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	71.6	110.6	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	70.8	110.0	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	70.0	109.4	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	69.2	108.8	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	68.3	108.2	-6.0	0.6	-7.0272	0.0	0.0	0.0
5	TW Foul-1	67.5	107.6	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	66.7	107.0	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	65.9	106.4	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	65.1	105.8	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	64.3	105.2	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	63.5	104.6	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	62.7	104.0	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	61.9	103.5	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	61.0	102.9	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	60.2	102.3	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	59.4	101.7	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	58.6	101.1	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	57.8	100.5	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	57.0	99.9	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	56.2	99.3	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	55.4	98.7	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	54.6	98.1	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	53.8	97.5	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	52.9	96.9	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	52.1	96.3	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	51.3	95.8	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	50.5	95.2	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	49.7	94.6	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	48.9	94.0	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	48.1	93.4	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	47.3	92.8	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	46.5	92.2	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	45.6	91.6	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	44.8	91.0	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	44.0	90.4	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	43.2	89.8	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	42.4	89.2	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	41.6	88.6	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	40.8	88.0	-6.0	0.8	-7.0272	0.0	0.0	0.0
5	TW Foul-1	40.0	87.5	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	39.2	86.9	-6.0	0.7	-7.0272	0.0	0.0	0.0
5	TW Foul-1	38.3	86.3	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	38.3	86.3	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	38.8	85.4	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	39.3	84.5	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	39.8	83.6	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	40.3	82.7	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	40.7	81.9	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	41.2	81.0	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	41.7	80.1	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	42.2	79.2	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	42.6	78.3	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	43.1	77.4	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	43.6	76.5	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	44.1	75.7	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	44.6	74.8	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	45.0	73.9	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	45.5	73.0	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	46.0	72.1	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	46.5	71.2	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	46.9	70.4	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	47.4	69.5	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	47.9	68.6	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	48.4	67.7	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	48.9	66.8	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	49.3	65.9	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	49.8	65.1	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	50.3	64.2	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	50.8	63.3	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	51.3	62.4	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	51.7	61.5	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	52.2	60.6	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	52.7	59.8	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	53.2	58.9	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	53.6	58.0	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	54.1	57.1	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	54.6	56.2	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	55.1	55.3	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	55.6	54.5	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	56.0	53.6	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	56.5	52.7	-6.0	1.3	-7.0272	0.0	0.0	0.0

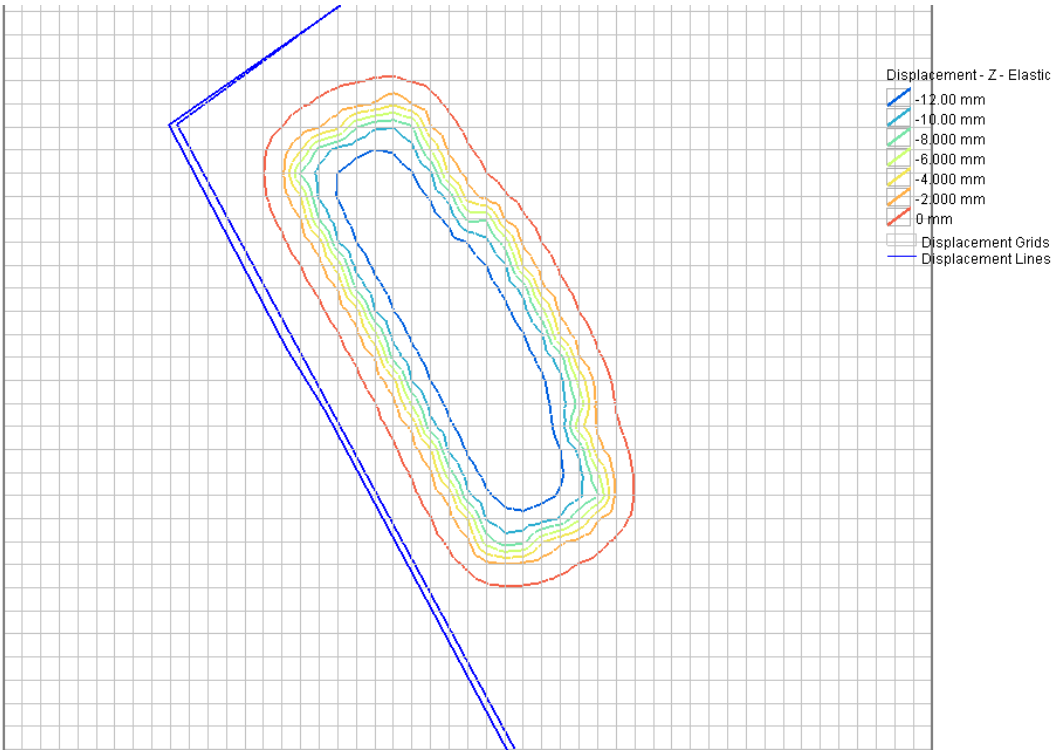
Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
6	TW Foul-2	57.0	51.8	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	57.5	50.9	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	57.9	50.0	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	58.4	49.2	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	58.9	48.3	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	59.4	47.4	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	59.9	46.5	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	60.3	45.6	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	60.8	44.7	-6.0	1.3	-7.0272	0.0	0.0	0.0
6	TW Foul-2	61.3	43.9	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	61.8	43.0	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	62.3	42.1	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	62.7	41.2	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	63.2	40.3	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	63.7	39.4	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	64.2	38.6	-6.0	1.2	-7.0272	0.0	0.0	0.0
6	TW Foul-2	64.6	37.7	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	65.1	36.8	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	65.6	35.9	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	66.1	35.0	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	66.6	34.1	-6.0	1.1	-7.0272	0.0	0.0	0.0
6	TW Foul-2	67.0	33.3	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	67.5	32.4	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	68.0	31.5	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	68.5	30.6	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	68.9	29.7	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	69.4	28.8	-6.0	1.0	-7.0272	0.0	0.0	0.0
6	TW Foul-2	69.9	27.9	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	70.4	27.1	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	70.9	26.2	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	71.3	25.3	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	71.8	24.4	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	72.3	23.5	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	72.8	22.6	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	73.3	21.8	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	73.7	20.9	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	74.2	20.0	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	74.7	19.1	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	75.2	18.2	-6.0	0.9	-7.0272	0.0	0.0	0.0
6	TW Foul-2	75.6	17.3	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	76.1	16.5	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	76.6	15.6	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	77.1	14.7	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	77.6	13.8	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	78.0	12.9	-6.0	0.8	-7.0272	0.0	0.0	0.0
6	TW Foul-2	78.5	12.0	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	79.0	11.2	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	79.5	10.3	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	79.9	9.4	-6.0	0.7	-7.0272	0.0	0.0	0.0
6	TW Foul-2	80.4	8.5	-6.0	0.6	-7.0272	0.0	0.0	0.0
6	TW Foul-2	80.9	7.6	-6.0	0.6	-7.0272	0.0	0.0	0.0
6	TW Foul-2	81.4	6.7	-6.0	0.6	-7.0272	0.0	0.0	0.0
6	TW Foul-2	81.9	5.9	-6.0	0.6	-7.0272	0.0	0.0	0.0
6	TW Foul-2	82.3	5.0	-6.0	0.5	-7.0272	0.0	0.0	0.0
6	TW Foul-2	82.8	4.1	-6.0	0.5	-7.0272	0.0	0.0	0.0
6	TW Foul-2	83.3	3.2	-6.0	0.5	-7.0272	0.0	0.0	0.0
6	TW Foul-2	83.8	2.3	-6.0	0.5	-7.0272	0.0	0.0	0.0
6	TW Foul-2	84.2	1.4	-6.0	0.5	-7.0272	0.0	0.0	0.0
6	TW Foul-2	84.7	0.6	-6.0	0.4	-7.0272	0.0	0.0	0.0

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None


Displacement - Z - Elastic
-12.00 mm
-10.00 mm
-8.000 mm
-6.000 mm
-4.000 mm
-2.000 mm
0 mm
Displacement Grids
Displacement Lines
y
z
x

Name	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals [No.]	Calculate	Detailed Results
TW Main-4	58.4	47.6	-0.9	83.8	0.2	-0.9	54	Yes	Yes
TW Foul-1	76.5	114.1	-6.0	38.3	86.3	-6.0	47	Yes	Yes
TW Foul-2	38.3	86.3	-6.0	84.7	0.6	-6.0	97	Yes	Yes

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Grid	Global X	15.0	-35.0	-1.0	-	120.0	-1.0	50	125.0	50	No	No

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Basement Lower	75.9	58.6	-9.4	-31.1	-10.389	-188.74	-425.24	-0.0023072
2	Lift Pit1	60.1	84.0	-11.7	-15.7	-12.598	-152.91	-243.93	-0.0019340
3	Lift Pit2	91.8	33.7	-11.7	-14.9	-12.598	-146.00	-232.23	-0.0018485

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	TW Main-1	76.8	113.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.9	113.1	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.1	112.6	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	74.3	112.0	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	73.5	111.4	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	72.6	110.9	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.8	110.3	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.0	109.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	70.2	109.1	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	69.3	108.6	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	68.5	108.0	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	67.7	107.4	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.9	106.8	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.0	106.3	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	65.2	105.7	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	64.4	105.1	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	63.6	104.6	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	62.8	104.0	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.9	103.4	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.1	102.8	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	60.3	102.3	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	59.5	101.7	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	58.6	101.1	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.8	100.5	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.0	100.0	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	56.2	99.4	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	55.3	98.8	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	54.5	98.3	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	53.7	97.7	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.9	97.1	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.1	96.5	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	51.2	96.0	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	50.4	95.4	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	49.6	94.8	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	48.8	94.2	-0.9	-0.4	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.9	93.7	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.1	93.1	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	46.3	92.5	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	45.5	92.0	-0.9	-0.3	-1.0562	0.0	0.0	0.0
1	TW Main-1	44.6	91.4	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.8	90.8	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.0	90.2	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	42.2	89.7	-0.9	-0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	41.4	89.1	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	40.5	88.5	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	39.7	87.9	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.9	87.4	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.1	86.8	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	37.2	86.2	-0.9	-0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.2	86.2	-0.9	-0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.7	85.3	-0.9	-0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	38.2	84.5	-0.9	-0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	38.6	83.6	-0.9	-0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.1	82.7	-0.9	-0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.6	81.8	-0.9	-0.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.0	80.9	-0.9	-0.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.5	80.0	-0.9	-0.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.0	79.1	-0.9	-0.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.4	78.2	-0.9	-0.4	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.9	77.4	-0.9	-0.4	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.4	76.5	-0.9	-0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.9	75.6	-0.9	-0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.3	74.7	-0.9	-0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.8	73.8	-0.9	-0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.3	72.9	-0.9	-0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.7	72.0	-0.9	-0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.2	71.1	-0.9	-0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.7	70.3	-0.9	-0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.1	69.4	-0.9	-0.8	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.6	68.5	-0.9	-0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.1	67.6	-0.9	-0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.5	66.7	-0.9	-0.9	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.0	65.8	-0.9	-1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.5	64.9	-0.9	-1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.9	64.0	-0.9	-1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.4	63.2	-0.9	-1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.9	62.3	-0.9	-1.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.3	61.4	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.8	60.5	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.3	59.6	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.7	58.7	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.2	57.8	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.7	56.9	-0.9	-1.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	53.1	56.1	-0.9	-1.1	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.1	56.1	-0.9	-1.1	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.7	55.2	-0.9	-1.1	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.2	54.4	-0.9	-1.2	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.7	53.5	-0.9	-1.2	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.2	52.7	-0.9	-1.2	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.8	51.8	-0.9	-1.2	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.3	51.0	-0.9	-1.2	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.8	50.1	-0.9	-1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	57.3	49.3	-0.9	-1.3	-1.0562	0.0	0.0	0.0

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
3	TW Main-3	57.9	48.4	-0.9	-1.3	-1.0562	0.0	0.0	0.0
3	TW Main-3	58.4	47.6	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	58.4	47.6	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	58.9	46.7	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.3	45.8	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.8	45.0	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.3	44.1	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.7	43.2	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.2	42.3	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.7	41.4	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.2	40.6	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.6	39.7	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.1	38.8	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.6	37.9	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.0	37.1	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.5	36.2	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.0	35.3	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.4	34.4	-0.9	-1.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.9	33.5	-0.9	-1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.4	32.7	-0.9	-1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.9	31.8	-0.9	-1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.3	30.9	-0.9	-1.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.8	30.0	-0.9	-1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.3	29.2	-0.9	-1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.7	28.3	-0.9	-1.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.2	27.4	-0.9	-1.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.7	26.5	-0.9	-0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.2	25.6	-0.9	-0.9	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.6	24.8	-0.9	-0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.1	23.9	-0.9	-0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.6	23.0	-0.9	-0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.0	22.1	-0.9	-0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.5	21.3	-0.9	-0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.0	20.4	-0.9	-0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.5	19.5	-0.9	-0.4	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.9	18.6	-0.9	-0.4	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.4	17.7	-0.9	-0.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.9	16.9	-0.9	-0.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.3	16.0	-0.9	-0.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.8	15.1	-0.9	-0.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.3	14.2	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.7	13.4	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.2	12.5	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.7	11.6	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.2	10.7	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.6	9.9	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.1	9.0	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.6	8.1	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.0	7.2	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.5	6.3	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.0	5.5	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.5	4.6	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.9	3.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.4	2.8	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.9	2.0	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.3	1.1	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.8	0.2	-0.9	0.1	-1.0562	0.0	0.0	0.0
5	TW Foul-1	76.5	114.1	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	75.6	113.5	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	74.8	112.9	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	74.0	112.3	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	73.2	111.8	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	72.4	111.2	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	71.6	110.6	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	70.8	110.0	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	70.0	109.4	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	69.2	108.8	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	68.3	108.2	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	67.5	107.6	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	66.7	107.0	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	65.9	106.4	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	65.1	105.8	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	64.3	105.2	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	63.5	104.6	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	62.7	104.0	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	61.9	103.5	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	61.0	102.9	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	60.2	102.3	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	59.4	101.7	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	58.6	101.1	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	57.8	100.5	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	57.0	99.9	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	56.2	99.3	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	55.4	98.7	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	54.6	98.1	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	53.8	97.5	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	52.9	96.9	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	52.1	96.3	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	51.3	95.8	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	50.5	95.2	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	49.7	94.6	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	48.9	94.0	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	48.1	93.4	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	47.3	92.8	-6.0	-0.4	-7.0266	0.0	0.0	0.0
5	TW Foul-1	46.5	92.2	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	45.6	91.6	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	44.8	91.0	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	44.0	90.4	-6.0	-0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	43.2	89.8	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	42.4	89.2	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	41.6	88.6	-6.0	-0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	40.8	88.0	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	40.0	87.5	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	39.2	86.9	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	38.3	86.3	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	38.3	86.3	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	38.8	85.4	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	39.3	84.5	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	39.8	83.6	-6.0	-0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	40.3	82.7	-6.0	-0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	40.7	81.9	-6.0	-0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	41.2	81.0	-6.0	-0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	41.7	80.1	-6.0	-0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	42.2	79.2	-6.0	-0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	42.6	78.3	-6.0	-0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	43.1	77.4	-6.0	-0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	43.6	76.5	-6.0	-0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	44.1	75.7	-6.0	-0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	44.6	74.8	-6.0	-0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	45.0	73.9	-6.0	-0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	45.5	73.0	-6.0	-0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.0	72.1	-6.0	-1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.5	71.2	-6.0	-1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.9	70.4	-6.0	-1.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	47.4	69.5	-6.0	-1.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	47.9	68.6	-6.0	-1.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	48.4	67.7	-6.0	-1.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	48.9	66.8	-6.0	-1.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	49.3	65.9	-6.0	-1.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	49.8	65.1	-6.0	-1.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	50.3	64.2	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	50.8	63.3	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	51.3	62.4	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	51.7	61.5	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	52.2	60.6	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	52.7	59.8	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	53.2	58.9	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	53.6	58.0	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	54.1	57.1	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	54.6	56.2	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	55.1	55.3	-6.0	-1.5	-7.0266	0.0	0.0	0.0

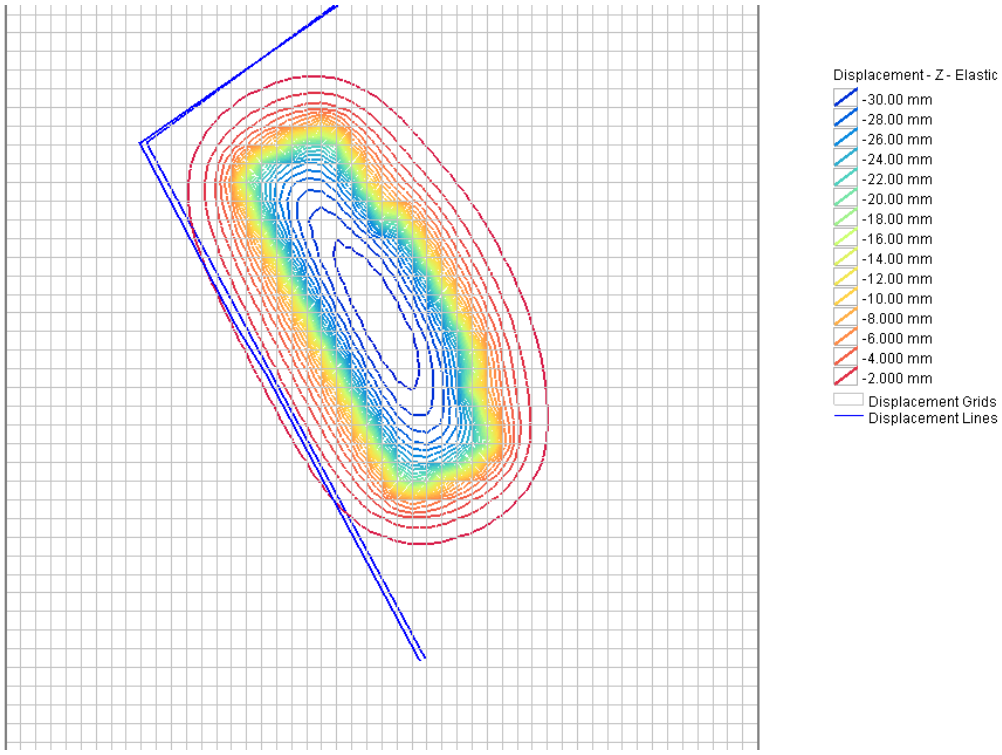
Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
6	TW Foul-2	55.6	54.5	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	56.0	53.6	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	56.5	52.7	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.0	51.8	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.5	50.9	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.9	50.0	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	58.4	49.2	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	58.9	48.3	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	59.4	47.4	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	59.9	46.5	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	60.3	45.6	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	60.8	44.7	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	61.3	43.9	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	61.8	43.0	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	62.3	42.1	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	62.7	41.2	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	63.2	40.3	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	63.7	39.4	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	64.2	38.6	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	64.6	37.7	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	65.1	36.8	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	65.6	35.9	-6.0	-1.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	66.1	35.0	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	66.6	34.1	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	67.0	33.3	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	67.5	32.4	-6.0	-1.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.0	31.5	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.5	30.6	-6.0	-1.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.9	29.7	-6.0	-1.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	69.4	28.8	-6.0	-1.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	69.9	27.9	-6.0	-1.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	70.4	27.1	-6.0	-1.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	70.9	26.2	-6.0	-1.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	71.3	25.3	-6.0	-1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	71.8	24.4	-6.0	-1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	72.3	23.5	-6.0	-0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	72.8	22.6	-6.0	-0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	73.3	21.8	-6.0	-0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	73.7	20.9	-6.0	-0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	74.2	20.0	-6.0	-0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	74.7	19.1	-6.0	-0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	75.2	18.2	-6.0	-0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	75.6	17.3	-6.0	-0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	76.1	16.5	-6.0	-0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	76.6	15.6	-6.0	-0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	77.1	14.7	-6.0	-0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	77.6	13.8	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	78.0	12.9	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	78.5	12.0	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.0	11.2	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.5	10.3	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.9	9.4	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	80.4	8.5	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	80.9	7.6	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	81.4	6.7	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	81.9	5.9	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	82.3	5.0	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	82.8	4.1	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	83.3	3.2	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	83.8	2.3	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	84.2	1.4	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	84.7	0.6	-6.0	0.1	-7.0266	0.0	0.0	0.0

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None


Displacement - Z - Elastic
-30.00 mm
-28.00 mm
-26.00 mm
-24.00 mm
-22.00 mm
-20.00 mm
-18.00 mm
-16.00 mm
-14.00 mm
-12.00 mm
-10.00 mm
-8.000 mm
-6.000 mm
-4.000 mm
-2.000 mm
Displacement Grids
Displacement Lines
y
z
x

No.	Centre : x	Centre : y	Angle of local x from global X	Width x	Depth y
4	85.1	40.7	-62.392	10.913	10.442
5	87.6	34.9	-62.392	1.7787	9.3991
6	89.4	34.8	-62.392	0.061906	4.1944

Displacement Lines

Name	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals [No.]	Calculate	Detailed Results
TW Main-1	76.8	113.7	-0.9	37.2	86.2	-0.9	48	Yes	Yes
TW Main-2	37.2	86.2	-0.9	53.1	56.1	-0.9	34	Yes	Yes
TW Main-3	53.1	56.1	-0.9	58.4	47.6	-0.9	10	Yes	Yes
TW Main-4	58.4	47.6	-0.9	83.8	0.2	-0.9	54	Yes	Yes
TW Foul-1	76.5	114.1	-6.0	38.3	86.3	-6.0	47	Yes	Yes
TW Foul-2	38.3	86.3	-6.0	84.7	0.6	-6.0	97	Yes	Yes

Displacement Grids

Name	Extrusion: Direction	X1 [m]	Y1 [m]	Z1 [m]	X2 [m]	Y2 [m]	Z2 [m]	Intervals Along Line [No.]	Extrusion: Distance [m]	Extrusion: Intervals Along [No.]	Calculate	Detailed Results
Grid	Global X	15.0	-35.0	-1.0	-	120.0	-1.0	50	125.0	80	No	No

Results : Immediate : Load Centres : Rectangular

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	Wall1	61.0	85.0	-14.4	16.2	-15.235	287.21	438.07	0.0032283
2	Wall2	76.0	76.0	-14.4	16.3	-15.235	278.82	444.55	0.0030855
3	Wall3	87.0	62.0	-14.4	17.2	-15.235	287.71	457.35	0.0031874
4	Wall4	93.8	41.9	-14.4	15.9	-15.235	276.84	436.48	0.0030760
5	Wall5	89.0	31.5	-14.4	15.4	-15.235	276.35	428.39	0.0030889
6	Wall6	69.8	49.1	-14.4	15.9	-15.235	273.48	439.49	0.0030179
7	Wall7	55.8	75.8	-14.4	15.1	-15.235	269.35	424.02	0.0029944
8	Wall8	72.0	83.5	-14.4	15.4	-15.235	272.15	428.71	0.0030249

Results : Consolidation : Load Centres : Rectangular

None

Results : Total : Load Centres : Rectangular

None

Results : Immediate : Load Centres : Polygonal

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	25kpa	75.9	58.6	-9.4	19.8	-10.389	125.85	275.92	0.0015633
2	101kpa	76.7	58.9	-9.4	19.9	-10.389	125.88	276.85	0.0015609

Results : Consolidation : Load Centres : Polygonal

None

Results : Total : Load Centres : Polygonal

None

Results : Immediate : Displacement Data : Lines

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
1	TW Main-1	76.8	113.7	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.9	113.1	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	75.1	112.6	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	74.3	112.0	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	73.5	111.4	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	72.6	110.9	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.8	110.3	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	71.0	109.7	-0.9	-0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	70.2	109.1	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	69.3	108.6	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	68.5	108.0	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	67.7	107.4	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.9	106.8	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	66.0	106.3	-0.9	-0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	65.2	105.7	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	64.4	105.1	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	63.6	104.6	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	62.8	104.0	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.9	103.4	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	61.1	102.8	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	60.3	102.3	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	59.5	101.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	58.6	101.1	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.8	100.5	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	57.0	100.0	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	56.2	99.4	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	55.3	98.8	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	54.5	98.3	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	53.7	97.7	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.9	97.1	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	52.1	96.5	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	51.2	96.0	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	50.4	95.4	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	49.6	94.8	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	48.8	94.2	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.9	93.7	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	47.1	93.1	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	46.3	92.5	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	45.5	92.0	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	44.6	91.4	-0.9	0.2	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.8	90.8	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	43.0	90.2	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	42.2	89.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	41.4	89.1	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	40.5	88.5	-0.9	0.1	-1.0562	0.0	0.0	0.0
1	TW Main-1	39.7	87.9	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.9	87.4	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	38.1	86.8	-0.9	0.0	-1.0562	0.0	0.0	0.0
1	TW Main-1	37.2	86.2	-0.9	-0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.2	86.2	-0.9	-0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	37.7	85.3	-0.9	0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	38.2	84.5	-0.9	0.0	-1.0562	0.0	0.0	0.0

Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
2	TW Main-2	38.6	83.6	-0.9	0.0	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.1	82.7	-0.9	0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	39.6	81.8	-0.9	0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.0	80.9	-0.9	0.1	-1.0562	0.0	0.0	0.0
2	TW Main-2	40.5	80.0	-0.9	0.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.0	79.1	-0.9	0.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.4	78.2	-0.9	0.2	-1.0562	0.0	0.0	0.0
2	TW Main-2	41.9	77.4	-0.9	0.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.4	76.5	-0.9	0.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	42.9	75.6	-0.9	0.3	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.3	74.7	-0.9	0.4	-1.0562	0.0	0.0	0.0
2	TW Main-2	43.8	73.8	-0.9	0.4	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.3	72.9	-0.9	0.4	-1.0562	0.0	0.0	0.0
2	TW Main-2	44.7	72.0	-0.9	0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.2	71.1	-0.9	0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	45.7	70.3	-0.9	0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.1	69.4	-0.9	0.5	-1.0562	0.0	0.0	0.0
2	TW Main-2	46.6	68.5	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.1	67.6	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	47.5	66.7	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.0	65.8	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.5	64.9	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	48.9	64.0	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.4	63.2	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	49.9	62.3	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.3	61.4	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	50.8	60.5	-0.9	0.6	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.3	59.6	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	51.7	58.7	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.2	57.8	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	52.7	56.9	-0.9	0.7	-1.0562	0.0	0.0	0.0
2	TW Main-2	53.1	56.1	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.1	56.1	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	53.7	55.2	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.2	54.4	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	54.7	53.5	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.2	52.7	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	55.8	51.8	-0.9	0.7	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.3	51.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
3	TW Main-3	56.8	50.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
3	TW Main-3	57.3	49.3	-0.9	0.8	-1.0562	0.0	0.0	0.0
3	TW Main-3	57.9	48.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
3	TW Main-3	58.4	47.6	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	58.4	47.6	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	58.9	46.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.3	45.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	59.8	45.0	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.3	44.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	60.7	43.2	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.2	42.3	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	61.7	41.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.2	40.6	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	62.6	39.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.1	38.8	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	63.6	37.9	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.0	37.1	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	64.5	36.2	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.0	35.3	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.4	34.4	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	65.9	33.5	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.4	32.7	-0.9	0.8	-1.0562	0.0	0.0	0.0
4	TW Main-4	66.9	31.8	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.3	30.9	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	67.8	30.0	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.3	29.2	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	68.7	28.3	-0.9	0.7	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.2	27.4	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	69.7	26.5	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.2	25.6	-0.9	0.6	-1.0562	0.0	0.0	0.0
4	TW Main-4	70.6	24.8	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.1	23.9	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	71.6	23.0	-0.9	0.5	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.0	22.1	-0.9	0.4	-1.0562	0.0	0.0	0.0
4	TW Main-4	72.5	21.3	-0.9	0.4	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.0	20.4	-0.9	0.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.5	19.5	-0.9	0.3	-1.0562	0.0	0.0	0.0
4	TW Main-4	73.9	18.6	-0.9	0.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.4	17.7	-0.9	0.2	-1.0562	0.0	0.0	0.0
4	TW Main-4	74.9	16.9	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.3	16.0	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	75.8	15.1	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.3	14.2	-0.9	0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	76.7	13.4	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.2	12.5	-0.9	0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	77.7	11.6	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.2	10.7	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	78.6	9.9	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.1	9.0	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	79.6	8.1	-0.9	-0.0	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.0	7.2	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	80.5	6.3	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.0	5.5	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.5	4.6	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	81.9	3.7	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.4	2.8	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	82.9	2.0	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.3	1.1	-0.9	-0.1	-1.0562	0.0	0.0	0.0
4	TW Main-4	83.8	0.2	-0.9	-0.1	-1.0562	0.0	0.0	0.0
5	TW Foul-1	76.5	114.1	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	75.6	113.5	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	74.8	112.9	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	74.0	112.3	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	73.2	111.8	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	72.4	111.2	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	71.6	110.6	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	70.8	110.0	-6.0	-0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	70.0	109.4	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	69.2	108.8	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	68.3	108.2	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	67.5	107.6	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	66.7	107.0	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	65.9	106.4	-6.0	-0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	65.1	105.8	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	64.3	105.2	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	63.5	104.6	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	62.7	104.0	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	61.9	103.5	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	61.0	102.9	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	60.2	102.3	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	59.4	101.7	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	58.6	101.1	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	57.8	100.5	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	57.0	99.9	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	56.2	99.3	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	55.4	98.7	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	54.6	98.1	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	53.8	97.5	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	52.9	96.9	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	52.1	96.3	-6.0	0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	51.3	95.8	-6.0	0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	50.5	95.2	-6.0	0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	49.7	94.6	-6.0	0.3	-7.0266	0.0	0.0	0.0
5	TW Foul-1	48.9	94.0	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	48.1	93.4	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	47.3	92.8	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	46.5	92.2	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	45.6	91.6	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	44.8	91.0	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	44.0	90.4	-6.0	0.2	-7.0266	0.0	0.0	0.0
5	TW Foul-1	43.2	89.8	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	42.4	89.2	-6.0	0.1	-7.0266	0.0	0.0	0.0

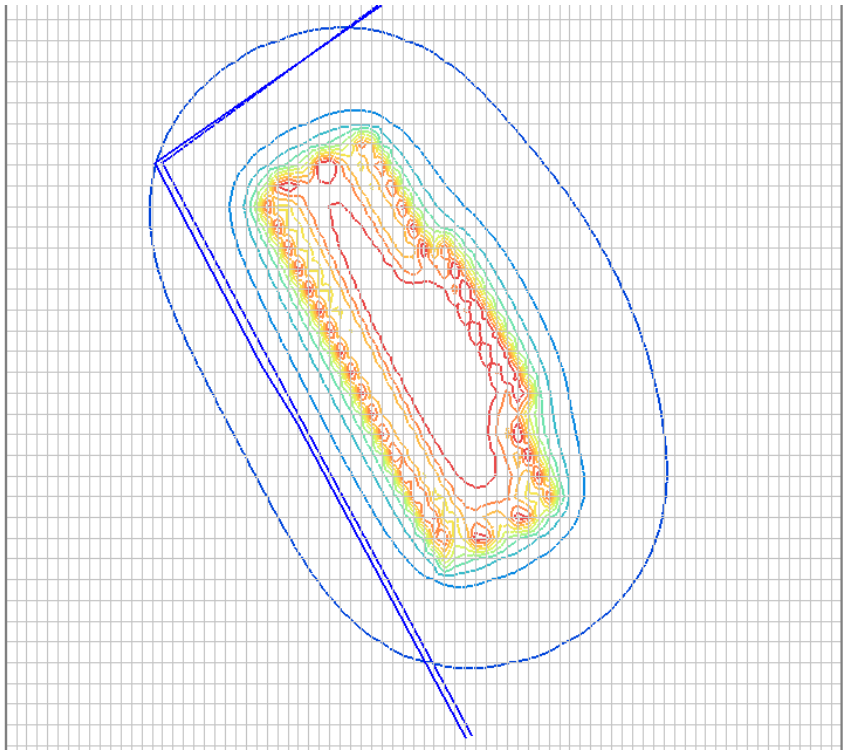
Ref.	Name	x [m]	y [m]	z [mOD]	δz [mm]	Stress: Calc. Level [mOD]	Stress: Vertical [kN/m²]	Stress: Sum Princ. [kN/m²]	Vert. Strain [μ]
5	TW Foul-1	41.6	88.6	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	40.8	88.0	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	40.0	87.5	-6.0	0.1	-7.0266	0.0	0.0	0.0
5	TW Foul-1	39.2	86.9	-6.0	0.0	-7.0266	0.0	0.0	0.0
5	TW Foul-1	38.3	86.3	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	38.3	86.3	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	38.8	85.4	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	39.3	84.5	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	39.8	83.6	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	40.3	82.7	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	40.7	81.9	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	41.2	81.0	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	41.7	80.1	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	42.2	79.2	-6.0	0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	42.6	78.3	-6.0	0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	43.1	77.4	-6.0	0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	43.6	76.5	-6.0	0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	44.1	75.7	-6.0	0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	44.6	74.8	-6.0	0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	45.0	73.9	-6.0	0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	45.5	73.0	-6.0	0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.0	72.1	-6.0	0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.5	71.2	-6.0	0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	46.9	70.4	-6.0	0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	47.4	69.5	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	47.9	68.6	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	48.4	67.7	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	48.9	66.8	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	49.3	65.9	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	49.8	65.1	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	50.3	64.2	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	50.8	63.3	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	51.3	62.4	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	51.7	61.5	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	52.2	60.6	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	52.7	59.8	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	53.2	58.9	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	53.6	58.0	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	54.1	57.1	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	54.6	56.2	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	55.1	55.3	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	55.6	54.5	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	56.0	53.6	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	56.5	52.7	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.0	51.8	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.5	50.9	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	57.9	50.0	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	58.4	49.2	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	58.9	48.3	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	59.4	47.4	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	59.9	46.5	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	60.3	45.6	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	60.8	44.7	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	61.3	43.9	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	61.8	43.0	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	62.3	42.1	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	62.7	41.2	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	63.2	40.3	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	63.7	39.4	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	64.2	38.6	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	64.6	37.7	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	65.1	36.8	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	65.6	35.9	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	66.1	35.0	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	66.6	34.1	-6.0	1.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	67.0	33.3	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	67.5	32.4	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.0	31.5	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.5	30.6	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	68.9	29.7	-6.0	0.9	-7.0266	0.0	0.0	0.0
6	TW Foul-2	69.4	28.8	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	69.9	27.9	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	70.4	27.1	-6.0	0.8	-7.0266	0.0	0.0	0.0
6	TW Foul-2	70.9	26.2	-6.0	0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	71.3	25.3	-6.0	0.7	-7.0266	0.0	0.0	0.0
6	TW Foul-2	71.8	24.4	-6.0	0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	72.3	23.5	-6.0	0.6	-7.0266	0.0	0.0	0.0
6	TW Foul-2	72.8	22.6	-6.0	0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	73.3	21.8	-6.0	0.5	-7.0266	0.0	0.0	0.0
6	TW Foul-2	73.7	20.9	-6.0	0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	74.2	20.0	-6.0	0.4	-7.0266	0.0	0.0	0.0
6	TW Foul-2	74.7	19.1	-6.0	0.3	-7.0266	0.0	0.0	0.0
6	TW Foul-2	75.2	18.2	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	75.6	17.3	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	76.1	16.5	-6.0	0.2	-7.0266	0.0	0.0	0.0
6	TW Foul-2	76.6	15.6	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	77.1	14.7	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	77.6	13.8	-6.0	0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	78.0	12.9	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	78.5	12.0	-6.0	0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.0	11.2	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.5	10.3	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	79.9	9.4	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	80.4	8.5	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	80.9	7.6	-6.0	-0.0	-7.0266	0.0	0.0	0.0
6	TW Foul-2	81.4	6.7	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	81.9	5.9	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	82.3	5.0	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	82.8	4.1	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	83.3	3.2	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	83.8	2.3	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	84.2	1.4	-6.0	-0.1	-7.0266	0.0	0.0	0.0
6	TW Foul-2	84.7	0.6	-6.0	-0.1	-7.0266	0.0	0.0	0.0

Results : Consolidation : Displacement Data : Lines

None

Results : Total : Displacement Data : Lines

None


Displacement - Z - Elastic
0 mm
2.000 mm
4.000 mm
6.000 mm
8.000 mm
10.00 mm
12.00 mm
14.00 mm
16.00 mm
18.00 mm
Displacement Grids
Displacement Lines
y
z
x

APPENDIX D
XDISP OUTPUTS

APPENDIX D1
XDISP DEMOLITION – UNDRAINED (STAGE 2A)

Titles

Job No.: 371944
Job Title: 60-86 Royal College Street, London
Sub-title: Demolition - Undrained
Calculation Heading:
Initials: SA
Checker:
Date Saved: 04-Mar-2021
Date Checked:
Notes:
File Name: XDisp1 Demo - Undrained.xdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\XDISP\Thames Water\02

History

Date	Time	By	Notes
05-Sep-2019	13:52	SAlHilly	New
05-Sep-2019	15:38	SAlHilly	
16-Sep-2019	16:58	SAlHilly	
17-Sep-2019	14:57	SAlHilly	
17-Sep-2019	15:05	SAlHilly	
17-Sep-2019	16:55	SAlHilly	
20-Sep-2019	15:42	TYLER_A	
20-Sep-2019	15:53	TYLER_A	
03-Oct-2019	12:16	TYLER_A	
14-Oct-2019	14:55	TYLER_A	
14-Oct-2019	14:56	TYLER_A	
18-Nov-2019	11:12	TYLER_A	
22-Nov-2019	16:02	TYLER_A	
04-Dec-2019	10:18	TYLER_A	
04-Dec-2019	10:21	TYLER_A	
04-Dec-2019	10:27	TYLER_A	
22-Apr-2020	09:24	TYLER_A	
22-Apr-2020	10:32	TYLER_A	
22-Apr-2020	15:06	TYLER_A	
22-Apr-2020	17:31	TYLER_A	
22-Apr-2020	19:43	TYLER_A	
22-Apr-2020	19:51	TYLER_A	
18-Jun-2020	12:42	TYLER_A	
18-Jun-2020	14:18	TYLER_A	
18-Jun-2020	14:58	TYLER_A	
18-Jun-2020	15:00	TYLER_A	
22-Jun-2020	12:11	TYLER_A	
22-Jun-2020	12:21	TYLER_A	
22-Jun-2020	14:37	TYLER_A	
25-Jun-2020	12:30	TYLER_A	
26-Jun-2020	09:51	TYLER_A	
29-Jun-2020	13:28	TYLER_A	
29-Jun-2020	14:17	TYLER_A	
29-Jun-2020	15:52	TYLER_A	
16-Jul-2020	15:49	TYLER_A	
20-Jul-2020	08:07	TYLER_A	
20-Jul-2020	08:57	TYLER_A	
20-Jul-2020	09:01	TYLER_A	
13-Nov-2020	14:27	SAlHilly	
16-Nov-2020	14:44	TYLER_A	
16-Nov-2020	15:25	TYLER_A	
16-Nov-2020	15:45	TYLER_A	
16-Nov-2020	15:51	TYLER_A	
20-Nov-2020	08:36	TYLER_A	
20-Nov-2020	08:39	TYLER_A	
20-Nov-2020	08:43	TYLER_A	
20-Nov-2020	16:55	SAlHilly	
02-Dec-2020	16:42	TYLER_A	
09-Dec-2020	20:19	TYLER_A	
09-Dec-2020	21:01	TYLER_A	
10-Dec-2020	09:34	TYLER_A	
04-Mar-2021	09:56	TYLER_A	

Displacement Lines

Ref.	Name	x1 [m]	y1 [m]	z1 [m]	x2 [m]	y2 [m]	z2 [m]	Intervals [No.]	Surface type for tunnels	Interpolate imported displacements	Calculate
1	TW Main-1	76.75020	113.72130	-0.90000	37.23790	86.22860	-0.90000	48	Surface	Yes	Yes
2	TW Main-2	37.23790	86.22860	-0.90000	53.14020	56.06240	-0.90000	34	Surface	Yes	Yes
3	TW Main-3	53.14020	56.06240	-0.90000	58.38580	47.58520	-0.90000	10	Surface	Yes	Yes
4	TW Main-4	58.38580	47.58520	-0.90000	83.80850	0.19950	-0.90000	54	Surface	Yes	Yes
5	TW Foul-1	76.45800	114.12130	-6.00000	38.34110	86.26920	-6.00000	47	Surface	Yes	Yes
6	TW Foul-2	38.34110	86.26920	-6.00000	84.72770	0.55680	-6.00000	97	Surface	Yes	Yes

Displacement Grids

Ref.	Name	Extrusion: Direction	Base line start: X [m]	Base line start: Y [m]	Base line start: Z(level) [m]	Base line end: X [m]	Base line end: Y [m]	Base line end: Z(level) [m]	Base line: Intervals [No.]	Extrusion: Distance [m]	Extrusion: Intervals [No.]	Surface type for tunnels	Calculate
1	Grid1	Global X	30.00000	0.00000	-3.00000	-	120.00000	-3.00000	120	80.00000	50	Surface	No

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	0.16310
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	0.16728
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	0.17140
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	0.17543
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	0.17933
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	0.18309
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	0.18665
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	0.19000
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	0.19308
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	0.19586
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	0.19830
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	0.20037
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	0.20203
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	0.20326
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	0.20403
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	0.20433
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	0.20417
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	0.20354
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	0.20249
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	0.20104
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	0.19925
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	0.19719
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	0.19494
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	0.19258
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	0.19021
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	0.18791

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	0.18579
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	0.18391
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	0.18236
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	0.18119
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	0.18046
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	0.18019
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	0.18040
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	0.18107
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	0.18217
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	0.18364
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	0.18540
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	0.18735
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	0.18939
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	0.19140
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	0.19327
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	0.19490
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	0.19621
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	0.19713
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	0.19761
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	0.19762
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	0.19716
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	0.19622
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	0.19482
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	0.19734
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	0.19949
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	0.20123
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	0.20258
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	0.20353
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	0.20411
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	0.20435
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	0.20433
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	0.20410
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	0.20377
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	0.20343
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	0.20317
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	0.20310
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	0.20332
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	0.20389
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	0.20490
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	0.20637
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	0.20834
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	0.21081
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	0.21376
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	0.21716
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	0.22096
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	0.22507
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	0.22942
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	0.23389
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	0.23837
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	0.24276
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	0.24695
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	0.25084
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	0.25435
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	0.25742
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	0.25998
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	0.26202
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	0.26352
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	0.26453
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	0.26507
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	0.26516
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	0.26480
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	0.26403
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	0.26287
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	0.26135
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	0.25951
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	0.25736
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	0.25496
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	0.25218
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	0.24919
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	0.24601
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	0.24267
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	0.23920
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	0.23560
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	0.23188
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	0.22807
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	0.22417
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	0.22018
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	0.21612
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	0.21198
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	0.20777
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	0.20350
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	0.19917
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	0.19479
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	0.19036
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	0.18589
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	0.18139
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	0.17687
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	0.17235
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	0.16782
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	0.16330
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	0.15880
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	0.15433
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	0.14990
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	0.14552
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	0.14120
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	0.13694
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	0.13275
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	0.12864
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	0.12461
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	0.12067
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	0.11683
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	0.11307
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	0.10942
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	0.10586
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	0.10241
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	0.09905
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	0.09580
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	0.09264
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	0.08959
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	0.08663
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	0.08377
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	0.08101
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	0.07834
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	0.07576
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	0.07328
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	0.07088
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	0.06856
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	0.06633
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	0.06418
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	0.06211
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	0.06011
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	0.11593
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	0.11740
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	0.11860
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	0.11951
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	0.12007
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	0.12022
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	0.11993
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	0.11913
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	0.11776
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	0.11578
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	0.11312
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	0.10975
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	0.10561
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	0.10068
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	0.09494
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	0.08839
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	0.08105
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	0.07299
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	0.06427
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	0.05502

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	0.04537
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	0.03549
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	0.02559
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	0.01589
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00660
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-0.00203
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-0.00979
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-0.01644
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-0.02180
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-0.02570
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-0.02800
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-0.02860
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-0.02747
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-0.02461
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-0.02008
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-0.01401
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-0.00658
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00198
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	0.01140
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	0.02138
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	0.03165
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	0.04191
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	0.05193
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	0.06150
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	0.07045
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	0.07865
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	0.08603
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	0.09256
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	0.08619
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	0.07873
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	0.07018
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	0.06055
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	0.04991
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	0.03837
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	0.02612
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	0.01336
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00039
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-0.01250
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-0.02495
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-0.03663
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-0.04720
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-0.05636
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-0.06384
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-0.06943
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-0.07298
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-0.07440
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-0.07366
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-0.07081
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-0.06593
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-0.05920
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-0.05083
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-0.04110
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-0.03031
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-0.01880
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-0.00690
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00506
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	0.01681
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	0.02809
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	0.03874
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	0.04861
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	0.05763
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	0.06577
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	0.07303
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	0.07945
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	0.08507
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	0.08998
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	0.09424
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	0.09794
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	0.10116
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	0.10396
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	0.10642
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	0.10860
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	0.11055
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	0.11231
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	0.11392
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	0.11540
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	0.11677
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	0.11803
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	0.11918
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	0.12021
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	0.12112
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	0.12188
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	0.12249
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	0.12292
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	0.12317
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	0.12321
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	0.12305
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	0.12267
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	0.12207
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	0.12126
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	0.12025
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	0.11903
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	0.11763
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	0.11606
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	0.11433
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	0.11245
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	0.11045
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	0.10834
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	0.10614
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	0.10386
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	0.10153
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	0.09915
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	0.09673
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	0.09430
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	0.09185
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	0.08941
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	0.08698
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	0.08457
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	0.08218
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	0.07983
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	0.07751
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	0.07523
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	0.07300
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	0.07082
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	0.06869
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	0.06661
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	0.06458
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	0.06261
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	0.06069
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	0.05882
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	0.05702
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	0.05526
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	0.05356
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	0.05192
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	0.05032

Utility Dimensions

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick 1372-762	1372.0	200.00
2	Brick 2134-1829	2134.0	200.00
3	HPPE	180.00	5.0000
4	BP	180.00	5.0000

Acceptance Criteria/Parameters

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick	1.0000	1.0000
2	HPPE	0.20000	0.20000

Ref.	Name	Criteria: Pullout: Threshold: Strain: Value	Criteria: Pullout: Limit: Strain: Value	Criteria: Pullout: Threshold: Strain: Value	Criteria: Pullout: Limit: Strain: Value	Criteria: Rotn.: Threshold: Strain: Value	Criteria: Rotn.: Limit: Strain: Value	Criteria: Rotn.: Threshold: Strain: Value	Criteria: Rotn.: Limit: Strain: Value	Allowable Strain: Tension	Allowable Strain: Tension: Value [με]	Allowable Strain: Compn.	Allowable Strain: Compn.: Value [με]	Rad. of Curv.: Threshold: Value [m]	Rad. of Curv.: Threshold: Value [m]	Rad. of Curv.: Limit: Value [m]	Rad. of Curv.: Limit: Value [m]	Factors: Pullout: Ax.	Factors: Pullout: Flex.
1	Brick	No	–	No	–	No	–	No	–	Yes	500.00	Yes	1000.0	Yes	15000.	Yes	15000.	1.0000	1.0000
2	HPPE	No	–	No	–	No	–	No	–	Yes	9000.0	Yes	9000.0	Yes	15000.	Yes	15000.	1.0000	1.0000

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : Yes

Utilities

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length [m]	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line [m]	End Distance Along Line [m]	Pipe Segment Length [m]
1	TW Main-1	1	Yes	BP	HPPE	Line	TW Main-1	–	48.136	–	–	0.0	48.135	3.0000
2	TW Main-2	1	Yes	HPPE	HPPE	Line	TW Main-2	–	34.101	–	–	0.0	34.101	3.0000
3	TW Main-3	1	Yes	HPPE	HPPE	Line	TW Main-3	–	9.9689	–	–	0.0	9.9680	3.0000
4	TW Main-4	1	Yes	HPPE	HPPE	Line	TW Main-4	–	53.775	–	–	0.0	53.774	3.0000
5	TW Foul-1	1	Yes	Brick 1372-762	Brick	Line	TW Foul-1	–	47.208	–	–	0.0	47.208	1.0000
6	TW Foul-2	1	Yes	Brick 2134-1829	Brick	Line	TW Foul-2	–	97.459	–	–	0.0	97.459	1.0000

Warnings

None

Errors

None

Displacement Results - Displacement Lines

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
0	Base Model	1	TW Main-1	0.0	76.75020	113.72130	-0.90000	0.0	0.0	0.16310	0.0	0.0	214.83	*
				1.0028	75.92703	113.14854	-0.90000	0.0	0.0	0.16728	0.0	0.0	214.83	*
				2.0057	75.10385	112.57577	-0.90000	0.0	0.0	0.17140	0.0	0.0	214.83	*
				3.0085	74.28068	112.00301	-0.90000	0.0	0.0	0.17543	0.0	0.0	214.83	*
				4.0113	73.45751	111.43024	-0.90000	0.0	0.0	0.17933	0.0	0.0	214.83	*
				5.0142	72.63434	110.85748	-0.90000	0.0	0.0	0.18309	0.0	0.0	214.83	*
				6.0170	71.81116	110.28471	-0.90000	0.0	0.0	0.18665	0.0	0.0	214.83	*
				7.0198	70.98799	109.71195	-0.90000	0.0	0.0	0.19000	0.0	0.0	214.83	*
				8.0227	70.16482	109.13918	-0.90000	0.0	0.0	0.19308	0.0	0.0	214.83	*
				9.0255	69.34164	108.56642	-0.90000	0.0	0.0	0.19586	0.0	0.0	214.83	*
				10.028	68.51847	107.99365	-0.90000	0.0	0.0	0.19830	0.0	0.0	214.83	*
				11.031	67.69530	107.42089	-0.90000	0.0	0.0	0.20037	0.0	0.0	214.83	*
				12.034	66.87213	106.84812	-0.90000	0.0	0.0	0.20203	0.0	0.0	214.83	*
				13.037	66.04895	106.27536	-0.90000	0.0	0.0	0.20326	0.0	0.0	214.83	*
				14.040	65.22578	105.70260	-0.90000	0.0	0.0	0.20403	0.0	0.0	214.83	*
				15.042	64.40261	105.12983	-0.90000	0.0	0.0	0.20433	0.0	0.0	214.83	*
				16.045	63.57943	104.55707	-0.90000	0.0	0.0	0.20417	0.0	0.0	214.83	*
				17.048	62.75626	103.98430	-0.90000	0.0	0.0	0.20354	0.0	0.0	214.83	*
				18.051	61.93309	103.41154	-0.90000	0.0	0.0	0.20249	0.0	0.0	214.83	*
				19.054	61.10991	102.83877	-0.90000	0.0	0.0	0.20104	0.0	0.0	214.83	*
				20.057	60.28674	102.26601	-0.90000	0.0	0.0	0.19925	0.0	0.0	214.83	*
				21.059	59.46357	101.69324	-0.90000	0.0	0.0	0.19719	0.0	0.0	214.83	*
				22.062	58.64040	101.12048	-0.90000	0.0	0.0	0.19494	0.0	0.0	214.83	*
				23.065	57.81722	100.54771	-0.90000	0.0	0.0	0.19258	0.0	0.0	214.83	*
				24.068	56.99405	99.97495	-0.90000	0.0	0.0	0.19021	0.0	0.0	214.83	*
				25.071	56.17088	99.40219	-0.90000	0.0	0.0	0.18791	0.0	0.0	214.83	*
				26.074	55.34770	98.82942	-0.90000	0.0	0.0	0.18579	0.0	0.0	214.83	*
				27.076	54.52453	98.25666	-0.90000	0.0	0.0	0.18391	0.0	0.0	214.83	*
				28.079	53.70136	97.68389	-0.90000	0.0	0.0	0.18236	0.0	0.0	214.83	*
				29.082	52.87819	97.11113	-0.90000	0.0	0.0	0.18119	0.0	0.0	214.83	*
				30.085	52.05501	96.53836	-0.90000	0.0	0.0	0.18046	0.0	0.0	214.83	*
				31.088	51.23184	95.96560	-0.90000	0.0	0.0	0.18019	0.0	0.0	214.83	*
				32.091	50.40867	95.39283	-0.90000	0.0	0.0	0.18040	0.0	0.0	214.83	*
				33.093	49.58549	94.82007	-0.90000	0.0	0.0	0.18107	0.0	0.0	214.83	*
				34.096	48.76232	94.24730	-0.90000	0.0	0.0	0.18217	0.0	0.0	214.83	*
				35.099	47.93915	93.67454	-0.90000	0.0	0.0	0.18364	0.0	0.0	214.83	*
				36.102	47.11598	93.10178	-0.90000	0.0	0.0	0.18540	0.0	0.0	214.83	*
				37.105	46.29280	92.52901	-0.90000	0.0	0.0	0.18735	0.0	0.0	214.83	*
				38.108	45.46963	91.95625	-0.90000	0.0	0.0	0.18939	0.0	0.0	214.83	*
				39.110	44.64646	91.38348	-0.90000	0.0	0.0	0.19140	0.0	0.0	214.83	*
				40.113	43.82328	90.81072	-0.90000	0.0	0.0	0.19327	0.0	0.0	214.83	*
				41.116	43.00011	90.23795	-0.90000	0.0	0.0	0.19490	0.0	0.0	214.83	*
				42.119	42.17694	89.66519	-0.90000	0.0	0.0	0.19621	0.0	0.0	214.83	*
				43.122	41.35376	89.09242	-0.90000	0.0	0.0	0.19713	0.0	0.0	214.83	*
				44.125	40.53059	88.51966	-0.90000	0.0	0.0	0.19761	0.0	0.0	214.83	*
				45.127	39.70742	87.94689	-0.90000	0.0	0.0	0.19762	0.0	0.0	214.83	*
				46.130	38.88425	87.37413	-0.90000	0.0	0.0	0.19716	0.0	0.0	214.83	*
				47.133	38.06107	86.80136	-0.90000	0.0	0.0	0.19622	0.0	0.0	214.83	*
				48.136	37.23790	86.22860	-0.90000	0.0	0.0	0.19482	0.0	0.0	214.83	*
		2	TW Main-2	0.0	37.23790	86.22860	-0.90000	0.0	0.0	0.19482	0.0	0.0	297.80	*
				1.0030	37.70561	85.34136	-0.90000	0.0	0.0	0.19734	0.0	0.0	297.80	*
				2.0059	38.17333	84.45412	-0.90000	0.0	0.0	0.19949	0.0	0.0	297.80	*
				3.0089	38.64104	83.56688	-0.90000	0.0	0.0	0.20123	0.0	0.0	297.80	*
				4.0119	39.10876	82.67964	-0.90000	0.0	0.0	0.20258	0.0	0.0	297.80	*
				5.0149	39.57647	81.79239	-0.90000	0.0	0.0	0.20353	0.0	0.0	297.80	*
				6.0178	40.04419	80.90515	-0.90000	0.0	0.0	0.20411	0.0	0.0	297.80	*
				7.0208	40.51190	80.01791	-0.90000	0.0	0.0	0.20435	0.0	0.0	297.80	*
				8.0238	40.97962	79.13067	-0.90000	0.0	0.0	0.20433	0.0	0.0	297.80	*
				9.0268	41.44733	78.24343	-0.90000	0.0	0.0	0.20410	0.0	0.0	297.80	*
				10.030	41.91505	77.35619	-0.90000	0.0	0.0	0.20377	0.0	0.0	297.80	*
				11.033	42.38276	76.46895	-0.90000	0.0	0.0	0.20343	0.0	0.0	297.80	*
				12.036	42.85048	75.58171	-0.90000	0.0	0.0	0.20317	0.0	0.0	297.80	*
				13.039	43.31819	74.69446	-0.90000	0.0	0.0	0.20310	0.0	0.0	297.80	*
				14.042	43.78591	73.80722	-0.90000	0.0	0.0	0.20332	0.0	0.0	297.80	*
				15.045	44.25362	72.91998	-0.90000	0.0	0.0	0.20389	0.0	0.0	297.80	*
				16.048	44.72134	72.03274	-0.90000	0.0	0.0	0.20490	0.0	0.0	297.80	*
				17.051	45.18905	71.14550	-0.90000	0.0	0.0	0.20637	0.0	0.0	297.80	*
				18.054	45.65676	70.25826	-0.90000	0.0	0.0	0.20834	0.0	0.0	297.80	*
				19.056	46.12448	69.37102	-0.90000	0.0	0.0	0.21081	0.0	0.0	297.80	*
				20.059	46.59219	68.48378	-0.90000	0.0	0.0	0.21376	0.0	0.0	297.80	*
				21.062	47.05991	67.59654	-0.90000	0.0	0.0	0.21716	0.0	0.0	297.80	*
				22.065	47.52762	66.70929	-0.90000	0.0	0.0	0.22096	0.0	0.0	297.80	*
				23.068	47.99534	65.82205	-0.90000	0.0	0.0	0.22507	0.0	0.0	297.80	*
				24.071	48.46305	64.93481	-0.90000	0.0	0.0	0.22942	0.0	0.0	297.80	*
				25.074	48.93077	64.04757	-0.90000	0.0	0.0	0.23389	0.0	0.0	297.80	*
				26.077	49.39848	63.16033	-0.90000	0.0	0.0	0.23837	0.0	0.0	297.80	*
				27.080	49.86620	62.27309	-0.90000	0.0	0.0	0.24276	0.0	0.0	297.80	*
				28.083	50.33391	61.38585	-0.90000	0.0	0.0	0.24695	0.0	0.0	297.80	*
				29.086	50.80163	60.4961	-0.90000	0.0	0.0	0.25084	0.0	0.0	297.80	*
				30.089	51.26934	59.61136	-0.90000	0.0	0.0	0.25435	0.0	0.0	297.80	*
				31.092	51.73706	58.72412	-0.90000	0.0	0.0	0.25742	0.0	0.0	297.80	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				32.095	52.20477	57.83688	-0.90000	0.0	0.0	0.25998	0.0	0.0	297.80	*
				33.098	52.67249	56.94964	-0.90000	0.0	0.0	0.26202	0.0	0.0	297.80	*
				34.101	53.14020	56.06240	-0.90000	0.0	0.0	0.26352	0.0	0.0	297.80	*
		3	TW Main-3	0.0	53.14020	56.06240	-0.90000	0.0	0.0	0.26352	0.0	0.0	301.75	*
				0.99689	53.66476	55.21468	-0.90000	0.0	0.0	0.26453	0.0	0.0	301.75	*
				1.9938	54.18932	54.36696	-0.90000	0.0	0.0	0.26507	0.0	0.0	301.75	*
				2.9907	54.71388	53.51924	-0.90000	0.0	0.0	0.26516	0.0	0.0	301.75	*
				3.9876	55.23844	52.67152	-0.90000	0.0	0.0	0.26480	0.0	0.0	301.75	*
				4.9845	55.76300	51.82380	-0.90000	0.0	0.0	0.26403	0.0	0.0	301.75	*
				5.9813	56.28756	50.97608	-0.90000	0.0	0.0	0.26287	0.0	0.0	301.75	*
				6.9782	56.81212	50.12836	-0.90000	0.0	0.0	0.26135	0.0	0.0	301.75	*
				7.9751	57.33668	49.28064	-0.90000	0.0	0.0	0.25951	0.0	0.0	301.75	*
				8.9720	57.86124	48.43292	-0.90000	0.0	0.0	0.25736	0.0	0.0	301.75	*
				9.9689	58.38580	47.58520	-0.90000	0.0	0.0	0.25496	0.0	0.0	301.75	*
		4	TW Main-4	0.0	58.38580	47.58520	-0.90000	0.0	0.0	0.25496	0.0	0.0	298.21	*
				0.99583	58.85659	46.70769	-0.90000	0.0	0.0	0.25218	0.0	0.0	298.21	*
				1.9917	59.32738	45.83017	-0.90000	0.0	0.0	0.24919	0.0	0.0	298.21	*
				2.9875	59.79817	44.95266	-0.90000	0.0	0.0	0.24601	0.0	0.0	298.21	*
				3.9833	60.26896	44.07515	-0.90000	0.0	0.0	0.24267	0.0	0.0	298.21	*
				4.9791	60.73975	43.19764	-0.90000	0.0	0.0	0.23920	0.0	0.0	298.21	*
				5.9750	61.21054	42.32012	-0.90000	0.0	0.0	0.23560	0.0	0.0	298.21	*
				6.9708	61.68134	41.44261	-0.90000	0.0	0.0	0.23188	0.0	0.0	298.21	*
				7.9666	62.15213	40.56510	-0.90000	0.0	0.0	0.22807	0.0	0.0	298.21	*
				8.9624	62.62292	39.68758	-0.90000	0.0	0.0	0.22417	0.0	0.0	298.21	*
				9.9583	63.09371	38.81007	-0.90000	0.0	0.0	0.22018	0.0	0.0	298.21	*
				10.954	63.56450	37.93256	-0.90000	0.0	0.0	0.21612	0.0	0.0	298.21	*
				11.950	64.03529	37.05504	-0.90000	0.0	0.0	0.21198	0.0	0.0	298.21	*
				12.946	64.50608	36.17753	-0.90000	0.0	0.0	0.20777	0.0	0.0	298.21	*
				13.942	64.97687	35.30002	-0.90000	0.0	0.0	0.20350	0.0	0.0	298.21	*
				14.937	65.44766	34.42251	-0.90000	0.0	0.0	0.19917	0.0	0.0	298.21	*
				15.933	65.91845	33.54499	-0.90000	0.0	0.0	0.19479	0.0	0.0	298.21	*
				16.929	66.38924	32.66748	-0.90000	0.0	0.0	0.19036	0.0	0.0	298.21	*
				17.925	66.86003	31.78997	-0.90000	0.0	0.0	0.18589	0.0	0.0	298.21	*
				18.921	67.33082	30.91245	-0.90000	0.0	0.0	0.18139	0.0	0.0	298.21	*
				19.917	67.80161	30.03494	-0.90000	0.0	0.0	0.17687	0.0	0.0	298.21	*
				20.912	68.27241	29.15743	-0.90000	0.0	0.0	0.17235	0.0	0.0	298.21	*
				21.908	68.74320	28.27991	-0.90000	0.0	0.0	0.16782	0.0	0.0	298.21	*
				22.904	69.21399	27.40240	-0.90000	0.0	0.0	0.16330	0.0	0.0	298.21	*
				23.900	69.68478	26.52489	-0.90000	0.0	0.0	0.15880	0.0	0.0	298.21	*
				24.896	70.15557	25.64738	-0.90000	0.0	0.0	0.15433	0.0	0.0	298.21	*
				25.892	70.62636	24.76986	-0.90000	0.0	0.0	0.14990	0.0	0.0	298.21	*
				26.887	71.09715	23.89235	-0.90000	0.0	0.0	0.14552	0.0	0.0	298.21	*
				27.883	71.56794	23.01484	-0.90000	0.0	0.0	0.14120	0.0	0.0	298.21	*
				28.879	72.03873	22.13732	-0.90000	0.0	0.0	0.13694	0.0	0.0	298.21	*
				29.875	72.50952	21.25981	-0.90000	0.0	0.0	0.13275	0.0	0.0	298.21	*
				30.871	72.98031	20.38230	-0.90000	0.0	0.0	0.12864	0.0	0.0	298.21	*
				31.866	73.45110	19.50479	-0.90000	0.0	0.0	0.12461	0.0	0.0	298.21	*
				32.862	73.92189	18.62727	-0.90000	0.0	0.0	0.12067	0.0	0.0	298.21	*
				33.858	74.39269	17.74976	-0.90000	0.0	0.0	0.11683	0.0	0.0	298.21	*
				34.854	74.86348	16.87225	-0.90000	0.0	0.0	0.11307	0.0	0.0	298.21	*
				35.850	75.33427	15.99473	-0.90000	0.0	0.0	0.10942	0.0	0.0	298.21	*
				36.846	75.80506	15.11722	-0.90000	0.0	0.0	0.10586	0.0	0.0	298.21	*
				37.841	76.27585	14.23971	-0.90000	0.0	0.0	0.10241	0.0	0.0	298.21	*
				38.837	76.74664	13.36219	-0.90000	0.0	0.0	0.099051	0.0	0.0	298.21	*
				39.833	77.21743	12.48468	-0.90000	0.0	0.0	0.095796	0.0	0.0	298.21	*
				40.829	77.68822	11.60717	-0.90000	0.0	0.0	0.092642	0.0	0.0	298.21	*
				41.825	78.15901	10.72966	-0.90000	0.0	0.0	0.089587	0.0	0.0	298.21	*
				42.821	78.62980	9.85214	-0.90000	0.0	0.0	0.086632	0.0	0.0	298.21	*
				43.816	79.10059	8.97463	-0.90000	0.0	0.0	0.083773	0.0	0.0	298.21	*
				44.812	79.57138	8.09712	-0.90000	0.0	0.0	0.081010	0.0	0.0	298.21	*
				45.808	80.04217	7.21960	-0.90000	0.0	0.0	0.078341	0.0	0.0	298.21	*
				46.804	80.51296	6.34209	-0.90000	0.0	0.0	0.075765	0.0	0.0	298.21	*
				47.800	80.98376	5.46458	-0.90000	0.0	0.0	0.073277	0.0	0.0	298.21	*
				48.796	81.45455	4.58706	-0.90000	0.0	0.0	0.070878	0.0	0.0	298.21	*
				49.791	81.92534	3.70955	-0.90000	0.0	0.0	0.068563	0.0	0.0	298.21	*
				50.787	82.39613	2.83204	-0.90000	0.0	0.0	0.066331	0.0	0.0	298.21	*
				51.783	82.86692	1.95453	-0.90000	0.0	0.0	0.064180	0.0	0.0	298.21	*
				52.779	83.33771	1.07701	-0.90000	0.0	0.0	0.062106	0.0	0.0	298.21	*
				53.775	83.80850	0.19950	-0.90000	0.0	0.0	0.060107	0.0	0.0	298.21	*
		5	TW Foul-1	0.0	76.45800	114.12130	-6.00000	0.0	0.0	0.11593	0.0	0.0	216.16	*
				1.0044	75.64700	113.52870	-6.00000	0.0	0.0	0.11740	0.0	0.0	216.16	*
				2.0089	74.83600	112.93610	-6.00000	0.0	0.0	0.11860	0.0	0.0	216.16	*
				3.0133	74.02501	112.34351	-6.00000	0.0	0.0	0.11951	0.0	0.0	216.16	*
				4.0177	73.21401	111.75091	-6.00000	0.0	0.0	0.12007	0.0	0.0	216.16	*
				5.0222	72.40301	111.15831	-6.00000	0.0	0.0	0.12022	0.0	0.0	216.16	*
				6.0266	71.59201	110.56571	-6.00000	0.0	0.0	0.11993	0.0	0.0	216.16	*
				7.0310	70.78101	109.97311	-6.00000	0.0	0.0	0.11913	0.0	0.0	216.16	*
				8.0355	69.97002	109.38052	-6.00000	0.0	0.0	0.11776	0.0	0.0	216.16	*
				9.0399	69.15902	108.78792	-6.00000	0.0	0.0	0.11578	0.0	0.0	216.16	*
				10.044	68.34802	108.19532	-6.00000	0.0	0.0	0.11312	0.0	0.0	216.16	*
				11.049	67.53702	107.60272	-6.00000	0.0	0.0	0.10975	0.0	0.0	216.16	*
				12.053	66.72603	107.01013	-6.00000	0.0	0.0	0.10561	0.0	0.0	216.16	*
				13.058	65.91503	106.41753	-6.00000	0.0	0.0	0.10069	0.0	0.0	216.16	*
				14.062	65.10403	105.82493	-6.00000	0.0	0.0	0.094938	0.0	0.0	216.16	*
				15.067	64.29303	105.23233	-6.00000	0.0	0.0	0.088388	0.0	0.0	216.16	*
				16.071	63.48203	104.63973	-6.00000	0.0	0.0	0.081054	0.0	0.0	216.16	*
				17.075	62.67104	104.04714	-6.00000	0.0	0.0	0.072989	0.0	0.0	216.16	*
				18.080	61.86004	103.45454	-6.00000	0.0	0.0	0.064272	0.0	0.0	216.16	*
				19.084	61.04904	102.86194	-6.00000	0.0	0.0	0.055017	0.0	0.0	216.16	*
				20.089	60.23804	102.26934	-6.00000	0.0	0.0	0.045366	0.0	0.0	216.16	*
				21.093	59.42704	101.67674	-6.00000	0.0	0.0	0.035493	0.0	0.0	216.16	*
				22.098	58.61605	101.08415	-6.00000	0.0	0.0	0.025594	0.0	0.0	216.16	*
				23.102	57.80505	100.49155	-6.00000	0.0	0.0	0.015887	0.0	0.0	216.16	*
				24.106	56.99405	99.89895	-6.00000	0.0	0.0	0.0065999	0.0	0.0	216.16	*
				25.111	56.18305	99.30635	-6.00000	0.0	0.0	-0.0020340	0.0	0.0	216.16	*
				26.115	55.37206	98.71376	-6.00000	0.0	0.0	-0.0097865	0.0	0.0	216.16	*
				27.120	54.56106	98.12116	-6.00000	0.0	0.0	-0.016441	0.0	0.0	216.16	*
				28.124	53.75006	97.52856	-6.00000	0.0	0.0	-0.021802	0.0	0.0	216.16	*
				29.129	52.93906	96.93596	-6.00000	0.0	0.0	-0.025700	0.0	0.0	216.16	*
				30.133	52.12806	96.34336	-6.00000	0.0	0.0	-0.027999	0.0	0.0	216.16	*
				31.137	51.31707	95.75077	-6.00000	0.0	0.0	-0.028605	0.0	0.0	216.16	*
				32.142	50.50607	95.15817	-6.00000	0.0	0.0	-0.027472	0.0	0.0	216.16	*
				33.146	49.69507	94.56557	-6.00000	0.0	0.0	-0.024607	0.0	0.0	216.16	*
				34.151	48.88407	93.97297	-6.00000	0.0	0.0	-0.020076	0.0	0.0	216.16	*
				35.155	48.07307	93.38037	-6.00000	0.0	0.0	-0.014005	0.0	0.0	216.16	*
				36.160	47.26208	92.78778	-6.00000	0.0	0.0	-0.0065757	0.0	0.0	216.16	*
				37.164	46.45108	92.19518	-6.00000	0.0	0.0	0.0019809	0.0	0.0	216.16	*
				38.169	45.64008	91.60258	-6.00000	0.0	0.0	0.011396	0.0	0.0	216.16	*
				39.173	44.82908	91.00998	-6.00000	0.0	0.0	0.021382	0.0	0.0	216.16	*
				40.177	44.01809	90.41739	-6.00000	0.0	0.0	0.031646	0.0	0.0	216.16	*
				41.182	43.20709	89.82479	-6.00000	0.0	0.0	0.041912	0.0	0.0	216.16	*
				42.186	42.39609	89.23219	-6.00000	0.0	0.0	0.051933	0.0	0.0	216.16	*
				43.191	41.58509	88.63959	-6.00000	0.0	0.0	0.061499	0.0	0.0	216.16	*
				44.195	40.77409	88.04699	-6.00000	0.0	0.0	0.070445	0.0	0.0	216.16	*
				45.200	39.96310	87.45440	-6.00000	0.0	0.0	0.078650	0.0	0.0	216.16	*
				46.204	39.15210	86.86180	-6.00000	0.0	0.0	0.086035	0.0	0.0	216.16	*
				47.208	38.34110	86.26920	-6.00000	0.0	0.0	0.092555	0.0	0.0	216.16	*
		6	TW Foul-2	0.0	38.34110	86.26920	-6.00000	0.0	0.0	0.092555	0.0	0.0	298.42	*
				1.0047	38.81931	85.38557	-6.00000	0.0	0.0	0.086190	0.0	0.0	298.42	*
				2.0095	39.29752	84.50193	-6.00000	0.0	0.0	0.078735	0.0	0.0	298.42	*
				3.0142	39.77574	83.61830	-6.00000	0.0	0.0	0.070180	0.0	0.0	298.42	*
				4.0189	40.25395	82.73467	-6.00000	0.0	0.0	0.060549	0.0	0.0	298.42	*
				5.0237	40.73216	81.85104	-6.00000	0.0	0.0	0.049908	0.0	0.0	298.42	*
				6.0284	41.21037	80.96740	-6.00000	0.0	0.0	0.038374	0.0	0.0	298.42	*
				7.0332	41.68859	80.08377	-6.00000	0.0	0.0	0.026118	0.0	0.0	298.42	*
				8.0379	42.16680	79.20014	-6.00000	0.0	0.0	0.013364	0.0	0.0	298.42	*
				9.0426	42.64501	78.31650	-6.00000	0.0	0.0	386.78E-6	0.0	0.0	298.42	*
				10.047	43.12322	77.43287	-6.00000	0.0	0.0	-0.012499	0.0	0.0	298.42	*
				11.052	43.60144	76.54924	-6.00000	0.0	0.0	-0.024955	0.0	0.0	298.42	*
				12.057	44.07965	75.66560	-6.00000	0.0	0.0	-0.036634	0.0	0.0	298.42	*
				13.062	44.55786	74.78197	-6.00000	0.0	0.0	-0.047204	0.0	0.0	298.42	*
				14.066	45.03607	73.89834	-6.00000	0.0	0.0	-0.056359	0.0	0.0	298.42	*
				15.071	45.51429	73.01471	-6.00000	0.0	0.0	-0.063836	0.0	0.0	298.42	*
				16.076	45.99250	72.13107	-6.00000	0.0	0.0	-0.069426	0.0	0.0	298.42	*
				17.081	46.47071	71.24744	-6.00000	0.0	0.0	-0.072977	0.0	0.0	298.42	*
				18.085	46.94892	70.36381	-6.00000	0.0	0.0	-0.074398	0.0	0.0	298.42	*
				19.090	47.42714	69.48017	-6.00000	0.0	0.0	-0.073663	0.0	0.0	298.42	*
				20.095	47.90535	68.59654	-6.00000	0.0	0.0	-0.070807	0.0	0.0	298.42	*
				21.099	48.38356	67.71291	-6.00000	0.0	0.0	-0.065932	0.0	0.0	298.42	*
				22.104	48.86177	66.82927	-6.00000	0.0	0.0	-0.059199	0.0	0.0	298.42	*
				23.109	49.33998	65.94564	-6.00000	0.0	0.0	-0.050830	0.0	0.0	298.42	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				24.114	49.81820	65.06201	-6.00000	0.0	0.0	-0.041097	0.0	0.0	298.42	*
				25.118	50.29641	64.17838	-6.00000	0.0	0.0	-0.030308	0.0	0.0	298.42	*
				26.123	50.77462	63.29474	-6.00000	0.0	0.0	-0.018798	0.0	0.0	298.42	*
				27.128	51.25283	62.41111	-6.00000	0.0	0.0	-0.0069015	0.0	0.0	298.42	*
				28.133	51.73105	61.52748	-6.00000	0.0	0.0	0.0050621	0.0	0.0	298.42	*
				29.137	52.20926	60.64384	-6.00000	0.0	0.0	0.016807	0.0	0.0	298.42	*
				30.142	52.68747	59.76021	-6.00000	0.0	0.0	0.028095	0.0	0.0	298.42	*
				31.147	53.16568	58.87658	-6.00000	0.0	0.0	0.038740	0.0	0.0	298.42	*
				32.152	53.64390	57.99294	-6.00000	0.0	0.0	0.048612	0.0	0.0	298.42	*
				33.156	54.12211	57.10931	-6.00000	0.0	0.0	0.057633	0.0	0.0	298.42	*
				34.161	54.60032	56.22568	-6.00000	0.0	0.0	0.065771	0.0	0.0	298.42	*
				35.166	55.07853	55.34205	-6.00000	0.0	0.0	0.073031	0.0	0.0	298.42	*
				36.170	55.55675	54.45841	-6.00000	0.0	0.0	0.079447	0.0	0.0	298.42	*
				37.175	56.03496	53.57478	-6.00000	0.0	0.0	0.085074	0.0	0.0	298.42	*
				38.180	56.51317	52.69115	-6.00000	0.0	0.0	0.089981	0.0	0.0	298.42	*
				39.185	56.99138	51.80751	-6.00000	0.0	0.0	0.094244	0.0	0.0	298.42	*
				40.189	57.46959	50.92388	-6.00000	0.0	0.0	0.097944	0.0	0.0	298.42	*
				41.194	57.94781	50.04025	-6.00000	0.0	0.0	0.10116	0.0	0.0	298.42	*
				42.199	58.42602	49.15661	-6.00000	0.0	0.0	0.10396	0.0	0.0	298.42	*
				43.204	58.90423	48.27298	-6.00000	0.0	0.0	0.10642	0.0	0.0	298.42	*
				44.208	59.38244	47.38935	-6.00000	0.0	0.0	0.10860	0.0	0.0	298.42	*
				45.213	59.86066	46.50572	-6.00000	0.0	0.0	0.11055	0.0	0.0	298.42	*
				46.218	60.33887	45.62208	-6.00000	0.0	0.0	0.11231	0.0	0.0	298.42	*
				47.223	60.81708	44.73845	-6.00000	0.0	0.0	0.11392	0.0	0.0	298.42	*
				48.227	61.29529	43.85482	-6.00000	0.0	0.0	0.11540	0.0	0.0	298.42	*
				49.232	61.77351	42.97118	-6.00000	0.0	0.0	0.11677	0.0	0.0	298.42	*
				50.237	62.25172	42.08755	-6.00000	0.0	0.0	0.11803	0.0	0.0	298.42	*
				51.242	62.72993	41.20392	-6.00000	0.0	0.0	0.11918	0.0	0.0	298.42	*
				52.246	63.20814	40.32028	-6.00000	0.0	0.0	0.12021	0.0	0.0	298.42	*
				53.251	63.68636	39.43665	-6.00000	0.0	0.0	0.12112	0.0	0.0	298.42	*
				54.256	64.16457	38.55302	-6.00000	0.0	0.0	0.12188	0.0	0.0	298.42	*
				55.260	64.64278	37.66939	-6.00000	0.0	0.0	0.12249	0.0	0.0	298.42	*
				56.265	65.12099	36.78575	-6.00000	0.0	0.0	0.12292	0.0	0.0	298.42	*
				57.270	65.59921	35.90212	-6.00000	0.0	0.0	0.12317	0.0	0.0	298.42	*
				58.275	66.07742	35.01849	-6.00000	0.0	0.0	0.12321	0.0	0.0	298.42	*
				59.279	66.55563	34.13485	-6.00000	0.0	0.0	0.12305	0.0	0.0	298.42	*
				60.284	67.03384	33.25122	-6.00000	0.0	0.0	0.12267	0.0	0.0	298.42	*
				61.289	67.51205	32.36759	-6.00000	0.0	0.0	0.12207	0.0	0.0	298.42	*
				62.294	67.99027	31.48395	-6.00000	0.0	0.0	0.12126	0.0	0.0	298.42	*
				63.298	68.46848	30.60032	-6.00000	0.0	0.0	0.12025	0.0	0.0	298.42	*
				64.303	68.94669	29.71669	-6.00000	0.0	0.0	0.11903	0.0	0.0	298.42	*
				65.308	69.42490	28.83306	-6.00000	0.0	0.0	0.11763	0.0	0.0	298.42	*
				66.313	69.90312	27.94942	-6.00000	0.0	0.0	0.11606	0.0	0.0	298.42	*
				67.317	70.38133	27.06579	-6.00000	0.0	0.0	0.11433	0.0	0.0	298.42	*
				68.322	70.85954	26.18216	-6.00000	0.0	0.0	0.11245	0.0	0.0	298.42	*
				69.327	71.33775	25.29852	-6.00000	0.0	0.0	0.11045	0.0	0.0	298.42	*
				70.332	71.81597	24.41489	-6.00000	0.0	0.0	0.10834	0.0	0.0	298.42	*
				71.336	72.29418	23.53126	-6.00000	0.0	0.0	0.10614	0.0	0.0	298.42	*
				72.341	72.77239	22.64762	-6.00000	0.0	0.0	0.10386	0.0	0.0	298.42	*
				73.346	73.25060	21.76399	-6.00000	0.0	0.0	0.10153	0.0	0.0	298.42	*
				74.350	73.72882	20.88036	-6.00000	0.0	0.0	0.099146	0.0	0.0	298.42	*
				75.355	74.20703	19.99673	-6.00000	0.0	0.0	0.096731	0.0	0.0	298.42	*
				76.360	74.68524	19.11309	-6.00000	0.0	0.0	0.094297	0.0	0.0	298.42	*
				77.365	75.16345	18.22946	-6.00000	0.0	0.0	0.091854	0.0	0.0	298.42	*
				78.369	75.64166	17.34583	-6.00000	0.0	0.0	0.089412	0.0	0.0	298.42	*
				79.374	76.11988	16.46219	-6.00000	0.0	0.0	0.086981	0.0	0.0	298.42	*
				80.379	76.59809	15.57856	-6.00000	0.0	0.0	0.084569	0.0	0.0	298.42	*
				81.384	77.07630	14.69493	-6.00000	0.0	0.0	0.082183	0.0	0.0	298.42	*
				82.388	77.55451	13.81129	-6.00000	0.0	0.0	0.079829	0.0	0.0	298.42	*
				83.393	78.03273	12.92766	-6.00000	0.0	0.0	0.077511	0.0	0.0	298.42	*
				84.398	78.51094	12.04403	-6.00000	0.0	0.0	0.075235	0.0	0.0	298.42	*
				85.403	78.98915	11.16040	-6.00000	0.0	0.0	0.073004	0.0	0.0	298.42	*
				86.407	79.46736	10.27676	-6.00000	0.0	0.0	0.070821	0.0	0.0	298.42	*
				87.412	79.94558	9.39313	-6.00000	0.0	0.0	0.068687	0.0	0.0	298.42	*
				88.417	80.42379	8.50950	-6.00000	0.0	0.0	0.066607	0.0	0.0	298.42	*
				89.421	80.90200	7.62586	-6.00000	0.0	0.0	0.064579	0.0	0.0	298.42	*
				90.426	81.38021	6.74223	-6.00000	0.0	0.0	0.062606	0.0	0.0	298.42	*
				91.431	81.85843	5.85860	-6.00000	0.0	0.0	0.060687	0.0	0.0	298.42	*
				92.436	82.33664	4.97496	-6.00000	0.0	0.0	0.058824	0.0	0.0	298.42	*
				93.440	82.81485	4.09133	-6.00000	0.0	0.0	0.057015	0.0	0.0	298.42	*
				94.445	83.29306	3.20770	-6.00000	0.0	0.0	0.055262	0.0	0.0	298.42	*
				95.450	83.77128	2.32407	-6.00000	0.0	0.0	0.053562	0.0	0.0	298.42	*
				96.455	84.24949	1.44043	-6.00000	0.0	0.0	0.051915	0.0	0.0	298.42	*
				97.459	84.72770	0.55680	-6.00000	0.0	0.0	0.050321	0.0	0.0	298.42	*

* Result includes imported displacement(s).

Displacement Results - Displacement Grids

Stage: Ref.	Stage: Name	Disp. Grid: Ref.	Disp. Grid: Name	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]

Specific Utility Damage Results - Coordinates & Displacements

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility [m]	x [m]	y [m]	z [m]	δx(n) [mm]	δy(n) [mm]	δz(n) [mm]	δH//(n) [mm]	δHperp.(n) [mm]	δx(n-Lp) [mm]	δy(n-Lp) [mm]	δz(n-Lp) [mm]	δH//(n-Lp) [mm]	δHperp.(n-Lp) [mm]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	0.00000	0.00000	0.17543	0.00000	0.00000	0.00000	0.00000	0.16313	0.00000	0.00000
						6.01699	71.81116	110.28471	-0.90000	0.00000	0.00000	0.18665	0.00000	0.00000	0.00000	0.00000	0.17546	0.00000	0.00000
						9.02549	69.34164	108.56642	-0.90000	0.00000	0.00000	0.19586	0.00000	0.00000	0.00000	0.00000	0.18668	0.00000	0.00000
						12.03399	66.87213	106.84812	-0.90000	0.00000	0.00000	0.20203	0.00000	0.00000	0.00000	0.00000	0.19588	0.00000	0.00000
						15.04249	64.40261	105.12983	-0.90000	0.00000	0.00000	0.20433	0.00000	0.00000	0.00000	0.00000	0.20204	0.00000	0.00000
						18.05098	61.93309	103.41154	-0.90000	0.00000	0.00000	0.20249	0.00000	0.00000	0.00000	0.00000	0.20433	0.00000	0.00000
						21.05948	59.46357	101.69324	-0.90000	0.00000	0.00000	0.19719	0.00000	0.00000	0.00000	0.00000	0.20248	0.00000	0.00000
						24.06798	56.99405	99.97495	-0.90000	0.00000	0.00000	0.19021	0.00000	0.00000	0.00000	0.00000	0.19717	0.00000	0.00000
						27.07648	54.52453	98.25666	-0.90000	0.00000	0.00000	0.18391	0.00000	0.00000	0.00000	0.00000	0.19019	0.00000	0.00000
						30.08497	52.05501	96.53836	-0.90000	0.00000	0.00000	0.18046	0.00000	0.00000	0.00000	0.00000	0.18390	0.00000	0.00000
						33.09347	49.58549	94.82007	-0.90000	0.00000	0.00000	0.18107	0.00000	0.00000	0.00000	0.00000	0.18046	0.00000	0.00000
						36.10197	47.11598	93.10178	-0.90000	0.00000	0.00000	0.18540	0.00000	0.00000	0.00000	0.00000	0.18108	0.00000	0.00000
						39.11047	44.64646	91.38348	-0.90000	0.00000	0.00000	0.19140	0.00000	0.00000	0.00000	0.00000	0.18542	0.00000	0.00000
						42.11896	42.17694	89.66519	-0.90000	0.00000	0.00000	0.19621	0.00000	0.00000	0.00000	0.00000	0.19142	0.00000	0.00000
						45.12746	39.70742	87.94689	-0.90000	0.00000	0.00000	0.19762	0.00000	0.00000	0.00000	0.00000	0.19622	0.00000	0.00000
					2	4.01133	73.45751	111.43024	-0.90000	0.00000	0.00000	0.17933	0.00000	0.00000	0.00000	0.00000	0.16731	0.00000	0.00000
						7.01983	70.98799	109.71195	-0.90000	0.00000	0.00000	0.19000	0.00000	0.00000	0.00000	0.00000	0.17937	0.00000	0.00000
						10.02832	68.51847	107.99365	-0.90000	0.00000	0.00000	0.19830	0.00000	0.00000	0.00000	0.00000	0.19002	0.00000	0.00000
						13.03682	66.04895	106.27536	-0.90000	0.00000	0.00000	0.20326	0.00000	0.00000	0.00000	0.00000	0.19832	0.00000	0.00000
						16.04532	63.57943	104.55707	-0.90000	0.00000	0.00000	0.20417	0.00000	0.00000	0.00000	0.00000	0.20327	0.00000	0.00000
						19.05382	61.10991	102.83877	-0.90000	0.00000	0.00000	0.20104	0.00000	0.00000	0.00000	0.00000	0.20416	0.00000	0.00000
						22.06231	58.64040	101.12048	-0.90000	0.00000	0.00000	0.19494	0.00000	0.00000	0.00000	0.00000	0.20102	0.00000	0.00000
						25.07081	56.17088	99.40219	-0.90000	0.00000	0.00000	0.18791	0.00000	0.00000	0.00000	0.00000	0.19492	0.00000	0.00000

Stage: Ref.	Stage: δHperp.(n-Lp)	Name δx(n+Lp)	Specific Utility: Ref.	Specific Utility: Name	Sub-utility δz(n+Lp)	Iteration δH//(n+Lp)	δHperp.(n+Lp)	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)
0.00000	0.00000	0.00000	0.18237		0.00000		0.00000													
								28.07931	53.70136	97.68389	-0.90000	0.00000	0.00000	0.18236	0.00000	0.00000	0.00000	0.00000	0.18790	0.00000
0.00000	0.00000	0.00000	0.18020		0.00000		0.00000													
								31.08781	51.23184	95.96560	-0.90000	0.00000	0.00000	0.18019	0.00000	0.00000	0.00000	0.00000	0.18235	0.00000
0.00000	0.00000	0.00000	0.18216		0.00000		0.00000													
								34.09630	48.76232	94.24730	-0.90000	0.00000	0.00000	0.18217	0.00000	0.00000	0.00000	0.00000	0.18020	0.00000
0.00000	0.00000	0.00000	0.18734		0.00000		0.00000													
								37.10480	46.29280	92.52901	-0.90000	0.00000	0.00000	0.18735	0.00000	0.00000	0.00000	0.00000	0.18218	0.00000
0.00000	0.00000	0.00000	0.19326		0.00000		0.00000													
								40.11330	43.82328	90.81072	-0.90000	0.00000	0.00000	0.19327	0.00000	0.00000	0.00000	0.00000	0.18737	0.00000
0.00000	0.00000	0.00000	0.19712		0.00000		0.00000													
								43.12180	41.35376	89.09242	-0.90000	0.00000	0.00000	0.19713	0.00000	0.00000	0.00000	0.00000	0.19329	0.00000
0.00000	0.00000	0.00000	0.19716		0.00000		0.00000													
						3		5.01416	72.63434	110.85748	-0.90000	0.00000	0.00000	0.18309	0.00000	0.00000	0.00000	0.00000	0.17143	0.00000
0.00000	0.00000	0.00000	0.19305		0.00000		0.00000													
								8.02266	70.16482	109.13918	-0.90000	0.00000	0.00000	0.19308	0.00000	0.00000	0.00000	0.00000	0.18312	0.00000
0.00000	0.00000	0.00000	0.20035		0.00000		0.00000													
								11.03116	67.69530	107.42089	-0.90000	0.00000	0.00000	0.20037	0.00000	0.00000	0.00000	0.00000	0.19310	0.00000
0.00000	0.00000	0.00000	0.20402		0.00000		0.00000													
								14.03965	65.22578	105.70260	-0.90000	0.00000	0.00000	0.20403	0.00000	0.00000	0.00000	0.00000	0.20038	0.00000
0.00000	0.00000	0.00000	0.20355		0.00000		0.00000													
								17.04815	62.75626	103.98430	-0.90000	0.00000	0.00000	0.20354	0.00000	0.00000	0.00000	0.00000	0.20403	0.00000
0.00000	0.00000	0.00000	0.19926		0.00000		0.00000													
								20.05665	60.28674	102.26601	-0.90000	0.00000	0.00000	0.19925	0.00000	0.00000	0.00000	0.00000	0.20354	0.00000
0.00000	0.00000	0.00000	0.19260		0.00000		0.00000													
								23.06515	57.81722	100.54771	-0.90000	0.00000	0.00000	0.19258	0.00000	0.00000	0.00000	0.00000	0.19923	0.00000
0.00000	0.00000	0.00000	0.18580		0.00000		0.00000													
								26.07364	55.34770	98.82942	-0.90000	0.00000	0.00000	0.18579	0.00000	0.00000	0.00000	0.00000	0.19256	0.00000
0.00000	0.00000	0.00000	0.18120		0.00000		0.00000													
								29.08214	52.87819	97.11113	-0.90000	0.00000	0.00000	0.18119	0.00000	0.00000	0.00000	0.00000	0.18577	0.00000
0.00000	0.00000	0.00000	0.18040		0.00000		0.00000													
								32.09064	50.40867	95.39283	-0.90000	0.00000	0.00000	0.18040	0.00000	0.00000	0.00000	0.00000	0.18119	0.00000
0.00000	0.00000	0.00000	0.18363		0.00000		0.00000													
								35.09914	47.93915	93.67454	-0.90000	0.00000	0.00000	0.18364	0.00000	0.00000	0.00000	0.00000	0.18041	0.00000
0.00000	0.00000	0.00000	0.18937		0.00000		0.00000													
								38.10763	45.46963	91.95625	-0.90000	0.00000	0.00000	0.18939	0.00000	0.00000	0.00000	0.00000	0.18365	0.00000
0.00000	0.00000	0.00000	0.19489		0.00000		0.00000													
								41.11613	43.00011	90.23795	-0.90000	0.00000	0.00000	0.19490	0.00000	0.00000	0.00000	0.00000	0.18941	0.00000
0.00000	0.00000	0.00000	0.19761		0.00000		0.00000													
								44.12463	40.53059	88.51966	-0.90000	0.00000	0.00000	0.19761	0.00000	0.00000	0.00000	0.00000	0.19492	0.00000
0.00000	0.00000	0.00000	0.19623		0.00000		0.00000													
		2	TW Main-2		1		1	3.00892	38.64104	83.56688	-0.90000	0.00000	0.00000	0.20123	0.00000	0.00000	0.00000	0.00000	0.19484	0.00000
0.00000	0.00000	0.00000	0.20410		0.00000		0.00000													
								6.01784	40.04419	80.90515	-0.90000	0.00000	0.00000	0.20411	0.00000	0.00000	0.00000	0.00000	0.20125	0.00000
0.00000	0.00000	0.00000	0.20411		0.00000		0.00000													
								9.02675	41.44733	78.24343	-0.90000	0.00000	0.00000	0.20410	0.00000	0.00000	0.00000	0.00000	0.20411	0.00000
0.00000	0.00000	0.00000	0.20317		0.00000		0.00000													
								12.03567	42.85048	75.58171	-0.90000	0.00000	0.00000	0.20317	0.00000	0.00000	0.00000	0.00000	0.20410	0.00000
0.00000	0.00000	0.00000	0.20389		0.00000		0.00000													
								15.04459	44.25362	72.91998	-0.90000	0.00000	0.00000	0.20389	0.00000	0.00000	0.00000	0.00000	0.20317	0.00000
0.00000	0.00000	0.00000	0.20832		0.00000		0.00000													
								18.05351	45.65676	70.25826	-0.90000	0.00000	0.00000	0.20834	0.00000	0.00000	0.00000	0.00000	0.20390	0.00000
0.00000	0.00000	0.00000	0.21713		0.00000		0.00000													
								21.06242	47.05991	67.59654	-0.90000	0.00000	0.00000	0.21716	0.00000	0.00000	0.00000	0.00000	0.20836	0.00000
0.00000	0.00000	0.00000	0.22938		0.00000		0.00000													
								24.07134	48.46305	64.93481	-0.90000	0.00000	0.00000	0.22942	0.00000	0.00000	0.00000	0.00000	0.21720	0.00000
0.00000	0.00000	0.00000	0.24272		0.00000		0.00000													
								27.08026	49.86620	62.27309	-0.90000	0.00000	0.00000	0.24276	0.00000	0.00000	0.00000	0.00000	0.22946	0.00000
0.00000	0.00000	0.00000	0.25432		0.00000		0.00000													
								30.08918	51.26934	59.61136	-0.90000	0.00000	0.00000	0.25435	0.00000	0.00000	0.00000	0.00000	0.24280	0.00000
0.00000	0.00000	0.00000	0.26200		0.00000		0.00000													
						2		4.01189	39.10876	82.67964	-0.90000	0.00000	0.00000	0.20258	0.00000	0.00000	0.00000	0.00000	0.19736	0.00000
0.00000	0.00000	0.00000	0.20435		0.00000		0.00000													
								7.02081	40.51190	80.01791	-0.90000	0.00000	0.00000	0.20435	0.00000	0.00000	0.00000	0.00000	0.20259	0.00000
0.00000	0.00000	0.00000	0.20377		0.00000		0.00000													
								10.02973	41.91505	77.35619	-0.90000	0.00000	0.00000	0.20377	0.00000	0.00000	0.00000	0.00000	0.20435	0.00000
0.00000	0.00000	0.00000	0.20310		0.00000		0.00000													
								13.03864	43.31819	74.69446	-0.90000	0.00000	0.00000	0.20310	0.00000	0.00000	0.00000	0.00000	0.20377	0.00000
0.00000	0.00000	0.00000	0.20489		0.00000		0.00000													
								16.04756	44.72134	72.03274	-0.90000	0.00000	0.00000	0.20490	0.00000	0.00000	0.00000	0.00000	0.20311	0.00000
0.00000	0.00000	0.00000	0.21078		0.00000		0.00000													
								19.05648	46.12448	69.37102	-0.90000	0.00000	0.00000	0.21081	0.00000	0.00000	0.00000	0.00000	0.20491	0.00000
0.00000	0.00000	0.00000	0.22093		0.00000		0.00000													
								22.06540	47.52762	66.70929	-0.90000	0.00000	0.00000	0.22096	0.00000	0.00000	0.00000	0.00000	0.21083	0.00000
0.00000	0.00000	0.00000	0.23385		0.00000		0.00000													
								25.07431	48.93077	64.04757	-0.90000	0.00000	0.00000	0.23389	0.00000	0.00000	0.00000	0.00000	0.22100	0.00000
0.00000	0.00000	0.00000	0.24691		0.00000		0.00000													
								28.08323	50.33391	61.38585	-0.90000	0.00000	0.00000	0.24695	0.00000	0.00000	0.00000	0.00000	0.23392	0.00000
0.00000	0.00000	0.00000	0.25739		0.00000		0.00000													
								31.09215	51.73706	58.72412	-0.90000	0.00000	0.00000	0.25742	0.00000	0.00000	0.00000	0.00000	0.24699	0.00000
0.00000	0.00000	0.00000	0.26351		0.00000		0.00000													
						3		5.01486	39.57647	81.79239	-0.90000	0.00000	0.00000	0.20353	0.00000	0.00000	0.00000	0.00000	0.19950	0.00000
0.00000	0.00000	0.00000	0.20433		0.00000		0.00000													
								8.02378	40.97962	79.13067	-0.90000	0.00000	0.00000	0.20433	0.00000	0.00000	0.00000	0.00000	0.20353	0.00000
0.00000	0.00000	0.00000	0.20343		0.00000		0.00000													
								11.03270	42.38276	76.46895	-0.90000	0.00000	0.00000	0.20343	0.00000	0.00000	0.00000	0.00000	0.20433	0.00000
0.00000	0.00000	0.00000	0.20332		0.00000		0.00000													
								14.04162	43.78591	73.80722	-0.90000	0.00000	0.00000	0.20332	0.00000	0.00000	0.00000	0.00000	0.20342	0.00000
0.00000	0.00000	0.00000	0.20636		0.00000		0.00000													
								17.05053	45.18905	71.14550	-0.90000	0.00000	0.00000	0.20637	0.00000	0.00000	0.00000	0.00000	0.20332	0.00000
0.00000	0.00000	0.00000	0.21374		0.00000		0.00000													
								20.05945	46.59219	68.48378	-0.90000	0.00000	0.00000	0.21376	0.00000	0.00000	0.00000	0.00000	0.20639	0.00000
0.00000	0.00000	0.00000	0.22504		0.00000		0.00000													
								23.06837	47.99534	65.82205	-0.90000	0.00000	0.00000	0.22507	0.00000	0.00000	0.00000	0.00000	0.21379	0.00000
0.00000	0.00000	0.00000	0.23833		0.00000		0.00000													
								26.07729	49.39848	63.16033	-0.90000	0.00000	0.00000	0.23837	0.00000	0.00000	0.00000	0.00000	0.22511	0.00000
0.00000	0.00000	0.00000	0.25081		0.00000		0.00000													
								29.08620	50.80163	60.49861	-0.90000	0.00000	0.00000	0.25084	0.00000	0.00000	0.00000	0.00000	0.23841	0.00000
0.00000	0.00000	0.00000	0.25996		0.00000		0.00000													
		3	TW Main-3		1		1	3.98757	55.23844	52.67152	-0.90000	0.00000	0.00000	0.26480	0.00000	0.00000	0.00000	0.00000	0.26452	0.00000
0.00000	0.00000	0.00000	0.26134		0.00000		0.00000													
								4.98446	55.76300	51.82380	-0.90000	0.00000	0.00000	0.26403	0.00000	0.00000	0.00000	0.00000	0.26506	0.00000
0.00000	0.00000	0.00000	0.25949		0.00000		0.00000													
		4	TW Main-4		1		1	3.98331	60.26896	44.07515	-0.90000	0.00000	0.00000	0.24267	0.00000	0.00000	0.00000	0.00000	0.25221	0.00000
0.00000	0.00000	0.00000	0.23184		0.00000		0.00000													
								7.96662	62.15213	40.56510	-0.90000	0.00000	0.00000	0.22807	0.00000	0.00000	0.00000	0.00000	0.23924	0.00000
0.00000	0.00000	0.00000	0.21607		0.00000		0.00000													
								11.94993	64.03529	37.05504	-0.90000	0.00000	0.00000	0.21198	0.00000	0.00000	0.00000	0.00000	0.22422	0.00000
0.00000	0.00000	0.00000	0.19911		0.00000		0.00000													
								15.93324	65.91845	33.54499	-0.90000	0.00000	0.00000	0.19479	0.00000	0.00000	0.00000	0.00000	0.20782	0.00000
0.00000	0.00000	0.00000	0.18133		0.00000		0.00000													
								19.91656	67.80161	30.03494	-0.90000	0.00000	0.00000	0.17687	0.00000	0.00000	0.00000	0.00000	0.19041	0.00000
0.00000	0.00000	0.00000	0.16324		0.00000		0.00000													
								23.89987	69.68478	26.52489	-0.90000	0.00000	0.00000	0.15880	0.00000	0.00000	0.00000	0.00000	0.17240	0.00000
0.00000	0.00000	0.00000	0.14547		0.00000		0.00000													
								27.88318	71.56794	23.01484	-0.90000	0.00000	0.00000	0.14120	0.00000	0.00000	0.00000	0.00000	0.15439	0.00000
0.00000	0.00000	0.00000	0.12859		0.00000		0.00000													
								31.86649	73.45110	19.50479	-0.90000	0.00000	0.00000	0.12461	0.00000	0.00000	0.00000	0.00000	0.13699	0.00000
0.00000	0.00000	0.00000	0.11303		0.00000		0.00000													
								35.84980	75.33427	15.99473	-0.90000	0.00000	0.00000	0.10942	0.00000	0.00000	0.00000	0.00000	0.12072	0.00000
0.00000	0.00000	0.00000	0.09901		0.00000		0.00000													
								39.83311	77.21743	12.48468	-0.90000	0.00000	0.00000	0.09580	0.00000	0.00000	0.00000	0.00000	0.10591	0.00000
0.00000	0.00000	0.00000	0.08660		0.00000		0.00000													
								43.81642	79.10059	8.97463	-0.90000	0.00000	0.00000	0.08377	0.00000	0.00000	0.00000	0.00000	0.09268	0.00000
0.00000	0.00000	0.00000	0.07573		0.00000		0.00000													
								47.79973	80.98376	5.46458	-0.90000	0.00000	0.00000	0.07328	0.00000	0.00000	0.00000	0.00000	0.08105	0.00000
0.00000	0.00000	0.00000	0.06630		0.00000		0.00000													
						2		4.97914	60.73975	43.19764	-0.90000	0.00000	0.00000	0.23920	0.00000	0.00000	0.00000	0.00000	0.24923	0.00000
0.00000	0.00000	0.00000	0.22802		0.00000		0.00000													
								8.96245	62.62292	39.68758	-0.90000	0.00000	0.00000	0.22417	0.00000	0.00000	0.00000	0.00000	0.23564	0.00000
0.00000	0.00000	0.00000	0.21193		0.00000		0.00000													
								12.94576	64.50608	36.17753	-0.90000	0.00000	0.00000	0.20777	0.00000	0.00000	0.00000	0.00000	0.22023	0.00000
0.00000	0.00000	0.00000	0.19473		0.00000		0.00000													
								16.92907	66.38924	32.66748	-0.90000	0.00000	0.00000	0.19036	0.00000	0.00000	0.00000	0.00000	0.20355	0.00000
0.00000	0.00000	0.00000	0.17682		0.00000		0.00000													
								20.91238	68.27241	29.15743	-0.90000	0.00000	0.00000	0.17235	0.00000	0.00000	0.00000	0.00000	0.18594	0.00000
0.00000	0.00000	0.00000	0.15874		0.00000		0.00000													
								24.89569	70.15557	25.64738	-0.90000	0.00000	0.00000	0.15433	0.00000	0.00000	0.00000	0.00000	0.16787	0.00000
0.00000	0.00000	0.00000	0.14114		0.00000		0.00000													
								28.87900	72.03873	22.13732	-0.90000	0.00000	0.00000	0.13694	0.00000	0.00000	0.00000	0.00000	0.14996	0.00000
0.00000	0.00000	0.00000	0.12456		0.00000		0.00000													

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n+Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)
						32.86232	73.92189	18.62727	-0.90000	0.00000	0.00000	0.12067	0.00000	0.00000	0.00000	0.00000	0.13280	0.00000	0.00000	0.00000	0.00000	0.10937	0.00000
						36.84563	75.80506	15.11722	-0.90000	0.00000	0.00000	0.10586	0.00000	0.00000	0.00000	0.00000	0.11687	0.00000	0.00000	0.00000	0.00000	0.09576	0.00000
						40.82894	77.68822	11.60717	-0.90000	0.00000	0.00000	0.09264	0.00000	0.00000	0.00000	0.00000	0.10245	0.00000	0.00000	0.00000	0.00000	0.08374	0.00000
						44.81225	79.57138	8.09712	-0.90000	0.00000	0.00000	0.08101	0.00000	0.00000	0.00000	0.00000	0.08963	0.00000	0.00000	0.00000	0.00000	0.07325	0.00000
						48.79556	81.45455	4.58706	-0.90000	0.00000	0.00000	0.07088	0.00000	0.00000	0.00000	0.00000	0.07838	0.00000	0.00000	0.00000	0.00000	0.06415	0.00000
					3	5.97497	61.21054	42.32012	-0.90000	0.00000	0.00000	0.23560	0.00000	0.00000	0.00000	0.00000	0.24605	0.00000	0.00000	0.00000	0.00000	0.22412	0.00000
						9.95828	63.09371	38.81007	-0.90000	0.00000	0.00000	0.22018	0.00000	0.00000	0.00000	0.00000	0.23193	0.00000	0.00000	0.00000	0.00000	0.20772	0.00000
						13.94159	64.97687	35.30002	-0.90000	0.00000	0.00000	0.20350	0.00000	0.00000	0.00000	0.00000	0.21617	0.00000	0.00000	0.00000	0.00000	0.19030	0.00000
						17.92490	66.86003	31.78997	-0.90000	0.00000	0.00000	0.18589	0.00000	0.00000	0.00000	0.00000	0.19922	0.00000	0.00000	0.00000	0.00000	0.17229	0.00000
						21.90821	68.74320	28.27991	-0.90000	0.00000	0.00000	0.16782	0.00000	0.00000	0.00000	0.00000	0.18145	0.00000	0.00000	0.00000	0.00000	0.15428	0.00000
						25.89152	70.62636	24.76986	-0.90000	0.00000	0.00000	0.14990	0.00000	0.00000	0.00000	0.00000	0.16336	0.00000	0.00000	0.00000	0.00000	0.13688	0.00000
						29.87483	72.50952	21.25981	-0.90000	0.00000	0.00000	0.13275	0.00000	0.00000	0.00000	0.00000	0.14558	0.00000	0.00000	0.00000	0.00000	0.12063	0.00000
						33.85814	74.39269	17.74976	-0.90000	0.00000	0.00000	0.11683	0.00000	0.00000	0.00000	0.00000	0.12869	0.00000	0.00000	0.00000	0.00000	0.10582	0.00000
						37.84145	76.27585	14.23971	-0.90000	0.00000	0.00000	0.10241	0.00000	0.00000	0.00000	0.00000	0.11312	0.00000	0.00000	0.00000	0.00000	0.09260	0.00000
						41.82477	78.15901	10.72966	-0.90000	0.00000	0.00000	0.08959	0.00000	0.00000	0.00000	0.00000	0.09909	0.00000	0.00000	0.00000	0.00000	0.08098	0.00000
						45.80808	80.04217	7.21960	-0.90000	0.00000	0.00000	0.07834	0.00000	0.00000	0.00000	0.00000	0.08667	0.00000	0.00000	0.00000	0.00000	0.07085	0.00000
						49.79139	81.92534	3.70955	-0.90000	0.00000	0.00000	0.06856	0.00000	0.00000	0.00000	0.00000	0.07580	0.00000	0.00000	0.00000	0.00000	0.06208	0.00000
					4	6.97079	61.68134	41.44261	-0.90000	0.00000	0.00000	0.23188	0.00000	0.00000	0.00000	0.00000	0.24272	0.00000	0.00000	0.00000	0.00000	0.22013	0.00000
						10.95411	63.56450	37.93256	-0.90000	0.00000	0.00000	0.21612	0.00000	0.00000	0.00000	0.00000	0.22812	0.00000	0.00000	0.00000	0.00000	0.20344	0.00000
						14.93742	65.44766	34.42251	-0.90000	0.00000	0.00000	0.19917	0.00000	0.00000	0.00000	0.00000	0.21203	0.00000	0.00000	0.00000	0.00000	0.18583	0.00000
						18.92073	67.33082	30.91245	-0.90000	0.00000	0.00000	0.18139	0.00000	0.00000	0.00000	0.00000	0.19484	0.00000	0.00000	0.00000	0.00000	0.16776	0.00000
						22.90404	69.21399	27.40240	-0.90000	0.00000	0.00000	0.16330	0.00000	0.00000	0.00000	0.00000	0.17693	0.00000	0.00000	0.00000	0.00000	0.14985	0.00000
						26.88735	71.09715	23.89235	-0.90000	0.00000	0.00000	0.14552	0.00000	0.00000	0.00000	0.00000	0.15886	0.00000	0.00000	0.00000	0.00000	0.13270	0.00000
						30.87066	72.98031	20.38230	-0.90000	0.00000	0.00000	0.12864	0.00000	0.00000	0.00000	0.00000	0.14125	0.00000	0.00000	0.00000	0.00000	0.11678	0.00000
						34.85397	74.86348	16.87225	-0.90000	0.00000	0.00000	0.11307	0.00000	0.00000	0.00000	0.00000	0.12466	0.00000	0.00000	0.00000	0.00000	0.10236	0.00000
						38.83728	76.74664	13.36219	-0.90000	0.00000	0.00000	0.09905	0.00000	0.00000	0.00000	0.00000	0.10946	0.00000	0.00000	0.00000	0.00000	0.08955	0.00000
						42.82059	78.62980	9.85214	-0.90000	0.00000	0.00000	0.08663	0.00000	0.00000	0.00000	0.00000	0.09584	0.00000	0.00000	0.00000	0.00000	0.07831	0.00000
						46.80390	80.51296	6.34209	-0.90000	0.00000	0.00000	0.07576	0.00000	0.00000	0.00000	0.00000	0.08381	0.00000	0.00000	0.00000	0.00000	0.06853	0.00000
		5	TW Fou1-1	1	1	1.00444	75.64700	113.52870	-6.00000	0.00000	0.00000	0.11740	0.00000	0.00000	0.00000	0.00000	0.11593	0.00000	0.00000	0.00000	0.00000	0.11860	0.00000
						2.00887	74.83600	112.93610	-6.00000	0.00000	0.00000	0.11860	0.00000	0.00000	0.00000	0.00000	0.11740	0.00000	0.00000	0.00000	0.00000	0.11951	0.00000
						3.01331	74.02501	112.34351	-6.00000	0.00000	0.00000	0.11951	0.00000	0.00000	0.00000	0.00000	0.11861	0.00000	0.00000	0.00000	0.00000	0.12006	0.00000
						4.01774	73.21401	111.75091	-6.00000	0.00000	0.00000	0.12007	0.00000	0.00000	0.00000	0.00000	0.11951	0.00000	0.00000	0.00000	0.00000	0.12022	0.00000
						5.02218	72.40301	111.15831	-6.00000	0.00000	0.00000	0.12022	0.00000	0.00000	0.00000	0.00000	0.12007	0.00000	0.00000	0.00000	0.00000	0.11993	0.00000
						6.02661	71.59201	110.56571	-6.00000	0.00000	0.00000	0.11993	0.00000	0.00000	0.00000	0.00000	0.12022	0.00000	0.00000	0.00000	0.00000	0.11913	0.00000
						7.03105	70.78101	109.97311	-6.00000	0.00000	0.00000	0.11913	0.00000	0.00000	0.00000	0.00000	0.11992	0.00000	0.00000	0.00000	0.00000	0.11777	0.00000
						8.03548	69.97002	109.38052	-6.00000	0.00000	0.00000	0.11776	0.00000	0.00000	0.00000	0.00000	0.11912	0.00000	0.00000	0.00000	0.00000	0.11579	0.00000
						9.03992	69.15902	108.78792	-6.00000	0.00000	0.00000	0.11578	0.00000	0.00000	0.00000	0.00000	0.11775	0.00000	0.00000	0.00000	0.00000	0.11314	0.00000
						10.04435	68.34802	108.19532	-6.00000	0.00000	0.00000	0.11312	0.00000	0.00000	0.00000	0.00000	0.11577	0.00000	0.00000	0.00000	0.00000	0.10976	0.00000
						11.04879	67.53702	107.60272	-6.00000	0.00000	0.00000	0.10975	0.00000	0.00000	0.00000	0.00000	0.11311	0.00000	0.00000	0.00000	0.00000	0.10563	0.00000
						12.05322	66.72603	107.01013	-6.00000	0.00000	0.00000	0.10561	0.00000	0.00000	0.00000	0.00000	0.10973	0.00000	0.00000	0.00000	0.00000	0.10070	0.00000
						13.05766	65.91503	106.41753	-6.00000	0.00000	0.00000	0.10068	0.00000	0.00000	0.00000	0.00000	0.10559	0.00000	0.00000	0.00000	0.00000	0.09496	0.00000
						14.06209	65.10403	105.82493	-6.00000	0.00000	0.00000	0.09494	0.00000	0.00000	0.00000	0.00000	0.10065	0.00000	0.00000	0.00000	0.00000	0.08842	0.00000
						15.06653	64.29303	105.23233	-6.00000	0.00000	0.00000	0.08839	0.00000	0.00000	0.00000	0.00000	0.09491	0.00000	0.00000	0.00000	0.00000	0.08109	0.00000
						16.07096	63.48203	104.63973	-6.00000	0.00000	0.00000	0.08105	0.00000	0.00000	0.00000	0.00000	0.08836	0.00000	0.00000	0.00000	0.00000	0.07302	0.00000
						17.07540	62.67104	104.04714	-6.00000	0.00000	0.00000	0.07299	0.00000	0.00000	0.00000	0.00000	0.08102	0.00000	0.00000	0.00000	0.00000	0.06431	0.00000
						18.07983	61.86004	103.45454	-6.00000	0.00000	0.00000	0.06427	0.00000	0.00000	0.00000	0.00000	0.07295	0.00000	0.00000	0.00000	0.00000	0.05506	0.00000
						19.08427	61.04904	102.86194	-6.00000	0.00000	0.00000	0.05502	0.00000	0.00000	0.00000	0.00000	0.06423	0.00000	0.00000	0.00000	0.00000	0.04541	0.00000
						20.08870	60.23804	102.26934	-6.00000	0.00000	0.00000	0.04537	0.00000	0.00000	0.00000	0.00000	0.05497	0.00000	0.00000	0.00000	0.00000	0.03554	0.00000
						21.09314	59.42704	101.67674	-6.00000	0.00000	0.00000	0.03549	0.00000	0.00000	0.00000	0.00000	0.04532	0.00000	0.00000	0.00000	0.00000	0.02564	0.00000
						22.09757	58.61605	101.08415	-6.00000	0.00000	0.00000	0.02559	0.00000	0.00000	0.00000	0.00000	0.03545	0.00000	0.00000	0.00000	0.00000	0.01593	0.00000
						23.10201	57.80505	100.49155	-6.00000	0.00000	0.00000	0.01589	0.00000	0.00000	0.00000	0.00000	0.02555	0.00000	0.00000	0.00000	0.00000	0.00664	0.00000
						24.10644	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00660	0.00000	0.00000	0.00000	0.00000	0.01585	0.00000	0.00000	0.00000	0.00000	-0.00200	0.00000
						25.11088	56.18305	99.30635	-6.00000	0.00000	0.00000	-0.00203	0.00000	0.00000	0.00000	0.00000	0.00656	0.00000	0.00000	0.00000	0.00000	-0.00975	0.00000
						26.11531	55.37206	98.71376	-6.00000	0.00000	0.00000	-0.00979	0.00000	0.00000	0.00000	0.00000	-0.00207	0.00000	0.00000	0.00000	0.00000	-0.01641	0.00000
						27.11975	54.56106	98.12116	-6.00000	0.00000	0.00000	-0.01644	0.00000	0.00000	0.00000	0.00000	-0.00982	0.00000	0.00000	0.00000	0.00000	-0.02178	0.00000
						28.12418	53.75006	97.52856	-6.00000	0.00000	0.00000	-0.02180	0.00000	0.00000	0.00000	0.00000	-0.01647	0.00000	0.00000	0.00000	0.00000	-0.02568	0.00000
						29.12862	52.93906	96.93596	-6.00000	0.00000	0.00000	-0.02570	0.00000	0.00000	0.00000	0.00000	-0.02182	0.00000	0.00000	0.00000	0.00000	-0.02799	0.00000
						30.13305	52.12806	96.34336	-6.00000	0.00000	0.00000	-0.02800	0.00000	0.00000	0.00000	0.00000	-0.02571	0.00000	0.00000	0.00000	0.00000	-0.02860	0.00000
						31.13749	51.31707	95.75077	-6.00000	0.00000	0.00000	-0.02860	0.00000	0.00000	0.00000	0.00000	-0.02800	0.00000	0.00000	0.00000	0.00000	-0.02748	0.00000
						32.14192	50.50607	95.15817	-6.00000	0.00000	0.00000	-0.02747	0.00000	0.00000	0.00000	0.00000	-0.02860	0.00000	0.00000	0.00000	0.00000	-0.02462	0.00000
						33.14636	49.69507	94.56557	-6.00000	0.00000	0.00000	-0.02461	0.00000	0.00000	0.00000	0.00000	-0.02746	0.00000	0.00000	0.00000	0.00000	-0.02010	0.00000
						34.15079	48.88407	93.97297	-6.00000	0.00000	0.00000	-0.02008	0.00000	0.00000	0.00000	0.00000	-0.02459	0.00000	0.00000	0.00000	0.00000	-0.01403	0.00000
						35.15523	48.07307	93.38037	-6.00000	0.00000	0.00000	-0.01401	0.00000	0.00000	0.00000	0.00000	-0.02005	0.00000	0.00000	0.00000	0.00000	-0.00661	0.00000
						36.15966	47.26208	92.78778	-6.00000	0.00000	0.00000	-0.00658	0.00000	0.00000	0.00000	0.00000	-0.01397	0.00000	0.00000	0.00000	0.00000	0.00194	0.00000
						37.16410	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00198	0.00000	0.00000	0.00000	0.00000	-0.00654	0.00000	0.00000	0.00000	0.00000	0.01135	0.00000
						38.16853	45.64008	91.60258	-6.00000	0.00000	0.00000	0.01140	0.00000	0.00000	0.00000	0.00000	0.00202	0.00000	0.00000	0.00000	0.00000	0.02134	0.00000
						39.17297	44.82908	91.00998	-6.00000	0.00000	0.00000	0.02138	0.00000	0.00000	0.00000	0.00000	0.01144	0.00000	0.00000	0.00000	0.00000	0.03160	0.00000
						40.17740	44.01809	90.41739	-6.00000	0.00000	0.00000	0.03165	0.00000	0.00000	0.00000	0.00000	0.02143	0.00000	0.00000	0.00000	0.00000	0.04187	0.00000
						41.18184	43.20709	89.82479	-6.00000	0.00000	0.00000	0.04191	0.00000	0.00000	0.00000	0.00000	0.03169	0.00000	0.00000	0.00000	0.00000	0.05189	0.00000
						42.18627	42.39609	89.23219	-6.00000	0.00000	0.00000	0.05193	0.00000	0.00000	0.00000	0.00000	0.04196	0.00000	0.00000	0.00000	0.00000	0.06146	0.00000
						43.19071	41.58509	88.63959	-6.00000	0.00000	0.00000	0.06150	0.00000	0.00000	0.00000	0.00000	0.05198	0.00000					

Stage: Ref.	Stage: δHperp.(n-Lp)	Name δx(n+Lp)	Specific Utility: Ref.	Specific Utility: Name	Sub-utility δz(n+Lp)	Iteration δH//(n+Lp)	δHperp.(n+Lp)	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)
0.00000	0.00000	0.00000	0.07041		0.00000		0.00000													
								44.19514	40.77409	88.04699	-6.00000	0.00000	0.00000	0.07045	0.00000	0.00000	0.00000	0.00000	0.06154	0.00000
0.00000	0.00000	0.00000	0.07861		0.00000		0.00000													
								45.19958	39.96310	87.45440	-6.00000	0.00000	0.00000	0.07865	0.00000	0.00000	0.00000	0.00000	0.07048	0.00000
0.00000	0.00000	0.00000	0.08600		0.00000		0.00000													
		6		TW Foul-2	1		1	1.00474	38.81931	85.38557	-6.00000	0.00000	0.00000	0.08619	0.00000	0.00000	0.00000	0.00000	0.09253	0.00000
0.00000	0.00000	0.00000	0.07877		0.00000		0.00000													
								2.00947	39.29752	84.50193	-6.00000	0.00000	0.00000	0.07873	0.00000	0.00000	0.00000	0.00000	0.08615	0.00000
0.00000	0.00000	0.00000	0.07022		0.00000		0.00000													
								3.01421	39.77574	83.61830	-6.00000	0.00000	0.00000	0.07018	0.00000	0.00000	0.00000	0.00000	0.07869	0.00000
0.00000	0.00000	0.00000	0.06059		0.00000		0.00000													
								4.01894	40.25395	82.73467	-6.00000	0.00000	0.00000	0.06055	0.00000	0.00000	0.00000	0.00000	0.07013	0.00000
0.00000	0.00000	0.00000	0.04996		0.00000		0.00000													
								5.02368	40.73216	81.85104	-6.00000	0.00000	0.00000	0.04991	0.00000	0.00000	0.00000	0.00000	0.06050	0.00000
0.00000	0.00000	0.00000	0.03843		0.00000		0.00000													
								6.02842	41.21037	80.96740	-6.00000	0.00000	0.00000	0.03837	0.00000	0.00000	0.00000	0.00000	0.04985	0.00000
0.00000	0.00000	0.00000	0.02618		0.00000		0.00000													
								7.03315	41.68859	80.08377	-6.00000	0.00000	0.00000	0.02612	0.00000	0.00000	0.00000	0.00000	0.03832	0.00000
0.00000	0.00000	0.00000	0.01342		0.00000		0.00000													
								8.03789	42.16680	79.20014	-6.00000	0.00000	0.00000	0.01336	0.00000	0.00000	0.00000	0.00000	0.02606	0.00000
0.00000	0.00000	0.00000	0.00045		0.00000		0.00000													
								9.04262	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00039	0.00000	0.00000	0.00000	0.00000	0.01330	0.00000
0.00000	0.00000	0.00000	-0.01244		0.00000		0.00000													
								10.04736	43.12322	77.43287	-6.00000	0.00000	0.00000	-0.01250	0.00000	0.00000	0.00000	0.00000	0.00033	0.00000
0.00000	0.00000	0.00000	-0.02490		0.00000		0.00000													
								11.05210	43.60144	76.54924	-6.00000	0.00000	0.00000	-0.02495	0.00000	0.00000	0.00000	0.00000	-0.01256	0.00000
0.00000	0.00000	0.00000	-0.03658		0.00000		0.00000													
								12.05683	44.07965	75.66560	-6.00000	0.00000	0.00000	-0.03663	0.00000	0.00000	0.00000	0.00000	-0.02501	0.00000
0.00000	0.00000	0.00000	-0.04715		0.00000		0.00000													
								13.06157	44.55786	74.78197	-6.00000	0.00000	0.00000	-0.04720	0.00000	0.00000	0.00000	0.00000	-0.03668	0.00000
0.00000	0.00000	0.00000	-0.05632		0.00000		0.00000													
								14.06630	45.03607	73.89834	-6.00000	0.00000	0.00000	-0.05636	0.00000	0.00000	0.00000	0.00000	-0.04725	0.00000
0.00000	0.00000	0.00000	-0.06380		0.00000		0.00000													
								15.07104	45.51429	73.01471	-6.00000	0.00000	0.00000	-0.06384	0.00000	0.00000	0.00000	0.00000	-0.05639	0.00000
0.00000	0.00000	0.00000	-0.06940		0.00000		0.00000													
								16.07578	45.99250	72.13107	-6.00000	0.00000	0.00000	-0.06943	0.00000	0.00000	0.00000	0.00000	-0.06386	0.00000
0.00000	0.00000	0.00000	-0.07296		0.00000		0.00000													
								17.08051	46.47071	71.24744	-6.00000	0.00000	0.00000	-0.07298	0.00000	0.00000	0.00000	0.00000	-0.06944	0.00000
0.00000	0.00000	0.00000	-0.07439		0.00000		0.00000													
								18.08525	46.94892	70.36381	-6.00000	0.00000	0.00000	-0.07440	0.00000	0.00000	0.00000	0.00000	-0.07298	0.00000
0.00000	0.00000	0.00000	-0.07367		0.00000		0.00000													
								19.08998	47.42714	69.48017	-6.00000	0.00000	0.00000	-0.07366	0.00000	0.00000	0.00000	0.00000	-0.07439	0.00000
0.00000	0.00000	0.00000	-0.07082		0.00000		0.00000													
								20.09472	47.90535	68.59654	-6.00000	0.00000	0.00000	-0.07081	0.00000	0.00000	0.00000	0.00000	-0.07365	0.00000
0.00000	0.00000	0.00000	-0.06595		0.00000		0.00000													
								21.09945	48.38356	67.71291	-6.00000	0.00000	0.00000	-0.06593	0.00000	0.00000	0.00000	0.00000	-0.07078	0.00000
0.00000	0.00000	0.00000	-0.05923		0.00000		0.00000													
								22.10419	48.86177	66.82927	-6.00000	0.00000	0.00000	-0.05920	0.00000	0.00000	0.00000	0.00000	-0.06590	0.00000
0.00000	0.00000	0.00000	-0.05087		0.00000		0.00000													
								23.10893	49.33998	65.94564	-6.00000	0.00000	0.00000	-0.05083	0.00000	0.00000	0.00000	0.00000	-0.05916	0.00000
0.00000	0.00000	0.00000	-0.04114		0.00000		0.00000													
								24.11366	49.81820	65.06201	-6.00000	0.00000	0.00000	-0.04110	0.00000	0.00000	0.00000	0.00000	-0.05078	0.00000
0.00000	0.00000	0.00000	-0.03036		0.00000		0.00000													
								25.11840	50.29641	64.17838	-6.00000	0.00000	0.00000	-0.03031	0.00000	0.00000	0.00000	0.00000	-0.04105	0.00000
0.00000	0.00000	0.00000	-0.01885		0.00000		0.00000													
								26.12313	50.77462	63.29474	-6.00000	0.00000	0.00000	-0.01880	0.00000	0.00000	0.00000	0.00000	-0.03025	0.00000
0.00000	0.00000	0.00000	-0.00696		0.00000		0.00000													
								27.12787	51.25283	62.41111	-6.00000	0.00000	0.00000	-0.00690	0.00000	0.00000	0.00000	0.00000	-0.01874	0.00000
0.00000	0.00000	0.00000	0.00501		0.00000		0.00000													
								28.13261	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00506	0.00000	0.00000	0.00000	0.00000	-0.00685	0.00000
0.00000	0.00000	0.00000	0.01675		0.00000		0.00000													
								29.13734	52.20926	60.64384	-6.00000	0.00000	0.00000	0.01681	0.00000	0.00000	0.00000	0.00000	0.00512	0.00000
0.00000	0.00000	0.00000	0.02804		0.00000		0.00000													
								30.14208	52.68747	59.76021	-6.00000	0.00000	0.00000	0.02809	0.00000	0.00000	0.00000	0.00000	0.01686	0.00000
0.00000	0.00000	0.00000	0.03869		0.00000		0.00000													
								31.14681	53.16568	58.87658	-6.00000	0.00000	0.00000	0.03874	0.00000	0.00000	0.00000	0.00000	0.02815	0.00000
0.00000	0.00000	0.00000	0.04857		0.00000		0.00000													
								32.15155	53.64390	57.99294	-6.00000	0.00000	0.00000	0.04861	0.00000	0.00000	0.00000	0.00000	0.03879	0.00000
0.00000	0.00000	0.00000	0.05759		0.00000		0.00000													
								33.15629	54.12211	57.10931	-6.00000	0.00000	0.00000	0.05763	0.00000	0.00000	0.00000	0.00000	0.04865	0.00000
0.00000	0.00000	0.00000	0.06573		0.00000		0.00000													
								34.16102	54.60032	56.22568	-6.00000	0.00000	0.00000	0.06577	0.00000	0.00000	0.00000	0.00000	0.05767	0.00000
0.00000	0.00000	0.00000	0.07300		0.00000		0.00000													
								35.16576	55.07853	55.34205	-6.00000	0.00000	0.00000	0.07303	0.00000	0.00000	0.00000	0.00000	0.06581	0.00000
0.00000	0.00000	0.00000	0.07942		0.00000		0.00000													
								36.17049	55.55675	54.45841	-6.00000	0.00000	0.00000	0.07945	0.00000	0.00000	0.00000	0.00000	0.07306	0.00000
0.00000	0.00000	0.00000	0.08505		0.00000		0.00000													
								37.17523	56.03496	53.57478	-6.00000	0.00000	0.00000	0.08507	0.00000	0.00000	0.00000	0.00000	0.07947	0.00000
0.00000	0.00000	0.00000	0.08996		0.00000		0.00000													
								37.17997	56.51317	52.69115	-6.00000	0.00000	0.00000	0.08998	0.00000	0.00000	0.00000	0.00000	0.08510	0.00000
0.00000	0.00000	0.00000	0.09422		0.00000		0.00000													
								39.18470	56.99138	51.80751	-6.00000	0.00000	0.00000	0.09424	0.00000	0.00000	0.00000	0.00000	0.09000	0.00000
0.00000	0.00000	0.00000	0.09793		0.00000		0.00000													
								40.18944	57.46959	50.92388	-6.00000	0.00000	0.00000	0.09794	0.00000	0.00000	0.00000	0.00000	0.09426	0.00000
0.00000	0.00000	0.00000	0.10114		0.00000		0.00000													
								41.19417	57.94781	50.04025	-6.00000	0.00000	0.00000	0.10116	0.00000	0.00000	0.00000	0.00000	0.09796	0.00000
0.00000	0.00000	0.00000	0.10395		0.00000		0.00000													
								42.19891	58.42602	49.15661	-6.00000	0.00000	0.00000	0.10396	0.00000	0.00000	0.00000	0.00000	0.10117	0.00000
0.00000	0.00000	0.00000	0.10641		0.00000		0.00000													
								43.20365	58.90423	48.27298	-6.00000	0.00000	0.00000	0.10642	0.00000	0.00000	0.00000	0.00000	0.10397	0.00000
0.00000	0.00000	0.00000	0.10859		0.00000		0.00000													
								44.20838	59.38244	47.38935	-6.00000	0.00000	0.00000	0.10860	0.00000	0.00000	0.00000	0.00000	0.10643	0.00000
0.00000	0.00000	0.00000	0.11054		0.00000		0.00000													
								45.21312	59.86066	46.50572	-6.00000	0.00000	0.00000	0.11055	0.00000	0.00000	0.00000	0.00000	0.10861	0.00000
0.00000	0.00000	0.00000	0.11230		0.00000		0.00000													
								46.21785	60.33887	45.62208	-6.00000	0.00000	0.00000	0.11231	0.00000	0.00000	0.00000	0.00000	0.11056	0.00000
0.00000	0.00000	0.00000	0.11392		0.00000		0.00000													
								47.22259	60.81708	44.73845	-6.00000	0.00000	0.00000	0.11392	0.00000	0.00000	0.00000	0.00000	0.11232	0.00000
0.00000	0.00000	0.00000	0.11540		0.00000		0.00000													
								48.22733	61.29529	43.85482	-6.00000	0.00000	0.00000	0.11540	0.00000	0.00000	0.00000	0.00000	0.11393	0.00000
0.00000	0.00000	0.00000	0.11677		0.00000		0.00000													
								49.23206	61.77351	42.97118	-6.00000	0.00000	0.00000	0.11677	0.00000	0.00000	0.00000	0.00000	0.11541	0.00000
0.00000	0.00000	0.00000	0.11802		0.00000		0.00000													
								50.23680	62.25172	42.08755	-6.00000	0.00000	0.00000	0.11803	0.00000	0.00000	0.00000	0.00000	0.11678	0.00000
0.00000	0.00000	0.00000	0.11918		0.00000		0.00000													
								51.24153	62.72993	41.20392	-6.00000	0.00000	0.00000	0.11918	0.00000	0.00000	0.00000	0.00000	0.11804	0.00000
0.00000	0.00000	0.00000	0.12021		0.00000		0.00000													
								52.24627	63.20814	40.32028	-6.00000	0.00000	0.00000	0.12021	0.00000	0.00000	0.00000	0.00000	0.11919	0.00000
0.00000	0.00000	0.00000	0.12112		0.00000		0.00000													
								53.25101	63.68636	39.43665	-6.00000	0.00000	0.00000	0.12112	0.00000	0.00000	0.00000	0.00000	0.12022	0.00000
0.00000	0.00000	0.00000	0.12188		0.00000		0.00000													
								54.25574	64.16457	38.55302	-6.00000	0.00000	0.00000	0.12188	0.00000	0.00000	0.00000	0.00000	0.12112	0.00000
0.00000	0.00000	0.00000	0.12249		0.00000		0.00000													
								55.26048	64.64278	37.66939	-6.00000	0.00000	0.00000	0.12249	0.00000	0.00000	0.00000	0.00000	0.12189	0.00000
0.00000	0.00000	0.00000	0.12292		0.00000		0.00000													
								56.26521	65.12099	36.78575	-6.00000	0.00000	0.00000	0.12292	0.00000	0.00000	0.00000	0.00000	0.12249	0.00000
0.00000	0.00000	0.00000	0.12317		0.00000		0.00000													
								57.26995	65.59921	35.90212	-6.00000	0.00000	0.00000	0.12317	0.00000	0.00000	0.00000	0.00000	0.12292	0.00000
0.00000	0.00000	0.00000	0.12321		0.00000		0.00000													
								58.27469	66.07742	35.01849	-6.00000	0.00000	0.00000	0.12321	0.00000	0.00000	0.00000	0.00000	0.12317	0.00000
0.00000	0.00000	0.00000	0.12305		0.00000		0.00000													
								59.27942	66.55563	34.13485	-6.00000	0.00000	0.00000	0.12305	0.00000	0.00000	0.00000	0.00000	0.12321	0.00000
0.00000	0.00000	0.00000	0.12267		0.00000		0.00000													
								60.28416	67.03384	33.25122	-6.00000	0.00000	0.00000	0.12267	0.00000	0.00000	0.00000	0.00000	0.12305	0.00000
0.00000	0.00000	0.00000	0.12208		0.00000		0.00000													
								61.28889	67.51205	32.36759	-6.00000	0.00000	0.00000	0.12207	0.00000	0.00000	0.00000	0.00000	0.12267	0.00000
0.00000	0.00000	0.00000	0.12127		0.00000		0.00000													
								62.29363	67.99027	31.48395	-6.00000	0.00000	0.00000	0.12126	0.00000	0.00000	0.00000	0.00000	0.12207	0.00000
0.00000	0.00000	0.00000	0.12025		0.00000		0.00000													
								63.29836	68.46848	30.60032	-6.00000	0.00000	0.00000	0.12025	0.00000	0.00000	0.00000	0.00000	0.12126	0.00000
0.00000	0.00000	0.00000	0.11904		0.00000		0.00000													
								64.30310	68.94669	29.71669	-6.00000	0.00000	0.00000	0.11903	0.00000	0.00000	0.00000	0.00000	0.12024	0.00000
0.00000	0.00000	0.00000	0.11764		0.00000		0.00000													
								65.30784	69.42490	28.83306	-6.00000	0.00000	0.00000	0.11763	0.00000	0.00000	0.00000	0.00000	0.11903	0.00000
0.00000	0.00000	0.00000	0.11607		0.00000		0.00000													
								66.31257	69.90312	27.94942	-6.00000	0.00000	0.00000	0.11606	0.00000	0.00000	0.00000	0.00000	0.11763	0.00000
0.00000	0.00000	0.00000	0.11433		0.00000		0.00000													
								67.31731	70.38133	27.06579	-6.00000	0.00000	0.00000	0.11433	0.00000	0.00000	0.00000	0.00000	0.11605	0.00000
0.00000	0.00000	0.00000	0.11246		0.00000		0.00000													
								68.32204	70.85954	26.18216	-6.00000	0.00000	0.00000	0.11245	0.00000	0.00000	0.00000	0.00000	0.11432	0.00000
0.00000	0.00000	0.00000	0.11046		0.00000		0.00000													

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000
						–	–	0.00002	0.00002	–	–								
						6.01699	71.81116	110.28471	-0.90000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000
						–	–	0.00004	0.00004	–	–								
						9.02549	69.34164	108.56642	-0.90000	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000
						–	–	0.00006	0.00006	–	–	Sagging							
						12.03399	66.87213	106.84812	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Sagging							
						15.04249	64.40261	105.12983	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Sagging							
						18.05098	61.93309	103.41154	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Sagging							
						21.05948	59.46357	101.69324	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000
						–	–	0.00003	0.00003	–	–								
						24.06798	56.99405	99.97495	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000
						–	–	0.00001	0.00001	–	–								
						27.07648	54.52453	98.25666	-0.90000	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000
						–	–	0.00005	0.00005	–	–								
						30.08497	52.05501	96.53836	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Hogging							
						33.09347	49.58549	94.82007	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Hogging							
						36.10197	47.11598	93.10178	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000
						–	–	0.00003	0.00003	–	–								
						39.11047	44.64646	91.38348	-0.90000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000
						–	–	0.00002	0.00002	–	–								
						42.11896	42.17694	89.66519	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000
						–	–	0.00006	0.00006	–	–	Sagging							
						45.12746	39.70742	87.94689	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Sagging							
					2	4.01133	73.45751	111.43024	-0.90000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000
						–	–	0.00003	0.00003	–	–								
						7.01983	70.98799	109.71195	-0.90000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000
						–	–	0.00004	0.00004	–	–								
						10.02832	68.51847	107.99365	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000
						–	–	0.00006	0.00006	–	–	Sagging							
						13.03682	66.04895	106.27536	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Sagging							
						16.04532	63.57943	104.55707	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Sagging							
						19.05382	61.10991	102.83877	-0.90000	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000
						–	–	0.00006	0.00006	–	–								
						22.06231	58.64040	101.12048	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000
						–	–	0.00002	0.00002	–	–								
						25.07081	56.17088	99.40219	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000
						–	–	0.00003	0.00003	–	–								
						28.07931	53.70136	97.68389	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000
						–	–	0.00006	0.00006	–	–	Hogging							
						31.08781	51.23184	95.96560	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Hogging							
						34.09630	48.76232	94.24730	-0.90000	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000
						–	–	0.00006	0.00006	–	–	Hogging							
						37.10480	46.29280	92.52901	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000
						–	–	0.00001	0.00001	–	–								
						40.11330	43.82328	90.81072	-0.90000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000
						–	–	0.00004	0.00004	–	–								
						43.12180	41.35376	89.09242	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Sagging							
					3	5.01416	72.63434	110.85748	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000
						–	–	0.00003	0.00003	–	–								
						8.02266	70.16482	109.13918	-0.90000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000
						–	–	0.00005	0.00005	–	–								
						11.03116	67.69530	107.42089	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Sagging							
						14.03965	65.22578	105.70260	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000
						–	–	0.00008	0.00008	–	–	Sagging							
						17.04815	62.75626	103.98430	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000
						–	–	0.00007	0.00007	–	–	Sagging							
						20.05665	60.28674	102.26601	-0.90000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000
						–	–	0.00005	0.00005	–	–								
						23.06515	57.81722	100.54771	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Specific Utility Damage Results - Pullouts & Rotations

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Check:	Iteration	Distance from start of utility	x	y	z	Check: Rotation:	Pullout: Rotation: Limit	Check:	Pullout: Left Seg.: Ax.:	Pullout: Check: Vertical Sagging vs Hogging	Pullout: Left Seg.: Flex.:	Pullout: Left Seg.:	Pullout: Right Seg.: Ax.:	Pullout: Right Seg.:	Pullout: Right Seg.: Flex.:	Pullout: Right Seg.:	Pullout: Total: Ax.:
Total: Ax.:	Total: Flex.:	Total: Ref.	Total: Name	Total:	Pullout: Threshold									Unfactored	Factored	Unfactored	Flex.: Factored	Unfactored	Ax.: Factored	Unfactored	Flex.: Factored	Unfactored
[mm]	[mm]	[mm]	[mm]	[mm]			[m]	[m]	[m]	[m]	[Deg]	[Deg]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0.00000	0.00007	0.00007	0.00007	0.00007	–																	
0.00000	0.00013	0.00013	0.00013	0.00013	–																	
0.00000	0.00019	0.00019	0.00019	0.00019	–																	
0.00000	0.00024	0.00024	0.00024	0.00024	–																	
0.00000	0.00026	0.00026	0.00026	0.00026	–																	
0.00000	0.00022	0.00022	0.00022	0.00022	–																	
0.00000	0.00011	0.00011	0.00011	0.00011	–																	
0.00000	0.00004	0.00004	0.00004	0.00004	–																	
0.00000	0.00018	0.00018	0.00018	0.00018	–																	
0.00000	0.00026	0.00026	0.00026	0.00026	–																	
0.00000	0.00023	0.00023	0.00023	0.00023	–																	
0.00000	0.00011	0.00011	0.00011	0.00011	–																	
0.00000	0.00007	0.00007	0.00007	0.00007	–																	
0.00000	0.00021	0.00021	0.00021	0.00021	–																	
0.00000	0.00027	0.00027	0.00027	0.00027	–																	
0.00000	0.00009	0.00009	0.00009	0.00009	–	2																
0.00000	0.00015	0.00015	0.00015	0.00015	–																	
0.00000	0.00021	0.00021	0.00021	0.00021	–																	
0.00000	0.00026	0.00026	0.00026	0.00026	–																	
0.00000	0.00020	0.00020	0.00020	0.00020	–																	
0.00000	0.00005	0.00005	0.00005	0.00005	–																	
0.00000	0.00013	0.00013	0.00013	0.00013	–																	
0.00000	0.00024	0.00024	0.00024	0.00024	–																	
0.00000	0.00011	0.00011	0.00011	0.00011	–	3																
0.00000	0.00017	0.00017	0.00017	0.00017	–																	
0.00000	0.00023	0.00023	0.00023	0.00023	–																	
0.00000	0.00026	0.00026	0.00026	0.00026	–																	
0.00000	0.00024	0.00024	0.00024	0.00024	–																	
0.00000	0.00015	0.00015	0.00015	0.00015	–																	

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance Check: from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Left Seg.:	Pullout: Vertical Left	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout:	Unfactored	Factored	Rotation:	Rotation:	Sagging							
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						26.07364	55.34770	98.82942	-0.90000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00004	0.00004	–	–	–							
						29.08214	52.87819	97.11113	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00024	0.00024	0.00024	0.00024	–	–	0.00007	0.00007	–	–	Hogging							
						32.09064	50.40867	95.39283	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000
0.00000	0.00025	0.00025	0.00025	0.00025	–	–	0.00008	0.00008	–	–	Hogging							
						35.09914	47.93915	93.67454	-0.90000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000
0.00000	0.00016	0.00016	0.00016	0.00016	–	–	0.00005	0.00005	–	–	–							
						38.10763	45.46963	91.95625	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						41.11613	43.00011	90.23795	-0.90000	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000	0.00009	0.00009	0.00000
0.00000	0.00018	0.00018	0.00018	0.00018	–	–	0.00005	0.00005	–	–	–							
						44.12463	40.53059	88.51966	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000
0.00000	0.00026	0.00026	0.00026	0.00026	–	–	0.00008	0.00008	–	–	Sagging							
	2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000
0.00000	0.00022	0.00022	0.00022	0.00022	–	–	0.00007	0.00007	–	–	Sagging							
						6.01784	40.04419	80.90515	-0.90000	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000	0.00009	0.00009	0.00000
0.00000	0.00018	0.00018	0.00018	0.00018	–	–	0.00005	0.00005	–	–	–							
						9.02675	41.44733	78.24343	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						12.03567	42.85048	75.58171	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000
0.00000	0.00010	0.00010	0.00010	0.00010	–	–	0.00003	0.00003	–	–	–							
						15.04459	44.25362	72.91998	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00023	0.00023	0.00023	0.00023	–	–	0.00007	0.00007	–	–	Hogging							
						18.05351	45.65676	70.25826	-0.90000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00028	0.00028	0.00028	0.00028	–	–	0.00008	0.00008	–	–	Hogging							
						21.06242	47.05991	67.59654	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000
0.00000	0.00022	0.00022	0.00022	0.00022	–	–	0.00007	0.00007	–	–	Hogging							
						24.07134	48.46305	64.93481	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00007	0.00007	0.00007	0.00007	–	–	0.00002	0.00002	–	–	–							
						27.08026	49.86620	62.27309	-0.90000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00011	0.00011	0.00011	0.00011	–	–	0.00003	0.00003	–	–	–							
						30.08918	51.26934	59.61136	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00025	0.00025	0.00025	0.00025	–	–	0.00007	0.00007	–	–	Sagging							
					2	4.01189	39.10876	82.67964	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000
0.00000	0.00022	0.00022	0.00022	0.00022	–	–	0.00007	0.00007	–	–	Sagging							
						7.02081	40.51190	80.01791	-0.90000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00015	0.00015	0.00015	0.00015	–	–	0.00004	0.00004	–	–	–							
						10.02973	41.91505	77.35619	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						13.03864	43.31819	74.69446	-0.90000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000
0.00000	0.00016	0.00016	0.00016	0.00016	–	–	0.00005	0.00005	–	–	–							
						16.04756	44.72134	72.03274	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000
0.00000	0.00026	0.00026	0.00026	0.00026	–	–	0.00008	0.00008	–	–	Hogging							
						19.05648	46.12448	69.37102	-0.90000	0.00000	0.00000	0.00013	0.00013	0.00000	0.00000	0.00013	0.00013	0.00000
0.00000	0.00027	0.00027	0.00027	0.00027	–	–	0.00008	0.00008	–	–	Hogging							
						22.06540	47.52652	66.70299	-0.90000	0.00000	0.00000	0.00009	0.00009	0.00000	0.00000	0.00009	0.00009	0.00000
0.00000	0.00017	0.00017	0.00017	0.00017	–	–	0.00005	0.00005	–	–	–							
						25.07431	48.93077	64.04757	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						28.08323	50.33391	61.38585	-0.90000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000
0.00000	0.00016	0.00016	0.00016	0.00016	–	–	0.00005	0.00005	–	–	–							
						31.09215	51.73706	58.72412	-0.90000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00027	0.00027	0.00027	0.00027	–	–	0.00008	0.00008	–	–	Sagging							
					3	5.01486	39.57647	81.79239	-0.90000	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000	0.00010	0.00010	0.00000
0.00000	0.00020	0.00020	0.00020	0.00020	–	–	0.00006	0.00006	–	–	Sagging							
						8.02378	40.97962	79.13067	-0.90000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000
0.00000	0.00011	0.00011	0.00011	0.00011	–	–	0.00003	0.00003	–	–	–							
						11.03270	42.38276	76.46895	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						14.04162	43.78591	73.80722	-0.90000	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000	0.00010	0.00010	0.00000
0.00000	0.00020	0.00020	0.00020	0.00020	–	–	0.00006	0.00006	–	–	Hogging							
						17.05053	45.18905	71.14550	-0.90000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00027	0.00027	0.00027	0.00027	–	–	0.00008	0.00008	–	–	Hogging							
						20.05945	46.59219	68.48378	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00025	0.00025	0.00025	0.00025	–	–	0.00007	0.00007	–	–	Hogging							
						23.06837	47.99534	65.82205	-0.90000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00012	0.00012	0.00012	0.00012	–	–	0.00004	0.00004	–	–	–							
						26.07729	49.39848	63.16033	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						29.08620	50.88583	60.49851	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000
0.00000	0.00021	0.00021	0.00021	0.00021	–	–	0.00006	0.00006	–	–	Sagging							
	3	TW Main-3	1		1	3.98757	55.23844	52.67152	-0.90000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00024	0.00024	0.00024	0.00024	–	–	0.00007	0.00007	–	–	Sagging							
					2	4.98446	55.76300	51.82380	-0.90000	0.00000	0.00000	0.00011	0.00011	0.00000	0.00000	0.00011	0.00011	0.00000
0.00000	0.00022	0.00022	0.00022	0.00022	–	–	0.00007	0.00007	–	–	Sagging							
	4	TW Main-4	1		1	3.98331	60.26896	44.07515	-0.90000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000
0.00000	0.00008	0.00008	0.00008	0.00008	–	–	0.00002	0.00002	–	–	–							
						7.96662	62.15213	40.56510	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						11.94993	64.03529	37.05504	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						15.93324	65.91845	33.54499	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	–	–	0.00001	0.00001	–	–	–							
						19.91656	67.80161	30.03494	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						23.89987	69.68478	26.52489	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00002	0.00002	0.00002	0.00002	–	–	0.00001	0.00001	–	–	–							
						27.88318	71.56794	23.01484	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						31.86649	73.45110	19.50479	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						35.84980	75.33427	15.99473	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						39.83311	77.21743	12.48468	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						43.81642	79.10059	8.97463	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						47.79973	80.98376	5.46458	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
					2	4.97914	60.73975	43.19764	-0.90000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000
0.00000	0.00007	0.00007	0.00007	0.00007	–	–	0.00002	0.00002	–	–	–							
						8.96245	62.62292	39.68758	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00001	0.00001	–	–	–							
						12.94576	64.50608	36.17753	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						16.92907	66.38924	32.66748	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00002	0.00002	0.00002	0.00002	–	–	0.00001	0.00001	–	–	–							
						20.91238	68.27241	29.15743	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	–	–	0.00000	0.00000	–	–	–							
						24.89569	70.15557	25.64738	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00002	0.00002	0.00002	0.00002	–	–	0.00001	0.00001	–	–	–							
						28.87900	72.03873	22.13732	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						32.86232	73.92189	18.62727	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						36.84563	75.80506	15.11722	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						40.82894	77.68822	11.60717	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						44.81225	79.57138	8.09712	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						48.79556	81.45455	4.58706	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00001	0.00001	–	–	–							
					3	5.97497	61.21054	42.32012	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						9.95828	63.09371	38.81007	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00001	0.00001	–	–	–							
						13.94159	64.97687	35.30002	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	–	–	0.00001	0.00001	–	–	–							
						17.92490	66.86003	31.78997	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00002	0.00002	0.00002	0.00002	–	–	0.00001	0.00001	–	–	–							
						21.90821	68.74320	28.27991	-0.90000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						25.89152	70.62636	24.76986	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	–	–	0.00001	0.00001	–	–	–							
						29.87483	72.50952	21.25981	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						33.85814	74.39269	17.74976	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance Check: from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Left Seg.:	Pullout: Vertical Left	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout: Unfactored	Factored	Rotation:		Rotation:	Sagging							
						37.84145	76.27585	14.23971	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						41.82477	78.15901	10.72966	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						45.80808	80.04217	7.21960	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
						49.79139	81.92534	3.70955	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00001	0.00001	–	–	–							
					4	6.97079	61.68134	41.44261	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						10.95411	63.56450	37.93256	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00001	0.00001	–	–	–							
						14.93742	65.44766	34.42251	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	–	–	0.00001	0.00001	–	–	–							
						18.92073	67.33082	30.91245	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						22.90404	69.21399	27.40240	-0.90000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						26.88735	71.09715	23.89235	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	–	–	0.00001	0.00001	–	–	–							
						30.87066	72.98031	20.38230	-0.90000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00001	0.00001	–	–	–							
						34.85397	74.86348	16.87225	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						38.83728	76.74664	13.36219	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						42.82059	78.62980	9.85214	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	–	–	0.00002	0.00002	–	–	–							
						46.80390	80.51296	6.34209	-0.90000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	–	–	0.00002	0.00002	–	–	–							
	5		TW Foul-1	1		1.00444	75.64700	113.52870	-6.00000	0.00000	0.00000	0.00023	0.00023	0.00000	0.00000	0.00023	0.00023	0.00000
0.00000	0.00046	0.00046	0.00046	0.00046	–	–	0.00001	0.00001	–	–	–							
						2.00887	74.83600	112.93610	-6.00000	0.00000	0.00000	0.00027	0.00027	0.00000	0.00000	0.00027	0.00027	0.00000
0.00000	0.00053	0.00053	0.00053	0.00053	–	–	0.00002	0.00002	–	–	–							
						3.01331	74.02501	112.34351	-6.00000	0.00000	0.00000	0.00031	0.00031	0.00000	0.00000	0.00031	0.00031	0.00000
0.00000	0.00062	0.00062	0.00062	0.00062	–	–	0.00002	0.00002	–	–	–							
						4.01774	73.21401	111.75091	-6.00000	0.00000	0.00000	0.00035	0.00035	0.00000	0.00000	0.00035	0.00035	0.00000
0.00000	0.00070	0.00070	0.00070	0.00070	–	–	0.00002	0.00002	–	–	–							
						5.02218	72.40301	111.15831	-6.00000	0.00000	0.00000	0.00040	0.00040	0.00000	0.00000	0.00040	0.00040	0.00000
0.00000	0.00080	0.00080	0.00080	0.00080	–	–	0.00003	0.00003	–	–	–							
						6.02661	71.59201	110.56571	-6.00000	0.00000	0.00000	0.00045	0.00045	0.00000	0.00000	0.00045	0.00045	0.00000
0.00000	0.00089	0.00089	0.00089	0.00089	–	–	0.00003	0.00003	–	–	–							
						7.03105	70.78101	109.97311	-6.00000	0.00000	0.00000	0.00050	0.00050	0.00000	0.00000	0.00050	0.00050	0.00000
0.00000	0.00099	0.00099	0.00099	0.00099	–	–	0.00003	0.00003	–	–	–							
						8.03548	69.97002	109.38052	-6.00000	0.00000	0.00000	0.00055	0.00055	0.00000	0.00000	0.00055	0.00055	0.00000
0.00000	0.00109	0.00109	0.00109	0.00109	–	–	0.00004	0.00004	–	–	–							
						9.03992	69.15902	108.78792	-6.00000	0.00000	0.00000	0.00059	0.00059	0.00000	0.00000	0.00059	0.00059	0.00000
0.00000	0.00119	0.00119	0.00119	0.00119	–	–	0.00004	0.00004	–	–	–							
						10.04435	68.34802	108.19532	-6.00000	0.00000	0.00000	0.00064	0.00064	0.00000	0.00000	0.00064	0.00064	0.00000
0.00000	0.00127	0.00127	0.00127	0.00127	–	–	0.00004	0.00004	–	–	–							
						11.04879	67.53702	107.60272	-6.00000	0.00000	0.00000	0.00067	0.00067	0.00000	0.00000	0.00067	0.00067	0.00000
0.00000	0.00135	0.00135	0.00135	0.00135	–	–	0.00004	0.00004	–	–	–							
						12.05322	66.72603	107.01013	-6.00000	0.00000	0.00000	0.00070	0.00070	0.00000	0.00000	0.00070	0.00070	0.00000
0.00000	0.00140	0.00140	0.00140	0.00140	–	–	0.00005	0.00005	–	–	–							
						13.05766	65.91503	106.41753	-6.00000	0.00000	0.00000	0.00071	0.00071	0.00000	0.00000	0.00071	0.00071	0.00000
0.00000	0.00143	0.00143	0.00143	0.00143	–	–	0.00005	0.00005	–	–	–							
						14.06209	65.10403	105.82493	-6.00000	0.00000	0.00000	0.00071	0.00071	0.00000	0.00000	0.00071	0.00071	0.00000
0.00000	0.00143	0.00143	0.00143	0.00143	–	–	0.00005	0.00005	–	–	–							
						15.06653	64.29303	105.23233	-6.00000	0.00000	0.00000	0.00069	0.00069	0.00000	0.00000	0.00069	0.00069	0.00000
0.00000	0.00138	0.00138	0.00138	0.00138	–	–	0.00004	0.00004	–	–	–							
						16.07096	63.48203	104.63973	-6.00000	0.00000	0.00000	0.00065	0.00065	0.00000	0.00000	0.00065	0.00065	0.00000
0.00000	0.00129	0.00129	0.00129	0.00129	–	–	0.00004	0.00004	–	–	–							
						17.07540	62.67104	104.04714	-6.00000	0.00000	0.00000	0.00057	0.00057	0.00000	0.00000	0.00057	0.00057	0.00000
0.00000	0.00115	0.00115	0.00115	0.00115	–	–	0.00004	0.00004	–	–	–							
						18.07983	61.86004	103.45454	-6.00000	0.00000	0.00000	0.00048	0.00048	0.00000	0.00000	0.00048	0.00048	0.00000
0.00000	0.00095	0.00095	0.00095	0.00095	–	–	0.00003	0.00003	–	–	–							
						19.08427	61.04904	102.86194	-6.00000	0.00000	0.00000	0.00035	0.00035	0.00000	0.00000	0.00035	0.00035	0.00000
0.00000	0.00070	0.00070	0.00070	0.00070	–	–	0.00002	0.00002	–	–	–							
						20.08870	60.23804	102.26934	-6.00000	0.00000	0.00000	0.00020	0.00020	0.00000	0.00000	0.00020	0.00020	0.00000
0.00000	0.00039	0.00039	0.00039	0.00039	–	–	0.00001	0.00001	–	–	–							
						21.09314	59.42704	101.67674	-6.00000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00004	0.00004	0.00004	0.00004	–	–	0.00000	0.00000	–	–	–							
						22.09757	58.61605	101.08415	-6.00000	0.00000	0.00000	0.00017	0.00017	0.00000	0.00000	0.00017	0.00017	0.00000
0.00000	0.00034	0.00034	0.00034	0.00034	–	–	0.00001	0.00001	–	–	–							
						23.10201	57.80505	100.49155	-6.00000	0.00000	0.00000	0.00037	0.00037	0.00000	0.00000	0.00037	0.00037	0.00000
0.00000	0.00074	0.00074	0.00074	0.00074	–	–	0.00002	0.00002	–	–	–							
						24.10644	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00058	0.00058	0.00000	0.00000	0.00058	0.00058	0.00000
0.00000	0.00115	0.00115	0.00115	0.00115	–	–	0.00004	0.00004	–	–	–							
						25.11088	56.18305	99.30635	-6.00000	0.00000	0.00000	0.00078	0.00078	0.00000	0.00000	0.00078	0.00078	0.00000
0.00000	0.00155	0.00155	0.00155	0.00155	–	–	0.00005	0.00005	–	–	–							
						26.11531	55.37206	98.71376	-6.00000	0.00000	0.00000	0.00097	0.00097	0.00000	0.00000	0.00097	0.00097	0.00000
0.00000	0.00194	0.00194	0.00194	0.00194	–	–	0.00006	0.00006	–	–	Hogging							
						27.11975	54.56606	98.12116	-6.00000	0.00000	0.00000	0.00114	0.00114	0.00000	0.00000	0.00114	0.00114	0.00000
0.00000	0.00228	0.00228	0.00228	0.00228	–	–	0.00007	0.00007	–	–	Hogging							
						28.12418	53.75006	97.52856	-6.00000	0.00000	0.00000	0.00129	0.00129	0.00000	0.00000	0.00129	0.00129	0.00000
0.00000	0.00258	0.00258	0.00258	0.00258	–	–	0.00008	0.00008	–	–	Hogging							
						29.12862	52.93906	96.93596	-6.00000	0.00000	0.00000	0.00141	0.00141	0.00000	0.00000	0.00141	0.00141	0.00000
0.00000	0.00282	0.00282	0.00282	0.00282	–	–	0.00009	0.00009	–	–	Hogging							
						30.13305	52.12806	96.34336	-6.00000	0.00000	0.00000	0.00149	0.00149	0.00000	0.00000	0.00149	0.00149	0.00000
0.00000	0.00299	0.00299	0.00299	0.00299	–	–	0.00010	0.00010	–	–	Hogging							
						31.13749	51.31707	95.75077	-6.00000	0.00000	0.00000	0.00153	0.00153	0.00000	0.00000	0.00153	0.00153	0.00000
0.00000	0.00307	0.00307	0.00307	0.00307	–	–	0.00010	0.00010	–	–	Hogging							
						32.14192	50.50607	95.15817	-6.00000	0.00000	0.00000	0.00153	0.00153	0.00000	0.00000	0.00153	0.00153	0.00000
0.00000	0.00305	0.00305	0.00305	0.00305	–	–	0.00010	0.00010	–	–	Hogging							
						33.14636	49.69507	94.56557	-6.00000	0.00000	0.00000	0.00147	0.00147	0.00000	0.00000	0.00147	0.00147	0.00000
0.00000	0.00294	0.00294	0.00294	0.00294	–	–	0.00010	0.00010	–	–	Hogging							
						34.15079	48.88407	93.97297	-6.00000	0.00000	0.00000	0.00136	0.00136	0.00000	0.00000	0.00136	0.00136	0.00000
0.00000	0.00272	0.00272	0.00272	0.00272	–	–	0.00009	0.00009	–	–	Hogging							
						35.15523	48.07307	93.38037	-6.00000	0.00000	0.00000	0.00120	0.00120	0.00000	0.00000	0.00120	0.00120	0.00000
0.00000	0.00240	0.00240	0.00240	0.00240	–	–	0.00008	0.00008	–	–	Hogging							
						36.15966	47.26208	92.78778	-6.00000	0.00000	0.00000	0.00099	0.00099	0.00000	0.00000	0.00099	0.00099	0.00000
0.00000	0.00199	0.00199	0.00199	0.00199	–	–	0.00006	0.00006	–	–	Hogging							
						37.16410	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00076	0.00076	0.00000	0.00000	0.00076	0.00076	0.00000
0.00000	0.00152	0.00152	0.00152	0.00152	–	–	0.00005	0.00005	–	–	–							
						38.16853	45.64008	91.60258	-6.00000	0.00000	0.00000	0.00050	0.00050	0.00000	0.00000	0.00050	0.00050	0.00000
0.00000	0.00101	0.00101	0.00101	0.00101	–	–	0.00003	0.00003	–	–	–							
						39.17297	44.82908	91.00998	-6.00000	0.00000	0.00000	0.00025	0.00025	0.00000	0.00000	0.00025	0.00025	0.00000
0.00000	0.00049	0.00049	0.00049	0.00049	–	–	0.00002	0.00002	–	–	–							
						40.17740	44.01809	90.41739	-6.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	–	–	0.00000	0.00000	–	–	–							
						41.18184	43.20709	89.82479	-6.00000	0.00000	0.00000	0.00022	0.00022	0.00000	0.00000	0.00022	0.00022	0.00000
0.00000	0.00043	0.00043	0.00043	0.00043	–	–	0.00001	0.00001	–	–	–							
						42.18627	42.39609	89.23219	-6.00000	0.00000	0.00000	0.00040	0.00040	0.00000	0.00000	0.00040	0.00040	0.00000
0.00000	0.00080	0.00080	0.00080	0.00080	–	–	0.00003	0.00003	–	–	–							
						43.19071	41.58509	88.63959	-6.00000	0.00000	0.00000	0.00055	0.00055	0.00000	0.00000	0.00055	0.00055	0.00000
0.00000	0.00109	0.00109	0.00109	0.00109	–	–	0.00004	0.00004	–	–	–							
						44.19514	40.77409	88.04699	-6.00000	0.00000	0.00000	0.00065	0.00065	0.00000	0.00000	0.00065	0.00065	0.00000
0.00000	0.00131	0.00131	0.00131	0.00131	–	–	0.00004	0.00004	–	–	–							
						45.19958	39.96310	87.45440	-6.00000	0.00000	0.00000	0.00072	0.00072	0.00000	0.00000	0.00072	0.00072	0.00000
0.00000	0.00145	0.00145	0.00145	0.00145	–	–	0.00005	0.00005	–	–	–							
	6		TW Foul-2	1		1.00474	38.81931	85.38557	-6.00000	0.00000	0.00000	0.00137	0.00137	0.00000	0.00000	0.00137	0.00137	0.00000
0.00000	0.00275	0.00275	0.00275	0.00275	–	–	0.00006	0.00006	–	–	Sagging							
						2.00947	39.29752	84.50193	-6.00000	0.00000	0.00000	0.00139	0.00139	0.00000	0.00000	0.00139	0.00139	0.00000
0.00000	0.00277	0.00277	0.00277	0.00277	–	–	0.00006	0.00006	–	–	Sagging							
						3.01421	39.77574	83.61830	-6.00000	0.00000	0.00000	0.00136	0.00136	0.00000	0.00000	0.00136	0.00136	0.00000
0.00000	0.00271	0.00271	0.00271	0.00271	–	–	0.00006	0.00006	–	–	Sagging							
						4.01894	40.25395	82.73467	-6.00000	0.00000	0.00000	0.00127	0.00127	0.00000	0.00000	0.00127	0.00127	0.00000
0.00000	0.00255	0.00255	0.00255	0.00255	–	–	0.00006	0.00006	–	–	Sagging							
						5.02368	40.73216	81.85104	-6.00000	0.00000	0.00000	0.00113	0.00113	0.00000	0.00000	0.00113	0.00113	0.00000
0.00000	0.00225	0.00225	0.00225	0.00225	–	–	0.00005	0.00005	–	–	–							
						6.02842	41.21037	80.96740	-6.00000	0.00000	0.00000	0.00091	0.00091	0.00000	0.00000	0.00091	0.00091	0.00000
0.00000	0.00182	0.00182	0.00182	0.00182	–	–	0.00004	0.00004	–	–	–							
						7.03315	41.68859	80.08377	-6.00000	0.00000	0.00000	0.00063	0.00063	0.00000	0.00000	0.00063	0.00063	0.00000
0.00000	0.00126	0.00126	0.00126	0.00126	–	–	0.00003	0.00003	–	–	–							
						8.03789	42.16680	79.20014	-6.00000	0.00000	0.00000	0.00028	0.00028	0.00000	0.00000	0.00028	0.00028	0.00000
0.00000	0.00056	0.00056	0.00056	0.00056	–	–	0.00001	0.00001	–	–	–							
						9.04262	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00023	0.00023	0.00023	0.00023	–	–	0.00001	0.00001	–	–	–							
						10.04736	43.12322	77.43287	-6.00000	0.00000	0.00000	0.00054	0.00054	0.00000	0.00000	0.00054	0.00054	0.00000
0.00000	0.00109	0.00109	0.00109	0.00109	–	–	0.00002	0.00002	–	–	–							
						11.05210	43.60144	76.54924	-6.00000	0.00000	0.00000	0.00098	0.00098	0.00000	0.00000	0.00098	0.00098	0.00000

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Sagging	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.00000	0.00196	0.00196	0.00196	0.00196	-	-	0.00004	0.00004	-	-	-							
						12.05683	44.07965	75.66560	-6.00000	0.00000	0.00000	0.00140	0.00140	0.00000	0.00000	0.00140	0.00140	0.00000
0.00000	0.00280	0.00280	0.00280	0.00280	-	-	0.00006	0.00006	-	-	Hogging							
						13.06157	44.55786	74.78197	-6.00000	0.00000	0.00000	0.00178	0.00178	0.00000	0.00000	0.00178	0.00178	0.00000
0.00000	0.00357	0.00357	0.00357	0.00357	-	-	0.00008	0.00008	-	-	Hogging							
						14.06630	45.03607	73.89834	-6.00000	0.00000	0.00000	0.00212	0.00212	0.00000	0.00000	0.00212	0.00212	0.00000
0.00000	0.00423	0.00423	0.00423	0.00423	-	-	0.00010	0.00010	-	-	Hogging							
						15.07104	45.51429	73.01471	-6.00000	0.00000	0.00000	0.00238	0.00238	0.00000	0.00000	0.00238	0.00238	0.00000
0.00000	0.00476	0.00476	0.00476	0.00476	-	-	0.00011	0.00011	-	-	Hogging							
						16.07578	45.99250	72.13107	-6.00000	0.00000	0.00000	0.00257	0.00257	0.00000	0.00000	0.00257	0.00257	0.00000
0.00000	0.00514	0.00514	0.00514	0.00514	-	-	0.00012	0.00012	-	-	Hogging							
						17.08051	46.47071	71.24744	-6.00000	0.00000	0.00000	0.00269	0.00269	0.00000	0.00000	0.00269	0.00269	0.00000
0.00000	0.00537	0.00537	0.00537	0.00537	-	-	0.00012	0.00012	-	-	Hogging							
						18.08525	46.94892	70.36381	-6.00000	0.00000	0.00000	0.00272	0.00272	0.00000	0.00000	0.00272	0.00272	0.00000
0.00000	0.00544	0.00544	0.00544	0.00544	-	-	0.00012	0.00012	-	-	Hogging							
						19.08998	47.42714	69.48017	-6.00000	0.00000	0.00000	0.00267	0.00267	0.00000	0.00000	0.00267	0.00267	0.00000
0.00000	0.00535	0.00535	0.00535	0.00535	-	-	0.00012	0.00012	-	-	Hogging							
						20.09472	47.90535	68.59654	-6.00000	0.00000	0.00000	0.00255	0.00255	0.00000	0.00000	0.00255	0.00255	0.00000
0.00000	0.00509	0.00509	0.00509	0.00509	-	-	0.00012	0.00012	-	-	Hogging							
						21.09945	48.38356	67.71291	-6.00000	0.00000	0.00000	0.00234	0.00234	0.00000	0.00000	0.00234	0.00234	0.00000
0.00000	0.00468	0.00468	0.00468	0.00468	-	-	0.00011	0.00011	-	-	Hogging							
						22.10419	48.86177	66.82927	-6.00000	0.00000	0.00000	0.00206	0.00206	0.00000	0.00000	0.00206	0.00206	0.00000
0.00000	0.00413	0.00413	0.00413	0.00413	-	-	0.00009	0.00009	-	-	Hogging							
						23.10893	49.33998	65.94564	-6.00000	0.00000	0.00000	0.00172	0.00172	0.00000	0.00000	0.00172	0.00172	0.00000
0.00000	0.00344	0.00344	0.00344	0.00344	-	-	0.00008	0.00008	-	-	Hogging							
						24.11366	49.81820	65.06201	-6.00000	0.00000	0.00000	0.00133	0.00133	0.00000	0.00000	0.00133	0.00133	0.00000
0.00000	0.00266	0.00266	0.00266	0.00266	-	-	0.00006	0.00006	-	-	Hogging							
						25.11840	50.29641	64.17838	-6.00000	0.00000	0.00000	0.00091	0.00091	0.00000	0.00000	0.00091	0.00091	0.00000
0.00000	0.00182	0.00182	0.00182	0.00182	-	-	0.00004	0.00004	-	-	-							
						26.12313	50.77462	63.29474	-6.00000	0.00000	0.00000	0.00049	0.00049	0.00000	0.00000	0.00049	0.00049	0.00000
0.00000	0.00097	0.00097	0.00097	0.00097	-	-	0.00002	0.00002	-	-	-							
						27.12787	51.25283	62.41111	-6.00000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000
0.00000	0.00017	0.00017	0.00017	0.00017	-	-	0.00000	0.00000	-	-	-							
						28.13261	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00028	0.00028	0.00000	0.00000	0.00028	0.00028	0.00000
0.00000	0.00055	0.00055	0.00055	0.00055	-	-	0.00001	0.00001	-	-	-							
						29.13734	52.20926	60.64384	-6.00000	0.00000	0.00000	0.00058	0.00058	0.00000	0.00000	0.00058	0.00058	0.00000
0.00000	0.00115	0.00115	0.00115	0.00115	-	-	0.00003	0.00003	-	-	-							
						30.14208	52.68747	59.76021	-6.00000	0.00000	0.00000	0.00081	0.00081	0.00000	0.00000	0.00081	0.00081	0.00000
0.00000	0.00162	0.00162	0.00162	0.00162	-	-	0.00004	0.00004	-	-	-							
						31.14681	53.16568	58.87658	-6.00000	0.00000	0.00000	0.00097	0.00097	0.00000	0.00000	0.00097	0.00097	0.00000
0.00000	0.00195	0.00195	0.00195	0.00195	-	-	0.00004	0.00004	-	-	-							
						32.15155	53.64390	57.99294	-6.00000	0.00000	0.00000	0.00107	0.00107	0.00000	0.00000	0.00107	0.00107	0.00000
0.00000	0.00215	0.00215	0.00215	0.00215	-	-	0.00005	0.00005	-	-	-							
						33.15629	54.12211	57.10931	-6.00000	0.00000	0.00000	0.00111	0.00111	0.00000	0.00000	0.00111	0.00111	0.00000
0.00000	0.00223	0.00223	0.00223	0.00223	-	-	0.00005	0.00005	-	-	-							
						34.16102	54.60032	56.22568	-6.00000	0.00000	0.00000	0.00111	0.00111	0.00000	0.00000	0.00111	0.00111	0.00000
0.00000	0.00221	0.00221	0.00221	0.00221	-	-	0.00005	0.00005	-	-	-							
						35.16576	55.07853	55.34205	-6.00000	0.00000	0.00000	0.00106	0.00106	0.00000	0.00000	0.00106	0.00106	0.00000
0.00000	0.00213	0.00213	0.00213	0.00213	-	-	0.00005	0.00005	-	-	-							
						36.17049	55.55675	54.45841	-6.00000	0.00000	0.00000	0.00099	0.00099	0.00000	0.00000	0.00099	0.00099	0.00000
0.00000	0.00199	0.00199	0.00199	0.00199	-	-	0.00004	0.00004	-	-	-							
						37.17523	56.03496	53.57478	-6.00000	0.00000	0.00000	0.00091	0.00091	0.00000	0.00000	0.00091	0.00091	0.00000
0.00000	0.00182	0.00182	0.00182	0.00182	-	-	0.00004	0.00004	-	-	-							
						38.17997	56.51317	52.69115	-6.00000	0.00000	0.00000	0.00081	0.00081	0.00000	0.00000	0.00081	0.00081	0.00000
0.00000	0.00162	0.00162	0.00162	0.00162	-	-	0.00004	0.00004	-	-	-							
						39.18470	56.99138	51.80751	-6.00000	0.00000	0.00000	0.00071	0.00071	0.00000	0.00000	0.00071	0.00071	0.00000
0.00000	0.00142	0.00142	0.00142	0.00142	-	-	0.00003	0.00003	-	-	-							
						40.18944	57.46959	50.92388	-6.00000	0.00000	0.00000	0.00061	0.00061	0.00000	0.00000	0.00061	0.00061	0.00000
0.00000	0.00122	0.00122	0.00122	0.00122	-	-	0.00003	0.00003	-	-	-							
						41.19417	57.94781	50.04025	-6.00000	0.00000	0.00000	0.00052	0.00052	0.00000	0.00000	0.00052	0.00052	0.00000
0.00000	0.00104	0.00104	0.00104	0.00104	-	-	0.00002	0.00002	-	-	-							
						42.19891	58.42602	49.15661	-6.00000	0.00000	0.00000	0.00043	0.00043	0.00000	0.00000	0.00043	0.00043	0.00000
0.00000	0.00086	0.00086	0.00086	0.00086	-	-	0.00002	0.00002	-	-	-							
						43.20365	58.90423	48.27298	-6.00000	0.00000	0.00000	0.00035	0.00035	0.00000	0.00000	0.00035	0.00035	0.00000
0.00000	0.00071	0.00071	0.00071	0.00071	-	-	0.00002	0.00002	-	-	-							
						44.20838	59.38244	47.38935	-6.00000	0.00000	0.00000	0.00029	0.00029	0.00000	0.00000	0.00029	0.00029	0.00000
0.00000	0.00058	0.00058	0.00058	0.00058	-	-	0.00001	0.00001	-	-	-							
						45.21312	59.86066	46.50572	-6.00000	0.00000	0.00000	0.00023	0.00023	0.00000	0.00000	0.00023	0.00023	0.00000
0.00000	0.00047	0.00047	0.00047	0.00047	-	-	0.00001	0.00001	-	-	-							
						46.21785	60.33887	45.62208	-6.00000	0.00000	0.00000	0.00019	0.00019	0.00000	0.00000	0.00019	0.00019	0.00000
0.00000	0.00039	0.00039	0.00039	0.00039	-	-	0.00001	0.00001	-	-	-							
						47.22259	60.81708	44.73845	-6.00000	0.00000	0.00000	0.00016	0.00016	0.00000	0.00000	0.00016	0.00016	0.00000
0.00000	0.00033	0.00033	0.00033	0.00033	-	-	0.00001	0.00001	-	-	-							
						48.22733	61.29529	43.85482	-6.00000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00029	0.00029	0.00029	0.00029	-	-	0.00001	0.00001	-	-	-							
						49.23206	61.77351	42.97118	-6.00000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00027	0.00027	0.00027	0.00027	-	-	0.00001	0.00001	-	-	-							
						50.23680	62.25172	42.08755	-6.00000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00028	0.00028	0.00028	0.00028	-	-	0.00001	0.00001	-	-	-							
						51.24153	62.72993	41.20392	-6.00000	0.00000	0.00000	0.00015	0.00015	0.00000	0.00000	0.00015	0.00015	0.00000
0.00000	0.00029	0.00029	0.00029	0.00029	-	-	0.00001	0.00001	-	-	-							
						52.24627	63.20814	40.32028	-6.00000	0.00000	0.00000	0.00016	0.00016	0.00000	0.00000	0.00016	0.00016	0.00000
0.00000	0.00032	0.00032	0.00032	0.00032	-	-	0.00001	0.00001	-	-	-							
						53.25101	63.68636	39.43665	-6.00000	0.00000	0.00000	0.00018	0.00018	0.00000	0.00000	0.00018	0.00018	0.00000
0.00000	0.00036	0.00036	0.00036	0.00036	-	-	0.00001	0.00001	-	-	-							
						54.25574	64.16457	38.55302	-6.00000	0.00000	0.00000	0.00020	0.00020	0.00000	0.00000	0.00020	0.00020	0.00000
0.00000	0.00040	0.00040	0.00040	0.00040	-	-	0.00001	0.00001	-	-	-							
						55.26048	64.64278	37.66939	-6.00000	0.00000	0.00000	0.00022	0.00022	0.00000	0.00000	0.00022	0.00022	0.00000
0.00000	0.00044	0.00044	0.00044	0.00044	-	-	0.00001	0.00001	-	-	-							
						56.26521	65.12099	36.78575	-6.00000	0.00000	0.00000	0.00024	0.00024	0.00000	0.00000	0.00024	0.00024	0.00000
0.00000	0.00047	0.00047	0.00047	0.00047	-	-	0.00001	0.00001	-	-	-							
						57.26995	65.59921	35.90212	-6.00000	0.00000	0.00000	0.00025	0.00025	0.00000	0.00000	0.00025	0.00025	0.00000
0.00000	0.00050	0.00050	0.00050	0.00050	-	-	0.00001	0.00001	-	-	-							
						58.27469	66.07742	35.01849	-6.00000	0.00000	0.00000	0.00026	0.00026	0.00000	0.00000	0.00026	0.00026	0.00000
0.00000	0.00053	0.00053	0.00053	0.00053	-	-	0.00001	0.00001	-	-	-							
						59.27942	66.55563	34.13485	-6.00000	0.00000	0.00000	0.00027	0.00027	0.00000	0.00000	0.00027	0.00027	0.00000
0.00000	0.00054	0.00054	0.00054	0.00054	-	-	0.00001	0.00001	-	-	-							
						60.28416	67.03384	33.25122	-6.00000	0.00000	0.00000	0.00027	0.00027	0.00000	0.00000	0.00027	0.00027	0.00000
0.00000	0.00054	0.00054	0.00054	0.00054	-	-	0.00001	0.00001	-	-	-							
						61.28889	67.51205	32.36759	-6.00000	0.00000	0.00000	0.00027	0.00027	0.00000	0.00000	0.00027	0.00027	0.00000
0.00000	0.00054	0.00054	0.00054	0.00054	-	-	0.00001	0.00001	-	-	-							
						62.29363	67.99027	31.48395	-6.00000	0.00000	0.00000	0.00026	0.00026	0.00000	0.00000	0.00026	0.00026	0.00000
0.00000	0.00052	0.00052	0.00052	0.00052	-	-	0.00001	0.00001	-	-	-							
						63.29836	68.46848	30.60032	-6.00000	0.00000	0.00000	0.00025	0.00025	0.00000	0.00000	0.00025	0.00025	0.00000
0.00000	0.00050	0.00050	0.00050	0.00050	-	-	0.00001	0.00001	-	-	-							
						64.30310	68.94669	29.71669	-6.00000	0.00000	0.00000	0.00024	0.00024	0.00000	0.00000	0.00024	0.00024	0.00000
0.00000	0.00047	0.00047	0.00047	0.00047	-	-	0.00001	0.00001	-	-	-							
						65.30784	69.42490	28.83306	-6.00000	0.00000	0.00000	0.00022	0.00022	0.00000	0.00000	0.00022	0.00022	0.00000
0.00000	0.00044	0.00044	0.00044	0.00044	-	-	0.00001	0.00001	-	-	-							
						66.31257	69.90312	27.94942	-6.00000	0.00000	0.00000	0.00020	0.00020	0.00000	0.00000	0.00020	0.00020	0.00000
0.00000	0.00040	0.00040	0.00040	0.00040	-	-	0.00001	0.00001	-	-	-							
						67.31731	70.38133	27.06579	-6.00000	0.00000	0.00000	0.00018	0.00018	0.00000	0.00000	0.00018	0.00018	0.00000
0.00000	0.00036	0.00036	0.00036	0.00036	-	-	0.00001	0.00001	-	-	-							
						68.32204	70.85954	26.18216	-6.00000	0.00000	0.00000	0.00016	0.00016	0.00000	0.00000	0.00016	0.00016	0.00000
0.00000	0.00032	0.00032	0.00032	0.00032	-	-	0.00001	0.00001	-	-	-							
						69.32678	71.33775	25.29852	-6.00000	0.00000	0.00000	0.00014	0.00014	0.00000	0.00000	0.00014	0.00014	0.00000
0.00000	0.00027	0.00027	0.00027	0.00027	-	-	0.00001	0.00001	-	-	-							
						70.33152	71.81597	24.41489	-6.00000	0.00000	0.00000	0.00012	0.00012	0.00000	0.00000	0.00012	0.00012	0.00000
0.00000	0.00023	0.00023	0.00023	0.00023	-	-	0.00001	0.00001	-	-	-							
						71.33625	72.29418	23.53126	-6.00000	0.00000	0.00000	0.00010	0.00010	0.00000	0.00000	0.00010	0.00010	0.00000
0.00000	0.00019	0.00019	0.00019	0.00019	-	-	0.00000	0.00000	-	-	-							
						72.34099	72.77239	22.64762	-6.00000	0.00000	0.00000	0.00008	0.00008	0.00000	0.00000	0.00008	0.00008	0.00000
0.00000	0.00015	0.00015	0.00015	0.00015	-	-	0.00000	0.00000	-	-	-							
						73.34572	73.25060	21.76399	-6.00000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00012	0.00012	0.00012	0.00012	-	-	0.00000	0.00000	-	-	-							
						74.35046	73.72882	20.88036	-6.00000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000
0.00000	0.00008	0.00008	0.00008	0.00008	-	-	0.00000	0.00000	-	-	-							
						75.35520	74.20703	19.99673	-6.00000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	-	-	0.00000	0.00000	-	-	-							
						76.35993	74.68524	19.11309	-6.00000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00002	0.00002	0.00002	0.00002	-	-	0.00000	0.00000	-	-	-							
						77.36467	75.16345	18.22946	-6.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000	-	-	0.00000	0.00000	-	-	-							
						78.36940	75.64166	17.34583	-6.00000	0.00000	0.00000	0.00001	0.00001	0.00000	0.00000	0.00001	0.00001	0.00000
0.00000	0.00003	0.00003	0.00003	0.00003	-	-	0.00000	0.00000	-	-	-							
						79.37414	76.11988	16.46219	-6.00000	0.00000	0.00000	0.00002	0.00002	0.00000	0.00000	0.00002	0.00002	0.00000
0.00000	0.00005	0.00005	0.00005	0.00005	-	-	0.00000	0.00000	-	-	-							
						80.37888	76.59809	15.57856	-6.00000	0.00000	0.00000	0.00003	0.00003	0.00000	0.00000	0.00003	0.00003	0.00000
0.00000	0.00006	0.00006	0.00006	0.00006	-	-	0.00000	0.00000	-	-	-							
						81.38361	77.07630	14.69493	-6.00000	0.00000	0.00000	0.00004	0.00004	0.00000	0.00000	0.00004	0.00004	0.00000
0.00000	0.00008	0.00008	0.00008	0.00008	-	-	0.00000	0.00000	-	-	-							

Stage: Total:	Stage: Name Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Sagging	Pullout: Left	Pullout: Left Seg.:	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
						82.38835	77.55451	13.81129	-6.00000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000
0.00000	0.00009	0.00009	0.00009	0.00009	–	–	0.00000	0.00000	–	–	–							
						83.39308	78.03273	12.92766	-6.00000	0.00000	0.00000	0.00005	0.00005	0.00000	0.00000	0.00005	0.00005	0.00000
0.00000	0.00010	0.00010	0.00010	0.00010	–	–	0.00000	0.00000	–	–	–							
						84.39782	78.51094	12.04403	-6.00000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00011	0.00011	0.00011	0.00011	–	–	0.00000	0.00000	–	–	–							
						85.40256	78.98915	11.16040	-6.00000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00012	0.00012	0.00012	0.00012	–	–	0.00000	0.00000	–	–	–							
						86.40729	79.46736	10.27676	-6.00000	0.00000	0.00000	0.00006	0.00006	0.00000	0.00000	0.00006	0.00006	0.00000
0.00000	0.00013	0.00013	0.00013	0.00013	–	–	0.00000	0.00000	–	–	–							
						87.41203	79.94558	9.39313	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00013	0.00013	0.00013	0.00013	–	–	0.00000	0.00000	–	–	–							
						88.41676	80.42379	8.50950	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00013	0.00013	0.00013	0.00013	–	–	0.00000	0.00000	–	–	–							
						89.42150	80.90200	7.62586	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						90.42624	81.38021	6.74223	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						91.43097	81.85843	5.85860	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						92.43571	82.33664	4.97496	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						93.44044	82.81485	4.09133	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						94.44518	83.29306	3.20770	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00014	0.00014	0.00014	0.00014	–	–	0.00000	0.00000	–	–	–							
						95.44992	83.77128	2.32407	-6.00000	0.00000	0.00000	0.00007	0.00007	0.00000	0.00000	0.00007	0.00007	0.00000
0.00000	0.00013	0.00013	0.00013	0.00013	–	–	0.00000	0.00000	–	–	–							

Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility Damage Results - Strains

Stage: Compn.: Ref.	Stage: Name Check: Total:	Specific Rad. of Utility: Curv. Ref.	Specific Rad. of Utility: Name Curv.:	Sub-utility Check: Name Rad. of Curv.:	Distance Check: Peak Flex. from Tens. Strain start of Orientn. Angle utility	x	y	z	Ax. Strain: Unfactored	Ax. Strain: Factored	Flexural: Tension: Unfactored	Flexural: Tension: Factored	Flexural: Compn.: Unfactored	Flexural: Compn.: Factored	Tension: Total: Unfactored	Tension: Total: Factored	Check: Tension	Compn.: Total: Unfactored
Threshold	Limit	(w.r.t. Global Axis)																
[με]		[m]			[Deg]	[m]	[m]	[m]	[με]	[με]	[με]	[με]	[με]	[με]	[με]	[με]		[με]
0	Base Model	1	TW Main-1	1		1.00283	75.92703	113.14854	-0.90000	8.5695E-6	1.7139E-6	0.0060586	0.0060586	-0.0060586	-0.0060586	0.00607	0.00606	OK	-0.00606 -
0.00606	OK	1.5680E+7	OK	OK	180.00000														
						2.00566	75.10385	112.57577	-0.90000	8.2516E-6	1.6503E-6	0.0086258	0.0086258	-0.0086258	-0.0086258	0.00863	0.00863	OK	-0.00863 -
0.00863	OK	1.1013E+7	OK	OK	180.00000														
						3.00850	74.28068	112.00301	-0.90000	7.8269E-6	1.5654E-6	0.011437	0.011437	-0.011437	-0.011437	0.01145	0.01144	OK	-0.01144 -
0.01144	OK	8.3062E+6	OK	OK	180.00000														
						4.01133	73.45751	111.43024	-0.90000	7.2950E-6	1.4590E-6	0.014482	0.014482	-0.014482	-0.014482	0.01449	0.01448	OK	-0.01448 -
0.01448	OK	6.5600E+6	OK	OK	180.00000														
						5.01416	72.63434	110.85748	-0.90000	6.6598E-6	1.3320E-6	0.017737	0.017737	-0.017737	-0.017737	0.01774	0.01774	OK	-0.01774 -
0.01774	OK	5.3560E+6	OK	OK	180.00000														
						6.01699	71.81116	110.28471	-0.90000	5.9316E-6	1.1863E-6	0.021168	0.021168	-0.021168	-0.021168	0.02117	0.02117	OK	-0.02117 -
0.02117	OK	4.4879E+6	OK	OK	180.00000														
						7.01983	70.98799	109.71195	-0.90000	5.1267E-6	1.0253E-6	0.024723	0.024723	-0.024723	-0.024723	0.02473	0.02472	OK	-0.02472 -
0.02472	OK	3.8426E+6	OK	OK	180.00000														
						8.02266	70.16482	109.13918	-0.90000	4.2694E-6	853.87E-9	0.028330	0.028330	-0.028330	-0.028330	0.02833	0.02833	OK	-0.02833 -
0.02833	OK	3.3533E+6	OK	OK	180.00000														
						9.02549	69.34164	108.56642	-0.90000	3.3908E-6	678.16E-9	0.031897	0.031897	-0.031897	-0.031897	0.03190	0.03190	OK	-0.03190 -
0.03190	OK	2.9784E+6	OK	OK	180.00000														
						10.02832	68.51847	107.99365	-0.90000	2.5301E-6	506.03E-9	0.035306	0.035306	-0.035306	-0.035306	0.03531	0.03531	OK	-0.03531 -
0.03531	OK	2.6908E+6	OK	OK	180.00000														
						11.03116	67.69530	107.42089	-0.90000	1.7306E-6	346.12E-9	0.038416	0.038416	-0.038416	-0.038416	0.03842	0.03842	OK	-0.03842 -
0.03842	OK	2.4729E+6	OK	OK	180.00000														
						12.03399	66.87213	106.84812	-0.90000	1.0380E-6	207.60E-9	0.041062	0.041062	-0.041062	-0.041062	0.04106	0.04106	OK	-0.04106 -
0.04106	OK	2.3136E+6	OK	OK	180.00000														
						13.03682	66.04895	106.27536	-0.90000	496.86E-9	99.372E-9	0.043061	0.043061	-0.043061	-0.043061	0.04306	0.04306	OK	-0.04306 -
0.04306	OK	2.2062E+6	OK	OK	180.00000														
						14.03965	65.22578	105.70260	-0.90000	143.70E-9	28.740E-9	0.044219	0.044219	-0.044219	-0.044219	0.04422	0.04422	OK	-0.04422 -
0.04422	OK	2.1484E+6	OK	OK	180.00000														
						15.04249	64.40261	105.12983	-0.90000	2.2142E-9	442.83E-12	0.044348	0.044348	-0.044348	-0.044348	0.04435	0.04435	OK	-0.04435 -
0.04435	OK	2.1421E+6	OK	OK	180.00000														
						16.04532	63.57943	104.55707	-0.90000	77.496E-9	15.499E-9	0.043280	0.043280	-0.043280	-0.043280	0.04328	0.04328	OK	-0.04328 -
0.04328	OK	2.1950E+6	OK	OK	180.00000														
						17.04815	62.75626	103.98430	-0.90000	350.95E-9	70.189E-9	0.040889	0.040889	-0.040889	-0.040889	0.04089	0.04089	OK	-0.04089 -
0.04089	OK	2.3233E+6	OK	OK	180.00000														
						18.05098	61.93309	103.41154	-0.90000	780.94E-9	156.19E-9	0.037116	0.037116	-0.037116	-0.037116	0.03712	0.03712	OK	-0.03712 -
0.03712	OK	2.5595E+6	OK	OK	180.00000														
						19.05382	61.10991	102.83877	-0.90000	1.3033E-6	260.65E-9	0.031983	0.031983	-0.031983	-0.031983	0.03198	0.03198	OK	-0.03198 -
0.03198	OK	2.9703E+6	OK	OK	180.00000														
						20.05665	60.28674	102.26601	-0.90000	1.8400E-6	368.00E-9	0.025604	0.025604	-0.025604	-0.025604	0.02561	0.02560	OK	-0.02560 -
0.02560	OK	3.7104E+6	OK	OK	180.00000														
						21.05948	59.46357	101.69324	-0.90000	2.3100E-6	462.01E-9	0.018183	0.018183	-0.018183	-0.018183	0.01819	0.01818	OK	-0.01818 -
0.01818	OK	5.2247E+6	OK	OK	180.00000														
						22.06231	58.64040	101.12048	-0.90000	2.6408E-6	528.17E-9	0.0099991	0.0099991	-0.0099991	-0.0099991	0.01000	0.01000	OK	-0.01000 -
0.01000	OK	9.5009E+6	OK	OK	180.00000														
						23.06515	57.81722	100.54771	-0.90000	2.7808E-6	556.16E-9	0.0013796	0.0013796	-0.0013796	-0.0013796	0.00138	0.00138	OK	-0.00138 -
0.00138	OK	6.8861E+7	OK	OK	180.00000														
						24.06798	56.99405	99.97495	-0.90000	2.7070E-6	541.41E-9	0.0073281	0.0073281	-0.0073281	-0.0073281	0.00733	0.00733	OK	-0.00733 -
0.00733	OK	1.2964E+7	OK	OK	0.00000														
						25.07081	56.17088	99.40219	-0.90000	2.4307E-6	486.14E-9	0.015782	0.015782	-0.015782	-0.015782	0.01578	0.01578	OK	-0.01578 -
0.01578	OK	6.0195E+6	OK	OK	0.00000														
						26.07364	55.34770	98.82942	-0.90000	1.9934E-6	398.68E-9	0.023662	0.023662	-0.023662	-0.023662	0.02366	0.02366	OK	-0.02366 -
0.02366	OK	4.0148E+6	OK	OK	0.00000														
						27.07648	54.52453	98.25666	-0.90000	1.4620E-6	292.40E-9	0.030676	0.030676	-0.030676	-0.030676	0.03068	0.03068	OK	-0.03068 -
0.03068	OK	3.0969E+6	OK	OK	0.00000														
						28.07931	53.70136	97.68389	-0.90000	918.22E-9	183.64E-9	0.036551	0.036551	-0.036551	-0.036551	0.03655	0.03655	OK	-0.03655 -
0.03655	OK	2.5991E+6	OK	OK	0.00000														
						29.08214	52.87819	97.11113	-0.90000	447.04E-9	89.408E-9	0.041032	0.041032	-0.041032	-0.041032	0.04103	0.04103	OK	-0.04103 -
0.04103	OK	2.3153E+6	OK	OK	0.00000														
						30.08497	52.05501	96.53836	-0.90000	123.77E-9	24.754E-9	0.043870	0.043870	-0.043870	-0.043870	0.04387	0.04387	OK	-0.04387 -
0.04387	OK	2.1655E+6	OK	OK	0.00000														
						31.08781	51.23184	95.96560	-0.90000	442.83E-12	88.567E-12	0.044834	0.044834	-0.044834	-0.044834	0.04483	0.04483	OK	-0.04483 -
0.04483	OK	2.1189E+6	OK	OK	0.00000														
						32.09064	50.40867	95.39283	-0.90000	95.874E-9	19.175E-9	0.043728	0.043728	-0.043728	-0.043728	0.04373	0.04373	OK	-0.04373 -
0.04373	OK	2.1725E+6	OK	OK	0.00000														
						33.09347	49.58549	94.82007	-0.90000	389.25E-9	77.850E-9	0.040431	0.040431	-0.040431	-0.040431	0.04043	0.04043	OK	-0.04043 -
0.04043	OK	2.3497E+6	OK	OK	0.00000														
						34.09630	48.76232	94.24730	-0.90000	819.47E-9	163.89E-9	0.034946	0.034946	-0.034946	-0.034946	0.03495	0.03495	OK	-0.03495 -
0.03495	OK	2.7185E+6	OK	OK	0.00000														
						35.09914	47.93915	93.67454	-0.90000	1.2951E-6	259.01E-9	0.027443	0.027443	-0.027443	-0.027443	0.02744	0.02744	OK	-0.02744 -
0.02744	OK	3.4618E+6	OK	OK	0.00000														
						36.10197	47.11598	93.10178	-0.90000	1.7127E-6	342.53E-9	0.018289	0.018289	-0.018289	-0.018289	0.01829	0.01829	OK	-0.01829 -
0.01829	OK	5.1944E+6	OK	OK	0.00000														
						37.10480	46.29280	92.52901	-0.90000	1.9795E-6	395.89E-9	0.0080321	0.0080321	-0.0080321	-0.0080321	0.00803	0.00803	OK	-0.00803 -
0.00803	OK	1.1827E+7	OK	OK	0.00000														
						38.10763	45.46963	91.95625	-0.90000	2.0364E-6	407.28E-9	0.0026540	0.0026540	-0.0026540	-0.0026540	0.00266	0.00265	OK	-0.00265 -
0.00265	OK	3.5795E+7	OK	OK	180.00000														
						39.11047	44.64646	91.38348	-0.90000	1.8725E-6	374.51E-9	0.013061	0.013061	-0.013061	-0.013061	0.01306	0.01306	OK	-0.01306 -
0.01306	OK	7.2734E+6	OK	OK	180.00000														
						40.11330	43.82328	90.81072	-0.90000	1.5265E-6	305.29E-9	0.022546	0.022546	-0.022546	-0.022546	0.02255	0.02255	OK	-0.02255 -
0.02255	OK	4.2137E+6	OK	OK	180.00000														
						41.11613	43.00011	90.23795	-0.90000	1.0754E-6	215.08E-9	0.030608	0.030608	-0.030608	-0.030608	0.03061	0.03061	OK	-0.03061 -
0.03061	OK	3.1037E+6	OK	OK	180.00000														
						42.11896	42.17694	89.66519	-0.90000	616.20E-9	123.24E-9	0.036940	0.036940	-0.036940	-0.036940	0.03694	0.03694	OK	-0.03694 -
0.03694	OK	2.5717E+6	OK	OK	180.00000														
						43.12180	41.35376	89.09242	-0.90000	242.67E-9	48.535E-9	0.041422	0.041422	-0.041422	-0.041422	0.04142	0.04142	OK	-0.04142 -
0.04142	OK	2.2935E+6	OK	OK	180.00000														
						44.12463	40.53059	88.51966	-0.90000	29.891E-9	5.9783E-9	0.044097	0.044097	-0.044097	-0.044097	0.04410	0.04410	OK	-0.04410 -
0.04410	OK	2.1543E+6	OK	OK	180.00000														
						45.12746	39.70742	87.94689	-0.90000	25.463E-9	5.0926E-9	0.045128	0.045128	-0.045128	-0.045128	0.04513	0.04513	OK	-0.04513 -
0.04513	OK	2.1051E+6	OK	OK	180.00000														
						46.13029	38.88425	87.37413	-0.90000	245.11E-9	49.022E-9	0.044747	0.044747	-0.044747	-0.044747	0.04475	0.04475	OK	-0.04475 -
0.04475	OK	2.1231E+6	OK	OK	180.00000														
		2	TW Main-2	1		2.00595	38.17333	84.45412	-0.90000	1.8798E-6	375.96E-9	0.037427	0.037427	-0.037427	-0.037427	0.03743	0.03743	OK	-0.03743 -
0.03743	OK	2.5383E+6	OK	OK	180.00000														
						3.00892	38.64104	83.56688	-0.90000	1.1873E-6	237.46E-9	0.037996	0.037996	-0.037996	-0.037996	0.03800	0.03800	OK	-0.03800 -

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
0.03800	OK	2.5002E+6	OK	OK	180.00000	4.01189	39.10876	82.67964	-0.90000	653.75E-9	130.75E-9	0.037281	0.037281	-0.037281	-0.037281	0.03728	0.03728	OK	-0.03728
0.03728	OK	2.5482E+6	OK	OK	180.00000	5.01486	39.57647	81.79239	-0.90000	290.02E-9	58.003E-9	0.035074	0.035074	-0.035074	-0.035074	0.03507	0.03507	OK	-0.03507
0.03507	OK	2.7086E+6	OK	OK	180.00000	6.01784	40.04419	80.90515	-0.90000	84.791E-9	16.958E-9	0.031239	0.031239	-0.031239	-0.031239	0.03124	0.03124	OK	-0.03124
0.03124	OK	3.0411E+6	OK	OK	180.00000	7.02081	40.51190	80.01791	-0.90000	6.1988E-9	1.2398E-9	0.025745	0.025745	-0.025745	-0.025745	0.02575	0.02575	OK	-0.02575
0.02575	OK	3.6900E+6	OK	OK	180.00000	8.02378	40.97962	79.13067	-0.90000	7.7485E-9	1.5497E-9	0.018701	0.018701	-0.018701	-0.018701	0.01870	0.01870	OK	-0.01870
0.01870	OK	5.0800E+6	OK	OK	180.00000	9.02675	41.44733	78.24343	-0.90000	38.521E-9	7.7043E-9	0.010367	0.010367	-0.010367	-0.010367	0.01037	0.01037	OK	-0.01037
0.01037	OK	9.1640E+6	OK	OK	180.00000	10.02973	41.91505	77.35619	-0.90000	57.339E-9	11.468E-9	0.0011465	0.0011465	-0.0011465	-0.0011465	0.00115	0.00115	OK	-0.00115
0.00115	OK	8.2862E+7	OK	OK	180.00000	11.03270	42.38276	76.46895	-0.90000	44.941E-9	8.9883E-9	0.0084507	0.0084507	-0.0084507	-0.0084507	0.00845	0.00845	OK	-0.00845
0.00845	OK	1.1242E+7	OK	OK	0.00000	12.03567	42.85048	75.58171	-0.90000	13.062E-9	2.6124E-9	0.017871	0.017871	-0.017871	-0.017871	0.01787	0.01787	OK	-0.01787
0.01787	OK	5.3158E+6	OK	OK	0.00000	13.03864	43.31819	74.69446	-0.90000	2.8780E-9	575.60E-12	0.026583	0.026583	-0.026583	-0.026583	0.02658	0.02658	OK	-0.02658
0.02658	OK	3.5737E+6	OK	OK	0.00000	14.04162	43.78591	73.80722	-0.90000	77.928E-9	15.586E-9	0.034131	0.034131	-0.034131	-0.034131	0.03413	0.03413	OK	-0.03413
0.03413	OK	2.7834E+6	OK	OK	0.00000	15.04459	44.25362	72.91998	-0.90000	309.50E-9	61.900E-9	0.040166	0.040166	-0.040166	-0.040166	0.04017	0.04017	OK	-0.04017
0.04017	OK	2.3652E+6	OK	OK	0.00000	16.04756	44.72134	72.03274	-0.90000	760.68E-9	152.14E-9	0.044456	0.044456	-0.044456	-0.044456	0.04446	0.04446	OK	-0.04446
0.04446	OK	2.1370E+6	OK	OK	0.00000	17.05053	45.18905	71.14550	-0.90000	1.4713E-6	294.27E-9	0.046861	0.046861	-0.046861	-0.046861	0.04686	0.04686	OK	-0.04686
0.04686	OK	2.0273E+6	OK	OK	0.00000	18.05351	45.65676	70.25826	-0.90000	2.4479E-6	489.57E-9	0.047316	0.047316	-0.047316	-0.047316	0.04732	0.04732	OK	-0.04732
0.04732	OK	2.0078E+6	OK	OK	0.00000	19.05648	46.12448	69.37102	-0.90000	3.6562E-6	731.24E-9	0.045809	0.045809	-0.045809	-0.045809	0.04581	0.04581	OK	-0.04581
0.04581	OK	2.0738E+6	OK	OK	0.00000	20.05945	46.59219	68.48378	-0.90000	5.0233E-6	1.0047E-6	0.042366	0.042366	-0.042366	-0.042366	0.04237	0.04237	OK	-0.04237
0.04237	OK	2.2424E+6	OK	OK	0.00000	21.06242	47.05991	67.59654	-0.90000	6.4401E-6	1.2880E-6	0.037065	0.037065	-0.037065	-0.037065	0.03707	0.03707	OK	-0.03706
0.03706	OK	2.5631E+6	OK	OK	0.00000	22.06540	47.52762	66.70929	-0.90000	7.7744E-6	1.5549E-6	0.030048	0.030048	-0.030048	-0.030048	0.03006	0.03005	OK	-0.03005
0.03005	OK	3.1616E+6	OK	OK	0.00000	23.06837	47.99534	65.82205	-0.90000	8.8856E-6	1.7771E-6	0.021550	0.021550	-0.021550	-0.021550	0.02156	0.02155	OK	-0.02155
0.02155	OK	4.4083E+6	OK	OK	0.00000	24.07134	48.46305	64.93481	-0.90000	9.6458E-6	1.9292E-6	0.011915	0.011915	-0.011915	-0.011915	0.01192	0.01192	OK	-0.01192
0.01192	OK	7.9731E+6	OK	OK	0.00000	25.07431	48.93077	64.04757	-0.90000	9.9615E-6	1.9923E-6	0.0015913	0.0015913	-0.0015913	-0.0015913	0.00160	0.00159	OK	-0.00159
0.00159	OK	5.9700E+7	OK	OK	0.00000	26.07729	49.39848	63.16033	-0.90000	9.7899E-6	1.9580E-6	0.0088932	0.0088932	-0.0088932	-0.0088932	0.00890	0.00890	OK	-0.00889
0.00889	OK	1.0682E+7	OK	OK	180.00000	27.08026	49.86620	62.27309	-0.90000	9.1497E-6	1.8299E-6	0.018985	0.018985	-0.018985	-0.018985	0.01899	0.01899	OK	-0.01898
0.01898	OK	5.0040E+6	OK	OK	180.00000	28.08323	50.33391	61.38585	-0.90000	8.1160E-6	1.6232E-6	0.028169	0.028169	-0.028169	-0.028169	0.02818	0.02817	OK	-0.02817
0.02817	OK	3.3725E+6	OK	OK	180.00000	29.08620	50.80163	60.49861	-0.90000	6.8079E-6	1.3616E-6	0.036032	0.036032	-0.036032	-0.036032	0.03604	0.03603	OK	-0.03603
0.03603	OK	2.6365E+6	OK	OK	180.00000	30.08918	51.26934	59.61136	-0.90000	5.3675E-6	1.0735E-6	0.042302	0.042302	-0.042302	-0.042302	0.04231	0.04230	OK	-0.04230
0.04230	OK	2.2457E+6	OK	OK	180.00000	31.09215	51.73706	58.72412	-0.90000	3.9363E-6	787.25E-9	0.046860	0.046860	-0.046860	-0.046860	0.04686	0.04686	OK	-0.04686
0.04686	OK	2.0273E+6	OK	OK	180.00000	32.09512	52.20477	57.83688	-0.90000	2.6356E-6	527.12E-9	0.049728	0.049728	-0.049728	-0.049728	0.04973	0.04973	OK	-0.04973
0.04973	OK	1.9104E+6	OK	OK	180.00000	33.09809	52.67241	56.94964	-0.90000	1.7722E-6	354.44E-9	0.044303	0.044303	-0.044303	-0.044303	0.04430	0.04430	OK	-0.04430
0.04430	OK	2.1443E+6	OK	OK	180.00000	34.10106	53.14013	56.06240	-0.90000	1.1815E-6	236.30E-9	0.043592	0.043592	-0.043592	-0.043592	0.04359	0.04359	OK	-0.04359
0.04359	OK	2.1793E+6	OK	OK	180.00000	35.10403	53.60784	55.17516	-0.90000	1.0135E-6	202.70E-9	0.042066	0.042066	-0.042066	-0.042066	0.04207	0.04207	OK	-0.04207
0.04207	OK	2.2583E+6	OK	OK	180.00000	36.10701	54.07556	54.28792	-0.90000	1.0135E-6	202.70E-9	0.039908	0.039908	-0.039908	-0.039908	0.03991	0.03991	OK	-0.03991
0.03991	OK	2.3805E+6	OK	OK	180.00000	37.10998	54.54327	53.40068	-0.90000	1.1815E-6	236.30E-9	0.037288	0.037288	-0.037288	-0.037288	0.03729	0.03729	OK	-0.03729
0.03729	OK	2.5478E+6	OK	OK	180.00000	38.11295	55.01099	52.51344	-0.90000	1.4761E-6	295.22E-9	0.034362	0.034362	-0.034362	-0.034362	0.03436	0.03436	OK	-0.03436
0.03436	OK	2.7647E+6	OK	OK	180.00000	39.11592	55.47870	51.62620	-0.90000	1.8930E-6	378.60E-9	0.031266	0.031266	-0.031266	-0.031266	0.03127	0.03127	OK	-0.03127
0.03127	OK	3.0385E+6	OK	OK	180.00000	40.11889	55.94642	50.73896	-0.90000	2.3719E-6	474.38E-9	0.028116	0.028116	-0.028116	-0.028116	0.02812	0.02812	OK	-0.02812
0.02812	OK	3.3788E+6	OK	OK	180.00000	41.12186	56.41413	49.85172	-0.90000	2.9508E-6	590.16E-9	0.025374	0.025374	-0.025374	-0.025374	0.02538	0.02537	OK	-0.02537
0.02537	OK	3.7615E+6	OK	OK	180.00000	42.12483	56.88184	48.96448	-0.90000	3.6562E-6	731.24E-9	0.023008	0.023008	-0.023008	-0.023008	0.02301	0.02300	OK	-0.02300
0.02300	OK	4.1555E+6	OK	OK	180.00000	43.12780	57.34955	48.07724	-0.90000	4.4761E-6	895.22E-9	0.021004	0.021004	-0.021004	-0.021004	0.02100	0.02100	OK	-0.02100
0.02100	OK	4.5511E+6	OK	OK	180.00000	44.13077	57.81726	47.19000	-0.90000	5.3960E-6	1.0792E-6	0.019284	0.019284	-0.019284	-0.019284	0.01928	0.01928	OK	-0.01928
0.01928	OK	4.9431E+6	OK	OK	180.00000	45.13374	58.28497	46.30276	-0.90000	6.3159E-6	1.2632E-6	0.017871	0.017871	-0.017871	-0.017871	0.01787	0.01787	OK	-0.01787
0.01787	OK	5.3158E+6	OK	OK	180.00000	46.13671	58.75268	45.41552	-0.90000	7.2358E-6	1.4472E-6	0.016653	0.016653	-0.016653	-0.016653	0.01665	0.01665	OK	-0.01665
0.01665	OK	5.6722E+6	OK	OK	180.00000	47.13968	59.22039	44.52828	-0.90000	8.1557E-6	1.6311E-6	0.015653	0.015653	-0.015653	-0.015653	0.01565	0.01565	OK	-0.01565
0.01565	OK	5.9700E+6	OK	OK	180.00000	48.14265	59.68810	43.64104	-0.90000	9.0756E-6	1.8151E-6	0.014827	0.014827	-0.014827	-0.014827	0.01483	0.01482	OK	-0.01482
0.01482	OK	6.2200E+6	OK	OK	180.00000	49.14562	60.15581	42.75380	-0.90000	9.9955E-6	1.9991E-6	0.014153	0.014153	-0.014153	-0.014153	0.01415	0.01415	OK	-0.01415
0.01415	OK	6.4317E+6	OK	OK	180.00000	50.14859	60.62352	41.86656	-0.90000	10.915E-6	2.1830E-6	0.013653	0.013653	-0.013653	-0.013653	0.01365	0.01365	OK	-0.01365
0.01365	OK	6.6050E+6	OK	OK	180.00000	51.15156	61.09123	40.97932	-0.90000	11.834E-6	2.3668E-6	0.013327	0.013327	-0.013327	-0.013327	0.01333	0.01332	OK	-0.01332
0.01332	OK	6.7400E+6	OK	OK	180.00000	52.15453	61.55894	40.09208	-0.90000	12.753E-6	2.5506E-6	0.013174	0.013174	-0.013174	-0.013174	0.01317	0.01317	OK	-0.01317
0.01317	OK	6.8367E+6	OK	OK	180.00000	53.15750	62.02665	39.20484	-0.90000	13.672E-6	2.7344E-6	0.013174	0.013174	-0.013174	-0.013174	0.01317	0.01317	OK	-0.01317
0.01317	OK	6.8950E+6	OK	OK	180.00000	54.16047	62.49436	38.31760	-0.90000	14.591E-6	2.9182E-6	0.013327	0.013327	-0.013327	-0.013327	0.01333	0.01332	OK	-0.01332
0.01332	OK	6.9150E+6	OK	OK	180.00000	55.16344	62.96207	37.43036	-0.90000	15.510E-6	3.1020E-6	0.013653	0.013653	-0.013653	-0.013653	0.01365	0.01365	OK	-0.01365
0.01365	OK	6.8967E+6	OK	OK	180.00000	56.16641	63.42978	36.54312	-0.90000	16.429E-6	3.2858E-6	0.014153	0.014153	-0.014153	-0.014153	0.01415	0.01415	OK	-0.01415
0.01415	OK	6.8400E+6	OK	OK	180.00000	57.16938	63.89749	35.65588	-0.90000	17.348E-6	3.4696E-6	0.014827	0.014827	-0.014827	-0.014827	0.01483	0.01482	OK	-0.01482
0.01482	OK	6.7450E+6	OK	OK	180.00000	58.17235	64.36520	34.76864	-0.90000	18.267E-6	3.6534E-6	0.015653	0.015653	-0.015653	-0.015653	0.01565	0.01565	OK	-0.01565
0.01565	OK	6.6117E+6	OK	OK	180.00000	59.17532	64.83291	33.88140	-0.90000	19.186E-6	3.8372E-6	0.016653	0.016653	-0.016653	-0.016653	0.01665	0.01665	OK	-0.01665
0.01665	OK	6.4400E+6	OK	OK	180.00000	60.17829	65.30062	32.99416	-0.90000	20.105E-6	4.0210E-6	0.017871	0.017871	-0.017871	-0.017871	0.01787	0.01787	OK	-0.01787
0.01787	OK	6.2300E+6	OK	OK	180.00000	61.18126	65.76833	32.10692	-0.90000	21.024E-6	4.2048E-6	0.019284	0.019284	-0.019284	-0.019284	0.01928	0.01928	OK	-0.01928
0.01928	OK	5.9817E+6	OK	OK	180.00000	62.18423	66.23604	31.21968	-0.90000	21.943E-6	4.3886E-6	0.021004	0.021004	-0.021004	-0.021004	0.02100	0.02100	OK	-0.02100
0.02100	OK	5.6950E+6	OK	OK	180.00000	63.18720	66.70375	30.33244	-0.90000	22.862E-6	4.5724E-6	0.023008	0.023008	-0.023008	-0.023008	0.02301	0.02300	OK	-0.02300
0.02300	OK	5.3700E+6	OK	OK	180.00000	64.19017	67.17146	29.44520	-0.90000	23.781E-6	4.7562E-6	0.025374	0.025374	-0.025374	-0.025374	0.02538	0.02537	OK	-0.02537
0.02537	OK	5.0067E+6	OK	OK	180.00000	65.19314	67.63917	28.55796	-0.90000	24.700E-6	4.9400E-6	0.028116	0.028116	-0.028116	-0.028116	0.02812	0.02812	OK	-0.02812
0.02812	OK	4.6050E+6	OK	OK	180.00000	66.19611	68.10688	27.67072	-0.90000	25.619E-6	5.1238E-6	0.031266	0.031266	-0.031266	-0.031266	0.03127	0.03127	OK	-0.03127
0.03127	OK	4.1650E+6	OK	OK	180.00000	67.19908	68.57459	26.78348	-0.90000	26.538E-6	5.3076E-6	0.034362	0.034362	-0.034362	-0.034362	0.03436	0.03436	OK	-0.03436
0.03436	OK	3.6967E+6	OK	OK	180.00000	68.20205	69.04230	25.89624	-0.90000	27.457E-6	5.4914E-6	0.037288	0.037288	-0.037288	-0.037288	0.03729	0.03729	OK	-0.03729
0.03729	OK	3.2000E+6	OK	OK	180.00000	69.20502	69.51001	25.00900	-0.90000	28.376E-6	5.6752E-6	0.039908	0.039908	-0.039908	-0.039908	0.03991	0.03991	OK	-0.03991
0.03991	OK	2.6950E+6	OK	OK	180.00000	70.20799	69.97772	24.12176	-0.90000	29.295E-6	5.8590E-6	0.042302	0.042302	-0.042302	-0.042302	0.04231	0.04230	OK	-0.04230
0.04230	OK	2.1817E+6	OK	OK	180.00000	71.21096	70.44543	23.23452	-0.90000	30.214E-6	6.0428E-6	0.046860	0.046860	-0.046860	-0.046860	0.04686	0.04686	OK	-0.04686
0.04686	OK	1.6650E+6	OK	OK	180.00000	72.21393	70.91314	22.34728	-0.90000	31.133E-6	6.2266E-6	0.049728	0.049728	-0.049728	-0.049728	0.04973	0.04973	OK	-0.04973
0.04973	OK	1.1450E+6	OK	OK	180.00000	73.21690	71.38085	21.46004	-0.90000	32.052E-6	6.4104E-6	0.044303	0.044303	-0.044303	-0.044303	0.04430	0.04430	OK	-0.04430
0.04430	OK	1.6433E+6	OK	OK	180.00000	74.21987	71.84856	20.57280	-0.90000	32.971E-6	6.5942E-6	0.043592	0.043592	-0.043592	-0.043592	0.04359	0.04359	OK	-0.04359
0.04359	OK	2.1793E+6	OK	OK	180.00000	75.22284	72.31627	19.68556	-0.90000	33.890E-6	6.7780E-6	0.042066	0.042066	-0.042066	-0.042066	0.04207	0.04207	OK	-0.04207
0.04207	OK	2.2583E+6	OK	OK	180.00000	76.22581	72.78398	18.79832	-0.90000	34.809E-6	6.9618E-6	0.039908	0.039908	-0.039908	-0.039908	0.03991	0.03991	OK	-0.03991
0.03991	OK	2.3805E+6	OK	OK	180.00000	77.22878	73.25169	17.91108	-0.90000	35.728E-6	7.1456E-6	0.037288	0.037288	-0.037288	-0.037288	0.03729	0.03729	OK	-0.03729
0.03729	OK	2.5478E+6	OK	OK	180.00000	78.23175	73.71940	17.02384	-0.90000	36.647E-6	7.3294E-6	0.034362	0.034362	-0.034362	-0.034362	0.03436	0.03436	OK	-0.03436
0.03436	OK	2.7647E+6	OK	OK	180.00000	79.23472	74.18711	16.13660	-0.90000	37.566E-6	7.5132E-6	0.031266	0.031266	-0.031266	-0.031266	0.03127	0.03127	OK	-0.03127
0.03127	OK	3.0385E+6	OK	OK	180.00000	80.23769	74.65482	15.24936	-0.90000	38.485E-6	7.6970E-6	0.028116	0.028116	-0.028116	-0.028116	0.02812	0.02812	OK	-0.02812
0.02812	OK	3.3788E+6	OK	OK	180.00000	81.24066	75.12253	14.36212	-0.90000	39.404E-6	7.8808E-6	0.025374	0.025374	-0.025374	-0.025374	0.02538	0.02537	OK	-0.02537
0.02537	OK	3.7615E+6	OK	OK	180.00000	82.24363	75.59024	13.47488	-0.90000	40.323E-6	8.0646E-6	0.023008	0.023008	-0.023008	-0.023008	0.02301	0.02300	OK	-0.02300
0.02300	OK	4.1555E+6	OK	OK	180.00000	83.24660	76.05795	12.58764	-0.90000	41.242E-6	8.2484E-6	0.021004	0.021004	-0.021004	-0.021004	0.02100	0.02100	OK	-0.02100
0.02100	OK	4.5511E+6	OK	OK	180.00000	84.24957	76.52566	11.70040	-0.90000	42.161E-6	8.4322E-6	0.019284	0.019284	-0.019284	-0.019284	0.01928	0.01928	OK	-0.01928
0.01928	OK	4.9431E+6	OK	OK	180.00000	85.25254	76.99337	10.81316	-0.90000	43.080E-6	8.6160E-6	0.017871	0.017871	-0.017871	-0.017871	0.01787	0.01787	OK	-0.01787
0.01787	OK	5.3158E+6	OK	OK	180.00000	86.25551	77.46108	9.92592	-0.90000	43.999E-6	8.7998E-6	0.016653	0.016653	-0.016653	-0.016653	0.01665	0.01665	OK	-0.01665
0.01665	OK	5.6722E+6	OK	OK	180.00000	87.25848	77.92879	9.03868	-0.90000	44.918E-6	8.9836E-6	0.015653	0.015653	-0.015653	-0.015653	0.01565	0.01565	OK	-0.01565
0.01565	OK	5.9700E+6	OK	OK	180.00000	88.26145	78.39650	8.15144	-0.90000	45.837E-6	9.1674E-6	0.014827	0.014827	-0.014827	-0.014827	0.01483	0.01482	OK	-0.01482
0.01482	OK	6.2200E+6	OK	OK	180.00000	89.26442	78.86421	7.26420	-0.90000	46.756E-6	9.3512E-6	0.014153	0.014153	-0.014153	-0.014153	0.01415	0.01415	OK	-0.01415
0.01415	OK	6.4317E+6	OK	OK	180.00000	90.26739	79.33192	6.37696	-0.90000	47.675E-6	9.5350E-6	0.013653	0.013653	-0.013653	-0.013653	0.01365	0.01365	OK	-0.01365
0.01365	OK	6.6050E+6	OK	OK	180.00000	91.27036	79.79963	5.48972	-0.90000	48.594E-6	9.7188E-6	0.013327	0.013327	-0.013327	-0.013327	0.01333	0.01332	OK	-0.01332
0.01332	OK	6.7400E+6	OK	OK	180.00000	92.27333	80.26734	4.60248	-0.90000	49.513E-6	9.9026E-6	0.013174	0.013174	-0.013174	-0.013174	0.01317	0.01317	OK	-0.01317
0.01317	OK	6.8367E+6	OK	OK	180.00000	93.27630	80.73505	3.71524	-0.90000	50.432E-6	10.086E-6	0.013174	0.013174	-0.013174	-0.013174	0.01317	0.01317	OK	-0.01317
0.01317	OK	6.8950E+6	OK	OK	180.00000	94.27927	81.20276	2.82800	-0.90000	51.351E-6	10.270E-6	0.013327	0.013327	-0.013327	-0.013327	0.01333	0.01332	OK	-0.01332
0.01332	OK	6.9150E+6	OK	OK	180.00000	95.28224	81.67047	1.94076	-0.90000	52.270E-6	10.454E-6	0.013653	0.013653	-0.013653	-0.013653	0.01365	0.01365	OK	-0.01365
0.01365	OK	6.8967E+6	OK	OK	180.00000	96.28521	82.13818	1.05352	-0.90000	53.189E-6	10.638E-6	0.014153	0.014153	-0.014153	-0.014153	0.01415	0.01415	OK	-0.01415
0.01415	OK	6.8400E+6	OK	OK	180.00000	97.28818	82.60589	0.16628	-0.90000	54.108E-6	10.822E-6	0.014827	0.014827	-0.014827	-0.014827	0.01483	0.01482	OK	-0.01482
0.01482	OK	6.7450E+6	OK	OK	180.00000	98.29115	83.07360	0.72096	-0.90000	55.027E-6	11.005E-6	0.015653	0.015653	-0.015653	-0.015653	0.01565	0.01565	OK	-0.01565
0.01565	OK	6.6117E+6	OK	OK	180.00000	99.29412	83.54131	1.61820	-0.90000	55.946E-6	11.189E-6	0.016653	0.016653	-0.016653	-0.016653	0.01665	0.01665	OK	-0.01665
0.01665	OK	6.4400E+6	OK	OK	180.00000	100.29709	84.00902	2.50544	-0.90000	56.865E-6	11.373E-6	0.017871	0.017871	-0.017871	-0.017871	0.01787	0.01787	OK	-0.01787
0.01787	OK	6.2300E+6	OK	OK	180.00000	101.30006	84.47673	3.39268	-0.90000	57.784E-6	11.557E-6	0.019284	0.019284	-0.019284	-0.019284	0.01928	0.01928	OK	-0.01928
0.01928	OK	5.9817E+6	OK	OK	180.00000	102.30303	84.94444	4.27992	-0.90000	58.703E-6	11.741E-6	0.021004	0.021004	-0.021004	-0.021004	0.02100	0.02100	OK	-0.02100
0.02100	OK	5.6950E+6	OK	OK	180.00000	103.30600	85.41215	5.16716	-0.90000	59.622E-6	11.924E-6	0.023008	0.023008	-0.023008	-0.023008	0.02301	0.02300	OK	-0.02300
0.02300	OK	5.3700E+6	OK	OK	180.00000	104.30897	85.87986	6.05440	-0.90000	60.541E-6	12.108E-6	0.025374	0.025374	-0.025374	-0.025374	0.02538	0.02537	OK	-0.02537
0.02537	OK	5.0067E+6	OK	OK	180.00000	105.31194	86.34757	6.94164	-0.90000	61.460E-6	12.292E-6	0.028116	0.028116	-0.028116	-0.028116	0.02812	0.02812	OK	-0.02812
0.02812	OK	4.6050E+6	OK	OK	180.00000	106.31491	86.81528	7.82888	-0.90000	62.379E-6	12.476E-6	0.031266	0.031266	-0.031266	-0.031266	0.03127	0.03127	OK	-0.03127
0.03127	OK	4.1650E+6	OK	OK	180.00000	107.31788	87.28299	8.71612	-0.90000	63.298E-6	12.660E-6	0.034362	0.034362	-0.034362	-0.034362	0.03436	0.03436	OK	-0.03436
0.03436	OK	3.6967E+6	OK	OK	180.00000	108.32085	87.75070	9.60336	-0.90000	64.217E-6	12.843E-6	0.037288	0.037288	-0.037288	-0.037288	0.03729	0.03729	OK	-0.03729
0.03729	OK	3.2000E+6	OK	OK	180.00000	109.32382	88.21841	10.49060	-0.90000	65.136E-6	13.027E-6	0.039908	0.039908	-0.039908	-0.039908	0.03991	0.03991	OK	-0.03991
0.03991	OK	2.6950E+6	OK	OK	180.00000	110.32679	88.68612	11.37784	-0.90000	66.055E-6	13.211E-6	0.042302	0.042302	-0.042302	-0.042302	0.04231	0.04230	OK	-0.04230
0.04230	OK	2.1817E+6	OK	OK	180.00000	111.32976	89.15383	12.26508	-0.90000	66.974E-6	13.395E-6	0.046860	0.046860	-0.046860	-0.046860	0.04686	0.04686	OK	-0.04686
0.04686	OK	1.6650E+6	OK	OK	180.00000	112.33273	89.62154	13.15232	-0.90000	67.893E-6	13.579E-6	0.049728	0.049728	-0.049728	-0.049728	0.04973	0.04973	OK	-0.04973
0.04973	OK	1.1450E+6	OK	OK	180.00000	113.33570	90.08925	14.03956	-0.90000	68.812E-6	13.762E-6	0.044303	0.044303	-0.044303	-0.044303	0.04430	0.04430	OK	-0.04430
0.04430	OK	1.6433E+6	OK	OK	180.00000	114.33867	90.55696	14.92680	-0.90000	69.731E-6	13.946E-6	0.043592	0.043592	-0.043592	-0.043592	0.04359	0.04359	OK	-0.04359
0.04359	OK	2.1793E+6	OK	OK	180.00000	115.34164	91.02467	15.81404	-0.90000	70.650E-6	14.130E-6	0.042066	0.042066	-0.042066	-0.042066	0.04207	0.04207	OK	-0.04207
0.04207	OK	2.2583E+6	OK	OK	180.00000	116.34461	91.49238	16.70128	-0.90000	71.569E-6	14.314E-6	0.039908	0.039908	-0.039908	-0.039908	0.03991	0.03991	OK	-0.03991
0.03991	OK	2.3805E+6	OK	OK	180.00000	117.34758	91.96009	17.58852	-0.90000	72.488E-6	14.498E-6	0.037288	0.037288	-0.037288	-0.037288	0.03729	0.03729	OK	-0.03729
0.03729	OK	2.5478E+6	OK	OK	180.00000	118.35055	92.42780	18.47576	-0.90000	73.407E-6	14.681E-6	0.034362	0.034362	-0.034362	-0.034362	0.03436	0.03436	OK	-0.03436
0.03436	OK	2.7647E+6	OK	OK	180.00000	119.35352	92.89551	19.36300	-0.90000	74.326E-6	14.865E-6	0.031266	0.031266	-0.031266	-0.031266	0.03127	0.03127	OK	-0.03127
0.03127	OK	3.0385E+6	OK	OK	180.00000	120.35649	93.36322	20.25024	-0.90000

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x Strain	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
0.00931	OK	1.0204E+7	OK	OK	34.85397	74.86348	16.87225	-0.90000	6.9168E-6	1.3834E-6	0.0093104	0.0093104	-0.0093104	-0.0093104	0.00932	0.00931	OK	-0.00931 - 0.00000
0.00948	OK	1.0023E+7	OK	OK	35.84980	75.33427	15.99473	-0.90000	6.5554E-6	1.3111E-6	0.0094783	0.0094783	-0.0094783	-0.0094783	0.00948	0.00948	OK	-0.00948 - 0.00000
0.00959	OK	9.9075E+6	OK	OK	36.84563	75.80506	15.11722	-0.90000	6.1986E-6	1.2397E-6	0.0095887	0.0095887	-0.0095887	-0.0095887	0.00959	0.00959	OK	-0.00959 - 0.00000
0.00965	OK	9.8480E+6	OK	OK	37.84145	76.27585	14.23971	-0.90000	5.8487E-6	1.1697E-6	0.0096466	0.0096466	-0.0096466	-0.0096466	0.00965	0.00965	OK	-0.00965 - 0.00000
0.00966	OK	9.8372E+6	OK	OK	38.83728	76.74664	13.36219	-0.90000	5.5078E-6	1.1016E-6	0.0096572	0.0096572	-0.0096572	-0.0096572	0.00966	0.00966	OK	-0.00966 - 0.00000
0.00963	OK	9.8696E+6	OK	OK	39.83311	77.21743	12.48468	-0.90000	5.1774E-6	1.0355E-6	0.0096255	0.0096255	-0.0096255	-0.0096255	0.00963	0.00963	OK	-0.00963 - 0.00000
0.00956	OK	9.9410E+6	OK	OK	40.82894	77.68822	11.60717	-0.90000	4.8590E-6	971.79E-9	0.0095564	0.0095564	-0.0095564	-0.0095564	0.00956	0.00956	OK	-0.00956 - 0.00000
0.00945	OK	1.0048E+7	OK	OK	41.82477	78.15901	10.72966	-0.90000	4.5534E-6	910.67E-9	0.0094545	0.0094545	-0.0094545	-0.0094545	0.00946	0.00946	OK	-0.00945 - 0.00000
0.00932	OK	1.0189E+7	OK	OK	42.82059	78.62980	9.85214	-0.90000	4.2612E-6	852.23E-9	0.0093242	0.0093242	-0.0093242	-0.0093242	0.00933	0.00933	OK	-0.00932 - 0.00000
0.00917	OK	1.0360E+7	OK	OK	43.81642	79.10059	8.97463	-0.90000	3.9829E-6	796.58E-9	0.0091697	0.0091697	-0.0091697	-0.0091697	0.00917	0.00917	OK	-0.00917 - 0.00000
0.00899	OK	1.0562E+7	OK	OK	44.81225	79.57138	8.09712	-0.90000	3.7187E-6	743.73E-9	0.0089948	0.0089948	-0.0089948	-0.0089948	0.00900	0.00900	OK	-0.00899 - 0.00000
0.00880	OK	1.0792E+7	OK	OK	45.80808	80.04217	7.21960	-0.90000	3.4687E-6	693.74E-9	0.0088029	0.0088029	-0.0088029	-0.0088029	0.00881	0.00880	OK	-0.00880 - 0.00000
0.00860	OK	1.1050E+7	OK	OK	46.80390	80.51296	6.34209	-0.90000	3.2327E-6	646.54E-9	0.0085973	0.0085973	-0.0085973	-0.0085973	0.00860	0.00860	OK	-0.00860 - 0.00000
0.00838	OK	1.1336E+7	OK	OK	47.79973	80.98376	5.46458	-0.90000	3.0104E-6	602.08E-9	0.0083807	0.0083807	-0.0083807	-0.0083807	0.00838	0.00838	OK	-0.00838 - 0.00000
0.00816	OK	1.1648E+7	OK	OK	48.79556	81.45455	4.58706	-0.90000	2.8015E-6	560.29E-9	0.0081558	0.0081558	-0.0081558	-0.0081558	0.00816	0.00816	OK	-0.00816 - 0.00000
0.00792	OK	1.1988E+7	OK	OK	49.79139	81.92534	3.70955	-0.90000	2.6055E-6	521.09E-9	0.0079248	0.0079248	-0.0079248	-0.0079248	0.00793	0.00793	OK	-0.00792 - 0.00000
0.00769	OK	1.2354E+7	OK	OK	50.78722	82.39613	2.83204	-0.90000	2.4220E-6	484.39E-9	0.0076898	0.0076898	-0.0076898	-0.0076898	0.00769	0.00769	OK	-0.00769 - 0.00000
0.00745	OK	1.2747E+7	OK	OK	51.78304	82.86692	1.95453	-0.90000	2.2505E-6	450.10E-9	0.0074525	0.0074525	-0.0074525	-0.0074525	0.00745	0.00745	OK	-0.00745 - 0.00000
0.26618	OK	3.3286E+6	OK	OK	2.00887	74.83600	112.93610	-6.00000	553.77E-9	553.77E-9	0.26618	0.53235	-0.26618	-0.26618	0.26618	0.53235	OK	-0.26618 - 180.00000
0.30698	OK	2.8861E+6	OK	OK	3.01331	74.02501	112.34351	-6.00000	264.61E-9	264.61E-9	0.30698	0.61397	-0.30698	-0.30698	0.30698	0.61397	OK	-0.30698 - 180.00000
0.35068	OK	2.5265E+6	OK	OK	4.01774	73.21401	111.75091	-6.00000	63.003E-9	63.003E-9	0.35068	0.70135	-0.35068	-0.35068	0.35068	0.70135	OK	-0.35068 - 180.00000
0.39687	OK	2.2325E+6	OK	OK	5.02218	72.40301	111.15831	-6.00000	2.4317E-9	2.4317E-9	0.39687	0.79374	-0.39687	-0.39687	0.39687	0.79374	OK	-0.39687 - 180.00000
0.44495	OK	1.9913E+6	OK	OK	6.02661	71.59201	110.56571	-6.00000	149.00E-9	149.00E-9	0.44495	0.88989	-0.44495	-0.44495	0.44495	0.88989	OK	-0.44495 - 180.00000
0.49402	OK	1.7934E+6	OK	OK	7.03105	70.78101	109.97311	-6.00000	581.40E-9	581.40E-9	0.49402	0.98805	-0.49402	-0.49402	0.49402	0.98805	OK	-0.49402 - 180.00000
0.54288	OK	1.6320E+6	OK	OK	8.03548	69.97002	109.38052	-6.00000	1.3881E-6	1.3881E-6	0.54288	1.0858	-0.54288	-0.54288	0.54288	1.08575	OK	-0.54288 - 180.00000
0.58989	OK	1.5020E+6	OK	OK	9.03992	69.15902	108.78792	-6.00000	2.6638E-6	2.6638E-6	0.58989	1.1798	-0.58989	-0.58989	0.58989	1.17978	OK	-0.58989 - 180.00000
0.63301	OK	1.3997E+6	OK	OK	10.04435	68.34802	108.19532	-6.00000	4.5042E-6	4.5042E-6	0.63301	1.2660	-0.63301	-0.63301	0.63302	1.26603	OK	-0.63301 - 180.00000
0.66972	OK	1.3229E+6	OK	OK	11.04879	67.53702	107.60272	-6.00000	6.9934E-6	6.9934E-6	0.66972	1.3394	-0.66972	-0.66972	0.66973	1.33945	OK	-0.66972 - 180.00000
0.69704	OK	1.2711E+6	OK	OK	12.05322	66.72603	107.01013	-6.00000	10.191E-6	10.191E-6	0.69704	1.3941	-0.69704	-0.69704	0.69705	1.39409	OK	-0.69704 - 180.00000
0.71161	OK	1.2451E+6	OK	OK	13.05766	65.91503	106.41753	-6.00000	14.114E-6	14.114E-6	0.71161	1.4232	-0.71161	-0.71161	0.71162	1.42323	OK	-0.71161 - 180.00000
0.70980	OK	1.2482E+6	OK	OK	14.06209	65.10403	105.82493	-6.00000	18.719E-6	18.719E-6	0.70980	1.4196	-0.70980	-0.70980	0.70982	1.41961	OK	-0.70980 - 180.00000
0.68798	OK	1.2878E+6	OK	OK	15.06653	64.29303	105.23233	-6.00000	23.881E-6	23.881E-6	0.68798	1.3760	-0.68798	-0.68798	0.68801	1.37599	OK	-0.68798 - 180.00000
0.64283	OK	1.3783E+6	OK	OK	16.07096	63.48203	104.63973	-6.00000	29.379E-6	29.379E-6	0.64283	1.2857	-0.64283	-0.64283	0.64286	1.28569	OK	-0.64283 - 180.00000
0.57173	OK	1.5497E+6	OK	OK	17.07540	62.67104	104.04714	-6.00000	34.894E-6	34.894E-6	0.57173	1.1435	-0.57173	-0.57173	0.57177	1.14350	OK	-0.57173 - 180.00000
0.47320	OK	1.8724E+6	OK	OK	18.07983	61.86004	103.45454	-6.00000	40.017E-6	40.017E-6	0.47320	0.94639	-0.47320	-0.47320	0.47324	0.94643	OK	-0.47320 - 180.00000
0.34726	OK	2.5514E+6	OK	OK	19.08427	61.04904	102.86194	-6.00000	44.286E-6	44.286E-6	0.34726	0.69452	-0.34726	-0.34726	0.34730	0.69456	OK	-0.34726 - 180.00000
0.19572	OK	4.5270E+6	OK	OK	20.08870	60.23804	102.26934	-6.00000	47.230E-6	47.230E-6	0.19572	0.39143	-0.19572	-0.19572	0.19576	0.39148	OK	-0.19572 - 180.00000
0.02215	OK	3.9992E+7	OK	OK	21.09314	59.42704	101.67674	-6.00000	48.438E-6	48.438E-6	0.022154	0.044309	-0.022154	-0.022154	0.02220	0.04436	OK	-0.02215 - 180.00000
0.16825	OK	5.2661E+6	OK	OK	22.09757	58.61605	101.08415	-6.00000	47.626E-6	47.626E-6	0.16825	0.33649	-0.16825	-0.16825	0.16829	0.33654	OK	-0.16825 - 0.00000
0.36912	OK	2.4003E+6	OK	OK	23.10201	57.80505	100.49155	-6.00000	44.700E-6	44.700E-6	0.36912	0.73825	-0.36912	-0.36912	0.36917	0.73829	OK	-0.36912 - 0.00000
0.57346	OK	1.5450E+6	OK	OK	24.10644	56.99405	99.89895	-6.00000	39.791E-6	39.791E-6	0.57346	1.1469	-0.57346	-0.57346	0.57350	1.14695	OK	-0.57346 - 0.00000
0.77406	OK	1.1446E+6	OK	OK	25.11088	56.18305	99.30635	-6.00000	33.268E-6	33.268E-6	0.77406	1.5481	-0.77406	-0.77406	0.77409	1.54815	OK	-0.77406 - 0.00000
0.96393	OK	9.1916E+5	OK	OK	26.11531	55.37206	98.71376	-6.00000	25.718E-6	25.718E-6	0.96393	1.9279	-0.96393	-0.96393	0.96395	1.92788	OK	-0.96393 - 0.00000
1.13640	OK	7.7965E+5	OK	OK	27.11975	54.56106	98.12116	-6.00000	17.888E-6	17.888E-6	1.1364	2.2728	-1.1364	-1.1364	1.13642	2.27282	OK	-1.13640 - 0.00000
1.28512	OK	6.8943E+5	OK	OK	28.12418	53.75006	97.52856	-6.00000	10.620E-6	10.620E-6	1.2851	2.5702	-1.2851	-1.2851	1.28513	2.57025	OK	-1.28512 - 0.00000
1.40388	OK	6.3111E+5	OK	OK	29.12862	52.93906	96.93596	-6.00000	4.7569E-6	4.7569E-6	1.4039	2.8078	-1.4039	-1.4039	1.40389	2.80777	OK	-1.40388 - 0.00000
1.48657	OK	5.9600E+5	OK	OK	30.13305	52.12806	96.34336	-6.00000	1.0454E-6	1.0454E-6	1.4866	2.9731	-1.4866	-1.4866	1.48657	2.97315	OK	-1.48657 - 0.00000
1.52726	OK	5.8012E+5	OK	OK	31.13749	51.31707	95.75077	-6.00000	34.486E-9	34.486E-9	1.5273	3.0545	-1.5273	-1.5273	1.52726	3.05452	OK	-1.52726 - 0.00000
1.52068	OK	5.8264E+5	OK	OK	32.14192	50.50607	95.15817	-6.00000	1.9801E-6	1.9801E-6	1.5207	3.0414	-1.5207	-1.5207	1.52068	3.04135	OK	-1.52068 - 0.00000
1.46300	OK	6.0560E+5	OK	OK	33.14636	49.69507	94.56557	-6.00000	6.7756E-6	6.7756E-6	1.4630	2.9260	-1.4630	-1.4630	1.46301	2.92601	OK	-1.46300 - 0.00000
1.35298	OK	6.5485E+5	OK	OK	34.15079	48.88407	93.97297	-6.00000	13.926E-6	13.926E-6	1.3530	2.7060	-1.3530	-1.3530	1.35299	2.70597	OK	-1.35298 - 0.00000
1.19298	OK	7.4268E+5	OK	OK	35.15523	48.07307	93.38037	-6.00000	22.583E-6	22.583E-6	1.1930	2.3860	-1.1930	-1.1930	1.19300	2.38597	OK	-1.19298 - 0.00000
0.98970	OK	8.9522E+5	OK	OK	36.15966	47.26208	92.78778	-6.00000	31.663E-6	31.663E-6	0.98970	1.9794	-0.98970	-0.98970	0.98974	1.97944	OK	-0.98970 - 0.00000
0.75416	OK	1.1748E+6	OK	OK	37.16410	46.45108	92.19518	-6.00000	40.018E-6	40.018E-6	0.75416	1.5083	-0.75416	-0.75416	0.75420	1.50836	OK	-0.75416 - 0.00000
0.50062	OK	1.7698E+6	OK	OK	38.16853	45.64008	91.60258	-6.00000	46.634E-6	46.634E-6	0.50062	1.0012	-0.50062	-0.50062	0.50067	1.00129	OK	-0.50062 - 0.00000
0.24485	OK	3.6185E+6	OK	OK	39.17297	44.82908	91.00998	-6.00000	50.804E-6	50.804E-6	0.24485	0.48971	-0.24485	-0.24485	0.24490	0.48976	OK	-0.24485 - 0.00000
0.00194	OK	4.5647E+8	OK	OK	40.17740	44.01809	90.41739	-6.00000	52.224E-6	52.224E-6	0.0019410	0.0038820	-0.0019410	-0.0019410	0.00199	0.00393	OK	-0.00194 - 0.00000
0.21564	OK	4.1087E+6	OK	OK	41.18184	43.20709	89.82479	-6.00000	50.994E-6	50.994E-6	0.21564	0.43128	-0.21564	-0.21564	0.21569	0.43133	OK	-0.21564 - 180.00000
0.39928	OK	2.2190E+6	OK	OK	42.18627	42.39609	89.23219	-6.00000	47.534E-6	47.534E-6	0.39928	0.79855	-0.39928	-0.39928	0.39932	0.79860	OK	-0.39928 - 180.00000
0.54456	OK	1.6270E+6	OK	OK	43.19071	41.58509	88.63959	-6.00000	42.461E-6	42.461E-6	0.54456	1.0891	-0.54456	-0.54456	0.54461	1.08917	OK	-0.54456 - 180.00000
0.65092	OK	1.3611E+6	OK	OK	44.19514	40.77409	88.04699	-6.00000	36.446E-6	36.446E-6	0.65092	1.3018	-0.65092	-0.65092	0.65096	1.30189	OK	-0.65092 - 180.00000
0.72073	OK	1.2293E+6	OK	OK	45.19958	39.96310	87.45440	-6.00000	30.110E-6	30.110E-6	0.72073	1.4415	-0.72073	-0.72073	0.72076	1.44148	OK	-0.72073 - 180.00000
1.36703	OK	9.2683E+5	OK	OK	1.00474	38.81931	85.38557	-6.00000	23.651E-6	23.651E-6	1.3670	2.7341	-1.3670	-1.3670	1.36706	2.73409	OK	-1.36703 - 180.00000
1.38081	OK	9.1758E+5	OK	OK	2.00947	39.29752	84.50193	-6.00000	31.738E-6	31.738E-6	1.3808	2.7616	-1.3808	-1.3808	1.38084	2.76165	OK	-1.38081 - 180.00000
1.35081	OK	9.3796E+5	OK	OK	3.01421	39.77574	83.61830	-6.00000	40.954E-6	40.954E-6	1.3508	2.7016	-1.3508	-1.3508	1.35085	2.70166	OK	-1.35081 - 180.00000
1.26701	OK	9.9999E+5	OK	OK	4.01894	40.25395	82.73467	-6.00000	50.886E-6	50.886E-6	1.2670	2.5340	-1.2670	-1.2670	1.26706	2.53407	OK	-1.26701 - 180.00000
1.12084	OK	1.1304E+6	OK	OK	5.02368	40.73216	81.85104	-6.00000	60.886E-6	60.886E-6	1.1208	2.2417	-1.1208	-1.1208	1.12090	2.24173	OK	-1.12084 - 180.00000
0.90688	OK	1.3971E+6	OK	OK	6.02842	41.21037	80.96740	-6.00000	70.081E-6	70.081E-6	0.90688	1.8138	-0.90688	-0.90688	0.90695	1.81382	OK	-0.90688 - 180.00000
0.62464	OK	2.0284E+6	OK	OK	7.03315	41.68859	80.08377	-6.00000	77.454E-6	77.454E-6	0.62464	1.2493	-0.62464	-0.62464	0.62471	1.24935	OK	-0.62464 - 180.00000
0.27996	OK	4.5256E+6	OK	OK	8.03789	42.16680	79.20014	-6.00000	81.983E-6	81.983E-6	0.27996	0.55993	-0.27996	-0.27996	0.28005	0.56001	OK	-0.27996 - 180.00000
					9.04262	42.64501	78.31650	-6.00000	82.825E-6	82.825E-6	0.11447	0.22895	-0.11447	-0.11447	0.11456	0.22903	OK	-0.11447 -

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
0.11447	OK	1.1068E+7	OK	OK	0.00000													
					10.04736	43.12322	77.43287	-6.00000	79.519E-6	79.519E-6	0.53999	1.0800	-0.53999	-0.53999	0.54007	1.08006	OK	-0.53999 -
0.53999	OK	2.3463E+6	OK	OK	0.00000													
					11.05210	43.60144	76.54924	-6.00000	72.129E-6	72.129E-6	0.97403	1.9481	-0.97403	-0.97403	0.97410	1.94814	OK	-0.97403 -
0.97403	OK	1.3008E+6	OK	OK	0.00000													
					12.05683	44.07965	75.66560	-6.00000	61.296E-6	61.296E-6	1.3931	2.7863	-1.3931	-1.3931	1.39319	2.78633	OK	-1.39313 -
1.39313	OK	9.0946E+5	OK	OK	0.00000													
					13.06157	44.55786	74.78197	-6.00000	48.173E-6	48.173E-6	1.7759	3.5518	-1.7759	-1.7759	1.77595	3.55185	OK	-1.77590 -
1.77590	OK	7.1344E+5	OK	OK	0.00000													
					14.06630	45.03607	73.89834	-6.00000	34.252E-6	34.252E-6	2.1052	4.2103	-2.1052	-2.1052	2.10519	4.21034	OK	-2.10515 -
2.10515	OK	6.0186E+5	OK	OK	0.00000													
					15.07104	45.51429	73.01471	-6.00000	21.144E-6	21.144E-6	2.3688	4.7376	-2.3688	-2.3688	2.36880	4.73758	OK	-2.36878 -
2.36878	OK	5.3487E+5	OK	OK	0.00000													
					16.07578	45.99250	72.13107	-6.00000	10.346E-6	10.346E-6	2.5593	5.1186	-2.5593	-2.5593	2.55931	5.11860	OK	-2.55929 -
2.55929	OK	4.9506E+5	OK	OK	0.00000													
					17.08051	46.47071	71.24744	-6.00000	3.0613E-6	3.0613E-6	2.6726	5.3453	-2.6726	-2.6726	2.67265	5.34529	OK	-2.67264 -
2.67264	OK	4.7406E+5	OK	OK	0.00000													
					18.08525	46.94892	70.36381	-6.00000	58.343E-9	58.343E-9	2.7068	5.4136	-2.7068	-2.7068	2.70682	5.41364	OK	-2.70682 -
2.70682	OK	4.6808E+5	OK	OK	0.00000													
					19.08998	47.42714	69.48017	-6.00000	1.5967E-6	1.5967E-6	2.6609	5.3219	-2.6609	-2.6609	2.66093	5.32186	OK	-2.66093 -
2.66093	OK	4.7615E+5	OK	OK	0.00000													
					20.09472	47.90535	68.59654	-6.00000	7.4003E-6	7.4003E-6	2.5351	5.0701	-2.5351	-2.5351	2.53508	5.07015	OK	-2.53507 -
2.53507	OK	4.9979E+5	OK	OK	0.00000													
					21.09945	48.38356	67.71291	-6.00000	16.684E-6	16.684E-6	2.3310	4.6621	-2.3310	-2.3310	2.33107	4.66211	OK	-2.33105 -
2.33105	OK	5.4353E+5	OK	OK	0.00000													
					22.10419	48.86177	66.82927	-6.00000	28.239E-6	28.239E-6	2.0538	4.1076	-2.0538	-2.0538	2.05383	4.10764	OK	-2.05381 -
2.05381	OK	6.1690E+5	OK	OK	0.00000													
					23.10893	49.33998	65.94564	-6.00000	40.578E-6	40.578E-6	1.7129	3.4258	-1.7129	-1.7129	1.71296	3.42588	OK	-1.71292 -
1.71292	OK	7.3967E+5	OK	OK	0.00000													
					24.11366	49.81820	65.06201	-6.00000	52.149E-6	52.149E-6	1.3235	2.6471	-1.3235	-1.3235	1.32360	2.64715	OK	-1.32355 -
1.32355	OK	9.5727E+5	OK	OK	0.00000													
					25.11840	50.29641	64.17838	-6.00000	61.569E-6	61.569E-6	0.90618	1.8124	-0.90618	-0.90618	0.90624	1.81243	OK	-0.90618 -
0.90618	OK	1.3982E+6	OK	OK	0.00000													
					26.12313	50.77462	63.29474	-6.00000	67.841E-6	67.841E-6	0.48485	0.96969	-0.48485	-0.48485	0.48491	0.96976	OK	-0.48485 -
0.48485	OK	2.6132E+6	OK	OK	0.00000													
					27.12787	51.25283	62.41111	-6.00000	70.495E-6	70.495E-6	0.084119	0.16824	-0.084119	-0.084119	0.08419	0.16831	OK	-0.08412 -
0.08412	OK	1.5062E+7	OK	OK	0.00000													
					28.13261	51.73105	61.52748	-6.00000	69.602E-6	69.602E-6	0.27426	0.54851	-0.27426	-0.27426	0.27433	0.54858	OK	-0.27426 -
0.27426	OK	4.6198E+6	OK	OK	180.00000													
					29.13734	52.20926	60.64384	-6.00000	65.690E-6	65.690E-6	0.57418	1.1484	-0.57418	-0.57418	0.57425	1.14843	OK	-0.57418 -
0.57418	OK	2.2066E+6	OK	OK	180.00000													
					30.14208	52.68747	59.76021	-6.00000	59.564E-6	59.564E-6	0.80669	1.6134	-0.80669	-0.80669	0.80675	1.61345	OK	-0.80669 -
0.80669	OK	1.5706E+6	OK	OK	180.00000													
					31.14681	53.16568	58.87658	-6.00000	52.123E-6	52.123E-6	0.96992	1.9398	-0.96992	-0.96992	0.96997	1.93989	OK	-0.96992 -
0.96992	OK	1.3063E+6	OK	OK	180.00000													
					32.15155	53.64390	57.99294	-6.00000	44.200E-6	44.200E-6	1.0679	2.1357	-1.0679	-1.0679	1.06790	2.13576	OK	-1.06786 -
1.06786	OK	1.1865E+6	OK	OK	180.00000													
					33.15629	54.12211	57.10931	-6.00000	36.459E-6	36.459E-6	1.1085	2.2171	-1.1085	-1.1085	1.10857	2.21710	OK	-1.10853 -
1.10853	OK	1.1430E+6	OK	OK	180.00000													
					34.16102	54.60032	56.22568	-6.00000	29.358E-6	29.358E-6	1.1021	2.2042	-1.1021	-1.1021	1.10213	2.20423	OK	-1.10210 -
1.10210	OK	1.1496E+6	OK	OK	180.00000													
					35.16576	55.07853	55.34205	-6.00000	23.159E-6	23.159E-6	1.0593	2.1185	-1.0593	-1.0593	1.05928	2.11854	OK	-1.05926 -
1.05926	OK	1.1961E+6	OK	OK	180.00000													
					36.17049	55.55675	54.45841	-6.00000	17.959E-6	17.959E-6	0.99016	1.9803	-0.99016	-0.99016	0.99018	1.98034	OK	-0.99016 -
0.99016	OK	1.2796E+6	OK	OK	180.00000													
					37.17523	56.03496	53.57478	-6.00000	13.740E-6	13.740E-6	0.90380	1.8076	-0.90380	-0.90380	0.90381	1.80761	OK	-0.90380 -
0.90380	OK	1.4019E+6	OK	OK	180.00000													
					38.17997	56.51317	52.69115	-6.00000	10.413E-6	10.413E-6	0.80771	1.6154	-0.80771	-0.80771	0.80772	1.61543	OK	-0.80771 -
0.80771	OK	1.5686E+6	OK	OK	180.00000													
					39.18470	56.99138	51.80751	-6.00000	7.8510E-6	7.8510E-6	0.70801	1.4160	-0.70801	-0.70801	0.70802	1.41603	OK	-0.70801 -
0.70801	OK	1.7895E+6	OK	OK	180.00000													
					40.18944	57.46959	50.92388	-6.00000	5.9174E-6	5.9174E-6	0.60949	1.2190	-0.60949	-0.60949	0.60949	1.21898	OK	-0.60949 -
0.60949	OK	2.0788E+6	OK	OK	180.00000													
					41.19417	57.94781	50.04025	-6.00000	4.4821E-6	4.4821E-6	0.51581	1.0316	-0.51581	-0.51581	0.51582	1.03163	OK	-0.51581 -
0.51581	OK	2.4563E+6	OK	OK	180.00000													
					42.19891	58.42602	49.15661	-6.00000	3.4299E-6	3.4299E-6	0.42972	0.85944	-0.42972	-0.42972	0.42972	0.85944	OK	-0.42972 -
0.42972	OK	2.9484E+6	OK	OK	180.00000													
					43.20365	58.90423	48.27298	-6.00000	2.6650E-6	2.6650E-6	0.35319	0.70638	-0.35319	-0.35319	0.35319	0.70639	OK	-0.35319 -
0.35319	OK	3.5873E+6	OK	OK	180.00000													
					44.20838	59.38244	47.38935	-6.00000	2.1105E-6	2.1105E-6	0.28758	0.57516	-0.28758	-0.28758	0.28758	0.57516	OK	-0.28758 -
0.28758	OK	4.4057E+6	OK	OK	180.00000													
					45.21312	59.86066	46.50572	-6.00000	1.7074E-6	1.7074E-6	0.23370	0.46741	-0.23370	-0.23370	0.23370	0.46741	OK	-0.23370 -
0.23370	OK	5.4214E+6	OK	OK	180.00000													
					46.21785	60.33887	45.62208	-6.00000	1.4097E-6	1.4097E-6	0.19190	0.38379	-0.19190	-0.19190	0.19190	0.38379	OK	-0.19190 -
0.19190	OK	6.6026E+6	OK	OK	180.00000													
					47.22259	60.81708	44.73845	-6.00000	1.1839E-6	1.1839E-6	0.16205	0.32410	-0.16205	-0.16205	0.16205	0.32410	OK	-0.16205 -
0.16205	OK	7.8186E+6	OK	OK	180.00000													
					48.22733	61.29529	43.85482	-6.00000	1.0049E-6	1.0049E-6	0.14362	0.28725	-0.14362	-0.14362	0.14363	0.28725	OK	-0.14362 -
0.14362	OK	8.8216E+6	OK	OK	180.00000													
					49.23206	61.77351	42.97118	-6.00000	853.94E-9	853.94E-9	0.13568	0.27136	-0.13568	-0.13568	0.13568	0.27136	OK	-0.13568 -
0.13568	OK	9.3383E+6	OK	OK	180.00000													
					50.23680	62.25172	42.08755	-6.00000	718.46E-9	718.46E-9	0.13690	0.27380	-0.13690	-0.13690	0.13690	0.27380	OK	-0.13690 -
0.13690	OK	9.2550E+6	OK	OK	180.00000													
					51.24153	62.72993	41.20392	-6.00000	590.51E-9	590.51E-9	0.14566	0.29132	-0.14566	-0.14566	0.14566	0.29132	OK	-0.14566 -
0.14566	OK	8.6984E+6	OK	OK	180.00000													
					52.24627	63.20814	40.32028	-6.00000	466.08E-9	466.08E-9	0.16011	0.32023	-0.16011	-0.16011	0.16011	0.32023	OK	-0.16011 -
0.16011	OK	7.9132E+6	OK	OK	180.00000													
					53.25101	63.68636	39.43665	-6.00000	345.64E-9	345.64E-9	0.17829	0.35658	-0.17829	-0.17829	0.17829	0.35658	OK	-0.17829 -
0.17829	OK	7.1065E+6	OK	OK	180.00000													
					54.25574	64.16457	38.55302	-6.00000	232.71E-9	232.71E-9	0.19822	0.39644	-0.19822	-0.19822	0.19822	0.39644	OK	-0.19822 -
0.19822	OK	6.3919E+6	OK	OK	180.00000													
					55.26048	64.64278	37.66939	-6.00000	133.70E-9	133.70E-9	0.21805	0.43611	-0.21805	-0.21805	0.21806	0.43611	OK	-0.21805 -
0.21805	OK	5.8105E+6	OK	OK	180.00000													
					56.26521	65.12099	36.78575	-6.00000	56.796E-9	56.796E-9	0.23618	0.47236	-0.23618	-0.23618	0.23618	0.47236	OK	-0.23618 -
0.23618	OK	5.3646E+6	OK	OK	180.00000													
					57.26995	65.59921	35.90212	-6.00000	10.387E-9	10.387E-9	0.25128	0.50256	-0.25128	-0.25128	0.25128	0.50256	OK	-0.25128 -
0.25128	OK	5.0422E+6	OK	OK	180.00000													
					58.27469	66.07742	35.01849	-6.00000	1.7680E-9	1.7680E-9	0.26241	0.52482	-0.26241	-0.26241	0.26241	0.52482	OK	-0.26241 -
0.26241	OK	4.8284E+6	OK	OK	180.00000													
					59.27942	66.55563	34.13485	-6.00000	36.686E-9	36.686E-9	0.26898	0.53795	-0.26898	-0.26898	0.26898	0.53795	OK	-0.26898 -
0.26898	OK	4.7105E+6	OK	OK	180.00000													
					60.28416	67.03384	33.25122	-6.00000	117.57E-9	117.57E-9	0.27075	0.54150	-0.27075	-0.27075	0.27075	0.54150	OK	-0.27075 -
0.27075	OK	4.6796E+6	OK	OK	180.00000													
					61.28889	67.51205	32.36759	-6.00000	243.76E-9	243.76E-9	0.26781	0.53562	-0.26781	-0.26781	0.26781	0.53562	OK	-0.26781 -
0.26781	OK	4.7310E+6	OK	OK	180.00000													
					62.29363	67.99027	31.48395	-6.00000	411.94E-9	411.94E-9	0.26047	0.52094	-0.26047	-0.26047	0.26047	0.52094	OK	-0.26047 -
0.26047	OK	4.8643E+6	OK	OK	180.00000													
					63.29836	68.46848	30.60032	-6.00000	615.92E-9	615.92E-9	0.24924	0.49848	-0.24924	-0.24924	0.24924	0.49848	OK	-0.24924 -
0.24924	OK	5.0835E+6	OK	OK	180.00000													
					64.30310	68.94669	29.71669	-6.00000	847.31E-9	847.31E-9	0.23473	0.46945	-0.23473	-0.23473	0.23473	0.46945	OK	-0.23473 -
0.23473	OK	5.3978E+6	OK	OK	180.00000													
					65.30784	69.42490	28.83306	-6.00000	1.0968E-6	1.0968E-6	0.21761	0.43522	-0.21761	-0.21761	0.21761	0.43522	OK	-0.21761 -
0.21761	OK	5.8224E+6	OK	OK	180.00000													
					66.31257	69.90312	27.94942	-6.00000	1.3549E-6	1.3549E-6	0.19857	0.39713	-0.19857	-0.19857	0.19857	0.39714	OK	-0.19857 -
0.19857	OK	6.3807E+6	OK	OK	180.00000													
					67.31731	70.38133	27.06579	-6.00000	1.6120E-6	1.6120E-6	0.17825	0.35650	-0.17825	-0.17825	0.17825	0.35650	OK	-0.17825 -
0.17825	OK	7.1080E+6	OK	OK	180.00000													
					68.32204	70.85954	26.18216	-6.00000	1.8597E-6	1.8597E-6	0.15725	0.31450	-0.15725	-0.15725	0.15725	0.31450	OK	-0.15725 -
0.15725	OK	8.0572E+6	OK	OK	180.00000													
					69.32678	71.33775	25.29852	-6.00000	2.0909E-6	2.0909E-6	0.13609	0.27218	-0.13609	-0.13609	0.13609	0.27218	OK	-0.13609 -
0.13609	OK	9.3100E+6	OK	OK	180.00000													
					70.33152	71.81597	24.41489	-6.00000	2.2995E-6	2.2995E-6	0.11521	0.23042	-0.11521	-0.11521	0.11521	0.23042	OK	-0.11521 -
0.11521	OK	1.0997E+7	OK	OK	180.00000													
					71.33625	72.29418	23.53126	-6.00000	2.4816E-6	2.4816E-6	0.094967	0.18993	-0.094967	-0.094967	0.09497	0.18994	OK	-0.09497 -
0.09497	OK	1.3342E+7	OK	OK	180.00000													
					72.34099	72.77239	22.64762	-6.00000	2.6347E-6	2.6347E-6	0.075641	0.15128	-0.075641	-0.075641	0.07564	0.15129	OK	-0.07564 -
0.07564	OK	1.6750E+7	OK	OK	180.00000													
					73.34572	73.25060	21.76399	-6.00000	2.7572E-6	2.7572E-6	0.057441	0.11488	-0.057441	-0.057441	0.05744	0.11489	OK	-0.05744 -
0.05744	OK	2.2057E+7	OK	OK	180.00000													
					74.35046	73.72882	20.88036	-6.00000	2.8491E-6	2.8491E-6	0.040509	0.081019	-0.040509	-0.040509	0.04051	0.08102	OK	-0.04051 -
0.04051	OK	3.1277E+7	OK	OK	180.00000													
					75.35520	74.20703	19.99673	-6.00000	2.9114E-6	2.9114E-6	0.024934	0.049868	-0.024934	-0.024934	0.02494	0.04987	OK	-0.02493 -
0.02493	OK	5.0814E+7	OK	OK	180.00000													
					76.35993	74.68524	19.11309	-6.00000	2.9457E-6	2.9457E-6	0.010757	0.021514	-0.010757	-0.010757	0.01076	0.02152	OK	-0.01076 -
0.01076	OK	1.1778E+8	OK	OK	180.00000													
					77.36467	75.16345	18.22946	-6.00000	2.9543E-6	2.9543E-6	0.0020168	0.0040337	-0.0020168	-0.0020168	0.00202	0.00404	OK	-0.00202 -
0.00202	OK	6.2821E+8	OK	OK	0.00000													
					78.36940	75.64166	17.34583	-6.00000	2.9393E-6	2.9393E-6	0.013413	0.026827	-0.013413	-0.013413	0.01342	0.02683	OK	-0.01341 -
0.01341	OK	9.4458E+7	OK	OK	0.00000													
					79.37414	76.11988	16.46219	-6.00000	2.9039E-6	2.9039E-6	0.023480	0.046960	-0.023480	-0.023480	0.02348	0.04696	OK	-0.02348 -
0.02348	OK	5.3960E+7	OK	OK	0.00000													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
0.03228	OK	3.9248E+7	OK	OK	80.37888 0.00000	76.59809	15.57856	-6.00000	2.8509E-6	2.8509E-6	0.032282	0.064563	-0.032282	-0.032282	0.03228	0.06457	OK	-0.03228 -
0.03989	OK	3.1759E+7	OK	OK	81.38361 0.00000	77.07630	14.69493	-6.00000	2.7828E-6	2.7828E-6	0.039894	0.079787	-0.039894	-0.039894	0.03990	0.07979	OK	-0.03989 -
0.04640	OK	2.7307E+7	OK	OK	82.38835 0.00000	77.55451	13.81129	-6.00000	2.7028E-6	2.7028E-6	0.046399	0.092798	-0.046399	-0.046399	0.04640	0.09280	OK	-0.04640 -
0.05188	OK	2.4419E+7	OK	OK	83.39308 0.00000	78.03273	12.92766	-6.00000	2.6129E-6	2.6129E-6	0.051885	0.10377	-0.051885	-0.051885	0.05189	0.10377	OK	-0.05188 -
0.05644	OK	2.2449E+7	OK	OK	84.39782 0.00000	78.51094	12.04403	-6.00000	2.5156E-6	2.5156E-6	0.056438	0.11288	-0.056438	-0.056438	0.05644	0.11288	OK	-0.05644 -
0.06015	OK	2.1065E+7	OK	OK	85.40256 0.00000	78.98915	11.16040	-6.00000	2.4131E-6	2.4131E-6	0.060147	0.12029	-0.060147	-0.060147	0.06015	0.12030	OK	-0.06015 -
0.06309	OK	2.0081E+7	OK	OK	86.40729 0.00000	79.46736	10.27676	-6.00000	2.3070E-6	2.3070E-6	0.063094	0.12619	-0.063094	-0.063094	0.06310	0.12619	OK	-0.06309 -
0.06536	OK	1.9385E+7	OK	OK	87.41203 0.00000	79.94558	9.39313	-6.00000	2.1989E-6	2.1989E-6	0.065359	0.13072	-0.065359	-0.065359	0.06536	0.13072	OK	-0.06536 -
0.06702	OK	1.8905E+7	OK	OK	88.41676 0.00000	80.42379	8.50950	-6.00000	2.0902E-6	2.0902E-6	0.067020	0.13404	-0.067020	-0.067020	0.06702	0.13404	OK	-0.06702 -
0.06815	OK	1.8593E+7	OK	OK	89.42150 0.00000	80.90200	7.62586	-6.00000	1.9819E-6	1.9819E-6	0.068146	0.13629	-0.068146	-0.068146	0.06815	0.13629	OK	-0.06815 -
0.06880	OK	1.8415E+7	OK	OK	90.42624 0.00000	81.38021	6.74223	-6.00000	1.8754E-6	1.8754E-6	0.068802	0.13760	-0.068802	-0.068802	0.06880	0.13761	OK	-0.06880 -
0.06905	OK	1.8349E+7	OK	OK	91.43097 0.00000	81.85843	5.85860	-6.00000	1.7709E-6	1.7709E-6	0.069050	0.13810	-0.069050	-0.069050	0.06905	0.13810	OK	-0.06905 -
0.06894	OK	1.8377E+7	OK	OK	92.43571 0.00000	82.33664	4.97496	-6.00000	1.6694E-6	1.6694E-6	0.068944	0.13789	-0.068944	-0.068944	0.06895	0.13789	OK	-0.06894 -
0.06853	OK	1.8487E+7	OK	OK	93.44044 0.00000	82.81485	4.09133	-6.00000	1.5713E-6	1.5713E-6	0.068533	0.13707	-0.068533	-0.068533	0.06853	0.13707	OK	-0.06853 -
0.06786	OK	1.8670E+7	OK	OK	94.44518 0.00000	83.29306	3.20770	-6.00000	1.4769E-6	1.4769E-6	0.067863	0.13573	-0.067863	-0.067863	0.06786	0.13573	OK	-0.06786 -
0.06697	OK	1.8918E+7	OK	OK	95.44992 0.00000	83.77128	2.32407	-6.00000	1.3865E-6	1.3865E-6	0.066974	0.13395	-0.066974	-0.066974	0.06698	0.13395	OK	-0.06697 -

Note: Tensile strains are +ve, compressive strains are -ve.
Note: The peak flexural tensile strain orientation angle is measured with respect to the global z-axis by looking at the end point of the utility from the start point. Anti-clockwise is positive.

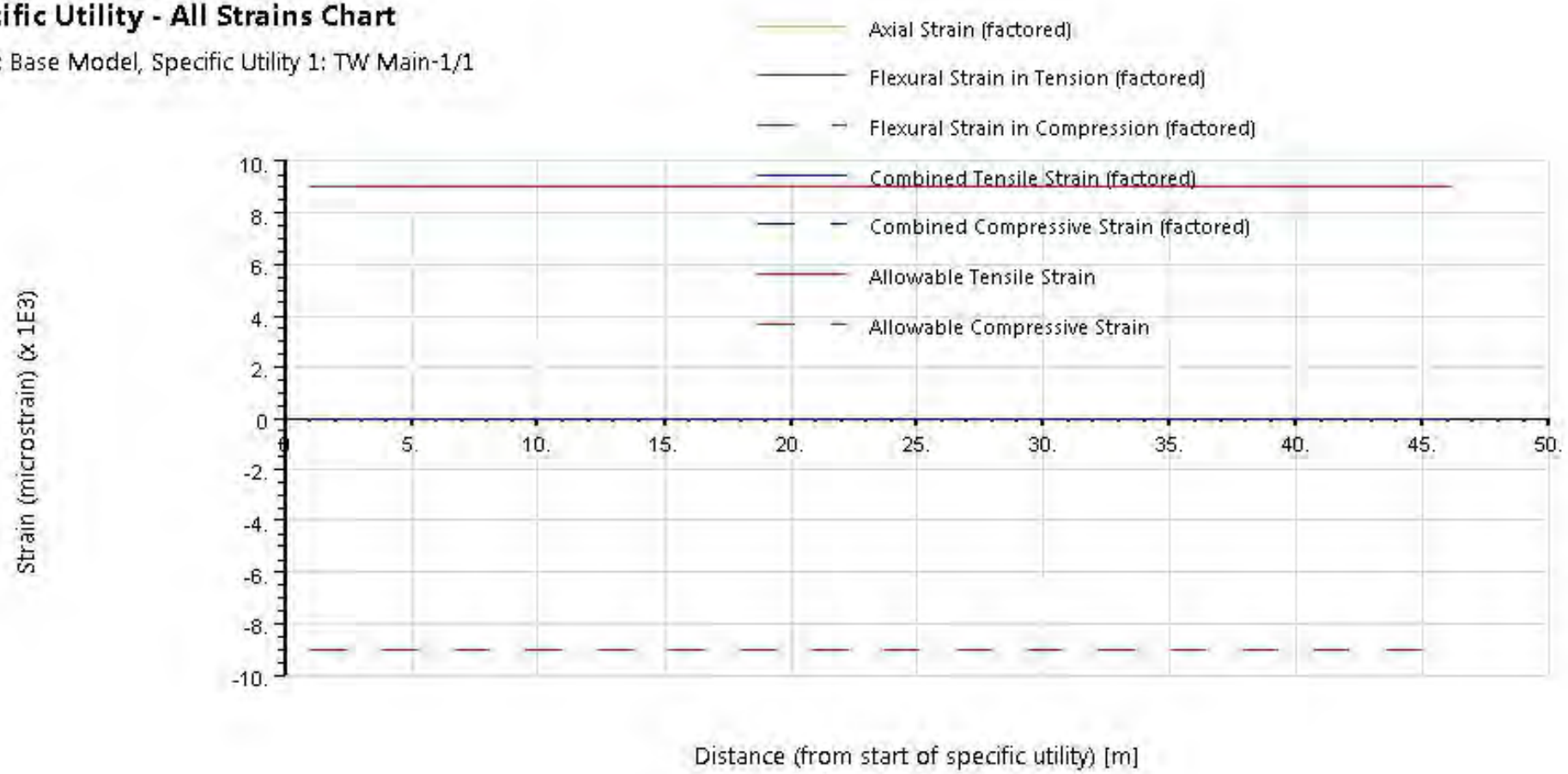
Specific Utility Damage Results - Maximum Values

Stage: Max. Ref. Disp: Horiz. y: Value	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Jointed	Max. Pullout: Factored: Location [m]	Max. Pullout: Factored: Value [mm]	Max. Rotation: Factored: Location [m]	Max. Rotation: Factored: Value [Deg]	Max. Strain: Tension: Factored: Location [m]	Max. Strain: Tension: Factored: Value [με]	Max. Strain: Compn.: Factored: Location [m]	Max. Strain: Compn.: Factored: Value [με]	Min. Rad. of Curv.: Location [m]	Min. Rad. of Curv.: Value [m]	Max. Disp.: Vert.: Location [m]	Max.Disp.: Vert. : Value [mm]	Max. Disp: Horiz. x: Location [m]	Max. Disp: Horiz. x: Value [mm]	Max. Disp: Horiz. y: Location [m]
0 0.0	Base Model	1	TW Main-1	Yes	45.127	265.40E-6	45.127	0.00008	45.12746	0.04513	45.12746	-0.04513	45.127	2.1051E+6	15.042	0.20433	48.135	0.0	48.135
		2	TW Main-2	Yes	18.054	276.36E-6	18.054	0.00008	32.09512	0.04973	32.09512	-0.04973	32.095	1.9104E+6	34.101	0.26352	34.101	0.0	34.101
0.0		3	TW Main-3	Yes	3.9876	237.81E-6	3.9876	0.00007	0.99689	0.04430	0.99689	-0.04430	0.99689	2.1443E+6	2.9907	0.26516	9.9680	0.0	9.9680
0.0		4	TW Main-4	Yes	3.9833	82.191E-6	3.9833	0.00002	1.99166	0.01763	1.99166	-0.01762	1.9917	5.3901E+6	0.0	0.25496	53.774	0.0	53.774
0.0		5	TW Foul-1	Yes	31.137	0.0030681	31.137	0.00010	31.13749	3.05452	31.13749	-1.52726	31.137	5.8012E+5	5.0222	0.12022	47.208	0.0	47.208
0.0		6	TW Foul-2	Yes	18.085	0.0054393	18.085	0.00012	18.08525	5.41364	18.08525	-2.70682	18.085	4.6808E+5	58.275	0.12321	97.459	0.0	97.459
0.0																			

Note: * symbol indicates that the value has exceeded one of (or both) the limiting criteria

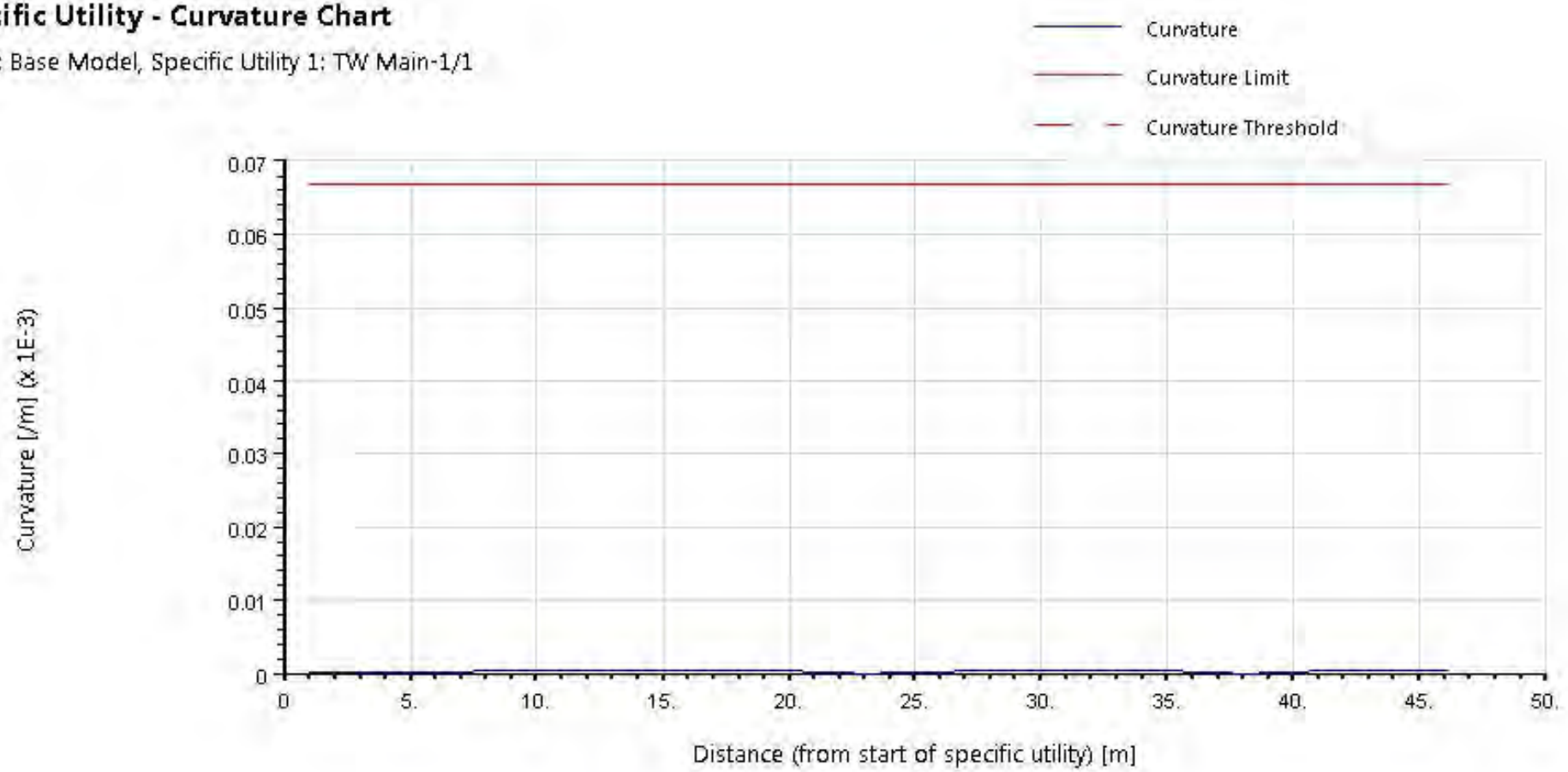
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



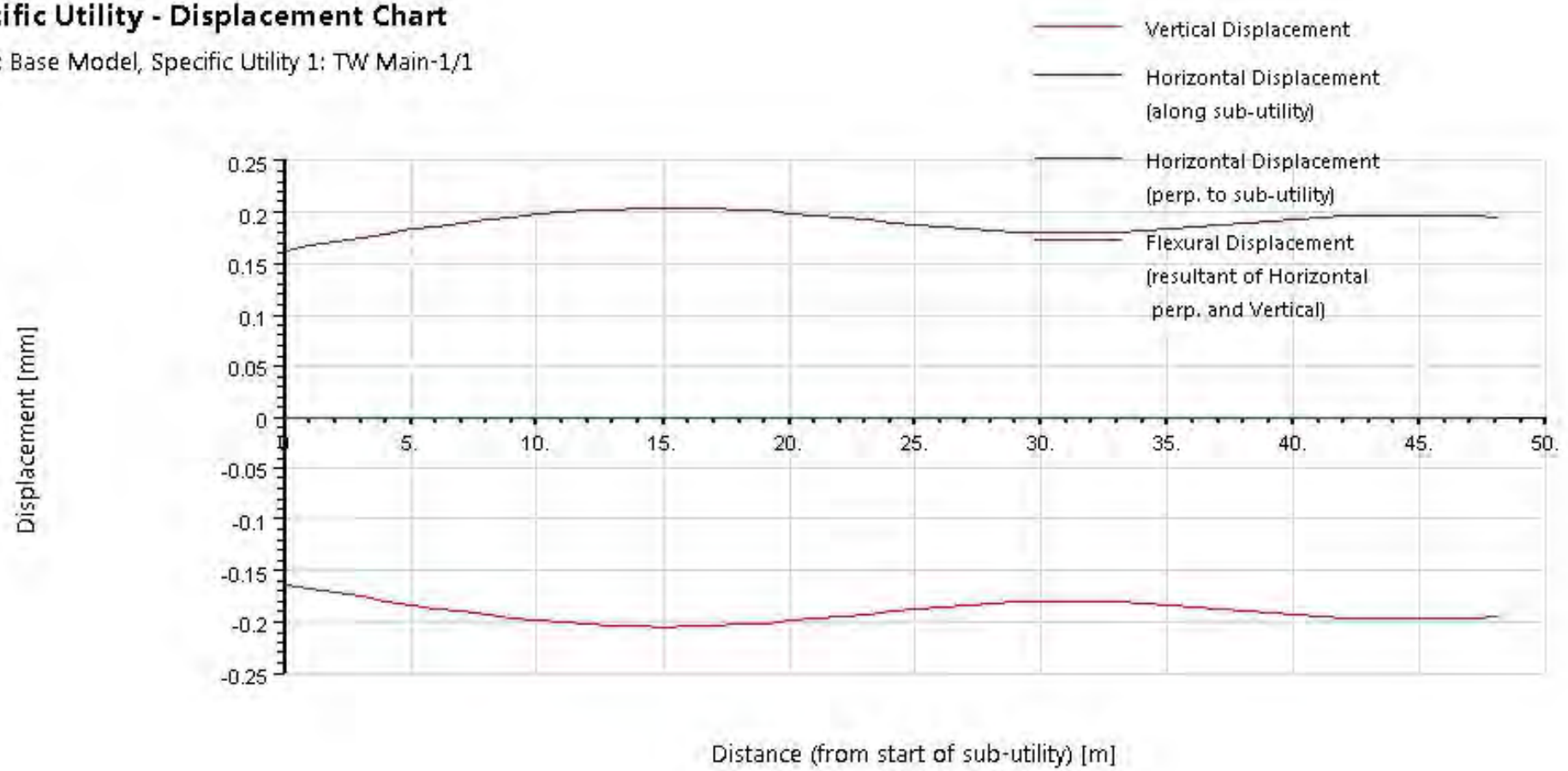
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



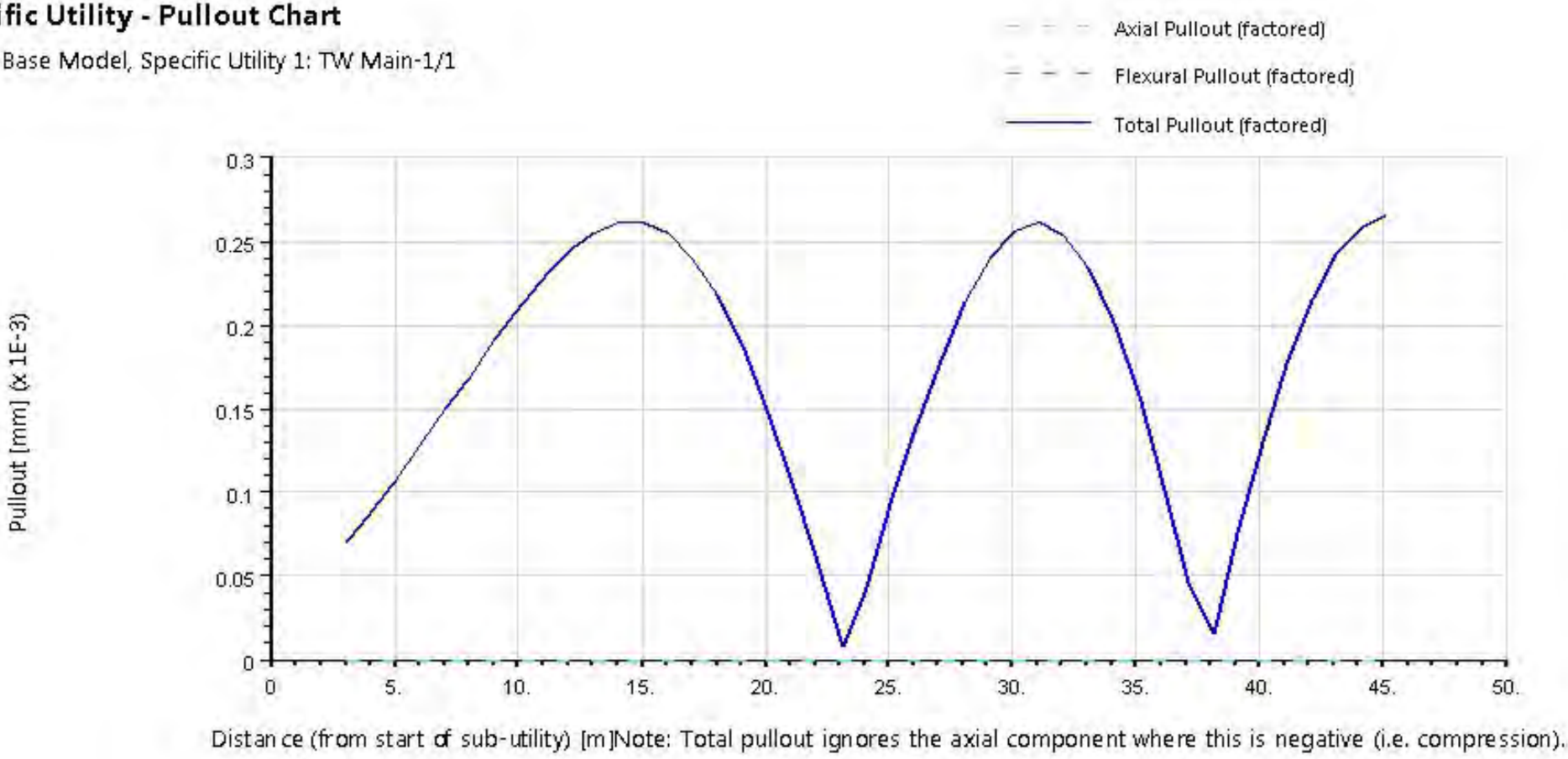
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



Specific Utility - Pullout Chart

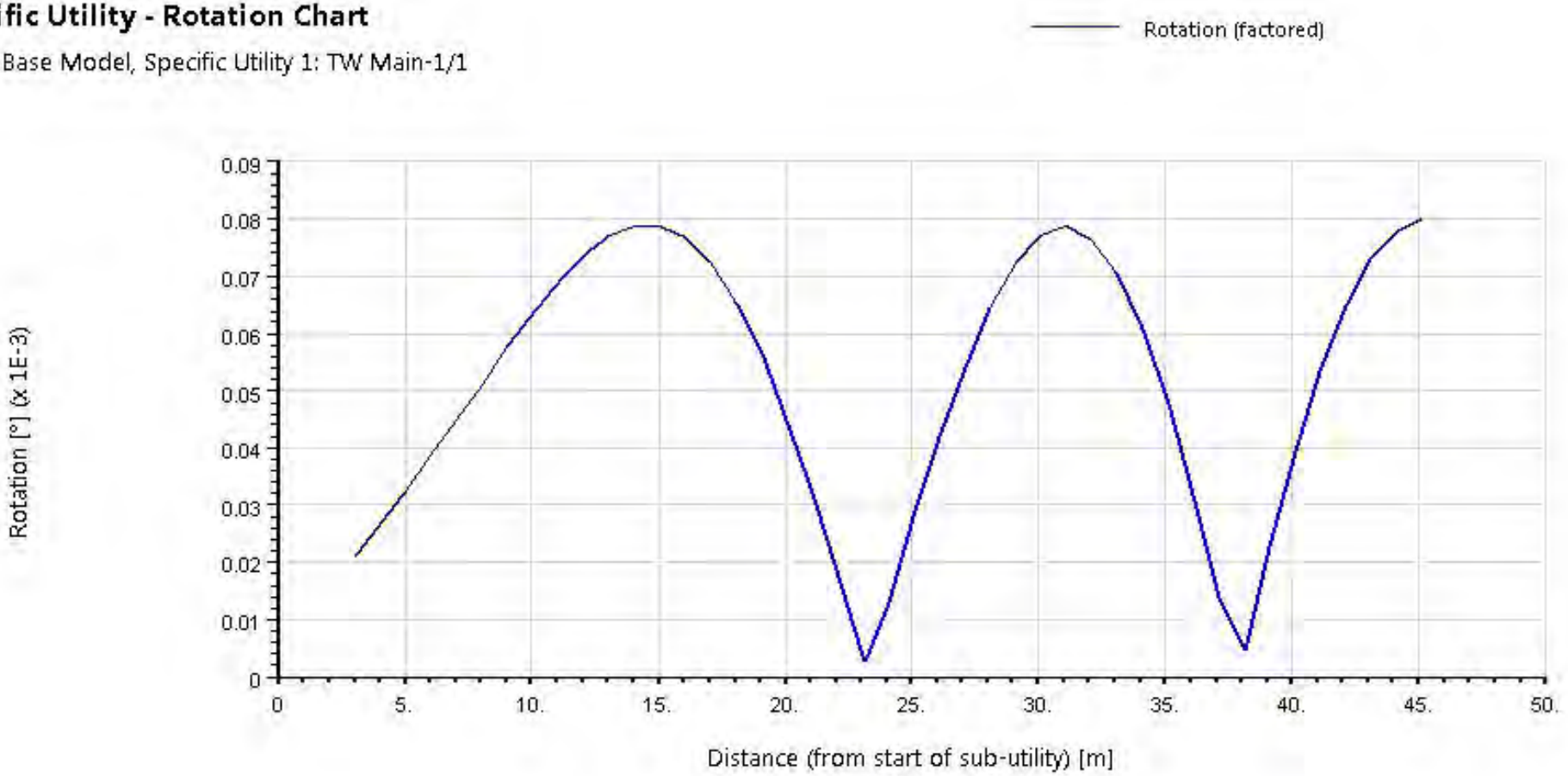
Stage: Base Model, Specific Utility 1: TW Main-1/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

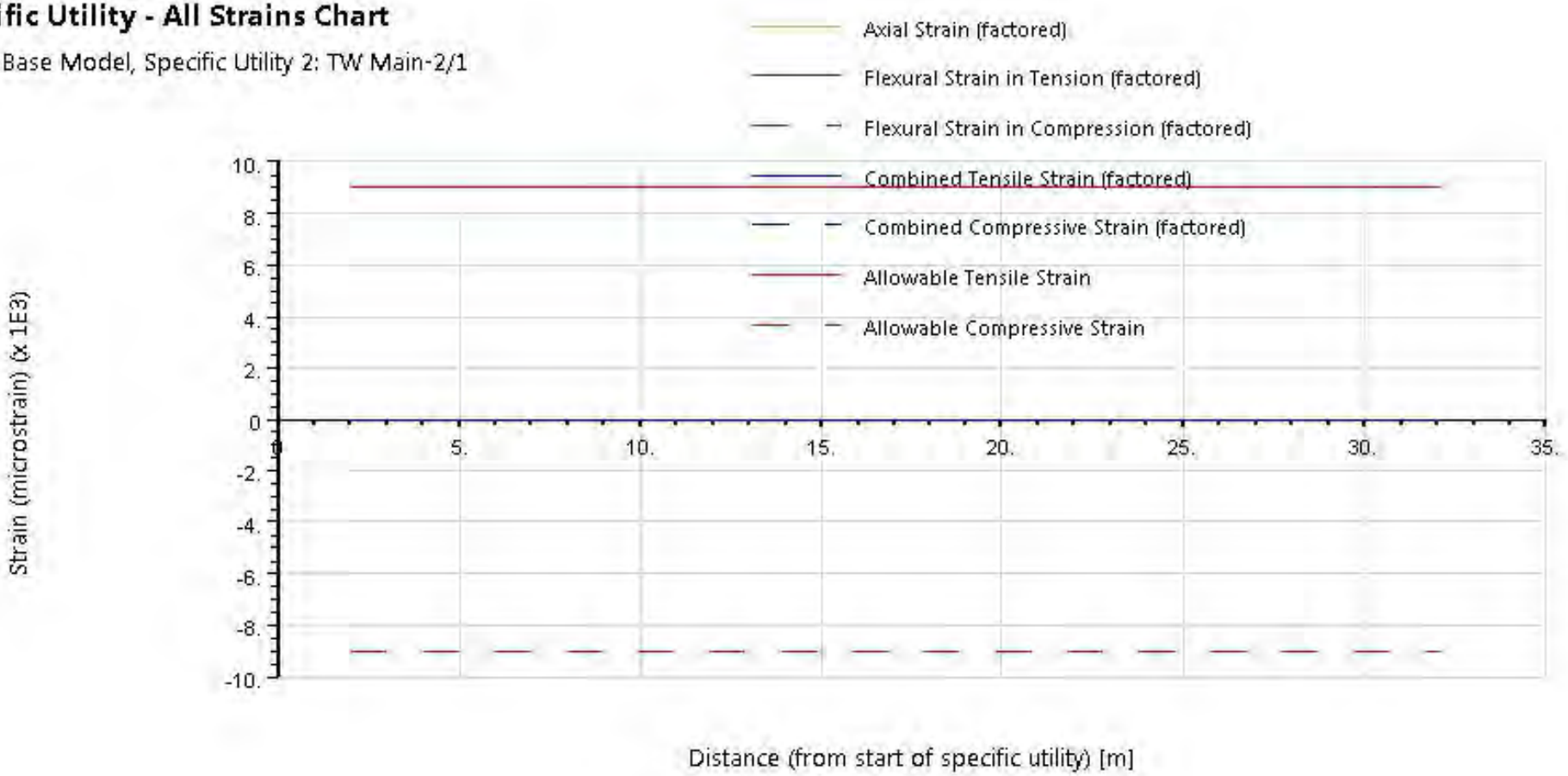
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



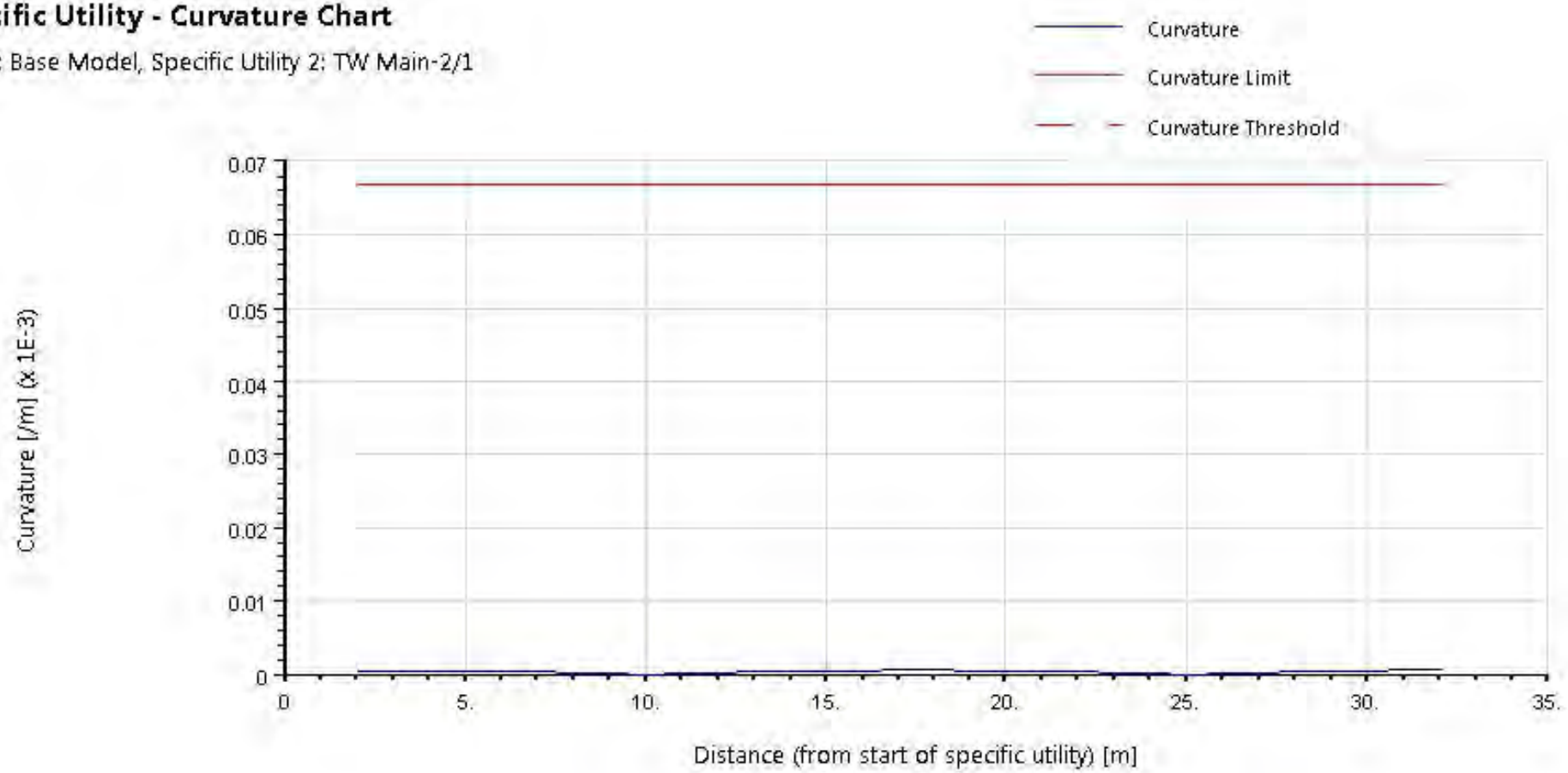
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



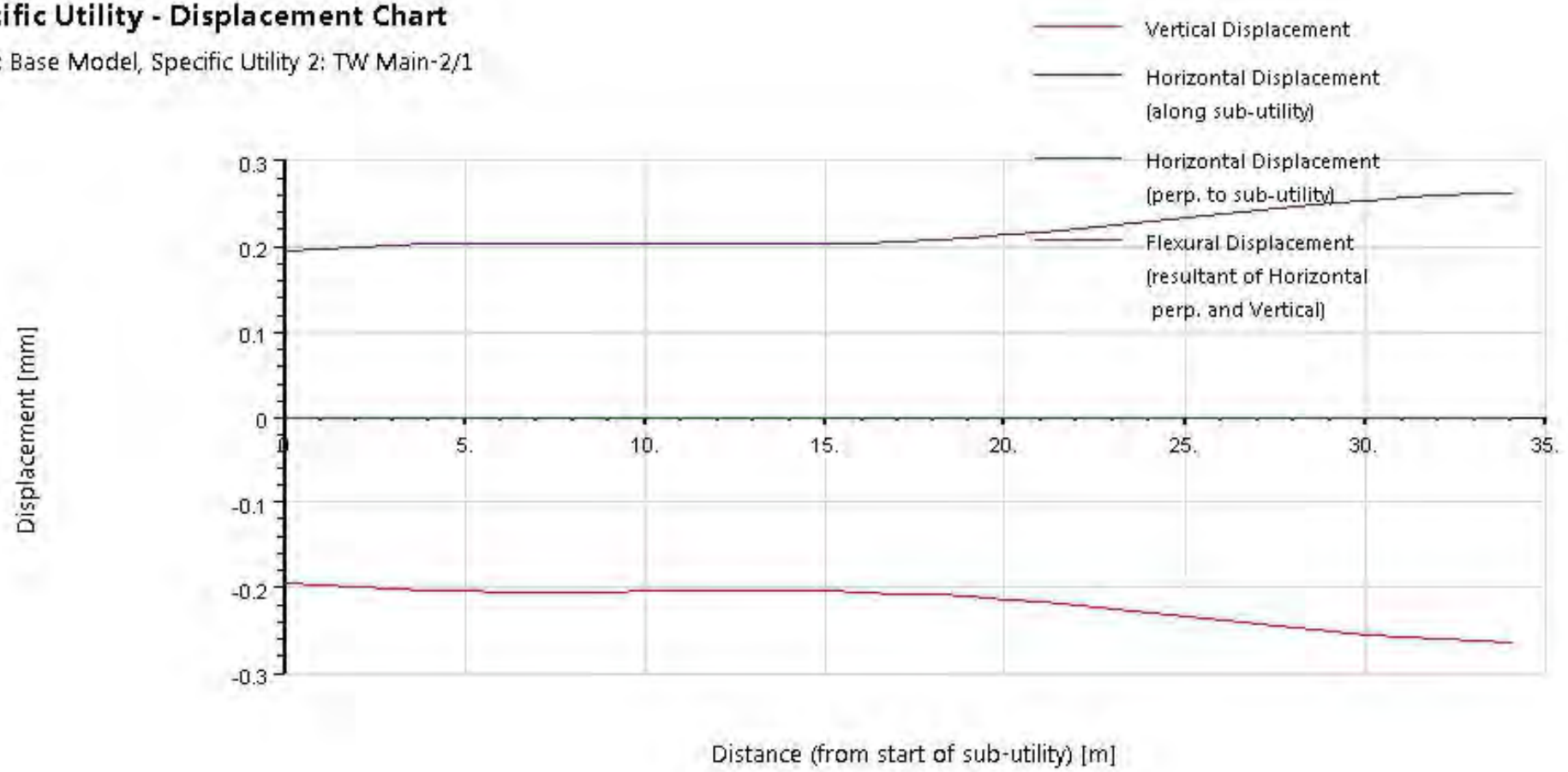
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



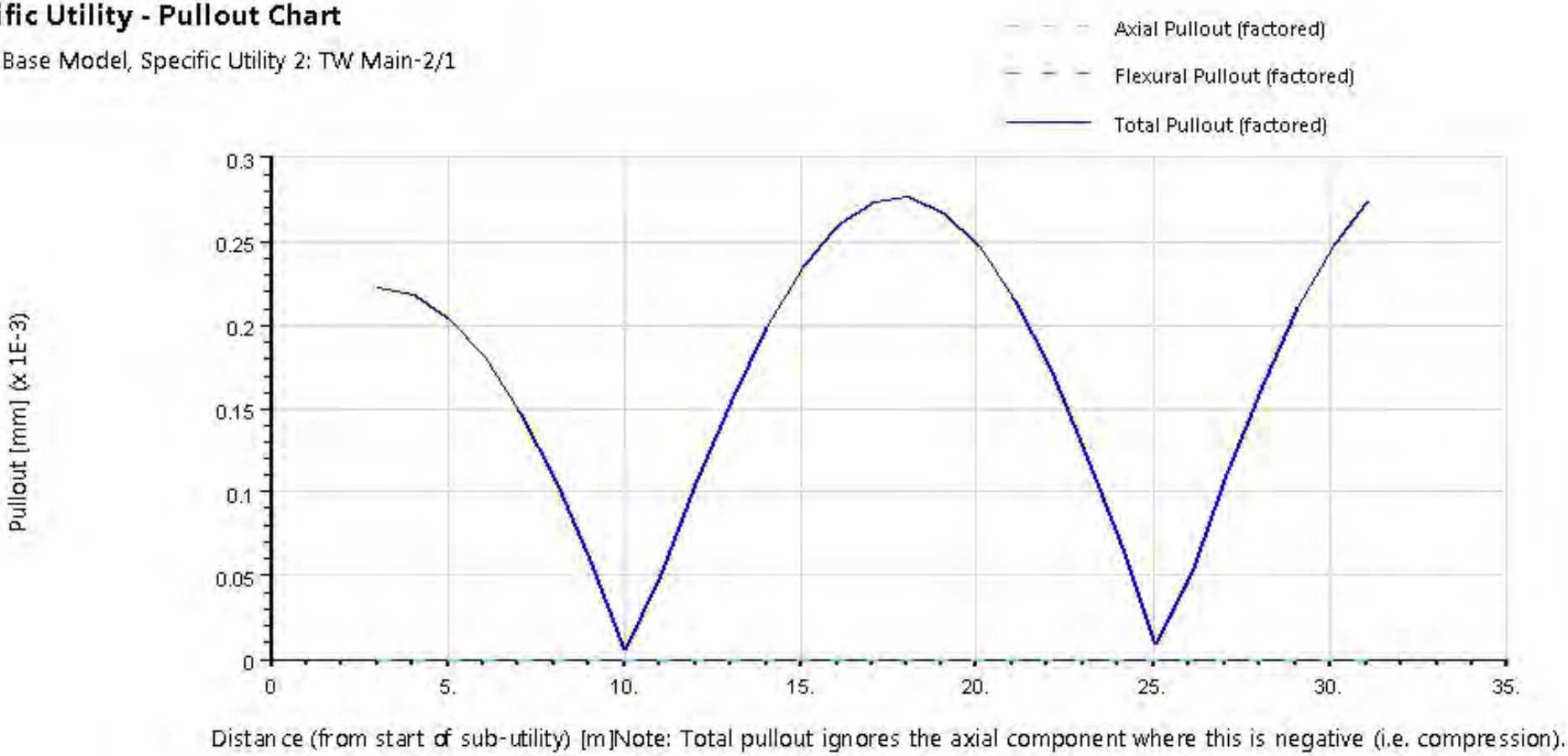
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



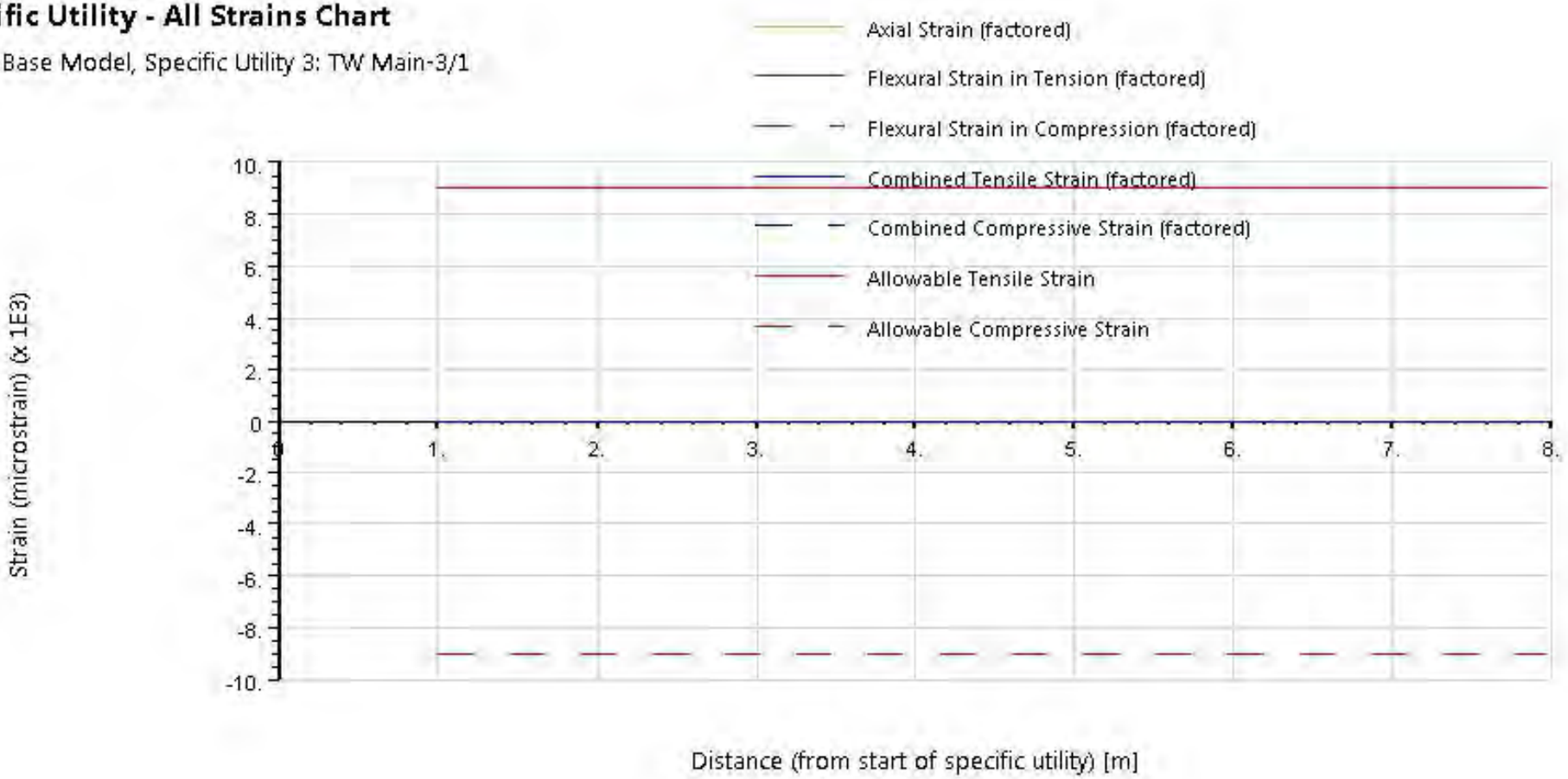
Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1

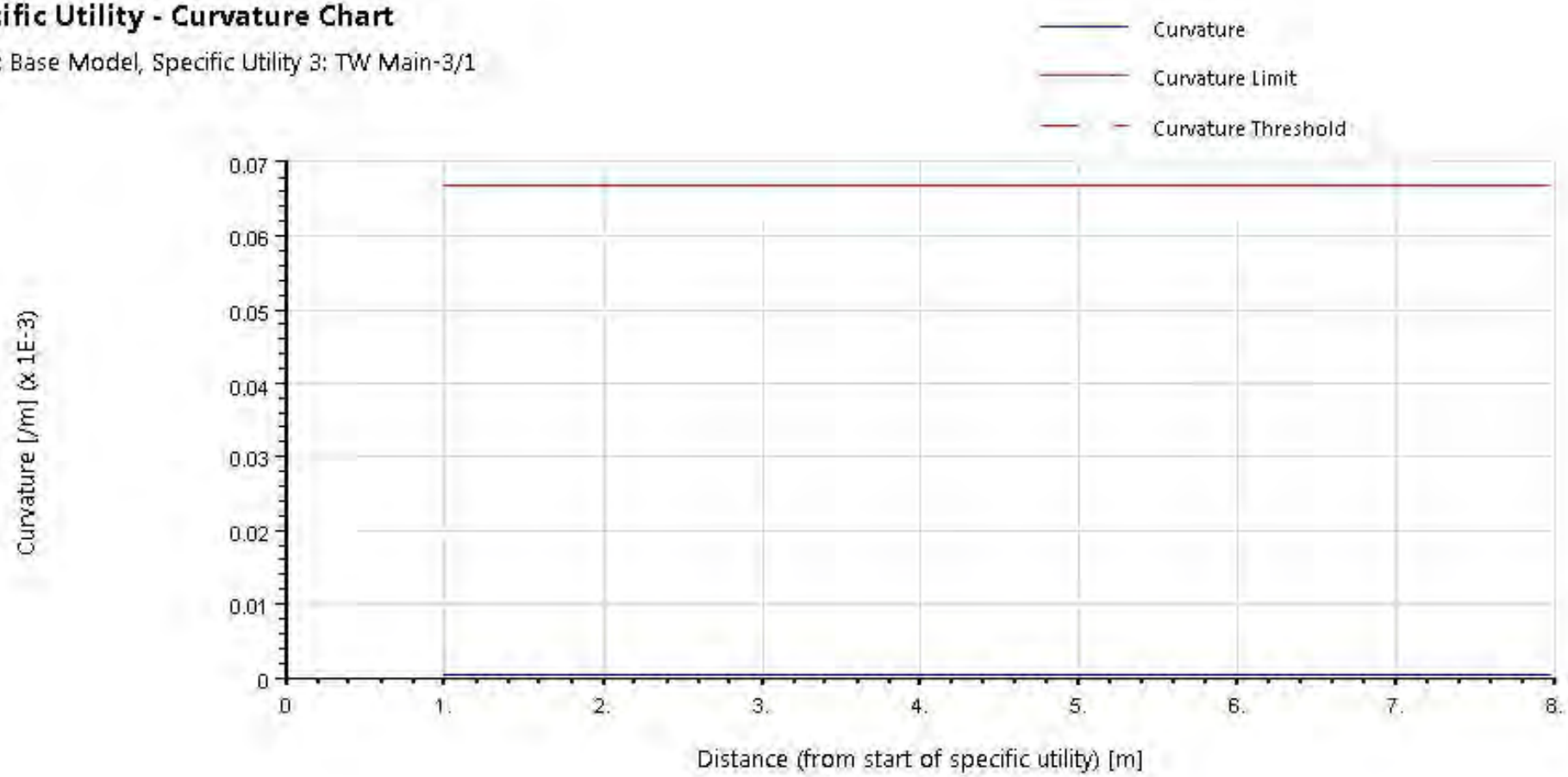
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



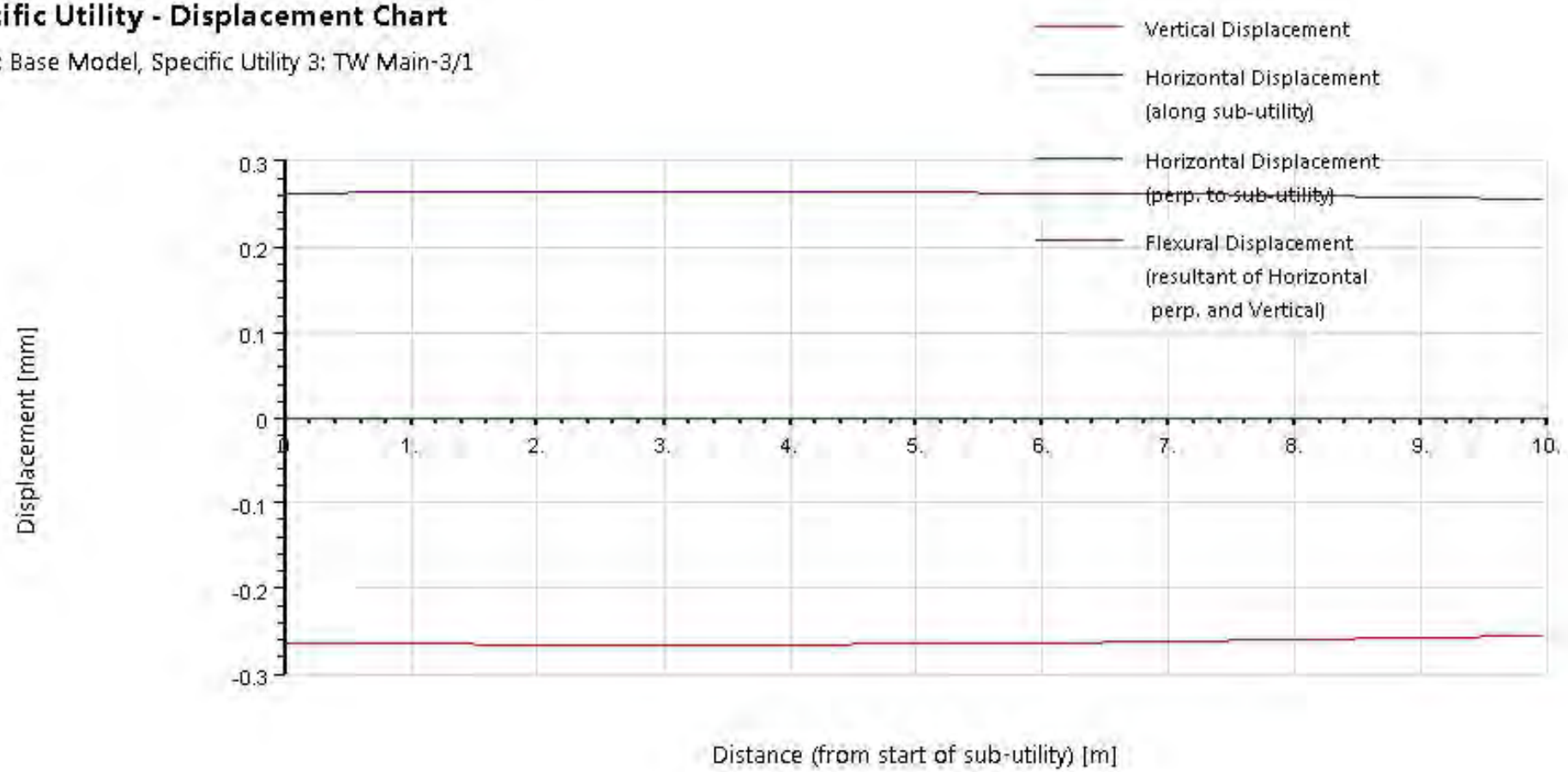
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



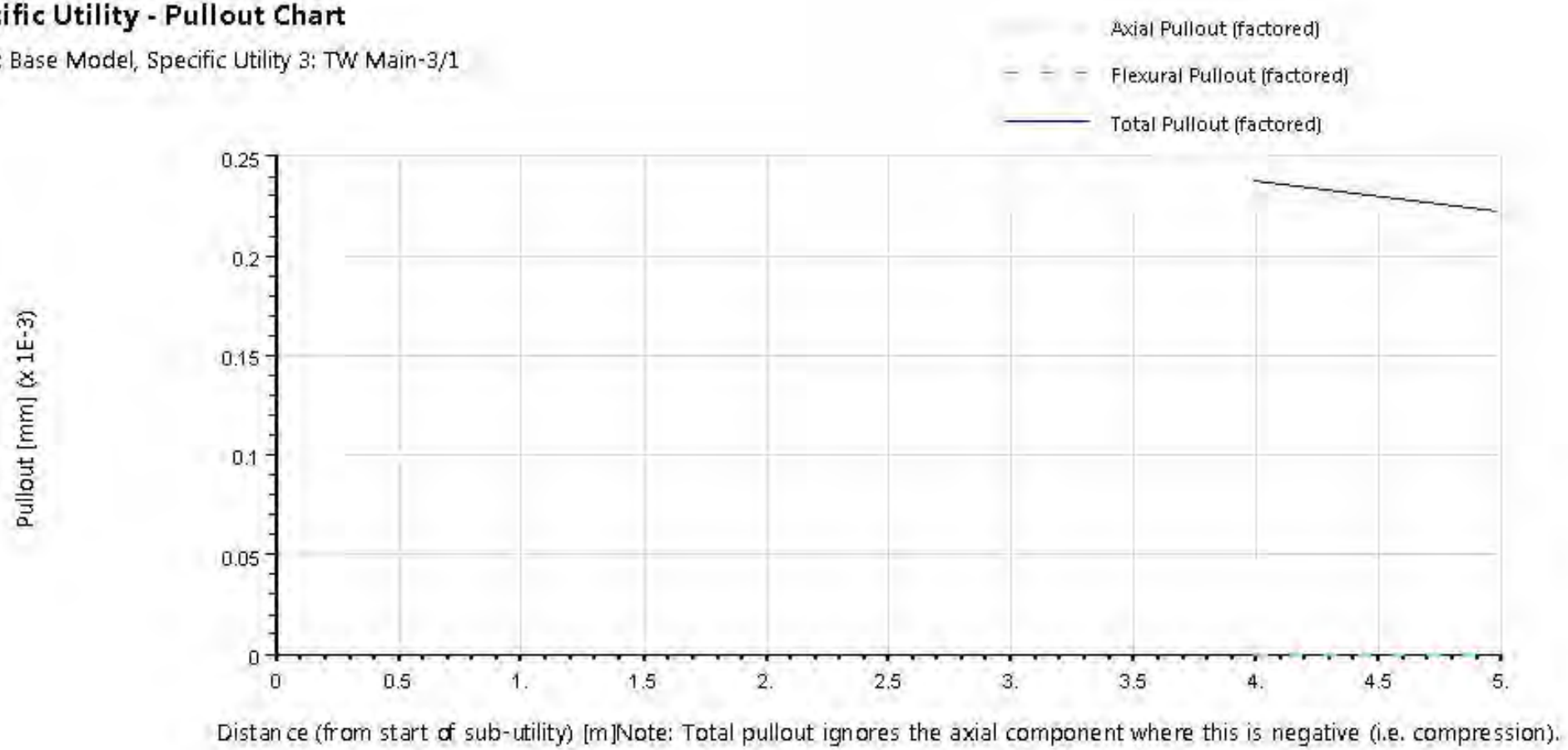
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



Specific Utility - Pullout Chart

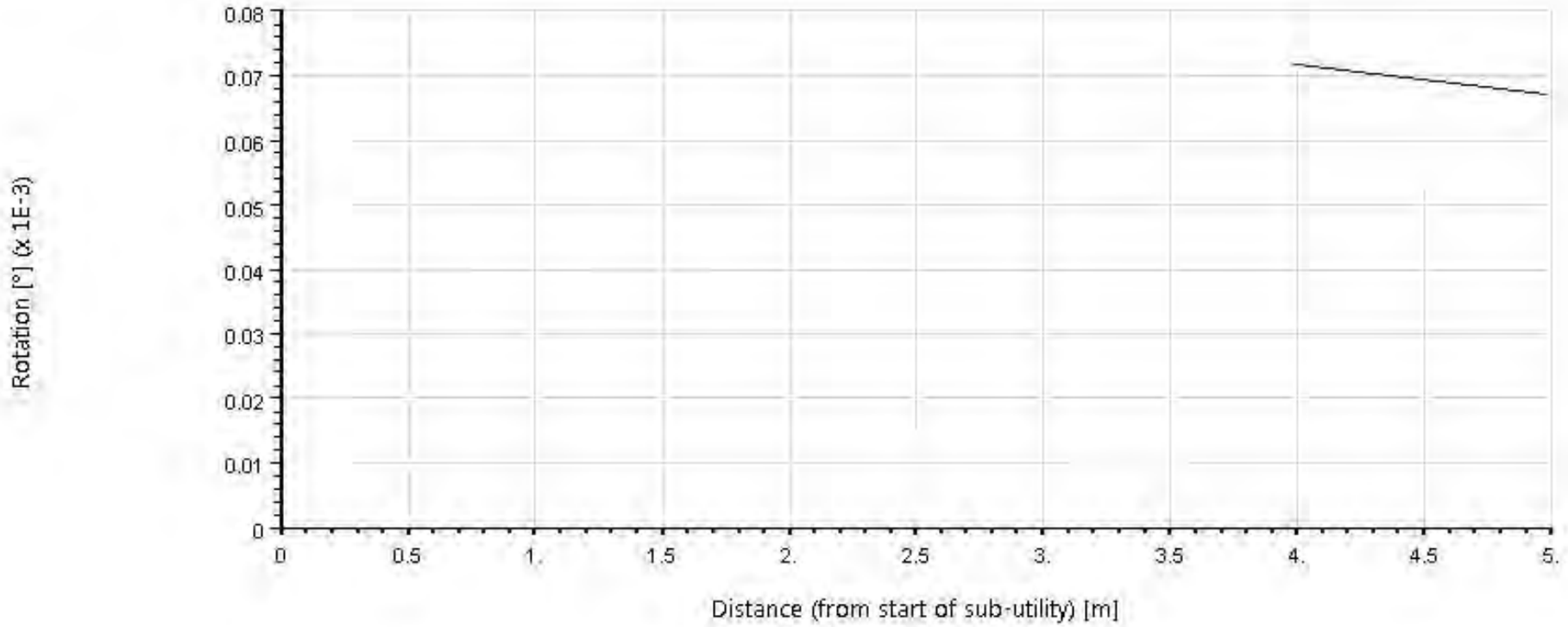
Stage: Base Model, Specific Utility 3: TW Main-3/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

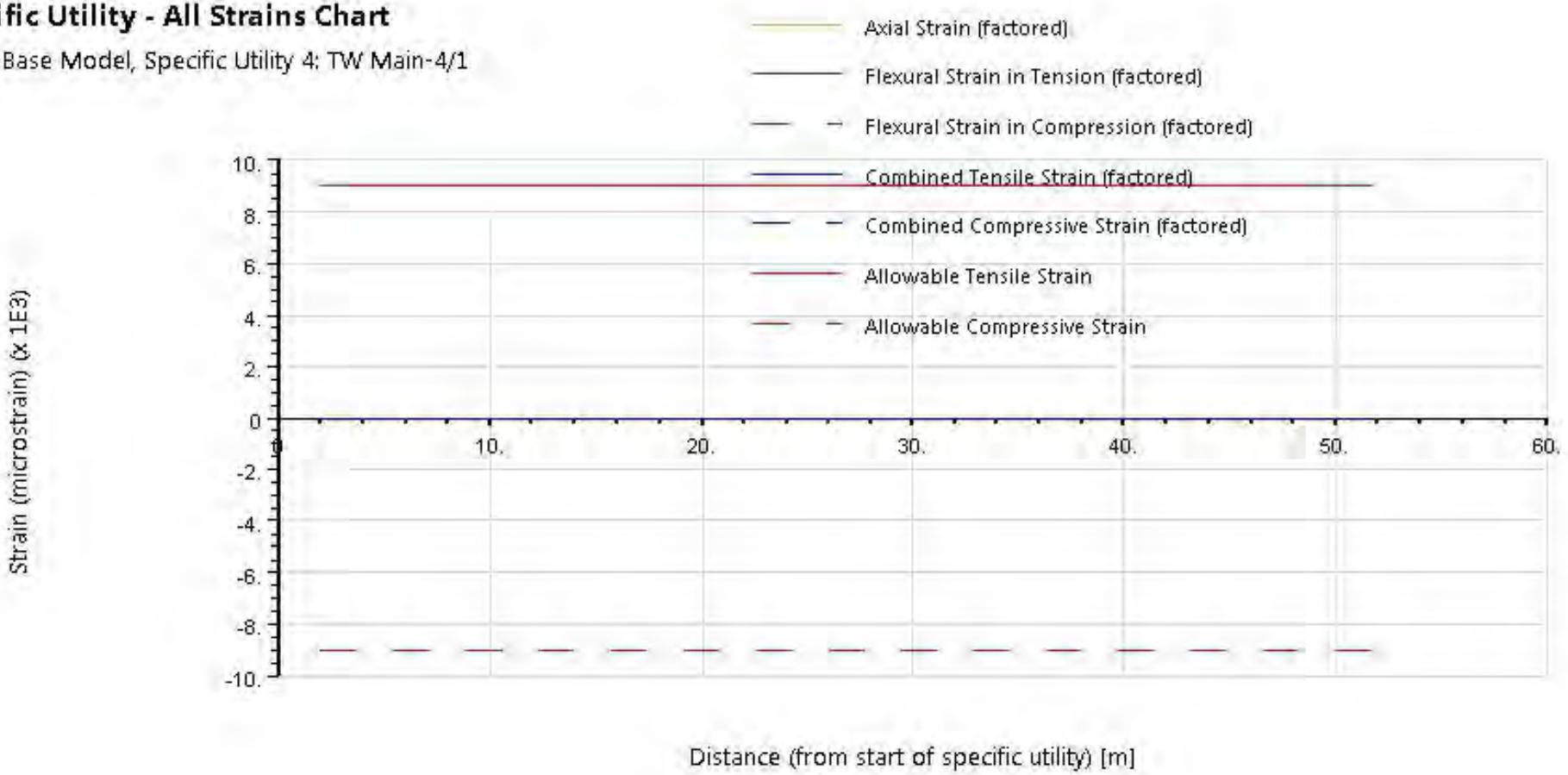
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



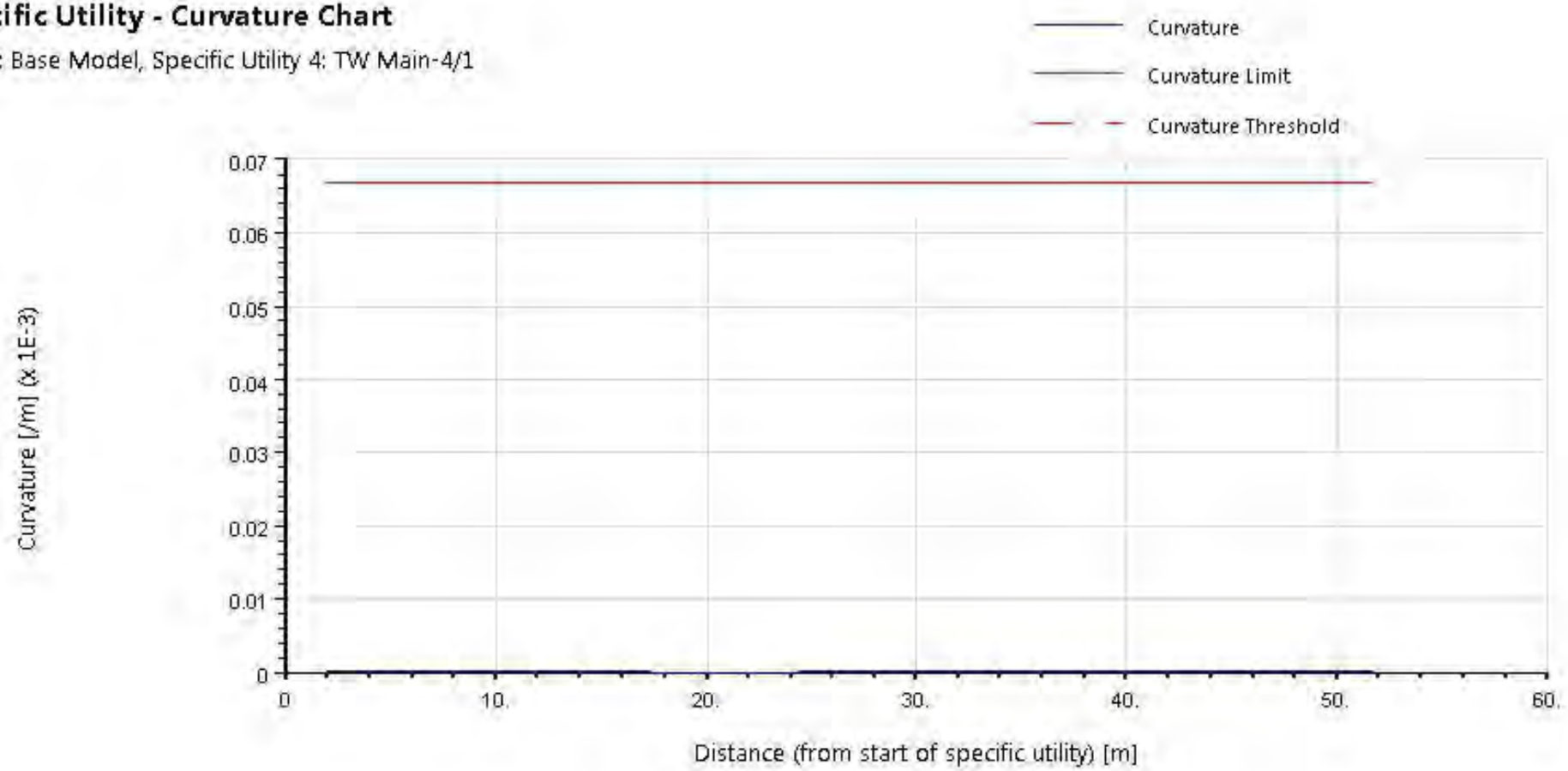
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



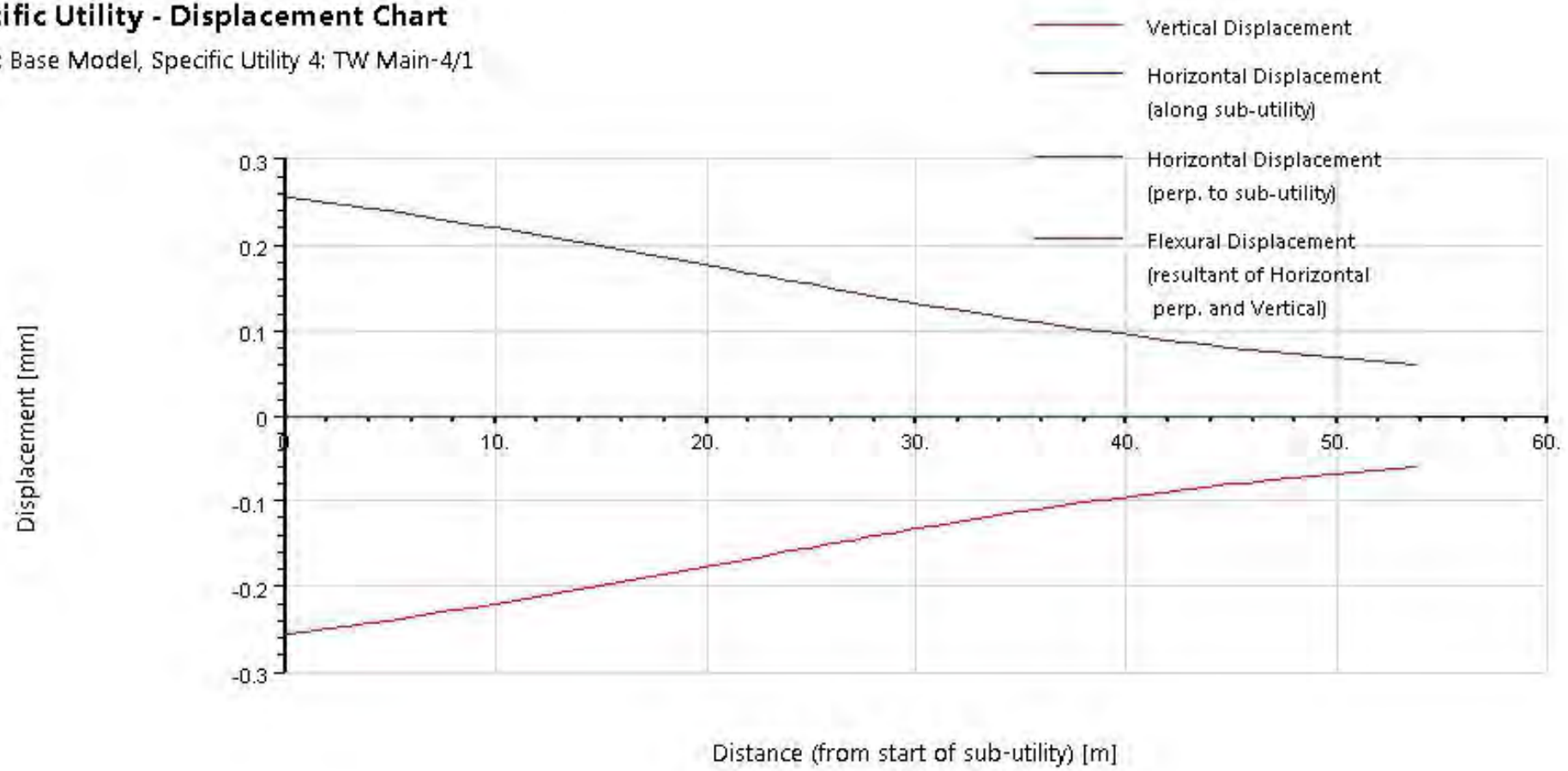
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



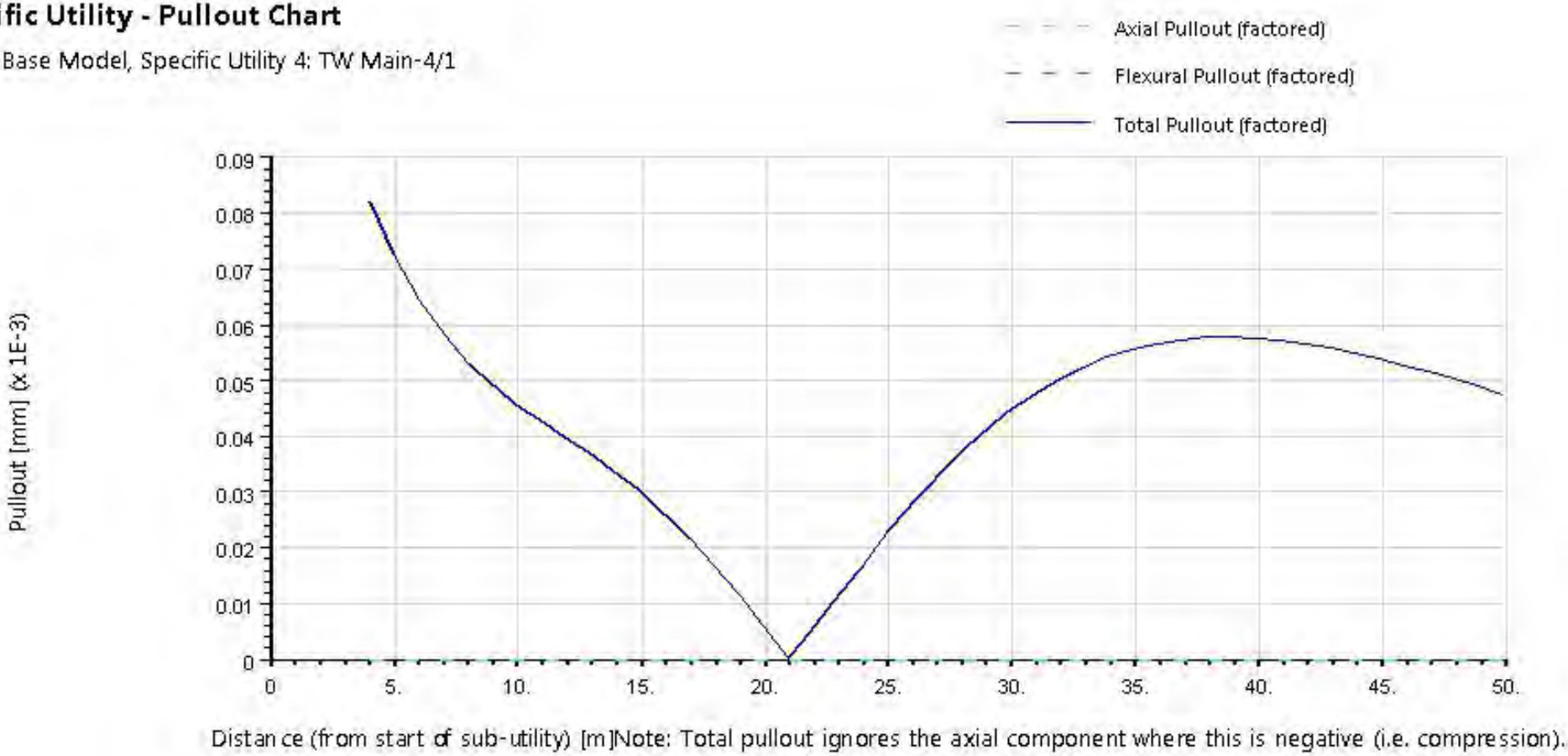
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



Specific Utility - Pullout Chart

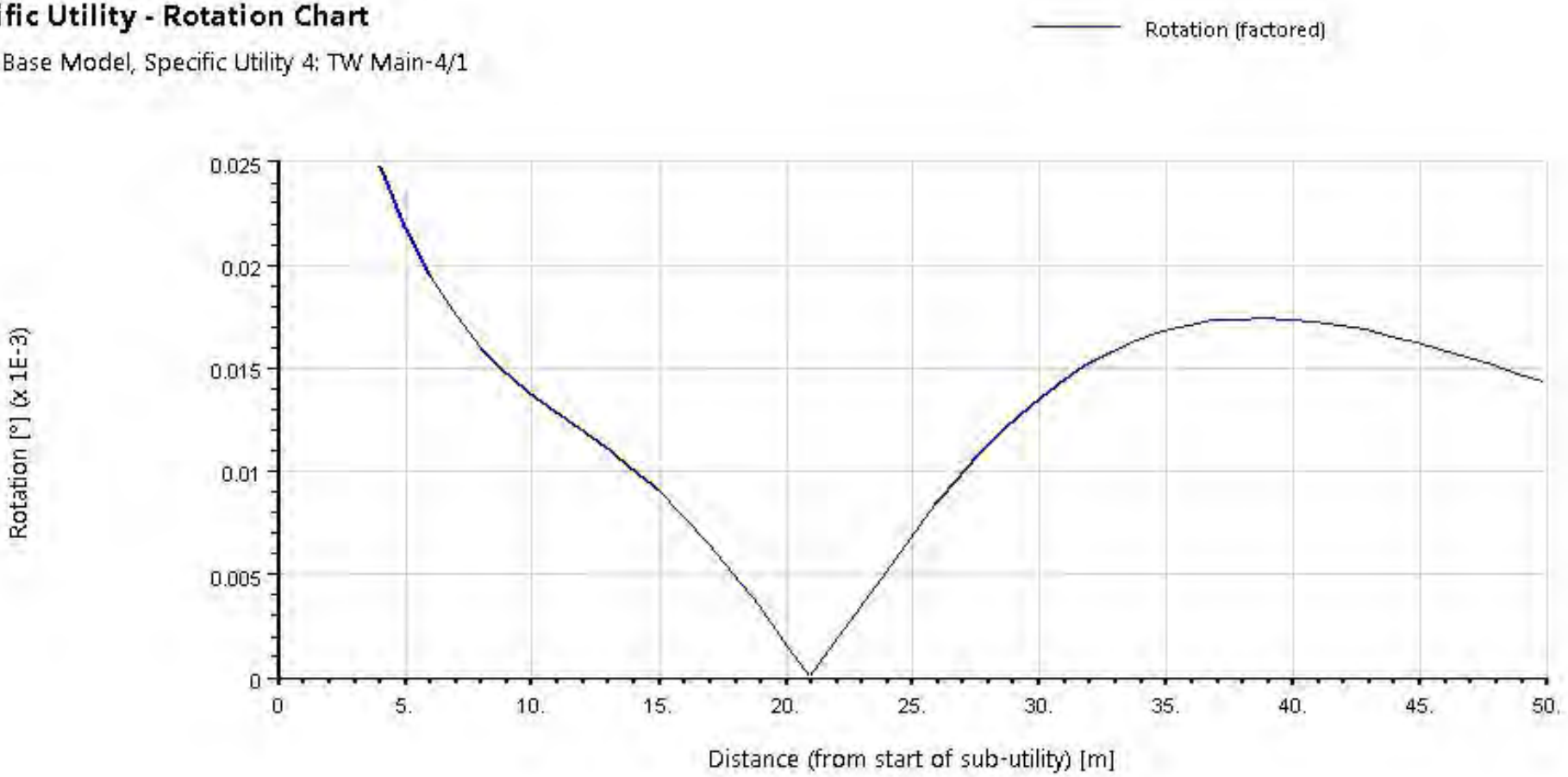
Stage: Base Model, Specific Utility 4: TW Main-4/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

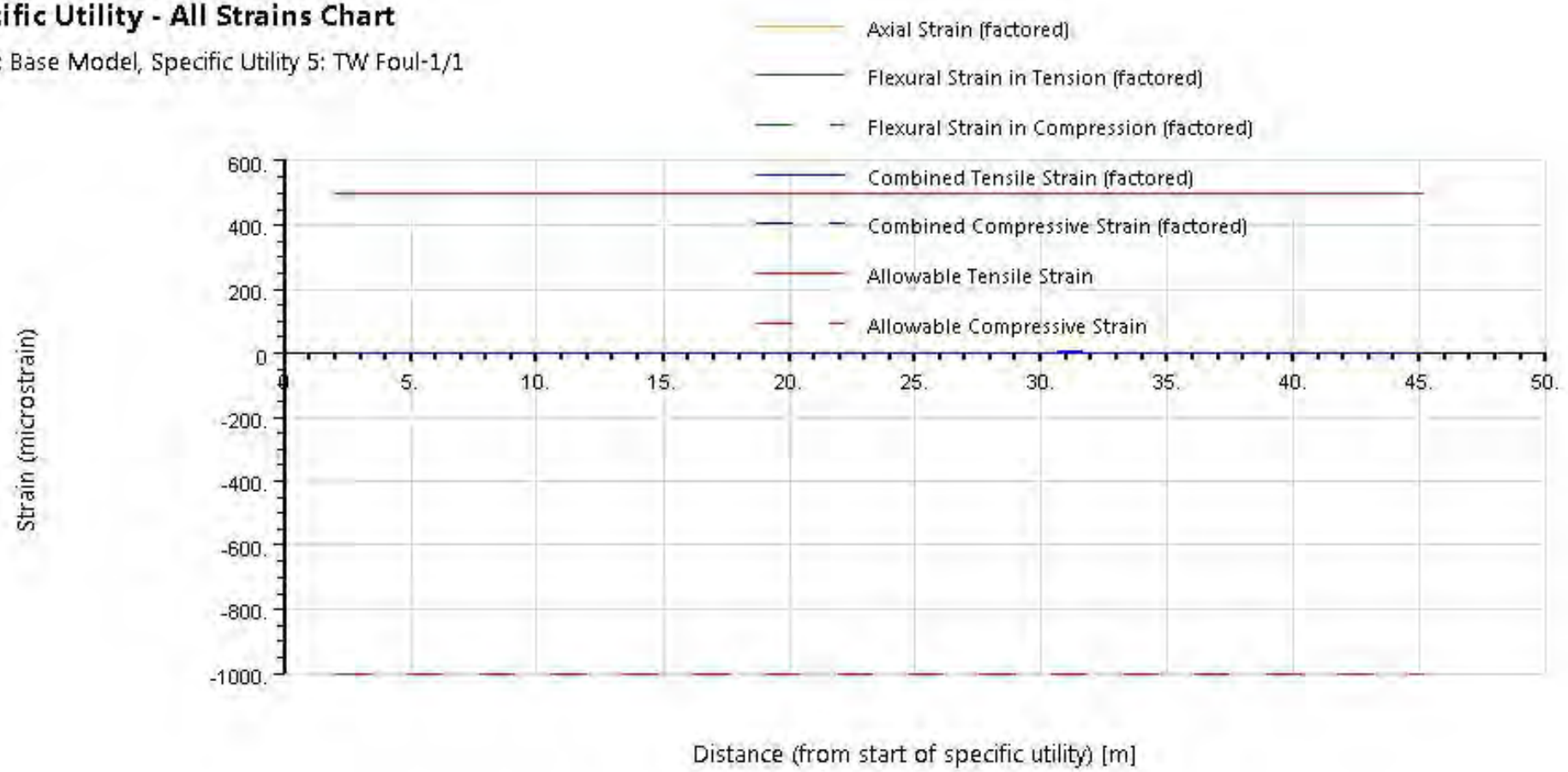
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



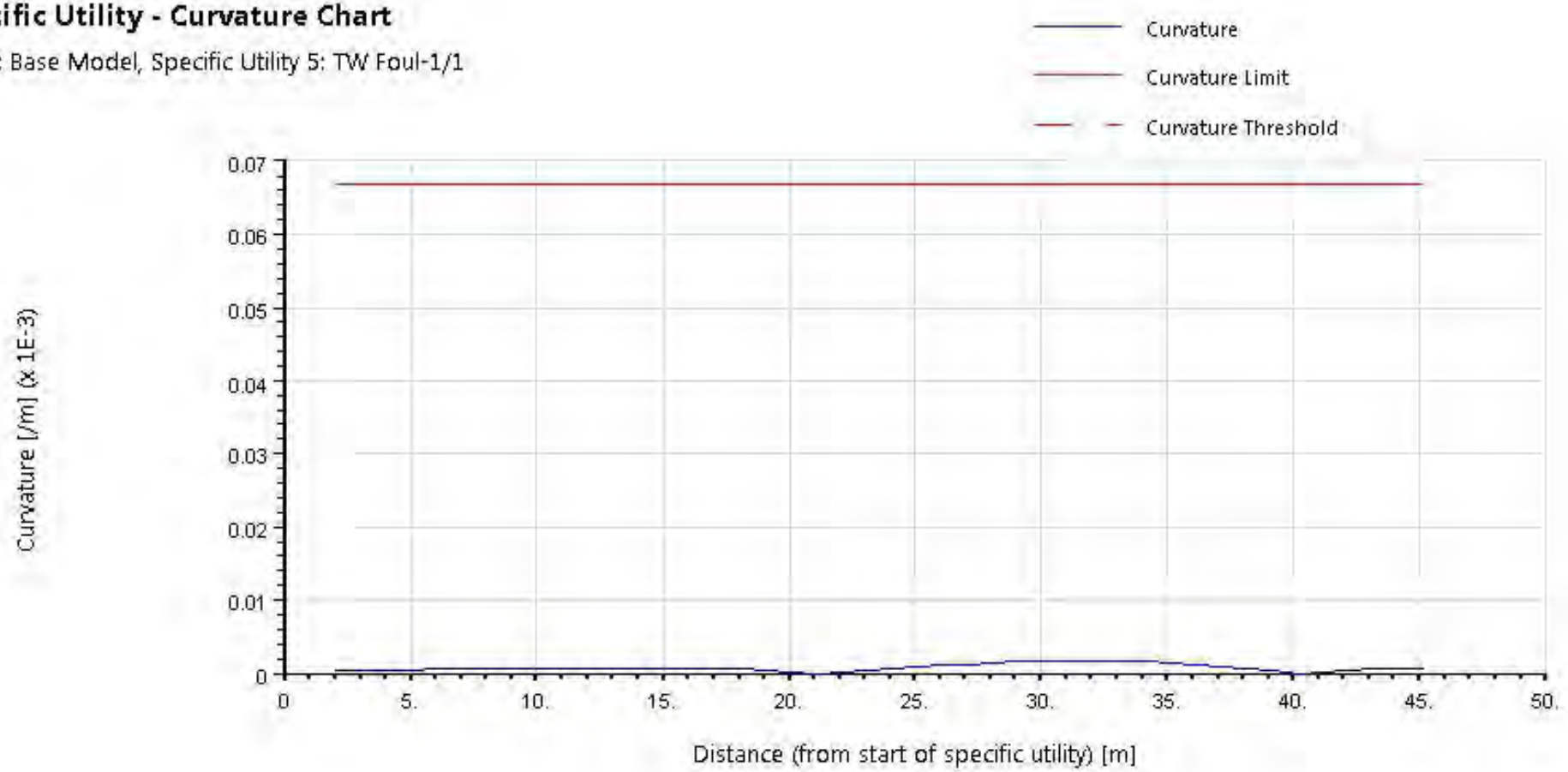
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



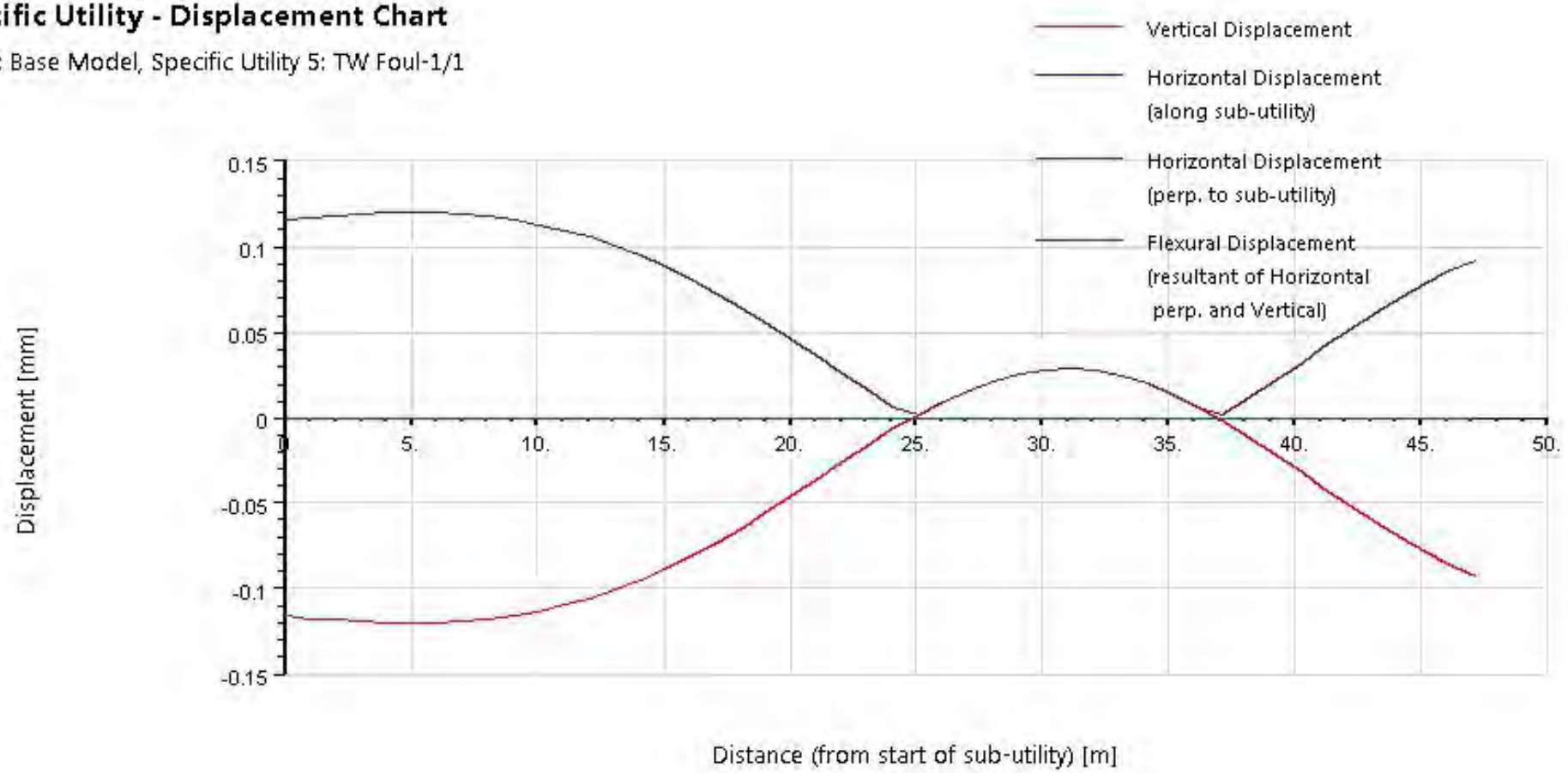
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



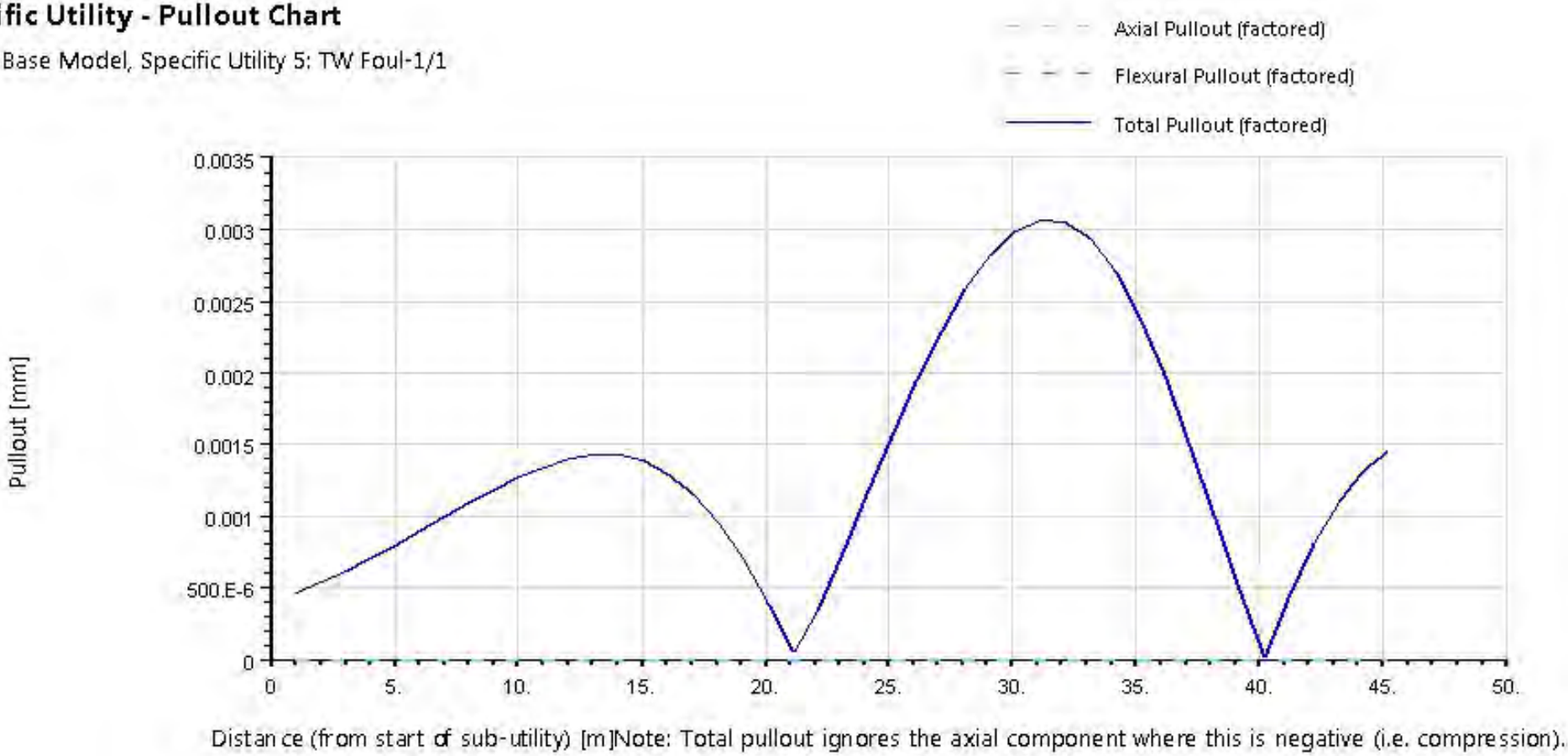
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



Specific Utility - Pullout Chart

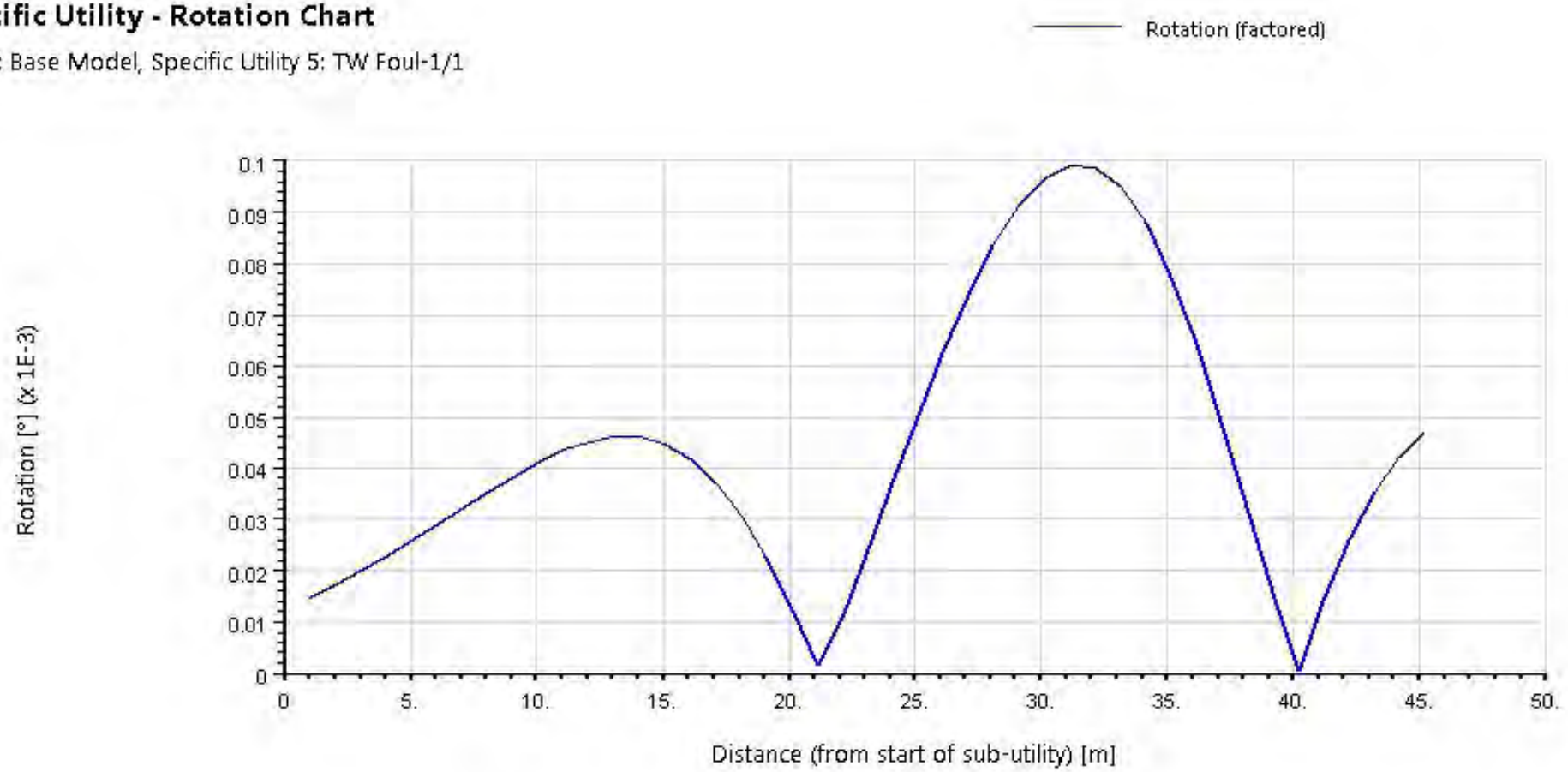
Stage: Base Model, Specific Utility 5: TW Foul-1/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

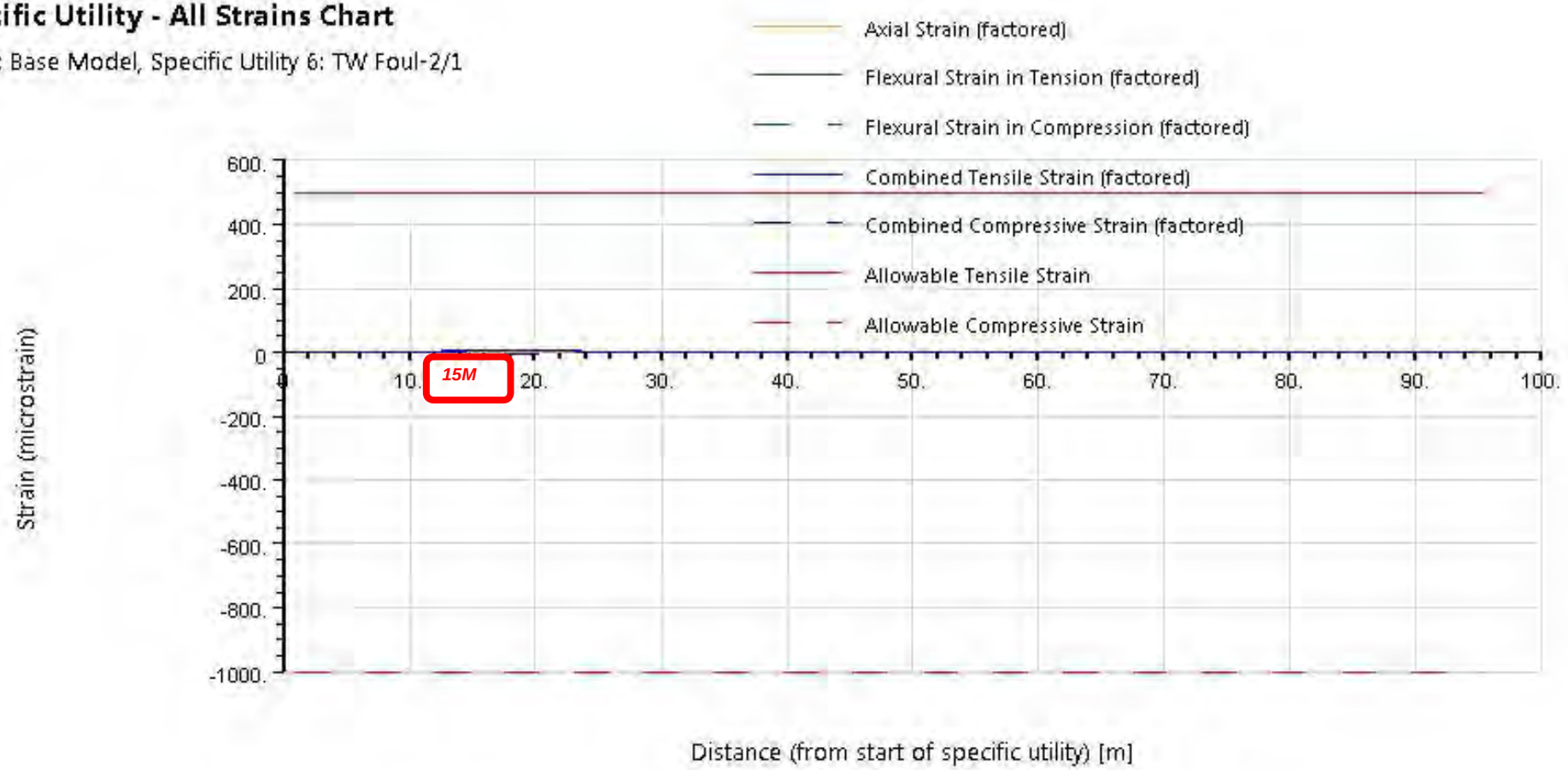
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



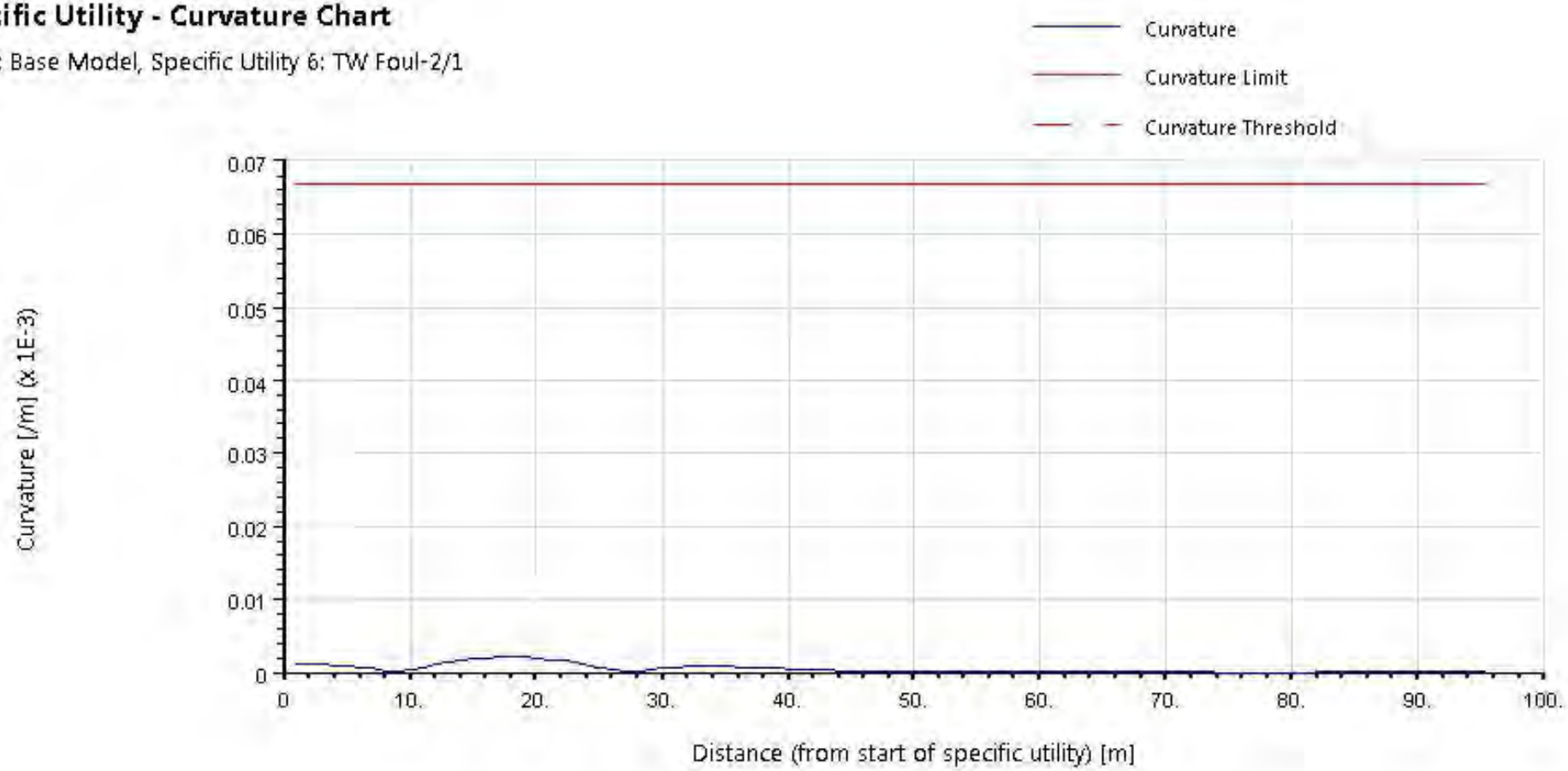
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



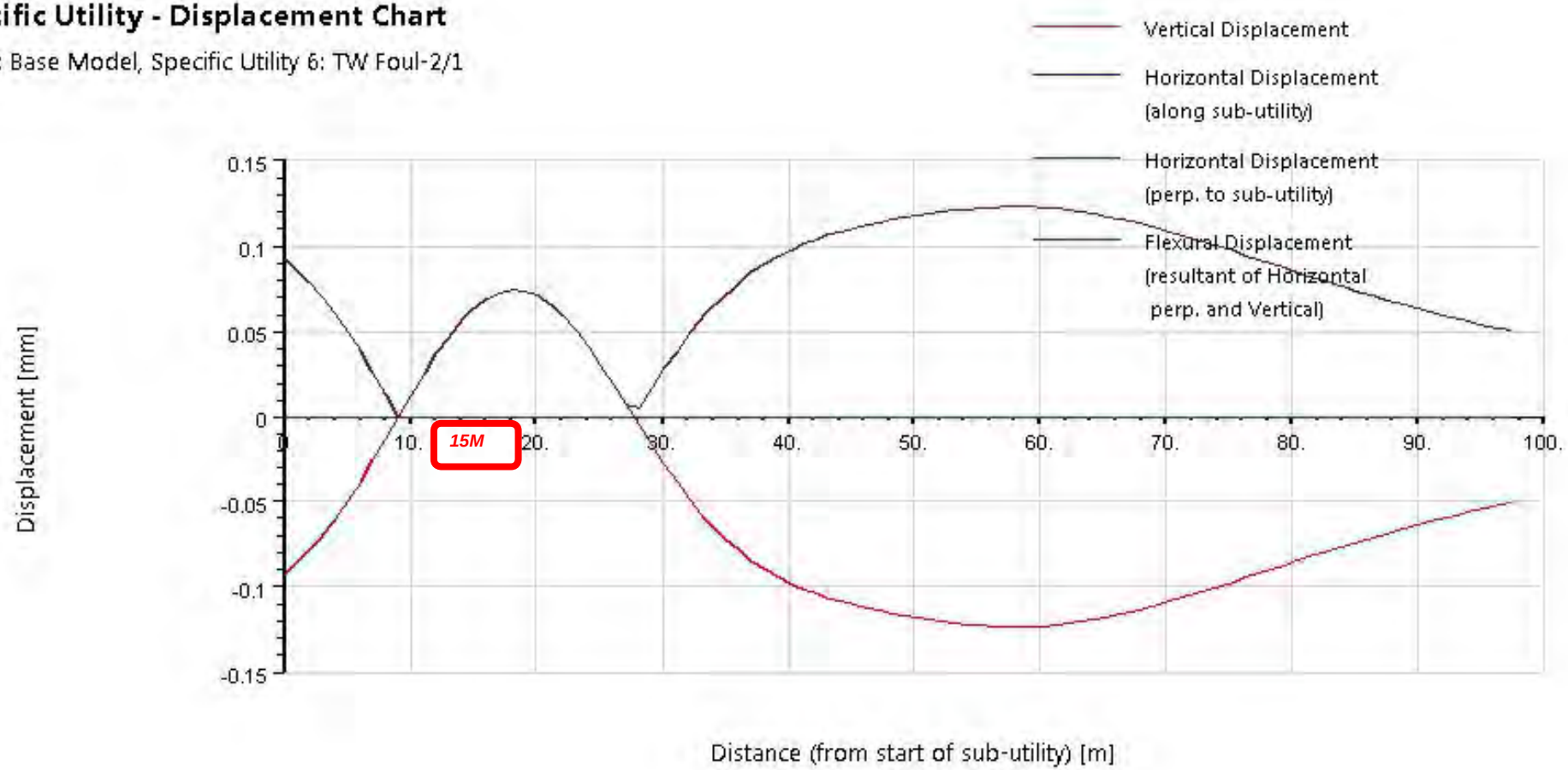
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



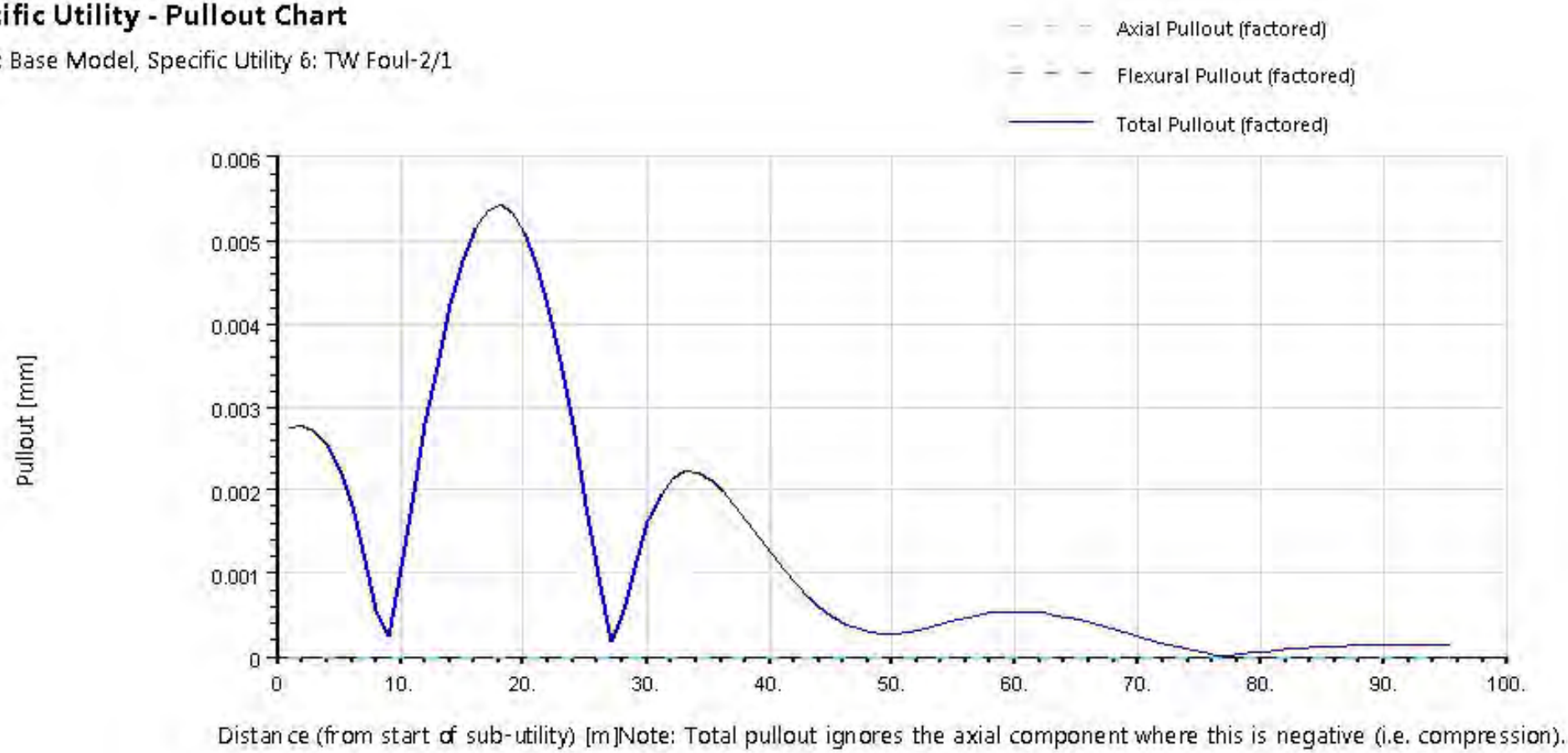
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Pullout Chart

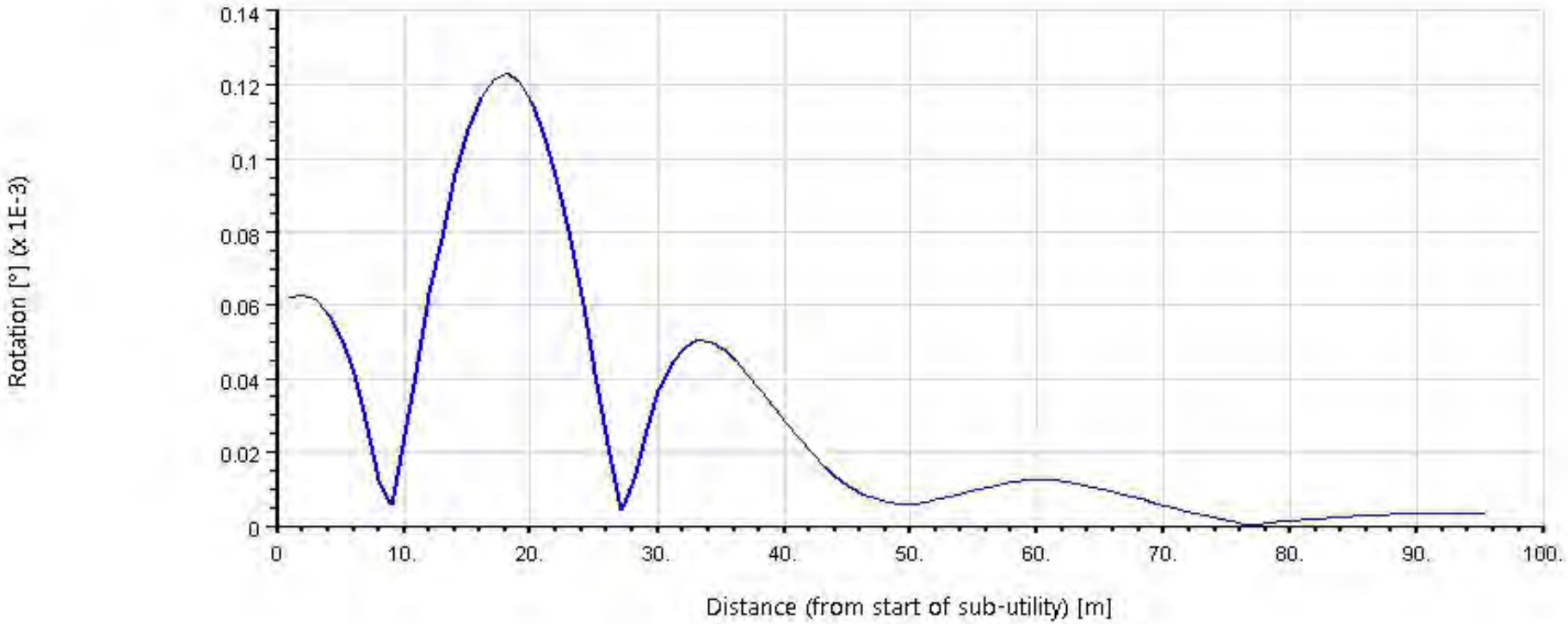
Stage: Base Model, Specific Utility 6: TW Foul-2/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



APPENDIX D2
XDISP BASEMENT CONSTRUCTION – UNDRAINED (STAGE 2A)

Titles

Job No.: 371944
Job Title: 60-86 Royal College Street, London
Sub-title: Basement Construction - Undrained
Calculation Heading:
Initials: SA
Checker:
Date Saved: 04-Mar-2021
Date Checked:
Notes:
File Name: XDisp1 Basement Construction - Undrained .xdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\XDISP\Thames Water\02

History

Date	Time	By	Notes
05-Sep-2019	13:52	SAlHilly	New
05-Sep-2019	15:38	SAlHilly	
16-Sep-2019	16:58	SAlHilly	
17-Sep-2019	14:57	SAlHilly	
17-Sep-2019	15:05	SAlHilly	
17-Sep-2019	16:55	SAlHilly	
20-Sep-2019	15:42	TYLER_A	
20-Sep-2019	15:53	TYLER_A	
03-Oct-2019	12:16	TYLER_A	
14-Oct-2019	14:55	TYLER_A	
14-Oct-2019	14:56	TYLER_A	
18-Nov-2019	11:12	TYLER_A	
22-Nov-2019	16:02	TYLER_A	
04-Dec-2019	10:18	TYLER_A	
04-Dec-2019	10:21	TYLER_A	
04-Dec-2019	10:27	TYLER_A	
22-Apr-2020	09:24	TYLER_A	
22-Apr-2020	10:32	TYLER_A	
22-Apr-2020	15:06	TYLER_A	
22-Apr-2020	17:31	TYLER_A	
22-Apr-2020	19:43	TYLER_A	
22-Apr-2020	19:51	TYLER_A	
18-Jun-2020	12:42	TYLER_A	
18-Jun-2020	14:18	TYLER_A	
18-Jun-2020	14:58	TYLER_A	
18-Jun-2020	15:00	TYLER_A	
22-Jun-2020	12:11	TYLER_A	
22-Jun-2020	12:21	TYLER_A	
22-Jun-2020	14:37	TYLER_A	
25-Jun-2020	12:30	TYLER_A	
26-Jun-2020	09:51	TYLER_A	
29-Jun-2020	13:28	TYLER_A	
29-Jun-2020	14:17	TYLER_A	
29-Jun-2020	15:52	TYLER_A	
16-Jul-2020	15:49	TYLER_A	
20-Jul-2020	08:07	TYLER_A	
20-Jul-2020	08:57	TYLER_A	
20-Jul-2020	09:01	TYLER_A	
13-Nov-2020	14:27	SAlHilly	
16-Nov-2020	14:44	TYLER_A	
16-Nov-2020	15:25	TYLER_A	
16-Nov-2020	15:45	TYLER_A	
16-Nov-2020	15:51	TYLER_A	
20-Nov-2020	08:37	TYLER_A	
20-Nov-2020	08:42	TYLER_A	
20-Nov-2020	16:58	SAlHilly	
20-Nov-2020	17:15	SAlHilly	
02-Dec-2020	15:44	TYLER_A	
02-Dec-2020	16:42	TYLER_A	
09-Dec-2020	21:32	TYLER_A	
10-Dec-2020	09:33	TYLER_A	
15-Feb-2021	09:56	TYLER_A	
04-Mar-2021	10:42	TYLER_A	

Displacement Lines

Ref.	Name	x1 [m]	y1 [m]	z1 [m]	x2 [m]	y2 [m]	z2 [m]	Intervals [No.]	Surface type for tunnels	Interpolate imported displacements	Calculate
1	TW Main-1	76.75020	113.72130	-0.90000	37.23790	86.22860	-0.90000	48	Surface	Yes	Yes
2	TW Main-2	37.23790	86.22860	-0.90000	53.14020	56.06240	-0.90000	34	Surface	Yes	Yes
3	TW Main-3	53.14020	56.06240	-0.90000	58.38580	47.58520	-0.90000	10	Surface	Yes	Yes
4	TW Main-4	58.38580	47.58520	-0.90000	83.80850	0.19950	-0.90000	54	Surface	Yes	Yes
5	TW Foul-1	76.45800	114.12130	-6.00000	38.34110	86.26920	-6.00000	47	Surface	Yes	Yes
6	TW Foul-2	38.34110	86.26920	-6.00000	84.72770	0.55680	-6.00000	97	Surface	Yes	Yes

Displacement Grids

Ref.	Name	Extrusion: Direction	Base line start: X [m]	Base line start: Y [m]	Base line start: Z(level) [m]	Base line end: X [m]	Base line end: Y [m]	Base line end: Z(level) [m]	Base line: Intervals [No.]	Extrusion: Distance [m]	Extrusion: Intervals [No.]	Surface type for tunnels	Calculate
1	Grid1	Global X	30.00000	0.00000	-3.00000	-	120.00000	-3.00000	120	80.00000	50	Surface	No

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	0.16310
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	0.16728
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	0.17140
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	0.17543
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	0.17933
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	0.18309
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	0.18665
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	0.19000
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	0.19308
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	0.19586
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	0.19830
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	0.20037
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	0.20203
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	0.20326
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	0.20403
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	0.20433
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	0.20417
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	0.20354
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	0.20249
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	0.20104
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	0.19925
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	0.19719
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	0.19494
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	0.19258
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	0.19021

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	0.18791
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	0.18579
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	0.18391
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	0.18236
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	0.18119
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	0.18046
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	0.18019
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	0.18040
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	0.18107
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	0.18217
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	0.18364
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	0.18540
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	0.18735
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	0.18939
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	0.19140
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	0.19327
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	0.19490
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	0.19621
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	0.19713
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	0.19761
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	0.19762
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	0.19716
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	0.19622
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	0.19482
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	0.19734
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	0.19949
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	0.20123
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	0.20258
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	0.20353
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	0.20411
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	0.20435
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	0.20433
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	0.20410
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	0.20377
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	0.20343
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	0.20317
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	0.20310
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	0.20332
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	0.20389
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	0.20490
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	0.20637
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	0.20834
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	0.21081
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	0.21376
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	0.21716
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	0.22096
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	0.22507
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	0.22942
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	0.23389
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	0.23837
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	0.24276
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	0.24695
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	0.25084
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	0.25435
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	0.25742
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	0.25998
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	0.26202
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	0.26352
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	0.26453
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	0.26507
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	0.26516
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	0.26480
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	0.26403
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	0.26287
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	0.26135
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	0.25951
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	0.25736
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	0.25496
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	0.25218
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	0.24919
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	0.24601
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	0.24267
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	0.23920
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	0.23560
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	0.23188
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	0.22807
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	0.22417
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	0.22018
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	0.21612
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	0.21198
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	0.20777
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	0.20350
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	0.19917
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	0.19479
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	0.19036
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	0.18589
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	0.18139
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	0.17687
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	0.17235
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	0.16782
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	0.16330
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	0.15880
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	0.15433
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	0.14990
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	0.14552
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	0.14120
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	0.13694
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	0.13275
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	0.12864
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	0.12461
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	0.12067
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	0.11683
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	0.11307
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	0.10942
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	0.10586
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	0.10241
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	0.09905
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	0.09580
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	0.09264
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	0.08959
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	0.08663
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	0.08377
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	0.08101
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	0.07834
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	0.07576
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	0.07328
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	0.07088
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	0.06856
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	0.06633
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	0.06418
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	0.06211
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	0.06011
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	0.11593
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	0.11740
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	0.11860
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	0.11951
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	0.12007
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	0.12022
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	0.11993
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	0.11913
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	0.11776
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	0.11578
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	0.11312
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	0.10975
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	0.10561
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	0.10068
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	0.09494
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	0.08839
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	0.08105
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	0.07299
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	0.06427

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	0.05502
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	0.04537
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	0.03549
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	0.02559
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	0.01589
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00660
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-0.00203
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-0.00979
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-0.01644
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-0.02180
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-0.02570
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-0.02800
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-0.02860
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-0.02747
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-0.02461
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-0.02008
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-0.01401
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-0.00658
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00198
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	0.01140
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	0.02138
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	0.03165
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	0.04191
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	0.05193
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	0.06150
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	0.07045
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	0.07865
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	0.08603
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	0.09256
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	0.08619
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	0.07873
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	0.07018
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	0.06055
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	0.04991
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	0.03837
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	0.02612
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	0.01336
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00039
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-0.01250
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-0.02495
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-0.03663
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-0.04720
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-0.05636
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-0.06384
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-0.06943
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-0.07298
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-0.07440
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-0.07366
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-0.07081
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-0.06593
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-0.05920
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-0.05083
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-0.04110
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-0.03031
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-0.01880
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-0.00690
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00506
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	0.01681
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	0.02809
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	0.03874
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	0.04861
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	0.05763
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	0.06577
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	0.07303
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	0.07945
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	0.08507
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	0.08998
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	0.09424
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	0.09794
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	0.10116
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	0.10396
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	0.10642
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	0.10860
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	0.11055
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	0.11231
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	0.11392
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	0.11540
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	0.11677
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	0.11803
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	0.11918
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	0.12021
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	0.12112
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	0.12188
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	0.12249
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	0.12292
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	0.12317
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	0.12321
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	0.12305
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	0.12267
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	0.12207
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	0.12126
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	0.12025
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	0.11903
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	0.11763
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	0.11606
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	0.11433
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	0.11245
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	0.11045
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	0.10834
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	0.10614
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	0.10386
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	0.10153
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	0.09915
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	0.09673
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	0.09430
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	0.09185
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	0.08941
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	0.08698
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	0.08457
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	0.08218
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	0.07983
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	0.07751
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	0.07523
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	0.07300
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	0.07082
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	0.06869
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	0.06661
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	0.06458
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	0.06261
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	0.06069
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	0.05882
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	0.05702
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	0.05526
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	0.05356
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	0.05192
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	0.05032

Polygonal Excavations

Ref.	**1**
Excavation Name:	**Prop Excavation B2**
Surface level [m]:	-1.0000
Contribution:	Positive
Surface movement curves which are selected are applied between surface and [m]:	-9.4400

Corner	x	y	Base Level	Arc Enabled	Stiffened	Prev. Side:	Prev. Side:	Prev. Side:	Next Side:	Next Side:	Next Side:

						d [m]	p1 [%]	p2* [%]	d [m]	p1 [%]	p2* [%]
1	53.300	81.600	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
2	81.100	27.300	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
3	97.000	35.500	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
4	93.900	49.100	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
5	80.500	74.700	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
6	68.800	89.700	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
2	81.100	27.300	97.000	35.500	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
3	97.000	35.500	93.900	49.100	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
4	93.900	49.100	80.500	74.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
5	80.500	74.700	68.800	89.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
6	68.800	89.700	53.300	81.600	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))

Ref. **2**
Excavation Name: **Contig Piled Wall B3**
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -16.900

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	53.300	81.600	-16.900	Yes	No	-	-	-	-	-	-
2	81.100	27.300	-16.900	Yes	No	-	-	-	-	-	-
3	97.000	35.500	-16.900	Yes	No	-	-	-	-	-	-
4	93.900	49.100	-16.900	Yes	No	-	-	-	-	-	-
5	80.500	74.700	-16.900	Yes	No	-	-	-	-	-	-
6	68.800	89.700	-16.900	Yes	No	-	-	-	-	-	-

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
2	81.100	27.300	97.000	35.500	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
3	97.000	35.500	93.900	49.100	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
4	93.900	49.100	80.500	74.700	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
5	80.500	74.700	68.800	89.700	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
6	68.800	89.700	53.300	81.600	Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(a))

Ref. **3**
Excavation Name: **Secant Piled Wall B2**
Surface level [m]: -1.0000
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -9.4400

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	53.300	81.600	-9.4400	Yes	No	-	-	-	-	-	-
2	81.100	27.300	-9.4400	Yes	No	-	-	-	-	-	-
3	97.000	35.500	-9.4400	Yes	No	-	-	-	-	-	-
4	93.900	49.100	-9.4400	Yes	No	-	-	-	-	-	-
5	80.500	74.700	-9.4400	Yes	No	-	-	-	-	-	-
6	68.800	89.700	-9.4400	Yes	No	-	-	-	-	-	-

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
2	81.100	27.300	97.000	35.500	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
3	97.000	35.500	93.900	49.100	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
4	93.900	49.100	80.500	74.700	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
5	80.500	74.700	68.800	89.700	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
6	68.800	89.700	53.300	81.600	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))

Ref. **4**
Excavation Name: **Lift Pit 1**
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -11.700

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	59.100	84.300	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	60.400	84.950	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	61.100	83.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	59.800	83.000	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal

1	59.100	84.300	60.400	84.950	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
2	60.400	84.950	61.100	83.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
3	61.100	83.700	59.800	83.000	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
4	59.800	83.000	59.100	84.300	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))

Ref. **5**
Excavation Name: **Lift Pit 2**
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -11.700

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	90.800	34.000	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	92.100	34.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	92.800	33.400	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	91.400	32.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	90.800	34.000	92.100	34.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
2	92.100	34.700	92.800	33.400	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
3	92.800	33.400	91.400	32.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
4	91.400	32.700	90.800	34.000	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))

Circular Excavations

Vertical Ground Movement Curves

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.040][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -2.0E-2x + 4.0E-2
Coeff. of Determination: 1.0

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: z = $-2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
Coeff. of Determination: 9.9991E-1

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.040][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -2.0E-2x + 4.0E-2
Coeff. of Determination: 1.0

Curve Name: **Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.050][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -2.5E-2x + 5.0E-2
Coeff. of Determination: 1.0

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: z = $-2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
Coeff. of Determination: 9.9991E-1

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal

Horizontal Ground Movement Curves

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.041][0.050,0.000,0.038][0.100,0.000,0.036][0.150,0.000,0.034]
[0.200,0.000,0.032][0.250,0.000,0.030][0.300,0.000,0.029][0.350,0.000,0.027]
[0.400,0.000,0.025][0.450,0.000,0.023][0.500,0.000,0.022][0.550,0.000,0.020]
[0.600,0.000,0.019][0.650,0.000,0.018][0.700,0.000,0.016][0.750,0.000,0.015]
[0.800,0.000,0.014][0.850,0.000,0.013][0.900,0.000,0.011][0.950,0.000,0.010]
[1.000,0.000,0.009][1.050,0.000,0.008][1.100,0.000,0.007][1.150,0.000,0.006]
[1.200,0.000,0.005][1.250,0.000,0.004][1.300,0.000,0.004][1.350,0.000,0.003]
[1.400,0.000,0.002][1.450,0.000,0.001][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-4.2486E-3x^3 + 1.9096E-2x^2 - 4.6221E-2x + 4.0729E-2$
Coeff. of Determination: 1.0000

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.041][0.050,0.000,0.038][0.100,0.000,0.036][0.150,0.000,0.034]
[0.200,0.000,0.032][0.250,0.000,0.030][0.300,0.000,0.029][0.350,0.000,0.027]
[0.400,0.000,0.025][0.450,0.000,0.023][0.500,0.000,0.022][0.550,0.000,0.020]
[0.600,0.000,0.019][0.650,0.000,0.018][0.700,0.000,0.016][0.750,0.000,0.015]
[0.800,0.000,0.014][0.850,0.000,0.013][0.900,0.000,0.011][0.950,0.000,0.010]
[1.000,0.000,0.009][1.050,0.000,0.008][1.100,0.000,0.007][1.150,0.000,0.006]
[1.200,0.000,0.005][1.250,0.000,0.004][1.300,0.000,0.004][1.350,0.000,0.003]
[1.400,0.000,0.002][1.450,0.000,0.001][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-4.2486E-3x^3 + 1.9096E-2x^2 - 4.6221E-2x + 4.0729E-2$
Coeff. of Determination: 1.0000

Curve Name: **Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.081][0.050,0.000,0.076][0.100,0.000,0.072][0.150,0.000,0.067]
[0.200,0.000,0.063][0.250,0.000,0.059][0.300,0.000,0.056][0.350,0.000,0.052]
[0.400,0.000,0.049][0.450,0.000,0.045][0.500,0.000,0.043][0.550,0.000,0.040]
[0.600,0.000,0.037][0.650,0.000,0.034][0.700,0.000,0.032][0.750,0.000,0.029]
[0.800,0.000,0.027][0.850,0.000,0.024][0.900,0.000,0.022][0.950,0.000,0.020]
[1.000,0.000,0.018][1.050,0.000,0.016][1.100,0.000,0.014][1.150,0.000,0.012]
[1.200,0.000,0.011][1.250,0.000,0.009][1.300,0.000,0.007][1.350,0.000,0.005]
[1.400,0.000,0.004][1.450,0.000,0.002][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-1.0610E-2x^3 + 4.4203E-2x^2 - 9.6358E-2x + 8.0901E-2$
Coeff. of Determination: 1.0000

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Utility Dimensions

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick 1372-762	1372.0	200.00
2	Brick 2134-1829	2134.0	200.00
3	HPPE	180.00	5.0000
4	BP	180.00	5.0000

Acceptance Criteria/Parameters

Ref.	Name	Criteria: Pullout: Threshold Value [mm]	Criteria: Pullout: Limit [mm]	Criteria: Pullout: Threshold Value [Deg]	Criteria: Rotn.: Limit [Deg]	Criteria: Rotn.: Threshold Value	Criteria: Rotn.: Limit	Allowable Strain: Tension	Allowable Strain: Compn.	Allowable Strain: Tension: Value [με]	Allowable Strain: Compn.: Value [με]	Rad. of Curv.: Threshold Value [m]	Rad. of Curv.: Limit	Factors: Ax.	Factors: Flex.
1	Brick	No	-	No	-	No	-	Yes	Yes	500.00	1000.0	Yes	15000.	1.0000	1.0000
1.0000	1.0000	1.0000	2.0000	1.0000											
2	HPPE	No	-	No	-	No	-	Yes	Yes	9000.0	9000.0	Yes	15000.	1.0000	1.0000
1.0000	0.20000	0.20000	1.0000	1.0000											

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : Yes

Utilities

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length [m]	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line [m]	End Distance Along Line [m]	Pipe Segment Length [m]
1	TW Main-1	1	Yes	BP	HPPE	Line	TW Main-1	-	48.136	-	-	0.0	48.135	3.0000
2	TW Main-2	1	Yes	HPPE	HPPE	Line	TW Main-2	-	34.101	-	-	0.0	34.101	3.0000
3	TW Main-3	1	Yes	HPPE	HPPE	Line	TW Main-3	-	9.9689	-	-	0.0	9.9680	3.0000
4	TW Main-4	1	Yes	HPPE	HPPE	Line	TW Main-4	-	53.775	-	-	0.0	53.774	3.0000
5	TW Foul-1	1	Yes	Brick 1372-762	Brick	Line	TW Foul-1	-	47.208	-	-	0.0	47.208	1.0000
6	TW Foul-2	1	Yes	Brick 2134-1829	Brick	Line	TW Foul-2	-	97.459	-	-	0.0	97.459	1.0000

Warnings

1 Multiple excavations have been specified. Displacements resulting from each excavation are summed with no account taken of the interactions between excavations (e.g. overlapping zones of influence or 'shielding' of one excavation by another).

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line	End Distance Along Line	Pipe Segment Length

2 If an embedded wall excavation is assigned a 'surface' ground movement curve and if the 'allow movement calculation to level' option is checked for the excavation then displacements induced by it are calculated for points at the surface, and points below the surface to the level specified. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 1/Line 1/Vertical. This is an example only. There are 263 others.

Errors

None

Displacement Results - Displacement Lines

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
0	Base Model	1	TW Main-1	0.0	76.75020	113.72130	-0.90000	-0.51428	-1.3356	0.48725	1.1850	0.80260	214.83	*
				1.0028	75.92703	113.14854	-0.90000	-0.50532	-1.4591	0.55712	1.2481	0.90907	214.83	*
				2.0057	75.10385	112.57577	-0.90000	-0.48164	-1.5796	0.63551	1.2975	1.0215	214.83	*
				3.0085	74.28068	112.00301	-0.90000	-0.44215	-1.6968	0.72140	1.3321	1.1403	214.83	*
				4.0113	73.45751	111.43024	-0.90000	-0.38647	-1.8136	0.81456	1.3531	1.2680	214.83	*
				5.0142	72.63434	110.85748	-0.90000	-0.32244	-1.9711	0.92943	1.3905	1.4338	214.83	*
				6.0170	71.81116	110.28471	-0.90000	-0.24121	-2.1331	1.0535	1.4163	1.6132	214.83	*
				7.0198	70.98799	109.71195	-0.90000	-0.14183	-2.2997	1.1857	1.4299	1.8067	214.83	*
				8.0227	70.16482	109.13918	-0.90000	-0.023421	-2.4708	1.3245	1.4304	2.0148	214.83	*
				9.0255	69.34164	108.56642	-0.90000	0.11476	-2.6464	1.4684	1.4173	2.2378	214.83	*
				10.028	68.51847	107.99365	-0.90000	0.27323	-2.8261	1.6155	1.3898	2.4758	214.83	*
				11.031	67.69530	107.42089	-0.90000	0.45222	-3.0094	1.7640	1.3476	2.7286	214.83	*
				12.034	66.87213	106.84812	-0.90000	0.65159	-3.1958	1.9116	1.2904	2.9954	214.83	*
				13.037	66.04895	106.27536	-0.90000	0.87069	-3.3841	2.0759	1.2181	3.2751	214.83	*
				14.040	65.22578	105.70260	-0.90000	1.1083	-3.5732	2.3169	1.1311	3.5660	214.83	*
				15.042	64.40261	105.12983	-0.90000	1.3624	-3.7614	2.5373	1.0299	3.8657	214.83	*
				16.045	63.57943	104.55707	-0.90000	1.6305	-3.9467	2.7341	0.91578	4.1709	214.83	*
				17.048	62.75626	103.98430	-0.90000	1.9090	-4.1270	2.9041	0.79013	4.4780	214.83	*
				18.051	61.93309	103.41154	-0.90000	2.1939	-4.2997	3.0445	0.65493	4.7824	214.83	*
				19.054	61.10991	102.83877	-0.90000	2.5106	-4.8041	3.3771	0.68309	5.3774	214.83	*
				20.057	60.28674	102.26601	-0.90000	2.8418	-5.4380	3.7949	0.77322	6.0869	214.83	*
				21.059	59.46357	101.69324	-0.90000	3.1773	-6.0801	4.2225	0.86451	6.8055	214.83	*
				22.062	58.64040	101.12048	-0.90000	3.2883	-6.2924	4.4214	0.89470	7.0432	214.83	*
				23.065	57.81722	100.54771	-0.90000	3.3102	-6.3344	4.5278	0.90068	7.0902	214.83	*
				24.068	56.99405	99.97495	-0.90000	3.3322	-6.3764	4.6341	0.90665	7.1372	214.83	*
				25.071	56.17088	99.40219	-0.90000	3.3541	-6.4184	4.7405	0.91262	7.1842	214.83	*
				26.074	55.34770	98.82942	-0.90000	3.3761	-6.4604	4.8470	0.91859	7.2313	214.83	*
				27.076	54.52453	98.25666	-0.90000	3.3980	-6.5024	4.9537	0.92456	7.2783	214.83	*
				28.079	53.70136	97.68389	-0.90000	3.4200	-6.5444	5.0607	0.93054	7.3253	214.83	*
				29.082	52.87819	97.11113	-0.90000	3.4419	-6.5864	5.1680	0.93651	7.3723	214.83	*
				30.085	52.05501	96.53836	-0.90000	3.4639	-6.6284	5.2756	0.94248	7.4193	214.83	*
				31.088	51.23184	95.96560	-0.90000	3.4858	-6.6704	5.3836	0.94845	7.4663	214.83	*
				32.091	50.40867	95.39283	-0.90000	3.5078	-6.7124	5.4919	0.95442	7.5133	214.83	*
				33.093	49.58549	94.82007	-0.90000	3.4644	-6.6294	5.5217	0.94262	7.4204	214.83	*
				34.096	48.76232	94.24730	-0.90000	3.0993	-5.9308	5.1601	0.84329	6.6385	214.83	*
				35.099	47.93915	93.67454	-0.90000	2.7295	-5.2231	4.7877	0.74266	5.8463	214.83	*
				36.102	47.11598	93.10178	-0.90000	2.4186	-4.5648	4.4668	0.62183	5.1284	214.83	*
				37.105	46.29280	92.52901	-0.90000	2.4498	-4.2084	4.4496	0.39273	4.8537	214.83	*
				38.108	45.46963	91.95625	-0.90000	2.4720	-3.8329	4.3767	0.15998	4.5581	214.83	*
				39.110	44.64646	91.38348	-0.90000	2.4849	-3.4468	4.2504	-0.071076	4.2485	214.83	*
				40.113	43.82328	90.81072	-0.90000	2.4879	-3.0587	4.0738	-0.29527	3.9317	214.83	*
				41.116	43.00011	90.23795	-0.90000	2.4812	-2.6766	3.8505	-0.50792	3.6142	214.83	*
				42.119	42.17694	89.66519	-0.90000	2.4646	-2.3075	3.5845	-0.70514	3.3017	214.83	*
				43.122	41.35376	89.09242	-0.90000	2.4384	-1.9568	3.2801	-0.88392	2.9989	214.83	*
				44.125	40.53059	88.51966	-0.90000	2.4030	-1.6288	2.9415	-1.0422	2.7095	214.83	*
				45.127	39.70742	87.94689	-0.90000	2.3589	-1.3263	2.5896	-1.1788	2.4360	214.83	*
				46.130	38.88425	87.37413	-0.90000	2.3068	-1.0508	2.2417	-1.2934	2.1800	214.83	*
				47.133	38.06107	86.80136	-0.90000	2.2471	-0.80281	2.0016	-1.3860	1.9424	214.83	*
				48.136	37.23790	86.22860	-0.90000	2.2319	-0.59855	1.7273	-1.4902	1.7660	214.83	*
		2	TW Main-2	0.0	37.23790	86.22860	-0.90000	2.2319	-0.59855	1.7273	1.5703	1.6952	297.80	*
				1.0030	37.70561	85.34136	-0.90000	2.4197	-0.46340	2.0682	1.5383	1.9244	297.80	*
				2.0059	38.17333	84.45412	-0.90000	2.6188	-0.30131	2.4030	1.4878	2.1762	297.80	*
				3.0089	38.64104	83.56688	-0.90000	2.8295	-0.11082	2.7546	1.4175	2.4514	297.80	*
				4.0119	39.10876	82.67964	-0.90000	3.0516	0.10905	3.1797	1.3266	2.7504	297.80	*
				5.0149	39.57647	81.79239	-0.90000	3.2844	0.35860	3.5790	1.2144	3.0727	297.80	*
				6.0178	40.04419	80.90515	-0.90000	3.5267	0.63717	3.9479	1.0809	3.4169	297.80	*
				7.0208	40.51190	80.01791	-0.90000	3.7762	0.94287	4.2815	0.92690	3.7802	297.80	*
				8.0238	40.97962	79.13067	-0.90000	4.0583	1.2799	4.5751	0.76031	4.1868	297.80	*
				9.0268	41.44733	78.24343	-0.90000	4.3859	1.6552	4.8240	0.58110	4.6517	297.80	*
				10.030	41.91505	77.35619	-0.90000	4.6892	2.0448	5.0236	0.37787	5.1017	297.80	*
				11.033	42.38276	76.46895	-0.90000	4.9603	2.4349	5.1697	0.15915	5.5234	297.80	*
				12.036	42.85048	75.58171	-0.90000	5.5350	2.8338	5.5310	0.074355	6.2178	297.80	*
				13.039	43.31819	74.69446	-0.90000	6.3376	3.2447	6.0679	0.085136	7.1194	297.80	*
				14.042	43.78591	73.80722	-0.90000	7.1410	3.6560	6.6061	0.095928	8.0219	297.80	*
				15.045	44.25362	72.91998	-0.90000	7.4657	3.8222	6.8270	0.10029	8.3867	297.80	*
				16.048	44.72134	72.03274	-0.90000	7.4734	3.8262	6.8379	0.10039	8.3954	297.80	*
				17.051	45.18905	71.14550	-0.90000	7.4812	3.8301	6.8493	0.10050	8.4040	297.80	*
				18.054	45.65676	70.25826	-0.90000	7.4889	3.8341	6.8612	0.10060	8.4127	297.80	*
				19.056	46.12448	69.37102	-0.90000	7.4967	3.8381	6.8736	0.10071	8.4214	297.80	*
				20.059	46.59219	68.48378	-0.90000	7.5044	3.8420	6.8864	0.10081	8.4301	297.80	*
				21.062	47.05991	67.59654	-0.90000	7.5121	3.8460	6.8997	0.10091	8.4388	297.80	*
				22.065	47.52762	66.70929	-0.90000	7.5199	3.8500	6.9134	0.10102	8.4475	297.80	*
				23.068	47.99534	65.82205	-0.90000	7.5276	3.8539	6.9274	0.10112	8.4562	297.80	*
				24.071	48.46305	64.93481	-0.90000	7.5354	3.8579	6.9417	0.10123	8.4649	297.80	*
				25.074	48.93077	64.04757	-0.90000	7.5431	3.8618	6.9560	0.10133	8.4736	297.80	*
				26.077	49.39848	63.16033	-0.90000	7.5508	3.8658	6.9704	0.10143	8.4823	297.80	*
				27.080	49.86620	62.27309	-0.90000	7.5586	3.8698	6.9847	0.10154	8.4910	297.80	*
				28.083	50.33391	61.38585	-0.90000	7.5663	3.8737	6.9987	0.10164	8.4997	297.80	*
				29.086	50.80163	60.49861	-0.90000	7.5740	3.8777	7.0125	0.10175	8.5084	297.80	*
				30.089	51.26934	59.61136	-0.90000	7.5818	3.8816	7.0259	0.10185	8.5171	297.80	*
				31.092	51.73706	58.72412	-0.90000	7.5895	3.8856	7.0388	0.10195	8.5257	297.80	*
				32.095	52.20477	57.83688	-0.90000	7.5973	3.8896	7.0512	0.10206	8.5344	297.80	*
				33.098	52.67249	56.94964	-0.90000	7.6050	3.8935	7.0631	0.10216	8.5431	297.80	*
				34.101	53.14020	56.06240	-0.90000	7.6127	3.8975	7.0745	0.10227	8.5518	297.80	*
		3	TW Main-3	0.0	53.14020	56.06240	-0.90000	7.6127	3.8975	7.0745	0.69150	8.5244	301.75	*
				0.99689	53.66476	55.21468	-0.90000	7.6647	3.9241	7.1416	0.69622	8.5827	301.75	*
				1.9938	54.18932	54.36696	-0.90000	7.7167	3.9507	7.2080	0.70095	8.6409	301.75	*
				2.9907	54.71388	53.51924	-0.90000	7.7687	3.9774	7.2738	0.70567	8.6991	301.75	*
				3.9876	55.23844	52.67152	-0.90000	7.8207	4.0040	7.3389	0.71039	8.7574	301.75	*
				4.9845	55.76300	51.82380	-0.90000	7.8728	4.0306	7.4034	0.71512	8.8156	301.75	*
				5.9813	56.28756	50.97608	-0.90000	7.9248	4.0573	7.4673	0.71985	8.8739	301.75	*
				6.9782	56.81212	50.12836	-0.90000	7.9769	4.0839	7.5307	0.72458	8.9322	301.75	*
				7.9751	57.33668	49.28064	-0.90000	8.0391	4.1158	7.5934	0.73023	9.0019	301.75	*
				8.9720	57.86124	48.43292	-0.90000	8.1039	4.1489	7.6556	0.73611	9.0744	301.75	*
				9.9689	58.38580	47.58520	-0.90000	8.1687	4.1821	7.7174	0.74200	9.1469	301.75	*
		4	TW Main-4	0.0	58.38580	47.58520	-0.90000	8.1687	4.1821	7.7174	0.17661	9.1753	298.21	*
				0.99583	58.85659	46.70769	-0.90000	8.1841	4.1900	7.7298	0.17694	9.1926	298.21	*
				1.9917	59.32738	45.83017	-0.90000	8.1995	4.1979	7.7420	0.17727	9.2099	298.21	*
				2.9875	59.79817	44.95266	-0.90000	8.2149	4.2058	7.7540	0.17761	9.2272	298.21	*
				3.9833	60.26896	44.07515	-0.90000	8.2303	4.2137	7.7659	0.17794	9.2446	298.21	*
				4.9791	60.73975	43.19764	-0.90000	8.2458	4.2216	7.7775	0.17827	9.2619	298.21	*
				5.9750	61.21054	42.32012	-0.90000	8.2612	4.2295	7.7891	0.17861	9.2792	298.21	*
				6.9708	61.68134	41.44261	-0.90000	8.2766	4.2374	7.8005	0.17894	9.2965	298.21	*
				7.9666	62.15213	40.56510	-0.90000	8.2920	4.2453	7.8118	0.17928	9.3139	298.21	*
				8.9624	62.62292	39.68758	-0.90000	8.3075	4.2532	7.8230	0.17961	9.3312	298.21	*
				9.9583	63.09371	38.81007	-0.90000	8.3229	4.2611	7.8341	0.17994	9.3486	298.21	*
				10.954	63.56450	37.93256	-0.90000	8.3384	4.2690	7.8451	0.18028	9.3659	298.21	*
				11.950	64.03529	37.05504	-0.90000	8.3538	4.2769	7.8560	0.18061	9.3832	298.21	*
				12.946	64.50608	36.17753	-0.90000	8.3693	4.2848	7.8668	0.18094	9.4006	298.21	*
				13.942	64.97687	35.30002	-0.90000	8.3847	4.2927	7.8776	0.18128	9.4180	298.21	*
				14.937	65.44766	34.42251	-0.90000	8.4002	4.3006	7.8882	0.18161	9.4353	298.21	*
				15.933	65.91845	33.54499	-0.90000	8.4156	4.3086	7.8988	0.18195	9.4527	298.21	*
				16.929	66.38924	32.66748	-0.90000	8.4311	4.3165	7.9094	0.18228	9.4701	298.21	*
				17.925	66.86003	31.78997	-0.90000	8.4466	4.3244	7.9199	0.18262	9.4874	298.21	*
				18.921	67.33082	30.91245	-0.90000	8.4620	4.3323	7.9303	0.18295	9.5048	298.21	*
				19.917	67.80161	30.03494	-0.90000	8.4775	4.3402	7.9407	0.18328	9.5222	298.21	*
				20.912	68.27241	29.15743	-0.90000	8.4930	4.3482	7.9511	0.18362	9.5396	298.21	*
				21.908	68.74320	28.27991	-0.90000	8.5085	4.3561	7.9615	0.18395	9.5570	298.21	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				22.904	69.21399	27.40240	-0.90000	8.5240	4.3640	7.9718	0.18429	9.5744	298.21	*
				23.900	69.68478	26.52489	-0.90000	8.5394	4.3719	7.9822	0.18462	9.5918	298.21	*
				24.896	70.15557	25.64738	-0.90000	8.5549	4.3799	7.9926	0.18496	9.6092	298.21	*
				25.892	70.62636	24.76986	-0.90000	8.1593	4.1773	7.7192	0.17640	9.1647	298.21	*
				26.887	71.09715	23.89235	-0.90000	7.3192	3.7472	7.1390	0.15824	8.2212	298.21	*
				27.883	71.56794	23.01484	-0.90000	6.4778	3.3165	6.5575	0.14005	7.2761	298.21	*
				28.879	72.03873	22.13732	-0.90000	5.7510	3.1131	6.1928	-0.024368	6.5395	298.21	*
				29.875	72.50952	21.25981	-0.90000	5.1177	3.1420	6.0309	-0.34928	5.9951	298.21	*
				30.871	72.98031	20.38230	-0.90000	4.4570	3.1309	5.8115	-0.65184	5.4076	298.21	*
				31.866	73.45110	19.50479	-0.90000	3.7969	3.0771	5.5398	-0.91645	4.8005	298.21	*
				32.862	73.92189	18.62727	-0.90000	3.1662	2.9851	5.2210	-1.1336	4.2013	298.21	*
				33.858	74.39269	17.74976	-0.90000	2.6053	2.8868	4.8606	-1.3121	3.6605	298.21	*
				34.854	74.86348	16.87225	-0.90000	2.0933	2.7563	4.4640	-1.4392	3.1477	298.21	*
				35.850	75.33427	15.99473	-0.90000	1.6388	2.6010	4.0363	-1.5172	2.6737	298.21	*
				36.846	75.80506	15.11722	-0.90000	1.2995	2.5463	3.5826	-1.6294	2.3489	298.21	*
				37.841	76.27585	14.23971	-0.90000	1.0001	2.4831	3.1076	-1.7153	2.0552	298.21	*
				38.837	76.74664	13.36219	-0.90000	0.74378	2.4291	2.6287	-1.7889	1.8038	298.21	*
				39.833	77.21743	12.48468	-0.90000	0.54697	2.4443	2.2721	-1.8953	1.6376	298.21	*
				40.829	77.68822	11.60717	-0.90000	0.37737	2.4379	1.9580	-1.9699	1.4851	298.21	*
				41.825	78.15901	10.72966	-0.90000	0.23253	2.4121	1.6275	-2.0156	1.3453	298.21	*
				42.821	78.62980	9.85214	-0.90000	0.11009	2.3689	1.4706	-2.0354	1.2170	298.21	*
				43.816	79.10059	8.97463	-0.90000	0.0078313	2.3101	1.3235	-2.0320	1.0990	298.21	*
				44.812	79.57138	8.09712	-0.90000	-0.076274	2.2374	1.1770	-2.0076	0.99054	298.21	*
				45.808	80.04217	7.21960	-0.90000	-0.14407	2.1522	1.0343	-1.9646	0.89051	298.21	*
				46.804	80.51296	6.34209	-0.90000	-0.19722	2.0558	0.89799	-1.9048	0.79812	298.21	*
				47.800	80.98376	5.46458	-0.90000	-0.23721	1.9494	0.77057	-1.8300	0.71259	298.21	*
				48.796	81.45455	4.58706	-0.90000	-0.26534	1.8341	0.65392	-1.7416	0.63327	298.21	*
				49.791	81.92534	3.70955	-0.90000	-0.28280	1.7107	0.54950	-1.6411	0.55955	298.21	*
				50.787	82.39613	2.83204	-0.90000	-0.29062	1.5800	0.45820	-1.5297	0.49088	298.21	*
				51.783	82.86692	1.95453	-0.90000	-0.28972	1.4428	0.38039	-1.4083	0.42680	298.21	*
				52.779	83.33771	1.07701	-0.90000	-0.28092	1.2996	0.31587	-1.2780	0.36688	298.21	*
				53.775	83.80850	0.19950	-0.90000	-0.26495	1.1511	0.26383	-1.1396	0.31073	298.21	*
		5	TW Foul-1	0.0	76.45800	114.12130	-6.00000	-0.46413	-1.2885	0.41583	1.1349	0.76649	216.16	*
				1.0044	75.64700	113.52870	-6.00000	-0.45521	-1.4129	0.47918	1.2011	0.87220	216.16	*
				2.0089	74.83600	112.93610	-6.00000	-0.43197	-1.5344	0.55099	1.2540	0.98401	216.16	*
				3.0133	74.02501	112.34351	-6.00000	-0.39337	-1.6527	0.63041	1.2927	1.1023	216.16	*
				4.0177	73.21401	111.75091	-6.00000	-0.34304	-1.7893	0.72355	1.3326	1.2423	216.16	*
				5.0222	72.40301	111.15831	-6.00000	-0.28065	-1.9473	0.83221	1.3755	1.4067	216.16	*
				6.0266	71.59201	110.56571	-6.00000	-0.20148	-2.1098	0.95023	1.4074	1.5846	216.16	*
				7.0310	70.78101	109.97311	-6.00000	-0.10458	-2.2768	1.0765	1.4277	1.7766	216.16	*
				8.0355	69.97002	109.38052	-6.00000	0.010944	-2.4483	1.2097	1.4356	1.9832	216.16	*
				9.0399	69.15902	108.78792	-6.00000	0.14587	-2.6242	1.3481	1.4304	2.2049	216.16	*
				10.044	68.34802	108.19532	-6.00000	0.30078	-2.8042	1.4901	1.4116	2.4416	216.16	*
				11.049	67.53702	107.60272	-6.00000	0.47599	-2.9879	1.6337	1.3785	2.6933	216.16	*
				12.053	66.72603	107.01013	-6.00000	0.67146	-3.1748	1.7767	1.3309	2.9595	216.16	*
				13.058	65.91503	106.41753	-6.00000	0.88669	-3.3638	1.9172	1.2687	3.2391	216.16	*
				14.062	65.10403	105.82493	-6.00000	1.1206	-3.5539	2.1371	1.1919	3.5306	216.16	*
				15.067	64.29303	105.23233	-6.00000	1.3715	-3.7435	2.2581	1.1012	3.8317	216.16	*
				16.071	63.48203	104.63973	-6.00000	1.6369	-3.9308	2.5560	0.99737	4.1395	216.16	*
				17.075	62.67104	104.04714	-6.00000	1.9137	-4.1135	2.7277	0.88175	4.4504	216.16	*
				18.080	61.86004	103.45454	-6.00000	2.1978	-4.2893	2.8703	0.75606	4.7599	216.16	*
				19.084	61.04904	102.86194	-6.00000	2.5175	-4.8174	3.2181	0.80952	5.3749	216.16	*
				20.089	60.23804	102.26934	-6.00000	2.8511	-5.4557	3.6400	0.91678	6.0871	216.16	*
				21.093	59.42704	101.67674	-6.00000	3.1897	-6.1037	4.0735	1.0257	6.8100	216.16	*
				22.098	58.61605	101.08415	-6.00000	3.2919	-6.2994	4.2701	1.0586	7.0284	216.16	*
				23.102	57.80505	100.49155	-6.00000	3.3179	-6.3491	4.3890	1.0669	7.0839	216.16	*
				24.106	56.99405	99.89895	-6.00000	3.3439	-6.3988	4.5084	1.0753	7.1393	216.16	*
				25.111	56.18305	99.30635	-6.00000	3.3699	-6.4485	4.6284	1.0836	7.1948	216.16	*
				26.115	55.37206	98.71376	-6.00000	3.3959	-6.4982	4.7492	1.0920	7.2503	216.16	*
				27.120	54.56106	98.12116	-6.00000	3.4218	-6.5480	4.8710	1.1003	7.3057	216.16	*
				28.124	53.75006	97.52856	-6.00000	3.4478	-6.5977	4.9941	1.1087	7.3612	216.16	*
				29.129	52.93906	96.93596	-6.00000	3.4738	-6.6474	5.1184	1.1170	7.4167	216.16	*
				30.133	52.12806	96.34336	-6.00000	3.4998	-6.6971	5.2441	1.1254	7.4722	216.16	*
				31.137	51.31707	95.75077	-6.00000	3.5258	-6.7468	5.3714	1.1337	7.5276	216.16	*
				32.142	50.50607	95.15817	-6.00000	3.5517	-6.7965	5.5001	1.1421	7.5831	216.16	*
				33.146	49.69507	94.56557	-6.00000	3.5034	-6.7040	5.5394	1.1265	7.4798	216.16	*
				34.151	48.88407	93.97297	-6.00000	3.1372	-6.0033	5.1880	1.0088	6.6980	216.16	*
				35.155	48.07307	93.38037	-6.00000	2.7654	-5.2917	4.8248	0.88923	5.9041	216.16	*
				36.160	47.26208	92.78778	-6.00000	2.4595	-4.6333	4.5205	0.74772	5.1921	216.16	*
				37.164	46.45108	92.19518	-6.00000	2.5022	-4.2776	4.5197	0.50342	4.9301	216.16	*
				38.169	45.64008	91.60258	-6.00000	2.5312	-3.8903	4.4621	0.25145	4.6344	216.16	*
				39.173	44.82908	91.00998	-6.00000	2.5355	-3.4703	4.3499	228.86E-6	4.2979	216.16	*
				40.177	44.01809	90.41739	-6.00000	2.5413	-3.0642	4.1860	-0.24408	3.9734	216.16	*
				41.182	43.20709	89.82479	-6.00000	2.5369	-2.6639	3.9738	-0.47664	3.6476	216.16	*
				42.186	42.39609	89.23219	-6.00000	2.5222	-2.2772	3.7174	-0.69294	3.3267	216.16	*
				43.191	41.58509	88.63959	-6.00000	2.4976	-1.9104	3.4211	-0.88949	3.0160	216.16	*
				44.195	40.77409	88.04699	-6.00000	2.4633	-1.5679	3.0893	-1.0639	2.7193	216.16	*
				45.200	39.96310	87.45440	-6.00000	2.4200	-1.2529	2.7264	-1.2147	2.4394	216.16	*
				46.204	39.15210	86.86180	-6.00000	2.3682	-0.96707	2.3718	-1.3416	2.1780	216.16	*
				47.208	38.34110	86.26920	-6.00000	2.3195	-0.71434	2.0830	-1.4513	1.9452	216.16	*
		6	TW Foul-2	0.0	38.34110	86.26920	-6.00000	2.3195	-0.71434	2.0830	1.7322	1.6999	298.42	*
				1.0047	38.81931	85.38557	-6.00000	2.5186	-0.56699	2.4339	1.6974	1.9452	298.42	*
				2.0095	39.29752	84.50193	-6.00000	2.7318	-0.38938	2.9013	1.6418	2.2176	298.42	*
				3.0142	39.77574	83.61830	-6.00000	2.9594	-0.17632	3.3593	1.5636	2.5187	298.42	*
				4.0189	40.25395	82.73467	-6.00000	3.2016	0.070905	3.7938	1.4615	2.8495	298.42	*
				5.0237	40.73216	81.85104	-6.00000	3.4828	0.35522	4.2001	1.3453	3.2321	298.42	*
				6.0284	41.21037	80.96740	-6.00000	3.8793	0.69155	4.5734	1.2382	3.7409	298.42	*
				7.0332	41.68859	80.08377	-6.00000	4.2737	1.0794	4.9084	1.0848	4.2724	298.42	*
				8.0379	42.16680	79.20014	-6.00000	4.6599	1.5110	5.2001	0.88908	4.8174	298.42	*
				9.0426	42.64501	78.31650	-6.00000	5.0371	1.9773	5.4435	0.65853	5.3711	298.42	*
				10.047	43.12322	77.43287	-6.00000	5.4038	2.4681	5.6337	0.40137	5.9272	298.42	*
				11.052	43.60144	76.54924	-6.00000	5.7629	2.9504	5.8019	0.14809	6.4726	298.42	*
				12.057	44.07965	75.66560	-6.00000	6.6171	3.3878	6.3794	0.17004	7.4320	298.42	*
				13.062	44.55786	74.78197	-6.00000	7.4731	3.8260	6.9597	0.19203	8.3933	298.42	*
				14.066	45.03607	73.8934	-6.00000	8.2559	4.2268	7.4919	0.21215	9.2726	298.42	*
				15.071	45.51429	73.01471	-6.00000	8.2744	4.2363	7.5026	0.21262	9.2934	298.42	*
				16.076	45.99250	72.13107	-6.00000	8.2929	4.2457	7.5151	0.21310	9.3141	298.42	*
				17.081	46.47071	71.24744	-6.00000	8.3114	4.2552	7.5297	0.21358	9.3349	298.42	*
				18.085	46.94892	70.36381	-6.00000	8.3299	4.2647	7.5463	0.21405	9.3557	298.42	*
				19.090	47.42714	69.48017	-6.00000	8.3485	4.2742	7.5651	0.21453	9.3765	298.42	*
				20.095	47.90535	68.59654	-6.00000	8.3670	4.2837	7.5860	0.21500	9.3973	298.42	*
				21.099	48.38356	67.71291	-6.00000	8.3855	4.2931	7.6089	0.21548	9.4182	298.42	*
				22.104	48.86177	66.82927	-6.00000	8.4041	4.3026	7.6336	0.21596	9.4390	298.42	*
				23.109	49.33998	65.94564	-6.00000	8.4226	4.3121	7.6600	0.21643	9.4598	298.42	*
				24.114	49.81820	65.06201	-6.00000	8.4411	4.3216	7.6877	0.21691	9.4806	298.42	*
				25.118	50.29641	64.17838	-6.00000	8.4597	4.3311	7.7164	0.21739	9.5015	298.42	*
				26.123	50.77462	63.29474	-6.00000	8.4783	4.3406	7.7458	0.21786	9.5223	298.42	*
				27.128	51.25283	62.41111	-6.00000	8.4968	4.3501	7.7756	0.21834	9.5432	298.42	*
				28.133	51.73105	61.52748	-6.00000	8.5154	4.3596	7.8054	0.21882	9.5640	298.42	*
				29.137	52.20926	60.64384	-6.00000	8.5340	4.3691	7.8350	0.21929	9.5849	298.42	*
				30.142	52.68747	59.76021	-6.00000	8.5525	4.3787	7.8640	0.21977	9.6057	298.42	*
				31.147	53.16568	58.87658	-6.00000	8.5711	4.3882	7.8925	0.22025	9.6266	298.42	*
				32.152	53.64390	57.99294	-6.00000	8.5897	4.3977	7.9201	0.22073	9.6475	298.42	*
				33.156	54.12211	57.10931	-6.00000	8.6083	4.4072	7.9469	0.22121	9.6684	298.42	*
				34.161	54.60032	56.22568	-6.00000	8.6269	4.4167	7.9727	0.22168	9.6893	298.42	*
				35.166	55.07853	55.34205	-6.00000	8.6456	4.4263	7.9977	0.22216	9.7102	298.42	*
				36.170	55.55675	54.45841	-6.00000	8.6642	4.4358	8.0218	0.22264	9.7311	298.42	*
				37.175	56.03496	53.57478	-6.00000	8.6828	4.4453	8.0450	0.22312	9.7521	298.42	*
				38.180	56.51317	52.69115	-6.00000	8.7015	4.4549	8.0676	0.22360	9.7730	298.42	*
				39.185	56.99138	51.80751	-6.00000	8.7201	4.4644	8.0894	0.22408	9.7939	298.42	*
				40.189	57.46959	50.92388	-6.00000	8.7388	4.4740	8.1107	0.22456	9.8149	298.42	*
				41.194	57.94781	50.04025	-6.00000	8.7574	4.4835	8.1314	0.22504	9.8359	298.42	*
				42.199	58.42602	49.15661	-6.00000	8.7761	4.4931	8.1517	0.22552	9.8568	298.42	*
				43.204	58.90423	48.27298	-6.00000	8.7948	4.5027	8.1717	0.22600	9.8778	298.42	*
				44.208	59.38244	47.38935	-6.00000	8.8135	4.5122	8.1913	0.22648	9.8988	298.42	*
				45.213	59.86066	46.50572	-6.00000	8.8322	4.5218	8.2107	0.22696	9.9198	298.42	*
				46.218	60.33887	45.62208	-6.00000	8.8509	4.5314	8.2299	0.22744	9.9408	298.42	*
				47.223	60.81708	44.73845	-6.00000	8.8696	4.5410	8.2489	0.22792	9.9618	298.42	*
				48.227	61.29529	43.85482	-6.00000	8.8883	4.5506	8.2678	0.22840	9.9829	298.42	*
				49.232	61.77351	42.97118	-6.00000	8.9070	4.5601	8.2865	0.22888	10.004	298.42	*
				50.237	62.25172	42.08755	-6.00000	8.9258	4.5697	8.3050	0.22936	10.025	298.42	*
				51.242	62.72993	41.20392	-6.00000	8.9445	4.5793	8.3235	0.22984	10.046	298.42	*
				52.246	63.20814	40.32028	-6.00000	8.9633	4.5889	8.3418	0.23033	10.067	298.42	*
				53.251	63.68636	39.43665	-6.00000	8.9821	4.5986	8.3599	0.23081	10.088	298.42	*
				54.256	64.16457	38.55302	-6.00000	9.0009	4.6082	8.3779	0.23129	10.109	298.42	*
				55.260	64.64278	37.66939	-6.00000	9.0196	4.6178	8.3956	0.23177	10.130	298.42	*
				56.265	65.12099	36.78575	-6.00000	9.0384	4.6274	8.4132	0.23226	10.151	298.42	*
				57.270	65.59921	35.90212	-6.00000	9.0573	4.6370	8.4306	0.23274	10.173	298.42	*
				58.275	66.07742	35.01849	-6.00000	9.0761	4.6467	8.4477	0.23322	10.194	298.42	*
				59.279	66.55563	34.13485	-6.00000	9.0949	4.6563	8.4646	0.23371	10.215	298.42	*
				60.284	67.03384	33.25122	-6.00000	9.1138	4.6660	8.4813	0.23419	10.236	298.42	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				61.289	67.51205	32.36759	-6.00000	9.1326	4.6756	8.4977	0.23468	10.257	298.42	*
				62.294	67.99027	31.48395	-6.00000	9.1515	4.6853	8.5139	0.23516	10.278	298.42	*
				63.298	68.46848	30.60032	-6.00000	9.1704	4.6950	8.5298	0.23565	10.300	298.42	*
				64.303	68.94669	29.71669	-6.00000	9.1892	4.7046	8.5455	0.23613	10.321	298.42	*
				65.308	69.42490	28.83306	-6.00000	9.2081	4.7143	8.5610	0.23662	10.342	298.42	*
				66.313	69.90312	27.94942	-6.00000	9.2271	4.7240	8.5763	0.23710	10.363	298.42	*
				67.317	70.38133	27.06579	-6.00000	9.2460	4.7337	8.5914	0.23759	10.385	298.42	*
				68.322	70.85954	26.18216	-6.00000	9.2649	4.7434	8.6063	0.23808	10.406	298.42	*
				69.327	71.33775	25.29852	-6.00000	8.9876	4.6014	8.4143	0.23095	10.094	298.42	*
				70.332	71.81597	24.41489	-6.00000	8.1110	4.1526	7.8039	0.20843	9.1098	298.42	*
				71.336	72.29418	23.53126	-6.00000	7.2327	3.7029	7.1918	0.18586	8.1234	298.42	*
				72.341	72.77239	22.64762	-6.00000	6.4094	3.4353	6.7460	0.029391	7.2719	298.42	*
				73.346	73.25060	21.76399	-6.00000	5.6529	3.4872	6.5746	-0.37634	6.6313	298.42	*
				74.350	73.72882	20.88036	-6.00000	4.8674	3.4932	6.3422	-0.75549	5.9433	298.42	*
				75.355	74.20703	19.99673	-6.00000	4.0900	3.4499	6.0545	-1.0874	5.2390	298.42	*
				76.360	74.68524	19.11309	-6.00000	3.3508	3.3563	5.7177	-1.3570	4.5444	298.42	*
				77.365	75.16345	18.22946	-6.00000	2.6709	3.2138	5.3377	-1.5552	3.8786	298.42	*
				78.369	75.64166	17.34583	-6.00000	2.0732	3.0413	4.9204	-1.6879	3.2708	298.42	*
				79.374	76.11988	16.46219	-6.00000	1.5732	2.8736	4.4713	-1.7785	2.7513	298.42	*
				80.379	76.59809	15.57856	-6.00000	1.1423	2.6750	3.9957	-1.8089	2.2778	298.42	*
				81.384	77.07630	14.69493	-6.00000	0.82230	2.5870	3.5019	-1.8838	1.9545	298.42	*
				82.388	77.55451	13.81129	-6.00000	0.59043	2.6239	3.0785	-2.0266	1.7681	298.42	*
				83.393	78.03273	12.92766	-6.00000	0.39207	2.6347	2.6202	-2.1305	1.5988	298.42	*
				84.398	78.51094	12.04403	-6.00000	0.22389	2.6222	2.2441	-2.1996	1.4450	298.42	*
				85.403	78.98915	11.16040	-6.00000	0.082701	2.5892	1.8949	-2.2377	1.3051	298.42	*
				86.407	79.46736	10.27676	-6.00000	-0.034446	2.5379	1.5882	-2.2484	1.1776	298.42	*
				87.412	79.94558	9.39313	-6.00000	-0.13023	2.4704	1.4287	-2.2347	1.0613	298.42	*
				88.417	80.42379	8.50950	-6.00000	-0.20705	2.3887	1.2694	-2.1994	0.95485	298.42	*
				89.421	80.90200	7.62586	-6.00000	-0.26701	2.2944	1.1139	-2.1450	0.85722	298.42	*
				90.426	81.38021	6.74223	-6.00000	-0.31198	2.1889	0.96510	-2.0736	0.76745	298.42	*
				91.431	81.85843	5.85860	-6.00000	-0.34361	2.0735	0.82578	-1.9871	0.68469	298.42	*
				92.436	82.33664	4.97496	-6.00000	-0.36332	1.9492	0.69805	-1.8871	0.60819	298.42	*
				93.440	82.81485	4.09133	-6.00000	-0.37237	1.8169	0.58352	-1.7752	0.53730	298.42	*
				94.445	83.29306	3.20770	-6.00000	-0.37187	1.6777	0.48325	-1.6524	0.47146	298.42	*
				95.450	83.77128	2.32407	-6.00000	-0.36276	1.5320	0.39770	-1.5200	0.41014	298.42	*
				96.455	84.24949	1.44043	-6.00000	-0.34592	1.3807	0.32669	-1.3789	0.35292	298.42	*
				97.459	84.72770	0.55680	-6.00000	-0.32208	1.2242	0.26945	-1.2299	0.29940	298.42	*

* Result includes imported displacement(s).

Displacement Results - Displacement Grids

Stage: Ref.	Stage: Name	Disp. Grid: Ref.	Disp. Grid: Name	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]

Specific Utility Damage Results - Coordinates & Displacements

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	δHperp.(n-Lp) [mm]	δx(n+Lp) [mm]	δy(n+Lp) [mm]	δz(n+Lp) [mm]	δH//(n+Lp) [mm]	δHperp.(n+Lp) [mm]	Distance from start of utility [m]	x [m]	y [m]	z [m]	δx(n) [mm]	δy(n) [mm]	δz(n) [mm]	δH//(n) [mm]	δHperp.(n) [mm]	δx(n-Lp) [mm]	δy(n-Lp) [mm]	δz(n-Lp) [mm]	δH//(n-Lp) [mm]
0	Base Model	1	TW Main-1	1	1	0.80350	-0.24190	-2.13173	1.05248	1.41610	1.14028	3.00850	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.72140	1.33206	1.14028	-0.51420	-1.33665	0.48785	1.18550
						1.14136	0.11359	-2.64491	1.46717	1.41739	1.61319	6.01699	71.81116	110.28471	-0.90000	-0.24121	-2.13311	1.05353	1.41632	1.61319	-0.44168	-1.69779	0.72219	1.33224
						1.61483	0.64990	-3.19419	1.91039	1.29088	2.23783	9.02549	69.34164	108.56642	-0.90000	0.11476	-2.64639	1.46839	1.41728	2.23783	-0.24037	-2.13452	1.05465	1.41643
						2.23985	1.36029	-3.75976	2.53544	1.03079	2.99539	12.03399	66.87213	106.84812	-0.90000	0.65159	-3.19577	1.91165	1.29039	2.99539	0.11610	-2.64792	1.46963	1.41705
						2.99776	2.19146	-4.29824	3.04333	0.65607	3.86566	15.04249	64.40261	105.12983	-0.90000	1.36244	-3.76136	2.53731	1.02993	3.86566	0.65345	-3.19736	1.91304	1.28978
						3.86824	3.17448	-6.07462	4.21884	0.86374	4.78243	18.05098	61.93309	103.41154	-0.90000	2.19387	-4.29971	3.04452	0.65493	4.78243	1.36471	-3.76293	2.53898	1.02897
						4.78747	3.33200	-6.37606	4.63318	0.90660	6.80552	21.05948	59.46357	101.69324	-0.90000	3.17732	-6.08006	4.22247	0.86451	6.80552	2.19656	-4.30398	3.04734	0.65517
						6.80753	3.39785	-6.50206	4.95281	0.92451	7.13724	24.06798	56.99405	99.97495	-0.90000	3.33219	-6.37641	4.63408	0.90665	7.13724	3.17826	-6.08186	4.22415	0.86476
						7.13763	3.46370	-6.62807	5.27473	0.94243	7.27827	27.07648	54.52453	98.25666	-0.90000	3.39804	-6.50242	4.95371	0.92456	7.27827	3.33238	-6.37677	4.63498	0.90670
						7.27867	3.46476	-6.63010	5.52143	0.94272	7.41931	30.08497	52.05501	96.53836	-0.90000	3.46388	-6.62842	5.27564	0.94248	7.41931	3.39822	-6.50277	4.95462	0.92461
						7.41971	2.42128	-4.57039	4.46951	0.62286	7.42040	33.09347	49.58549	94.82007	-0.90000	3.46439	-6.62939	5.52168	0.94262	7.42040	3.46407	-6.62878	5.27656	0.94253
						7.41377	2.48475	-3.45005	4.25149	-0.06912	5.12842	36.10197	47.11598	93.10178	-0.90000	2.41865	-4.56481	4.46679	0.62183	5.12842	3.46130	-6.62347	5.51862	0.94178
						5.12609	2.46471	-2.31058	3.58678	-0.70347	4.24850	39.11047	44.64646	91.38348	-0.90000	2.48486	-3.44677	4.25042	-0.07108	4.24850	2.41891	-4.56179	4.46664	0.61989
						4.24581	2.35932	-1.32885	2.59262	-1.17768	3.30170	42.11896	42.17694	89.66519	-0.90000	2.46456	-2.30745	3.58452	-0.70514	3.30170	2.48488	-3.44349	4.24892	-0.07298
						3.29913	2.23200	-0.60028	1.72964	-1.48928	2.43599	45.12746	39.70742	87.94689	-0.90000	2.35895	-1.32629	2.58964	-1.17883	2.43599	2.46434	-2.30448	3.58194	-0.70665
					2	0.91002	-0.14267	-2.29828	1.18458	1.42977	1.26798	4.01133	73.45751	111.43024	-0.90000	-0.38647	-1.81363	0.81456	1.35308	1.26798	-0.50512	-1.46010	0.55779	1.24856
						1.26938	0.27188	-2.82456	1.61427	1.39007	1.80669	7.01983	70.98799	109.71195	-0.90000	-0.14183	-2.29969	1.18570	1.42988	1.80669	-0.38593	-1.81496	0.81553	1.35340
						1.80845	0.86883	-3.38250	2.07451	1.21872	2.47584	10.02832	68.51847	107.99365	-0.90000	0.27323	-2.82609	1.61551	1.38983	2.47584	-0.14083	-2.30114	1.18687	1.42989
						2.47798	1.62823	-3.94517	2.73240	0.91675	3.27512	13.03682	66.04895	106.27536	-0.90000	0.87069	-3.38410	2.07591	1.21811	3.27512	0.27474	-2.82764	1.61677	1.38948
						3.27759	2.50787	-4.79987	3.37423	0.68285	4.17093	16.04532	63.57943	104.55707	-0.90000	1.63050	-3.94674	2.73407	0.91578	4.17093	0.87270	-3.38570	2.07795	1.21737
						4.17353	3.28735	-6.29061	4.41976	0.89445	5.37737	19.05382	61.10991	102.83877	-0.90000	2.51055	-4.80414	3.37705	0.68309	5.37737	1.63286	-3.94827	2.73551	0.91471
						5.38338	3.35395	-6.41806	4.73956	0.91257	7.04321	22.06231	58.64040	101.12048	-0.90000	3.28829	-6.29241	4.42144	0.89470	7.04321	2.51336	-4.80952	3.38059	0.68385
						7.04361	3.41980	-6.54406	5.05980	0.93048	7.18425	25.07081	56.17088	99.40219	-0.90000	3.35414	-6.41842	4.74046	0.91262	7.18425	3.28848	-6.29277	4.42234	0.89475
						7.18465	3.48565	-6.67007	5.38271	0.94840	7.32529	28.07931	53.70136	97.68389	-0.90000	3.41999	-6.54442	5.06071	0.93054	7.32529	3.35433	-6.41877	4.74136	0.91267
						7.32569	3.10243	-5.93675	5.16321	0.84413	7.46633	31.08781	51.23184	95.96560	-0.90000	3.48583	-6.67042	5.38363	0.94845	7.46633	3.42017	-6.54478	5.06162	0.93059
						7.46672	2.44952	-4.21145	4.44971	0.39467	6.63849	34.09630	48.76232	94.24730	-0.90000	3.09934	-5.93083	5.16014	0.84329	6.63849	3.48602	-6.67078	5.38455	0.94850
						6.63178	2.48792	-3.06198	4.07534	-0.29337	4.85367	37.10480	46.29280	92.52901	-0.90000	2.44978	-4.20843	4.44957	0.39273	4.85367	3.09620	-5.92484	5.15699	0.84244
						4.85117	2.43861	-1.95977	3.28264	-0.88241	3.93171	40.11330	43.82328	90.81072	-0.90000	2.48795	-3.05869	4.07384	-0.29527	3.93171	2.44997	-4.20525	4.44895	0.39076
						3.92902	2.30720	-1.05310	2.30413	-1.29239	2.99891	43.12180	41.35376	89.09242	-0.90000	2.43839	-1.95680	3.28006	-0.88392	2.99891	2.48789	-3.05546	4.07195	-0.29707
					3	1.02251	-0.02442	-2.46938	1.32334	1.43043	1.43381	5.01416	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.92943	1.39046	1.43381	-0.48130	-1.58057	0.63623	1.29781
						1.43533	0.45071	-3.00789	1.76270	1.34799	2.01480	8.02266	70.16482	109.13918	-0.90000	-0.02342	-2.47083	1.32452	1.43043	2.01480	-0.32175	-1.97247	0.93048	1.39068
						2.01669	1.10627	-3.57156	2.31483	1.13181	2.72858	11.03116	67.69530	107.42089	-0.90000	0.45222	-3.00944	1.76395	1.34763	2.72858	-0.02225	-2.47232	1.32574	1.43032
						2.73084	1.90667	-4.12552	2.90266	0.79119	3.56601	14.03965	65.22578	105.70260	-0.90000	1.10828	-3.57316	2.31687	1.13107	3.56601	0.45391	-3.01102	1.76520	1.34714
						3.56855	2.83900	-5.43266	3.79132	0.77246	4.47801	17.04815	62.75626	103.98430	-0.90000	1.90903	-4.12704	2.90410	0.79013	4.47801	1.11043	-3.57476	2.31874	1.13021
						4.48059	3.31006	-6.33406	4.52686	0.90062	6.08689	20.05665	60.28674	102.26601	-0.90000	2.84181	-5.43803	3.79486	0.77322	6.08689	1.91144	-4.12851	2.90529	0.78898
						6.09298	3.37590	-6.46006	4.84608	0.91854	7.09022	23.06515	57.81722	100.54771	-0.90000	3.31024	-6.33441	4.52776	0.90068	7.09022	2.84465	-5.44347	3.79848	0.77399
						7.09062	3.44175	-6.58606	5.16710	0.93646	7.23126	26.07364	55.34770	98.82942	-0.90000	3.37609	-6.46042	4.84698	0.91859	7.23126	3.31043	-6.33477	4.52866	0.90073
						7.23166	3.50760	-6.71207	5.49103	0.95437	7.37230	29.08214	52.87819	97.11113	-0.90000	3.44194	-6.58642	5.16801	0.93651	7.37230	3.37627	-6.46077	4.84789	0.91864
						7.37270	2.73264	-5.22912	4.79090	0.74352	7.51334	32.09064	50.40867	95.39283	-0.90000	3.50778	-6.71242	5.49195	0.95442	7.51334	3.44212	-6.58678	5.16892	0.93656
						7.51255	2.47184	-3.83606	4.37729	0.16195	5.84634	35.09914	47.93915	93.67454	-0.90000	2.72951	-5.22313	4.78774	0.74266	5.84634	3.50742	-6.71172	5.49220	0.95432
						5.84026	2.48122	-2.67985	3.85243	-0.50612	4.55810	38.10763	45.46963	91.95625	-0.90000	2.47202	-3.83288	4.37667	0.15998	4.55810	2.72687	-5.21755	4.78502	0.74164

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
						41.11613	43.00011	90.23795	-0.90000	2.48117	-2.67661	3.85054	-0.50792	3.61420	2.47213	-3.82961	4.37560	0.15802	4.55548	2.40331	-1.63160	2.94441	-1.04087	3.61420
						44.12463	40.53059	88.51966	-0.90000	2.40302	-1.62882	2.94154	-1.04221	2.70949	2.48102	-2.67348	3.84829	-0.50959	3.61155	2.24756	-0.80491	2.00416	-1.38518	2.70949
2	TW Main-2			1	1	3.00892	38.64104	83.56688	-0.90000	2.82955	-0.11082	2.75464	1.41753	2.45137	2.23354	-0.59734	1.73035	1.56998	1.69725	3.52452	0.63469	3.94458	1.08213	2.45137
						6.01784	40.04419	80.90515	-0.90000	3.52667	0.63717	3.94786	1.08094	3.41687	2.83152	-0.10887	2.75842	1.41672	2.45403	4.38299	1.65182	4.82176	0.58270	3.41687
						9.02675	41.44733	78.24343	-0.90000	4.38590	1.65515	4.82398	0.58110	4.65166	3.52889	0.63989	3.95082	1.07957	3.42010	5.52994	2.83024	5.52781	0.07511	4.65166
						12.03567	42.85048	75.58171	-0.90000	5.53505	2.83378	5.53102	0.07435	6.21784	4.38860	1.65862	4.82575	0.57930	4.65567	7.46282	3.82074	6.82504	0.10025	6.21784
						15.04459	44.25362	72.91998	-0.90000	7.46570	3.82222	6.82701	0.10029	8.38666	5.54218	2.83743	5.53579	0.07445	6.22586	7.48885	3.83407	6.86109	0.10060	8.38666
						18.05351	45.65676	70.25826	-0.90000	7.48892	3.83411	6.86120	0.10060	8.41274	7.46577	3.82225	6.82710	0.10029	8.38673	7.51207	3.84596	6.89962	0.10091	8.41274
						21.06242	47.05991	67.59654	-0.90000	7.51214	3.84599	6.89974	0.10091	8.43882	7.48899	3.83414	6.86131	0.10060	8.41282	7.53529	3.85784	6.94155	0.10122	8.43882
						24.07134	48.46305	64.93481	-0.90000	7.53536	3.85788	6.94167	0.10123	8.46490	7.51221	3.84603	6.89986	0.10091	8.43890	7.55850	3.86973	6.98454	0.10154	8.46490
						27.08026	49.86620	62.27309	-0.90000	7.55857	3.86976	6.98466	0.10154	8.49098	7.53542	3.85792	6.94180	0.10123	8.46498	7.58171	3.88161	7.02575	0.10185	8.49098
						30.08918	51.26934	59.61136	-0.90000	7.58178	3.88165	7.02587	0.10185	8.51705	7.55864	3.86980	6.98479	0.10154	8.49106	7.60492	3.89350	7.06300	0.10216	8.51705
2						4.01189	39.10876	82.67964	-0.90000	3.05163	0.10905	3.17971	1.32660	2.75036	2.42145	-0.46196	2.07115	1.53785	1.92662	3.77402	0.94015	4.27853	0.92827	2.75036
						7.02081	40.51190	80.01791	-0.90000	3.77624	0.94287	4.28150	0.92690	3.78019	3.05370	0.11126	3.18326	1.32560	2.75322	4.68655	2.04134	5.02179	0.37968	3.78019
						10.02973	41.91505	77.35619	-0.90000	4.68924	2.04481	5.02356	0.37787	5.10171	3.77875	0.94586	4.28411	0.92542	3.78381	6.33045	3.24100	6.06313	0.08504	5.10171
						13.03864	43.31819	74.69446	-0.90000	6.33759	3.24466	6.06790	0.08514	7.11938	4.69165	2.04828	5.02486	0.37592	5.10546	7.47337	3.82615	6.83783	0.10039	7.11938
						16.04756	44.72134	72.03274	-0.90000	7.47344	3.82618	6.83793	0.10039	8.39535	6.34473	3.24831	6.07269	0.08523	7.12740	7.49659	3.83803	6.87347	0.10070	8.39535
						19.05648	46.12448	69.37102	-0.90000	7.49666	3.83807	6.87358	0.10071	8.42144	7.47351	3.82622	6.83803	0.10039	8.39543	7.51981	3.84992	6.91331	0.10102	8.42144
						22.06540	47.52762	66.70929	-0.90000	7.51988	3.84996	6.91344	0.10102	8.44752	7.49673	3.83811	6.87369	0.10071	8.42151	7.54302	3.86181	6.95590	0.10133	8.44752
						25.07431	48.93077	64.04757	-0.90000	7.54309	3.86184	6.95603	0.10133	8.47359	7.51995	3.84999	6.91356	0.10102	8.44759	7.56624	3.87369	6.99860	0.10164	8.47359
						28.08323	50.33391	61.38585	-0.90000	7.56631	3.87373	6.99873	0.10164	8.49967	7.54316	3.86188	6.95616	0.10133	8.47367	7.58945	3.88557	7.03868	0.10195	8.49967
						31.09215	51.73706	58.72412	-0.90000	7.58952	3.88561	7.03879	0.10195	8.52575	7.56638	3.87376	6.99885	0.10164	8.49975	7.61266	3.89746	7.07435	0.10226	8.52575
3						5.01486	39.57647	81.79239	-0.90000	3.28444	0.35860	3.57900	1.21441	3.07268	2.62072	-0.29961	2.40610	1.48716	2.17860	4.05574	1.27686	4.57251	0.76179	3.07268
						8.02378	40.97962	79.13067	-0.90000	4.05825	1.27985	4.57512	0.76031	4.18681	3.28659	0.36107	3.58228	1.21322	3.07574	4.95784	2.43145	5.16844	0.16110	4.18681
						11.03270	42.38276	76.46895	-0.90000	4.96025	2.43491	5.16974	0.15915	5.52337	4.06117	1.28319	4.57733	0.75871	4.19094	7.13386	3.65233	6.60127	0.09583	5.52337
						14.04162	43.78591	73.80722	-0.90000	7.14100	3.65598	6.60606	0.09593	8.02190	4.96536	2.43846	5.17295	0.15840	5.52954	7.48111	3.83011	6.84922	0.10050	8.02190
						17.05053	45.18905	71.14550	-0.90000	7.48118	3.83015	6.84932	0.10050	8.40405	7.14389	3.65746	6.60802	0.09597	8.02515	7.50433	3.84200	6.88632	0.10081	8.40405
						20.05945	46.59219	68.48378	-0.90000	7.50440	3.84203	6.88644	0.10081	8.43013	7.48125	3.83018	6.84942	0.10050	8.40412	7.52755	3.85388	6.92732	0.10112	8.43013
						23.06837	47.99534	65.82205	-0.90000	7.52762	3.85392	6.92744	0.10112	8.45621	7.50447	3.84207	6.88656	0.10081	8.43021	7.55076	3.86577	6.97027	0.10143	8.45621
						26.07729	49.39848	63.16033	-0.90000	7.55083	3.86580	6.97040	0.10143	8.48229	7.52769	3.85395	6.92757	0.10112	8.45629	7.57397	3.87765	7.01237	0.10174	8.48229
						29.08620	50.80163	60.49861	-0.90000	7.57404	3.87769	7.01249	0.10175	8.50836	7.55090	3.86584	6.97052	0.10143	8.48236	7.59719	3.88954	7.05110	0.10206	8.50836
3	TW Main-3			1	1	3.98757	55.23844	52.67152	-0.90000	7.82074	4.00399	7.33891	0.71039	8.75735	7.66424	3.92386	7.14092	0.69618	8.58211	7.97746	4.08422	7.53124	0.72463	8.75735
						4.98446	55.76300	51.82380	-0.90000	7.87276	4.03062	7.40343	0.71512	8.81561	7.71624	3.95049	7.20737	0.70090	8.64033	8.03972	4.11610	7.59400	0.73029	8.81561
4	TW Main-4			1	1	3.98331	60.26896	44.07515	-0.90000	8.23033	4.21369	7.76585	0.17794	9.24456	8.18389	4.18991	7.72965	0.17694	9.19239	8.27681	4.23748	7.80062	0.17895	9.24456
						7.96662	62.15213	40.56510	-0.90000	8.29204	4.24528	7.81178	0.17928	9.31387	8.24556	4.22148	7.77738	0.17827	9.26167	8.33855	4.26909	7.84520	0.18028	9.31387
						11.94993	64.03529	37.05504	-0.90000	8.35380	4.27690	7.85598	0.18061	9.38325	8.30728	4.25309	7.82283	0.17960	9.33099	8.40036	4.30074	7.88836	0.18162	9.38325
						15.93324	65.91845	33.54499	-0.90000	8.41562	4.30855	7.89884	0.18195	9.45268	8.36906	4.28471	7.86667	0.18094	9.40038	8.46222	4.33241	7.93045	0.18295	9.45268
						19.91656	67.80161	30.03494	-0.90000	8.47750	4.34023	7.94073	0.18328	9.52219	8.43089	4.31637	7.90925	0.18228	9.46983	8.52415	4.36411	7.97197	0.18429	9.52219
						23.89987	69.68478	26.52489	-0.90000	8.53945	4.37195	7.98220	0.18462	9.59177	8.49279	4.34806	7.95098	0.18362	9.53936	7.30867	3.74182	7.13172	0.15801	9.59177
						27.88318	71.56794	23.01484	-0.90000	6.47783	3.31646	6.55750	0.14005	7.27609	8.55475	4.37978	7.99245	0.18496	9.60895	4.44869	3.13025	5.80810	-0.65517	7.27609
						31.86649	73.45110	19.50479	-0.90000	3.79689	3.07707	5.53978	-0.91645	4.80050	5.76018	3.11568	6.19743	-0.02230	6.54879	2.08761	2.75439	4.45861	-1.44020	4.80050
						35.84980	75.33427	15.99473	-0.90000	1.63878	2.60103	4.03633	-1.51725	2.67375	3.17417	2.98628	5.22501	-1.13085	4.20885	0.74131	2.42932	2.62424	-1.79023	2.67375
						39.83311	77.21743	12.48468	-0.90000	0.54697	2.44430	2.27205	-1.89530	1.63756	1.30375	2.54699	3.58833	-1.62801	2.35297	0.10880	2.36819	1.46871	-2.03539	1.63756
						43.81642	79.10059	8.97463	-0.90000	0.00783	2.31014	1.32348	-2.03196	1.09905	0.37950	2.43800	1.96197	-1.96893	1.48701	-0.19773	2.05447	0.89639	-1.90385	1.09905
						47.79973	80.98376	5.46458	-0.90000	-0.23721	1.94943	0.77057	-1.82996	0.71259	-0.07522	2.23831	1.17886	-2.00793	0.99191	-0.29061	1.57829	0.45722	-1.52816	0.71259
2						4.97914	60.73975	43.19764	-0.90000	8.24576	4.22158	7.77753	0.17827	9.26188	8.19930	4.19780	7.74186	0.17727	9.20970	8.29224	4.24538	7.81192	0.17928	9.26188
						8.96245	62.62292	39.68758	-0.90000	8.30748	4.25318	7.82297	0.17961	9.33121	8.26099	4.22938	7.78892	0.17860	9.27899	8.35400	4.27700	7.85612	0.18061	9.33121
						12.94576	64.50608	36.17753	-0.90000	8.36925	4.28481	7.86681	0.18094	9.40060	8.32272	4.26099	7.83393	0.17994	9.34834	8.41582	4.30865	7.89897	0.18195	9.40060
						16.92907	66.38924	32.66748	-0.90000	8.43109	4.31647	7.90938	0.18228	9.47005	8.38451	4.29262	7.87742	0.18127	9.41774	8.47770	4.34033	7.94086	0.18329	9.47005
						20.91238	68.27241	29.15743	-0.90000	8.49298	4.34816	7.95111	0.18362	9.53957	8.44636	4.32429	7.91974	0.18261	9.48721	8.53964	4.37204	7.98233	0.18463	9.53957
						24.89569	70.15557	25.64738	-0.90000	8.55494	4.37988	7.99258	0.18496	9.60917	8.50827	4.35598	7.96135	0.18395	9.55675	6.46869	3.31390	6.55292	0.13799	9.60917
						28.87900	72.03873	22.13732	-0.90000	5.75105	3.11312	6.19285	-0.02437	6.53953	8.16423	4.17985	7.72268	0.17651	9.17031	3.78896	3.07591	5.53577	-0.91918	6.53953
						32.86232	73.92189	18.62727	-0.90000	3.16625	2.98512	5.22101	-1.13358	4.20132	5.12563	3.14167	6.03292	-0.34520	6.00192	1.63451	2.60034	4.03062	-1.51866	4.20132
						36.84563	75.80506	15.11722	-0.90000	1.29949	2.54630	3.58263	-1.62942	2.34889	2.61235	2.88805	4.86515	-1.30990	3.66733	0.54484	2.44422	2.26811	-1.89624	2.34889
						40.82894	77.68822	11.60717	-0.90000	0.37737	2.43792	1.95802	-1.96987	1.48509	1.00384	2.48394	3.11358	-1.71424	2.05889	0.00677	2.30922	1.32164	-2.03166	1.48509
						44.81225	79.57138	8.09712	-0.90000	-0.07627	2.23739	1.17702	-2.00763	0.99054	0.23435	2.41246	1.63170	-2.01504	1.34703	-0.23756	1.94798	0.76910	-1.82885	0.99054
						48.79556	81.45455	4.58706	-0.90000	-0.26534	1.83409	0.65392	-1.74162	0.63327	-0.14322	2.15325	1.03606	-1.96513	0.89177	-0.28961	1.44099	0.37958	-1.40671	0.63327
3						5.97497	61.21054	42.32012	-0.90000	8.26118	4.22948	7.78907	0.17861	9.27921	8.21472	4.20569	7.75387	0.17760	9.22702	8.30767	4.25328	7.82311	0.17961	9.27921
						9.95828	63.09371	38.81007	-0.90000	8.32292	4.26109	7.83407	0.17994	9.34855	8.27642	4.23728	7.80034	0.17894	9.29632	8.36945	4.28491	7.86694	0.18095	9.34855
						13.94159	64.97687	35.30002	-0.90000	8.38471	4.29272	7.87756	0.18128	9.41796	8.33817	4.26890	7.84493	0.18027	9.36568	8.43128	4.31657	7.90951	0.18229	9.41796
						17.92490	66.86003	31.78997	-0.90000	8.44655	4.32439	7.91987	0.18262	9.48743	8.39997	4.30054	7.88810	0.18161	9.43510	8.49318	4.34826	7.95124	0.18362	9.48743
						21.90821	68.74320	28.27991	-0.90000	8.50847	4.35608	7.96148	0.18395	9.55697	8.46183	4.33221	7.93019	0.18295	9.50459	8.54997	4.37733	7.98915	0.18485	9.55697
						25.89152	70.62636	24.76986	-0.90000	8.15926	4.17730	7.71924	0.17640	9.16473	8.52376	4.36391	7.97171	0.18429	9.57414	5.74309	3.11349	6.19081	-0.02845	9.16473
						29.87483	72.50952	21.25981	-0.90000	5.11767	3.14203	6.03088	-0.34928	5.99507	7.32980	3.75264	7.14632	0.15847	8.23306	3.15919	2.98389	5.21648	-1.13582	5.99507
						33.85814	74.39269	17.74976	-0.90000	2.60530	2.88681	4.86062	-1.31214	3.66054	4.46529	3.13107	5.81427	-0.64804	5.41502	1.29572	2.54551	3.57666	-1.63050	3.66054
						37.84145	76.27585	14.23971	-0.90000	1.00007	2.48315	3.10760	-1.71532	2.05519	2.09976	2.75798	4.46897	-1.43762	3.15416	0.37555	2.43760	1.95386	-1.97044	2.05519
						41.82477	78.15901	10.72966	-0.90000	0.23253	2.41214	1.62754	-2.01562	1.34527	0.74700	2.42981	2.63474	-1.78797	1.80697	-0.07713	2.23632	1.17522	-2.00708	1.34527
						45.80808	80.04217	7.21960	-0.90000	-0.14407	2.15218	1.03426	-1.96459	0.89051	0.11163	2.36948	1.47253	-2.03518	1.21857	-0.26556	1.83254	0.65261	-1.74036	0.89051
						49.79139	81.92534	3.70955	-0.90000	-0.28280	1.71068	0.54950	-1.64113	0.55955	-0.19656	2.05701	0.89970	-1.90554	0.79928	-0.28072	1.29777	0.31521	-1.27630	0.55955
4						6.97079	61.68134	41.44261	-0.90000	8.27661	4.23738	7.80048	0.17894	9.29654	8.23014	4.21359	7.76570	0.17794	9.24434	8.32311	4.26119	7.83420	0.17995	9.29654
						10.95411	63.56450	37.93256	-0.90000	8.33836	4.26899	7.84507	0.18028	9.36590	8.29185	4.24518	7.81164	0.17927						

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration from start of utility	Distance	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
5	TW Foul-1	1		1																				
6	TW Foul-2	1		1																				

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
1	Basement Construction - Undrained				1	17.08051	46.47071	71.24744	-6.00000	8.31143	4.25521	7.52969	0.21358	9.33494	8.29301	4.24577	7.51521	0.21310	9.31424
1	Basement Construction - Undrained				2	18.08525	46.94892	70.36381	-6.00000	8.32994	4.26469	7.54634	0.21405	9.35573	8.31152	4.25525	7.52977	0.21358	9.33503
1	Basement Construction - Undrained				3	19.08998	47.42714	69.48017	-6.00000	8.34846	4.27417	7.56514	0.21453	9.37653	8.33003	4.26473	7.54643	0.21405	9.35583
1	Basement Construction - Undrained				4	20.09472	47.90535	68.59654	-6.00000	8.36699	4.28365	7.58603	0.21500	9.39734	8.34855	4.27421	7.56523	0.21453	9.37663
1	Basement Construction - Undrained				5	21.09945	48.38356	67.71291	-6.00000	8.38552	4.29314	7.60891	0.21548	9.41815	8.36708	4.28370	7.58613	0.21501	9.39744
1	Basement Construction - Undrained				6	22.10419	48.86177	66.82927	-6.00000	8.40406	4.30263	7.63364	0.21596	9.43897	8.38561	4.29318	7.60903	0.21548	9.41825
1	Basement Construction - Undrained				7	23.10893	49.33998	65.94564	-6.00000	8.42260	4.31212	7.65998	0.21643	9.45979	8.40414	4.30267	7.63376	0.21596	9.43907
1	Basement Construction - Undrained				8	24.11366	49.81820	65.06201	-6.00000	8.44114	4.32162	7.68766	0.21691	9.48062	8.42268	4.31217	7.66011	0.21643	9.45989
1	Basement Construction - Undrained				9	25.11840	50.29641	64.17838	-6.00000	8.45969	4.33111	7.71637	0.21739	9.50146	8.44123	4.32166	7.68779	0.21691	9.48072
1	Basement Construction - Undrained				10	26.12313	50.77462	63.29474	-6.00000	8.47825	4.34062	7.74578	0.21786	9.52230	8.45978	4.33116	7.71651	0.21739	9.50156
1	Basement Construction - Undrained				11	27.12787	51.25283	62.41111	-6.00000	8.49682	4.35012	7.77556	0.21834	9.54315	8.47834	4.34066	7.74592	0.21786	9.52240
1	Basement Construction - Undrained				12	28.13261	51.73105	61.52748	-6.00000	8.51539	4.35963	7.80537	0.21882	9.56401	8.49690	4.35016	7.77570	0.21834	9.54325
1	Basement Construction - Undrained				13	29.13734	52.20926	60.64384	-6.00000	8.53396	4.36914	7.83495	0.21929	9.58487	8.51547	4.35967	7.80551	0.21882	9.56411
1	Basement Construction - Undrained				14	30.14208	52.68747	59.76021	-6.00000	8.55255	4.37865	7.86405	0.21977	9.60574	8.53405	4.36918	7.83509	0.21930	9.58497
1	Basement Construction - Undrained				15	31.14681	53.16568	58.87658	-6.00000	8.57114	4.38817	7.89248	0.22025	9.62662	8.55263	4.37870	7.86418	0.21977	9.60584
1	Basement Construction - Undrained				16	32.15155	53.64390	57.99294	-6.00000	8.58973	4.39769	7.92011	0.22073	9.64751	8.57122	4.38821	7.89261	0.22025	9.62672
1	Basement Construction - Undrained				17	33.15629	54.12211	57.10931	-6.00000	8.60833	4.40721	7.94687	0.22121	9.66840	8.58982	4.39773	7.92024	0.22073	9.64761
1	Basement Construction - Undrained				18	34.16102	54.60032	56.22568	-6.00000	8.62694	4.41674	7.97273	0.22168	9.68931	8.60842	4.40726	7.94700	0.22121	9.66850
1	Basement Construction - Undrained				19	35.16576	55.07853	55.34205	-6.00000	8.64556	4.42627	7.99768	0.22216	9.71022	8.62703	4.41679	7.97284	0.22169	9.68940
1	Basement Construction - Undrained				20	36.17049	55.55675	54.45841	-6.00000	8.66419	4.43581	8.02176	0.22264	9.73113	8.64565	4.42632	7.99779	0.22216	9.71031
1	Basement Construction - Undrained				21	37.17523	56.03496	53.57478	-6.00000	8.68282	4.44535	8.04503	0.22312	9.75206	8.66427	4.43585	8.02187	0.22264	9.73123
1	Basement Construction - Undrained				22	38.17997	56.51317	52.69115	-6.00000	8.70146	4.45489	8.06755	0.22360	9.77300	8.68291	4.44539	8.04513	0.22312	9.75216
1	Basement Construction - Undrained				23	39.18470	56.99138	51.80751	-6.00000	8.72011	4.46444	8.08941	0.22408	9.79394	8.70155	4.45494	8.06765	0.22360	9.77309
1	Basement Construction - Undrained				24	40.18944	57.46959	50.92388	-6.00000	8.73876	4.47399	8.11067	0.22456	9.81489	8.72019	4.46448	8.08951	0.22408	9.79404
1	Basement Construction - Undrained				25	41.19417	57.94781	50.04025	-6.00000	8.75743	4.48354	8.13143	0.22504	9.83585	8.73885	4.47403	8.11077	0.22456	9.81499
1	Basement Construction - Undrained				26	42.19891	58.42602	49.15661	-6.00000	8.77610	4.49310	8.15175	0.22552	9.85682	8.75751	4.48359	8.13153	0.22504	9.83595
1	Basement Construction - Undrained				27	43.20365	58.90423	48.27298	-6.00000	8.79478	4.50267	8.17170	0.22600	9.87781	8.77619	4.49315	8.15184	0.22552	9.85692
1	Basement Construction - Undrained				28	44.20838	59.38244	47.38935	-6.00000	8.81347	4.51223	8.19135	0.22648	9.89880	8.79487	4.50271	8.17179	0.22600	9.87790
1	Basement Construction - Undrained				29	45.21312	59.86066	46.50572	-6.00000	8.83216	4.52181	8.21074	0.22696	9.91980	8.81355	4.51228	8.19144	0.22648	9.89889
1	Basement Construction - Undrained				30	46.21785	60.33887	45.62208	-6.00000	8.85087	4.53138	8.22992	0.22744	9.94080	8.83225	4.52185	8.21083	0.22696	9.91989
1	Basement Construction - Undrained				31	47.22259	60.81708	44.73845	-6.00000	8.86958	4.54097	8.24892	0.22792	9.96182	8.85096	4.53143	8.23001	0.22744	9.94090
1	Basement Construction - Undrained				32	48.22733	61.29529	43.85482	-6.00000	8.88831	4.55055	8.26776	0.22840	9.98285	8.86967	4.54101	8.24900	0.22792	9.96192
1	Basement Construction - Undrained				33	49.23206	61.77351	42.97118	-6.00000	8.90704	4.56014	8.28646	0.22888	10.00389	8.88840	4.55060	8.26785	0.22840	9.98295
1	Basement Construction - Undrained				34	50.23680	62.25172	42.08755	-6.00000	8.92578	4.56974	8.30503	0.22936	10.02494	8.90713	4.56019	8.28655	0.22888	10.00399
1	Basement Construction - Undrained				35	51.24153	62.72993	41.20392	-6.00000	8.94454	4.57934	8.32347	0.22984	10.04601	8.92587	4.56978	8.30512	0.22936	10.02504
1	Basement Construction - Undrained				36	52.24627	63.20814	40.32028	-6.00000	8.96330	4.58894	8.34176	0.23033	10.06708	8.94462	4.57938	8.32355	0.22985	10.04611
1	Basement Construction - Undrained				37	53.25101	63.68636	39.43665	-6.00000	8.98207	4.59855	8.35989	0.23081	10.08816	8.96339	4.58899	8.34184	0.23033	10.06718
1	Basement Construction - Undrained				38	54.25574	64.16457	38.55302	-6.00000	9.00085	4.60817	8.37786	0.23129	10.10926	8.98216	4.59860	8.35998	0.23081	10.08826
1	Basement Construction - Undrained				39	55.26048	64.64278	37.66939	-6.00000	9.01964	4.61779	8.39564	0.23177	10.13036	9.00094	4.60822	8.37794	0.23129	10.10936
1	Basement Construction - Undrained				40	56.26521	65.12099	36.78575	-6.00000	9.03844	4.62742	8.41322	0.23226	10.15148	9.01973	4.61784	8.39572	0.23178	10.13046
1	Basement Construction - Undrained				41	57.26995	65.59921	35.90212	-6.00000	9.05726	4.63705	8.43059	0.23274	10.17261	9.03853	4.62746	8.41330	0.23226	10.15158
1	Basement Construction - Undrained				42	58.27469	66.07742	35.01849	-6.00000	9.07608	4.64669	8.44772	0.23322	10.19375	9.05735	4.63709	8.43067	0.23274	10.17271
1	Basement Construction - Undrained				43	59.27942	66.55563	34.13485	-6.00000	9.09491	4.65633	8.46462	0.23371	10.21490	9.07617	4.64673	8.44780	0.23323	10.19385
1	Basement Construction - Undrained				44	60.28416	67.03384	33.25122	-6.00000	9.11376	4.66598	8.48128	0.23419	10.23607	9.09500	4.65637	8.46470	0.23371	10.21500
1	Basement Construction - Undrained				45	61.28889	67.51205	32.36759	-6.00000	9.13261	4.67563	8.49769	0.23468	10.25724	9.11385	4.66602	8.48136	0.23420	10.23617
1	Basement Construction - Undrained				46	62.29363	67.99027	31.48395	-6.00000	9.15148	4.68529	8.51386	0.23516	10.27843	9.13270	4.67567	8.49777	0.23468	10.25734
1	Basement Construction - Undrained				47	63.29836	68.46848	30.60032	-6.00000	9.17036	4.69495	8.52980	0.23565	10.29964	9.15157	4.68533	8.51394	0.23516	10.27853
1	Basement Construction - Undrained				48	64.30310	68.94669	29.71669	-6.00000	9.18925	4.70462	8.54551	0.23613	10.32085	9.17045	4.69500	8.52987	0.23565	10.29974
1	Basement Construction - Undrained				49	65.30784	69.42490	28.83306	-6.00000	9.20815	4.71430	8.56100	0.23662	10.34208	9.18934	4.70467	8.54558	0.23613	10.32095
1	Basement Construction - Undrained				50	66.31257	69.90312	27.94942	-6.00000	9.22706	4.72398	8.57629	0.23710	10.36332	9.20824	4.71435	8.56107	0.23662	10.34218
1	Basement Construction - Undrained				51	67.31731	70.38133	27.06579	-6.00000	9.24598	4.73367	8.59139	0.23759	10.38458	9.22715	4.72403	8.57636	0.23711	10.36342
1	Basement Construction - Undrained				52	68.32204	70.85954	26.18216	-6.00000	9.26492	4.74337	8.60632	0.23808	10.40584	9.24607	4.73372	8.59146	0.23759	10.38468
1	Basement Construction - Undrained				53	69.32678	71.33775	25.29852	-6.00000	8.98759	4.60138	8.41433	0.23095	10.09436	9.26361	4.74270	8.60541	0.23804	10.40438
1	Basement Construction - Undrained				54	70.33152	71.81597	24.41489	-6.00000	8.11099	4.15259	7.80385	0.20843	9.10982	8.98346	4.59926	8.41146	0.23084	10.08972
1	Basement Construction - Undrained				55	71.33625	72.29418	23.53126	-6.00000	7.23271	3.70293	7.19184	0.18586	8.12338	8.10685	4.15047	7.80097	0.20832	9.10517
1	Basement Construction - Undrained				56	72.34099	72.77239	22.64762	-6.00000	6.40940	3.43528	6.74598	0.02939	7.27191	7.22883	3.70167	7.18974	0.18512	8.11937
1	Basement Construction - Undrained				57	73.34572	73.25060	21.76399	-6.00000	5.65286	3.48719	6.57460	-0.37634	6.63127	6.40583	3.43552	6.74517	0.02748	7.26889
1	Basement Construction - Undrained				58	74.35046	73.72882	20.88036	-6.00000	4.86739	3.49321	6.34217	-0.75549	5.94334	5.64916	3.48722	6.57350	-0.37813	6.62803
1	Basement Construction - Undrained				59	75.35520	74.20703	19.99673	-6.00000	4.08999	3.44988	6.05453	-1.08739	5.23902	4.86373	3.49300	6.34081	-0.75705	5.94002
1	Basement Construction - Undrained				60	76.35993	74.68524	19.11309	-6.00000	3.35076	3.35634	5.71771	-1.35697	4.54436	4.08651	3.44944	6.05294	-1.08867	5.23574
1	Basement Construction - Undrained				61	77.36467	75.16345	18.22946	-6.00000	2.67093	3.21378	5.33771	-1.55517	3.87862	3.34755	3.35567	5.71592	-1.35791	4.54122
1	Basement Construction - Undrained				62	78.36940	75.64166	17.34583	-6.00000	2.07319	3.04125	4.92037	-1.68793	3.27081	2.66811	3.21297	5.33574	-1.55580	3.87576
1	Basement Construction - Undrained				63	79.37414	76.11988	16.46219	-6.00000	1.57318	2.87361	4.47127	-1.77848	2.75128	2.07083	3.04046	4.91825	-1.68836	3.26837
1	Basement Construction - Undrained				64	80.37888	76.59809	15.57856	-6.00000	1.14233	2.67498	3.99569	-1.80886	2.27782	1.57115	2.87267	4.46903	-1.77862	2.74905
1	Basement Construction - Undrained				65	81.38361	77.07630	14.69493	-6.00000	0.82230	2.58703	3.50185	-1.88383	1.95450	1.14082	2.67457	3.99336	-1.80921	2.27630
1	Basement Construction - Undrained				66	82.38835	77.55451	13.81129	-6.00000	0.59043	2.62389	3.07845	-2.02661	1.76813	0.82120	2.58721	3.49985	-1.88451	1.95362
1	Basement Construction - Undrained				67	83.39308	78.03273	12.92766	-6.00000	0.39207	2.63469	2.62024	-2.13052	1.59881	0.58949	2.62394	3.07629	-2.02710	1.76733
1	Basement Construction - Undrained				68	84.39782	78.51094	12.04403	-6.00000	0.22389	2.62225	2.24411	-2.19962	1.44498	0.39127	2.63463	2.61847	-2.13084	1.59809
1	Basement Construction - Undrained				69	85.40256	78.98915	11.16040	-6.00000	0.08270	2.58918	1.89493	-2.23774	1.30508	0.22322	2.62209	2.24246	-2.19980	1.44432
1	Basement Construction - Undrained				70	86.40729	79.46736	10.27676	-6.00000	-0.03445	2.53787	1.58822	-2.24837	1.17763	0.08215	2.58894	1.89348	-2.23779	1.30447
1	Basement Construction - Undrained				71	87.41203	79.94558	9.39313	-6.00000	-0.13023	2.47044	1.42870	-2.23465	1.06129	-0.03490	2.53756	1.58747	-2.24831	1.17763

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
1	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00526	0.00526	1.36708	1.36708	0.00526	0.00526	0.09539	0.09539
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00544	0.00544	1.42120	1.42120	0.00544	0.00544	0.04152	0.04152
						9.02549	69.34164	108.56642	-0.90000	1.42138	1.42138	0.00428	0.00428	1.36600	1.36600	0.00428	0.00428	-0.05538	-0.05538
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00676	0.00676	1.17977	1.17977	0.00676	0.00676	-0.17193	-0.17193
						15.04249	64.40261	105.12983	-0.90000	1.15026	1.15026	0.00402	0.00402	0.86726	0.86726	0.00402	0.00402	-0.28300	-0.28300
						18.05098	61.93309	103.41154	-0.90000	0.82467	0.82467	0.04084	0.04084	0.73392	0.73392	0.04084	0.04084	-0.09076	-0.09076
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05864	0.05864	0.88860	0.88860	0.05864	0.05864	0.12430	0.12430
						24.06798	56.99405	99.97495	-0.90000	0.89070	0.89070	0.00665	0.00665	0.91459	0.91459	0.00665	0.00665	0.02390	0.02390
						27.07648	54.52453	98.25666	-0.90000	0.91662	0.91662	0.00007	0.00007	0.93251	0.93251	0.00007	0.00007	0.01589	0.01589
						30.08497	52.05501	96.53836	-0.90000	0.93453	0.93453	0.00500	0.00500	0.94455	0.94455	0.00500	0.00500	0.01002	0.01002
						33.09347	49.58549	94.82007	-0.90000	0.94652	0.94652	0.08325	0.08325	0.80292	0.80292	0.08325	0.08325	-0.14360	-0.14360
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05186	0.05186	0.31515	0.31515	0.05186	0.05186	-0.45361	-0.45361
						39.11047	44.64646	91.38348	-0.90000	0.23627	0.23627	0.01432	0.01432	-0.35660	-0.35660	0.01432	0.01432	-0.59287	-0.59287
						42.11896	42.17694	89.66519	-0.90000	-0.42868	-0.42868	0.01068	0.01068	-0.92225	-0.92225	0.01068	0.01068	-0.49357	-0.49357
						45.12746	39.70742	87.94689	-0.90000	-0.97590	-0.97590	0.00745	0.00745	-1.32049	-1.32049	0.00745	0.00745	-0.34459	-0.34459
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00671	0.00671	1.39110	1.39110	0.00671	0.00671	0.07987	0.07987
						7.01983	70.98799	109.71195	-0.90000	1.39987	1.39987	0.00451	0.00451	1.41679	1.41679	0.00451	0.00451	0.01693	0.01693
						10.02832	68.51847	107.99365	-0.90000	1.41233	1.41233	0.00421	0.00421	1.31873	1.31873	0.00421	0.00421	-0.09361	-0.09361
						13.03682	66.04895	106.27536	-0.90000	1.29933	1.29933	0.00695	0.00695	1.08864	1.08864	0.00695	0.00695	-0.21068	-0.21068
						16.04532	63.57943	104.55707	-0.90000	1.05436	1.05436	0.00977	0.00977	0.79625	0.79625	0.00977	0.00977	-0.25811	-0.25811
						19.05382	61.10991	102.83877	-0.90000	0.75091	0.75091	0.01933	0.01933	0.78359	0.78359	0.01933	0.01933	0.03268	0.03268
						22.06231	58.64040	101.12048	-0.90000	0.81436	0.81436	0.05327	0.05327	0.90265	0.90265	0.05327	0.05327	0.08829	0.08829
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00004	0.00004	0.92057	0.92057	0.00004	0.00004	0.01589	0.01589
						28.07931	53.70136	97.68389	-0.90000	0.92259	0.92259	0.00008	0.00008	0.93848	0.93848	0.00008	0.00008	0.01589	0.01589
						31.08781	51.23184	95.96560	-0.90000	0.94051	0.94051	0.03497	0.03497	0.91567	0.91567	0.03497	0.03497	-0.02484	-0.02484
						34.09630	48.76232	94.24730	-0.90000	0.91147	0.91147	0.03391	0.03391	0.66021	0.66021	0.03391	0.03391	-0.25126	-0.25126
						37.10480	46.29280	92.52901	-0.90000	0.61900	0.61900	0.02917	0.02917	0.08645	0.08645	0.02917	0.02917	-0.53255	-0.53255
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01318	0.01318	-0.56186	-0.56186	0.01318	0.01318	-0.57000	-0.57000
						43.12180	41.35376	89.09242	-0.90000	-0.62871	-0.62871	0.00685	0.00685	-1.07284	-1.07284	0.00685	0.00685	-0.44413	-0.44413
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00620	0.00620	1.41240	1.41240	0.00620	0.00620	0.06528	0.06528
						8.02266	70.16482	109.13918	-0.90000	1.41700	1.41700	0.00441	0.00441	1.39857	1.39857	0.00441	0.00441	-0.01843	-0.01843
						11.03116	67.69530	107.42089	-0.90000	1.38926	1.38926	0.00528	0.00528	1.25661	1.25661	0.00528	0.00528	-0.13265	-0.13265
						14.03965	65.22578	105.70260	-0.90000	1.23211	1.23211	0.00259	0.00259	0.98406	0.98406	0.00259	0.00259	-0.24804	-0.24804
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02395	0.02395	0.73917	0.73917	0.02395	0.02395	-0.20620	-0.20620
						20.05665	60.28674	102.26601	-0.90000	0.74843	0.74843	0.01975	0.01975	0.84612	0.84612	0.01975	0.01975	0.09769	0.09769
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.03009	0.03009	0.90862	0.90862	0.03009	0.03009	0.05216	0.05216
						26.07364	55.34770	98.82942	-0.90000	0.91065	0.91065	0.00006	0.00006	0.92654	0.92654	0.00006	0.00006	0.01589	0.01589
						29.08214	52.87819	97.11113	-0.90000	0.92856	0.92856	0.00009	0.00009	0.94445	0.94445	0.00009	0.00009	0.01589	0.01589
						32.09064	50.40867	95.39283	-0.90000	0.94648	0.94648	0.06560	0.06560	0.88019	0.88019	0.06560	0.06560	-0.06629	-0.06629
						35.09914	47.93915	93.67454	-0.90000	0.84676	0.84676	0.01523	0.01523	0.50882	0.50882	0.01523	0.01523	-0.33794	-0.33794
						38.10763	45.46963	91.95625	-0.90000	0.43145	0.43145	0.01140	0.01140	-0.13907	-0.13907	0.01140	0.01140	-0.57052	-0.57052
						41.11613	43.00011	90.23795	-0.90000	-0.21505	-0.21505	0.01213	0.01213	-0.75131	-0.75131	0.01213	0.01213	-0.53626	-0.53626
						44.12463	40.53059	88.51966	-0.90000	-0.81191	-0.81191	0.00444	0.00444	-1.20208	-1.20208	0.00444	0.00444	-0.39017	-0.39017
		2	TW Main-2	1	1	3.00892	38.64104	83.56688	-0.90000	1.49176	1.49176	0.00843	0.00843	1.27542	1.27542	0.00843	0.00843	-0.21634	-0.21634
						6.01784	40.04419	80.90515	-0.90000	1.23736	1.23736	0.01311	0.01311	0.86351	0.86351	0.01311	0.01311	-0.37385	-0.37385
						9.02675	41.44733	78.24343	-0.90000	0.80699	0.80699	0.01170	0.01170	0.34469	0.34469	0.01170	0.01170	-0.46230	-0.46230
						12.03567	42.85048	75.58171	-0.90000	0.27093	0.27093	0.02670	0.02670	0.08658	0.08658	0.02670	0.02670	-0.18435	-0.18435
						15.04459	44.25362	72.91998	-0.90000	0.09022	0.09022	0.07845	0.07845	0.10043	0.10043	0.07845	0.07845	0.01021	0.01021
						18.05351	45.65676	70.25826	-0.90000	0.10046	0.10046	0.00014	0.00014	0.10074	0.10074	0.00014	0.00014	0.00028	0.00028
						21.06242	47.05991	67.59654	-0.90000	0.10078	0.10078	0.00011	0.00011	0.10105	0.10105	0.00011	0.00011	0.00028	0.00028
						24.07134	48.46305	64.93481	-0.90000	0.10109	0.10109	0.00003	0.00003	0.10136	0.10136	0.00003	0.00003	0.00028	0.00028
						27.08026	49.86620	62.27309	-0.90000	0.10140	0.10140	0.00006	0.00006	0.10168	0.10168	0.00006	0.00006	0.00028	0.00028
						30.08918	51.26934	59.61136	-0.90000	0.10171	0.10171	0.00012	0.00012	0.10199	0.10199	0.00012	0.00012	0.00028	0.00028
					2	4.01189	39.10876	82.67964	-0.90000	1.42733	1.42733	0.00643	0.00643	1.15643	1.15643	0.00643	0.00643	-0.27090	-0.27090

Specific Utility Damage Results - Pullouts & Rotations

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	Pullout: Check: Left Seg.: Rotation: Ax.:	Pullout: Vertical Check: Left Seg.: Rotation: Sagging vs Hogging Ax.:	Pullout: Left Seg.: Flex.:	Pullout: Left Seg.: Flex.:	Pullout: Right Seg.: Ax.:	Pullout: Right Seg.: Ax.:	Pullout: Right Seg.: Flex.:	Pullout: Right Seg.: Flex.:	Pullout: Total: Ax.:
		Pullout: Total: Ax.:	Pullout: Total: Flex.:	Check: Pullout: Total: Threshold		Pullout: Unfactored Limit	Factored	Rotation: Threshold		Limit Unfactored	Factored	Unfactored	Factored	Unfactored	Factored	Unfactored	Factored	Unfactored
		Factored	Unfactored	Factored	Unfactored	Factored												
		[mm]	[mm]	[mm]	[mm]	[mm]		[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
1	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00526	0.00526	1.36708	1.36708	0.00526	0.00526	0.09539
0.09539	0.01053	0.01053	0.10591	0.10591	-	-	0.00317	0.00317	-	-	Hogging							
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00544	0.00544	1.42120	1.42120	0.00544	0.00544	0.04152
0.04152	0.01089	0.01089	0.05241	0.05241	-	-	0.00328	0.00328	-	-	Hogging							
						9.02549	69.34164	108.56642	-0.90000	1.42138	1.42138	0.00428	0.00428	1.36600	1.36600	0.00428	0.00428	-0.05538
-0.05538	0.00857	0.00857	0.00857	0.00857	-	-	0.00258	0.00258	-	-	Hogging							
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00676	0.00676	1.17977	1.17977	0.00676	0.00676	-0.17193
-0.17193	0.01353	0.01353	0.01353	0.01353	-	-	0.00408	0.00408	-	-	Hogging							
						15.04249	64.40261	105.12983	-0.90000	1.15026	1.15026	0.00402	0.00402	0.86726	0.86726	0.00402	0.00402	-0.28300
-0.28300	0.00804	0.00804	0.00804	0.00804	-	-	0.00243	0.00243	-	-	Sagging							
						18.05098	61.93309	103.41154	-0.90000	0.82467	0.82467	0.04084	0.04084	0.73392	0.73392	0.04084	0.04084	-0.09076
-0.09076	0.08168	0.08168	0.08168	0.08168	-	-	0.02463	0.02463	-	-	Hogging							
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05864	0.05864	0.88860	0.88860	0.05864	0.05864	0.12430
0.12430	0.11728	0.11728	0.24159	0.24159	-	-	0.03537	0.03537	-	-	Sagging							
						24.06798	56.99405	99.97495	-0.90000	0.89070	0.89070	0.00665	0.00665	0.91459	0.91459	0.00665	0.00665	0.02390
0.02390	0.01329	0.01329	0.03719	0.03719	-	-	0.00401	0.00401	-	-	Sagging							
						27.07648	54.52453	98.25666	-0.90000	0.91662	0.91662	0.00007	0.00007	0.93251	0.93251	0.00007	0.00007	0.01589
0.01589	0.00014	0.00014	0.01604	0.01604	-	-	0.00004	0.00004	-	-	-							
						30.08497	52.05501	96.53836	-0.90000	0.93453	0.93453	0.00500	0.00500	0.94455	0.94455	0.00500	0.00500	0.01002
0.01002	0.01000	0.01000	0.02001	0.02001	-	-	0.00301	0.00301	-	-	Sagging							
						33.09347	49.58549	94.82007	-0.90000	0.94652	0.94652	0.08325	0.08325	0.80292	0.80292	0.08325	0.08325	-0.14360
0.14360	0.16650	0.16650	0.16650	0.16650	-	-	0.05021	0.05021	-	-	Sagging							
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05186	0.05186	0.31515	0.31515	0.05186	0.05186	-0.45361
0.45361	0.10373	0.10373	0.10373	0.10373	-	-	0.03128	0.03128	-	-	Hogging							
						39.11047	44.64646	91.38348	-0.90000	0.23627	0.23627	0.01432	0.01432	-0.35660	-0.35660	0.01432	0.01432	-0.59287
0.59287	0.02865	0.02865	0.02865	0.02865	-	-	0.00864	0.00864	-	-	Sagging							
						42.11896	42.17694	89.66519	-0.90000	-0.42868	-0.42868	0.01068	0.01068	-0.92225	-0.92225	0.01068	0.01068	-0.49357
0.49357	0.02136	0.02136	0.02136	0.02136	-	-	0.00644	0.00644	-	-	Sagging							
						45.12746	39.70742	87.94689	-0.90000	-0.97590	-0.97590	0.00745	0.00745	-1.32049	-1.32049	0.00745	0.00745	-0.34459
0.34459	0.01491	0.01491	0.01491	0.01491	-	-	0.00450	0.00450	-	-	Hogging							
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00671	0.00671	1.39110	1.39110	0.00671	0.00671	0.07987
0.07987	0.01342	0.01342	0.09329	0.09329	-	-	0.00405	0.00405	-	-	Hogging							
						7.01983	70.98799	109.71195	-0.90000	1.39987	1.39987	0.00451	0.00451	1.41679	1.41679	0.00451	0.00451	0.01693
0.01693	0.00902	0.00902	0.02595	0.02595	-	-	0.00272	0.00272	-	-	Hogging							
						10.02832	68.51847	107.99365	-0.90000	1.41233	1.41233	0.00421	0.00421	1.31873	1.31873	0.00421	0.00421	-0.09361
0.09361	0.00843	0.00843	0.00843	0.00843	-	-	0.00254	0.00254	-	-	Hogging							
						13.03682	66.04895	106.27536	-0.90000	1.29933	1.29933	0.00695	0.00695	1.08864	1.08864	0.00695	0.00695	-0.21068
0.21068	0.01390	0.01390	0.01390	0.01390	-	-	0.00419	0.00419	-	-	Hogging							
						16.04532	63.57943	104.55707	-0.90000	1.05436	1.05436	0.00977	0.00977	0.79625	0.79625	0.00977	0.00977	-0.25811
0.25811	0.01954	0.01954	0.01954	0.01954	-	-	0.00589	0.00589	-	-	Sagging							
						19.05382	61.10991	102.83877	-0.90000	0.75091	0.75091	0.01933	0.01933	0.78359	0.78359	0.01933	0.01933	0.03268
0.03268	0.03866	0.03866	0.07133	0.07133	-	-	0.01166	0.01166	-	-	Hogging							
						22.06231	58.64040	101.12048	-0.90000	0.81436	0.81436	0.05327	0.05327	0.90265	0.90265	0.05327	0.05327	0.08829
0.08829	0.10655	0.10655	0.19484	0.19484	-	-	0.03213	0.03213	-	-	Sagging							
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00004	0.00004	0.92057	0.92057	0.00004	0.00004	0.01589
0.01589	0.00008	0.00008	0.01597	0.01597	-	-	0.00002	0.00002	-	-	-							
						28.07931	53.70136	97.68389	-0.90000	0.92259	0.92259	0.00008	0.00008	0.93848	0.93848	0.00008	0.00008	0.01589
0.01589	0.00017	0.00017	0.01606	0.01606	-	-	0.00005	0.00005	-	-	-							
						31.08781	51.23184	95.96560	-0.90000	0.94051	0.94051	0.03497	0.03497	0.91567	0.91567	0.03497	0.03497	-0.02484
0.02484	0.06994	0.06994	0.06994	0.06994	-	-	0.02109	0.02109	-	-	Sagging							
						34.09630	48.76232	94.24730	-0.90000	0.91147	0.91147	0.03391	0.03391	0.66021	0.66021	0.03391	0.03391	-0.25126
0.25126	0.06782	0.06782	0.06782	0.06782	-	-	0.02045	0.02045	-	-	Sagging							
						37.10480	46.29280	92.52901	-0.90000	0.61900	0.61900	0.02917	0.02917	0.08645	0.08645	0.02917	0.02917	-0.53255
0.53255	0.05834	0.05834	0.05834	0.05834	-	-	0.01759	0.01759	-	-	Hogging							
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01318	0.01318	-0.56186	-0.56186	0.01318	0.01318	-0.57000
0.57000	0.02636	0.02636	0.02636	0.02636	-	-	0.00795	0.00795	-	-	Sagging							
						43.12180	41.35376	89.09242	-0.90000	-0.62871	-0.62871	0.00685	0.00685	-1.07284	-1.07284	0.00685	0.00685	-0.44413
0.44413	0.01369	0.01369	0.01369	0.01369	-	-	0.00413	0.00413	-	-	Sagging							
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00620	0.00620	1.41240	1.41240	0.00620	0.00620	0.06528
0.06528	0.01240	0.01240	0.07769	0.07769	-	-	0.00374	0.00374	-	-	Hogging							
						8.02266	70.16482	109.13918	-0.90000	1.41700	1.41700	0.00441	0.00441	1.39857	1.39857	0.00441	0.00441	-0.01843
0.01843	0.00882	0.00882	0.00882	0.00882	-	-	0.00266	0.00266	-	-	Hogging							
						11.03116	67.69530	107.42089	-0.90000	1.38926	1.38926	0.00528	0.00528	1.25661	1.25661	0.00528	0.00528	-0.13265
0.13265	0.01057	0.01057	0.01057	0.01057	-	-	0.00319	0.00319	-	-	Hogging							
						14.03965	65.22578	105.70260	-0.90000	1.23211	1.23211	0.00259	0.00259	0.98406	0.98406	0.00259	0.00259	-0.24804
0.24804	0.00517	0.00517	0.00517	0.00517	-	-	0.00156	0.00156	-	-	Hogging							
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02395	0.02395	0.73917	0.73917	0.02395	0.02395	-0.20620
0.20620	0.04790	0.04790	0.04790	0.04790	-	-	0.01444	0.01444	-	-	Hogging							
						20.05665	60.28674	102.26601	-0.90000	0.74843	0.74843	0.01975	0.01975	0.84612	0.84612	0.01975	0.01975	0.09769
0.09769	0.03949	0.03949	0.13718	0.13718	-	-	0.01191	0.01191	-	-	Sagging							
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.03009	0.03009	0.90862	0.90862	0.03009	0.03009	0.05216
0.05216	0.06017	0.06017	0.11234	0.11234	-	-	0.01815	0.01815	-	-	Sagging							
						26.07364	55.34770	98.82942	-0.90000	0.91065	0.91065	0.00006	0.00006	0.92654	0.92654	0.00006	0.00006	0.01589
0.01589	0.00011	0.00011	0.01601	0.01601	-	-	0.00003	0.00003	-	-	-							
						29.08214	52.87819	97.11113	-0.90000	0.92856	0.92856	0.00009	0.00009	0.94445	0.94445	0.00009	0.00009	0.01589
0.01589	0.00018	0.00018	0.01608	0.01608	-	-	0.00006	0.00006	-	-	-							
						32.09064	50.40867	95.39283	-0.90000	0.94648	0.94648	0.06560	0.06560	0.88019	0.88019	0.06560	0.06560	-0.06629
0.06629	0.13121	0.13121	0.13121	0.13121	-	-	0.03957	0.03957	-	-	Sagging							
						35.09914	47.93915	93.67454	-0.90000	0.84676	0.84676	0.01523	0.01523	0.50882	0.50882	0.01523	0.01523	-0.33794
0.33794	0.03045	0.03045	0.03045	0.03045	-	-	0.00918	0.00918	-	-	Hogging							
						38.10763	45.46963	91.95625	-0.90000	0.43145	0.43145	0.01140	0.01140	-0.13907	-0.13907	0.01140	0.01140	-0.57052
0.57052	0.02281	0.02281	0.02281	0.02281	-	-	0.00688	0.00688	-	-	Sagging							
						41.11613	43.00011	90.23795	-0.90000	-0.21505	-0.21505	0.01213	0.01213	-0.75131	-0.75131	0.01213	0.01213	-0.53626
0.53626	0.02426	0.02426	0.02426	0.02426	-	-	0.00732	0.00732	-	-	Sagging							
						44.12463	40.53059	88.51966	-0.90000	-0.81191	-0.81191	0.00444	0.00444	-1.20208	-1.20208	0.00444	0.00444	-0.39017
0.39017	0.00889	0.00889	0.00889	0.00889	-	-	0.00268	0.00268	-	-	Sagging							
	2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	1.49176	1.49176	0.00843	0.00843	1.27542	1.27542	0.00843	0.00843	-0.21634
0.21634	0.01686	0.01686	0.01686	0.01686	-	-	0.00508	0.00508	-	-	Hogging							
						6.01784	40.04419	80.90515	-0.90000	1.23736	1.23736	0.01311	0.01311	0.86351	0.86351	0.01311	0.01311	-0.37385
0.37385	0.02621	0.02621	0.02621	0.02621	-	-	0.00790	0.00790	-	-	Sagging							
						9.02675	41.44733	78.24343	-0.90000	0.80699	0.80699	0.01170	0.01170	0.34469	0.34469	0.01170	0.01170	-0.46230
0.46230	0.02340	0.02340	0.02340	0.02340	-	-	0.00706	0.00706	-	-	Sagging							
						12.03567	42.85048	75.58171	-0.90000	0.27093	0.27093	0.02670	0.02670	0.08658	0.08658	0.02670	0.02670	-0.18435
0.18435	0.05339	0.05339	0.05339	0.05339	-	-	0.01610	0.01610	-	-	Hogging							
						15.04459	44.25362	72.91998	-0.90000	0.09022	0.09022	0.07845	0.07845	0.10043	0.10043	0.07845	0.07845	0.01021
0.01021	0.15690	0.15690	0.16711	0.16711	-	-	0.04732	0.04732	-	-	Sagging							
						18.05351	45.65676	70.25826	-0.90000	0.10046	0.10046	0.00014	0.00014	0.10074	0.10074	0.00014	0.00014	0.00028
0.00028	0.00027	0.00027	0.00055	0.00055	-	-	0.00008	0.00008	-	-	Hogging							
						21.06242	47.05991	67.59654	-0.90000	0.10078	0.10078	0.00011	0.00011	0.10105	0.10105	0.00011	0.00011	0.00028
0.00028	0.00021	0.00021	0.00049	0.00049	-	-	0.00006	0.00006	-	-	Hogging							
						24.07134	48.46305	64.93481	-0.90000	0.10109	0.10109	0.00003	0.00003	0.10136	0.10136	0.00003	0.00003	0.00028
0.00028	0.00007	0.00007	0.00034	0.00034	-	-	0.00002	0.00002	-	-	-							
						27.08026	49.86620	62.27309	-0.90000	0.10140	0.10140	0.00006	0.00006	0.10168	0.10168	0.00006	0.00006	0.00028
0.00028	0.00011	0.00011	0.00039	0.00039	-	-	0.00003	0.00003	-	-	-							
						30.08918	51.26934	59.61136	-0.90000	0.10171	0.10171	0.00012	0.00012	0.10199	0.10199	0.00012	0.00012	0.00028
0.00028	0.00025	0.00025	0.00053	0.00053	-	-	0.00008	0.00008	-	-	Sagging							
					2	4.01189	39.10876	82.67964	-0.90000	1.42733	1.42733	0.00643	0.00643	1.15643	1.15643	0.00643	0.00643	-0.27090
0.27090	0.01286	0.01286	0.01286	0.01286	-	-	0.00388	0.00388	-	-	Sagging							

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Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance Check: from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Left	Pullout: Vertical Seg.: Left	Pullout: Left	Pullout: Seg.: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout: Unfactored	Factored	Rotation:		Rotation:	Sagging							
						7.02081	40.51190	80.01791	-0.90000	1.11115	1.11115	0.01460	0.01460	0.68896	0.68896	0.01460	0.01460	-0.42219 -
0.42219	0.02920	0.02920	0.02920	0.02920	-	-	0.00880	0.00880	-	-	Sagging							
						10.02973	41.91505	77.35619	-0.90000	0.62813	0.62813	0.02388	0.02388	0.20735	0.20735	0.02388	0.02388	-0.42078 -
0.42078	0.04776	0.04776	0.04776	0.04776	-	-	0.01440	0.01440	-	-	Hogging							
						13.03864	43.31819	74.69446	-0.90000	0.17847	0.17847	0.02492	0.02492	0.09382	0.09382	0.02492	0.02492	-0.08465 -
0.08465	0.04984	0.04984	0.04984	0.04984	-	-	0.01503	0.01503	-	-	Sagging							
						16.04756	44.72134	72.03274	-0.90000	0.09531	0.09531	0.04561	0.04561	0.10053	0.10053	0.04561	0.04561	0.00523
0.00523	0.09123	0.09123	0.09646	0.09646	-	-	0.02751	0.02751	-	-	Sagging							
						19.05648	46.12448	69.37102	-0.90000	0.10057	0.10057	0.00013	0.00013	0.10084	0.10084	0.00013	0.00013	0.00028
0.00028	0.00027	0.00027	0.00054	0.00054	-	-	0.00008	0.00008	-	-	Hogging							
						22.06540	47.52762	66.70929	-0.90000	0.10088	0.10088	0.00009	0.00009	0.10116	0.10116	0.00009	0.00009	0.00028
0.00028	0.00017	0.00017	0.00045	0.00045	-	-	0.00005	0.00005	-	-	-							
						25.07431	48.93077	64.04757	-0.90000	0.10119	0.10119	0.00000	0.00000	0.10147	0.10147	0.00000	0.00000	0.00028
0.00028	0.00001	0.00001	0.00028	0.00028	-	-	0.00000	0.00000	-	-	-							
						28.08323	50.33391	61.38585	-0.90000	0.10150	0.10150	0.00008	0.00008	0.10178	0.10178	0.00008	0.00008	0.00028
0.00028	0.00017	0.00017	0.00044	0.00044	-	-	0.00005	0.00005	-	-	-							
						31.09215	51.73706	58.72412	-0.90000	0.10182	0.10182	0.00014	0.00014	0.10209	0.10209	0.00014	0.00014	0.00028
0.00028	0.00028	0.00028	0.00055	0.00055	-	-	0.00008	0.00008	-	-	Sagging							
					3	5.01486	39.57647	81.79239	-0.90000	1.34272	1.34272	0.00890	0.00890	1.01905	1.01905	0.00890	0.00890	-0.32368 -
0.32368	0.01780	0.01780	0.01780	0.01780	-	-	0.00537	0.00537	-	-	Sagging							
						8.02378	40.97962	79.13067	-0.90000	0.96681	0.96681	0.01447	0.01447	0.50084	0.50084	0.01447	0.01447	-0.46597 -
0.46597	0.02894	0.02894	0.02894	0.02894	-	-	0.00873	0.00873	-	-	Sagging							
						11.03270	42.38276	76.46895	-0.90000	0.43191	0.43191	0.04529	0.04529	0.10978	0.10978	0.04529	0.04529	-0.32213 -
0.32213	0.09058	0.09058	0.09058	0.09058	-	-	0.02731	0.02731	-	-	Hogging							
						14.04162	43.78591	73.80722	-0.90000	0.11315	0.11315	0.07672	0.07672	0.09891	0.09891	0.07672	0.07672	-0.01425 -
0.01425	0.15344	0.15344	0.15344	0.15344	-	-	0.04627	0.04627	-	-	Sagging							
						17.05053	45.18905	71.14550	-0.90000	0.09895	0.09895	0.01291	0.01291	0.10064	0.10064	0.01291	0.01291	0.00168
0.00168	0.02582	0.02582	0.02751	0.02751	-	-	0.00779	0.00779	-	-	Sagging							
						20.05945	46.59219	68.48378	-0.90000	0.10067	0.10067	0.00012	0.00012	0.10095	0.10095	0.00012	0.00012	0.00028
0.00028	0.00024	0.00024	0.00052	0.00052	-	-	0.00007	0.00007	-	-	Hogging							
						23.06837	47.99534	65.82205	-0.90000	0.10098	0.10098	0.00006	0.00006	0.10126	0.10126	0.00006	0.00006	0.00028
0.00028	0.00012	0.00012	0.00040	0.00040	-	-	0.00004	0.00004	-	-	-							
						26.07729	49.39848	63.16033	-0.90000	0.10130	0.10130	0.00003	0.00003	0.10157	0.10157	0.00003	0.00003	0.00028
0.00028	0.00005	0.00005	0.00033	0.00033	-	-	0.00002	0.00002	-	-	-							
						29.08620	50.80163	60.49861	-0.90000	0.10161	0.10161	0.00011	0.00011	0.10188	0.10188	0.00011	0.00011	0.00028
0.00028	0.00021	0.00021	0.00049	0.00049	-	-	0.00006	0.00006	-	-	Sagging							
	3		TW Main-3	1	1	3.98757	55.03844	52.67152	-0.90000	0.70330	0.70330	0.00018	0.00018	0.71750	0.71750	0.00018	0.00018	0.01420
0.01420	0.00036	0.00036	0.01456	0.01456	-	-	0.00011	0.00011	-	-	Sagging							
					2	4.98446	55.76300	51.82380	-0.90000	0.70802	0.70802	0.00041	0.00041	0.72246	0.72246	0.00041	0.00041	0.01444
0.01444	0.00082	0.00082	0.01525	0.01525	-	-	0.00025	0.00025	-	-	Sagging							
	4		TW Main-4	1	1	3.98331	60.26896	44.07515	-0.90000	0.17744	0.17744	0.00005	0.00005	0.17844	0.17844	0.00005	0.00005	0.00100
0.00100	0.00009	0.00009	0.00109	0.00109	-	-	0.00003	0.00003	-	-	-							
						7.96662	62.15213	40.56510	-0.90000	0.17877	0.17877	0.00003	0.00003	0.17978	0.17978	0.00003	0.00003	0.00100
0.00100	0.00006	0.00006	0.00106	0.00106	-	-	0.00002	0.00002	-	-	-							
						11.94993	64.03529	37.05504	-0.90000	0.18011	0.18011	0.00002	0.00002	0.18111	0.18111	0.00002	0.00002	0.00100
0.00100	0.00005	0.00005	0.00105	0.00105	-	-	0.00001	0.00001	-	-	-							
						15.93324	65.91845	33.54499	-0.90000	0.18144	0.18144	0.00002	0.00002	0.18245	0.18245	0.00002	0.00002	0.00100
0.00100	0.00004	0.00004	0.00104	0.00104	-	-	0.00001	0.00001	-	-	-							
						19.91656	30.03641	30.03494	-0.90000	0.18278	0.18278	0.00001	0.00001	0.18379	0.18379	0.00001	0.00001	0.00101
0.00101	0.00002	0.00002	0.00102	0.00102	-	-	0.00000	0.00000	-	-	-							
						23.89987	69.68478	26.52489	-0.90000	0.18412	0.18412	0.05333	0.05333	0.17600	0.17600	0.05333	0.05333	-0.00812 -
0.00812	0.10666	0.10666	0.10666	0.10666	-	-	0.03216	0.03216	-	-	Sagging							
						27.88318	71.56794	23.01484	-0.90000	0.16491	0.16491	0.02609	0.02609	-0.22219	-0.22219	0.02609	0.02609	-0.38710 -
0.38710	0.05217	0.05217	0.05217	0.05217	-	-	0.01573	0.01573	-	-	Hogging							
						31.86649	73.45110	19.50479	-0.90000	-0.48497	-0.48497	0.01371	0.01371	-1.20059	-1.20059	0.01371	0.01371	-0.71562 -
0.71562	0.02742	0.02742	0.02742	0.02742	-	-	0.00827	0.00827	-	-	Sagging							
						35.84980	75.33427	15.99473	-0.90000	-1.34986	-1.34986	0.02216	0.02216	-1.66306	-1.66306	0.02216	0.02216	-0.31319 -
0.31319	0.04431	0.04431	0.04431	0.04431	-	-	0.01336	0.01336	-	-	Sagging							
						39.83311	77.21743	12.48468	-0.90000	-1.75688	-1.75688	0.01871	0.01871	-1.97904	-1.97904	0.01871	0.01871	-0.22216 -
0.22216	0.03742	0.03742	0.03742	0.03742	-	-	0.01129	0.01129	-	-	Hogging							
						43.81642	79.10059	8.97463	-0.90000	-2.01299	-2.01299	0.00723	0.00723	-1.97701	-1.97701	0.00723	0.00723	0.03598
0.03598	0.01445	0.01445	0.05043	0.05043	-	-	0.00436	0.00436	-	-	Hogging							
						47.79973	80.98376	5.46458	-0.90000	-1.92682	-1.92682	0.00350	0.00350	-1.68522	-1.68522	0.00350	0.00350	0.24160
0.24160	0.00701	0.00701	0.24860	0.24860	-	-	0.00211	0.00211	-	-	Hogging							
					2	4.97914	60.73975	43.19764	-0.90000	0.17777	0.17777	0.00004	0.00004	0.17878	0.17878	0.00004	0.00004	0.00100
0.00100	0.00008	0.00008	0.00108	0.00108	-	-	0.00002	0.00002	-	-	-							
						8.96245	62.62292	39.68758	-0.90000	0.17911	0.17911	0.00003	0.00003	0.18011	0.18011	0.00003	0.00003	0.00100
0.00100	0.00006	0.00006	0.00106	0.00106	-	-	0.00002	0.00002	-	-	-							
						12.94576	64.50608	36.17753	-0.90000	0.18044	0.18044	0.00002	0.00002	0.18145	0.18145	0.00002	0.00002	0.00100
0.00100	0.00005	0.00005	0.00105	0.00105	-	-	0.00001	0.00001	-	-	-							
						16.92907	66.38924	32.66748	-0.90000	0.18178	0.18178	0.00002	0.00002	0.18278	0.18278	0.00002	0.00002	0.00101
0.00101	0.00003	0.00003	0.00104	0.00104	-	-	0.00001	0.00001	-	-	-							
						20.91238	68.27241	29.15743	-0.90000	0.18312	0.18312	0.00000	0.00000	0.18412	0.18412	0.00000	0.00000	0.00101
0.00101	0.00001	0.00001	0.00102	0.00102	-	-	0.00000	0.00000	-	-	-							
						24.89569	70.15557	25.64738	-0.90000	0.18446	0.18446	0.08900	0.08900	0.16440	0.16440	0.08900	0.08900	-0.02006 -
0.02006	0.17799	0.17799	0.17799	0.17799	-	-	0.05367	0.05367	-	-	Sagging							
						28.87900	72.03873	22.13732	-0.90000	0.11261	0.11261	0.03934	0.03934	-0.48617	-0.48617	0.03934	0.03934	-0.59878 -
0.59878	0.07868	0.07868	0.07868	0.07868	-	-	0.02373	0.02373	-	-	Hogging							
						32.86232	73.92189	18.62727	-0.90000	-0.76177	-0.76177	0.01470	0.01470	-1.35090	-1.35090	0.01470	0.01470	-0.58913 -
0.58913	0.02940	0.02940	0.02940	0.02940	-	-	0.00887	0.00887	-	-	Sagging							
						36.84563	75.80506	15.11722	-0.90000	-1.47395	-1.47395	0.01919	0.01919	-1.75747	-1.75747	0.01919	0.01919	-0.28352 -
0.28352	0.03838	0.03838	0.03838	0.03838	-	-	0.01157	0.01157	-	-	Sagging							
						40.82894	77.68822	11.60717	-0.90000	-1.84208	-1.84208	0.01747	0.01747	-2.01314	-2.01314	0.01747	0.01747	-0.17107 -
0.17107	0.03494	0.03494	0.03494	0.03494	-	-	0.01054	0.01054	-	-	Hogging							
						44.81225	79.57138	8.09712	-0.90000	-2.02252	-2.02252	0.00287	0.00287	-1.92646	-1.92646	0.00287	0.00287	0.09605
0.09605	0.00573	0.00573	0.10179	0.10179	-	-	0.00173	0.00173	-	-	Hogging							
						48.79556	81.45455	4.58706	-0.90000	-1.86038	-1.86038	0.00378	0.00378	-1.57979	-1.57979	0.00378	0.00378	0.28059
0.28059	0.00756	0.00756	0.28815	0.28815	-	-	0.00228	0.00228	-	-	Hogging							
					3	5.97497	61.21054	42.32012	-0.90000	0.17811	0.17811	0.00004	0.00004	0.17911	0.17911	0.00004	0.00004	0.00100
0.00100	0.00007	0.00007	0.00108	0.00108	-	-	0.00002	0.00002	-	-	-							
						9.95828	63.09371	38.81007	-0.90000	0.17944	0.17944	0.00003	0.00003	0.18044	0.18044	0.00003	0.00003	0.00100
0.00100	0.00005	0.00005	0.00106	0.00106	-	-	0.00002	0.00002	-	-	-							
						13.94159	64.97687	35.30002	-0.90000	0.18078	0.18078	0.00002	0.00002	0.18178	0.18178	0.00002	0.00002	0.00100
0.00100	0.00004	0.00004	0.00105	0.00105	-	-	0.00001	0.00001	-	-	-							
						17.92490	66.86003	31.78897	-0.90000	0.18211	0.18211	0.00001	0.00001	0.18312	0.18312	0.00001	0.00001	0.00101
0.00101	0.00003	0.00003	0.00103	0.00103	-	-	0.00001	0.00001	-	-	-							
						21.90821	68.74320	28.27991	-0.90000	0.18345	0.18345	0.00022	0.00022	0.18443	0.18443	0.00022	0.00022	0.00098
0.00098	0.00043	0.00043	0.00141	0.00141	-	-	0.00013	0.00013	-	-	Sagging							
						25.89152	70.62636	24.76986	-0.90000	0.18257	0.18257	0.08116	0.08116	0.11156	0.11156	0.08116	0.08116	-0.07101 -
0.07101	0.16231	0.16231	0.16231	0.16231	-	-	0.04895	0.04895	-	-	Sagging							
						29.87483	72.50952	21.25981	-0.90000	-0.01878	-0.01878	0.01682	0.01682	-0.76335	-0.76335	0.01682	0.01682	-0.74457 -
0.74457	0.03363	0.03363	0.03363	0.03363	-	-	0.01014	0.01014	-	-	Hogging							
						33.85814	74.39269	17.74976	-0.90000	-1.00255	-1.00255	0.01740	0.01740	-1.47478	-1.47478	0.01740	0.01740	-0.47223 -
0.47223	0.03480	0.03480	0.03480	0.03480	-	-	0.01049	0.01049	-	-	Sagging							
						37.84145	76.27585	14.23971	-0.90000	-1.57490	-1.57490	0.01794	0.01794	-1.84249	-1.84249	0.01794	0.01794	-0.26759 -
0.26759	0.03588	0.03588	0.03588	0.03588	-	-	0.01082	0.01082	-	-	Hogging							
						41.82477	78.15901	10.72966	-0.90000	-1.91719	-1.91719	0.01789	0.01789	-2.02253	-2.02253	0.01789	0.01789	-0.10534 -
0.10534	0.03577	0.03577	0.03577	0.03577	-	-	0.01079	0.01079	-	-	Hogging							
						45.80808	80.04217	7.21960	-0.90000	-2.00984	-2.00984	0.00285	0.00285	-1.85993	-1.85993	0.00285	0.00285	0.14992
0.14992	0.00570	0.00570	0.15561	0.15561	-	-	0.00172	0.00172	-	-	Hogging							
						49.79139	81.92534	3.70955	-0.90000	-1.77957	-1.77957	0.00395	0.00395	-1.46387	-1.46387	0.00395	0.00395	0.31570
0.31570	0.00791	0.00791	0.32361	0.32361	-	-	0.00238	0.00238	-	-	Hogging							
					4	6.97079	61.68134	41.44261	-0.90000	0.17844	0.17844	0.00003	0.00003	0.17944	0.17944	0.00003	0.00003	0.00100
0.00100	0.00007	0.00007	0.00107	0.00107	-	-	0.00002	0.00002	-	-	-							
						10.95411	63.56450	37.93256	-0.90000	0.17977	0.17977	0.00003	0.00003	0.18078	0.18078	0.00003	0.00003	0.00100
0.00100	0.00005	0.00005	0.00106	0.00106	-	-	0.00002	0.00002	-	-	-							
						14.93742	65.44766	34.42251	-0.90000	0.18111	0.18111	0.00002	0.00002	0.18212	0.18212	0.00002	0.00002	0.00100
0.00100	0.00004	0.00004	0.00104	0.00104	-	-	0.00001	0.00001	-	-	-							
						18.92073	67.33082	30.91245	-0.90000	0.18245	0.18245	0.00001	0.00001	0.18345	0.18345	0.00001	0.00001	0.00101
0.00101	0.00002	0.00002	0.00103	0.00103	-	-	0.00001	0.00001	-	-	-							
						22.90404	69.21399	27.40240	-0.90000	0.18379	0.18379	0.01761	0.01761	0.18251	0.18251	0.01761	0.01761	-0.00127 -
0.00127	0.03522	0.03522	0.03522	0.03522	-	-	0.01062	0.01062	-	-	Sagging							
						26.88735	71.09715	23.89235	-0.90000	0.17606	0.17606	0.02862	0.02862	-0.01979	-0.01979	0.02862	0.02862	-0.19585 -
0.19585	0.05724	0.05724	0.05724	0.05724	-	-	0.01726	0.01726	-	-	Sagging							
						30.87066	72.98031	20.38230	-0.90000	-0.22130	-0.22130	0.00757	0.00757	-1.00390	-1.00390	0.00757	0.00757	-0.78260 -
0.78260	0.01514	0.01514	0.01514	0.01514	-	-	0.00456	0.00456	-	-	Sagging							
						34.85397	74.86348	16.87225	-0.90000	-1.19951	-1.19951	0.02001	0.02001	-1.57553	-1.57553	0.02001	0.02001	-0.37602 -
0.37602	0.04001	0.04001	0.04001	0.04001	-	-	0.01207	0.01207	-	-	Sagging							
						38.83728	76.74664	13.36219	-0.90000	-1.66248	-1.66248	0.01849	0.01849	-1.91748	-1.91748	0.01849	0.01849	-0.25501 -
0.25501	0.03697	0.03697	0.03697	0.03697	-	-	0.01115	0.01115	-	-	Hogging							
						42.82059	78.62980	9.85214	-0.90000	-1.97872	-1.97872	0.01204	0.01204	-2.00971	-2.00971	0.01204	0.01204	-0.03099 -
0.03099	0.02407	0.02407	0.02407	0.02407	-	-	0.00726	0.00726	-	-	Hogging							
						46.80390	80.51296	6.34209	-0.90000	-1.97725	-1.97725	0.00317	0.00317	-1.77903	-1.77903	0.00317	0.00317	0.19823
0.19823	0.00633	0.00633	0.20456	0.20456	-	-	0.00191	0.00191	-	-	Hogging							
	5		TW Foul-1	1	1	1.00444	75.64700	113.52870	-6.00000	1.13520	1.13520	0.00921	0.00921	1.25379	1.25379	0.00921	0.00921	0.11859
0.11859	0.01842	0.01842	0.13701	0.13701	-	-	0.00060	0.00060	-	-	Hogging							
						2.00887	74.83600	112.93610	-6.00000	1.20134	1.20134	0.00882	0.00882	1.29249	1.29249	0.00882	0.00882	0.09115
0.09115	0.01764	0.01764	0.10880	0.10880	-	-	0.00057	0.00057	-	-	Hogging							
						3.01331	74.02501	112.34351	-6.00000	1.25419	1.25419	0.02263	0.02263	1.33244	1.33244	0.02263	0.02263	0.07825
0.07825	0.04526	0.04526	0.12351	0.12351	-	-	0.00146	0.00146	-	-	Hogging							
						4.01774	73.21401	111.75091	-6.00000	1.29284	1.29284	0.02553	0.02553	1.37530	1.37530	0.02553	0.02553	0.08246

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance Check: from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Vertical	Pullout:	Pullout:	Pullout:	Pullout:	Pullout:	Pullout:	Pullout:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout:	Unfactored	Factored	Rotation:	Rotation:	Sagging	Left Seg.:	Left	Left Seg.:	Left	Right	Right	Right	Right	Total:
0.08246	0.05107	0.05107	0.13353	0.13353	-	-	0.00165	0.00165	-	-	Hogging									
						5.02218	72.40301	111.15831	-6.00000	1.33281	1.33281									
0.07448	0.02896	0.02896	0.10344	0.10344	-	-	0.00094	0.00094	-	-	Hogging	0.01448	0.01448	1.40729	1.40729	0.01448	0.01448	0.07448		
						6.02661	71.59201	110.56571	-6.00000	1.37563	1.37563									
0.05199	0.02882	0.02882	0.08081	0.08081	-	-	0.00093	0.00093	-	-	Hogging	0.01441	0.01441	1.42763	1.42763	0.01441	0.01441	0.05199		
						7.03105	70.78101	109.97311	-6.00000	1.40752	1.40752									
0.02805	0.02851	0.02851	0.05656	0.05656	-	-	0.00092	0.00092	-	-	Hogging	0.01425	0.01425	1.43557	1.43557	0.01425	0.01425	0.02805		
						8.03548	69.97002	109.38052	-6.00000	1.42775	1.42775									
0.00270	0.02804	0.02804	0.03074	0.03074	-	-	0.00091	0.00091	-	-	Hogging	0.01402	0.01402	1.43045	1.43045	0.01402	0.01402	0.00270		
						9.03992	69.15902	108.78792	-6.00000	1.43559	1.43559									
0.02394	0.02741	0.02741	0.02741	0.02741	-	-	0.00089	0.00089	-	-	Hogging	0.01371	0.01371	1.41164	1.41164	0.01371	0.01371	-0.02394	-	
						10.04435	68.34802	108.19532	-6.00000	1.43035	1.43035									
0.05170	0.02659	0.02659	0.02659	0.02659	-	-	0.00086	0.00086	-	-	Hogging	0.01329	0.01329	1.37864	1.37864	0.01329	0.01329	-0.05170	-	
						11.04879	67.53702	107.60272	-6.00000	1.41141	1.41141									
0.08030	0.02551	0.02551	0.02551	0.02551	-	-	0.00082	0.00082	-	-	Sagging	0.01276	0.01276	1.33111	1.33111	0.01276	0.01276	-0.08030	-	
						12.05322	66.72603	107.01013	-6.00000	1.37829	1.37829									
0.10935	0.02416	0.02416	0.02416	0.02416	-	-	0.00078	0.00078	-	-	Sagging	0.01208	0.01208	1.26894	1.26894	0.01208	0.01208	-0.10935	-	
						13.05766	65.91503	106.41753	-6.00000	1.33063	1.33063									
0.13836	0.14160	0.14160	0.14160	0.14160	-	-	0.00458	0.00458	-	-	Hogging	0.07080	0.07080	1.19227	1.19227	0.07080	0.07080	-0.13836	-	
						14.06209	65.10403	105.82493	-6.00000	1.26832	1.26832									
0.16672	0.01711	0.01711	0.01711	0.01711	-	-	0.00055	0.00055	-	-	Hogging	0.00856	0.00856	1.10160	1.10160	0.00856	0.00856	-0.16672	-	
						15.06653	64.29303	105.23233	-6.00000	1.19153	1.19153									
0.19369	0.04249	0.04249	0.04249	0.04249	-	-	0.00137	0.00137	-	-	Sagging	0.02125	0.02125	0.99783	0.99783	0.02125	0.02125	-0.19369	-	
						16.07096	63.48203	104.63973	-6.00000	1.10074	1.10074									
0.21848	0.04654	0.04654	0.04654	0.04654	-	-	0.00150	0.00150	-	-	Sagging	0.02327	0.02327	0.88226	0.88226	0.02327	0.02327	-0.21848	-	
						17.07540	62.67704	104.04714	-6.00000	0.99686	0.99686									
0.24025	0.05141	0.05141	0.05141	0.05141	-	-	0.00166	0.00166	-	-	Sagging	0.02570	0.02570	0.75661	0.75661	0.02570	0.02570	-0.24025	-	
						18.07983	61.86004	103.45454	-6.00000	0.88120	0.88120									
0.07191	0.64935	0.64935	0.64935	0.64935	-	-	0.02100	0.02100	-	-	Hogging	0.32468	0.32468	0.80928	0.80928	0.32468	0.32468	-0.07191	-	
						19.08427	61.04904	102.86194	-6.00000	0.75630	0.75630									
0.16001	0.21540	0.21540	0.37542	0.37542	-	-	0.00696	0.00696	-	-	Hogging	0.10770	0.10770	0.91631	0.91631	0.10770	0.10770	0.16001		
						20.08870	60.23804	102.26934	-6.00000	0.80999	0.80999									
0.21519	0.02798	0.02798	0.24317	0.24317	-	-	0.00090	0.00090	-	-	Hogging	0.01399	0.01399	1.02518	1.02518	0.01399	0.01399	0.21519		
						21.09314	59.42704	101.67674	-6.00000	0.91726	0.91726									
0.14114	0.98334	0.98334	1.12448	1.12448	-	-	0.03180	0.03180	-	-	Sagging	0.49167	0.49167	1.05841	1.05841	0.49167	0.49167	0.14114		
						22.09757	58.61605	101.08415	-6.00000	1.02581	1.02581									
0.04106	0.31838	0.31838	0.35944	0.35944	-	-	0.01029	0.01029	-	-	Sagging	0.15919	0.15919	1.06687	1.06687	0.15919	0.15919	0.04106		
						23.10201	57.80505	100.49155	-6.00000	1.05859	1.05859									
0.01664	0.00075	0.00075	0.01738	0.01738	-	-	0.00002	0.00002	-	-	-	0.00037	0.00037	1.07522	1.07522	0.00037	0.00037	0.01664		
						24.10644	56.99405	99.89895	-6.00000	1.06694	1.06694									
0.01664	0.00111	0.00111	0.01774	0.01774	-	-	0.00004	0.00004	-	-	-	0.00055	0.00055	1.08358	1.08358	0.00055	0.00055	0.01664		
						25.11088	56.18305	99.30635	-6.00000	1.07530	1.07530									
0.01664	0.00146	0.00146	0.01809	0.01809	-	-	0.00005	0.00005	-	-	-	0.00073	0.00073	1.09193	1.09193	0.00073	0.00073	0.01664		
						26.11531	55.37206	98.71376	-6.00000	1.08365	1.08365									
0.01664	0.00179	0.00179	0.01842	0.01842	-	-	0.00006	0.00006	-	-	Hogging	0.00089	0.00089	1.10029	1.10029	0.00089	0.00089	0.01664		
						27.11975	54.56106	98.12116	-6.00000	1.09201	1.09201									
0.01664	0.00208	0.00208	0.01872	0.01872	-	-	0.00007	0.00007	-	-	Hogging	0.00104	0.00104	1.10864	1.10864	0.00104	0.00104	0.01664		
						28.12418	53.75606	97.52866	-6.00000	1.10036	1.10036									
0.01664	0.00233	0.00233	0.01896	0.01896	-	-	0.00008	0.00008	-	-	Hogging	0.00116	0.00116	1.11700	1.11700	0.00116	0.00116	0.01664		
						29.12862	52.93906	96.93596	-6.00000	1.10871	1.10871									
0.01664	0.00251	0.00251	0.01914	0.01914	-	-	0.00008	0.00008	-	-	Hogging	0.00125	0.00125	1.12535	1.12535	0.00125	0.00125	0.01664		
						30.13305	52.12806	96.34336	-6.00000	1.11707	1.11707									
0.01664	0.00262	0.00262	0.01925	0.01925	-	-	0.00008	0.00008	-	-	Hogging	0.00131	0.00131	1.13370	1.13370	0.00131	0.00131	0.01664		
						31.13749	51.31707	95.75077	-6.00000	1.12542	1.12542									
0.01664	0.00264	0.00264	0.01928	0.01928	-	-	0.00009	0.00009	-	-	Hogging	0.00132	0.00132	1.14206	1.14206	0.00132	0.00132	0.01664		
						32.14192	50.50607	95.15817	-6.00000	1.13378	1.13378									
0.00717	0.32144	0.32144	0.32144	0.32144	-	-	0.01039	0.01039	-	-	Sagging	0.16072	0.16072	1.12661	1.12661	0.16072	0.16072	-0.00717	-	
						33.14636	49.69507	94.56557	-6.00000	1.14203	1.14203									
0.13272	1.38136	1.38136	1.38136	1.38136	-	-	0.04466	0.04466	-	-	Sagging	0.69068	0.69068	1.00931	1.00931	0.69068	0.69068	-0.13272	-	
						34.15079	48.88407	93.97297	-6.00000	1.12602	1.12602									
0.23627	0.02963	0.02963	0.02963	0.02963	-	-	0.00096	0.00096	-	-	Sagging	0.01482	0.01482	0.88975	0.88975	0.01482	0.01482	-0.23627	-	
						35.15523	48.07307	93.38037	-6.00000	1.00826	1.00826									
0.25992	0.17767	0.17767	0.17767	0.17767	-	-	0.00574	0.00574	-	-	Hogging	0.08883	0.08883	0.74834	0.74834	0.08883	0.08883	-0.25992	-	
						36.15966	47.26208	92.78778	-6.00000	0.88860	0.88860									
0.38410	0.95780	0.95780	0.95780	0.95780	-	-	0.03097	0.03097	-	-	Hogging	0.47890	0.47890	0.50450	0.50450	0.47890	0.47890	-0.38410	-	
						37.16410	46.45108	92.19518	-6.00000	0.74664	0.74664									
0.49408	0.11645	0.11645	0.11645	0.11645	-	-	0.00377	0.00377	-	-	Sagging	0.05822	0.05822	0.25256	0.25256	0.05822	0.05822	-0.49408	-	
						38.16853	45.64008	91.60258	-6.00000	0.50231	0.50231									
0.50097	0.12045	0.12045	0.12045	0.12045	-	-	0.00389	0.00389	-	-	Sagging	0.06022	0.06022	0.00134	0.00134	0.06022	0.06022	-0.50097	-	
						39.17297	44.82908	91.00998	-6.00000	0.25034	0.25034									
0.49334	0.09373	0.09373	0.09373	0.09373	-	-	0.00303	0.00303	-	-	Sagging	0.04686	0.04686	-0.24300	-0.24300	0.04686	0.04686	-0.49334	-	
						40.17740	44.01809	90.41739	-6.00000	-0.00085	-0.00085									
0.47477	0.08508	0.08508	0.08508	0.08508	-	-	0.00275	0.00275	-	-	Sagging	0.04254	0.04254	-0.47562	-0.47562	0.04254	0.04254	-0.47477	-	
						41.18184	43.20709	89.82479	-6.00000	-0.24510	-0.24510									
0.44688	0.07851	0.07851	0.07851	0.07851	-	-	0.00254	0.00254	-	-	Sagging	0.03925	0.03925	-0.69199	-0.69199	0.03925	0.03925	-0.44688	-	
						42.18627	42.39609	89.23219	-6.00000	-0.47760	-0.47760									
0.41102	0.07269	0.07269	0.07269	0.07269	-	-	0.00235	0.00235	-	-	Sagging	0.03635	0.03635	-0.88862	-0.88862	0.03635	0.03635	-0.41102	-	
						43.19071	41.58509	88.63959	-6.00000	-0.69381	-0.69381									
0.36930	0.06738	0.06738	0.06738	0.06738	-	-	0.00218	0.00218	-	-	Sagging	0.03369	0.03369	-1.06311	-1.06311	0.03369	0.03369	-0.36930	-	
						44.19514	40.77409	88.04699	-6.00000	-0.89026	-0.89026									
0.32381	0.06230	0.06230	0.06230	0.06230	-	-	0.00201	0.00201	-	-	Sagging	0.03115	0.03115	-1.21407	-1.21407	0.03115	0.03115	-0.32381	-	
						45.19958	39.96310	87.45440	-6.00000	-1.06455	-1.06455									
0.27647	0.03581	0.03581	0.03581	0.03581	-	-	0.00116	0.00116	-	-	Hogging	0.01790	0.01790	-1.34101	-1.34101	0.01790	0.01790	-0.27647	-	
6		TW Foul-2	1		1	1.00474	38.81931	86.38557	-6.00000	1.73206	1.73206									
0.09003	0.30167	0.30167	0.30167	0.30167	-	-	0.00682	0.00682	-	-	Hogging	0.15083	0.15083	1.64203	1.64203	0.15083	0.15083	-0.09003	-	
						2.00947	39.29752	84.50193	-6.00000	1.69716	1.69716									
0.13319	0.07616	0.07616	0.07616	0.07616	-	-	0.00172	0.00172	-	-	Sagging	0.03808	0.03808	1.56397	1.56397	0.03808	0.03808	-0.13319	-	
						3.01421	39.77574	83.61830	-6.00000	1.64140	1.64140									
0.17944	0.09527	0.09527	0.09527	0.09527	-	-	0.00215	0.00215	-	-	Sagging	0.04763	0.04763	1.46196	1.46196	0.04763	0.04763	-0.17944	-	
						4.01894	40.25395	82.73467	-6.00000	1.56312	1.56312									
0.21730	0.14894	0.14894	0.14894	0.14894	-	-	0.00337	0.00337	-	-	Sagging	0.07447	0.07447	1.34582	1.34582	0.07447	0.07447	-0.21730	-	
						5.02368	40.73216	81.85104	-6.00000	1.46093	1.46093									
0.22223	0.32893	0.32893	0.32893	0.32893	-	-	0.00744	0.00744	-	-	Sagging	0.16446	0.16446	1.23870	1.23870	0.16446	0.16446	-0.22223	-	
						6.02842	41.21037	80.96740	-6.00000	1.34477	1.34477									
0.25922	0.11206	0.11206	0.11206	0.11206	-	-	0.00253	0.00253	-	-	Sagging	0.05603	0.05603	1.08555	1.08555	0.05603	0.05603	-0.25922	-	
						7.03315	41.68859	80.08377	-6.00000	1.23747	1.23747									
0.34747	0.11446	0.11446	0.11446	0.11446	-	-	0.00259	0.00259	-	-	Sagging	0.05723	0.05723	0.89000	0.89000	0.05723	0.05723	-0.34747	-	
						8.03789	42.16680	79.20014	-6.00000	1.08390	1.08390									
0.42429	0.12388	0.12388	0.12388	0.12388	-	-	0.00280	0.00280	-	-	Sagging	0.06194	0.06194	0.65961	0.65961	0.06194	0.06194	-0.42429	-	
						9.04262	42.64501	78.31650	-6.00000	0.88799	0.88799									
0.48541	0.13431	0.13431	0.13431	0.13431	-	-	0.00304	0.00304	-	-	Sagging	0.06716	0.06716	0.40258	0.40258	0.06716	0.06716	-0.48541	-	
						10.04736	43.12322	77.43287	-6.00000	0.65731	0.65731									
0.50803	0.06171	0.06171	0.06171	0.06171	-	-	0.00140	0.00140	-	-	Sagging	0.03086	0.03086	0.14928	0.14928	0.03086	0.03086	-0.50803	-	
						11.05210	43.60144	76.54924	-6.00000	0.40018	0.40018									
0.23024	1.46841	1.46841	1.46841	1.46841	-	-	0.03320	0.03320	-	-	Hogging	0.73421	0.73421	0.16993	0.16993	0.73421	0.73421	-0.23024	-	
						12.05683	44.07965	75.66560	-6.00000	0.14819	0.14819									
0.04374	0.00857	0.00857	0.05231	0.05231	-	-	0.00019	0.00019	-	-	Hogging	0.00429	0.00429	0.19193	0.19193	0.00429	0.00429	0.04374		
						13.06157	44.55786	74.78197	-6.00000	0.17014	0.17014									
0.04191	0.23992	0.23992	0.28183	0.28183	-	-	0.00542	0.00542	-	-	Sagging	0.11996	0.11996	0.21205	0.21205	0.11996	0.11996	0.04191		
						14.06630	45.03607	73.89834	-6.00000	0.19213	0.19213									
0.02049	2.53338	2.53338	2.55388	2.55388	-	-	0.05728	0.05728	-	-	Sagging	1.26669	1.26669	0.21262	0.21262	1.26669	1.26669	0.02049		
						15.07104	45.51429	73.01471	-6.00000	0.21215	0.21215									
0.00095	0.00471	0.00471	0.00565	0.00565	-	-	0.00011	0.00011	-	-	Hogging	0.00235	0.00235	0.21310	0.21310	0.00235	0.00235	0.00095		
						16.07578	45.99250	72.13107	-6.00000	0.21263	0.21263									
0.00095	0.00509	0.00509	0.00604	0.00604	-	-	0.00012	0.00012	-	-	Hogging	0.00254	0.00254	0.21357	0.21357	0.00254	0.00254	0.00095		
						17.08051	46.47071	71.24744	-6.00000	0.21310	0.21310									
0.00095	0.00532	0.00532	0.00626	0.00626	-	-	0.00012	0.00012	-	-	Hogging	0.00266	0.00266	0.21405	0.21405	0.00266	0.00266	0.00095		
						18.08525	46.94922	70.36381	-6.00000	0.21358	0.21358									
0.00095	0.00538	0.00538	0.00633	0.00633	-	-	0.00012	0.00012	-	-	Hogging	0.00269	0.00269	0.21453	0.21453	0.00269	0.00269	0.00095		
						19.08998	47.42714	69.48017	-6.00000	0.21405	0.21405									
0.00095	0.00529	0.00529	0.00624	0.00624	-	-	0.00012	0.00012	-	-	Hogging	0.00265	0.00265	0.21500	0.21500	0.00265	0.00265	0.00095		
						20.09472	47.90535	68.59654	-6.00000	0.21453	0.21453									
0.00095	0.00504	0.00504	0.00599	0.00599	-	-	0.00011	0.00011	-	-	Hogging	0.00252	0.00252	0.21548	0.21548	0.00252	0.00252	0.00095		
						21.09945	48.38356	67.71291	-6.00000	0.21501	0.21501									
0.00095	0.00463	0.00463	0.00558	0.00558	-	-	0.00010	0.00010	-	-	Hogging	0.00231	0.00231	0.21595	0.21595	0.00231	0.00231	0.00095		
						22.10419	48.86177	66.82927	-6.00000	0.21548	0.21548									
0.00095	0.00407	0.00407	0.00502	0.00502	-	-	0.00009	0.00009	-	-	Hogging	0.00204	0.00204	0.21643	0.21643	0.00204	0.00204	0.00095		
						23.10893	49.33998	65.94564	-6.00000	0.21596	0.21596									
0.00095	0.00339	0.00339	0.00433	0.00433	-	-	0.00008	0.00008	-	-	Hogging	0.00169	0.00169	0.21691	0.21691	0.00169	0.00169	0.00095		
						24.11366	49.81820	65.06201	-6.00000	0.21643	0.21643									
0.00095	0.00260	0.00260	0.00355	0.00355	-	-	0.00006	0.00006	-	-	Hogging	0.00130	0.00130	0.21738	0.21738	0.00130	0.00130	0.00095		
						25.11840	50.29641	64.17838	-6.00000	0.21691	0.21691									
0.00095	0.00176	0.00176	0.00271	0.00271	-	-	0.00004	0.00004	-	-	-	0.00088	0.00088	0.21786	0.21786	0.00088	0.00088	0.00095		
						26.12313	50.77462	63.29474	-6.00000	0.21739	0.21739									
0.00095	0.00092	0.00092	0.00187	0.00187	-	-	0.00002	0.00002	-	-	-	0.00046	0.00046	0.21834	0.21834	0.00046	0.00046	0.00095		
						27.12787	51.25283	62.41111	-6.00000	0.21786	0.21786									
0.00095	0.00011	0.00011	0.00106	0.00106	-	-	0.00000	0.00000	-	-	-	0.00006	0.00006	0.21881	0.21881	0.00006	0.00006	0.00095		
						28.13261	51.73105	61.52748	-6.00000	0.21834	0.21834									
0.00095	0.00061	0.00061	0.00156	0.00156	-	-	0.00001	0.00001	-	-	-	0.00030	0.00030	0.21929	0.21929	0.00030	0.00030	0.00095		
						29.13734	52.20926	60.64384	-6.00000	0.21882	0.21882									
0.00095	0.00121	0.00121	0.00216	0.00216	-	-	0.00003	0.00003	-	-	-	0.00061	0.00061	0.21977	0.21977	0.00061	0.00061	0.00095		

Stage Ref.	Stage: Name	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Sagging	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.00095	0.00168	0.00168	0.00263	0.00263	–	30.14208	52.68747	59.76021	-6.00000	0.21930	0.21930	0.00084	0.00084	0.22025	0.22025	0.00084	0.00084	0.00095
						–	0.00004	0.00004	–	–	–							
0.00095	0.00201	0.00201	0.00296	0.00296	–	31.14681	53.16568	58.87658	-6.00000	0.21977	0.21977	0.00100	0.00100	0.22072	0.22072	0.00100	0.00100	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00221	0.00221	0.00316	0.00316	–	32.15155	53.64390	57.99294	-6.00000	0.22025	0.22025	0.00110	0.00110	0.22120	0.22120	0.00110	0.00110	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00229	0.00229	0.00324	0.00324	–	33.15629	54.12211	57.10931	-6.00000	0.22073	0.22073	0.00114	0.00114	0.22168	0.22168	0.00114	0.00114	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00228	0.00228	0.00323	0.00323	–	34.16102	54.60032	56.22568	-6.00000	0.22121	0.22121	0.00114	0.00114	0.22216	0.22216	0.00114	0.00114	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00219	0.00219	0.00314	0.00314	–	35.16576	55.07853	55.34205	-6.00000	0.22169	0.22169	0.00109	0.00109	0.22264	0.22264	0.00109	0.00109	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00205	0.00205	0.00300	0.00300	–	36.17049	55.55675	54.45841	-6.00000	0.22216	0.22216	0.00103	0.00103	0.22312	0.22312	0.00103	0.00103	0.00095
						–	0.00005	0.00005	–	–	–							
0.00095	0.00188	0.00188	0.00283	0.00283	–	37.17523	56.03496	53.57478	-6.00000	0.22264	0.22264	0.00094	0.00094	0.22360	0.22360	0.00094	0.00094	0.00095
						–	0.00004	0.00004	–	–	–							
0.00095	0.00169	0.00169	0.00264	0.00264	–	38.17997	56.51317	52.69115	-6.00000	0.22312	0.22312	0.00084	0.00084	0.22407	0.22407	0.00084	0.00084	0.00095
						–	0.00004	0.00004	–	–	–							
0.00095	0.00149	0.00149	0.00244	0.00244	–	39.18470	56.99138	51.80751	-6.00000	0.22360	0.22360	0.00074	0.00074	0.22455	0.22455	0.00074	0.00074	0.00095
						–	0.00003	0.00003	–	–	–							
0.00095	0.00129	0.00129	0.00224	0.00224	–	40.18944	57.46959	50.92388	-6.00000	0.22408	0.22408	0.00064	0.00064	0.22503	0.22503	0.00064	0.00064	0.00095
						–	0.00003	0.00003	–	–	–							
0.00095	0.00110	0.00110	0.00206	0.00206	–	41.19417	57.94781	50.04025	-6.00000	0.22456	0.22456	0.00055	0.00055	0.22551	0.22551	0.00055	0.00055	0.00095
						–	0.00002	0.00002	–	–	–							
0.00096	0.00093	0.00093	0.00188	0.00188	–	42.19891	58.42602	49.15661	-6.00000	0.22504	0.22504	0.00046	0.00046	0.22599	0.22599	0.00046	0.00046	0.00096
						–	0.00002	0.00002	–	–	–							
0.00096	0.00077	0.00077	0.00173	0.00173	–	43.20365	58.90423	48.27298	-6.00000	0.22552	0.22552	0.00039	0.00039	0.22647	0.22647	0.00039	0.00039	0.00096
						–	0.00002	0.00002	–	–	–							
0.00096	0.00064	0.00064	0.00160	0.00160	–	44.20838	59.38244	47.38935	-6.00000	0.22600	0.22600	0.00032	0.00032	0.22695	0.22695	0.00032	0.00032	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00054	0.00054	0.00149	0.00149	–	45.21312	59.86066	46.50572	-6.00000	0.22648	0.22648	0.00027	0.00027	0.22744	0.22744	0.00027	0.00027	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00045	0.00045	0.00141	0.00141	–	46.21785	60.33887	45.62208	-6.00000	0.22696	0.22696	0.00023	0.00023	0.22792	0.22792	0.00023	0.00023	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00039	0.00039	0.00135	0.00135	–	47.22259	60.81708	44.73845	-6.00000	0.22744	0.22744	0.00020	0.00020	0.22840	0.22840	0.00020	0.00020	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00036	0.00036	0.00131	0.00131	–	48.22733	61.29529	43.85482	-6.00000	0.22792	0.22792	0.00018	0.00018	0.22888	0.22888	0.00018	0.00018	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00034	0.00034	0.00130	0.00130	–	49.23206	61.77351	42.97118	-6.00000	0.22840	0.22840	0.00017	0.00017	0.22936	0.22936	0.00017	0.00017	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00034	0.00034	0.00130	0.00130	–	50.23680	62.25172	42.08755	-6.00000	0.22888	0.22888	0.00017	0.00017	0.22984	0.22984	0.00017	0.00017	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00036	0.00036	0.00132	0.00132	–	51.24153	62.72993	41.20392	-6.00000	0.22936	0.22936	0.00018	0.00018	0.23032	0.23032	0.00018	0.00018	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00039	0.00039	0.00135	0.00135	–	52.24627	63.20814	40.32028	-6.00000	0.22985	0.22985	0.00020	0.00020	0.23081	0.23081	0.00020	0.00020	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00043	0.00043	0.00139	0.00139	–	53.25101	63.68636	39.43665	-6.00000	0.23033	0.23033	0.00021	0.00021	0.23129	0.23129	0.00021	0.00021	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00047	0.00047	0.00143	0.00143	–	54.25574	64.16457	38.55302	-6.00000	0.23081	0.23081	0.00023	0.00023	0.23177	0.23177	0.00023	0.00023	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00051	0.00051	0.00147	0.00147	–	55.26048	64.64278	37.66939	-6.00000	0.23129	0.23129	0.00025	0.00025	0.23226	0.23226	0.00025	0.00025	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00055	0.00055	0.00151	0.00151	–	56.26521	65.12099	36.78575	-6.00000	0.23178	0.23178	0.00027	0.00027	0.23274	0.23274	0.00027	0.00027	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00058	0.00058	0.00154	0.00154	–	57.26995	65.59921	35.90212	-6.00000	0.23226	0.23226	0.00029	0.00029	0.23322	0.23322	0.00029	0.00029	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00060	0.00060	0.00156	0.00156	–	58.27469	66.07742	35.01849	-6.00000	0.23274	0.23274	0.00030	0.00030	0.23371	0.23371	0.00030	0.00030	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00061	0.00061	0.00158	0.00158	–	59.27942	66.55563	34.13485	-6.00000	0.23323	0.23323	0.00031	0.00031	0.23419	0.23419	0.00031	0.00031	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00062	0.00062	0.00158	0.00158	–	60.28416	67.03384	33.25122	-6.00000	0.23371	0.23371	0.00031	0.00031	0.23467	0.23467	0.00031	0.00031	0.00096
						–	0.00001	0.00001	–	–	–							
0.00096	0.00061	0.00061	0.00158	0.00158	–	61.28889	67.51205	32.36759	-6.00000	0.23420	0.23420	0.00031	0.00031	0.23516	0.23516	0.00031	0.00031	0.00096
						–	0.00001	0.00001	–	–	–							
0.00097	0.00060	0.00060	0.00156	0.00156	–	62.29363	67.99027	31.48395	-6.00000	0.23468	0.23468	0.00030	0.00030	0.23564	0.23564	0.00030	0.00030	0.00097
						–	0.00001	0.00001	–	–	–							
0.00097	0.00057	0.00057	0.00154	0.00154	–	63.29836	68.46848	30.60032	-6.00000	0.23516	0.23516	0.00029	0.00029	0.23613	0.23613	0.00029	0.00029	0.00097
						–	0.00001	0.00001	–	–	–							
0.00097	0.00055	0.00055	0.00151	0.00151	–	64.30310	68.94669	29.71669	-6.00000	0.23565	0.23565	0.00027	0.00027	0.23662	0.23662	0.00027	0.00027	0.00097
						–	0.00001	0.00001	–	–	–							
0.00097	0.00051	0.00051	0.00148	0.00148	–	65.30784	69.42490	28.83306	-6.00000	0.23613	0.23613	0.00026	0.00026	0.23710	0.23710	0.00026	0.00026	0.00097
						–	0.00001	0.00001	–	–	–							
0.00097	0.00047	0.00047	0.00144	0.00144	–	66.31257	69.90312	27.94942	-6.00000	0.23662	0.23662	0.00024	0.00024	0.23759	0.23759	0.00024	0.00024	0.00097
						–	0.00001	0.00001	–	–	–							
0.00097	0.00043	0.00043	0.00140	0.00140	–	67.31731	70.38133	27.06579	-6.00000	0.23711	0.23711	0.00022	0.00022	0.23807	0.23807	0.00022	0.00022	0.00097
						–	0.00001	0.00001	–	–	–							
0.00661	0.98824	0.98824	0.98824	0.98824	–	68.32204	70.85954	26.18216	-6.00000	0.23759	0.23759	0.49412	0.49412	0.23098	0.23098	0.49412	0.49412	-0.00661 -
						–	0.02234	0.02234	–	–	Sagging							
0.02951	1.99887	1.99887	1.99887	1.99887	–	69.32678	71.33775	25.29852	-6.00000	0.23804	0.23804	0.99943	0.99943	0.20853	0.20853	0.99943	0.99943	-0.02951 -
						–	0.04520	0.04520	–	–	Sagging							
0.04488	0.00615	0.00615	0.00615	0.00615	–	70.33152	71.81597	24.41489	-6.00000	0.23084	0.23084	0.00308	0.00308	0.18596	0.18596	0.00308	0.00308	-0.04488 -
						–	0.00014	0.00014	–	–	Sagging							
0.17819	0.53989	0.53989	0.53989	0.53989	–	71.33625	72.29418	23.53126	-6.00000	0.20832	0.20832	0.26994	0.26994	0.03013	0.03013	0.26994	0.26994	-0.17819 -
						–	0.01221	0.01221	–	–	Hogging							
0.55955	0.87288	0.87288	0.87288	0.87288	–	72.34099	72.77239	22.64762	-6.00000	0.18512	0.18512	0.43644	0.43644	-0.37443	-0.37443	0.43644	0.43644	-0.55955 -
						–	0.01974	0.01974	–	–	Hogging							
0.78118	0.19475	0.19475	0.19475	0.19475	–	73.34572	73.25060	21.76399	-6.00000	0.02748	0.02748	0.09737	0.09737	-0.75370	-0.75370	0.09737	0.09737	-0.78118 -
						–	0.00440	0.00440	–	–	Sagging							
0.70770	0.14525	0.14525	0.14525	0.14525	–	74.35046	73.72882	20.88036	-6.00000	-0.37813	-0.37813	0.07263	0.07263	-1.08583	-1.08583	0.07263	0.07263	-0.70770 -
						–	0.00328	0.00328	–	–	Sagging							
0.59865	0.12641	0.12641	0.12641	0.12641	–	75.35520	74.20703	19.99673	-6.00000	-0.75705	-0.75705	0.06321	0.06321	-1.35570	-1.35570	0.06321	0.06321	-0.59865 -
						–	0.00286	0.00286	–	–	Sagging							
0.46557	0.13106	0.13106	0.13106	0.13106	–	76.35993	74.68524	19.11309	-6.00000	-1.08867	-1.08867	0.06553	0.06553	-1.55424	-1.55424	0.06553	0.06553	-0.46557 -
						–	0.00296	0.00296	–	–	Sagging							
0.32940	0.17383	0.17383	0.17383	0.17383	–	77.36467	75.16345	18.22946	-6.00000	-1.35791	-1.35791	0.08692	0.08692	-1.68731	-1.68731	0.08692	0.08692	-0.32940 -
						–	0.00393	0.00393	–	–	Sagging							
0.22226	0.23661	0.23661	0.23661	0.23661	–	78.36940	75.64166	17.34583	-6.00000	-1.55580	-1.55580	0.11830	0.11830	-1.77805	-1.77805	0.11830	0.11830	-0.22226 -
						–	0.00535	0.00535	–	–	Sagging							
0.17220	0.21066	0.21066	0.21066	0.21066	–	79.37414	76.11988	16.46219	-6.00000	-1.68836	-1.68836	0.06701	0.06701	-1.80871	-1.80871	0.06701	0.06701	-0.12036 -
						–	0.00476	0.00476	–	–	Hogging							
0.10672	0.07652	0.07652	0.07652	0.07652	–	80.37888	76.59809	15.57856	-6.00000	-1.77862	-1.77862	0.19073	0.19073	-1.88348	-1.88348	0.19073	0.19073	-0.10486 -
						–	0.00303	0.00303	–	–	Sagging							
0.04852	0.11161	0.11161	0.11161	0.11161	–	81.38361	77.07630	14.69493	-6.00000	-1.80921	-1.80921	0.19420	0.19420	-2.02594	-2.02594	0.19420	0.19420	-0.21673 -
						–	0.00862	0.00862	–	–	Sagging							
0.00307	0.37229	0.37229	0.37537	0.37537	–	82.38835	77.55451	13.81129	-6.00000	-1.88451	-1.88451	0.04889	0.04889	-2.13003	-2.13003	0.04889	0.04889	-0.24552 -
						–	0.00842	0.00842	–	–	Hogging							
0.04878	0.02497	0.02497	0.07375	0.07375	–	83.39308	78.03273	12.92766	-6.00000	-2.02710	-2.02710	0.10533	0.10533	-2.19929	-2.19929	0.10533	0.10533	-0.17220 -
						–	0.00056	0.00056	–	–	Hogging							
0.08928	0.02412	0.02412	0.11340	0.11340	–	84.39782	78.51094	12.04403	-6.00000	-2.13084	-2.13084	0.03826	0.03826	-2.23756	-2.23756	0.03826	0.03826	-0.10672 -
						–	0.00055	0.00055	–	–	Hogging							
0.12520	0.02620	0.02620	0.15140	0.15140	–	85.40256	79.00200	11.16040	-6.00000	-2.19911	-2.19911	0.01310	0.01310	-2.07390	-2.07390	0.01310	0.01310	0.12520
						–	0.00059	0.00059	–	–	Hogging							
0.15712	0.02966	0.02966	0.18678	0.18678	–	90.42624	81.38021	6.74223	-6.00000	-2.14462	-2.14462	0.01483	0.01483	-1.98749	-1.98749	0.01483	0.01483	0.15712
						–	0.00067	0.00067	–	–	Hogging							
0.18554	0.03323	0.03323	0.21877	0.21877	–	91.43097	81.85843	5.85860	-6.00000	-2.07316	-2.07316	0.01662	0.01662	-1.88762	-1.88762	0.01662	0.01662	0.18554
						–	0.00075	0.00075	–	–	Hogging							
0.21090	0.03619	0.03619	0.24710	0.24710	–	92.43571	82.33664	4.97496	-6.00000	-1.98662	-1.98662	0.01810	0.01810	-1.77571	-1.77571	0.01810	0.01810	0.21090
						–	0.00082	0.00082	–	–	Hogging							
0.23359	0.03813	0.03813	0.27173	0.27173	–	93.44044	82.81485	4.09133	-6.00000	-1.88662	-1.88662	0.01907	0.01907	-1.65302	-1.65302	0.01907	0.01907	0.23359
						–	0.00086	0.00086	–	–	Hogging							
0.25395	0.03883	0.03883	0.29277	0.29277	–	94.44518	83.29306	3.20770	-6.00000	-1.77460	-1.77460	0.01941	0.01941	-1.52066	-1.52066	0.01941	0.01941	0.25395
						–	0.00088	0.00088	–	–	Hogging							
0.27225	0.03813	0.03813	0.31037	0.31037	–	95.44992	83.77128	2.32407	-6.00000	-1.65182	-1.65182	0.01906	0.01906	-1.37958	-1.37958	0.01906	0.01906	0.27225
						–	0.00086	0.00086	–	–	Hogging							

Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility Damage Results - Strains

Stage Ref.	Stage: Name	Specific Compn.: Utility: Total:	Check: Rad. of Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Peak Flex. Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:

Factored	Ref.	Name Curv.:	Curv.:	start of Orientn. Angle utility	Unfactored [m]	Factored [m]	Unfactored [m]	Factored [m]	Unfactored [με]	Factored [με]	Unfactored [με]	Factored [με]	Unfactored [με]	Factored [με]	Unfactored [με]
Threshold	Limit	(w.r.t. Global Axis)		[Deg]											
0	Base Model	1	TW Main-1	1	1.00283	75.92703	113.14854	-0.90000	56.126	11.225	0.98174	0.98174	-0.98174	-0.98174	57.10824	12.20704	OK	-0.98174
-0.98174	OK	9.6767E+4	OK	OK	-35.01937													
					2.00566	75.10385	112.57577	-0.90000	41.852	8.3703	0.92855	0.92855	-0.92855	-0.92855	42.78024	9.29889	OK	-0.92855
-0.92855	OK	1.0231E+5	OK	OK	-40.12386													
					3.00850	74.28068	112.00301	-0.90000	27.713	5.5426	1.0869	1.0869	-1.0869	-1.0869	28.79985	6.62949	OK	-1.08690
-1.08690	OK	8.7404E+4	OK	OK	-50.88938													
					4.01133	73.45751	111.43024	-0.90000	29.134	5.8268	4.1452	4.1452	-4.1452	-4.1452	33.27923	9.97202	OK	-4.14522
-4.14522	OK	2.2918E+4	OK	OK	-60.34633													
					5.01416	72.63434	110.85748	-0.90000	31.551	6.3102	1.5481	1.5481	-1.5481	-1.5481	33.09912	7.85834	OK	-1.54814
-1.54814	OK	6.1364E+4	OK	OK	-55.69763													
					6.01699	71.81116	110.28471	-0.90000	19.680	3.9361	1.5369	1.5369	-1.5369	-1.5369	21.21721	5.47295	OK	-1.53689
-1.53689	OK	6.1813E+4	OK	OK	-60.29419													
					7.01983	70.98799	109.71195	-0.90000	7.0680	1.4136	1.5165	1.5165	-1.5165	-1.5165	8.58454	2.93014	OK	-1.51654
-1.51654	OK	6.2643E+4	OK	OK	-65.50082													
					8.02266	70.16482	109.13918	-0.90000	-6.2505	-1.2501	1.4874	1.4874	-1.4874	-1.4874	1.48737	1.48737	OK	-7.73786
-2.73747	OK	6.3871E+4	OK	OK	-71.30699													
					9.02549	69.34164	108.56642	-0.90000	-20.206	-4.0412	1.4483	1.4483	-1.4483	-1.4483	1.44830	1.44830	OK	-21.65446
-5.48953	OK	6.5594E+4	OK	OK	-77.73751													
					10.02832	68.51847	107.99365	-0.90000	-34.688	-6.9376	1.3971	1.3971	-1.3971	-1.3971	1.39708	1.39708	OK	-36.08508
-8.33468	OK	6.7999E+4	OK	OK	-84.89754													
					11.03116	67.69530	107.42089	-0.90000	-49.535	-9.9069	1.3312	1.3312	-1.3312	-1.3312	1.33124	1.33124	OK	-50.86594
-11.23818	OK	7.1362E+4	OK	OK	266.95734													
					12.03399	66.87213	106.84812	-0.90000	-64.526	-12.905	1.9843	1.9843	-1.9843	-1.9843	1.98433	1.98433	OK	-66.51040
-14.88954	OK	4.7875E+4	OK	OK	-37.93513													
					13.03682	66.04895	106.27536	-0.90000	-79.376	-15.875	7.3220	7.3220	-7.3220	-7.3220	7.32197	7.32197	OK	-86.69802
-23.19718	OK	1.2975E+4	Fails	Fails	-8.28190													
					14.03965	65.22578	105.70260	-0.90000	-93.754	-18.751	2.1076	2.1076	-2.1076	-2.1076	2.10759	2.10759	OK	-95.86112
-20.85830	OK	4.5075E+4	OK	OK	203.09494													
					15.04249	64.40261	105.12983	-0.90000	-107.27	-21.455	2.2990	2.2990	-2.2990	-2.2990	2.29898	2.29898	OK	-109.57362
-23.75391	OK	4.1323E+4	OK	OK	193.37726													
					16.04532	63.57943	104.55707	-0.90000	-119.50	-23.900	2.5310	2.5310	-2.5310	-2.5310	2.53095	2.53095	OK	-122.03242
-26.43125	OK	3.7535E+4	OK	OK	183.86304													
					17.04815	62.75626	103.98430	-0.90000	-130.00	-26.000	2.8088	2.8088	-2.8088	-2.8088	2.80882	2.80882	OK	-132.80753
-28.80856	OK	3.3822E+4	OK	OK	174.86400													
					18.05098	61.93309	103.41154	-0.90000	-53.239	-10.648	32.902	32.902	-32.902	-32.902	32.90164	32.90164	OK	-86.14036
-43.54938	OK	2.8874E+3	Fails	Fails	-56.52399													
					19.05382	61.10991	102.83877	-0.90000	59.261	11.852	13.493	13.493	-13.493	-13.493	72.75387	25.34500	OK	-13.49278
-13.49278	OK	7.0408E+3	Fails	Fails	-53.34250													
					20.05665	60.28674	102.26601	-0.90000	90.796	18.159	1.2633	1.2633	-1.2633	-1.2633	92.05882	19.42237	OK	-1.26326
-1.26326	OK	7.5202E+4	OK	OK	-42.90798													
					21.05948	59.46357	101.69324	-0.90000	60.732	12.146	50.303	50.303	-50.303	-50.303	111.03512	62.44958	OK	-50.30320
-50.30320	OK	1.8885E+3	Fails	Fails	115.42543													
					22.06231	58.64040	101.12048	-0.90000	18.054	3.6108	20.027	20.027	-20.027	-20.027	38.08033	23.63732	OK	-20.02656
-20.02656	OK	4.7437E+3	Fails	Fails	115.91691													
					23.06515	57.81722	100.54771	-0.90000	5.9619	1.1924	543.74E-6	543.74E-6	-543.74E-6	-543.74E-6	5.96245	1.19293	OK	-0.00054
-0.00054	OK	1.7471E+8	OK	OK	180.00000													
					24.06798	56.99405	99.97495	-0.90000	5.9619	1.1924	0.0065352	0.0065352	-0.0065352	-0.0065352	5.96845	1.19892	OK	-0.00654
-0.00654	OK	1.4537E+7	OK	OK	-0.00000													
					25.07081	56.17088	99.40219	-0.90000	5.9619	1.1924	0.013335	0.013335	-0.013335	-0.013335	5.97526	1.20572	OK	-0.01334
-0.01334	OK	7.1241E+6	OK	OK	0.00000													
					26.07364	55.34770	98.82942	-0.90000	5.9619	1.1924	0.019536	0.019536	-0.019536	-0.019536	5.98148	1.21192	OK	-0.01954
-0.01954	OK	4.8629E+6	OK	OK	-0.00000													
					27.07648	54.52453	98.25666	-0.90000	5.9620	1.1924	0.024844	0.024844	-0.024844	-0.024844	5.98681	1.21724	OK	-0.02484
-0.02484	OK	3.8239E+6	OK	OK	0.00000													
					28.07931	53.70136	97.68389	-0.90000	5.9620	1.1924	0.028989	0.028989	-0.028989	-0.028989	5.99098	1.22139	OK	-0.02899
-0.02899	OK	3.2771E+6	OK	OK	-0.00000													
					29.08214	52.87819	97.11113	-0.90000	5.9620	1.1924	0.031713	0.031713	-0.031713	-0.031713	5.99374	1.22412	OK	-0.03171
-0.03171	OK	2.9956E+6	OK	OK	0.00000													
					30.08497	52.05501	96.53836	-0.90000	5.9621	1.1924	0.032770	0.032770	-0.032770	-0.032770	5.99484	1.22518	OK	-0.03277
-0.03277	OK	2.8990E+6	OK	OK	-0.00000													
					31.08781	51.23184	95.96560	-0.90000	5.9621	1.1924	0.031927	0.031927	-0.031927	-0.031927	5.99403	1.22435	OK	-0.03193
-0.03193	OK	2.9755E+6	OK	OK	-0.00000													
					32.09064	50.40867	95.39283	-0.90000	-2.9061	-0.58122	15.162	15.162	-15.162	-15.162	15.16225	15.16225	OK	-18.06835
-15.74347	OK	6.2656E+3	Fails	Fails	119.31687													
					33.09347	49.58549	94.82007	-0.90000	-55.301	-11.060	74.846	74.846	-74.846	-74.846	74.84603	74.84603	OK	-130.14660
-85.90614	OK	1.2693E+3	Fails	Fails	119.59223													
					34.09630	48.76232	94.24730	-0.90000	-99.319	-19.864	1.4099	1.4099	-1.4099	-1.4099	1.40987	1.40987	OK	-100.72927
-21.27375	OK	6.7382E+4	OK	OK	136.70645													
					35.09914	47.93915	93.67454	-0.90000	-110.07	-22.014	8.5308	8.5308	-8.5308	-8.5308	8.53081	8.53081	OK	-118.60287
-30.54522	OK	1.1136E+4	Fails	Fails	-55.27079													
					36.10197	47.11598	93.10178	-0.90000	-174.33	-34.867	50.753	50.753	-50.753	-50.753	50.75290	50.75290	OK	-225.08764
-85.61985	OK	1.8718E+3	Fails	Fails	-55.57554													
					37.10480	46.29280	92.52901	-0.90000	-230.23	-46.047	5.6147	5.6147	-5.6147	-5.6147	5.61475	5.61475	OK	-235.84772
-51.66134	OK	1.6920E+4	OK	OK	159.49363													
					38.10763	45.46963	91.95625	-0.90000	-231.20	-46.240	5.2119	5.2119	-5.2119	-5.2119	5.21195	5.21195	OK	-236.41077
-51.45171	OK	1.8227E+4	OK	OK	165.26093													
					39.11047	44.64646	91.38348	-0.90000	-226.92	-45.384	4.8020	4.8020	-4.8020	-4.8020	4.80204	4.80204	OK	-231.72229
-50.18609	OK	1.9783E+4	OK	OK	171.87539													
					40.11330	43.82328	90.81072	-0.90000	-217.74	-43.547	4.4143	4.4143	-4.4143	-4.4143	4.41427	4.41427	OK	-222.14987
-47.96139	OK	2.1521E+4	OK	OK	179.12200													
					41.11613	43.00011	90.23795	-0.90000	-204.28	-40.856	4.0626	4.0626	-4.0626	-4.0626	4.06264	4.06264	OK	-208.34135
-44.91838	OK	2.3384E+4	OK	OK	186.67545													
					42.11896	42.17694	89.66519	-0.90000	-187.38	-37.476	3.7464	3.7464	-3.7464	-3.7464	3.74635	3.74635	OK	-191.12877
-41.22284	OK	2.5358E+4	OK	OK	194.19238													
					43.12180	41.35376	89.09242	-0.90000	-167.97	-33.593	3.4557	3.4557	-3.4557	-3.4557	3.45569	3.45569	OK	-171.42261
-37.04908	OK	2.7491E+4	OK	OK	201.41633													
					44.12463	40.53059	88.51966	-0.90000	-146.94	-29.388	1.9646	1.9646	-1.9646	-1.9646	1.96457	1.96457	OK	-148.90512
-31.35268	OK	4.8357E+4	OK	OK	229.96798													
					45.12746	39.70742	87.94689	-0.90000	-125.13	-25.026	6.2637	6.2637	-6.2637	-6.2637	6.26371	6.26371	OK	-131.39456
-31.28988	OK	1.5167E+4	OK	OK	-15.32999													
					46.13029	38.88425	87.37413	-0.90000	-103.20	-20.640	2.0760	2.0760	-2.0760	-2.0760	2.07601	2.07601	OK	-105.27648
-22.71611	OK	4.5761E+4	OK	OK	236.52760													
		2	TW Main-2	1	2.00595	38.17333	84.45412	-0.90000	-60.109	-12.022	2.7278	2.7278	-2.7278	-2.7278	2.72778	2.72778	OK	-62.83725
-14.74967	OK	3.4827E+4	OK	OK	-54.27316													
					3.00892	38.64104	83.56688	-0.90000	-80.235	-16.047	7.2862	7.2862	-7.2862	-7.2862	7.28624	7.28624	OK	-87.52156
-23.33330	OK	1.3038E+4	Fails	Fails	-17.94132													
					4.01189	39.10876	82.67964	-0.90000	-101.13	-20.226	3.2835	3.2835	-3.2835	-3.2835	3.28349	3.28349	OK	-104.41125
-23.50904	OK	2.8933E+4	OK	OK	222.14335													
					5.01486	39.57647	81.79239	-0.90000	-122.34	-24.468	3.5396	3.5396	-3.5396	-3.5396	3.53964	3.53964	OK	-125.87720
-28.00715	OK	2.6839E+4	OK	OK	215.70441													
					6.01784	40.04419	80.90515	-0.90000	-143.21	-28.641	3.7848	3.7848	-3.7848	-3.7848	3.78484	3.78484	OK	-146.99152
-32.42617	OK	2.5100E+4	OK	OK	208.52222													
					7.02081	40.51190	80.01791	-0.90000	-159.72	-31.944	5.5676	5.5676	-5.5676	-5.5676	5.56755	5.56755	OK	-165.28649
-37.51134	OK	1.7063E+4	OK	OK	227.24277													
					8.02378	40.97962	79.13067	-0.90000	-172.25	-34.451	6.9366	6.9366	-6.9366	-6.9366	6.93662	6.93662	OK	-179.18984
-41.38726	OK	1.3695E+4	Fails	Fails	232.45871													
					9.02675	41.44733	78.24343	-0.90000	-190.52	-38.105	4.8589	4.8589	-4.8589	-4.8589	4.85890	4.85890	OK	-195.38199
-42.96352	OK	1.9552E+4	OK	OK	163.27351													
					10.02973	41.91505	77.35619	-0.90000	-210.24	-42.048	5.7126	5.7126	-5.7126	-5.7126	5.71258	5.71258	OK	-215.95322
-47.76070	OK	1.6630E+4	OK	OK	152.00696													
					11.03270	42.38276	76.46895	-0.90000	-151.12	-30.224	32.810	32.810	-32.810	-32.810	32.80970	32.80970	OK	-183.92983
-63.03373	OK	2.8955E+3	Fails	Fails	-51.74524													
					12.03567	42.85048	75.58171	-0.90000	-36.482	-7.2965	25.640	25.640	-25.640	-25.640	25.63955	25.63955	OK	-62.12195
-32.93603	OK	3.7052E+3	Fails	Fails	-49.70069													
					13.03864	43.31819	74.69446	-0.90000	11.303	2.2606	0.15211	0.15211	-0.15211	-0.15211	11.45491	2.41267	OK	-0.15211
-0.15211	OK	6.2457E+5	OK	OK	-37.77109													
					14.04162	43.78591	73.80722	-0.90000	7.8259	1.5652	58.963	58.963	-58.963	-58.963	66.78851	60.52776	OK	-58.96258
-58.96258	OK	1.6112E+3	Fails	Fails	120.53433													
					15.04459	44.25362	72.91998	-0.90000	2.2503	0.45006	39.039	39.039	-39.039	-39.039	41.28957	39.48933	OK	-39.03928
-39.03928	OK	2.4334E+3	Fails	Fails	120.53498													
					16.04756	44.72134	72.03274	-0.90000	0.10377	0.020754	0.044099	0.044099	-0.044099	-0.044099	0.14787	0.06485	OK	-0.04410
-0.04410	OK	2.1542E+6	OK	OK	0.04342													
					17.05053	45.18905	71.14550	-0.90000	0.10377	0.020754	0.046503	0.046503	-0.046503	-0.046503	0.15027	0.06726	OK	-0.04650
-0.04650	OK	2.0429E+6	OK	OK	0.03938													
					18.05351	45.65676	70.25826	-0.90000	0.10377	0.020754	0.046956	0.046956	-0.046956	-0.046956	0.15073	0.06771	OK	-0.04696
-0.04696	OK	2.0232E+6	OK	OK	0.03723													
					19.05648	46.12448	69.37102	-0.90000	0.10377	0.020755	0.045447	0.045447	-0.045447	-0.045447	0.14922	0.06620	OK	-0.04545
-0.04545	OK	2.0904E+6	OK	OK	0.03663													
					20.05945	46.59219	68.48378	-0.90000	0.10378	0.020755	0.042002	0.042002	-0.042002	-0.042002	0.14578	0.06276	OK	-0.04200
-0.04200	OK	2.2618E+6	OK	OK	0.03764													
					21.06242	47.05991	67.59654	-0.90000	0.10378	0.020756	0.036699	0.036699	-0.036699	-0.036699	0.14048	0.05745	OK	-0.03670

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
-0.03670	OK	2.5886E+6	OK	OK	0.04081													
					22.06540	47.52762	66.70929	-0.90000	0.10378	0.020756	0.029680	0.029680	-0.029680	-0.029680	0.13346	0.05044	OK	-0.02968
-0.02968	OK	3.2008E+6	OK	OK	0.04765													
					23.06837	47.99534	65.82205	-0.90000	0.10378	0.020756	0.021181	0.021181	-0.021181	-0.021181	0.12496	0.04194	OK	-0.02118
-0.02118	OK	4.4851E+6	OK	OK	0.06284													
					24.07134	48.46305	64.93481	-0.90000	0.10378	0.020756	0.011544	0.011544	-0.011544	-0.011544	0.11532	0.03230	OK	-0.01154
-0.01154	OK	8.2294E+6	OK	OK	0.10807													
					25.07431	48.93077	64.04757	-0.90000	0.10378	0.020756	0.0012184	0.0012184	-0.0012184	-0.0012184	0.10500	0.02197	OK	-0.00122
-0.00122	OK	7.7970E+7	OK	OK	0.95548													
					26.07729	49.39848	63.16033	-0.90000	0.10378	0.020755	0.0092681	0.0092681	-0.0092681	-0.0092681	0.11304	0.03002	OK	-0.00927
-0.00927	OK	1.0250E+7	OK	OK	179.88339													
					27.08026	49.86620	62.27309	-0.90000	0.10377	0.020754	0.019361	0.019361	-0.019361	-0.019361	0.12313	0.04012	OK	-0.01936
-0.01936	OK	4.9067E+6	OK	OK	179.94849													
					28.08323	50.33391	61.38585	-0.90000	0.10377	0.020753	0.028547	0.028547	-0.028547	-0.028547	0.13231	0.04930	OK	-0.02855
-0.02855	OK	3.3278E+6	OK	OK	179.96799													
					29.08620	50.80163	60.49861	-0.90000	0.10376	0.020752	0.036413	0.036413	-0.036413	-0.036413	0.14017	0.05716	OK	-0.03641
-0.03641	OK	2.6090E+6	OK	OK	179.97719													
					30.08918	51.26934	59.61136	-0.90000	0.10375	0.020750	0.042685	0.042685	-0.042685	-0.042685	0.14644	0.06344	OK	-0.04268
-0.04268	OK	2.2256E+6	OK	OK	179.98250													
					31.09215	51.73706	58.72412	-0.90000	0.10374	0.020749	0.047245	0.047245	-0.047245	-0.047245	0.15099	0.06799	OK	-0.04724
-0.04724	OK	2.0108E+6	OK	OK	179.98595													
					32.09512	52.20477	57.83688	-0.90000	0.10374	0.020747	0.050114	0.050114	-0.050114	-0.050114	0.15385	0.07086	OK	-0.05011
-0.05011	OK	1.8957E+6	OK	OK	179.98842													
	3		TW Main-3	1	0.99689	53.66476	55.21468	-0.90000	4.7418	0.94836	0.062711	0.062711	-0.062711	-0.062711	4.80453	1.01108	OK	-0.06271
-0.06271	OK	1.5149E+6	OK	OK	180.10691													
					1.99378	54.18932	54.36696	-0.90000	4.7421	0.94841	0.062588	0.062588	-0.062588	-0.062588	4.80465	1.01100	OK	-0.06259
-0.06259	OK	1.5179E+6	OK	OK	180.51533													
					2.99067	54.71388	53.51924	-0.90000	4.7427	0.94854	0.061657	0.061657	-0.061657	-0.061657	4.80435	1.01020	OK	-0.06166
-0.06166	OK	1.5408E+6	OK	OK	180.93751													
					3.98757	55.23844	52.67152	-0.90000	4.7437	0.94874	0.060101	0.060101	-0.060101	-0.060101	4.80380	1.00884	OK	-0.06010
-0.06010	OK	1.5807E+6	OK	OK	181.38696													
					4.98446	55.76300	51.82380	-0.90000	4.7451	0.94902	0.058093	0.058093	-0.058093	-0.058093	4.80318	1.00711	OK	-0.05809
-0.05809	OK	1.6353E+6	OK	OK	181.87489													
					5.98135	56.28756	50.97608	-0.90000	4.7469	0.94937	0.055787	0.055787	-0.055787	-0.055787	4.80265	1.00516	OK	-0.05579
-0.05579	OK	1.7029E+6	OK	OK	182.41069													
					6.97822	56.81212	50.12836	-0.90000	5.2116	1.0423	1.0902	1.0902	-1.0902	-1.0902	6.30184	2.13254	OK	-1.09021
-1.09021	OK	8.7139E+4	OK	OK	267.20042													
					7.97513	57.33668	49.28064	-0.90000	5.7904	1.1581	0.27454	0.27454	-0.27454	-0.27454	6.06492	1.43261	OK	-0.27454
-0.27454	OK	3.4604E+5	OK	OK	259.35581													
	4		TW Main-4	1	1.99166	59.32738	45.83017	-0.90000	0.33493	0.066985	0.018994	0.018994	-0.018994	-0.018994	0.35392	0.08598	OK	-0.01899
-0.01899	OK	5.0017E+6	OK	OK	180.86138													
					2.98748	59.79817	44.95266	-0.90000	0.33498	0.066996	0.016751	0.016751	-0.016751	-0.016751	0.35173	0.08375	OK	-0.01675
-0.01675	OK	5.6711E+6	OK	OK	181.00786													
					3.98331	60.26896	44.07515	-0.90000	0.33504	0.067008	0.014848	0.014848	-0.014848	-0.014848	0.34989	0.08186	OK	-0.01485
-0.01485	OK	6.3980E+6	OK	OK	181.17222													
					4.97914	60.73975	43.19764	-0.90000	0.33510	0.067020	0.013268	0.013268	-0.013268	-0.013268	0.34837	0.08029	OK	-0.01327
-0.01327	OK	7.1601E+6	OK	OK	181.35124													
					5.97491	61.21054	42.32012	-0.90000	0.33516	0.067033	0.011983	0.011983	-0.011983	-0.011983	0.34715	0.07902	OK	-0.01198
-0.01198	OK	7.9278E+6	OK	OK	181.53974													
					6.97079	61.68134	41.44261	-0.90000	0.33523	0.067046	0.010957	0.010957	-0.010957	-0.010957	0.34619	0.07800	OK	-0.01096
-0.01096	OK	8.6702E+6	OK	OK	181.73163													
					7.96662	62.15213	40.56510	-0.90000	0.33529	0.067059	0.010146	0.010146	-0.010146	-0.010146	0.34544	0.07721	OK	-0.01015
-0.01015	OK	9.3632E+6	OK	OK	181.92157													
					8.96245	62.62292	39.68758	-0.90000	0.33536	0.067073	0.0095015	0.0095015	-0.0095015	-0.0095015	0.34486	0.07657	OK	-0.00950
-0.00950	OK	9.9984E+6	OK	OK	182.10699													
					9.95828	63.09371	38.81007	-0.90000	0.33543	0.067087	0.0089727	0.0089727	-0.0089727	-0.0089727	0.34441	0.07606	OK	-0.00897
-0.00897	OK	1.0588E+7	OK	OK	182.28947													
					10.95411	63.56450	37.93256	-0.90000	0.33551	0.067101	0.0085105	0.0085105	-0.0085105	-0.0085105	0.34402	0.07561	OK	-0.00851
-0.00851	OK	1.1163E+7	OK	OK	182.47528													
					11.94993	64.03529	37.05504	-0.90000	0.33558	0.067116	0.0080700	0.0080700	-0.0080700	-0.0080700	0.34365	0.07519	OK	-0.00807
-0.00807	OK	1.1772E+7	OK	OK	182.67526													
					12.94576	64.50608	36.17753	-0.90000	0.33566	0.067131	0.0076128	0.0076128	-0.0076128	-0.0076128	0.34327	0.07474	OK	-0.00761
-0.00761	OK	1.2479E+7	OK	OK	182.90473													
					13.94159	64.97687	35.30002	-0.90000	0.33573	0.067147	0.0071089	0.0071089	-0.0071089	-0.0071089	0.34284	0.07426	OK	-0.00711
-0.00711	OK	1.3363E+7	OK	OK	183.18434													
					14.93742	65.44766	34.42251	-0.90000	0.33581	0.067163	0.0065380	0.0065380	-0.0065380	-0.0065380	0.34235	0.07370	OK	-0.00654
-0.00654	OK	1.4530E+7	OK	OK	183.54276													
					15.93324	65.91845	33.54499	-0.90000	0.33590	0.067179	0.0058888	0.0058888	-0.0058888	-0.0058888	0.34178	0.07307	OK	-0.00589
-0.00589	OK	1.6132E+7	OK	OK	184.02280													
					16.92907	66.38924	32.66748	-0.90000	0.33598	0.067196	0.0051591	0.0051591	-0.0051591	-0.0051591	0.34114	0.07235	OK	-0.00516
-0.00516	OK	1.8414E+7	OK	OK	184.69444													
					17.92490	66.86003	31.78997	-0.90000	0.33607	0.067213	0.0043545	0.0043545	-0.0043545	-0.0043545	0.34042	0.07157	OK	-0.00435
-0.00435	OK	2.1817E+7	OK	OK	185.68487													
					18.92073	67.33082	30.91245	-0.90000	0.33615	0.067231	0.0034870	0.0034870	-0.0034870	-0.0034870	0.33964	0.07072	OK	-0.00349
-0.00349	OK	2.7244E+7	OK	OK	187.25672													
					19.91656	67.80161	30.03494	-0.90000	0.33624	0.067248	0.0025743	0.0025743	-0.0025743	-0.0025743	0.33882	0.06982	OK	-0.00257
-0.00257	OK	3.6903E+7	OK	OK	190.05749													
					20.91238	68.27241	29.15743	-0.90000	0.33633	0.067267	0.0016432	0.0016432	-0.0016432	-0.0016432	0.33798	0.06891	OK	-0.00164
-0.00164	OK	5.7814E+7	OK	OK	196.20872													
					21.90821	68.74320	28.27991	-0.90000	0.33643	0.067285	766.38E-6	766.38E-6	-766.38E-6	-766.38E-6	0.33719	0.06805	OK	-0.00077
-0.00077	OK	1.2396E+8	OK	OK	217.61788													
					22.90404	69.21399	27.40240	-0.90000	0.33652	0.067305	597.20E-6	597.20E-6	-597.20E-6	-597.20E-6	0.33712	0.06790	OK	-0.00060
-0.00060	OK	1.5908E+8	OK	OK	-52.99408													
					23.89987	69.68478	26.52489	-0.90000	0.33662	0.067324	0.0013921	0.0013921	-0.0013921	-0.0013921	0.33801	0.06872	OK	-0.00139
-0.00139	OK	6.8240E+7	OK	OK	-20.43327													
					24.89569	70.15557	25.64738	-0.90000	-4.0954	-0.81907	51.926	51.926	-51.926	-51.926	51.92576	51.92576	OK	-56.02113
-52.74484	OK	1.8295E+3	Fails	Fails	121.56264													
					25.89152	70.62636	24.76986	-0.90000	-13.079	-2.6159	56.126	56.126	-56.126	-56.126	56.12617	56.12617	OK	-69.20547
-58.74203	OK	1.6926E+3	Fails	Fails	121.58613													
					26.88735	71.09715	23.89235	-0.90000	-17.633	-3.5266	0.19660	0.19660	-0.19660	-0.19660	0.19660	0.19660	OK	-17.82942
-3.72316	OK	4.8322E+5	OK	OK	129.89293													
					27.88318	71.56794	23.01484	-0.90000	-91.219	-18.244	28.823	28.823	-28.823	-28.823	28.82350	28.82350	OK	-120.04257
-47.06731	OK	3.2959E+3	Fails	Fails	-43.87761													
					28.87900	72.03873	22.13732	-0.90000	-245.45	-49.090	26.752	26.752	-26.752	-26.752	26.75179	26.75179	OK	-272.20136
-75.84170	OK	3.5512E+3	Fails	Fails	-43.46393													
					29.87483	72.50952	21.25981	-0.90000	-314.87	-62.974	6.8691	6.8691	-6.8691	-6.8691	6.86910	6.86910	OK	-321.73919
-69.84312	OK	1.3830E+4	Fails	Fails	143.18293													
					30.87066	72.98031	20.38230	-0.90000	-284.56	-56.912	5.3602	5.3602	-5.3602	-5.3602	5.36015	5.36015	OK	-289.92167
-62.27246	OK	1.7723E+4	OK	OK	159.37854													
					31.86649	73.45110	19.50479	-0.90000	-241.65	-48.330	4.5701	4.5701	-4.5701	-4.5701	4.57012	4.57012	OK	-246.22027
-52.90015	OK	2.0787E+4	OK	OK	189.59842													
					32.86232	73.92189	18.62727	-0.90000	-198.45	-39.690	6.8697	6.8697	-6.8697	-6.8697	6.86969	6.86969	OK	-205.32214
-46.56018	OK	1.3829E+4	Fails	Fails	234.52805													
					33.85814	74.39269	17.74976	-0.90000	-153.25	-30.649	4.3847	4.3847	-4.3847	-4.3847	4.38475	4.38475	OK	-157.63222
-35.03424	OK	2.1666E+4	OK	OK	217.64351													
					34.85397	74.86348	16.87225	-0.90000	-102.78	-20.555	4.7641	4.7641	-4.7641	-4.7641	4.76412	4.76412	OK	-107.53914
-25.31912	OK	1.9941E+4	OK	OK	231.39759													
					35.84980	75.33427	15.99473	-0.90000	-95.325	-19.065	14.500	14.500	-14.500	-14.500	14.50035	14.50035	OK	-109.82498
-33.56527	OK	6.5516E+3	Fails	Fails	260.09388													
					36.84563	75.80506	15.11722	-0.90000	-99.297	-19.859	3.6172	3.6172	-3.6172	-3.6172	3.61724	3.61724	OK	-102.91386
-23.47657	OK	2.6263E+4	OK	OK	235.61246													
					37.84145	76.27585	14.23971	-0.90000	-79.915	-15.983	4.0707	4.0707	-4.0707	-4.0707	4.07065	4.07065	OK	-83.98547
-20.05362	OK	2.3338E+4	OK	OK	264.78818													
					38.83728	76.74664	13.36219	-0.90000	-90.256	-18.051	14.268	14.268	-14.268	-14.268	14.26809	14.26809	OK	-104.52400
-32.31927	OK	6.6582E+3	Fails	Fails	-34.85629													
					39.83311	77.21743	12.48468	-0.90000	-90.798	-18.160	4.2923	4.2923	-4.2923	-4.2923	4.29233	4.29233	OK	-95.09016
-22.45190	OK	2.2132E+4	OK	OK	-17.92813													
					40.82894	77.68822	11.60717	-0.90000	-60.348	-12.070	1.9868	1.9868	-1.9868	-1.9868	1.98680	1.98680	OK	-62.33445
-14.05633	OK	4.7816E+4	OK	OK	217.56061													
					41.82477	78.15901	10.72966	-0.90000	-32.882	-6.5764	16.657	16.657	-16.657	-16.657	16.65660	16.65660	OK	-49.53865
-23.23301	OK	5.7034E+3	Fails	Fails	-3.79324													
					42.82059	78.62980	9.85214	-0.90000	-8.1874	-1.6375	1.3772	1.3772	-1.3772	-1.3772	1.37717	1.37717	OK	-9.56460
-3.01466	OK	6.8982E+4	OK	OK	-46.42291													
					43.81642	79.10059	8.97463	-0.90000	13.980	2.7960	0.90249	0.90249	-0.90249	-0.90249	14.88241	3.69847	OK	-0.90249
-0.90249	OK	1.0526E+5	OK	OK	-86.30602													
					44.81225	79.57138	8.09712	-0.90000	33.845	6.7691	0.88620	0.88620	-0.88620	-0.88620	34.73167	7.65529	OK	-0.88620
-0.88620	OK	1.0720E+5	OK	OK	-66.33820													
					45.80808	80.04217	7.21960	-0.90000	51.647	10.329	0.95923	0.95923	-0.95923	-0.95923	52.60583	11.28855	OK	-0.95923
-0.95923	OK	9.9037E+4	OK	OK	-49.66131													
					46.80390	80.51296	6.34209	-0.90000	67.608	13.522	1.0739	1.0739	-1.0739	-1.0739	68.68197	14.59551	OK	-1.07389
-1.07389	OK	8.8463E+4	OK	OK	-37.83752													
					47.79973	80.98376	5.46458	-0.90000	81.936	16.387	1.1911	1.1911	-1.1911	-1.1911	83.12757	17.57842	OK	-1.19113
-1.19113	OK	7.9756E+4	OK	OK	-29.91144													
					48.79556	81.45455	4.58706	-0.90000	94.818	18.964	1.2871	1.2871	-1.2871	-1.2871	96.10529	20.25072	OK	-1.28707
-1.28707	OK	7.3811E+4	OK	OK	-24.61984													
					49.79139	81.92534	3.70955	-0.90000	106.42	21.284	1.3478	1.3478	-1.3478	-1.3478	107.76774	22.63183	OK	-1.34785
-1.34785	OK	7.0483E+4	OK	OK	-21.07789													
					50.78722	82.39613	2.83204	-0.90000	116.89	23.378	1.3651	1.3651	-1.3651	-1.3651	118.25403	24.74288	OK	-1.36510
-1.36510	OK	6.9592E+4	OK	OK	-18.75680													
					51.78304	82.86692	1.95453	-0.90000	126.36	25.271	1.3335	1.3335	-1.3335	-1.3335	127.68877	26.60456	OK	-1.33350
-1.33350	OK	7.1241E+4	OK	OK	-17.37442													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
5	TW Foul-1	1	2.00887	74.83600	112.93610	-6.00000	45.587	45.587	8.7827	17.565	-8.7827	-8.7827	54.36950	63.15219	OK	-8.78270
-8.78270	OK	1.0088E+5	OK	OK	-40.50445											
					3.01331	74.02501	112.34351	-6.00000	39.136	39.136	22.529	45.058	-22.529	-22.529	61.66526	84.19410	OK	-22.52884
-22.52884	OK	3.9327E+4	OK	OK	-57.66850													
					4.01774	73.21401	111.75091	-6.00000	41.248	41.248	25.420	50.840	-25.420	-25.420	66.66762	92.08750	OK	-25.41988
-25.41988	OK	3.4855E+4	OK	OK	-57.59504													
					5.02218	72.40301	111.15831	-6.00000	37.263	37.263	14.416	28.831	-14.416	-14.416	51.67898	66.09470	OK	-14.41572
-14.41572	OK	6.1461E+4	OK	OK	-55.17021													
					6.02661	71.59201	110.56571	-6.00000	26.021	26.021	14.345	28.690	-14.345	-14.345	40.36653	54.71163	OK	-14.34511
-14.34511	OK	6.1763E+4	OK	OK	-59.66898													
					7.03105	70.78101	109.97311	-6.00000	14.053	14.053	14.191	28.381	-14.191	-14.191	28.24365	42.43418	OK	-14.19053
-14.19053	OK	6.2436E+4	OK	OK	-64.79916													
					8.03548	69.97002	109.38052	-6.00000	1.3826	1.3826	13.959	27.919	-13.959	-13.959	15.34212	29.30159	OK	-13.95947
-13.95947	OK	6.3469E+4	OK	OK	-70.54111													
					9.03992	69.15902	108.78792	-6.00000	-11.936	-11.936	13.647	27.293	-13.647	-13.647	13.64671	27.29341	OK	-25.58275
-25.58275	OK	6.4924E+4	OK	OK	-76.89951													
					10.04435	68.34802	108.19532	-6.00000	-25.811	-25.811	13.235	26.469	-13.235	-13.235	13.23461	26.46922	OK	-39.04598
-39.04598	OK	6.6946E+4	OK	OK	-83.94179													
					11.04879	67.53702	107.60272	-6.00000	-40.106	-40.106	12.700	25.399	-12.700	-12.700	12.69953	25.39906	OK	-52.80549
-52.80549	OK	6.9766E+4	OK	OK	268.14125													
					12.05322	66.72603	107.01013	-6.00000	-54.629	-54.629	12.029	24.057	-12.029	-12.029	12.02857	24.05714	OK	-66.65781
-66.65781	OK	7.3658E+4	OK	OK	258.94921													
					13.05766	65.91503	106.41753	-6.00000	-69.126	-69.126	70.487	140.97	-70.487	-70.487	70.48656	140.97312	OK	-139.61231
-139.61231	OK	1.2570E+4	Fails	Fails	-8.49873													
					14.06209	65.10403	105.82493	-6.00000	-83.292	-83.292	8.5197	17.039	-8.5197	-8.5197	8.51967	17.03934	OK	-91.81173
-91.81173	OK	1.0399E+5	OK	OK	-82.98879													
					15.06653	64.29303	105.23233	-6.00000	-96.779	-96.779	21.151	42.303	-21.151	-21.151	21.15140	42.30280	OK	-117.93027
-117.93027	OK	4.1888E+4	OK	OK	196.12312													
					16.07096	63.48203	104.63973	-6.00000	-109.18	-109.18	23.168	46.336	-23.168	-23.168	23.16809	46.33617	OK	-132.34497
-132.34497	OK	3.8242E+4	OK	OK	186.59038													
					17.07540	62.67104	104.04714	-6.00000	-120.06	-120.06	25.589	51.179	-25.589	-25.589	25.58942	51.17885	OK	-145.65430
-145.65430	OK	3.4624E+4	OK	OK	177.42508													
					18.07983	61.86004	103.45454	-6.00000	-35.820	-35.820	323.24	646.49	-323.24	-323.24	323.24322	646.48645	Fails	-359.06328
-359.06328	OK	2.7410E+3	Fails	Fails	-56.10125													
					19.08427	61.04904	102.86194	-6.00000	80.299	80.299	107.23	214.45	-107.23	-107.23	187.52506	294.75102	OK	-107.22596
-107.22596	OK	8.2629E+3	Fails	Fails	-52.72469													
					20.08870	60.23804	102.26934	-6.00000	107.94	107.94	13.930	27.859	-13.930	-13.930	121.86972	135.79931	OK	-13.92958
-13.92958	OK	6.3606E+4	OK	OK	-42.54591													
					21.09314	59.42704	101.67674	-6.00000	70.729	70.729	489.50	979.00	-489.50	-489.50	560.22897	1049.72859	Fails	-489.49962
-489.49962	OK	1.8100E+3	Fails	Fails	115.14879													
					22.09757	58.61605	101.08415	-6.00000	20.552	20.552	158.49	316.97	-158.49	-158.49	179.03664	337.52166	OK	-158.48502
-158.48502	OK	5.5904E+3	Fails	Fails	115.49786													
					23.10201	57.80505	100.49155	-6.00000	8.3262	8.3262	0.37263	0.74525	-0.37263	-0.37263	8.69885	9.07148	OK	-0.37263
-0.37263	OK	2.3777E+6	OK	OK	0.00000													
					24.10644	56.99405	99.89895	-6.00000	8.3263	8.3263	0.55167	1.1033	-0.55167	-0.55167	8.87796	9.42964	OK	-0.55167
-0.55167	OK	1.6060E+6	OK	OK	0.00000													
					25.11088	56.18305	99.30635	-6.00000	8.3264	8.3264	0.72652	1.4530	-0.72652	-0.72652	9.05290	9.77942	OK	-0.72652
-0.72652	OK	1.2195E+6	OK	OK	-0.00000													
					26.11533	55.37206	98.71376	-6.00000	8.3265	8.3265	0.89018	1.7804	-0.89018	-0.89018	9.21666	10.10684	OK	-0.89018
-0.89018	OK	9.9531E+5	OK	OK	0.00000													
					27.11975	54.56106	98.12116	-6.00000	8.3266	8.3266	1.0360	2.0719	-1.0360	-1.0360	9.36259	10.39856	OK	-1.03597
-1.03597	OK	8.5524E+5	OK	OK	-0.00000													
					28.12418	53.75006	97.52856	-6.00000	8.3268	8.3268	1.1575	2.3151	-1.1575	-1.1575	9.48432	10.64186	OK	-1.15754
-1.15754	OK	7.6541E+5	OK	OK	-0.00000													
					29.12862	52.93906	96.93596	-6.00000	8.3269	8.3269	1.2487	2.4974	-1.2487	-1.2487	9.57564	10.82434	OK	-1.24870
-1.24870	OK	7.0954E+5	OK	OK	0.00000													
					30.13305	52.12806	96.34336	-6.00000	8.3271	8.3271	1.3033	2.6066	-1.3033	-1.3033	9.63043	10.93375	OK	-1.30331
-1.30331	OK	6.7981E+5	OK	OK	-0.00000													
					31.13749	51.31707	95.75077	-6.00000	8.3273	8.3273	1.3155	2.6309	-1.3155	-1.3155	9.64277	10.95824	OK	-1.31546
-1.31546	OK	6.7353E+5	OK	OK	0.00000													
					32.14192	50.50607	95.15817	-6.00000	-3.5802	-3.5802	160.01	320.02	-160.01	-160.01	160.00902	320.01805	OK	-163.58923
-163.58923	OK	5.5372E+3	Fails	Fails	119.39428													
					33.14636	49.69507	94.56557	-6.00000	-66.249	-66.249	687.63	1375.3	-687.63	-687.63	687.63177	1375.26355	Fails	-753.88072
-753.88072	OK	1.2885E+3	Fails	Fails	119.93550													
					34.15079	48.88407	93.97297	-6.00000	-117.76	-117.76	14.752	29.503	-14.752	-14.752	14.75153	29.50306	OK	-132.51502
-132.51502	OK	6.0062E+4	OK	OK	134.13086													
					35.15523	48.07307	93.38037	-6.00000	-129.63	-129.63	88.442	176.88	-88.442	-88.442	88.44246	176.88492	OK	-218.06775
-218.06775	OK	1.0018E+4	Fails	Fails	-54.32357													
					36.15966	47.26208	92.78778	-6.00000	-191.92	-191.92	476.78	953.57	-476.78	-476.78	476.78352	953.56703	Fails	-668.70457
-668.70457	OK	1.8583E+3	Fails	Fails	-55.99634													
					37.16410	46.45108	92.19518	-6.00000	-247.00	-247.00	57.965	115.93	-57.965	-57.965	57.96545	115.93090	OK	-304.96487
-304.96487	OK	1.5285E+4	OK	OK	149.53237													
					38.16853	45.64008	91.60258	-6.00000	-250.43	-250.43	59.959	119.92	-59.959	-59.959	59.95907	119.91814	OK	-310.39122
-310.39122	OK	1.4777E+4	Fails	Fails	143.16904													
					39.17297	44.82908	91.00998	-6.00000	-246.60	-246.60	46.658	93.315	-46.658	-46.658	46.65765	93.31530	OK	-293.26235
-293.26235	OK	1.8989E+4	OK	OK	193.14828													
					40.17740	44.01809	90.41739	-6.00000	-237.31	-237.31	42.351	84.703	-42.351	-42.351	42.35149	84.70297	OK	-279.66462
-279.66462	OK	2.0920E+4	OK	OK	178.44780													
					41.18184	43.20709	89.82479	-6.00000	-223.36	-223.36	39.081	78.161	-39.081	-39.081	39.08057	78.16115	OK	-262.44349
-262.44349	OK	2.2671E+4	OK	OK	186.36269													
					42.18627	42.39609	89.23219	-6.00000	-205.42	-205.42	36.186	72.372	-36.186	-36.186	36.18618	72.37236	OK	-241.61023
-241.61023	OK	2.4484E+4	OK	OK	194.17920													
					43.19071	41.58509	88.63959	-6.00000	-184.55	-184.55	33.543	67.087	-33.543	-33.543	33.54345	67.08689	OK	-218.09802
-218.09802	OK	2.6414E+4	OK	OK	201.58413													
					44.19514	40.77409	88.04699	-6.00000	-161.81	-161.81	31.013	62.026	-31.013	-31.013	31.01299	62.02597	OK	-192.81927
-192.81927	OK	2.8569E+4	OK	OK	208.44658													
					45.19958	39.96310	87.45440	-6.00000	-138.13	-138.13	17.824	35.648	-17.824	-17.824	17.82385	35.64769	OK	-155.95833
-155.95833	OK	4.9709E+4	OK	OK	-65.89430													
6	TW Foul-2	1	1.00474	38.81931	85.38557	-6.00000	-44.897	-44.897	150.12	300.25	-150.12	-150.12	150.12329	300.24657	OK	-195.02035
-195.02035	OK	8.4397E+3	Fails	Fails	-13.11405													
					2.00947	39.29752	84.50193	-6.00000	-66.451	-66.451	37.903	75.805	-37.903	-37.903	37.90263	75.80526	OK	-104.35323
-104.35323	OK	3.3428E+4	OK	OK	251.73401													
					3.01421	39.77574	83.61830	-6.00000	-89.573	-89.573	47.410	94.820	-47.410	-47.410	47.40980	94.81961	OK	-136.98245
-136.98245	OK	2.6724E+4	OK	OK	231.66241													
					4.01894	40.25395	82.73467	-6.00000	-108.50	-108.50	74.121	148.24	-74.121	-74.121	74.12052	148.24104	OK	-182.61756
-182.61756	OK	1.7094E+4	OK	OK	241.50275													
					5.02368	40.73216	81.85104	-6.00000	-110.94	-110.94	163.69	327.38	-163.69	-163.69	163.68936	327.37872	OK	-274.63069
-274.63069	OK	7.7403E+3	Fails	Fails	255.28981													
					6.02842	41.21037	80.96740	-6.00000	-129.41	-129.41	55.764	111.53	-55.764	-55.764	55.76397	111.52794	OK	-185.17808
-185.17808	OK	2.2721E+4	OK	OK	210.73487													
					7.03315	41.68859	80.08377	-6.00000	-173.54	-173.54	56.962	113.92	-56.962	-56.962	56.96230	113.92460	OK	-230.50571
-230.50571	OK	2.2243E+4	OK	OK	197.40235													
					8.03789	42.16680	79.20014	-6.00000	-211.96	-211.96	61.649	123.30	-61.649	-61.649	61.64912	123.29823	OK	-273.60921
-273.60921	OK	2.0552E+4	OK	OK	190.08999													
					9.04262	42.64501	78.31650	-6.00000	-242.53	-242.53	66.841	133.68	-66.841	-66.841	66.84054	133.68108	OK	-309.36890
-309.36890	OK	1.8956E+4	OK	OK	182.64999													
					10.04736	43.12322	77.43287	-6.00000	-253.85	-253.85	30.712	61.423	-30.712	-30.712	30.71159	61.42318	OK	-284.56162
-284.56162	OK	4.1255E+4	OK	OK	153.87688													
					11.05210	43.60144	76.54924	-6.00000	-114.77	-114.77	730.74	1461.5	-730.74	-730.74	730.74470	1461.48940	Fails	-845.51728
-845.51728	OK	1.7338E+3	Fails	Fails	-45.33166													
					12.05683	44.07965	75.66560	-6.00000	22.492	22.492	4.2662	8.5325	-4.2662	-4.2662	26.75810	31.02434	OK	-4.26623
-4.26623	OK	2.9698E+5	OK	OK	-33.94885													
					13.06157	44.55786	74.78197	-6.00000	21.529	21.529	119.39	238.79	-119.39	-119.39	140.92382	260.31873	OK	-119.39492
-119.39492	OK	1.0612E+4	Fails	Fails	120.36629													
					14.06630	45.03607	73.89834	-6.00000	10.384	10.384	1260.7	2521.4	-1260.7	-1260.7	1271.10561	2531.82701	Fails	-1260.72140
-1260.72140	Fails	1.0050E+3	Fails	Fails	121.28124													
					15.07104	45.51429	73.01471	-6.00000	0.47352	0.47352	2.3423	4.6845	-2.3423	-2.3423	2.81579	5.15806	OK	-2.34227
-2.34227	OK	5.4093E+5	OK	OK	-0.15198													
					16.07578	45.99250	72.13107	-6.00000	0.47366	0.47366	2.5326	5.0652	-2.5326	-2.5326	3.00625	5.53885	OK	-2.53259
-2.53259	OK	5.0028E+5	OK	OK	-0.14522													
					17.08051	46.47071	71.24744	-6.00000	0.47381	0.47381	2.6457	5.2915	-2.6457	-2.6457	3.11956	5.76531	OK	-2.64575
-2.64575	OK	4.7888E+5	OK	OK	-0.14347													
					18.08525	46.94892	70.36381	-6.00000	0.47396	0.47396	2.6797	5.3595	-2.6797	-2.6797	3.15370	5.83343	OK	-2.67973
-2.67973	OK	4.7281E+5	OK	OK	-0.14605													
					19.08998	47.42714	69.48017	-6.00000	0.47413	0.47413	2.6337	5.2673	-2.6337	-2.6337	3.10778	5.74144	OK	-2.63365
-2.63365	OK	4.8108E+5	OK	OK	-0.15308													
					20.09472	47.90535	68.59654	-6.00000	0.47430	0.47430	2.5076	5.0152	-2.5076	-2.5076	2.98190	5.48950	OK	-2.50760
-2.50760	OK	5.0526E+5	OK	OK	-0.16548													
					21.09945	48.38356	67.71291	-6.00000	0.47448	0.47448	2.3034	4.6068	-2.3034	-2.3034	2.77787	5.08126	OK	-2.30339
-2.30339	OK	5.5006E+5	OK	OK	-0.18527													
					22.10419	48.86177	66.82927	-6.00000	0.47466	0.47466	2.0260	4.0519	-2.0260	-2.0260	2.50061	4.52657	OK	-2.02595
-2.02595	OK	6.2538E+5	OK	OK	-0.21647													
					23.10893	49.33998	65.94564	-6.00000	0.47484	0.47484	1.6849	3.3698	-1.6849	-1.6849	2.15971	3.84459	OK	-1.68488
-1.68488	OK	7.5198E+5	OK	OK	-0.26729													
					24.11366	49.81820	65.06201	-6.00000	0.47501	0.47501	1.2953	2.5906	-1.2953	-1.2953	1.77033	3.06565	OK	-1.29532
-1.29532	OK	9.7814E+5	OK	OK	-0.35678													
					25.11840	50.29641	64.17838	-6.00000	0.47519	0.47519	0.87777	1.7555	-0.87777	-0.87777	1.35296	2.23073	OK	-0.87777
-0.87777	OK	1.4434E+6	OK	OK	-0.53994													
					26.12313	50.77462	63.29474	-6.00000	0.47536	0.47536	0.45628	0.91256	-0.45628	-0.45628	0.93164	1.38792	OK	-0.45628
-0.45628	OK	2.7768E+6	OK	OK	-1.06462													
					27.12787	51.25283	62.41111	-6.00000	0.47552	0.47552	0.055957	0.11191	-0.055957	-0.055957	0.53147	0.58743	OK	-0.05596

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
-0.05596	OK	2.2642E+7	OK	OK	-8.92738													
					28.13261	51.73105	61.52748	-6.00000	0.47567	0.47567	0.30342	0.60684	-0.30342	-0.30342	0.77910	1.08252	OK	-0.30342
-0.30342	OK	4.1757E+6	OK	OK	181.67885													
					29.13734	52.20926	60.64384	-6.00000	0.47583	0.47583	0.60348	1.2070	-0.60348	-0.60348	1.07931	1.68279	OK	-0.60348
-0.60348	OK	2.0995E+6	OK	OK	180.86356													
					30.14208	52.68747	59.76021	-6.00000	0.47598	0.47598	0.83617	1.6723	-0.83617	-0.83617	1.31215	2.14833	OK	-0.83617
-0.83617	OK	1.5152E+6	OK	OK	180.63734													
					31.14681	53.16568	58.87658	-6.00000	0.47613	0.47613	0.99959	1.9992	-0.99959	-0.99959	1.47572	2.47531	OK	-0.99959
-0.99959	OK	1.2675E+6	OK	OK	180.54494													
					32.15155	53.64390	57.99294	-6.00000	0.47628	0.47628	1.0977	2.1954	-1.0977	-1.0977	1.57400	2.67172	OK	-1.09772
-1.09772	OK	1.1542E+6	OK	OK	180.50697													
					33.15629	54.12211	57.10931	-6.00000	0.47643	0.47643	1.1386	2.2772	-1.1386	-1.1386	1.61503	2.75363	OK	-1.13860
-1.13860	OK	1.1128E+6	OK	OK	180.49913													
					34.16102	54.60032	56.22568	-6.00000	0.47659	0.47659	1.1324	2.2647	-1.1324	-1.1324	1.60896	2.74132	OK	-1.13236
-1.13236	OK	1.1189E+6	OK	OK	180.51230													
					35.16576	55.07853	55.34205	-6.00000	0.47676	0.47676	1.0897	2.1794	-1.0897	-1.0897	1.56648	2.65620	OK	-1.08972
-1.08972	OK	1.1627E+6	OK	OK	180.54317													
					36.17049	55.55675	54.45841	-6.00000	0.47693	0.47693	1.0208	2.0417	-1.0208	-1.0208	1.49776	2.51859	OK	-1.02083
-1.02083	OK	1.2411E+6	OK	OK	180.59138													
					37.17523	56.03496	53.57478	-6.00000	0.47710	0.47710	0.93467	1.8693	-0.93467	-0.93467	1.41177	2.34645	OK	-0.93467
-0.93467	OK	1.3556E+6	OK	OK	180.65852													
					38.17997	56.51317	52.69115	-6.00000	0.47728	0.47728	0.83880	1.6776	-0.83880	-0.83880	1.31608	2.15487	OK	-0.83880
-0.83880	OK	1.5105E+6	OK	OK	180.74786													
					39.18470	56.99138	51.80751	-6.00000	0.47747	0.47747	0.73931	1.4786	-0.73931	-0.73931	1.21678	1.95609	OK	-0.73931
-0.73931	OK	1.7138E+6	OK	OK	180.86446													
					40.18944	57.46959	50.92388	-6.00000	0.47766	0.47766	0.64100	1.2820	-0.64100	-0.64100	1.11866	1.75967	OK	-0.64100
-0.64100	OK	1.9766E+6	OK	OK	181.01545													
					41.19417	57.94781	50.04025	-6.00000	0.47786	0.47786	0.54755	1.0951	-0.54755	-0.54755	1.02541	1.57296	OK	-0.54755
-0.54755	OK	2.3140E+6	OK	OK	181.21033													
					42.19891	58.42602	49.15661	-6.00000	0.47806	0.47806	0.46169	0.92337	-0.46169	-0.46169	0.93975	1.40143	OK	-0.46169
-0.46169	OK	2.7443E+6	OK	OK	181.46103													
					43.20365	58.90423	48.27298	-6.00000	0.47827	0.47827	0.38540	0.77079	-0.38540	-0.38540	0.86367	1.24906	OK	-0.38540
-0.38540	OK	3.2875E+6	OK	OK	181.78095													
					44.20838	59.38244	47.38935	-6.00000	0.47849	0.47849	0.32003	0.64006	-0.32003	-0.32003	0.79852	1.11855	OK	-0.32003
-0.32003	OK	3.9590E+6	OK	OK	182.18173													
					45.21312	59.86066	46.50572	-6.00000	0.47871	0.47871	0.26641	0.53282	-0.26641	-0.26641	0.74512	1.01153	OK	-0.26641
-0.26641	OK	4.7558E+6	OK	OK	182.66544													
					46.21785	60.33887	45.62208	-6.00000	0.47893	0.47893	0.22487	0.44974	-0.22487	-0.22487	0.70380	0.92867	OK	-0.22487
-0.22487	OK	5.6343E+6	OK	OK	183.21081													
					47.22259	60.81708	44.73845	-6.00000	0.47916	0.47916	0.19530	0.39059	-0.19530	-0.19530	0.67445	0.86975	OK	-0.19530
-0.19530	OK	6.4876E+6	OK	OK	183.75824													
					48.22733	61.29529	43.85482	-6.00000	0.47939	0.47939	0.17713	0.35426	-0.17713	-0.17713	0.65652	0.83365	OK	-0.17713
-0.17713	OK	7.1529E+6	OK	OK	184.21102													
					49.23206	61.77351	42.97118	-6.00000	0.47962	0.47962	0.16943	0.33886	-0.16943	-0.16943	0.64905	0.81848	OK	-0.16943
-0.16943	OK	7.4781E+6	OK	OK	184.47271													
					50.23680	62.25172	42.08755	-6.00000	0.47986	0.47986	0.17086	0.34173	-0.17086	-0.17086	0.65073	0.82159	OK	-0.17086
-0.17086	OK	7.4153E+6	OK	OK	184.50430													
					51.24153	62.72993	41.20392	-6.00000	0.48011	0.48011	0.17982	0.35964	-0.17982	-0.17982	0.65992	0.83974	OK	-0.17982
-0.17982	OK	7.0460E+6	OK	OK	184.34534													
					52.24627	63.20814	40.32028	-6.00000	0.48035	0.48035	0.19445	0.38890	-0.19445	-0.19445	0.67480	0.86926	OK	-0.19445
-0.19445	OK	6.5158E+6	OK	OK	184.07858													
					53.25101	63.68636	39.43665	-6.00000	0.48060	0.48060	0.21280	0.42561	-0.21280	-0.21280	0.69341	0.90621	OK	-0.21280
-0.21280	OK	5.9539E+6	OK	OK	183.78188													
					54.25574	64.16457	38.55302	-6.00000	0.48086	0.48086	0.23291	0.46582	-0.23291	-0.23291	0.71377	0.94668	OK	-0.23291
-0.23291	OK	5.4399E+6	OK	OK	183.50571													
					55.26048	64.64278	37.66939	-6.00000	0.48111	0.48111	0.25293	0.50586	-0.25293	-0.25293	0.73404	0.98697	OK	-0.25293
-0.25293	OK	5.0093E+6	OK	OK	183.27463													
					56.26521	65.12099	36.78575	-6.00000	0.48137	0.48137	0.27124	0.54249	-0.27124	-0.27124	0.75262	1.02386	OK	-0.27124
-0.27124	OK	4.6711E+6	OK	OK	183.09687													
					57.26995	65.59921	35.90212	-6.00000	0.48164	0.48164	0.28654	0.57308	-0.28654	-0.28654	0.76818	1.05472	OK	-0.28654
-0.28654	OK	4.4217E+6	OK	OK	182.97261													
					58.27469	66.07742	35.01849	-6.00000	0.48191	0.48191	0.29787	0.59574	-0.29787	-0.29787	0.77978	1.07765	OK	-0.29787
-0.29787	OK	4.2535E+6	OK	OK	182.89910													
					59.27942	66.55563	34.13485	-6.00000	0.48218	0.48218	0.30465	0.60930	-0.30465	-0.30465	0.78682	1.09147	OK	-0.30465
-0.30465	OK	4.1589E+6	OK	OK	182.87333													
					60.28416	67.03384	33.25122	-6.00000	0.48245	0.48245	0.30664	0.61328	-0.30664	-0.30664	0.78909	1.09573	OK	-0.30664
-0.30664	OK	4.1319E+6	OK	OK	182.89317													
					61.28889	67.51205	32.36759	-6.00000	0.48273	0.48273	0.30392	0.60784	-0.30392	-0.30392	0.78665	1.09057	OK	-0.30392
-0.30392	OK	4.1689E+6	OK	OK	182.95794													
					62.29363	67.99027	31.48395	-6.00000	0.48301	0.48301	0.29681	0.59362	-0.29681	-0.29681	0.77982	1.07663	OK	-0.29681
-0.29681	OK	4.2687E+6	OK	OK	183.06865													
					63.29836	68.46848	30.60032	-6.00000	0.48330	0.48330	0.28581	0.57163	-0.28581	-0.28581	0.76911	1.05493	OK	-0.28581
-0.28581	OK	4.4330E+6	OK	OK	183.22817													
					64.30310	68.94669	29.71669	-6.00000	0.48359	0.48359	0.27155	0.54309	-0.27155	-0.27155	0.75514	1.02669	OK	-0.27155
-0.27155	OK	4.6659E+6	OK	OK	183.44148													
					65.30784	69.42490	28.83306	-6.00000	0.48389	0.48389	0.25469	0.50937	-0.25469	-0.25469	0.73857	0.99326	OK	-0.25469
-0.25469	OK	4.9748E+6	OK	OK	183.71604													
					66.31257	69.90312	27.94942	-6.00000	0.48418	0.48418	0.23591	0.47182	-0.23591	-0.23591	0.72010	0.95601	OK	-0.23591
-0.23591	OK	5.3707E+6	OK	OK	184.06237													
					67.31731	70.38133	27.06579	-6.00000	0.48449	0.48449	0.21587	0.43175	-0.21587	-0.21587	0.70036	0.91624	OK	-0.21587
-0.21587	OK	5.8691E+6	OK	OK	184.49494													
					68.32204	70.85954	26.18216	-6.00000	-3.2900	-3.2900	491.79	983.58	-491.79	-491.79	491.79163	983.58326	Fails	-495.08163
-495.08163	OK	2.5763E+3	Fails	Fails	121.87441													
					69.32677	71.33775	25.29852	-6.00000	-14.468	-14.468	994.72	1989.4	-994.72	-994.72	994.72243	1989.44487	Fails	-1009.19083
-1009.19083	Fails	1.2737E+3	Fails	Fails	121.87266													
					70.33152	71.81597	24.41489	-6.00000	-21.775	-21.775	3.0627	6.1255	-3.0627	-3.0627	3.06275	6.12550	OK	-24.83757
-24.83757	OK	4.1368E+5	OK	OK	128.96855													
					71.33625	72.29418	23.53126	-6.00000	-88.538	-88.538	268.67	537.34	-268.67	-268.67	268.67151	537.34301	Fails	-357.20963
-357.20963	OK	4.7158E+3	Fails	Fails	-39.08745													
					72.34099	72.77239	22.64762	-6.00000	-279.45	-279.45	434.38	868.76	-434.38	-434.38	434.38137	868.76275	Fails	-713.83374
-713.83374	OK	2.9168E+3	Fails	Fails	-37.52814													
					73.34572	73.25060	21.76399	-6.00000	-390.35	-390.35	96.914	193.83	-96.914	-96.914	96.91375	193.82750	OK	-487.26472
-487.26472	OK	1.3073E+4	Fails	Fails	142.23575													
					74.35046	73.72882	20.88036	-6.00000	-353.58	-353.58	72.284	144.57	-72.284	-72.284	72.28386	144.56772	OK	-425.85965
-425.85965	OK	1.7528E+4	OK	OK	163.46802													
					75.35520	74.20703	19.99673	-6.00000	-299.03	-299.03	62.908	125.82	-62.908	-62.908	62.90796	125.81591	OK	-361.94249
-361.94249	OK	2.0141E+4	OK	OK	191.11832													
					76.35993	74.68524	19.11309	-6.00000	-232.49	-232.49	65.219	130.44	-65.219	-65.219	65.21870	130.43741	OK	-297.71060
-297.71060	OK	1.9427E+4	OK	OK	213.80756													
					77.36467	75.16345	18.22946	-6.00000	-164.42	-164.42	86.507	173.01	-86.507	-86.507	86.50723	173.01446	OK	-250.92651
-250.92651	OK	1.4646E+4	Fails	Fails	237.19597													
					78.36940	75.64166	17.34583	-6.00000	-110.88	-110.88	117.75	235.49	-117.75	-117.75	117.74665	235.49330	OK	-228.62435
-228.62435	OK	1.0760E+4	Fails	Fails	250.21243													
					79.37414	76.11988	16.46219	-6.00000	-59.950	-59.950	66.693	133.39	-66.693	-66.693	66.69334	133.38668	OK	-126.64312
-126.64312	OK	1.8997E+4	OK	OK	240.11063													
					80.37888	76.59809	15.57856	-6.00000	-52.235	-52.235	189.83	379.65	-189.83	-189.83	189.82662	379.65324	OK	-242.06140
-242.06140	OK	6.6745E+3	Fails	Fails	263.06667													
					81.38361	77.07630	14.69493	-6.00000	-108.23	-108.23	193.28	386.56	-193.28	-193.28	193.28124	386.56248	OK	-301.50799
-301.50799	OK	6.5552E+3	Fails	Fails	-62.77993													
					82.38835	77.55451	13.81129	-6.00000	-122.65	-122.65	48.662	97.324	-48.662	-48.662	48.66180	97.32359	OK	-171.31002
-171.31002	OK	2.6037E+4	OK	OK	206.10939													
					83.39308	78.03273	12.92766	-6.00000	-85.998	-85.998	104.83	209.66	-104.83	-104.83	104.83238	209.66475	OK	-190.83083
-190.83083	OK	1.2086E+4	Fails	Fails	-10.68186													
					84.39782	78.51094	12.04403	-6.00000	-53.283	-53.283	38.082	76.164	-38.082	-38.082	38.08211	76.16423	OK	-91.36555
-91.36555	OK	3.3270E+4	OK	OK	-27.31909													
					85.40256	78.98915	11.16040	-6.00000	-24.199	-24.199	55.544	111.09	-55.544	-55.544	55.54373	111.08746	OK	-79.74318
-79.74318	OK	2.2811E+4	OK	OK	-16.34973													
					86.40729	79.46736	10.27676	-6.00000	1.5709	1.5709	185.27	370.54	-185.27	-185.27	186.83962	372.10836	OK	-185.26875
-185.26875	OK	6.8387E+3	Fails	Fails	-4.31671													
					87.41203	79.94558	9.39313	-6.00000	24.408	24.408	12.424	24.849	-12.424	-12.424	36.83254	49.25685	OK	-12.42431
-12.42431	OK	1.0198E+5	OK	OK	-88.61334													
					88.41676	80.42379	8.50950	-6.00000	44.656	44.656	12.002	24.004	-12.002	-12.002	56.65849	68.66056	OK	-12.00207
-12.00207	OK	1.0557E+5	OK	OK	-67.16419													
					89.42150	80.90200	7.62586	-6.00000	62.617	62.617	13.038	26.077	-13.038	-13.038	75.65543	88.69380	OK	-13.03837
-13.03837	OK	9.7175E+4	OK	OK	-49.11908													
					90.42624	81.38021	6.74223	-6.00000	78.575	78.575	14.759	29.518	-14.759	-14.759	93.33423	108.09334	OK	-14.75911
-14.75911	OK	8.5845E+4	OK	OK	-36.58735													
					91.43097	81.85843	5.85860	-6.00000	92.783	92.783	16.538	33.075	-16.538	-16.538	109.32069	125.85831	OK	-16.53762
-16.53762	OK	7.6613E+4	OK	OK	-28.39425													
					92.43571	82.33664	4.97496	-6.00000	105.46	105.46	18.010	36.020	-18.010	-18.010	123.47234	141.48249	OK	-18.01015
-18.01015	OK	7.0349E+4	OK	OK	-23.02580													
					93.44044	82.81485	4.09133	-6.00000	116.81	116.81	18.977	37.953	-18.977	-18.977	135.78178	154.75843	OK	-18.97665
-18.97665	OK	6.6766E+4	OK	OK	-19.46753													
					94.44518	83.29306	3.20770	-6.00000	126.98	126.98	19.322	38.644	-19.322	-19.322	146.30063	165.62242	OK	-19.32179
-19.32179	OK	6.5574E+4	OK	OK	-17.13009													
					95.44992	83.77128	2.32407	-6.00000	136.13	136.13	18.975	37.949	-18.975	-18.975	155.10233	174.07693	OK	-18.97460
-18.97460	OK	6.6773E+4	OK	OK	-15.69655													

Summary: There is failure at one(or many) location(s). e.g. Stage 0, Specific Utility 6, location (79.467364|10.276763|-6.000000)
Note: Tensile strains are +ve, compressive strains are -ve.
Note: The peak flexural tensile strain orientation angle is measured with respect to the global z-axis by looking at the end point of the utility from the start point. Anti-clockwise is

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
positive.																		

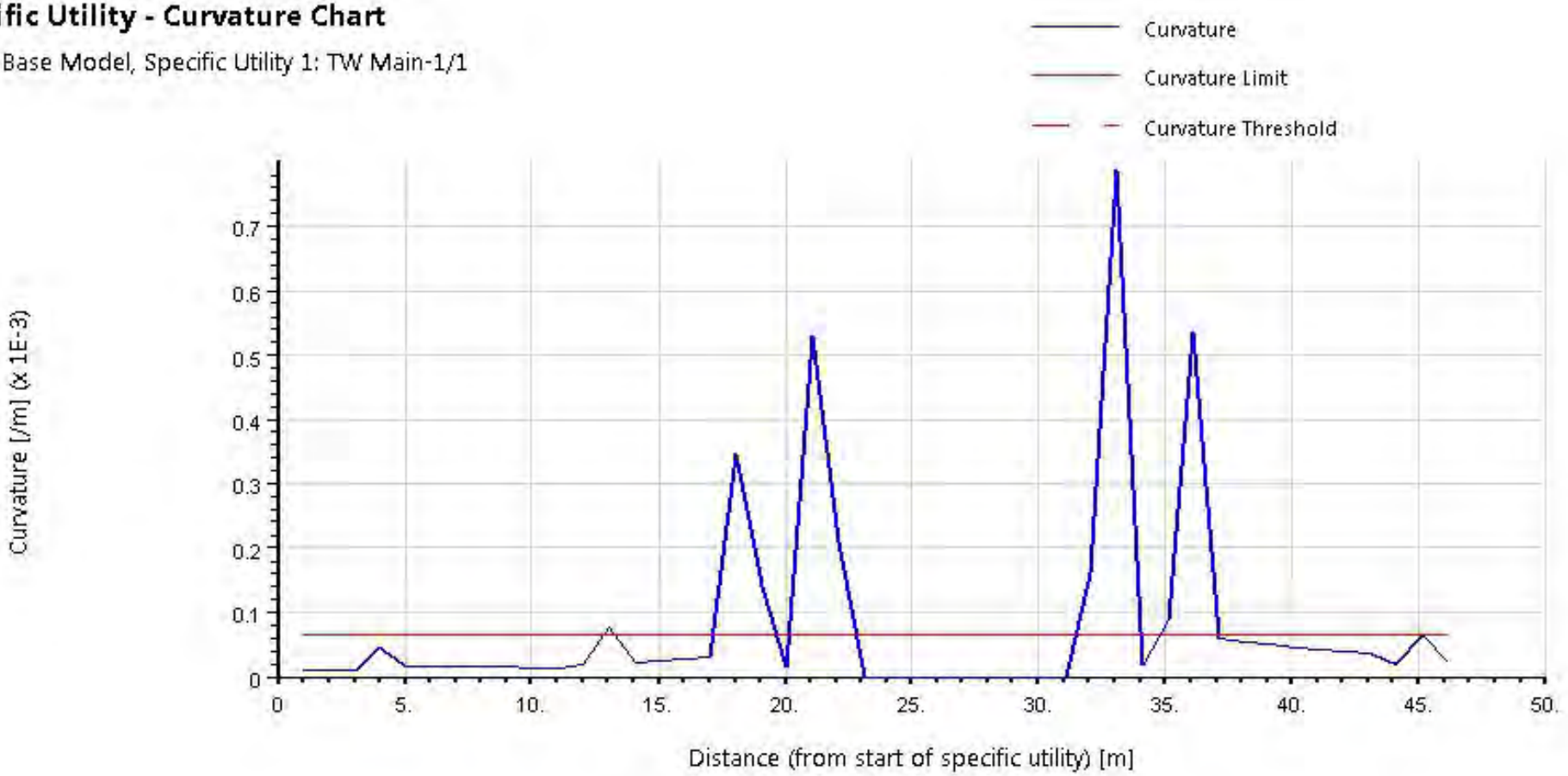
Specific Utility Damage Results - Maximum Values

Stage: Compn.: Ref.	Stage: Name Check: Compn.	Specific Utility: Ref.	Specific Utility: Name	Jointed	Max. Pullout: Factored: Location [m]	Max. Pullout: Factored: Value [mm]	Max. Rotation: Factored: Location [m]	Max. Rotation: Factored: Value [Deg]	Max. Strain: Tension: Factored: Location [m]	Max. Strain: Tension: Factored: Value [με]	Max. Strain: Compn.: Factored: Location [m]	Max. Strain: Compn.: Factored: Value [με]	Min. Rad. of Curv.: Location [m]	Min. Rad. of Curv.: Value [m]	Max. Disp.: Vert.: Location [m]	Max.Disp.: Vert. : Value [mm]	Max. Disp: Horiz. x: Location [m]	Max. Disp: Horiz. x: Value [mm]	Max. Disp: Horiz. y: Location [m]	Max. Disp: Horiz. y: Value [mm]
0	Base Model	1	TW Main-1	Yes	21.059	0.24159	33.093	0.05021	33.09347	74.84603	33.09347	-85.90614	33.093	1.2693E+3*	33.093	5.5217	48.135	-1.4901	32.091	7.5133
		2	TW Main-2	Yes	15.045	0.16711	15.045	0.04732	14.04162	60.52776	11.03270	-63.03373	14.042	1.6112E+3*	34.101	7.0745	0.0	1.5703	34.101	8.5518
		3	TW Main-3	Yes	4.9845	0.015253	4.9845	0.00025	6.97824	2.13254	6.97824	-1.09021	6.9782	8.7139E+4	9.9680	7.7173	9.9680	0.74199	9.9680	9.1469
		4	TW Main-4	Yes	49.791	0.32361	24.896	0.05367	25.89152	56.12617	28.87900	-75.84170	25.892	1.6926E+3*	24.896	7.9926	42.821	-2.0354	24.896	9.6092
		5	TW Foul-1	Yes	33.146	1.3814	33.146	0.04466	33.14636	1375.26355*	33.14636	-753.88072	33.146	1.2885E+3*	33.146	5.5394	47.208	-1.4513	32.142	7.5831
		6	TW Foul-2	Yes	14.066	2.5539	14.066	0.05728	14.06630	2531.82701*	14.06630	-1260.72140*	14.066	1.0050E+3*	68.322	8.6063	86.407	-2.2484	68.322	10.406

Note: * symbol indicates that the value has exceeded one of (or both) the limiting criteria

Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1

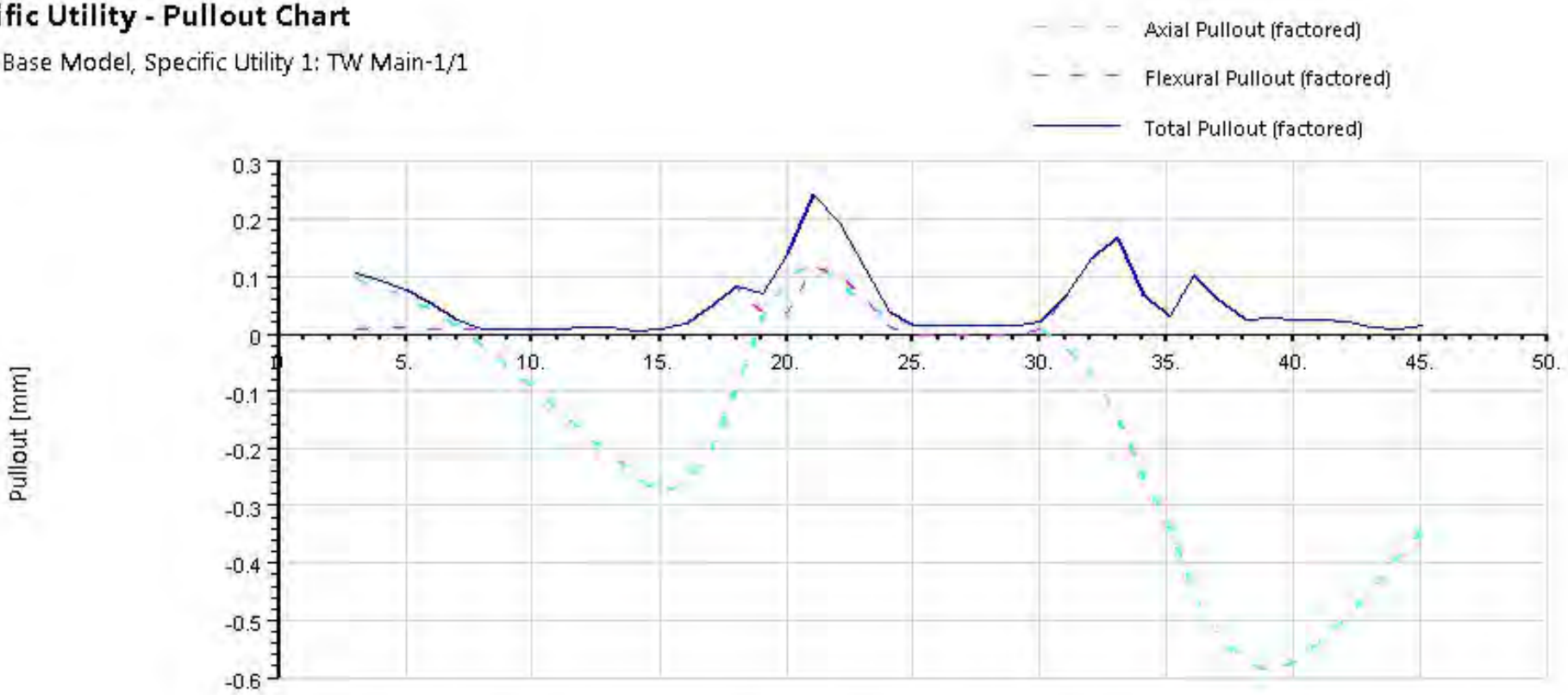


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1

Specific Utility - Pullout Chart

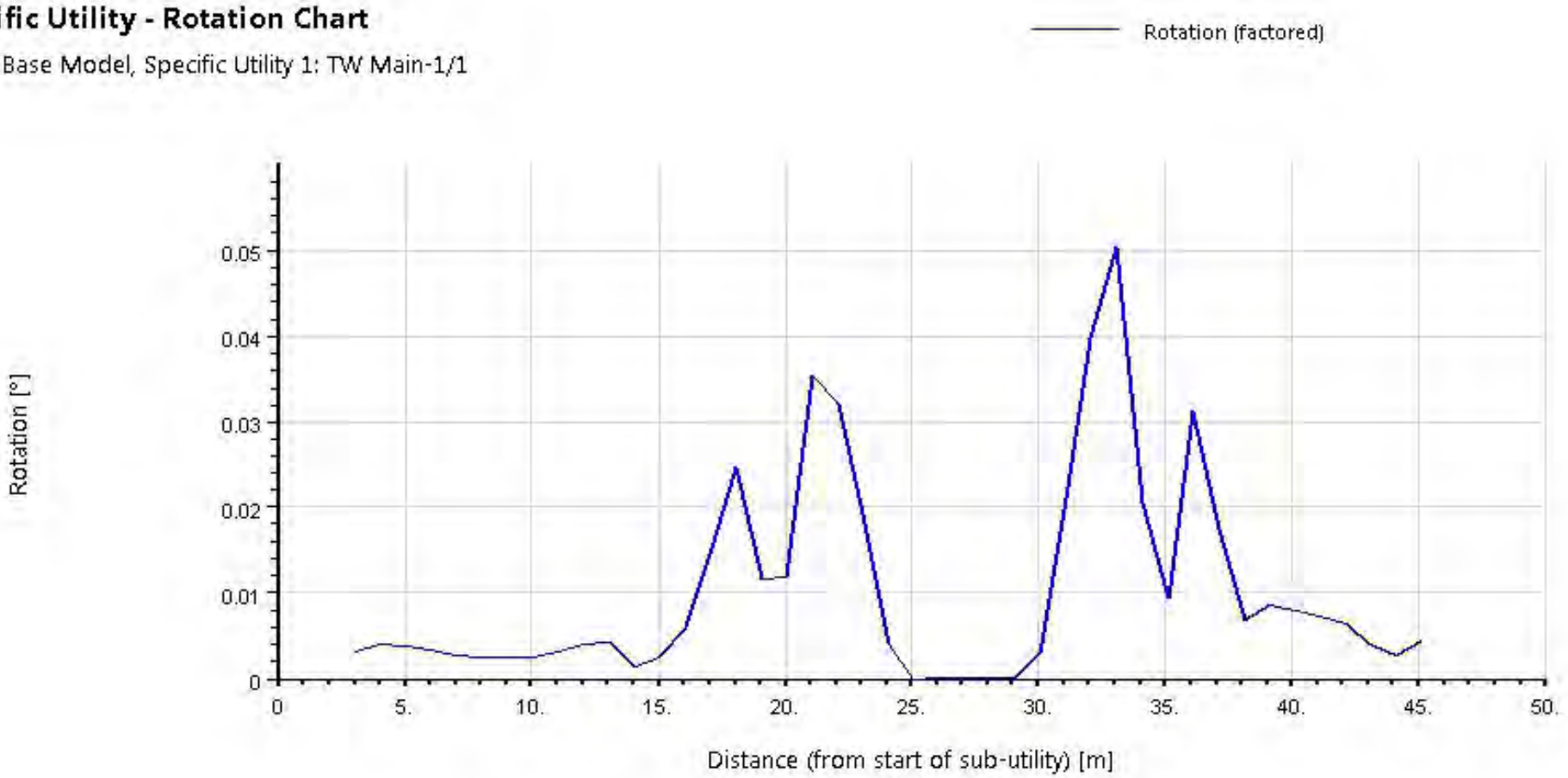
Stage: Base Model, Specific Utility 1: TW Main-1/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

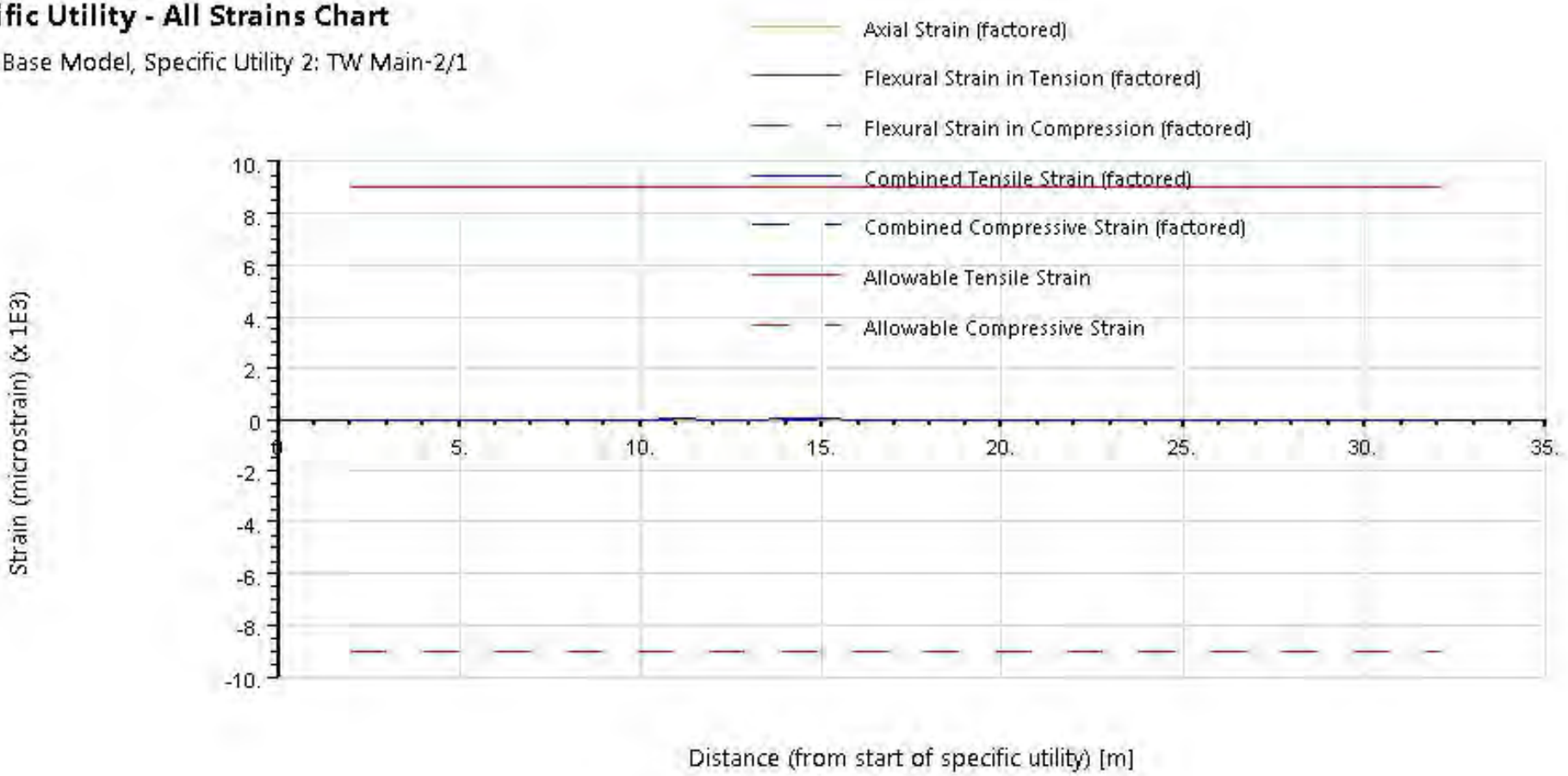
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



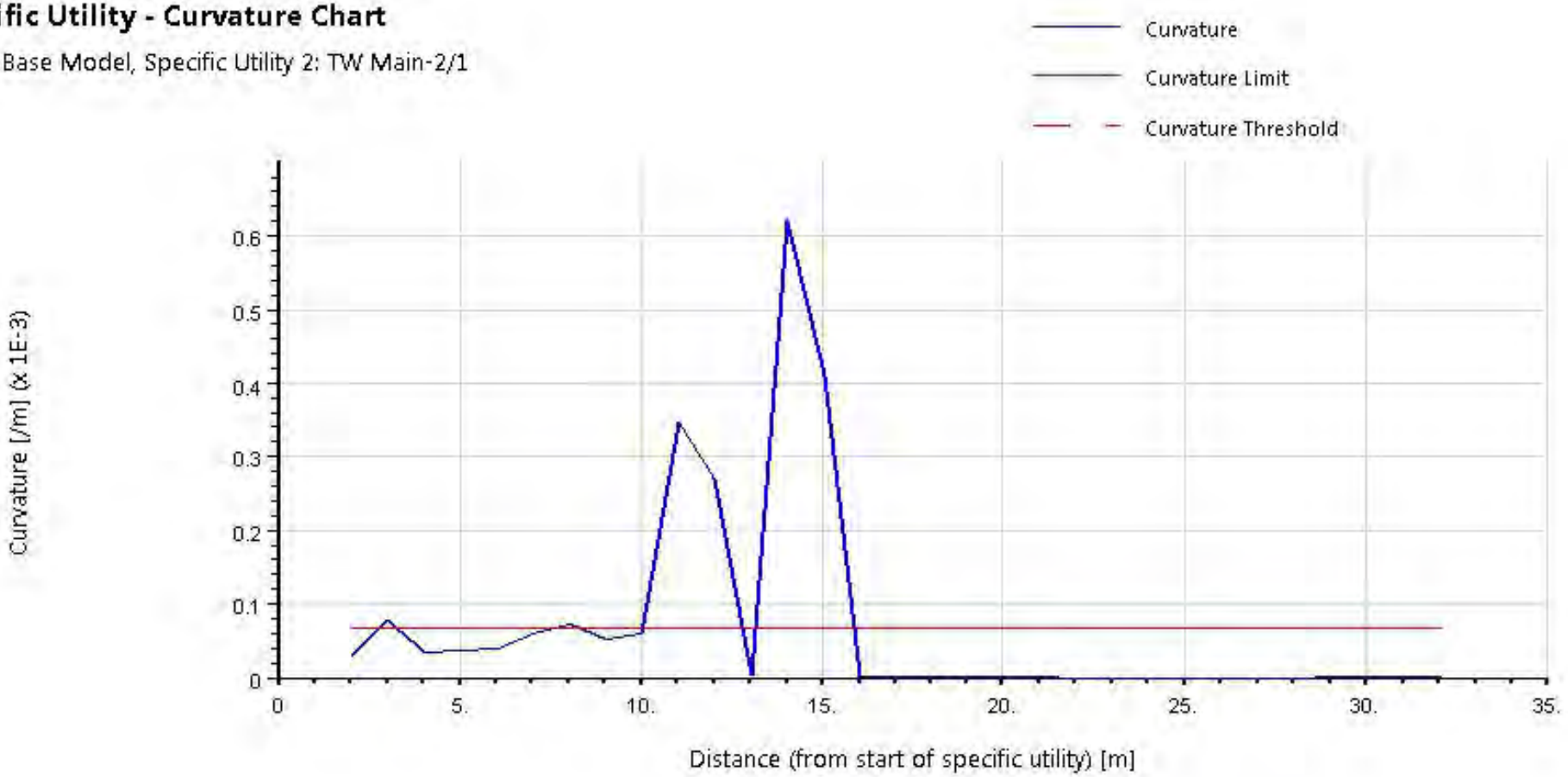
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



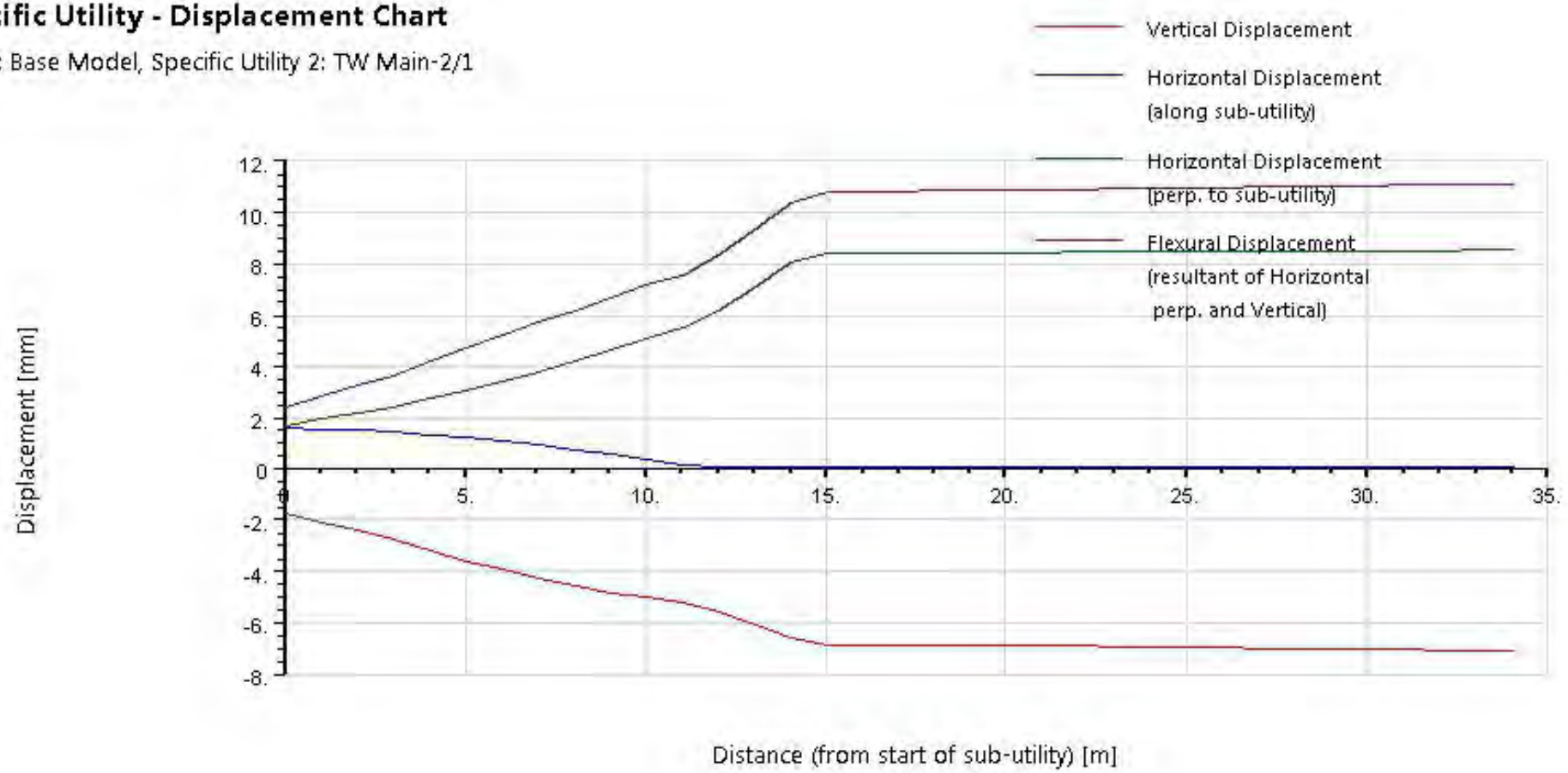
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



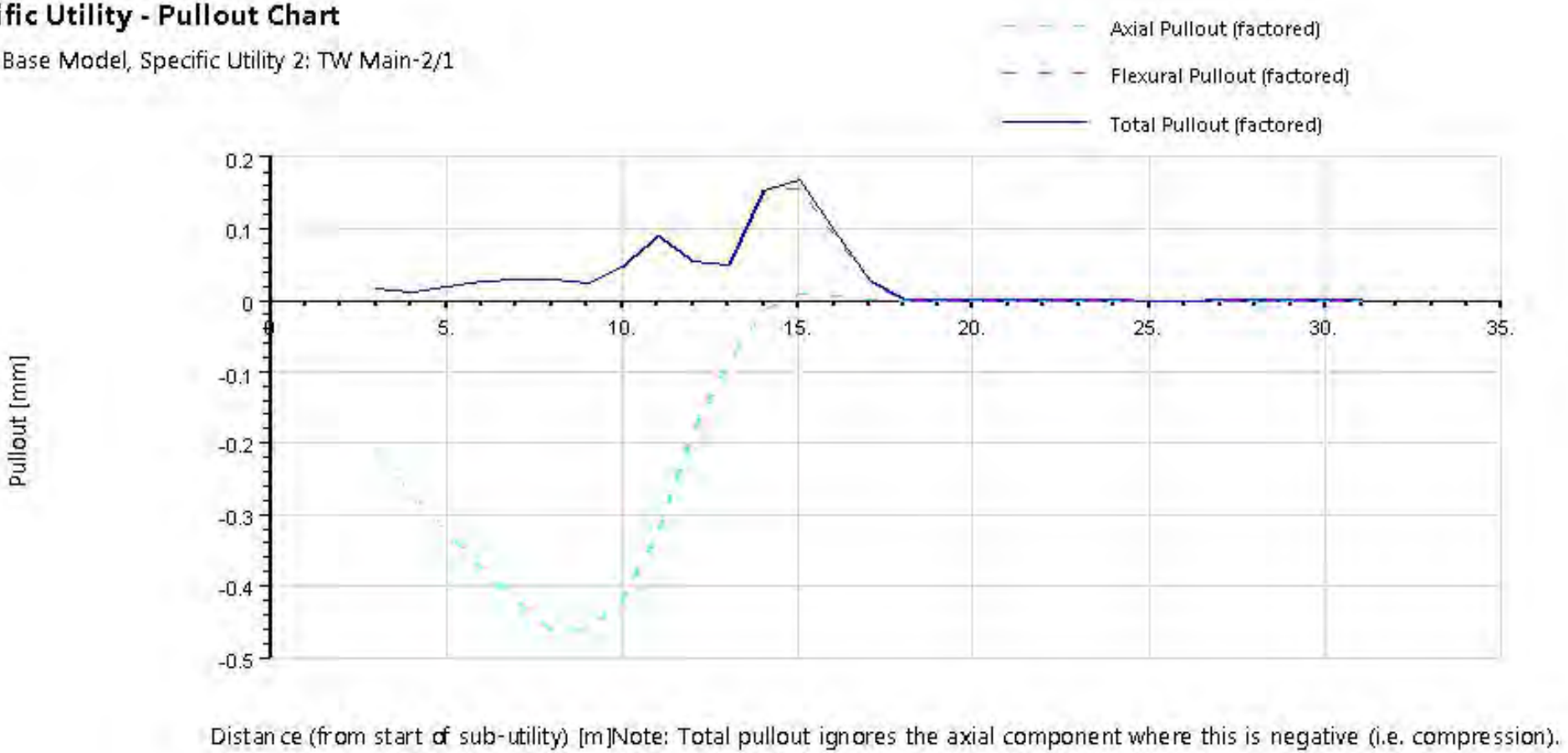
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



Specific Utility - Pullout Chart

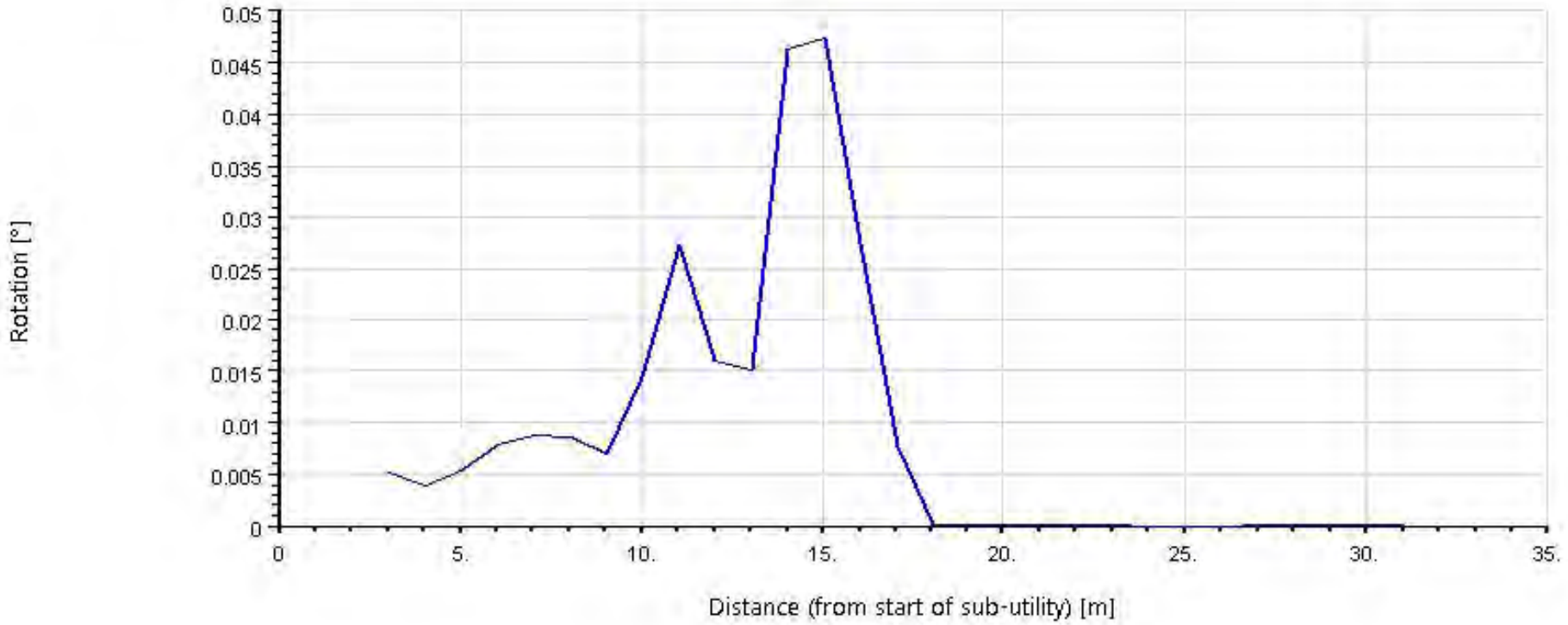
Stage: Base Model, Specific Utility 2: TW Main-2/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

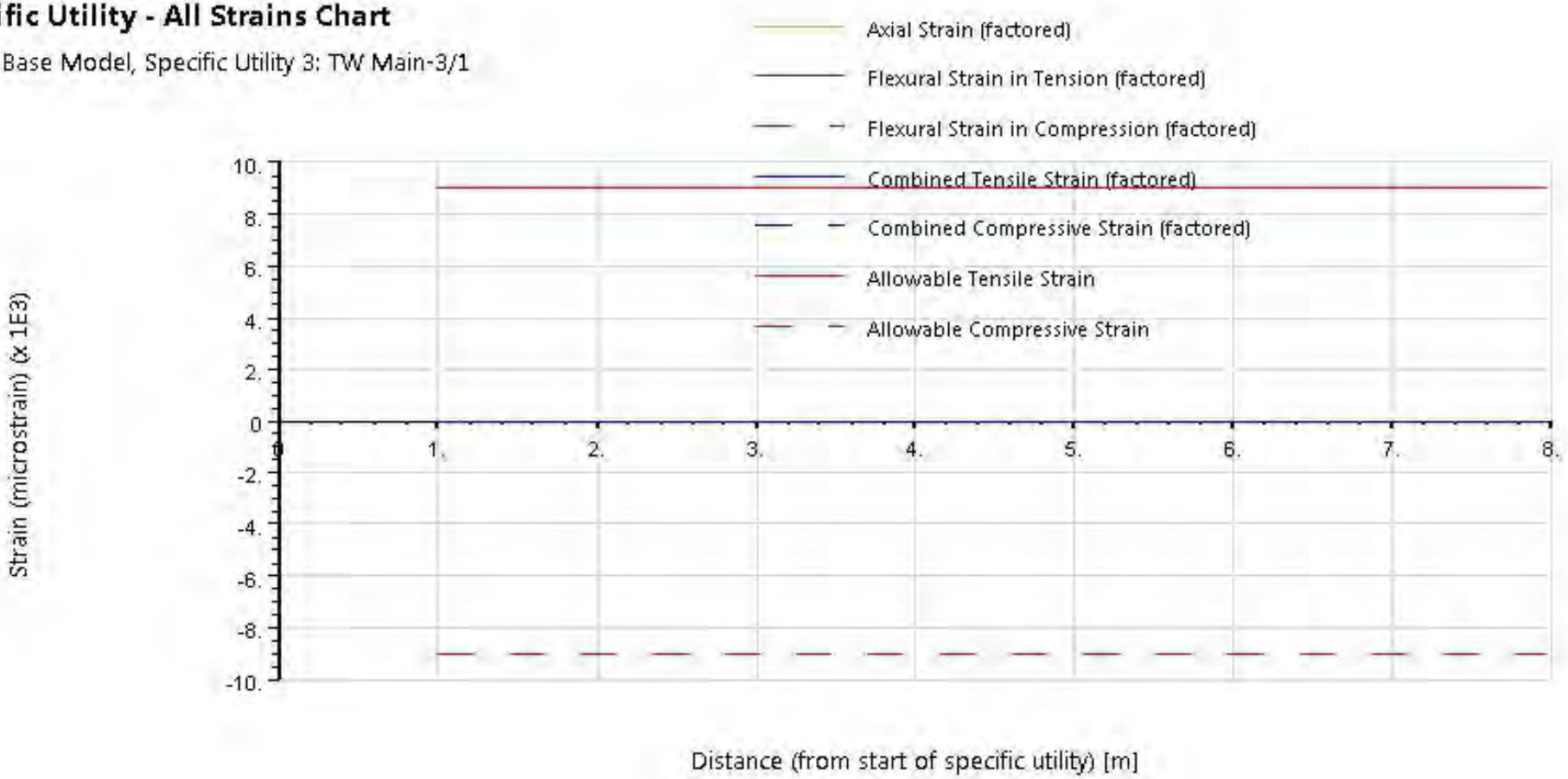
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



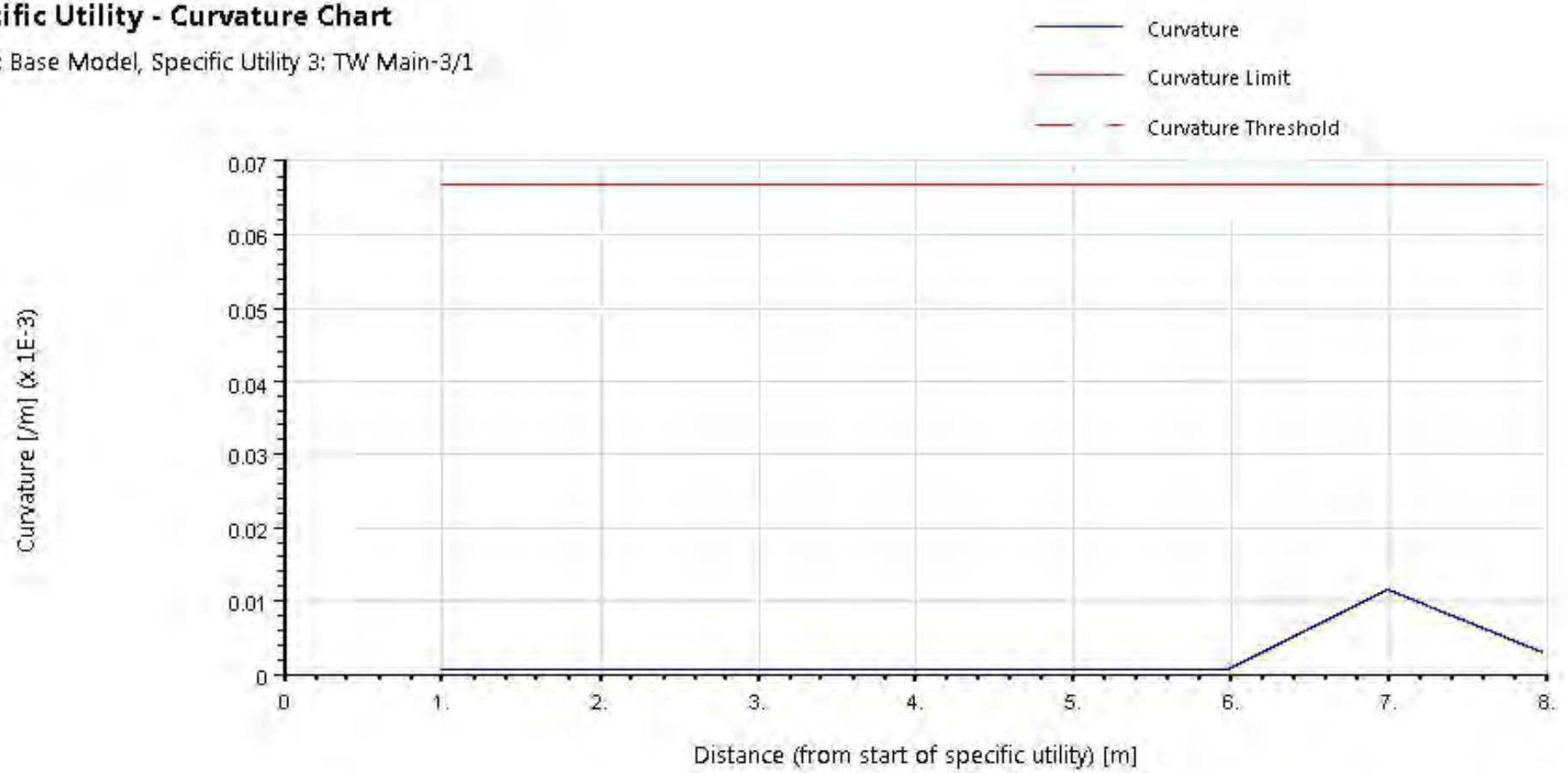
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



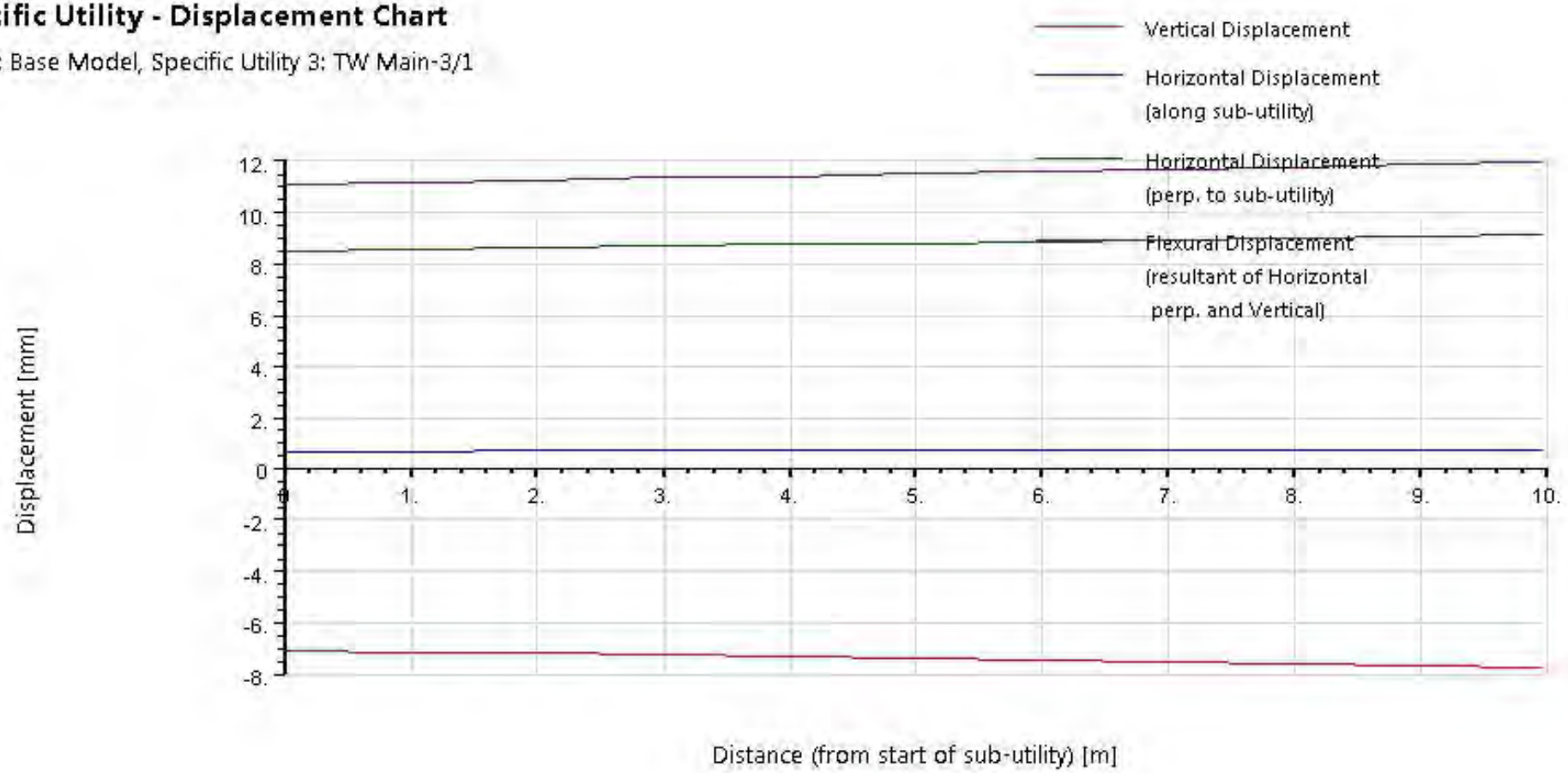
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



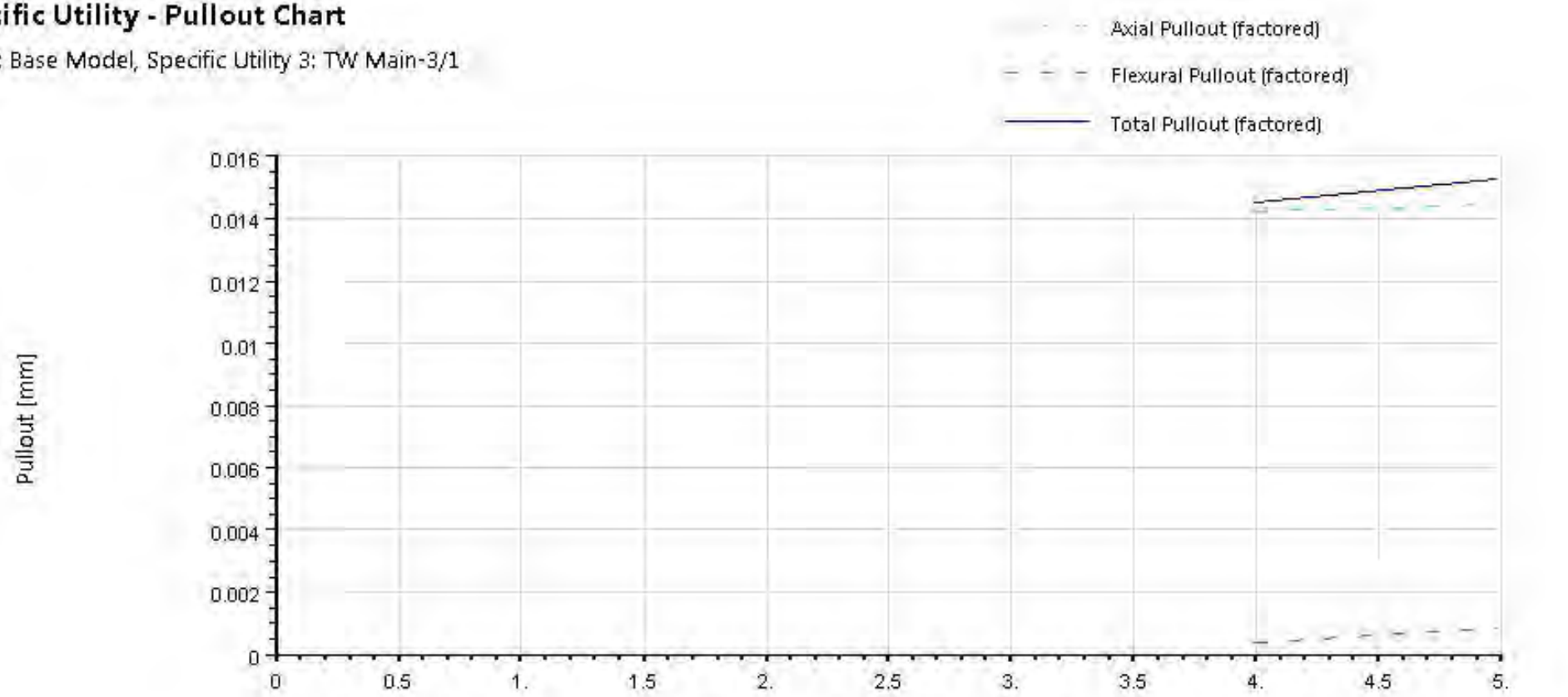
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



Specific Utility - Pullout Chart

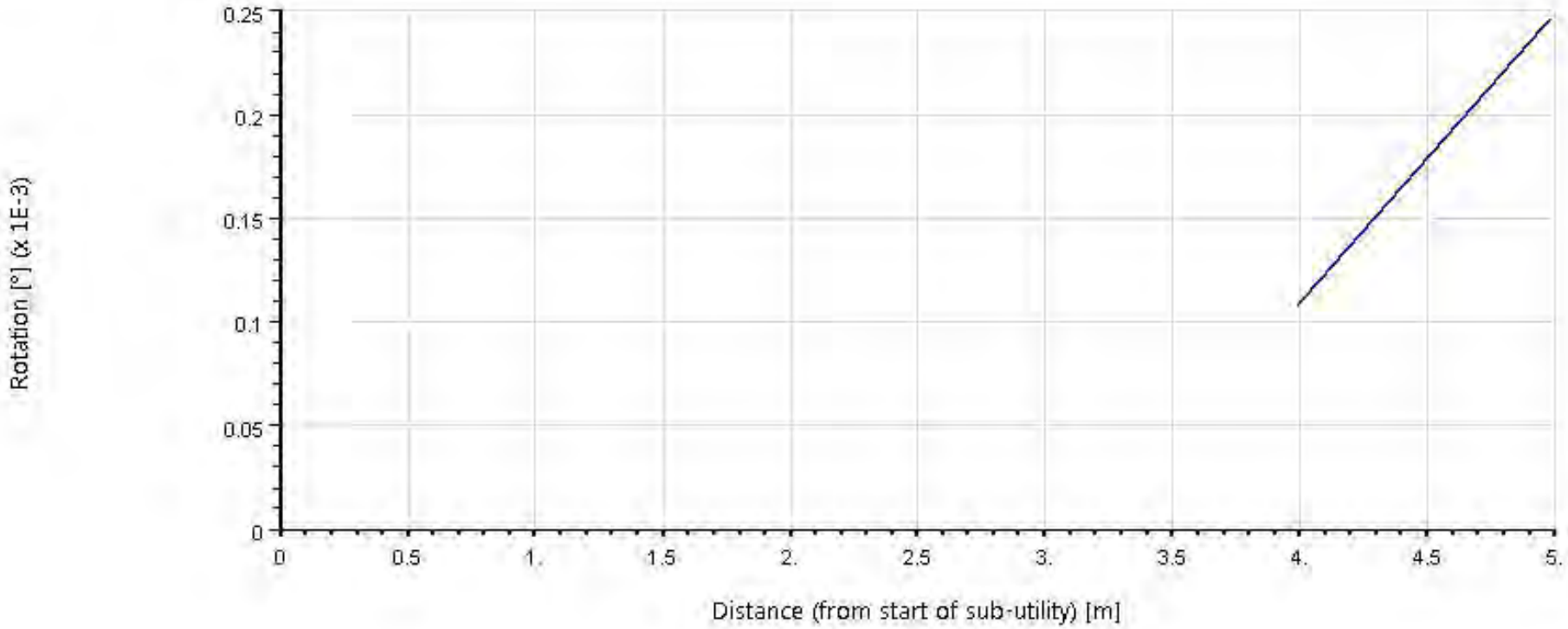
Stage: Base Model, Specific Utility 3: TW Main-3/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

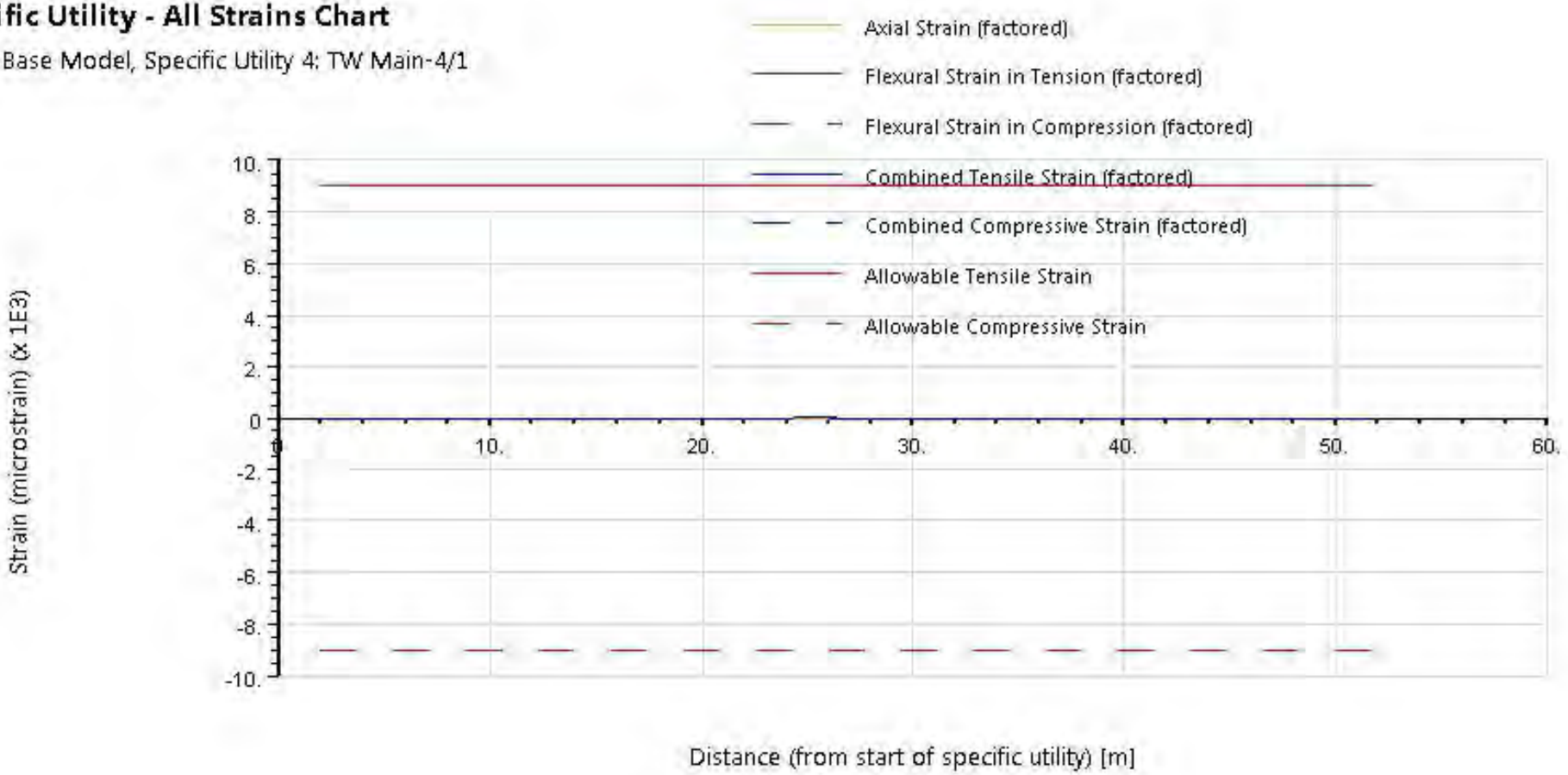
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



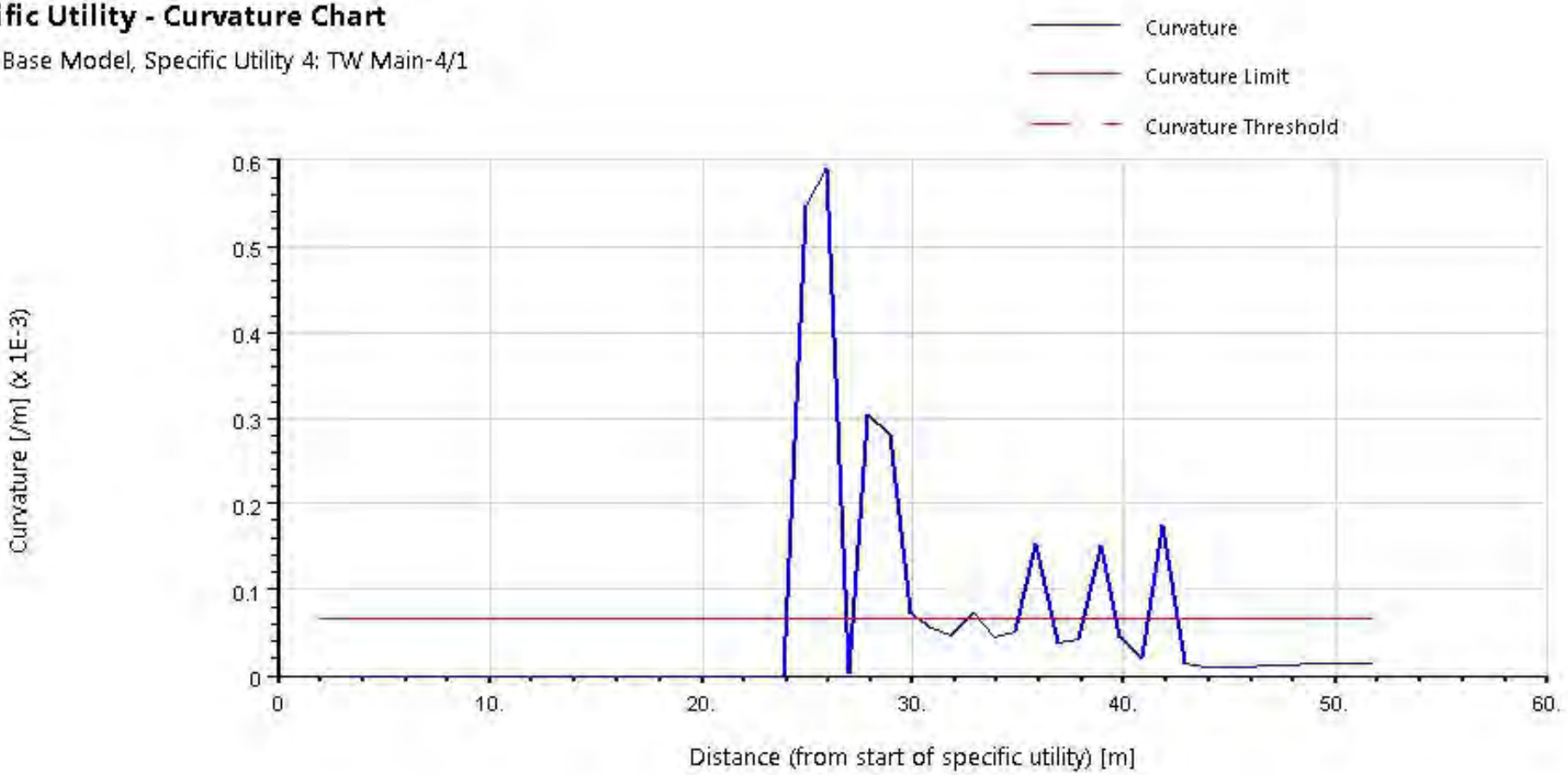
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1

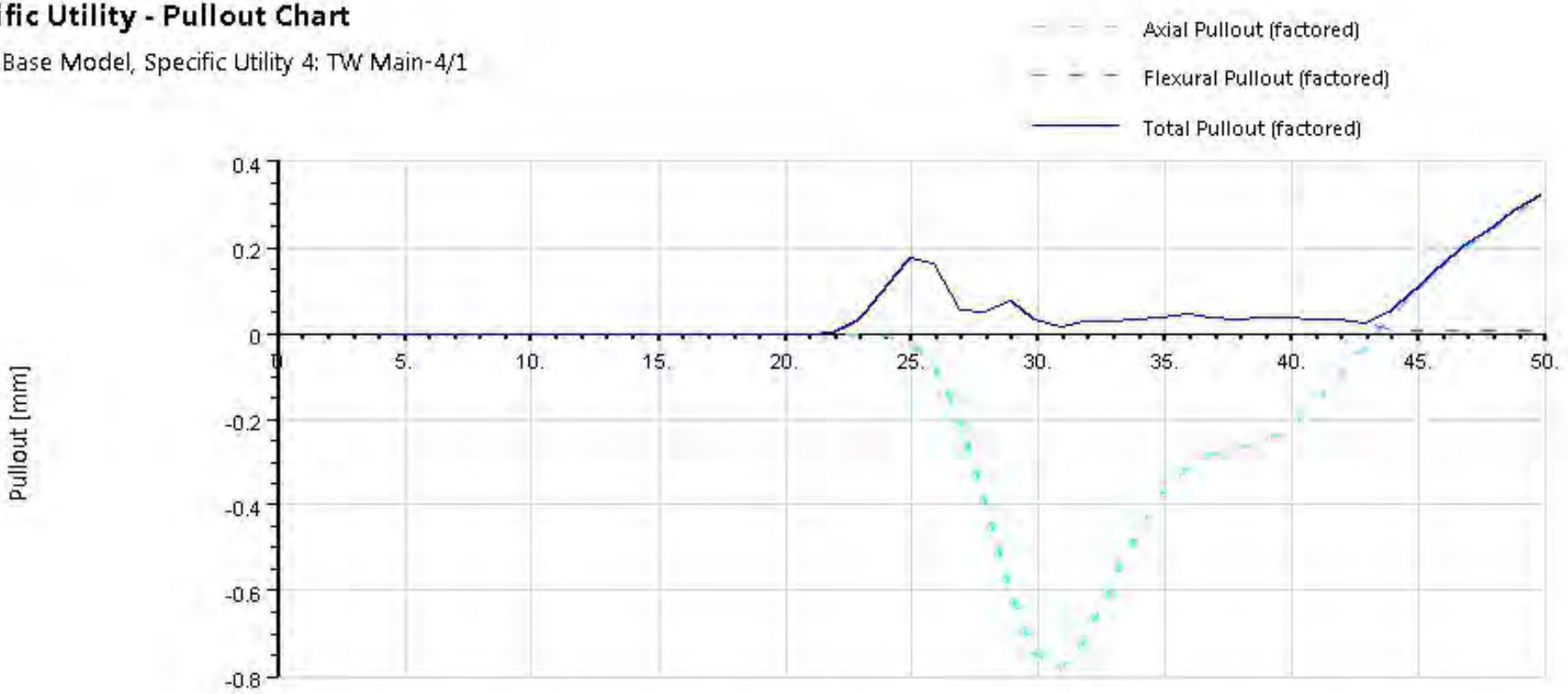


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1

Specific Utility - Pullout Chart

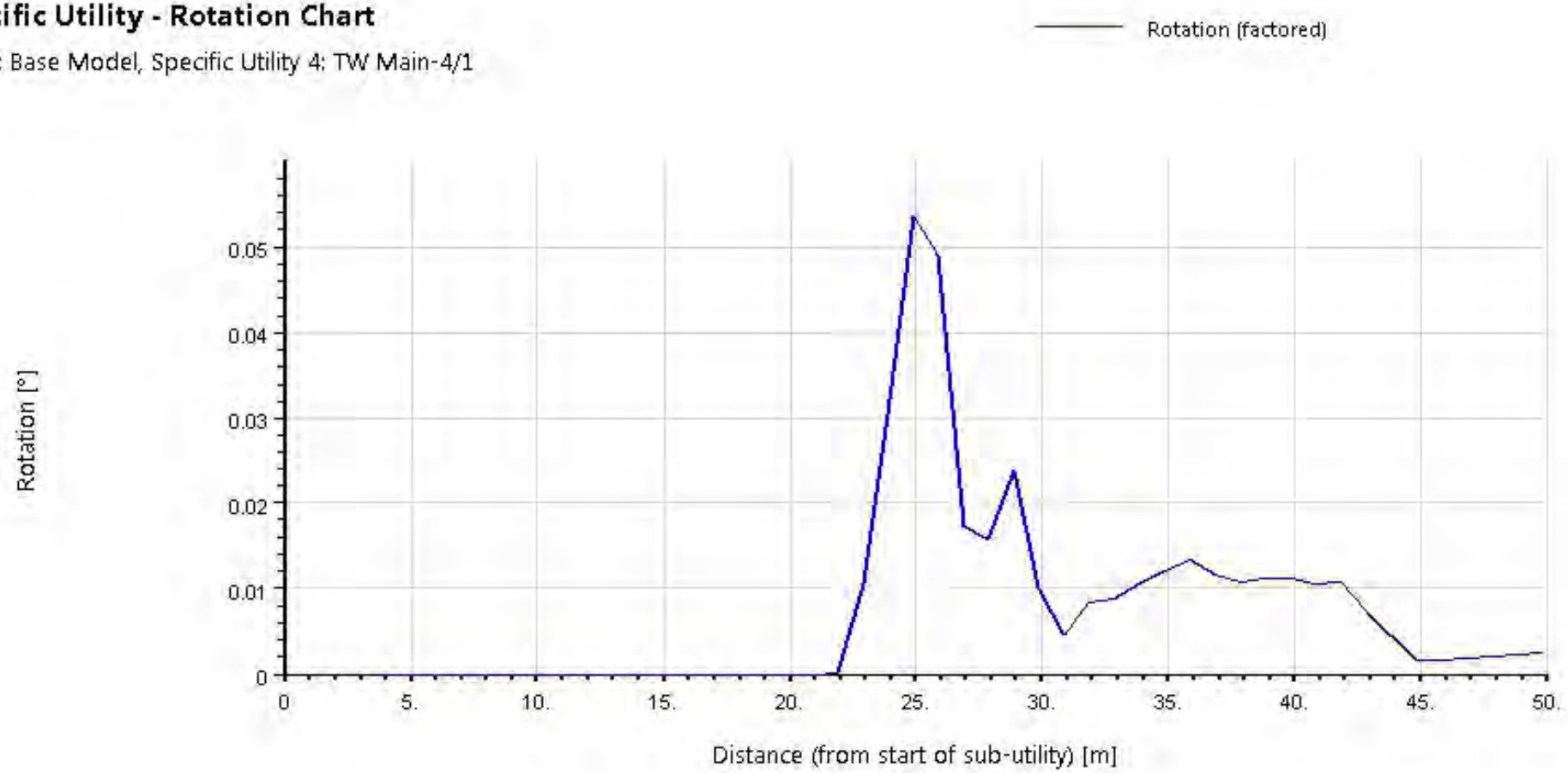
Stage: Base Model, Specific Utility 4: TW Main-4/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

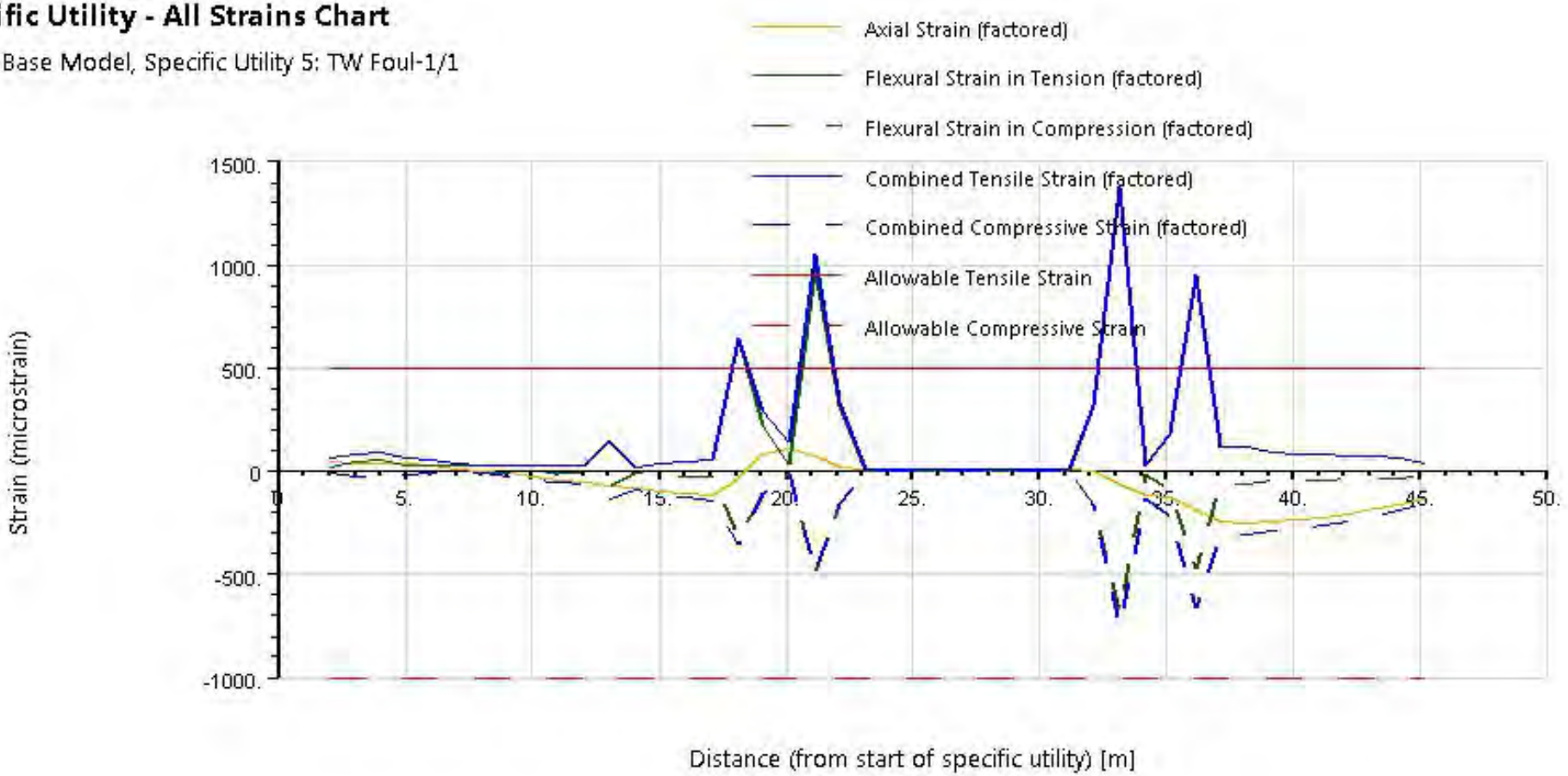
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



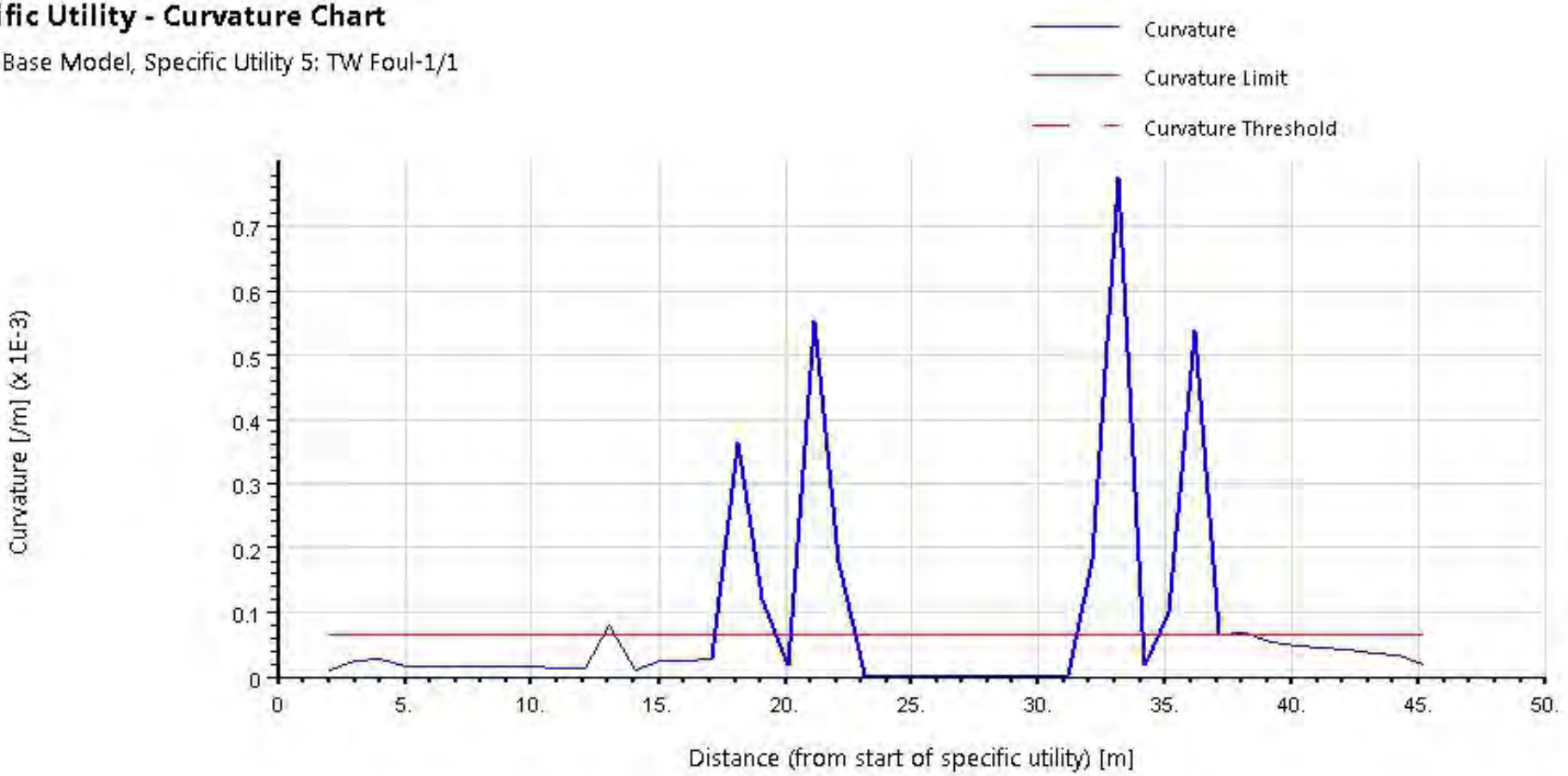
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1

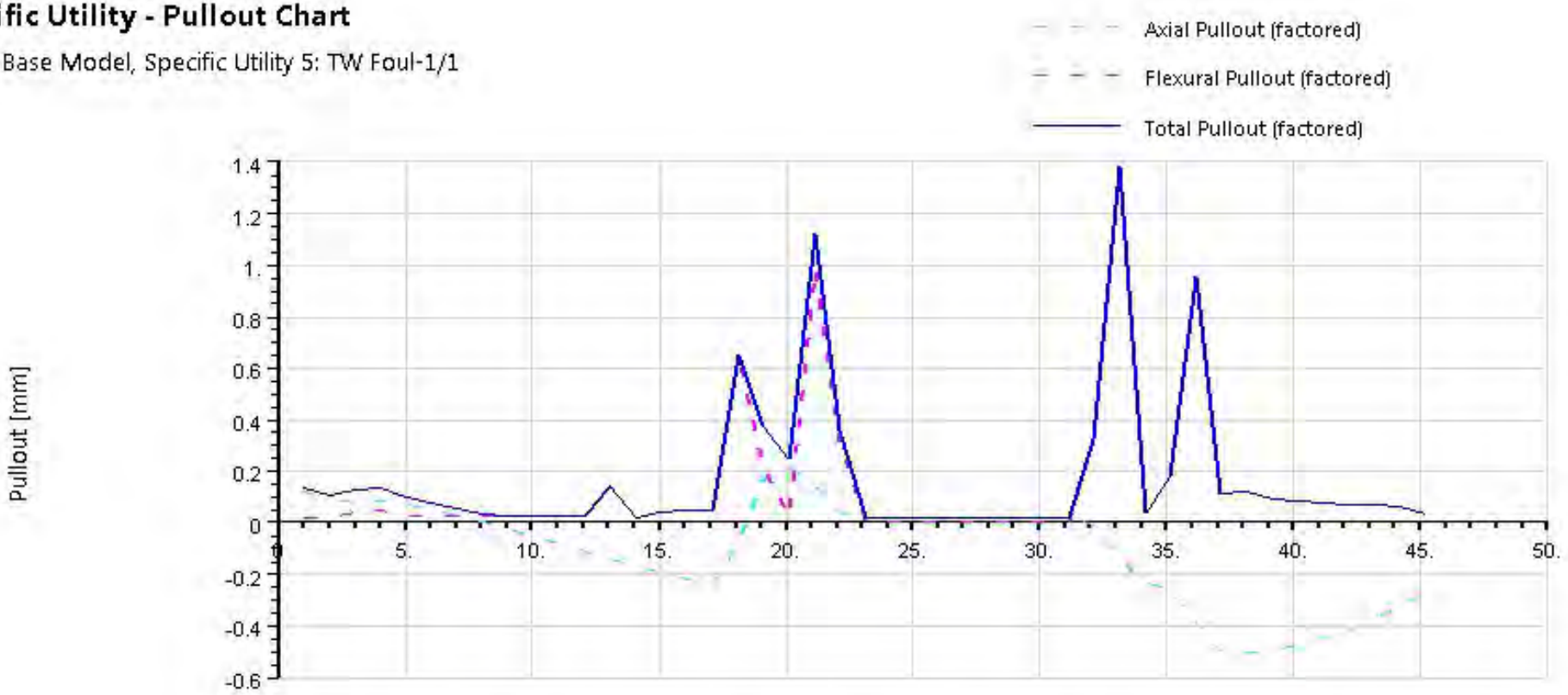


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1

Specific Utility - Pullout Chart

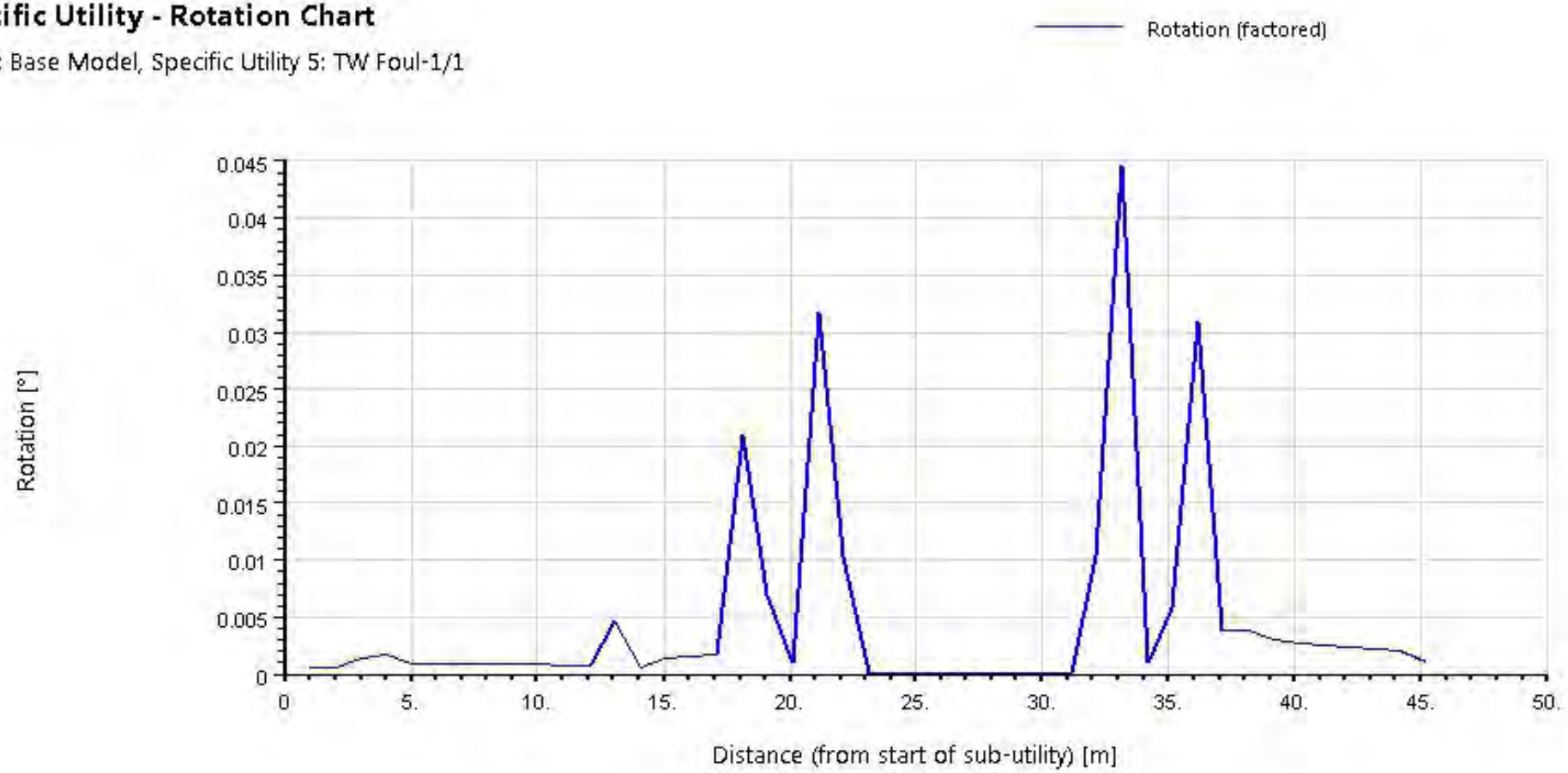
Stage: Base Model, Specific Utility 5: TW Foul-1/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

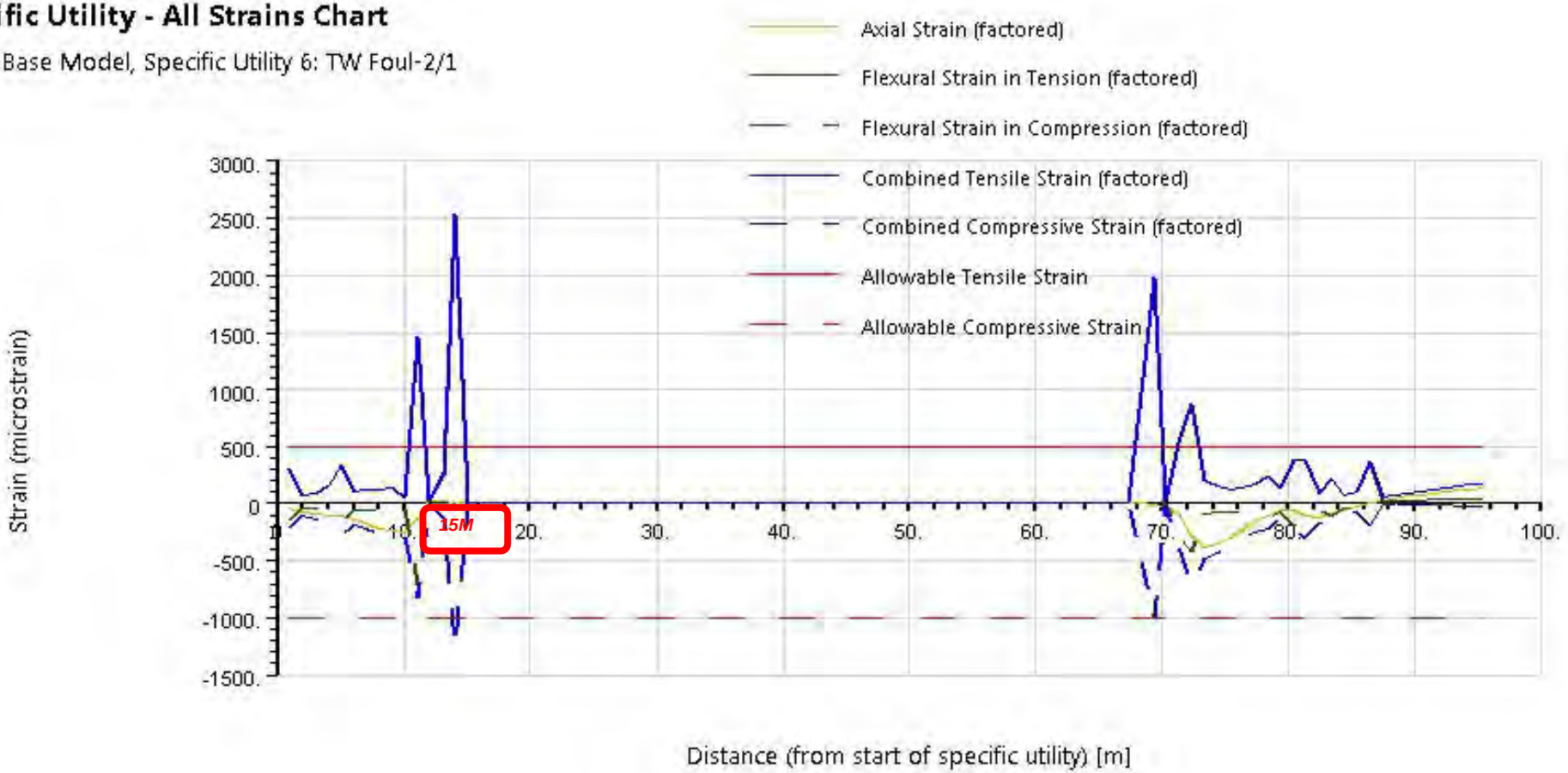
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



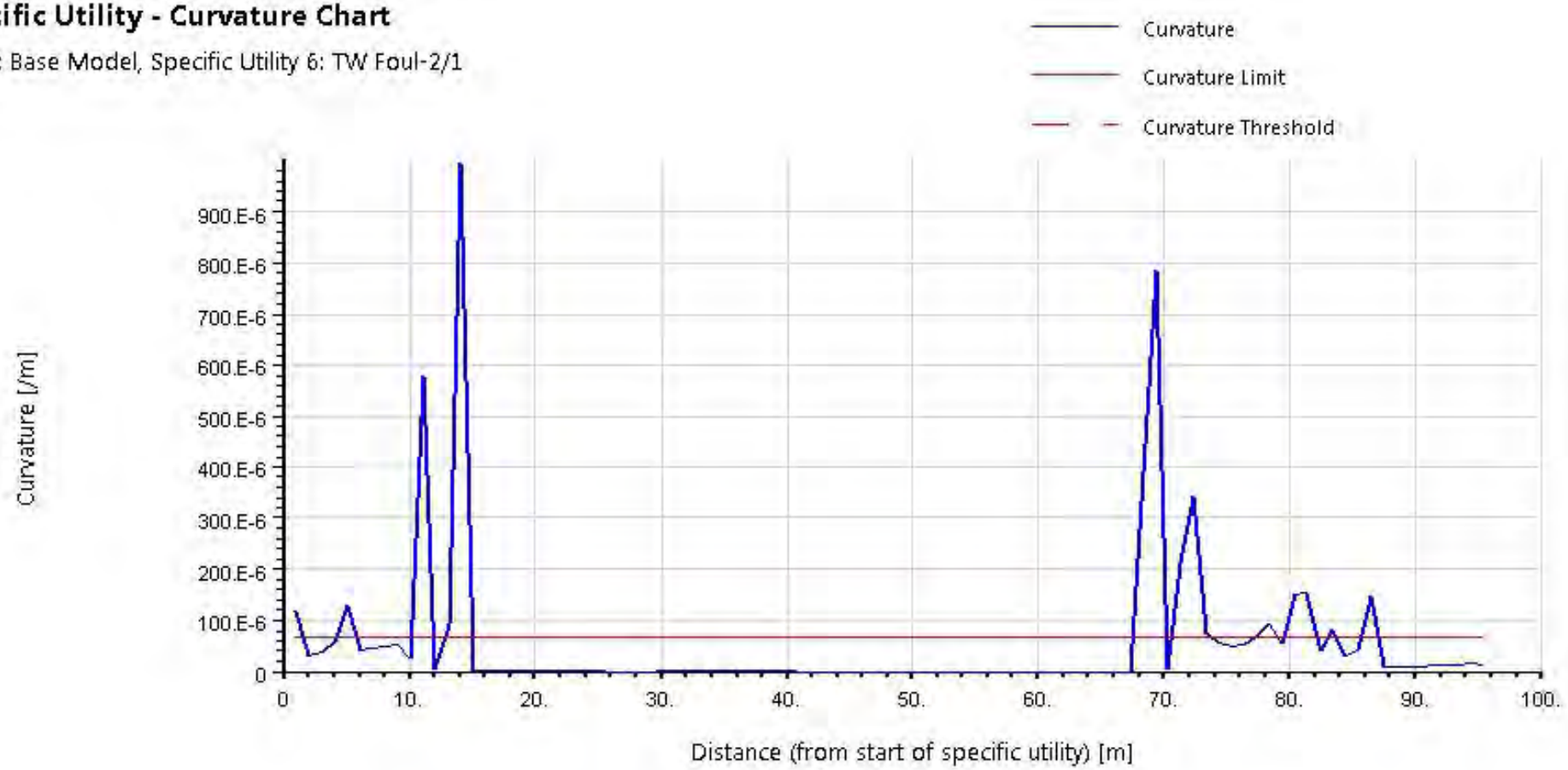
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

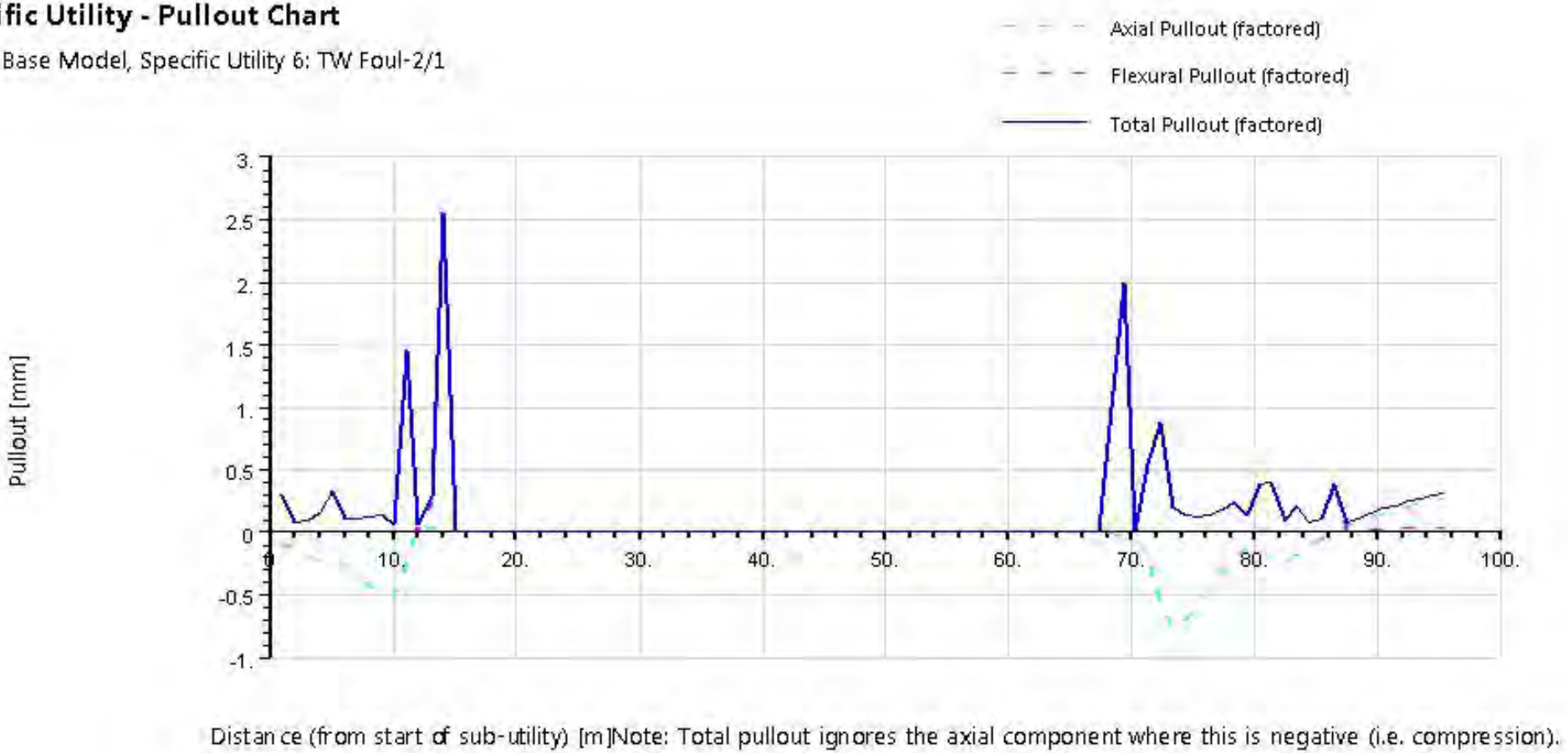


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

Specific Utility - Pullout Chart

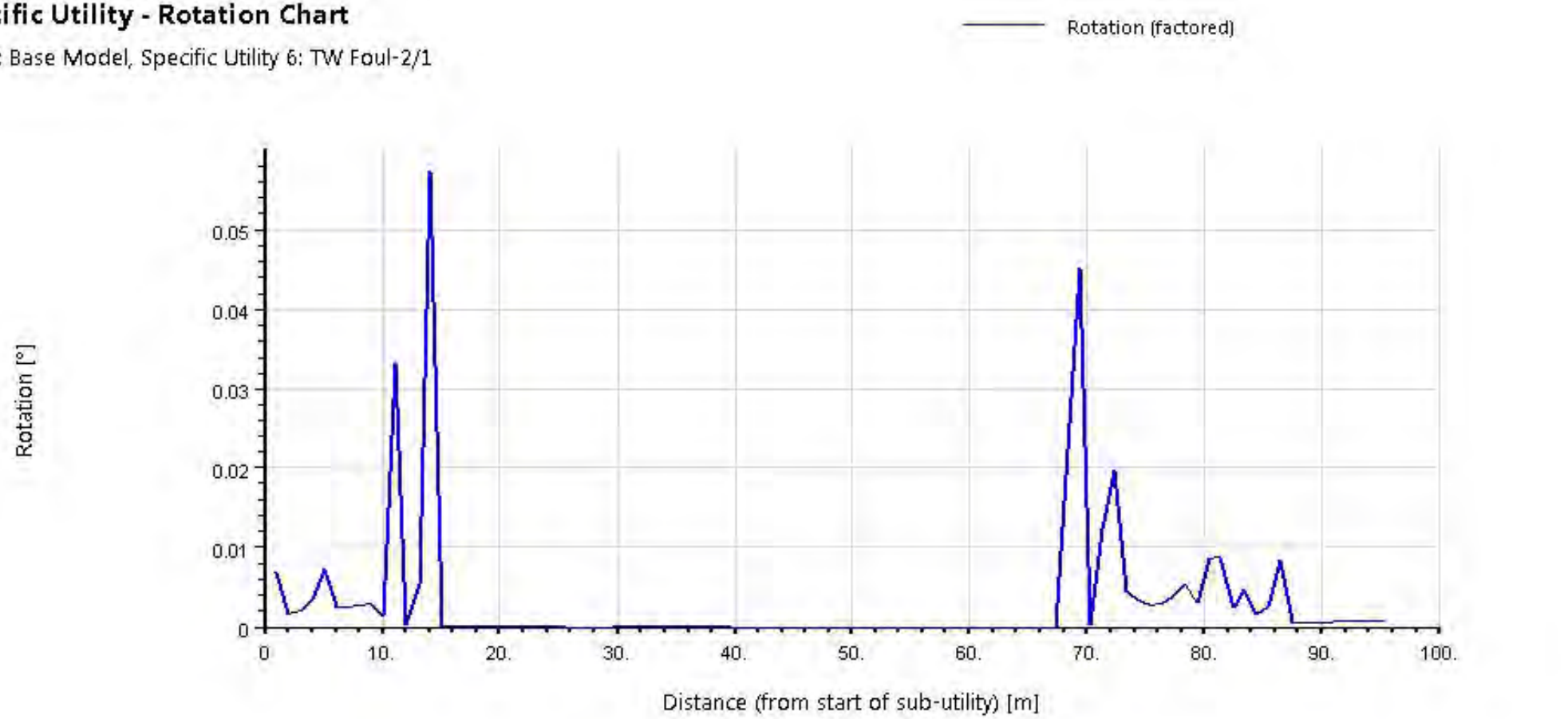
Stage: Base Model, Specific Utility 6: TW Foul-2/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

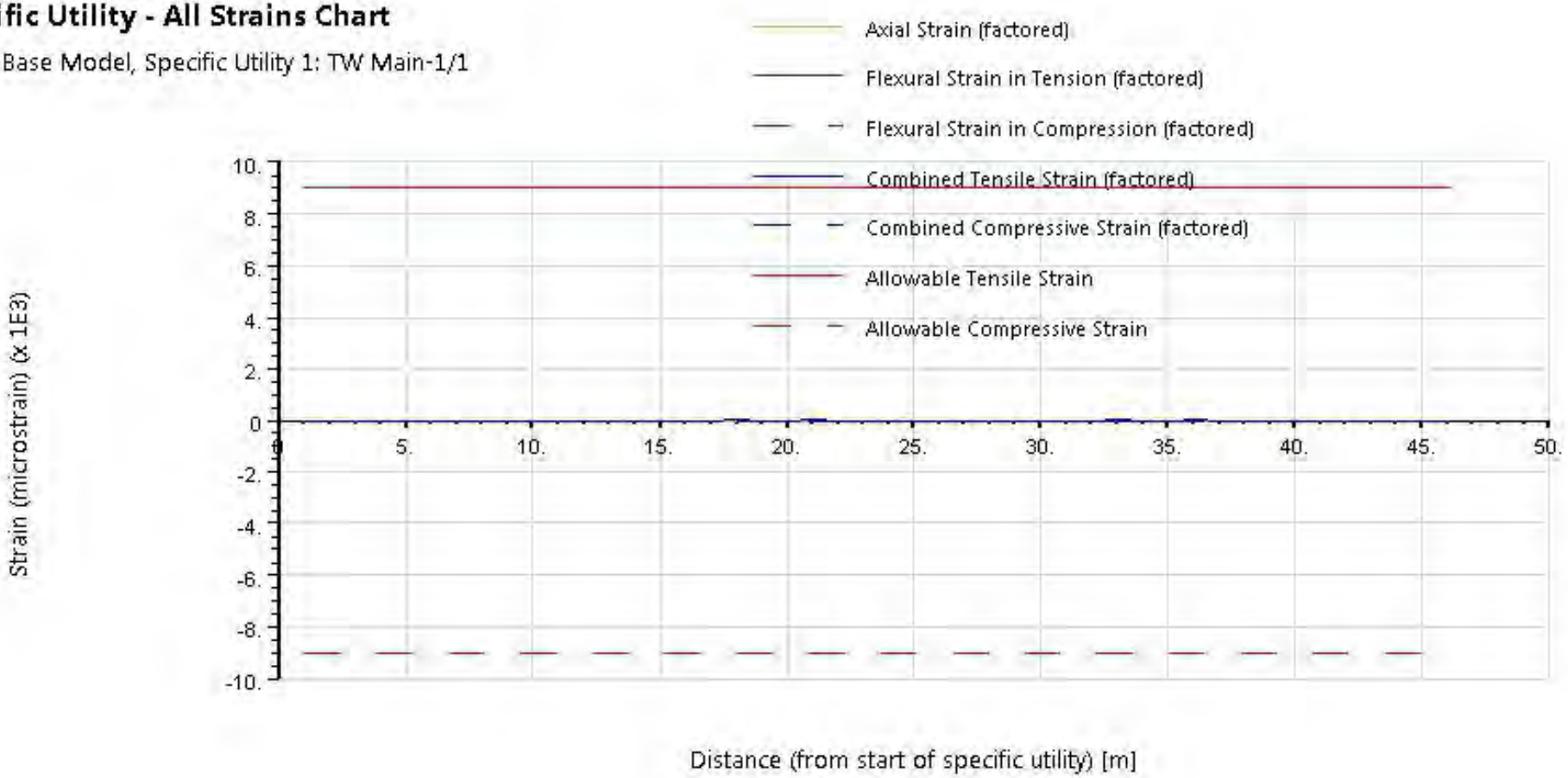
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



APPENDIX D3
XDISP PROPOSED DEVELOPMENT – DRAINED (STAGE 2A)

Titles

Job No.: 371944
Job Title: 60-86 Royal College Street, London
Sub-title: Proposed - Drained
Calculation Heading:
Initials: SA
Checker:
Date Saved: 04-Mar-2021
Date Checked:
Notes:
File Name: XDisp1 Proposed - Drained.xdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\XDISP\Thames Water\02

History

Date	Time	By	Notes
05-Sep-2019	13:52	SAlHilly	New
05-Sep-2019	15:38	SAlHilly	
16-Sep-2019	16:58	SAlHilly	
17-Sep-2019	14:57	SAlHilly	
17-Sep-2019	15:05	SAlHilly	
17-Sep-2019	16:55	SAlHilly	
20-Sep-2019	15:42	TYLER_A	
20-Sep-2019	15:53	TYLER_A	
03-Oct-2019	12:16	TYLER_A	
14-Oct-2019	14:55	TYLER_A	
14-Oct-2019	14:56	TYLER_A	
18-Nov-2019	11:12	TYLER_A	
22-Nov-2019	16:02	TYLER_A	
04-Dec-2019	10:18	TYLER_A	
04-Dec-2019	10:21	TYLER_A	
04-Dec-2019	10:27	TYLER_A	
22-Apr-2020	09:24	TYLER_A	
22-Apr-2020	10:32	TYLER_A	
22-Apr-2020	15:06	TYLER_A	
22-Apr-2020	17:31	TYLER_A	
22-Apr-2020	19:43	TYLER_A	
22-Apr-2020	19:51	TYLER_A	
18-Jun-2020	12:42	TYLER_A	
18-Jun-2020	14:18	TYLER_A	
18-Jun-2020	14:58	TYLER_A	
18-Jun-2020	15:00	TYLER_A	
22-Jun-2020	12:11	TYLER_A	
22-Jun-2020	12:21	TYLER_A	
22-Jun-2020	14:37	TYLER_A	
25-Jun-2020	12:30	TYLER_A	
26-Jun-2020	09:51	TYLER_A	
29-Jun-2020	13:28	TYLER_A	
29-Jun-2020	14:17	TYLER_A	
29-Jun-2020	15:52	TYLER_A	
16-Jul-2020	15:49	TYLER_A	
20-Jul-2020	08:07	TYLER_A	
20-Jul-2020	08:57	TYLER_A	
20-Jul-2020	09:01	TYLER_A	
13-Nov-2020	14:27	SAlHilly	
16-Nov-2020	14:44	TYLER_A	
16-Nov-2020	15:25	TYLER_A	
16-Nov-2020	15:45	TYLER_A	
16-Nov-2020	15:51	TYLER_A	
20-Nov-2020	08:37	TYLER_A	
20-Nov-2020	08:42	TYLER_A	
20-Nov-2020	16:58	SAlHilly	
20-Nov-2020	17:15	SAlHilly	
02-Dec-2020	15:44	TYLER_A	
02-Dec-2020	16:42	TYLER_A	
09-Dec-2020	21:32	TYLER_A	
10-Dec-2020	09:33	TYLER_A	
15-Feb-2021	09:56	TYLER_A	
04-Mar-2021	10:52	TYLER_A	

Displacement Lines

Ref.	Name	x1 [m]	y1 [m]	z1 [m]	x2 [m]	y2 [m]	z2 [m]	Intervals [No.]	Surface type for tunnels	Interpolate imported displacements	Calculate
1	TW Main-1	76.75020	113.72130	-0.90000	37.23790	86.22860	-0.90000	48	Surface	Yes	Yes
2	TW Main-2	37.23790	86.22860	-0.90000	53.14020	56.06240	-0.90000	34	Surface	Yes	Yes
3	TW Main-3	53.14020	56.06240	-0.90000	58.38580	47.58520	-0.90000	10	Surface	Yes	Yes
4	TW Main-4	58.38580	47.58520	-0.90000	83.80850	0.19950	-0.90000	54	Surface	Yes	Yes
5	TW Foul-1	76.45800	114.12130	-6.00000	38.34110	86.26920	-6.00000	47	Surface	Yes	Yes
6	TW Foul-2	38.34110	86.26920	-6.00000	84.72770	0.55680	-6.00000	97	Surface	Yes	Yes

Displacement Grids

Ref.	Name	Extrusion: Direction	Base line start: X [m]	Base line start: Y [m]	Base line start: Z(level) [m]	Base line end: X [m]	Base line end: Y [m]	Base line end: Z(level) [m]	Base line: Intervals [No.]	Extrusion: Distance [m]	Extrusion: Intervals [No.]	Surface type for tunnels	Calculate
1	Grid1	Global X	30.00000	0.00000	-3.00000	-	120.00000	-3.00000	120	80.00000	50	Surface	No

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	0.16310
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	0.16728
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	0.17140
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	0.17543
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	0.17933
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	0.18309
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	0.18665
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	0.19000
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	0.19308
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	0.19586
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	0.19830
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	0.20037
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	0.20203
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	0.20326
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	0.20403
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	0.20433
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	0.20417
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	0.20354
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	0.20249
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	0.20104
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	0.19925
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	0.19719
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	0.19494
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	0.19258
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	0.19021

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	0.18791
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	0.18579
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	0.18391
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	0.18236
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	0.18119
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	0.18046
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	0.18019
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	0.18040
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	0.18107
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	0.18217
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	0.18364
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	0.18540
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	0.18735
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	0.18939
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	0.19140
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	0.19327
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	0.19490
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	0.19621
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	0.19713
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	0.19761
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	0.19762
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	0.19716
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	0.19622
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	0.19482
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	0.19734
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	0.19949
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	0.20123
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	0.20258
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	0.20353
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	0.20411
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	0.20435
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	0.20433
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	0.20410
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	0.20377
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	0.20343
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	0.20317
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	0.20310
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	0.20332
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	0.20389
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	0.20490
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	0.20637
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	0.20834
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	0.21081
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	0.21376
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	0.21716
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	0.22096
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	0.22507
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	0.22942
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	0.23389
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	0.23837
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	0.24276
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	0.24695
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	0.25084
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	0.25435
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	0.25742
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	0.25998
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	0.26202
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	0.26352
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	0.26453
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	0.26507
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	0.26516
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	0.26480
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	0.26403
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	0.26287
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	0.26135
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	0.25951
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	0.25736
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	0.25496
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	0.25218
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	0.24919
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	0.24601
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	0.24267
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	0.23920
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	0.23560
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	0.23188
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	0.22807
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	0.22417
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	0.22018
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	0.21612
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	0.21198
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	0.20777
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	0.20350
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	0.19917
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	0.19479
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	0.19036
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	0.18589
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	0.18139
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	0.17687
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	0.17235
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	0.16782
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	0.16330
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	0.15880
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	0.15433
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	0.14990
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	0.14552
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	0.14120
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	0.13694
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	0.13275
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	0.12864
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	0.12461
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	0.12067
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	0.11683
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	0.11307
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	0.10942
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	0.10586
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	0.10241
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	0.09905
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	0.09580
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	0.09264
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	0.08959
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	0.08663
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	0.08377
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	0.08101
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	0.07834
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	0.07576
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	0.07328
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	0.07088
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	0.06856
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	0.06633
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	0.06418
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	0.06211
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	0.06011
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	0.11593
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	0.11740
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	0.11860
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	0.11951
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	0.12007
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	0.12022
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	0.11993
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	0.11913
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	0.11776
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	0.11578
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	0.11312
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	0.10975
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	0.10561
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	0.10068
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	0.09494
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	0.08839
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	0.08105
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	0.07299
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	0.06427

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	0.05502
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	0.04537
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	0.03549
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	0.02559
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	0.01589
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00660
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-0.00203
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-0.00979
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-0.01644
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-0.02180
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-0.02570
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-0.02800
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-0.02860
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-0.02747
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-0.02461
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-0.02008
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-0.01401
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-0.00658
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00198
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	0.01140
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	0.02138
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	0.03165
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	0.04191
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	0.05193
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	0.06150
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	0.07045
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	0.07865
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	0.08603
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	0.09256
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	0.08619
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	0.07873
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	0.07018
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	0.06055
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	0.04991
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	0.03837
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	0.02612
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	0.01336
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00039
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-0.01250
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-0.02495
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-0.03663
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-0.04720
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-0.05636
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-0.06384
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-0.06943
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-0.07298
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-0.07440
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-0.07366
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-0.07081
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-0.06593
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-0.05920
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-0.05083
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-0.04110
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-0.03031
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-0.01880
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-0.00690
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00506
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	0.01681
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	0.02809
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	0.03874
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	0.04861
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	0.05763
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	0.06577
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	0.07303
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	0.07945
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	0.08507
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	0.08998
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	0.09424
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	0.09794
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	0.10116
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	0.10396
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	0.10642
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	0.10860
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	0.11055
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	0.11231
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	0.11392
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	0.11540
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	0.11677
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	0.11803
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	0.11918
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	0.12021
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	0.12112
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	0.12188
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	0.12249
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	0.12292
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	0.12317
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	0.12321
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	0.12305
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	0.12267
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	0.12207
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	0.12126
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	0.12025
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	0.11903
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	0.11763
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	0.11606
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	0.11433
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	0.11245
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	0.11045
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	0.10834
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	0.10614
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	0.10386
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	0.10153
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	0.09915
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	0.09673
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	0.09430
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	0.09185
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	0.08941
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	0.08698
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	0.08457
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	0.08218
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	0.07983
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	0.07751
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	0.07523
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	0.07300
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	0.07082
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	0.06869
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	0.06661
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	0.06458
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	0.06261
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	0.06069
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	0.05882
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	0.05702
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	0.05526
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	0.05356
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	0.05192
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	0.05032
2	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	-0.49253
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	-0.51567
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	-0.53994
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	-0.56536
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	-0.59197
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	-0.61975
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	-0.64873
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	-0.67887
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	-0.71015
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	-0.74253
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	-0.77594
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	-0.81029
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	-0.84548
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	-0.88138
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	-0.91780

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	-0.95458
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	-0.99148
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	-1.02824
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	-1.06457
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	-1.10014
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	-1.13459
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	-1.16753
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	-1.19854
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	-1.22721
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	-1.25309
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	-1.27580
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	-1.29493
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	-1.31017
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	-1.32122
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	-1.32788
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	-1.33002
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	-1.32760
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	-1.32068
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	-1.30941
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	-1.29404
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	-1.27491
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	-1.25240
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	-1.22694
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	-1.19899
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	-1.16898
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	-1.13732
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	-1.10439
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	-1.07050
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	-1.03595
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	-1.00099
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	-0.96585
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	-0.93073
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	-0.89582
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	-0.86129
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	-0.89172
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	-0.93873
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	-0.98713
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	-1.03673
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	-1.08737
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	-1.13886
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	-1.19106
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	-1.24382
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	-1.29703
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	-1.35059
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	-1.40439
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	-1.45829
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	-1.51206
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	-1.56540
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	-1.61792
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	-1.66913
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	-1.71849
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	-1.76547
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	-1.80956
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	-1.85032
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	-1.88743
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	-1.92069
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	-1.95000
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	-1.97541
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	-1.99707
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	-2.01522
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	-2.03016
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	-2.04222
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	-2.05174
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	-2.05904
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	-2.06442
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	-2.06814
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	-2.07039
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	-2.07134
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	-2.07452
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	-2.08994
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	-2.09353
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	-2.09581
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	-2.09681
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	-2.09651
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	-2.09487
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	-2.09184
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	-2.08735
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	-2.08133
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	-2.07089
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	-2.05883
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	-2.05337
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	-2.03602
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	-2.01705
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	-1.99640
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	-1.97403
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	-1.94990
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	-1.92398
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	-1.89625
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	-1.86672
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	-1.83538
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	-1.80227
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	-1.76741
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	-1.73088
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	-1.69275
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	-1.65314
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	-1.61219
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	-1.57010
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	-1.52710
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	-1.48350
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	-1.43962
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	-1.39587
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	-1.35263
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	-1.31031
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	-1.26923
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	-1.22962
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	-1.19157
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	-1.15501
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	-1.11971
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	-1.08536
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	-1.05161
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	-1.01812
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	-0.98465
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	-0.95105
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	-0.91725
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	-0.88331
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	-0.84933
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	-0.81546
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	-0.78186
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	-0.74871
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	-0.71617
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	-0.68439
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	-0.65349
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	-0.62356
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	-0.59469
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	-0.56691
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	-0.54028
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	-0.51479
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	-0.49045
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	-0.46725
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	-0.44517
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	-0.42419
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	-0.40426
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	-0.45045
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	-0.46849
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	-0.48711
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	-0.55192
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	-0.57725
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	-0.60369
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	-0.63124
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	-0.65990
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	-0.68965

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	-0.72048
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	-0.75234
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	-0.78519
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	-0.81895
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	-0.85355
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	-0.88890
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	-0.92489
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	-0.96138
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	-0.99823
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	-1.03526
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	-1.07226
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	-1.10900
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	-1.14518
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	-1.18048
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	-1.21455
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	-1.24698
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-1.27736
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-1.30524
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-1.33019
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-1.35179
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-1.36965
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-1.38345
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-1.39291
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-1.39785
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-1.39816
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-1.39381
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-1.38486
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-1.37145
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	-1.35378
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	-1.33213
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	-1.30680
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	-1.27815
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	-1.24656
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	-1.21244
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	-1.17622
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	-1.13833
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	-1.09922
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	-1.05930
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	-1.01896
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	-1.02831
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	-1.03862
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	-1.04979
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	-1.08034
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	-1.13250
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	-1.18576
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	-1.24013
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	-1.29573
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	-1.35273
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-1.41133
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-1.47174
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-1.53401
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-1.59802
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-1.66338
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-1.72946
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-1.79541
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-1.86026
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-1.92297
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-1.98258
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-2.03822
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-2.08917
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-2.13493
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-2.17517
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-2.20977
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-2.23877
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-2.26236
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-2.28085
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	-2.29465
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	-2.30422
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	-2.31008
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	-2.31275
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	-2.31273
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	-2.31048
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	-2.30640
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	-2.30081
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	-2.29396
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	-2.28602
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	-2.27710
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	-2.26722
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	-2.25640
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	-2.24458
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	-2.23169
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	-2.21765
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	-2.20236
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	-2.18571
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	-2.16759
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	-2.14791
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	-2.12656
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	-2.10345
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	-2.07853
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	-2.05171
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	-2.02295
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	-1.99222
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	-1.95949
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	-1.92477
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	-1.88808
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	-1.84944
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	-1.80894
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	-1.76664
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	-1.72270
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	-1.67726
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	-1.63057
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	-1.58292
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	-1.53465
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	-1.48623
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	-1.43815
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	-1.39098
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	-1.34528
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	-1.30154
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	-1.26010
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	-1.22110
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	-1.18440
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	-1.14962
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	-1.11621
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	-1.08355
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	-1.05108
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	-1.01836
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	-0.98512
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	-0.95128
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	-0.91688
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	-0.88207
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	-0.84707
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	-0.81211
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	-0.77743
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	-0.74326
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	-0.70980
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	-0.67720
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	-0.64561
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	-0.61511
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	-0.58578
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	-0.55766
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	-0.53077
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	-0.50512
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	-0.48070
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	-0.45749
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	-0.43545
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	-0.41456

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	0.16310
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	0.16728
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	0.17140
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	0.17543
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	0.17933
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	0.18309
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	0.18665
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	0.19000
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	0.19308
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	0.19586
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	0.19830
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	0.20037
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	0.20203
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	0.20326
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	0.20403
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	0.20433
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	0.20417
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	0.20354
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	0.20249
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	0.20104
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	0.19925
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	0.19719
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	0.19494
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	0.19258
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	0.19021
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	0.18791
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	0.18579
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	0.18391
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	0.18236
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	0.18119
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	0.18046
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	0.18019
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	0.18040
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	0.18107
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	0.18217
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	0.18364
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	0.18540
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	0.18735
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	0.18939
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	0.19140
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	0.19327
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	0.19490
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	0.19621
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	0.19713
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	0.19761
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	0.19762
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	0.19716
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	0.19622
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	0.19482
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	0.19734
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	0.19949
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	0.20123
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	0.20258
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	0.20353
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	0.20411
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	0.20435
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	0.20433
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	0.20410
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	0.20377
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	0.20343
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	0.20317
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	0.20310
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	0.20332
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	0.20389
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	0.20490
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	0.20637
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	0.20834
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	0.21081
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	0.21376
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	0.21716
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	0.22096
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	0.22507
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	0.22942
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	0.23389
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	0.23837
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	0.24276
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	0.24695
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	0.25084
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	0.25435
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	0.25742
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	0.25998
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	0.26202
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	0.26352
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	0.26453
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	0.26507
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	0.26516
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	0.26480
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	0.26403
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	0.26287
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	0.26135
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	0.25951
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	0.25736
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	0.25496
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	0.25218
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	0.24919
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	0.24601
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	0.24267
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	0.23920
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	0.23560
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	0.23188
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	0.22807
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	0.22417
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	0.22018
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	0.21612
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	0.21198
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	0.20777
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	0.20350
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	0.19917
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	0.19479
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	0.19036
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	0.18589
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	0.18139
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	0.17687
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	0.17235
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	0.16782
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	0.16330
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	0.15880
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	0.15433
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	0.14990
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	0.14552
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	0.14120
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	0.13694
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	0.13275
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	0.12864
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	0.12461
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	0.12067
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	0.11683
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	0.11307
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	0.10942
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	0.10586
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	0.10241
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	0.09905
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	0.09580
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	0.09264
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	0.08959
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	0.08663
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	0.08377

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	0.08101
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	0.07834
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	0.07576
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	0.07328
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	0.07088
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	0.06856
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	0.06633
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	0.06418
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	0.06211
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	0.06011
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	0.11593
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	0.11740
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	0.11860
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	0.11951
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	0.12007
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	0.12022
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	0.11993
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	0.11913
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	0.11776
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	0.11578
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	0.11312
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	0.10975
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	0.10561
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	0.10068
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	0.09494
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	0.08839
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	0.08105
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	0.07299
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	0.06427
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	0.05502
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	0.04537
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	0.03549
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	0.02559
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	0.01589
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	0.00660
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-0.00203
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-0.00979
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-0.01644
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-0.02180
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-0.02570
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-0.02800
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-0.02860
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-0.02747
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-0.02461
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-0.02008
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-0.01401
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-0.00658
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	0.00198
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	0.01140
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	0.02138
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	0.03165
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	0.04191
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	0.05193
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	0.06150
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	0.07045
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	0.07865
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	0.08603
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	0.09256
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	0.08619
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	0.07873
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	0.07018
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	0.06055
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	0.04991
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	0.03837
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	0.02612
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	0.01336
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	0.00039
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-0.01250
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-0.02495
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-0.03663
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-0.04720
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-0.05636
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-0.06384
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-0.06943
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-0.07298
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-0.07440
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-0.07366
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-0.07081
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-0.06593
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-0.05920
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-0.05083
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-0.04110
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-0.03031
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-0.01880
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-0.00690
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	0.00506
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	0.01681
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	0.02809
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	0.03874
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	0.04861
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	0.05763
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	0.06577
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	0.07303
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	0.07945
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	0.08507
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	0.08998
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	0.09424
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	0.09794
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	0.10116
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	0.10396
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	0.10642
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	0.10860
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	0.11055
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	0.11231
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	0.11392
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	0.11540
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	0.11677
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	0.11803
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	0.11918
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	0.12021
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	0.12112
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	0.12188
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	0.12249
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	0.12292
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	0.12317
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	0.12321
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	0.12305
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	0.12267
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	0.12207
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	0.12126
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	0.12025
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	0.11903
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	0.11763
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	0.11606
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	0.11433
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	0.11245
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	0.11045
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	0.10834
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	0.10614
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	0.10386
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	0.10153
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	0.09915
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	0.09673
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	0.09430
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	0.09185
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	0.08941
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	0.08698
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	0.08457
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	0.08218
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	0.07983
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	0.07751

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	0.07523
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	0.07300
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	0.07082
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	0.06869
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	0.06661
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	0.06458
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	0.06261
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	0.06069
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	0.05882
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	0.05702
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	0.05526
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	0.05356
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	0.05192
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	0.05032
2	ID Set #	1	76.75020	113.72130	-0.90000	0.00000	0.00000	-0.49253
		2	75.92703	113.14854	-0.90000	0.00000	0.00000	-0.51567
		3	75.10385	112.57577	-0.90000	0.00000	0.00000	-0.53994
		4	74.28068	112.00301	-0.90000	0.00000	0.00000	-0.56536
		5	73.45751	111.43024	-0.90000	0.00000	0.00000	-0.59197
		6	72.63434	110.85748	-0.90000	0.00000	0.00000	-0.61975
		7	71.81116	110.28471	-0.90000	0.00000	0.00000	-0.64873
		8	70.98799	109.71195	-0.90000	0.00000	0.00000	-0.67887
		9	70.16482	109.13918	-0.90000	0.00000	0.00000	-0.71015
		10	69.34164	108.56642	-0.90000	0.00000	0.00000	-0.74253
		11	68.51847	107.99365	-0.90000	0.00000	0.00000	-0.77594
		12	67.69530	107.42089	-0.90000	0.00000	0.00000	-0.81029
		13	66.87212	106.84812	-0.90000	0.00000	0.00000	-0.84548
		14	66.04895	106.27536	-0.90000	0.00000	0.00000	-0.88138
		15	65.22578	105.70260	-0.90000	0.00000	0.00000	-0.91780
		16	64.40261	105.12983	-0.90000	0.00000	0.00000	-0.95458
		17	63.57943	104.55707	-0.90000	0.00000	0.00000	-0.99148
		18	62.75626	103.98430	-0.90000	0.00000	0.00000	-1.02824
		19	61.93309	103.41154	-0.90000	0.00000	0.00000	-1.06457
		20	61.10991	102.83877	-0.90000	0.00000	0.00000	-1.10014
		21	60.28674	102.26601	-0.90000	0.00000	0.00000	-1.13459
		22	59.46357	101.69324	-0.90000	0.00000	0.00000	-1.16753
		23	58.64040	101.12048	-0.90000	0.00000	0.00000	-1.19854
		24	57.81722	100.54771	-0.90000	0.00000	0.00000	-1.22721
		25	56.99405	99.97495	-0.90000	0.00000	0.00000	-1.25309
		26	56.17088	99.40219	-0.90000	0.00000	0.00000	-1.27580
		27	55.34770	98.82942	-0.90000	0.00000	0.00000	-1.29493
		28	54.52453	98.25666	-0.90000	0.00000	0.00000	-1.31017
		29	53.70136	97.68389	-0.90000	0.00000	0.00000	-1.32122
		30	52.87819	97.11113	-0.90000	0.00000	0.00000	-1.32788
		31	52.05501	96.53836	-0.90000	0.00000	0.00000	-1.33002
		32	51.23184	95.96560	-0.90000	0.00000	0.00000	-1.32760
		33	50.40867	95.39283	-0.90000	0.00000	0.00000	-1.32068
		34	49.58549	94.82007	-0.90000	0.00000	0.00000	-1.30941
		35	48.76232	94.24730	-0.90000	0.00000	0.00000	-1.29404
		36	47.93915	93.67454	-0.90000	0.00000	0.00000	-1.27491
		37	47.11597	93.10178	-0.90000	0.00000	0.00000	-1.25240
		38	46.29280	92.52901	-0.90000	0.00000	0.00000	-1.22694
		39	45.46963	91.95625	-0.90000	0.00000	0.00000	-1.19899
		40	44.64646	91.38348	-0.90000	0.00000	0.00000	-1.16898
		41	43.82328	90.81072	-0.90000	0.00000	0.00000	-1.13732
		42	43.00011	90.23795	-0.90000	0.00000	0.00000	-1.10439
		43	42.17694	89.66519	-0.90000	0.00000	0.00000	-1.07050
		44	41.35376	89.09242	-0.90000	0.00000	0.00000	-1.03595
		45	40.53059	88.51966	-0.90000	0.00000	0.00000	-1.00099
		46	39.70742	87.94689	-0.90000	0.00000	0.00000	-0.96585
		47	38.88425	87.37413	-0.90000	0.00000	0.00000	-0.93073
		48	38.06107	86.80136	-0.90000	0.00000	0.00000	-0.89582
		49	37.23790	86.22860	-0.90000	0.00000	0.00000	-0.86129
		50	37.70561	85.34136	-0.90000	0.00000	0.00000	-0.89172
		51	38.17333	84.45412	-0.90000	0.00000	0.00000	-0.93873
		52	38.64104	83.56688	-0.90000	0.00000	0.00000	-0.98713
		53	39.10876	82.67964	-0.90000	0.00000	0.00000	-1.03673
		54	39.57647	81.79239	-0.90000	0.00000	0.00000	-1.08737
		55	40.04419	80.90515	-0.90000	0.00000	0.00000	-1.13886
		56	40.51190	80.01791	-0.90000	0.00000	0.00000	-1.19106
		57	40.97962	79.13067	-0.90000	0.00000	0.00000	-1.24382
		58	41.44733	78.24343	-0.90000	0.00000	0.00000	-1.29703
		59	41.91505	77.35619	-0.90000	0.00000	0.00000	-1.35059
		60	42.38276	76.46895	-0.90000	0.00000	0.00000	-1.40439
		61	42.85048	75.58171	-0.90000	0.00000	0.00000	-1.45829
		62	43.31819	74.69446	-0.90000	0.00000	0.00000	-1.51206
		63	43.78591	73.80722	-0.90000	0.00000	0.00000	-1.56540
		64	44.25362	72.91998	-0.90000	0.00000	0.00000	-1.61792
		65	44.72134	72.03274	-0.90000	0.00000	0.00000	-1.66913
		66	45.18905	71.14550	-0.90000	0.00000	0.00000	-1.71849
		67	45.65676	70.25826	-0.90000	0.00000	0.00000	-1.76547
		68	46.12448	69.37102	-0.90000	0.00000	0.00000	-1.80956
		69	46.59219	68.48378	-0.90000	0.00000	0.00000	-1.85032
		70	47.05991	67.59654	-0.90000	0.00000	0.00000	-1.88743
		71	47.52762	66.70929	-0.90000	0.00000	0.00000	-1.92069
		72	47.99534	65.82205	-0.90000	0.00000	0.00000	-1.95000
		73	48.46305	64.93481	-0.90000	0.00000	0.00000	-1.97541
		74	48.93077	64.04757	-0.90000	0.00000	0.00000	-1.99707
		75	49.39848	63.16033	-0.90000	0.00000	0.00000	-2.01522
		76	49.86620	62.27309	-0.90000	0.00000	0.00000	-2.03016
		77	50.33391	61.38585	-0.90000	0.00000	0.00000	-2.04222
		78	50.80163	60.49861	-0.90000	0.00000	0.00000	-2.05174
		79	51.26934	59.61136	-0.90000	0.00000	0.00000	-2.05904
		80	51.73706	58.72412	-0.90000	0.00000	0.00000	-2.06442
		81	52.20477	57.83688	-0.90000	0.00000	0.00000	-2.06814
		82	52.67249	56.94964	-0.90000	0.00000	0.00000	-2.07039
		83	53.14020	56.06240	-0.90000	0.00000	0.00000	-2.07134
		84	53.66476	55.21468	-0.90000	0.00000	0.00000	-2.07452
		85	54.18932	54.36696	-0.90000	0.00000	0.00000	-2.08994
		86	54.71388	53.51924	-0.90000	0.00000	0.00000	-2.09353
		87	55.23844	52.67152	-0.90000	0.00000	0.00000	-2.09581
		88	55.76300	51.82380	-0.90000	0.00000	0.00000	-2.09681
		89	56.28756	50.97608	-0.90000	0.00000	0.00000	-2.09651
		90	56.81212	50.12836	-0.90000	0.00000	0.00000	-2.09487
		91	57.33668	49.28064	-0.90000	0.00000	0.00000	-2.09184
		92	57.86124	48.43292	-0.90000	0.00000	0.00000	-2.08735
		93	58.38580	47.58520	-0.90000	0.00000	0.00000	-2.08133
		94	58.85659	46.70769	-0.90000	0.00000	0.00000	-2.07089
		95	59.32738	45.83017	-0.90000	0.00000	0.00000	-2.05883
		96	59.79817	44.95266	-0.90000	0.00000	0.00000	-2.05337
		97	60.26896	44.07515	-0.90000	0.00000	0.00000	-2.03602
		98	60.73975	43.19764	-0.90000	0.00000	0.00000	-2.01705
		99	61.21054	42.32012	-0.90000	0.00000	0.00000	-1.99640
		100	61.68134	41.44261	-0.90000	0.00000	0.00000	-1.97403
		101	62.15213	40.56510	-0.90000	0.00000	0.00000	-1.94990
		102	62.62292	39.68758	-0.90000	0.00000	0.00000	-1.92398
		103	63.09371	38.81007	-0.90000	0.00000	0.00000	-1.89625
		104	63.56450	37.93256	-0.90000	0.00000	0.00000	-1.86672
		105	64.03529	37.05504	-0.90000	0.00000	0.00000	-1.83538
		106	64.50608	36.17753	-0.90000	0.00000	0.00000	-1.80227
		107	64.97687	35.30002	-0.90000	0.00000	0.00000	-1.76741
		108	65.44766	34.42251	-0.90000	0.00000	0.00000	-1.73088
		109	65.91845	33.54499	-0.90000	0.00000	0.00000	-1.69275
		110	66.38924	32.66748	-0.90000	0.00000	0.00000	-1.65314
		111	66.86003	31.78997	-0.90000	0.00000	0.00000	-1.61219
		112	67.33082	30.91245	-0.90000	0.00000	0.00000	-1.57010
		113	67.80161	30.03494	-0.90000	0.00000	0.00000	-1.52710
		114	68.27241	29.15743	-0.90000	0.00000	0.00000	-1.48350
		115	68.74320	28.27991	-0.90000	0.00000	0.00000	-1.43962
		116	69.21399	27.40240	-0.90000	0.00000	0.00000	-1.39587
		117	69.68478	26.52489	-0.90000	0.00000	0.00000	-1.35263
		118	70.15557	25.64738	-0.90000	0.00000	0.00000	-1.31031
		119	70.62636	24.76986	-0.90000	0.00000	0.00000	-1.26923
		120	71.09715	23.89235	-0.90000	0.00000	0.00000	-1.22962
		121	71.56794	23.01484	-0.90000	0.00000	0.00000	-1.19157
		122	72.03873	22.13732	-0.90000	0.00000	0.00000	-1.15501
		123	72.50952	21.25981	-0.90000	0.00000	0.00000	-1.11971
		124	72.98031	20.38230	-0.90000	0.00000	0.00000	-1.08536
		125	73.45110	19.50479	-0.90000	0.00000	0.00000	-1.05161
		126	73.92189	18.62727	-0.90000	0.00000	0.00000	-1.01812
		127	74.39269	17.74976	-0.90000	0.00000	0.00000	-0.98465

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		128	74.86348	16.87225	-0.90000	0.00000	0.00000	-0.95105
		129	75.33427	15.99473	-0.90000	0.00000	0.00000	-0.91725
		130	75.80506	15.11722	-0.90000	0.00000	0.00000	-0.88331
		131	76.27585	14.23971	-0.90000	0.00000	0.00000	-0.84933
		132	76.74664	13.36219	-0.90000	0.00000	0.00000	-0.81546
		133	77.21743	12.48468	-0.90000	0.00000	0.00000	-0.78186
		134	77.68822	11.60717	-0.90000	0.00000	0.00000	-0.74871
		135	78.15901	10.72966	-0.90000	0.00000	0.00000	-0.71617
		136	78.62980	9.85214	-0.90000	0.00000	0.00000	-0.68439
		137	79.10059	8.97463	-0.90000	0.00000	0.00000	-0.65349
		138	79.57138	8.09712	-0.90000	0.00000	0.00000	-0.62356
		139	80.04217	7.21960	-0.90000	0.00000	0.00000	-0.59469
		140	80.51296	6.34209	-0.90000	0.00000	0.00000	-0.56691
		141	80.98376	5.46458	-0.90000	0.00000	0.00000	-0.54028
		142	81.45455	4.58706	-0.90000	0.00000	0.00000	-0.51479
		143	81.92534	3.70955	-0.90000	0.00000	0.00000	-0.49045
		144	82.39613	2.83204	-0.90000	0.00000	0.00000	-0.46725
		145	82.86692	1.95453	-0.90000	0.00000	0.00000	-0.44517
		146	83.33771	1.07701	-0.90000	0.00000	0.00000	-0.42419
		147	83.80850	0.19950	-0.90000	0.00000	0.00000	-0.40426
		148	76.45800	114.12130	-6.00000	0.00000	0.00000	-0.45045
		149	75.64700	113.52870	-6.00000	0.00000	0.00000	-0.46849
		150	74.83600	112.93610	-6.00000	0.00000	0.00000	-0.48711
		151	74.02501	112.34351	-6.00000	0.00000	0.00000	-0.55192
		152	73.21401	111.75091	-6.00000	0.00000	0.00000	-0.57725
		153	72.40301	111.15831	-6.00000	0.00000	0.00000	-0.60369
		154	71.59201	110.56571	-6.00000	0.00000	0.00000	-0.63124
		155	70.78101	109.97311	-6.00000	0.00000	0.00000	-0.65990
		156	69.97002	109.38052	-6.00000	0.00000	0.00000	-0.68965
		157	69.15902	108.78792	-6.00000	0.00000	0.00000	-0.72048
		158	68.34802	108.19532	-6.00000	0.00000	0.00000	-0.75234
		159	67.53702	107.60272	-6.00000	0.00000	0.00000	-0.78519
		160	66.72603	107.01013	-6.00000	0.00000	0.00000	-0.81895
		161	65.91503	106.41753	-6.00000	0.00000	0.00000	-0.85355
		162	65.10403	105.82493	-6.00000	0.00000	0.00000	-0.88890
		163	64.29303	105.23233	-6.00000	0.00000	0.00000	-0.92489
		164	63.48203	104.63973	-6.00000	0.00000	0.00000	-0.96138
		165	62.67104	104.04714	-6.00000	0.00000	0.00000	-0.99823
		166	61.86004	103.45454	-6.00000	0.00000	0.00000	-1.03526
		167	61.04904	102.86194	-6.00000	0.00000	0.00000	-1.07226
		168	60.23804	102.26934	-6.00000	0.00000	0.00000	-1.10900
		169	59.42704	101.67674	-6.00000	0.00000	0.00000	-1.14518
		170	58.61605	101.08415	-6.00000	0.00000	0.00000	-1.18048
		171	57.80505	100.49155	-6.00000	0.00000	0.00000	-1.21455
		172	56.99405	99.89895	-6.00000	0.00000	0.00000	-1.24698
		173	56.18305	99.30635	-6.00000	0.00000	0.00000	-1.27736
		174	55.37206	98.71376	-6.00000	0.00000	0.00000	-1.30524
		175	54.56106	98.12116	-6.00000	0.00000	0.00000	-1.33019
		176	53.75006	97.52856	-6.00000	0.00000	0.00000	-1.35179
		177	52.93906	96.93596	-6.00000	0.00000	0.00000	-1.36965
		178	52.12806	96.34336	-6.00000	0.00000	0.00000	-1.38345
		179	51.31707	95.75077	-6.00000	0.00000	0.00000	-1.39291
		180	50.50607	95.15817	-6.00000	0.00000	0.00000	-1.39785
		181	49.69507	94.56557	-6.00000	0.00000	0.00000	-1.39816
		182	48.88407	93.97297	-6.00000	0.00000	0.00000	-1.39381
		183	48.07307	93.38037	-6.00000	0.00000	0.00000	-1.38486
		184	47.26208	92.78778	-6.00000	0.00000	0.00000	-1.37145
		185	46.45108	92.19518	-6.00000	0.00000	0.00000	-1.35378
		186	45.64008	91.60258	-6.00000	0.00000	0.00000	-1.33213
		187	44.82908	91.00998	-6.00000	0.00000	0.00000	-1.30680
		188	44.01809	90.41739	-6.00000	0.00000	0.00000	-1.27815
		189	43.20709	89.82479	-6.00000	0.00000	0.00000	-1.24656
		190	42.39609	89.23219	-6.00000	0.00000	0.00000	-1.21244
		191	41.58509	88.63959	-6.00000	0.00000	0.00000	-1.17622
		192	40.77409	88.04699	-6.00000	0.00000	0.00000	-1.13833
		193	39.96310	87.45440	-6.00000	0.00000	0.00000	-1.09922
		194	39.15210	86.86180	-6.00000	0.00000	0.00000	-1.05930
		195	38.34110	86.26920	-6.00000	0.00000	0.00000	-1.01896
		196	38.81931	85.38557	-6.00000	0.00000	0.00000	-1.02831
		197	39.29752	84.50193	-6.00000	0.00000	0.00000	-1.03862
		198	39.77574	83.61830	-6.00000	0.00000	0.00000	-1.04979
		199	40.25395	82.73467	-6.00000	0.00000	0.00000	-1.08034
		200	40.73216	81.85104	-6.00000	0.00000	0.00000	-1.13250
		201	41.21037	80.96740	-6.00000	0.00000	0.00000	-1.18576
		202	41.68859	80.08377	-6.00000	0.00000	0.00000	-1.24013
		203	42.16680	79.20014	-6.00000	0.00000	0.00000	-1.29573
		204	42.64501	78.31650	-6.00000	0.00000	0.00000	-1.35273
		205	43.12322	77.43287	-6.00000	0.00000	0.00000	-1.41133
		206	43.60144	76.54924	-6.00000	0.00000	0.00000	-1.47174
		207	44.07965	75.66560	-6.00000	0.00000	0.00000	-1.53401
		208	44.55786	74.78197	-6.00000	0.00000	0.00000	-1.59802
		209	45.03607	73.89834	-6.00000	0.00000	0.00000	-1.66338
		210	45.51429	73.01471	-6.00000	0.00000	0.00000	-1.72946
		211	45.99250	72.13107	-6.00000	0.00000	0.00000	-1.79541
		212	46.47071	71.24744	-6.00000	0.00000	0.00000	-1.86026
		213	46.94892	70.36381	-6.00000	0.00000	0.00000	-1.92297
		214	47.42714	69.48017	-6.00000	0.00000	0.00000	-1.98258
		215	47.90535	68.59654	-6.00000	0.00000	0.00000	-2.03822
		216	48.38356	67.71291	-6.00000	0.00000	0.00000	-2.08917
		217	48.86177	66.82927	-6.00000	0.00000	0.00000	-2.13493
		218	49.33998	65.94564	-6.00000	0.00000	0.00000	-2.17517
		219	49.81820	65.06201	-6.00000	0.00000	0.00000	-2.20977
		220	50.29641	64.17838	-6.00000	0.00000	0.00000	-2.23877
		221	50.77462	63.29474	-6.00000	0.00000	0.00000	-2.26236
		222	51.25283	62.41111	-6.00000	0.00000	0.00000	-2.28085
		223	51.73105	61.52748	-6.00000	0.00000	0.00000	-2.29465
		224	52.20926	60.64384	-6.00000	0.00000	0.00000	-2.30422
		225	52.68747	59.76021	-6.00000	0.00000	0.00000	-2.31008
		226	53.16568	58.87658	-6.00000	0.00000	0.00000	-2.31275
		227	53.64390	57.99294	-6.00000	0.00000	0.00000	-2.31273
		228	54.12211	57.10931	-6.00000	0.00000	0.00000	-2.31048
		229	54.60032	56.22568	-6.00000	0.00000	0.00000	-2.30640
		230	55.07853	55.34205	-6.00000	0.00000	0.00000	-2.30081
		231	55.55675	54.45841	-6.00000	0.00000	0.00000	-2.29396
		232	56.03496	53.57478	-6.00000	0.00000	0.00000	-2.28602
		233	56.51317	52.69115	-6.00000	0.00000	0.00000	-2.27710
		234	56.99138	51.80751	-6.00000	0.00000	0.00000	-2.26722
		235	57.46959	50.92388	-6.00000	0.00000	0.00000	-2.25640
		236	57.94781	50.04025	-6.00000	0.00000	0.00000	-2.24458
		237	58.42602	49.15661	-6.00000	0.00000	0.00000	-2.23169
		238	58.90423	48.27298	-6.00000	0.00000	0.00000	-2.21765
		239	59.38244	47.38935	-6.00000	0.00000	0.00000	-2.20236
		240	59.86066	46.50572	-6.00000	0.00000	0.00000	-2.18571
		241	60.33887	45.62208	-6.00000	0.00000	0.00000	-2.16759
		242	60.81708	44.73845	-6.00000	0.00000	0.00000	-2.14791
		243	61.29529	43.85482	-6.00000	0.00000	0.00000	-2.12656
		244	61.77351	42.97118	-6.00000	0.00000	0.00000	-2.10345
		245	62.25172	42.08755	-6.00000	0.00000	0.00000	-2.07853
		246	62.72993	41.20392	-6.00000	0.00000	0.00000	-2.05171
		247	63.20814	40.32028	-6.00000	0.00000	0.00000	-2.02295
		248	63.68636	39.43665	-6.00000	0.00000	0.00000	-1.99222
		249	64.16457	38.55302	-6.00000	0.00000	0.00000	-1.95949
		250	64.64278	37.66939	-6.00000	0.00000	0.00000	-1.92477
		251	65.12099	36.78575	-6.00000	0.00000	0.00000	-1.88808
		252	65.59921	35.90212	-6.00000	0.00000	0.00000	-1.84944
		253	66.07742	35.01849	-6.00000	0.00000	0.00000	-1.80894
		254	66.55563	34.13485	-6.00000	0.00000	0.00000	-1.76664
		255	67.03384	33.25122	-6.00000	0.00000	0.00000	-1.72270
		256	67.51205	32.36759	-6.00000	0.00000	0.00000	-1.67726
		257	67.99027	31.48395	-6.00000	0.00000	0.00000	-1.63057
		258	68.46848	30.60032	-6.00000	0.00000	0.00000	-1.58292
		259	68.94669	29.71669	-6.00000	0.00000	0.00000	-1.53465
		260	69.42490	28.83306	-6.00000	0.00000	0.00000	-1.48623
		261	69.90312	27.94942	-6.00000	0.00000	0.00000	-1.43815
		262	70.38133	27.06579	-6.00000	0.00000	0.00000	-1.39098
		263	70.85954	26.18216	-6.00000	0.00000	0.00000	-1.34528
		264	71.33775	25.29852	-6.00000	0.00000	0.00000	-1.30154
		265	71.81597	24.41489	-6.00000	0.00000	0.00000	-1.26010
		266	72.29418	23.53126	-6.00000	0.00000	0.00000	-1.22110
		267	72.77239	22.64762	-6.00000	0.00000	0.00000	-1.18440
		268	73.25060	21.76399	-6.00000	0.00000	0.00000	-1.14962

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		269	73.72882	20.88036	-6.00000	0.00000	0.00000	-1.11621
		270	74.20703	19.99673	-6.00000	0.00000	0.00000	-1.08355
		271	74.68524	19.11309	-6.00000	0.00000	0.00000	-1.05108
		272	75.16345	18.22946	-6.00000	0.00000	0.00000	-1.01836
		273	75.64166	17.34583	-6.00000	0.00000	0.00000	-0.98512
		274	76.11988	16.46219	-6.00000	0.00000	0.00000	-0.95128
		275	76.59809	15.57856	-6.00000	0.00000	0.00000	-0.91688
		276	77.07630	14.69493	-6.00000	0.00000	0.00000	-0.88207
		277	77.55451	13.81129	-6.00000	0.00000	0.00000	-0.84707
		278	78.03273	12.92766	-6.00000	0.00000	0.00000	-0.81211
		279	78.51094	12.04403	-6.00000	0.00000	0.00000	-0.77743
		280	78.98915	11.16040	-6.00000	0.00000	0.00000	-0.74326
		281	79.46736	10.27676	-6.00000	0.00000	0.00000	-0.70980
		282	79.94558	9.39313	-6.00000	0.00000	0.00000	-0.67720
		283	80.42379	8.50950	-6.00000	0.00000	0.00000	-0.64561
		284	80.90200	7.62586	-6.00000	0.00000	0.00000	-0.61511
		285	81.38021	6.74223	-6.00000	0.00000	0.00000	-0.58578
		286	81.85843	5.85860	-6.00000	0.00000	0.00000	-0.55766
		287	82.33664	4.97496	-6.00000	0.00000	0.00000	-0.53077
		288	82.81485	4.09133	-6.00000	0.00000	0.00000	-0.50512
		289	83.29306	3.20770	-6.00000	0.00000	0.00000	-0.48070
		290	83.77128	2.32407	-6.00000	0.00000	0.00000	-0.45749
		291	84.24949	1.44043	-6.00000	0.00000	0.00000	-0.43545
		292	84.72770	0.55680	-6.00000	0.00000	0.00000	-0.41456

Polygonal Excavations

Ref. 1
Excavation Name: Prop Excavation B2
Surface level [m]: -1.0000
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -9.4400

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	53.300	81.600	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
2	81.100	27.300	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
3	97.000	35.500	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
4	93.900	49.100	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
5	80.500	74.700	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000
6	68.800	89.700	-9.4400	Yes	Yes	3.0000	67.000	25.000	3.0000	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
2	81.100	27.300	97.000	35.500	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
3	97.000	35.500	93.900	49.100	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
4	93.900	49.100	80.500	74.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
5	80.500	74.700	68.800	89.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))
6	68.800	89.700	53.300	81.600	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))

Ref. 2
Excavation Name: Contig Piled Wall B3
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -16.900

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	53.300	81.600	-16.900	Yes	No	-	-	-	-	-	-
2	81.100	27.300	-16.900	Yes	No	-	-	-	-	-	-
3	97.000	35.500	-16.900	Yes	No	-	-	-	-	-	-
4	93.900	49.100	-16.900	Yes	No	-	-	-	-	-	-
5	80.500	74.700	-16.900	Yes	No	-	-	-	-	-	-
6	68.800	89.700	-16.900	Yes	No	-	-	-	-	-	-

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
2	81.100	27.300	97.000	35.500	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
3	97.000	35.500	93.900	49.100	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
4	93.900	49.100	80.500	74.700	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
5	80.500	74.700	68.800	89.700	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
6	68.800	89.700	53.300	81.600	Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(b))	Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(a))

Ref. 3
Excavation Name: Secant Piled Wall B2
Surface level [m]: -1.0000
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -9.4400

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	53.300	81.600	-9.4400	Yes	No	-	-	-	-	-	-
2	81.100	27.300	-9.4400	Yes	No	-	-	-	-	-	-
3	97.000	35.500	-9.4400	Yes	No	-	-	-	-	-	-
4	93.900	49.100	-9.4400	Yes	No	-	-	-	-	-	-
5	80.500	74.700	-9.4400	Yes	No	-	-	-	-	-	-
6	68.800	89.700	-9.4400	Yes	No	-	-	-	-	-	-

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	53.300	81.600	81.100	27.300	Inst. of secant bored pile wall in stiff clay (CIRIA C760	Inst. of secant bored pile wall in stiff clay (CIRIA C760

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
					Fig. 6.8(b))	Fig. 6.8(a))
2	81.100	27.300	97.000	35.500	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
3	97.000	35.500	93.900	49.100	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
4	93.900	49.100	80.500	74.700	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
5	80.500	74.700	68.800	89.700	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))
6	68.800	89.700	53.300	81.600	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))	Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))

Ref. 4
Excavation Name: Lift Pit 1
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -11.700

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	59.100	84.300	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	60.400	84.950	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	61.100	83.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	59.800	83.000	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	59.100	84.300	60.400	84.950	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
2	60.400	84.950	61.100	83.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
3	61.100	83.700	59.800	83.000	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
4	59.800	83.000	59.100	84.300	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))

Ref. 5
Excavation Name: Lift Pit 2
Surface level [m]: -9.4400
Contribution: Positive
Surface movement curves which are selected are applied between surface and [m]: -11.700

Corner	x [m]	y [m]	Base Level [m]	Arc Enabled	Stiffened	Prev. Side: d [m]	Prev. Side: p1 [%]	Prev. Side: p2* [%]	Next Side: d [m]	Next Side: p1 [%]	Next Side: p2* [%]
1	90.800	34.000	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
2	92.100	34.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
3	92.800	33.400	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000
4	91.400	32.700	-11.700	Yes	Yes	0.0	67.000	25.000	0.0	67.000	25.000

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal
1	90.800	34.000	92.100	34.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
2	92.100	34.700	92.800	33.400	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
3	92.800	33.400	91.400	32.700	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))
4	91.400	32.700	90.800	34.000	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))	Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))

Circular Excavations

Vertical Ground Movement Curves

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.040][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -2.0E-2x + 4.0E-2
Coeff. of Determination: 1.0

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: $z = -2.6455E\text{-}3x^4 + 2.8495E\text{-}2x^3 - 1.0051E\text{-}1x^2 + 1.0569E\text{-}1x + 3.8990E\text{-}2$
Coeff. of Determination: 9.9991E-1

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.040][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0

Side	x1 [m]	y1 [m]	x2 [m]	y2 [m]	G.M. Curve: Vertical	G.M. Curve: Horizontal

Polynomial: z = -2.0E-2x + 4.0E-2
Coeff. of Determination: 1.0

Curve Name: **Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.050][2.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -2.5E-2x + 5.0E-2
Coeff. of Determination: 1.0

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(b))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Settlement / wall depth or max. excavation depth (z)(%)]

[0.000,0.000,0.039][0.100,0.000,0.049][0.200,0.000,0.056][0.300,0.000,0.062]
[0.400,0.000,0.067][0.500,0.000,0.070][0.600,0.000,0.072][0.700,0.000,0.073]
[0.800,0.000,0.073][0.900,0.000,0.072][1.000,0.000,0.070][1.100,0.000,0.068]
[1.200,0.000,0.065][1.300,0.000,0.061][1.400,0.000,0.058][1.500,0.000,0.054]
[1.600,0.000,0.050][1.700,0.000,0.046][1.800,0.000,0.042][1.900,0.000,0.038]
[2.000,0.000,0.034][2.100,0.000,0.030][2.200,0.000,0.027][2.300,0.000,0.023]
[2.400,0.000,0.020][2.500,0.000,0.017][2.600,0.000,0.014][2.700,0.000,0.012]
[2.800,0.000,0.010][2.900,0.000,0.008][3.000,0.000,0.007][3.100,0.000,0.005]
[3.200,0.000,0.004][3.300,0.000,0.004][3.400,0.000,0.003][3.500,0.000,0.002]
[3.600,0.000,0.002][3.700,0.000,0.002][3.800,0.000,0.001][3.900,0.000,0.001]
[4.000,0.000,0.000]

Curve Fitting Method: Polynomial
x Order: 4
y Order: 0
Polynomial: z = $-2.6455E-3x^4 + 2.8495E-2x^3 - 1.0051E-1x^2 + 1.0569E-1x + 3.8990E-2$
Coeff. of Determination: 9.9991E-1

Horizontal Ground Movement Curves

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C580 Fig. 2.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.041][0.050,0.000,0.038][0.100,0.000,0.036][0.150,0.000,0.034]
[0.200,0.000,0.032][0.250,0.000,0.030][0.300,0.000,0.029][0.350,0.000,0.027]
[0.400,0.000,0.025][0.450,0.000,0.023][0.500,0.000,0.022][0.550,0.000,0.020]
[0.600,0.000,0.019][0.650,0.000,0.018][0.700,0.000,0.016][0.750,0.000,0.015]
[0.800,0.000,0.014][0.850,0.000,0.013][0.900,0.000,0.011][0.950,0.000,0.010]
[1.000,0.000,0.009][1.050,0.000,0.008][1.100,0.000,0.007][1.150,0.000,0.006]
[1.200,0.000,0.005][1.250,0.000,0.004][1.300,0.000,0.004][1.350,0.000,0.003]
[1.400,0.000,0.002][1.450,0.000,0.001][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-4.2486E-3x^3 + 1.9096E-2x^2 - 4.6221E-2x + 4.0729E-2$
Coeff. of Determination: 1.0000

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C580 Fig. 2.11(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Curve Name: **Inst. of contiguous bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.041][0.050,0.000,0.038][0.100,0.000,0.036][0.150,0.000,0.034]
[0.200,0.000,0.032][0.250,0.000,0.030][0.300,0.000,0.029][0.350,0.000,0.027]
[0.400,0.000,0.025][0.450,0.000,0.023][0.500,0.000,0.022][0.550,0.000,0.020]
[0.600,0.000,0.019][0.650,0.000,0.018][0.700,0.000,0.016][0.750,0.000,0.015]
[0.800,0.000,0.014][0.850,0.000,0.013][0.900,0.000,0.011][0.950,0.000,0.010]
[1.000,0.000,0.009][1.050,0.000,0.008][1.100,0.000,0.007][1.150,0.000,0.006]
[1.200,0.000,0.005][1.250,0.000,0.004][1.300,0.000,0.004][1.350,0.000,0.003]
[1.400,0.000,0.002][1.450,0.000,0.001][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-4.2486E-3x^3 + 1.9096E-2x^2 - 4.6221E-2x + 4.0729E-2$
Coeff. of Determination: 1.0000

Curve Name: **Inst. of secant bored pile wall in stiff clay (CIRIA C760 Fig. 6.8(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.081][0.050,0.000,0.076][0.100,0.000,0.072][0.150,0.000,0.067]
[0.200,0.000,0.063][0.250,0.000,0.059][0.300,0.000,0.056][0.350,0.000,0.052]
[0.400,0.000,0.049][0.450,0.000,0.045][0.500,0.000,0.043][0.550,0.000,0.040]
[0.600,0.000,0.037][0.650,0.000,0.034][0.700,0.000,0.032][0.750,0.000,0.029]
[0.800,0.000,0.027][0.850,0.000,0.024][0.900,0.000,0.022][0.950,0.000,0.020]
[1.000,0.000,0.018][1.050,0.000,0.016][1.100,0.000,0.014][1.150,0.000,0.012]
[1.200,0.000,0.011][1.250,0.000,0.009][1.300,0.000,0.007][1.350,0.000,0.005]
[1.400,0.000,0.004][1.450,0.000,0.002][1.500,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 3
y Order: 0
Polynomial: z = $-1.0610E-2x^3 + 4.4203E-2x^2 - 9.6358E-2x + 8.0901E-2$
Coeff. of Determination: 1.0000

Curve Name: **Exc. in front of high stiffness wall in stiff clay (CIRIA C760 Fig. 6.15(a))**
Coordinates: [Distance from wall / wall depth or max. excavation depth (x), Depth / wall depth or max. excavation depth (y), Horizontal movement / wall depth or max. excavation depth (z)(%)]
[0.000,0.000,0.150][4.000,0.000,0.000]
Curve Fitting Method: Polynomial
x Order: 1
y Order: 0
Polynomial: z = -3.75E-2x + 1.50E-1
Coeff. of Determination: 1.00

Utility Dimensions

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick 1372-762	1372.0	200.00
2	Brick 2134-1829	2134.0	200.00
3	HPPE	180.00	5.0000
4	BP	180.00	5.0000

Acceptance Criteria/Parameters

Ref.	Name	Criteria: Pullout:	Criteria: Pullout:	Criteria: Pullout:	Criteria: Pullout:	Criteria: Rotn.:	Criteria: Rotn.:	Criteria: Rotn.:	Criteria: Rotn.:	Allowable Rotn.	Allowable Ax.	Allowable Ax.	Allowable Flex.	Rad. of Flex.	Rad. of Flex.	Factors: Rad. of Flex.	Factors: Rad. of Flex.	Factors: Pullout:	Factors: Pullout:

	Strain:	Strain:	Threshold Strain: Value	Threshold Strain:	Limit Strain: Value	Limit Strain:	Threshold Strain: Value	Threshold Strain:	Limit Strain: Value	Limit Strain:	Strain: Tension	Strain: Tension: Value [με]	Strain: Compn.	Strain: Compn.: Value [με]	Curv.: Threshold	Curv.: Threshold: Value [m]	Curv.: Limit	Curv.: Limit: Value [m]	Ax.	Flex.
	Tension	Compn.	Tension	Compn.	[mm]		[mm]		[Deg]		[Deg]									
1	Brick	No	–		No	–	No	–	No	–	Yes	500.00	Yes	1000.0	Yes	15000.	Yes	15000.	1.0000	1.0000
1.0000	1.0000	1.0000	2.0000	1.0000																
2	HPPE	No	–		No	–	No	–	No	–	Yes	9000.0	Yes	9000.0	Yes	15000.	Yes	15000.	1.0000	1.0000
1.0000	0.20000	0.20000	1.0000	1.0000																

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : Yes

Utilities

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length [m]	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line [m]	End Distance Along Line [m]	Pipe Segment Length [m]
1	TW Main-1	1	Yes	BP	HPPE	Line	TW Main-1	–	48.136	–	–	0.0	48.135	3.0000
2	TW Main-2	1	Yes	HPPE	HPPE	Line	TW Main-2	–	34.101	–	–	0.0	34.101	3.0000
3	TW Main-3	1	Yes	HPPE	HPPE	Line	TW Main-3	–	9.9689	–	–	0.0	9.9680	3.0000
4	TW Main-4	1	Yes	HPPE	HPPE	Line	TW Main-4	–	53.775	–	–	0.0	53.774	3.0000
5	TW Foul-1	1	Yes	Brick 1372-762	Brick	Line	TW Foul-1	–	47.208	–	–	0.0	47.208	1.0000
6	TW Foul-2	1	Yes	Brick 2134-1829	Brick	Line	TW Foul-2	–	97.459	–	–	0.0	97.459	1.0000

Warnings

1 Multiple excavations have been specified. Displacements resulting from each excavation are summed with no account taken of the interactions between excavations (e.g. overlapping zones of influence or 'shielding' of one excavation by another).

2 If an embedded wall excavation is assigned a 'surface' ground movement curve and if the 'allow movement calculation to level' option is checked for the excavation then displacements induced by it are calculated for points at the surface, and points below the surface to the level specified. Others are ignored. An example of such a combination, for which displacements will not be calculated is Excavation XP1/Side 1/Line 1/Vertical. This is an example only. There are 263 others.

Errors

None

Displacement Results - Displacement Lines

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
0	Base Model	1	TW Main-1	0.0	76.75020	113.72130	-0.90000	-0.51428	-1.3356	-0.0052772	1.1850	0.80260	214.83	*
				1.0028	75.92703	113.14854	-0.90000	-0.50532	-1.4591	0.041458	1.2481	0.90907	214.83	*
				2.0057	75.10385	112.57577	-0.90000	-0.48164	-1.5796	0.095571	1.2975	1.0215	214.83	*
				3.0085	74.28068	112.00301	-0.90000	-0.44215	-1.6968	0.15604	1.3321	1.1403	214.83	*
				4.0113	73.45751	111.43024	-0.90000	-0.38647	-1.8136	0.22260	1.3531	1.2680	214.83	*
				5.0142	72.63434	110.85748	-0.90000	-0.32244	-1.9711	0.30967	1.3905	1.4338	214.83	*
				6.0170	71.81116	110.28471	-0.90000	-0.24121	-2.1331	0.40480	1.4163	1.6132	214.83	*
				7.0198	70.98799	109.71195	-0.90000	-0.14183	-2.2997	0.50683	1.4299	1.8067	214.83	*
				8.0227	70.16482	109.13918	-0.90000	-0.023421	-2.4708	0.61437	1.4304	2.0148	214.83	*
				9.0255	69.34164	108.56642	-0.90000	0.11476	-2.6464	0.72586	1.4173	2.2378	214.83	*
				10.028	68.51847	107.99365	-0.90000	0.27323	-2.8261	0.83957	1.3898	2.4758	214.83	*
				11.031	67.69530	107.42089	-0.90000	0.45222	-3.0094	0.95366	1.3476	2.7286	214.83	*
				12.034	66.87213	106.84812	-0.90000	0.65159	-3.1958	1.0662	1.2904	2.9954	214.83	*
				13.037	66.04895	106.27536	-0.90000	0.87069	-3.3841	1.1945	1.2181	3.2751	214.83	*
				14.040	65.22578	105.70260	-0.90000	1.1083	-3.5732	1.3991	1.1311	3.5660	214.83	*
				15.042	64.40261	105.12983	-0.90000	1.3624	-3.7614	1.5827	1.0299	3.8657	214.83	*
				16.045	63.57943	104.55707	-0.90000	1.6305	-3.9467	1.7426	0.91578	4.1709	214.83	*
				17.048	62.75626	103.98430	-0.90000	1.9090	-4.1270	1.8759	0.79013	4.4780	214.83	*
				18.051	61.93309	103.41154	-0.90000	2.1939	-4.2997	1.9799	0.65493	4.7824	214.83	*
				19.054	61.10991	102.83877	-0.90000	2.5106	-4.8041	2.2769	0.68309	5.3774	214.83	*
				20.057	60.28674	102.26601	-0.90000	2.8418	-5.4380	2.6603	0.77322	6.0869	214.83	*
				21.059	59.46357	101.69324	-0.90000	3.1773	-6.0801	3.0549	0.86451	6.8055	214.83	*
				22.062	58.64040	101.12048	-0.90000	3.2883	-6.2924	3.2229	0.89470	7.0432	214.83	*
				23.065	57.81722	100.54771	-0.90000	3.3102	-6.3344	3.3006	0.90068	7.0902	214.83	*
				24.068	56.99405	99.97495	-0.90000	3.3322	-6.3764	3.3810	0.90665	7.1372	214.83	*
				25.071	56.17088	99.40219	-0.90000	3.3541	-6.4184	3.4647	0.91262	7.1842	214.83	*
				26.074	55.34770	98.82942	-0.90000	3.3761	-6.4604	3.5520	0.91859	7.2313	214.83	*
				27.076	54.52453	98.25666	-0.90000	3.3980	-6.5024	3.6435	0.92456	7.2783	214.83	*
				28.079	53.70136	97.68389	-0.90000	3.4200	-6.5444	3.7395	0.93054	7.3253	214.83	*
				29.082	52.87819	97.11113	-0.90000	3.4419	-6.5864	3.8401	0.93651	7.3723	214.83	*
				30.085	52.05501	96.53836	-0.90000	3.4639	-6.6284	3.9456	0.94248	7.4193	214.83	*
				31.088	51.23184	95.96560	-0.90000	3.4858	-6.6704	4.0560	0.94845	7.4663	214.83	*
				32.091	50.40867	95.39283	-0.90000	3.5078	-6.7124	4.1713	0.95442	7.5133	214.83	*
				33.093	49.58549	94.82007	-0.90000	3.4644	-6.6294	4.2123	0.94262	7.4204	214.83	*
				34.096	48.76232	94.24730	-0.90000	3.0993	-5.9308	3.8661	0.84329	6.6385	214.83	*
				35.099	47.93915	93.67454	-0.90000	2.7295	-5.2231	3.5128	0.74266	5.8463	214.83	*
				36.102	47.11598	93.10178	-0.90000	2.4186	-4.5648	3.2144	0.62183	5.1284	214.83	*
				37.105	46.29280	92.52901	-0.90000	2.4498	-4.2084	3.2226	0.39273	4.8537	214.83	*
				38.108	45.46963	91.95625	-0.90000	2.4720	-3.8329	3.1777	0.15998	4.5581	214.83	*
				39.110	44.64646	91.38348	-0.90000	2.4849	-3.4468	3.0814	-0.071076	4.2485	214.83	*
				40.113	43.82328	90.81072	-0.90000	2.4879	-3.0587	2.9365	-0.29527	3.9317	214.83	*
				41.116	43.00011	90.23795	-0.90000	2.4812	-2.6766	2.7462	-0.50792	3.6142	214.83	*
				42.119	42.17694	89.66519	-0.90000	2.4646	-2.3075	2.5140	-0.70514	3.3017	214.83	*
				43.122	41.35376	89.09242	-0.90000	2.4384	-1.9568	2.2441	-0.88392	2.9989	214.83	*
				44.125	40.53059	88.51966	-0.90000	2.4030	-1.6288	1.9405	-1.0422	2.7095	214.83	*
				45.127	39.70742	87.94689	-0.90000	2.3589	-1.3263	1.6238	-1.1788	2.4360	214.83	*
				46.130	38.88425	87.37413	-0.90000	2.3068	-1.0508	1.3710	-1.2934	2.1800	214.83	*
				47.133	38.06107	86.80136	-0.90000	2.2471	-0.80281	1.1058	-1.3860	1.9424	214.83	*
				48.136	37.23790	86.22860	-0.90000	2.2319	-0.59855	0.86603	-1.4902	1.7660	214.83	*
		2	TW Main-2	0.0	37.23790	86.22860	-0.90000	2.2319	-0.59855	0.86603	1.5703	1.6952	297.80	*
				1.0030	37.70561	85.34136	-0.90000	2.4197	-0.46340	1.1764	1.5383	1.9244	297.80	*
				2.0059	38.17333	84.45412	-0.90000	2.6188	-0.30131	1.4642	1.4878	2.1762	297.80	*
				3.0089	38.64104	83.56688	-0.90000	2.8295	-0.11082	1.7675	1.4175	2.4514	297.80	*
				4.0119	39.10876	82.67964	-0.90000	3.0516	0.10905	2.1430	1.3266	2.7504	297.80	*
				5.0149	39.57647	81.79239	-0.90000	3.2844	0.35860	2.4916	1.2144	3.0727	297.80	*
				6.0178	40.04419	80.90515	-0.90000	3.5267	0.63717	2.8090	1.0809	3.4169	297.80	*
				7.0208	40.51190	80.01791	-0.90000	3.7762	0.94287	3.0904	0.92690	3.7802	297.80	*
				8.0238	40.97962	79.13067	-0.90000	4.0583	1.2799	3.3313	0.76031	4.1868	297.80	*
				9.0268	41.44733	78.24343	-0.90000	4.3859	1.6552	3.5269	0.58110	4.6517	297.80	*
				10.030	41.91505	77.35619	-0.90000	4.6892	2.0448	3.6730	0.37787	5.1017	297.80	*
				11.033	42.38276	76.46895	-0.90000	4.9603	2.4349	3.7653	0.15915	5.5234	297.80	*
				12.036	42.85048	75.58171	-0.90000	5.5350	2.8338	4.0727	0.074355	6.2178	297.80	*
				13.039	43.31819	74.69446	-0.90000	6.3376	3.2447	4.5558	0.085136	7.1194	297.80	*
				14.042	43.78591	73.80722	-0.90000	7.1410	3.6560	5.0407	0.095928	8.0219	297.80	*
				15.045	44.25362	72.91998	-0.90000	7.4657	3.8222	5.2091	0.10029	8.3867	297.80	*
				16.048	44.72134	72.03274	-0.90000	7.4734	3.8262	5.1688	0.10039	8.3954	297.80	*
				17.051	45.18905	71.14550	-0.90000	7.4812	3.8301	5.1308	0.10050	8.4040	297.80	*
				18.054	45.65676	70.25826	-0.90000	7.4889	3.8341	5.0957	0.10060	8.4127	297.80	*
				19.056	46.12448	69.37102	-0.90000	7.4967	3.8381	5.0640	0.10071	8.4214	297.80	*
				20.059	46.59219	68.48378	-0.90000	7.5044	3.8420	5.0361	0.10081	8.4301	297.80	*
				21.062	47.05991	67.59654	-0.90000	7.5121	3.8460	5.0123	0.10091	8.4388	297.80	*
				22.065	47.52762	66.70929	-0.90000	7.5199	3.8500	4.9927	0.10102	8.4475	297.80	*
				23.068	47.99534	65.82205	-0.90000	7.5276	3.8539	4.9774	0.10112	8.4562	297.80	*
				24.071	48.46305	64.93481	-0.90000	7.5354	3.8579	4.9663	0.10123	8.4649	297.80	*
				25.074	48.93077	64.04757	-0.90000	7.5431	3.8618	4.9590	0.10133	8.4736	297.80	*
				26.077	49.39848	63.16033	-0.90000	7.5508	3.8658	4.9552	0.10143	8.4823	297.80	*
				27.080	49.86620	62.27309	-0.90000	7.5586	3.8698	4.9545	0.10154	8.4910	297.80	*
				28.083	50.33391	61.38585	-0.90000	7.5663	3.8737	4.9565	0.10164	8.4997	297.80	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				29.086	50.80163	60.49861	-0.90000	7.5740	3.8777	4.9608	0.10175	8.5084	297.80	*
				30.089	51.26934	59.61136	-0.90000	7.5818	3.8816	4.9668	0.10185	8.5171	297.80	*
				31.092	51.73706	58.72412	-0.90000	7.5895	3.8856	4.9744	0.10195	8.5257	297.80	*
				32.095	52.20477	57.83688	-0.90000	7.5973	3.8896	4.9831	0.10206	8.5344	297.80	*
				33.098	52.67249	56.94964	-0.90000	7.6050	3.8935	4.9927	0.10216	8.5431	297.80	*
				34.101	53.14020	56.06240	-0.90000	7.6127	3.8975	5.0031	0.10227	8.5518	297.80	*
		3	TW Main-3	0.0	53.14020	56.06240	-0.90000	7.6127	3.8975	5.0031	0.69150	8.5244	301.75	*
				0.99689	53.66476	55.21468	-0.90000	7.6647	3.9241	5.0670	0.69622	8.5827	301.75	*
				1.9938	54.18932	54.36696	-0.90000	7.7167	3.9507	5.1181	0.70095	8.6409	301.75	*
				2.9907	54.71388	53.51924	-0.90000	7.7687	3.9774	5.1802	0.70567	8.6991	301.75	*
				3.9876	55.23844	52.67152	-0.90000	7.8207	4.0040	5.2431	0.71039	8.7574	301.75	*
				4.9845	55.76300	51.82380	-0.90000	7.8728	4.0306	5.3066	0.71512	8.8156	301.75	*
				5.9813	56.28756	50.97608	-0.90000	7.9248	4.0573	5.3708	0.71985	8.8739	301.75	*
				6.9782	56.81212	50.12836	-0.90000	7.9769	4.0839	5.4358	0.72458	8.9322	301.75	*
				7.9751	57.33668	49.28064	-0.90000	8.0391	4.1158	5.5016	0.73023	9.0019	301.75	*
				8.9720	57.86124	48.43292	-0.90000	8.1039	4.1489	5.5683	0.73611	9.0744	301.75	*
				9.9689	58.38580	47.58520	-0.90000	8.1687	4.1821	5.6360	0.74200	9.1469	301.75	*
		4	TW Main-4	0.0	58.38580	47.58520	-0.90000	8.1687	4.1821	5.6360	0.17661	9.1753	298.21	*
				0.99583	58.85659	46.70769	-0.90000	8.1841	4.1900	5.6589	0.17694	9.1926	298.21	*
				1.9917	59.32738	45.83017	-0.90000	8.1995	4.1979	5.6832	0.17727	9.2099	298.21	*
				2.9875	59.79817	44.95266	-0.90000	8.2149	4.2058	5.7007	0.17761	9.2272	298.21	*
				3.9833	60.26896	44.07515	-0.90000	8.2303	4.2137	5.7298	0.17794	9.2446	298.21	*
				4.9791	60.73975	43.19764	-0.90000	8.2458	4.2216	5.7605	0.17827	9.2619	298.21	*
				5.9750	61.21054	42.32012	-0.90000	8.2612	4.2295	5.7927	0.17861	9.2792	298.21	*
				6.9708	61.68134	41.44261	-0.90000	8.2766	4.2374	5.8264	0.17894	9.2965	298.21	*
				7.9666	62.15213	40.56510	-0.90000	8.2920	4.2453	5.8619	0.17928	9.3139	298.21	*
				8.9624	62.62292	39.68758	-0.90000	8.3075	4.2532	5.8990	0.17961	9.3312	298.21	*
				9.9583	63.09371	38.81007	-0.90000	8.3229	4.2611	5.9378	0.17994	9.3486	298.21	*
				10.954	63.56450	37.93256	-0.90000	8.3384	4.2690	5.9784	0.18028	9.3659	298.21	*
				11.950	64.03529	37.05504	-0.90000	8.3538	4.2769	6.0206	0.18061	9.3832	298.21	*
				12.946	64.50608	36.17753	-0.90000	8.3693	4.2848	6.0645	0.18094	9.4006	298.21	*
				13.942	64.97687	35.30002	-0.90000	8.3847	4.2927	6.1101	0.18128	9.4180	298.21	*
				14.937	65.44766	34.42251	-0.90000	8.4002	4.3006	6.1574	0.18161	9.4353	298.21	*
				15.933	65.91845	33.54499	-0.90000	8.4156	4.3086	6.2061	0.18195	9.4527	298.21	*
				16.929	66.38924	32.66748	-0.90000	8.4311	4.3165	6.2562	0.18228	9.4701	298.21	*
				17.925	66.86003	31.78997	-0.90000	8.4466	4.3244	6.3077	0.18262	9.4874	298.21	*
				18.921	67.33082	30.91245	-0.90000	8.4620	4.3323	6.3602	0.18295	9.5048	298.21	*
				19.917	67.80161	30.03494	-0.90000	8.4775	4.3402	6.4136	0.18328	9.5222	298.21	*
				20.912	68.27241	29.15743	-0.90000	8.4930	4.3482	6.4676	0.18362	9.5396	298.21	*
				21.908	68.74320	28.27991	-0.90000	8.5085	4.3561	6.5219	0.18395	9.5570	298.21	*
				22.904	69.21399	27.40240	-0.90000	8.5240	4.3640	6.5760	0.18429	9.5744	298.21	*
				23.900	69.68478	26.52489	-0.90000	8.5394	4.3719	6.6296	0.18462	9.5918	298.21	*
				24.896	70.15557	25.64738	-0.90000	8.5549	4.3799	6.6823	0.18496	9.6092	298.21	*
				25.892	70.62636	24.76986	-0.90000	8.1593	4.1773	6.4500	0.17640	9.1647	298.21	*
				26.887	71.09715	23.89235	-0.90000	7.3192	3.7472	5.9094	0.15824	8.2212	298.21	*
				27.883	71.56794	23.01484	-0.90000	6.4778	3.3165	5.3659	0.14005	7.2761	298.21	*
				28.879	72.03873	22.13732	-0.90000	5.7510	3.1131	5.0378	-0.024368	6.5395	298.21	*
				29.875	72.50952	21.25981	-0.90000	5.1177	3.1420	4.9112	-0.34928	5.9951	298.21	*
				30.871	72.98031	20.38230	-0.90000	4.4570	3.1309	4.7262	-0.65184	5.4076	298.21	*
				31.866	73.45110	19.50479	-0.90000	3.7969	3.0771	4.4882	-0.91645	4.8005	298.21	*
				32.862	73.92189	18.62727	-0.90000	3.1662	2.9851	4.2029	-1.1336	4.2013	298.21	*
				33.858	74.39269	17.74976	-0.90000	2.6053	2.8868	3.8760	-1.3121	3.6605	298.21	*
				34.854	74.86348	16.87225	-0.90000	2.0933	2.7563	3.5129	-1.4392	3.1477	298.21	*
				35.850	75.33427	15.99473	-0.90000	1.6388	2.6010	3.1191	-1.5172	2.6737	298.21	*
				36.846	75.80506	15.11722	-0.90000	1.2995	2.5463	2.6993	-1.6294	2.3489	298.21	*
				37.841	76.27585	14.23971	-0.90000	1.0001	2.4831	2.2583	-1.7153	2.0552	298.21	*
				38.837	76.74664	13.36219	-0.90000	0.74378	2.4291	1.8133	-1.7889	1.8038	298.21	*
				39.833	77.21743	12.48468	-0.90000	0.54697	2.4443	1.4902	-1.8953	1.6376	298.21	*
				40.829	77.68822	11.60717	-0.90000	0.37737	2.4379	1.2093	-1.9699	1.4851	298.21	*
				41.825	78.15901	10.72966	-0.90000	0.23253	2.4121	0.91137	-2.0156	1.3453	298.21	*
				42.821	78.62980	9.85214	-0.90000	0.11009	2.3689	0.78617	-2.0354	1.2170	298.21	*
				43.816	79.10059	8.97463	-0.90000	0.0078313	2.3101	0.67000	-2.0320	1.0990	298.21	*
				44.812	79.57138	8.09712	-0.90000	-0.076274	2.2374	0.55345	-2.0076	0.99054	298.21	*
				45.808	80.04217	7.21960	-0.90000	-0.14407	2.1522	0.43957	-1.9646	0.89051	298.21	*
				46.804	80.51296	6.34209	-0.90000	-0.19722	2.0558	0.33107	-1.9048	0.79812	298.21	*
				47.800	80.98376	5.46458	-0.90000	-0.23721	1.9494	0.23029	-1.8300	0.71259	298.21	*
				48.796	81.45455	4.58706	-0.90000	-0.26534	1.8341	0.13914	-1.7416	0.63327	298.21	*
				49.791	81.92534	3.70955	-0.90000	-0.28280	1.7107	0.059045	-1.6411	0.55955	298.21	*
				50.787	82.39613	2.83204	-0.90000	-0.29062	1.5800	-0.0090572	-1.5297	0.49088	298.21	*
				51.783	82.86692	1.95453	-0.90000	-0.28972	1.4428	-0.064786	-1.4083	0.42680	298.21	*
				52.779	83.33771	1.07701	-0.90000	-0.28092	1.2996	-0.10832	-1.2780	0.36688	298.21	*
				53.773	83.80850	0.19950	-0.90000	-0.26495	1.1511	-0.13643	-1.1396	0.31073	298.21	*
		5	TW Foul-1	0.0	76.45800	114.12130	-6.00000	-0.46413	-1.2885	-0.034615	1.1349	0.76649	216.16	*
				1.0044	75.64700	113.52870	-6.00000	-0.45521	-1.4129	0.010688	1.2011	0.87220	216.16	*
				2.0089	74.83600	112.93610	-6.00000	-0.43197	-1.5344	0.063880	1.2540	0.98401	216.16	*
				3.0133	74.02501	112.34351	-6.00000	-0.39337	-1.6527	0.078489	1.2927	1.1023	216.16	*
				4.0177	73.21401	111.75091	-6.00000	-0.34304	-1.7893	0.14630	1.3326	1.2423	216.16	*
				5.0222	72.40301	111.15831	-6.00000	-0.28065	-1.9473	0.22852	1.3755	1.4067	216.16	*
				6.0266	71.59201	110.56571	-6.00000	-0.20148	-2.1098	0.31899	1.4074	1.5846	216.16	*
				7.0310	70.78101	109.97311	-6.00000	-0.10458	-2.2768	0.41661	1.4277	1.7766	216.16	*
				8.0355	69.97002	109.38052	-6.00000	0.010944	-2.4483	0.52001	1.4356	1.9832	216.16	*
				9.0399	69.15902	108.78792	-6.00000	0.14587	-2.6242	0.62763	1.4304	2.2049	216.16	*
				10.044	68.34802	108.19532	-6.00000	0.30078	-2.8042	0.73775	1.4116	2.4416	216.16	*
				11.049	67.53702	107.60272	-6.00000	0.47599	-2.9879	0.84847	1.3785	2.6933	216.16	*
				12.053	66.72603	107.01013	-6.00000	0.67146	-3.1748	0.95780	1.3309	2.9595	216.16	*
				13.058	65.91503	106.41753	-6.00000	0.88669	-3.3638	1.0637	1.2687	3.2391	216.16	*
				14.062	65.10403	105.82493	-6.00000	1.1206	-3.5539	1.2482	1.1919	3.5306	216.16	*
				15.067	64.29303	105.23233	-6.00000	1.3715	-3.7435	1.4332	1.1012	3.8317	216.16	*
				16.071	63.48203	104.63973	-6.00000	1.6369	-3.9308	1.5946	0.99737	4.1395	216.16	*
				17.075	62.67104	104.04714	-6.00000	1.9137	-4.1135	1.7295	0.88175	4.4504	216.16	*
				18.080	61.86004	103.45454	-6.00000	2.1978	-4.2893	1.8350	0.75606	4.7599	216.16	*
				19.084	61.04904	102.86194	-6.00000	2.5175	-4.8174	2.1459	0.80952	5.3749	216.16	*
				20.089	60.23804	102.26934	-6.00000	2.8511	-5.4557	2.5310	0.91678	6.0871	216.16	*
				21.093	59.42704	101.67674	-6.00000	3.1897	-6.1037	2.9283	1.0257	6.8100	216.16	*
				22.098	58.61605	101.08415	-6.00000	3.2919	-6.2994	3.0896	1.0586	7.0284	216.16	*
				23.102	57.80505	100.49155	-6.00000	3.3179	-6.3491	3.1745	1.0669	7.0839	216.16	*
				24.106	56.99405	99.89895	-6.00000	3.3439	-6.3988	3.2614	1.0753	7.1393	216.16	*
				25.111	56.18305	99.30635	-6.00000	3.3699	-6.4485	3.3510	1.0836	7.1948	216.16	*
				26.115	55.37206	98.71376	-6.00000	3.3959	-6.4982	3.4440	1.0920	7.2503	216.16	*
				27.120	54.56106	98.12116	-6.00000	3.4218	-6.5480	3.5408	1.1003	7.3057	216.16	*
				28.124	53.75006	97.52856	-6.00000	3.4478	-6.5977	3.6423	1.1087	7.3612	216.16	*
				29.129	52.93906	96.93596	-6.00000	3.4738	-6.6474	3.7487	1.1170	7.4167	216.16	*
				30.133	52.12806	96.34336	-6.00000	3.4998	-6.6971	3.8607	1.1254	7.4722	216.16	*
				31.137	51.31707	95.75077	-6.00000	3.5258	-6.7468	3.9785	1.1337	7.5276	216.16	*
				32.142	50.50607	95.15817	-6.00000	3.5517	-6.7965	4.1023	1.1421	7.5831	216.16	*
				33.146	49.69507	94.56557	-6.00000	3.5034	-6.7040	4.1413	1.1265	7.4798	216.16	*
				34.151	48.88407	93.97297	-6.00000	3.1372	-6.0033	3.7942	1.0088	6.6980	216.16	*
				35.155	48.07307	93.38037	-6.00000	2.7654	-5.2917	3.4400	0.88923	5.9041	216.16	*
				36.160	47.26208	92.78778	-6.00000	2.4595	-4.6333	3.1490	0.74772	5.1921	216.16	*
				37.164	46.45108	92.19518	-6.00000	2.5022	-4.2776	3.1659	0.50342	4.9301	216.16	*
				38.169	45.64008	91.60258	-6.00000	2.5312	-3.8903	3.1300	0.25145	4.6344	216.16	*
				39.173	44.82908	91.00998	-6.00000	2.5355	-3.4703	3.0431	228.86E-6	4.2979	216.16	*
				40.177	44.01809	90.41739	-6.00000	2.5413	-3.0642	2.9078	-0.24408	3.9734	216.16	*
				41.182	43.20709	89.82479	-6.00000	2.5369	-2.6639	2.7273	-0.47664	3.6476	216.16	*
				42.186	42.39609	89.23219	-6.00000	2.5222	-2.2772	2.5050	-0.69294	3.3267	216.16	*
				43.191	41.58509	88.63959	-6.00000	2.4976	-1.9104	2.2449	-0.88949	3.0160	216.16	*
				44.195	40.77409	88.04699	-6.00000	2.4633	-1.5679	1.9509	-1.0639	2.7193	216.16	*
				45.200	39.96310	87.45440	-6.00000	2.4200	-1.2529	1.6272	-1.2147	2.4394	216.16	*
				46.204	39.15210	86.86180	-6.00000	2.3682	-0.96707	1.3125	-1.3416	2.1780	216.16	*
				47.208	38.34110	86.26920	-6.00000	2.3195	-0.71434	1.0640	-1.4513	1.9452	216.16	*
		6	TW Foul-2	0.0	38.34110	86.26920	-6.00000	2.3195	-0.71434	1.0640	1.7322	1.6999	298.42	*
				1.0047	38.81931	85.38557	-6.00000	2.5186	-0.56699	1.4056	1.6974	1.9452	298.42	*
				2.0095	39.29752	84.50193	-6.00000	2.7318	-0.38838	1.8627	1.6418	2.2176	298.42	*
				3.0142	39.77574	83.61830	-6.00000	2.9594	-0.17632	2.3095	1.5636	2.5187	298.42	*
				4.0189	40.25395	82.73467	-6.00000	3.2016	0.070905	2.7135	1.4615	2.8495	298.42	*
				5.0237	40.73216	81.85104	-6.00000	3.4828	0.35522	3.0676	1.3453	3.2321	298.42	*
				6.0284	41.21037	80.96740	-6.00000	3.8793	0.69155	3.3876	1.2382	3.7409	298.42	*
				7.0332	41.68859	80.08377	-6.00000	4.2737	1.0794	3.6683	1.0848	4.2724	298.42	*
				8.0379	42.16680	79.20014	-6.00000	4.6599	1.5110	3.9044	0.88908	4.8174	298.42	*
				9.0426	42.64501	78.31650	-6.00000	5.0371	1.9773	4.0908	0.65853	5.3711	298.42	*
				10.047	43.12322	77.43287	-6.00000	5.4038	2.4681	4.2223	0.40137	5.9272	298.42	*
				11.052	43.60144	76.54924	-6.00000	5.7629	2.9504	4.3301	0.14809	6.4726	298.42	*
				12.057	44.07965	75.66560	-6.00000	6.1171	3.3878	4.8454	0.17004	7.4320	298.42	*
				13.062	44.55786	74.78197	-6.00000	7.4731	3.8260	5.3617	0.19203	8.3933	298.42	*
				14.066	45.03607	73.89834	-6.00000	8.2559	4.2268	5.8286	0.21215	9.2726	298.42	*
				15.071	45.51429	73.01471	-6.00000	8.2744	4.2363	5.7732	0.21262	9.2934	298.42	*
				16.076	45.99250	72.13107	-6.00000	8.2929	4.2457	5.7197	0.21310	9.3141	298.42	*
				17.081	46.47071	71.24744	-6.00000	8.3114	4.2552	5.6694	0.21358	9.3349	298.42	*
				18.085	46.94892	70.36381	-6.00000	8.3299	4.2647	5.6234	0.21405	9.3557	298.42	*
				19.090	47.42714	69.48017	-6.00000	8.3485	4.2742	5.5826	0.21453	9.3765	298.42	*
				20.095	47.90535	68.59654	-6.00000	8.3670	4.2837	5.5478	0.21500	9.3973	298.42	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				21.099	48.38356	67.71291	-6.00000	8.3855	4.2931	5.5197	0.21548	9.4182	298.42	*
				22.104	48.86177	66.82927	-6.00000	8.4041	4.3026	5.4987	0.21596	9.4390	298.42	*
				23.109	49.33998	65.94564	-6.00000	8.4226	4.3121	5.4848	0.21643	9.4598	298.42	*
				24.114	49.81820	65.06201	-6.00000	8.4411	4.3216	5.4779	0.21691	9.4806	298.42	*
				25.118	50.29641	64.17838	-6.00000	8.4597	4.3311	5.4776	0.21739	9.5015	298.42	*
				26.123	50.77462	63.29474	-6.00000	8.4783	4.3406	5.4834	0.21786	9.5223	298.42	*
				27.128	51.25283	62.41111	-6.00000	8.4968	4.3501	5.4947	0.21834	9.5432	298.42	*
				28.133	51.73105	61.52748	-6.00000	8.5154	4.3596	5.5107	0.21882	9.5640	298.42	*
				29.137	52.20926	60.64384	-6.00000	8.5340	4.3691	5.5307	0.21929	9.5849	298.42	*
				30.142	52.68747	59.76021	-6.00000	8.5525	4.3787	5.5540	0.21977	9.6057	298.42	*
				31.147	53.16568	58.87658	-6.00000	8.5711	4.3882	5.5797	0.22025	9.6266	298.42	*
				32.152	53.64390	57.99294	-6.00000	8.5897	4.3977	5.6074	0.22073	9.6475	298.42	*
				33.156	54.12211	57.10931	-6.00000	8.6083	4.4072	5.6364	0.22121	9.6684	298.42	*
				34.161	54.60032	56.22568	-6.00000	8.6269	4.4167	5.6663	0.22168	9.6893	298.42	*
				35.166	55.07853	55.34205	-6.00000	8.6456	4.4263	5.6969	0.22216	9.7102	298.42	*
				36.170	55.55675	54.45841	-6.00000	8.6642	4.4358	5.7278	0.22264	9.7311	298.42	*
				37.175	56.03496	53.57478	-6.00000	8.6828	4.4453	5.7590	0.22312	9.7521	298.42	*
				38.180	56.51317	52.69115	-6.00000	8.7015	4.4549	5.7905	0.22360	9.7730	298.42	*
				39.185	56.99138	51.80751	-6.00000	8.7201	4.4644	5.8222	0.22408	9.7939	298.42	*
				40.189	57.46959	50.92388	-6.00000	8.7388	4.4740	5.8543	0.22456	9.8149	298.42	*
				41.194	57.94781	50.04025	-6.00000	8.7574	4.4835	5.8869	0.22504	9.8359	298.42	*
				42.199	58.42602	49.15661	-6.00000	8.7761	4.4931	5.9201	0.22552	9.8568	298.42	*
				43.204	58.90423	48.27298	-6.00000	8.7948	4.5027	5.9540	0.22600	9.8778	298.42	*
				44.208	59.38244	47.38935	-6.00000	8.8135	4.5122	5.9890	0.22648	9.8988	298.42	*
				45.213	59.86066	46.50572	-6.00000	8.8322	4.5218	6.0250	0.22696	9.9198	298.42	*
				46.218	60.33887	45.62208	-6.00000	8.8509	4.5314	6.0623	0.22744	9.9408	298.42	*
				47.223	60.81708	44.73845	-6.00000	8.8696	4.5410	6.1010	0.22792	9.9618	298.42	*
				48.227	61.29529	43.85482	-6.00000	8.8883	4.5506	6.1412	0.22840	9.9829	298.42	*
				49.232	61.77351	42.97118	-6.00000	8.9070	4.5601	6.1830	0.22888	10.004	298.42	*
				50.237	62.25172	42.08755	-6.00000	8.9258	4.5697	6.2265	0.22936	10.025	298.42	*
				51.242	62.72993	41.20392	-6.00000	8.9445	4.5793	6.2718	0.22984	10.046	298.42	*
				52.246	63.20814	40.32028	-6.00000	8.9633	4.5889	6.3188	0.23033	10.067	298.42	*
				53.251	63.68636	39.43665	-6.00000	8.9821	4.5986	6.3677	0.23081	10.088	298.42	*
				54.256	64.16457	38.55302	-6.00000	9.0009	4.6082	6.4184	0.23129	10.109	298.42	*
				55.260	64.64278	37.66939	-6.00000	9.0196	4.6178	6.4709	0.23177	10.130	298.42	*
				56.265	65.12099	36.78575	-6.00000	9.0384	4.6274	6.5251	0.23226	10.151	298.42	*
				57.270	65.59921	35.90212	-6.00000	9.0573	4.6370	6.5811	0.23274	10.173	298.42	*
				58.275	66.07742	35.01849	-6.00000	9.0761	4.6467	6.6388	0.23322	10.194	298.42	*
				59.279	66.55563	34.13485	-6.00000	9.0949	4.6563	6.6980	0.23371	10.215	298.42	*
				60.284	67.03384	33.25122	-6.00000	9.1138	4.6660	6.7586	0.23419	10.236	298.42	*
				61.289	67.51205	32.36759	-6.00000	9.1326	4.6756	6.8204	0.23468	10.257	298.42	*
				62.294	67.99027	31.48395	-6.00000	9.1515	4.6853	6.8833	0.23516	10.278	298.42	*
				63.298	68.46848	30.60032	-6.00000	9.1704	4.6950	6.9469	0.23565	10.300	298.42	*
				64.303	68.94669	29.71669	-6.00000	9.1892	4.7046	7.0109	0.23613	10.321	298.42	*
				65.308	69.42490	28.83306	-6.00000	9.2081	4.7143	7.0748	0.23662	10.342	298.42	*
				66.313	69.90312	27.94942	-6.00000	9.2271	4.7240	7.1381	0.23710	10.363	298.42	*
				67.317	70.38133	27.06579	-6.00000	9.2460	4.7337	7.2004	0.23759	10.385	298.42	*
				68.322	70.85954	26.18216	-6.00000	9.2649	4.7434	7.2610	0.23808	10.406	298.42	*
				69.327	71.33775	25.29852	-6.00000	8.9876	4.6014	7.1128	0.23095	10.094	298.42	*
				70.332	71.81597	24.41489	-6.00000	8.1110	4.1526	6.5438	0.20843	9.1098	298.42	*
				71.336	72.29418	23.53126	-6.00000	7.2327	3.7029	5.9707	0.18586	8.1234	298.42	*
				72.341	72.77239	22.64762	-6.00000	6.4094	3.4353	5.5616	0.029391	7.2719	298.42	*
				73.346	73.25060	21.76399	-6.00000	5.6529	3.4872	5.4250	-0.37634	6.6313	298.42	*
				74.350	73.72882	20.88036	-6.00000	4.8674	3.4932	5.2260	-0.75549	5.9433	298.42	*
				75.355	74.20703	19.99673	-6.00000	4.0900	3.4499	4.9710	-1.0874	5.2390	298.42	*
				76.360	74.68524	19.11309	-6.00000	3.3508	3.3563	4.6666	-1.3570	4.5444	298.42	*
				77.365	75.16345	18.22946	-6.00000	2.6709	3.2138	4.3194	-1.5552	3.8786	298.42	*
				78.369	75.64166	17.34583	-6.00000	2.0732	3.0413	3.9352	-1.6879	3.2708	298.42	*
				79.374	76.11988	16.46219	-6.00000	1.5732	2.8736	3.5200	-1.7785	2.7513	298.42	*
				80.379	76.59809	15.57856	-6.00000	1.1423	2.6750	3.0788	-1.8089	2.2778	298.42	*
				81.384	77.07630	14.69493	-6.00000	0.82230	2.5870	2.6198	-1.8838	1.9545	298.42	*
				82.388	77.55451	13.81129	-6.00000	0.59043	2.6239	2.2314	-2.0266	1.7681	298.42	*
				83.393	78.03273	12.92766	-6.00000	0.39207	2.6347	1.8081	-2.1305	1.5988	298.42	*
				84.398	78.51094	12.04403	-6.00000	0.22389	2.6222	1.4667	-2.1996	1.4450	298.42	*
				85.403	78.98915	11.16040	-6.00000	0.082701	2.5892	1.1517	-2.2377	1.3051	298.42	*
				86.407	79.46736	10.27676	-6.00000	-0.034446	2.5379	0.87842	-2.2484	1.1776	298.42	*
				87.412	79.94558	9.39313	-6.00000	-0.13023	2.4704	0.75150	-2.2347	1.0613	298.42	*
				88.417	80.42379	8.50950	-6.00000	-0.20705	2.3887	0.62382	-2.1994	0.95485	298.42	*
				89.421	80.90200	7.62586	-6.00000	-0.26701	2.2944	0.49876	-2.1450	0.85722	298.42	*
				90.426	81.38021	6.74223	-6.00000	-0.31198	2.1889	0.37933	-2.0736	0.76745	298.42	*
				91.431	81.85843	5.85860	-6.00000	-0.34361	2.0735	0.26812	-1.9871	0.68469	298.42	*
				92.436	82.33664	4.97496	-6.00000	-0.36332	1.9492	0.16728	-1.8871	0.60819	298.42	*
				93.440	82.81485	4.09133	-6.00000	-0.37237	1.8169	0.078400	-1.7752	0.53730	298.42	*
				94.445	83.29306	3.20770	-6.00000	-0.37187	1.6777	0.0025495	-1.6524	0.47146	298.42	*
				95.450	83.77128	2.32407	-6.00000	-0.36276	1.5320	-0.059795	-1.5200	0.41014	298.42	*
				96.455	84.24949	1.44043	-6.00000	-0.34592	1.3807	-0.10876	-1.3789	0.35292	298.42	*
				97.459	84.72770	0.55680	-6.00000	-0.32208	1.2242	-0.14510	-1.2299	0.29940	298.42	*

* Result includes imported displacement(s).

Displacement Results - Displacement Grids

Stage: Ref.	Stage: Name	Disp. Grid: Ref.	Disp. Grid: Name	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]

Specific Utility Damage Results - Coordinates & Displacements

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility [m]	x [m]	y [m]	z [m]	δx(n) [mm]	δy(n) [mm]	δz(n) [mm]	δH//(n) [mm]	δHperp.(n) [mm]	δx(n-Lp) [mm]	δy(n-Lp) [mm]	δz(n-Lp) [mm]	δH//(n-Lp) [mm]	δHperp.(n-Lp) [mm]	δx(n+Lp) [mm]	δy(n+Lp) [mm]	δz(n+Lp) [mm]	δH//(n+Lp) [mm]	δHperp.(n+Lp) [mm]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.15604	1.33206	1.14028	-0.51420	-1.33665	-0.00488	1.18550	0.80350	-0.24190	-2.13173	0.40400	1.41610	1.14028
						6.01699	71.81116	110.28471	-0.90000	-0.24121	-2.13311	0.40480	1.41632	1.61319	-0.44168	-1.69779	0.15661	1.33224	1.14136	0.11359	-2.64491	0.72491	1.41739	1.61319
						9.02549	69.34164	108.56642	-0.90000	0.11476	-2.64639	0.72586	1.41728	2.23783	-0.24037	-2.13452	0.40567	1.41643	1.61483	0.64990	-3.19419	1.06521	1.29088	2.23783
						12.03399	66.87213	106.84812	-0.90000	0.65159	-3.19577	1.06616	1.29039	2.99539	0.11610	-2.64792	0.72682	1.41705	2.23985	1.36029	-3.75976	1.58117	1.03079	2.99539
						15.04249	64.40261	105.12983	-0.90000	1.36244	-3.76136	1.58273	1.02993	3.86566	0.65345	-3.19736	1.06725	1.28978	2.99776	2.19146	-4.29824	1.97907	0.65607	3.86566
						18.05098	61.93309	103.41154	-0.90000	2.19387	-4.29971	1.97995	0.65493	4.78243	1.36471	-3.76293	1.58408	1.02897	3.86824	3.17448	-6.07462	3.05159	0.86374	4.78243
						21.05948	59.46357	101.69324	-0.90000	3.17732	-6.08006	3.05494	0.86451	6.80552	2.19656	-4.30398	1.98247	0.65517	4.78747	3.33200	-6.37606	3.38030	0.90660	6.80552
						24.06798	56.99405	99.97495	-0.90000	3.33219	-6.37641	3.38098	0.90665	7.13724	3.17826	-6.08186	3.05636	0.86476	6.80753	3.39785	-6.50206	3.64277	0.92451	7.13724
						27.07648	54.52453	98.25666	-0.90000	3.39804	-6.50242	3.64355	0.92456	7.27827	3.33238	-6.37677	3.38169	0.90670	7.13763	3.46370	-6.62807	3.94473	0.94243	7.27827
						30.08497	52.05501	96.53836	-0.90000	3.46388	-6.62842	3.94563	0.94248	7.41931	3.39822	-6.50277	3.64436	0.92461	7.27867	3.46476	-6.63010	4.21192	0.94272	7.41931
						33.09347	49.58549	94.82007	-0.90000	3.46439	-6.62939	4.21227	0.94262	7.42040	3.46407	-6.62878	3.94656	0.94253	7.41971	2.42128	-4.57039	3.21692	0.62286	7.42040
						36.10197	47.11598	93.10178	-0.90000	2.41865	-4.56481	3.21439	0.62183	5.12842	3.46130	-6.62347	4.20934	0.94178	7.41377	2.48475	-3.45005	3.08226	-0.06912	5.12842
						39.11047	44.64646	91.38348	-0.90000	2.48486	-3.44677	3.08144	-0.07108	4.24850	2.41891	-4.56179	3.21446	0.61989	5.12609	2.46471	-2.31058	2.51599	-0.70347	4.24850
						42.11896	42.17694	89.66519	-0.90000	2.46456	-2.30745	2.51402	-0.70514	3.30170	2.48488	-3.44349	3.08021	-0.07298	4.24581	2.35932	-1.32885	1.62647	-1.17768	3.30170
						45.12746	39.70742	87.94689	-0.90000	2.35895	-1.32629	1.62379	-1.17883	2.43599	2.46434	-2.30448	2.51174	-0.70665	3.29913	2.23200	-0.60028	0.86806	-1.48928	2.43599
					2	4.01133	73.45751	111.43024	-0.90000	-0.38647	-1.81363	0.22260	1.35308	1.26798	-0.50512	-1.46010	0.04192	1.24856	0.91002	-0.14267	-2.29828	0.50596	1.42977	1.26798
						7.01983	70.98799	109.71195	-0.90000	-0.14183	-2.29969	0.50683	1.42988	1.80669	-0.38593	-1.81496	0.22333	1.35340	1.26938	0.27188	-2.82456	0.83861	1.39007	1.80669
						10.02832	68.51847	107.99365	-0.90000	0.27323	-2.82609	0.83957	1.38983	2.47584	-0.14083	-2.30114	0.50774	1.42989	1.80845	0.86883	-3.38250	1.19344	1.21872	2.47584
						13.03682	66.04895	106.27536	-0.90000	0.87069	-3.38410	1.19453	1.21811	3.27512	0.27474	-2.82764	0.84054	1.38948	2.47798	1.62823	-3.94517	1.74124	0.91675	3.27512
						16.04532	63.57943	104.55707	-0.90000	1.63050	-3.94674	1.74259	0.91578	4.17093	0.87270	-3.38570	1.19626	1.21737	3.27759	2.50787	-4.79987	2.27439	0.68285	4.17093
						19.05382	61.10991	102.83877	-0.90000	2.51055	-4.80414	2.27691	0.68309	5.37737	1.63286	-3.94827	1.74372	0.91471	4.17353	3.28735	-6.29061	3.22148	0.89445	5.37737

Stage: Ref.	Stage: δHperp.(n-Lp)	Name	Specific Utility: δx(n+Lp)	Specific Utility: δy(n+Lp)	Specific Utility: δz(n+Lp)	Sub-utility Name δH//(n+Lp)	Iteration δHperp.(n+Lp)	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)
								22.06231	58.64040	101.12048	-0.90000	3.28829	-6.29241	3.22290	0.89470	7.04321	2.51336	-4.80952	2.28016	0.68385
5.38338	3.35395	-6.41806	3.46395	0.91257	7.04321															
								25.07081	56.17088	99.40219	-0.90000	3.35414	-6.41842	3.46466	0.91262	7.18425	3.28848	-6.29277	3.22356	0.89475
7.04361	3.41980	-6.54406	3.73868	0.93048	7.18425															
								28.07931	53.70136	97.68389	-0.90000	3.41999	-6.54442	3.73949	0.93054	7.32529	3.35433	-6.41877	3.46540	0.91267
7.18465	3.48565	-6.67007	4.05510	0.94840	7.32529															
								31.08781	51.23184	95.96560	-0.90000	3.48583	-6.67042	4.05603	0.94845	7.46633	3.42017	-6.54478	3.74034	0.93059
7.32569	3.10243	-5.93675	3.86903	0.84413	7.46633															
								34.09630	48.76232	94.24730	-0.90000	3.09934	-5.93083	3.86610	0.84329	6.63849	3.48602	-6.67078	4.05701	0.94850
7.46672	2.44952	-4.21145	3.22256	0.39467	6.63849															
								37.10480	46.29280	92.52901	-0.90000	2.44978	-4.20843	3.22263	0.39273	4.85367	3.09620	-5.92484	3.86310	0.84244
6.63178	2.48792	-3.06198	2.93775	-0.29337	4.85367															
								40.11330	43.82328	90.81072	-0.90000	2.48795	-3.05869	2.93652	-0.29527	3.93171	2.44997	-4.20525	3.22225	0.39076
4.85117	2.43861	-1.95977	2.24640	-0.88241	3.93171															
								43.12180	41.35376	89.09242	-0.90000	2.43839	-1.95680	2.24411	-0.88392	2.99891	2.48789	-3.05546	2.93491	-0.29707
3.92902	2.30720	-1.05310	1.37310	-1.29239	2.99891															
						3		5.01416	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.30967	1.39046	1.43381	-0.48130	-1.58057	0.09608	1.29781
1.02251	-0.02442	-2.46938	0.61345	1.43043	1.43381															
								8.02266	70.16482	109.13918	-0.90000	-0.02342	-2.47083	0.61437	1.43043	2.01480	-0.32175	-1.97247	0.31048	1.39068
1.43533	0.45071	-3.00789	0.95269	1.34799	2.01480															
								11.03116	67.69530	107.42089	-0.90000	0.45222	-3.00944	0.95366	1.34763	2.72858	-0.02225	-2.47232	0.61531	1.43032
2.01669	1.10627	-3.57156	1.39733	1.13181	2.72858															
								14.03965	65.22578	105.70260	-0.90000	1.10828	-3.57316	1.39906	1.13107	3.56601	0.45391	-3.01102	0.95461	1.34714
2.73084	1.90667	-4.12552	1.87473	0.79119	3.56601															
								17.04815	62.75626	103.98430	-0.90000	1.90903	-4.12704	1.87586	0.79013	4.47801	1.11043	-3.57476	1.40062	1.13021
3.56855	2.83900	-5.43266	2.65702	0.77246	4.47801															
								20.05665	60.28674	102.26601	-0.90000	2.84181	-5.43803	2.66027	0.77322	6.08689	1.91144	-4.12851	1.87675	0.78898
4.48059	3.31006	-6.33406	3.29990	0.90062	6.08689															
								23.06515	57.81722	100.54771	-0.90000	3.31024	-6.33441	3.30056	0.90068	7.09022	2.84465	-5.44347	2.66361	0.77399
6.09298	3.37590	-6.46006	3.55131	0.91854	7.09022															
								26.07364	55.34770	98.82942	-0.90000	3.37609	-6.46042	3.55205	0.91859	7.23126	3.31043	-6.33477	3.30124	0.90073
7.09062	3.44175	-6.58606	3.83928	0.93646	7.23126															
								29.08214	52.87819	97.11113	-0.90000	3.44194	-6.58642	3.84013	0.93651	7.37230	3.37627	-6.46077	3.55282	0.91864
7.23166	3.50760	-6.71207	4.17030	0.95437	7.37230															
								32.09064	50.40867	95.39283	-0.90000	3.50778	-6.71242	4.17127	0.95442	7.51334	3.44212	-6.58678	3.84102	0.93656
7.37270	2.73264	-5.22912	3.51583	0.74352	7.51334															
								35.09914	47.93915	93.67454	-0.90000	2.72951	-5.22313	3.51283	0.74266	5.84634	3.50742	-6.71172	4.17162	0.95432
7.51255	2.47184	-3.83606	3.17806	0.16195	5.84634															
								38.10763	45.46963	91.95625	-0.90000	2.47202	-3.83288	3.17768	0.15998	4.55810	2.72687	-5.21755	3.51030	0.74164
5.84026	2.48122	-2.67985	2.74777	-0.50612	4.55810															
								41.11613	43.00011	90.23795	-0.90000	2.48117	-2.67661	2.74616	-0.50792	3.61420	2.47213	-3.82961	3.17687	0.15802
4.55548	2.40331	-1.63160	1.94312	-1.04087	3.61420															
								44.12463	40.53059	88.51966	-0.90000	2.40302	-1.62882	1.94055	-1.04221	2.70949	2.48102	-2.67348	2.74419	-0.50959
3.61155	2.24756	-0.80491	1.10805	-1.38518	2.70949															
			2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	2.82955	-0.11082	1.76752	1.41753	2.45137	2.23354	-0.59734	0.86879	1.56998
1.69725	3.52452	0.63469	2.80617	1.08213	2.45137															
								6.01784	40.04419	80.90515	-0.90000	3.52667	0.63717	2.80899	1.08094	3.41687	2.83152	-0.10887	1.77085	1.41672
2.45403	4.38299	1.65182	3.52520	0.58270	3.41687															
								9.02675	41.44733	78.24343	-0.90000	4.38590	1.65515	3.52694	0.58110	4.65166	3.52889	0.63989	2.81150	1.07957
3.42010	5.52994	2.83024	4.07000	0.07511	4.65166															
								12.03567	42.85048	75.58171	-0.90000	5.53505	2.83378	4.07273	0.07435	6.21784	4.38860	1.65862	3.52824	0.57930
4.65567	7.46282	3.82074	5.20759	0.10025	6.21784															
								15.04459	44.25362	72.91998	-0.90000	7.46570	3.82222	5.20908	0.10029	8.38666	5.54218	2.83743	4.07703	0.07445
6.22586	7.48885	3.83407	5.09604	0.10060	8.38666															
								18.05351	45.65676	70.25826	-0.90000	7.48892	3.83411	5.09573	0.10060	8.41274	7.46577	3.82225	5.20873	0.10029
8.38673	7.51207	3.84596	5.01252	0.10091	8.41274															
								21.06242	47.05991	67.59654	-0.90000	7.51214	3.84599	5.01231	0.10091	8.43882	7.48899	3.83414	5.09545	0.10060
8.41282	7.53529	3.85784	4.96636	0.10122	8.43882															
								24.07134	48.46305	64.93481	-0.90000	7.53536	3.85788	4.96627	0.10123	8.46490	7.51221	3.84603	5.01213	0.10091
8.43890	7.55850	3.86973	4.95451	0.10154	8.46490															
								27.08026	49.86620	62.27309	-0.90000	7.55857	3.86976	4.95450	0.10154	8.49098	7.53542	3.85792	4.96620	0.10123
8.46498	7.58171	3.88161	4.96677	0.10185	8.49098															
								30.08918	51.26934	59.61136	-0.90000	7.58178	3.88165	4.96683	0.10185	8.51705	7.55864	3.86980	4.95452	0.10154
8.49106	7.60492	3.89350	4.99263	0.10216	8.51705															
						2		4.01189	39.10876	82.67964	-0.90000	3.05163	0.10905	2.14298	1.32660	2.75036	2.42145	-0.46196	1.17900	1.53785
1.92662	3.77402	0.94015	3.08793	0.92827	2.75036															
								7.02081	40.51190	80.01791	-0.90000	3.77624	0.94287	3.09044	0.92690	3.78019	3.05370	0.11126	2.14608	1.32560
2.75322	4.68655	2.04134	3.67167	0.37968	3.78019															
								10.02973	41.91505	77.35619	-0.90000	4.68924	2.04481	3.67297	0.37787	5.10171	3.77875	0.94586	3.09258	0.92542
3.78381	6.33045	3.24100	4.55155	0.08504	5.10171															
								13.03864	43.31819	74.69446	-0.90000	6.33759	3.24466	4.55584	0.08514	7.11938	4.69165	2.04828	3.67379	0.37592
5.10546	7.47337	3.82615	5.16916	0.10039	7.11938															
								16.04756	44.72134	72.03274	-0.90000	7.47344	3.82618	5.16880	0.10039	8.39535	6.34473	3.24831	4.56015	0.08523
7.12740	7.49659	3.83803	5.06430	0.10070	8.39535															
								19.05648	46.12448	69.37102	-0.90000	7.49666	3.83807	5.06402	0.10071	8.42144	7.47351	3.82622	5.16846	0.10039
8.39543	7.51981	3.84992	4.99292	0.10102	8.42144															
								22.06540	47.52762	66.70929	-0.90000	7.51988	3.84996	4.99275	0.10102	8.44752	7.49673	3.83811	5.06377	0.10071
8.42151	7.54302	3.86181	4.95902	0.10133	8.44752															
								25.07431	48.93077	64.04757	-0.90000	7.54309	3.86184	4.95896	0.10133	8.47359	7.51995	3.84999	4.99261	0.10102
8.44759	7.56624	3.87369	4.95649	0.10164	8.47359															
								28.08323	50.33391	61.38585	-0.90000	7.56631	3.87373	4.95651	0.10164	8.49967	7.54316	3.86188	4.95892	0.10133
8.47367	7.58945	3.88557	4.97430	0.10195	8.49967															
								31.09215	51.73706	58.72412	-0.90000	7.58952	3.88561	4.97437	0.10195	8.52575	7.56638	3.87376	4.95655	0.10164
8.49975	7.61266	3.89746	5.00303	0.10226	8.52575															
						3		5.01486	39.57647	81.79239	-0.90000	3.28444	0.35860	2.49164	1.21441	3.07268	2.62072	-0.29961	1.46693	1.48716
2.17860	4.05574	1.27686	3.32915	0.76179	3.07268															
								8.02378	40.97962	79.13067	-0.90000	4.05825	1.27985	3.33129	0.76031	4.18681	3.28659	0.36107	2.49446	1.21322
3.07574	4.95784	2.43145	3.76452	0.16110	4.18681															
								11.03270	42.38276	76.46895	-0.90000	4.96025	2.43491	3.76535	0.15915	5.52337	4.06117	1.28319	3.33303	0.75871
4.19094	7.13386	3.65233	5.03634	0.09583	5.52337															
								14.04162	43.78591	73.80722	-0.90000	7.14100	3.65598	5.04065	0.09593	8.02190	4.96536	2.43846	3.76808	0.15840
5.52954	7.48111	3.83011	5.13116	0.10050	8.02190															
								17.05053	45.18905	71.14550	-0.90000	7.48118	3.83015	5.13083	0.10050	8.40405	7.14389	3.65746	5.04215	0.09597
8.02515	7.50433	3.84200	5.03637	0.10081	8.40405															
								20.05945	46.59219	68.48378	-0.90000	7.50440	3.84203	5.03612	0.10081	8.43013	7.48125	3.83018	5.13052	0.10050
8.40412	7.52755	3.85388	4.97758	0.10112	8.43013															
								23.06837	47.99534	65.82205	-0.90000	7.52762	3.85392	4.97745	0.10112	8.45621	7.50447	3.84207	5.03591	0.10081
8.43021	7.55076	3.86577	4.95521	0.10143	8.45621															
								26.07729	49.39848	63.16033	-0.90000	7.55083	3.86580	4.95517	0.10143	8.48229	7.52769	3.85395	4.97735	0.10112
8.45629	7.57397	3.87765	4.96071	0.10174	8.48229															
								29.08620	50.80163	60.49861	-0.90000	7.57404	3.87769	4.96075	0.10175	8.50836	7.55090	3.86584	4.95517	0.10143
8.48236	7.59719	3.88954	4.98300	0.10206	8.50836															
			3	TW Main-3	1		1	3.98757	55.23844	52.67152	-0.90000	7.82074	4.00399	5.24310	0.71039	8.75735	7.66424	3.92386	5.06643	0.69618
8.58211	7.97746	4.08422	5.43640	0.72463	8.75735															
							2	4.98446	55.76300	51.82380	-0.90000	7.87276	4.03062	5.30662	0.71512	8.81561	7.71624	3.95049	5.11757	0.70090
8.64033	8.03972	4.11610	5.50220	0.73029	8.81561															
			4	TW Main-4	1		1	3.98331	60.26896	44.07515	-0.90000	8.23033	4.21369	5.72983	0.17794	9.24456	8.18389	4.18991	5.65863	0.17694
9.19239	8.27681	4.23748	5.82690	0.17895	9.24456															
								7.96662	62.15213	40.56510	-0.90000	8.29204	4.24528	5.86188	0.17928	9.31387	8.24556	4.22148	5.76009	0.17827
9.26167	8.33855	4.26909	5.97888	0.18028	9.31387															
								11.94993	64.03529	37.05504	-0.90000	8.35380	4.27690	6.02060	0.18061	9.38325	8.30728	4.25309	5.89853	0.17960
9.33099	8.40036	4.30074	6.15796	0.18162	9.38325															
								15.93324	65.91845	33.54499	-0.90000	8.41562	4.30855	6.20609	0.18195	9.45268	8.36906	4.28471	6.06399	0.18094
9.40038	8.46222	4.33241	6.36089	0.18295	9.45268															
								19.91656	67.80161	30.03494	-0.90000	8.47750	4.34023	6.41363	0.18328	9.52219	8.43089	4.31637	6.25561	0.18228
9.46983	8.52415	4.36411	6.57665	0.18429	9.52219															
								23.89987	69.68478	26.52489	-0.90000	8.53945	4.37195	6.62957	0.18462	9.59177	8.49279	4.34806	6.46694	0.18362
9.53936	7.30867	3.74182	5.90257	0.15801	9.59177															
								27.88318	71.56794	23.01484	-0.90000	6.47783	3.31646	5.36592	0.14005	7.27609	8.55475	4.37978	6.68161	0.18496
9.60895	4.44869	3.13025	4.72317	-0.65517	7.27609															
								31.86649	73.45110	19.50479	-0.90000	3.79689	3.07707	4.48817	-0.91645	4.80050	5.76018	3.11568	5.04196	-0.02230
6.54879	2.08761	2.75439	3.50799	-1.44020	4.80050															
								35.84980	75.33427	15.99473	-0.90000	1.63878	2.60103	3.11907	-1.51725	2.67375	3.17417	2.98628	4.20647	-1.13085
4.20885	0.74131	2.42932	1.80920	-1.79023	2.67375															
								39.83311	77.21743	12.48468	-0.90000	0.54697	2.44430	1.49020	-1.89530	1.63756	1.30375	2.54699	2.70459	-1.62801
2.35297	0.10880	2.36819	0.78471	-2.03539	1.63756															
								43.81642	79.10059	8.97463	-0.90000	0.00783	2.31014	0.67000	-2.03196	1.09905	0.37950	2.43800	1.21284	-1.96893
1.48701	-0.19773	2.05447	0.32981	-1.90385	1.09905															
								47.79973	80.98376	5.46458	-0.90000	-0.23721	1.94943	0.23029	-1.82996	0.71259	-0.07522	2.23831	0.55492	-2.00793
0.99191	-0.29061	1.57829	-0.00976	-1.52816	0.71259															
						2		4.97914	60.73975	43.19764	-0.90000	8.24576	4.22158	5.76048	0.17827	9.26188	8.19930	4.19780	5.68288	0.17727
9.20970	8.29224	4.24538	5.86235	0.17928	9.26188															
								8.96245	62.62292	39.68758	-0.90000	8.30748	4.25318	5.89900	0.17961	9.33121	8.26099	4.22938	5.79226	0.17860
9.27899	8.35400	4.27700	6.02115	0.18061	9.33121															
								12.94576	64.50608	36.17753	-0.90000	8.36925	4.28481	6.06454	0.18094	9.40060	8.32272	4.26099	5.93733	0.17994
9.34834	8.41582	4.30865	6.20672	0.18195	9.40060															
								16.92907	66.38924	32.66748	-0.90000	8.43109	4.31647	6.25624	0.18228	9.47005	8.38451	4.29262	6.10957	0.18127
9.41774	8.47770	4.34033	6.41430	0.18329	9.47005															
								20.91238	68.27241	29.15743	-0.90000	8.49298	4.34816	6.46762	0.18362	9.53957	8.44636	4.32429	6.30704	0.18261
9.48721	8.53964	4.37204	6.63023	0.18463	9.53957															
								24.89569	70.15557	25.64738	-0.90000	8.55494	4.37988	6.68227	0.18496	9.60917	8.50827	4.35598	6.52117	0.18395

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration from start of utility	Distance	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
9.55675	6.46869	3.31390	5.36180	0.13799	9.60917														
						28.87900	72.03873	22.13732	-0.90000	5.75105	3.11312	5.03784	-0.02437	6.53953	8.16423	4.17985	6.45293	0.17651	
9.17031	3.78896	3.07591	4.48459	-0.91918	6.53953														
						32.86232	73.92189	18.62727	-0.90000	3.16625	2.98512	4.20288	-1.13358	4.20132	5.12563	3.14167	4.91277	-0.34520	
6.00192	1.63451	2.60034	3.11380	-1.51866	4.20132														
						36.84563	75.80506	15.11722	-0.90000	1.29949	2.54630	2.69932	-1.62942	2.34889	2.61235	2.88805	3.88007	-1.30990	
3.66733	0.54484	2.44422	1.48667	-1.89624	2.34889														
						40.82894	77.68822	11.60717	-0.90000	0.37737	2.43792	1.20931	-1.96987	1.48509	1.00384	2.48394	2.26382	-1.71424	
2.05889	0.00677	2.30922	0.66853	-2.03166	1.48509														
						44.81225	79.57138	8.09712	-0.90000	-0.07627	2.23739	0.55345	-2.00763	0.99054	0.23435	2.41246	0.91512	-2.01504	
1.34703	-0.23756	1.94798	0.22915	-1.82885	0.99054														
						48.79556	81.45455	4.58706	-0.90000	-0.26534	1.83409	0.13914	-1.74162	0.63327	-0.14322	2.15325	0.44101	-1.96513	
0.89177	-0.28961	1.44099	-0.06533	-1.40671	0.63327														
			3			5.97497	61.21054	42.32012	-0.90000	8.26118	4.22948	5.79267	0.17861	9.27921	8.21472	4.20569	5.70043	0.17760	
9.22702	8.30767	4.25328	5.89948	0.17961	9.27921														
						9.95828	63.09371	38.81007	-0.90000	8.32292	4.26109	5.93782	0.17994	9.34855	8.27642	4.23728	5.82603	0.17894	
9.29632	8.36945	4.28491	6.06511	0.18095	9.34855														
						13.94159	64.97687	35.30002	-0.90000	8.38471	4.29272	6.11014	0.18128	9.41796	8.33817	4.26890	5.97784	0.18027	
9.36568	8.43128	4.31657	6.25689	0.18229	9.41796														
						17.92490	66.86003	31.78997	-0.90000	8.44655	4.32439	6.30768	0.18262	9.48743	8.39997	4.30054	6.15676	0.18161	
9.43510	8.49318	4.34826	6.46830	0.18362	9.48743														
						21.90821	68.74320	28.27991	-0.90000	8.50847	4.35608	6.52186	0.18395	9.55697	8.46183	4.33221	6.35956	0.18295	
9.50459	8.54997	4.37733	6.67935	0.18485	9.55697														
						25.89152	70.62636	24.76986	-0.90000	8.15926	4.17730	6.45001	0.17640	9.16473	8.52376	4.36391	6.57529	0.18429	
9.57414	5.74309	3.11349	5.03625	-0.02845	9.16473														
						29.87483	72.50952	21.25981	-0.90000	5.11767	3.14203	4.91118	-0.34928	5.99507	7.32980	3.75264	5.91620	0.15847	
8.23306	3.15919	2.98389	4.19878	-1.13582	5.99507														
						33.85814	74.39269	17.74976	-0.90000	2.60530	2.88681	3.87596	-1.31214	3.66054	4.46529	3.13107	4.72848	-0.64804	
5.41502	1.29572	2.54551	2.69377	-1.63050	3.66054														
						37.84145	76.27585	14.23971	-0.90000	1.00007	2.48315	2.25827	-1.71532	2.05519	2.09976	2.75798	3.51750	-1.43762	
3.15416	0.37555	2.43760	1.20557	-1.97044	2.05519														
						41.82477	78.15901	10.72966	-0.90000	0.23253	2.41214	0.91137	-2.01562	1.34527	0.74700	2.42981	1.81886	-1.78797	
1.80697	-0.07713	2.23632	0.55202	-2.00708	1.34527														
						45.80808	80.04217	7.21960	-0.90000	-0.14407	2.15218	0.43957	-1.96459	0.89051	0.11163	2.36948	0.78774	-2.03518	
1.21857	-0.26556	1.83254	0.13813	-1.74036	0.89051														
						49.79139	81.92534	3.70955	-0.90000	-0.28280	1.71068	0.05905	-1.64113	0.55955	-0.19656	2.05701	0.33244	-1.90554	
0.79928	-0.28072	1.29777	-0.10872	-1.27630	0.55955														
			4			6.97079	61.68134	41.44261	-0.90000	8.27661	4.23738	5.82645	0.17894	9.29654	8.23014	4.21359	5.72947	0.17794	
9.24434	8.32311	4.26119	5.93833	0.17995	9.29654														
						10.95411	63.56450	37.93256	-0.90000	8.33836	4.26899	5.97835	0.18028	9.36590	8.29185	4.24518	5.86144	0.17927	
9.31366	8.38490	4.29282	6.11074	0.18128	9.36590														
						14.93742	65.44766	34.42251	-0.90000	8.40016	4.30064	6.15735	0.18161	9.43532	8.35361	4.27680	6.02007	0.18061	
9.38303	8.44675	4.32449	6.30834	0.18262	9.43532														
						18.92073	67.33082	30.91245	-0.90000	8.46203	4.33231	6.36022	0.18295	9.50480	8.41543	4.30845	6.20547	0.18194	
9.45246	8.50866	4.35618	6.52254	0.18396	9.50480														
						22.90404	69.21399	27.40240	-0.90000	8.52395	4.36401	6.57597	0.18429	9.57436	8.47731	4.34013	6.41295	0.18328	
9.52197	8.14870	4.17190	6.44322	0.17618	9.57436														
						26.88735	71.09715	23.89235	-0.90000	7.31925	3.74724	5.90940	0.15824	8.22120	8.53925	4.37185	6.62890	0.18462	
9.59155	5.10936	3.14189	4.90885	-0.35308	8.22120														
						30.87066	72.98031	20.38230	-0.90000	4.45699	3.13093	4.72616	-0.65184	5.40764	6.48840	3.32187	5.37276	0.14028	
7.28797	2.59886	2.88517	3.87140	-1.31374	5.40764														
						34.85397	74.86348	16.87225	-0.90000	2.09332	2.75634	3.51294	-1.43922	3.14771	3.80519	3.07774	4.49117	-0.91312	
4.80813	0.99685	2.48247	2.25268	-1.71625	3.14771														
						38.83728	76.74664	13.36219	-0.90000	0.74378	2.42913	1.81326	-1.78889	1.80382	1.64449	2.60298	3.12402	-1.51627	
2.67970	0.23099	2.41159	0.90980	-2.01587	1.80382														
						42.82059	78.62980	9.85214	-0.90000	0.11009	2.36893	0.78617	-2.03543	1.21695	0.54944	2.44411	1.49426	-1.89396	
1.63965	-0.14474	2.15097	0.43821	-1.96384	1.21695														
						46.80390	80.51296	6.34209	-0.90000	-0.19722	2.05580	0.33107	-1.90479	0.79812	0.00912	2.31087	0.67146	-2.03201	
1.10053	-0.28290	1.70904	0.05819	-1.63973	0.79812														
	5		TW Foul-1	1	1	1.00444	75.64700	113.52870	-6.00000	-0.45521	-1.41286	0.01069	1.20110	0.87220	-0.46409	-1.28900	-0.03441	1.13520	
0.76696	-0.43207	-1.53382	0.06365	1.25379	0.87220														
						2.00887	74.83600	112.93610	-6.00000	-0.43197	-1.53436	0.06388	1.25402	0.98401	-0.45511	-1.41339	0.01092	1.20134	
0.87269	-0.39354	-1.65216	0.07842	1.29249	0.98401														
						3.01331	74.02501	112.34351	-6.00000	-0.39337	-1.65268	0.07849	1.29266	1.10232	-0.43180	-1.53488	0.06394	1.25419	
0.98454	-0.34326	-1.78868	0.14600	1.33244	1.10232														
						4.01774	73.21401	111.75091	-6.00000	-0.34304	-1.78928	0.14630	1.33262	1.24231	-0.39315	-1.65328	0.07879	1.29284	
1.10294	-0.28092	-1.94664	0.22815	1.37530	1.24231														
						5.02218	72.40301	111.15831	-6.00000	-0.28065	-1.94733	0.22852	1.37549	1.40673	-0.34277	-1.78998	0.14667	1.33281	
1.24303	-0.20183	-2.10910	0.31860	1.40729	1.40673														
						6.02661	71.59201	110.56571	-6.00000	-0.20148	-2.10982	0.31899	1.40743	1.58463	-0.28030	-1.94805	0.22892	1.37563	
1.40752	-0.10501	-2.27607	0.41618	1.42763	1.58463														
						7.03105	70.78101	109.97311	-6.00000	-0.10458	-2.27681	0.41661	1.42772	1.77663	-0.20106	-2.11056	0.31943	1.40752	
1.58548	0.01043	-2.44753	0.51955	1.43557	1.77663														
						8.03548	69.97002	109.38052	-6.00000	0.01094	-2.44829	0.52001	1.43561	1.98325	-0.10407	-2.27756	0.41707	1.42775	
1.77754	0.14527	-2.62339	0.62716	1.43045	1.98325														
						9.03992	69.15902	108.78792	-6.00000	0.14587	-2.62416	0.62763	1.43043	2.20485	0.01154	-2.44907	0.52049	1.43559	
1.98423	0.30009	-2.80338	0.73726	1.41164	2.20485														
						10.04435	68.34802	108.19532	-6.00000	0.30078	-2.80418	0.73775	1.41156	2.44160	0.14655	-2.62496	0.62812	1.43035	
2.20590	0.47521	-2.98711	0.84798	1.37864	2.44160														
						11.04879	67.53702	107.60272	-6.00000	0.47599	-2.98792	0.84847	1.37850	2.69332	0.30155	-2.80499	0.73824	1.41141	
2.44271	0.67059	-3.17394	0.95732	1.33111	2.69332														
						12.05322	66.72603	107.01013	-6.00000	0.67146	-3.17476	0.95780	1.33090	2.95950	0.47685	-2.98875	0.84895	1.37829	
2.69450	0.88574	-3.36298	1.06320	1.26894	2.95950														
						13.05766	65.91503	106.41753	-6.00000	0.88669	-3.36381	1.06367	1.26866	3.23913	0.67241	-3.17560	0.95827	1.33063	
2.96074	1.11958	-3.55305	1.24736	1.19227	3.23913														
						14.06209	65.10403	105.82493	-6.00000	1.12061	-3.55389	1.24817	1.19193	3.53061	0.88772	-3.36465	1.06448	1.26832	
3.24041	1.37041	-3.74265	1.43240	1.10160	3.53061														
						15.06653	64.29303	105.23233	-6.00000	1.37152	-3.74349	1.43322	1.10120	3.83173	1.12172	-3.55473	1.24899	1.19153	
3.53194	1.63578	-3.92993	1.59391	0.99783	3.83173														
						16.07096	63.48203	104.63973	-6.00000	1.63695	-3.93076	1.59462	0.99737	4.13953	1.37269	-3.74432	1.43393	1.10074	
3.83309	1.91247	-4.11271	1.72887	0.88226	4.13953														
						17.07540	62.67104	104.04714	-6.00000	1.91369	-4.11351	1.72946	0.88175	4.45036	1.63817	-3.93157	1.59522	0.99686	
4.14090	2.19653	-4.28849	1.83455	0.75661	4.45036														
						18.07983	61.86004	103.45454	-6.00000	2.19779	-4.28927	1.83502	0.75606	4.75988	1.91494	-4.11429	1.72993	0.88120	
4.45173	2.51607	-4.81507	2.14451	0.80928	4.75988														
						19.08427	61.04904	102.86194	-6.00000	2.51748	-4.81740	2.14588	0.80952	5.37492	2.19920	-4.29160	1.83639	0.75630	
4.76260	2.84958	-5.45290	2.52927	0.91631	5.37492														
						20.08870	60.23804	102.26934	-6.00000	2.85105	-5.45572	2.53097	0.91678	6.08711	2.51895	-4.82022	2.14758	0.80999	
5.37806	3.18816	-6.10079	2.92653	1.02518	6.08711														
						21.09314	59.42704	101.67674	-6.00000	3.18965	-6.10365	2.92829	1.02566	6.81003	2.85255	-5.45858	2.53272	0.91726	
6.09030	3.29148	-6.29850	3.08890	1.05841	6.81003														
						22.09757	58.61605	101.08415	-6.00000	3.29193	-6.29937	3.08961	1.05855	7.02839	3.19010	-6.10452	2.92900	1.02581	
6.81099	3.31779	-6.34886	3.17411	1.06687	7.02839														
						23.10201	57.80505	100.49155	-6.00000	3.31791	-6.34908	3.17448	1.06691	7.08386	3.29204	-6.29959	3.08999	1.05859	
7.02863	3.34377	-6.39858	3.26103	1.07522	7.08386														
						24.10644	56.99405	99.89895	-6.00000	3.34389	-6.39880	3.26141	1.07526	7.13933	3.31802	-6.34930	3.17486	1.06694	
7.08411	3.36976	-6.44830	3.35063	1.08358	7.13933														
						25.11088	56.18305	99.30635	-6.00000	3.36987	-6.44852	3.35103	1.08361	7.19480	3.34400	-6.39902	3.26181	1.07530	
7.13958	3.39574	-6.49802	3.44355	1.09193	7.19480														
						26.11531	55.37206	98.71376	-6.00000	3.39585	-6.49824	3.44396	1.09197	7.25027	3.36999	-6.44874	3.35144	1.08365	
7.19505	3.42172	-6.54773	3.54042	1.10029	7.25027														
						27.11975	54.56106	98.12116	-6.00000	3.42183	-6.54795	3.54085	1.10032	7.30575	3.39597	-6.49845	3.44439	1.09201	
7.25052	3.44770	-6.59745	3.64182	1.10864	7.30575														
						28.12418	53.75006	97.52856	-6.00000	3.44781	-6.59767	3.64226	1.10868	7.36122	3.42195	-6.54817	3.54130	1.10036	
7.30599	3.47368	-6.64717	3.74826	1.11700	7.36122														
						29.12862	52.93906	96.93596	-6.00000	3.47380	-6.64739	3.74873	1.11703	7.41669	3.44793	-6.59789	3.64273	1.10871	
7.36146	3.49966	-6.69689	3.86019	1.12535	7.41669														
						30.13305	52.12806	96.34336	-6.00000	3.49978	-6.69711	3.86069	1.12539	7.47216	3.47391	-6.64761	3.74922	1.11707	
7.41693	3.52564	-6.74660	3.97794	1.13370	7.47216														
						31.13749	51.31707	95.75077	-6.00000	3.52576	-6.74682	3.97846	1.13374	7.52763	3.49989	-6.69732	3.86121	1.12542	
7.47240	3.55163	-6.79632	4.10171	1.14206	7.52763														
						32.14192	50.50607	95.15817	-6.00000	3.55174	-6.79654	4.10225	1.14210	7.58310	3.52587	-6.74704	3.97900	1.13378	
7.52788	3.50358	-6.70439	4.14108	1.12661	7.58310														
						33.14636	49.69507	94.56557	-6.00000	3.50337	-6.70398	4.14125	1.12654	7.47983	3.55153	-6.79613	4.10243	1.14203	
7.58265	3.13880	-6.00635	3.79571	1.00931	7.47983														
						34.15079	48.88407	93.97297	-6.00000	3.13718	-6.00325	3.79417	1.00879	6.69801	3.50175	-6.70088	4.13972	1.12602	
7.47637	2.76699	-5.29486	3.44156	0.88975	6.69801														
						35.15523	48.07307	93.38037	-6.00000	2.76535	-5.29172	3.43999	0.88923	5.90413	3.13554	-6.00011	3.79261	1.00826	
6.69450	2.46085	-4.63620	3.15029	0.74834	5.90413														
						36.15966	47.26208	92.78778	-6.00000	2.45950	-4.63330	3.14901	0.74772	5.19206	2.76400	-5.28881	3.43871	0.88860	
5.90099	2.50199	-4.27920	3.16583	0.50450	5.19206														
						37.16410	46.45108	92.19518	-6.00000	2.50218	-4.27763	3.16590	0.50342	4.93007	2.45969	-4.63173	3.14908	0.74664	
5.19091	2.53108	-3.89198	3.13015	0.25256	4.93007														
						38.16853	45.64008	91.60258	-6.00000	2.53121	-3.89027	3.12999	0.25145	4.63443	2.50231	-4.27592	3.16574	0.50231	
4.92877	2.53546	-3.47216	3.04350	0.00134	4.63443														
						39.17297	44.82908	91.00998	-6.00000	2.53548	-3.47031	3.04312	0.00023	4.29787	2.53123	-3.88842	3.12961	0.25034	
4.63295	2.54127	-3.06597	2.90842	-0.24300	4.29787														
						40.17740	44.01809	90.41739	-6.00000	2.54130	-3.06418	2.90783	-0.24408	3.97339	2.53550	-3.46851	3.04252	-0.00085	
4.29644	2.53689	-2.66569	2.72806	-0.47562	3.97339														
						41.18184	43.20709	89.82479	-6.00000	2.53687	-2.66393	2.72727	-0.47664	3.64760	2.54128	-3.06241	2.90703	-0.24510	
3.97195	2.52228	-2.27896	2.50599	-0.69199	3.64760														

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
						42.18627	42.39609	89.23219	-6.00000	2.52221	-2.27725	2.50501	-0.69294	3.32675	2.53680	-2.66222	2.72629	-0.47760	3.64619
						43.19071	41.58509	88.63959	-6.00000	2.49756	-1.91038	2.24490	-0.88949	3.01599	2.52210	-2.27563	2.50386	-0.69381	3.32538
						44.19514	40.77409	88.04699	-6.00000	2.46332	-1.56792	1.95094	-1.06388	2.71928	2.49741	-1.90886	2.24360	-0.89026	3.01468
						45.19958	39.96310	87.45440	-6.00000	2.41999	-1.25293	1.62715	-1.21474	2.43939	2.46312	-1.56653	1.94951	-1.06455	2.71804
6	TW Foul-2	1			1	1.00474	38.81931	85.38557	-6.00000	2.51865	-0.56699	1.40559	1.69742	1.94521	2.32043	-0.71365	1.06563	1.73206	1.70108
						2.00947	39.29752	84.50193	-6.00000	2.73175	-0.38838	1.86271	1.64177	2.21763	2.51965	-0.56615	1.40775	1.69716	1.94649
						3.01421	39.77574	83.61830	-6.00000	2.95936	-0.17632	2.30949	1.56360	2.51874	2.73282	-0.38738	1.86481	1.64140	2.21905
						4.01894	40.25395	82.73467	-6.00000	3.20162	0.07090	2.71346	1.46148	2.84947	2.96050	-0.17516	2.31139	1.56312	2.52030
						5.02368	40.73216	81.85104	-6.00000	3.48282	0.35522	3.06764	1.34527	3.23210	3.20295	0.07224	2.71513	1.46093	2.85127
						6.02842	41.21037	80.96740	-6.00000	3.87932	0.69155	3.38761	1.23820	3.74088	3.48469	0.35681	3.06915	1.34477	3.23450
						7.03315	41.68859	80.08377	-6.00000	4.27374	1.07940	3.66827	1.08483	4.27237	3.88118	0.69338	3.38893	1.23747	3.74339
						8.03789	42.16680	79.20014	-6.00000	4.65994	1.51098	3.90440	0.88908	4.81743	4.27556	1.08144	3.66938	1.08390	4.27494
						9.04262	42.64501	78.31650	-6.00000	5.03714	1.97727	4.09078	0.65853	5.37110	4.66172	1.51318	3.90528	0.88799	4.82004
						10.04736	43.12322	77.43287	-6.00000	5.40384	2.46812	4.22234	0.40137	5.92723	5.03887	1.97958	4.09140	0.65731	5.37372
						11.05210	43.60144	76.54924	-6.00000	5.76291	2.95044	4.33013	0.14809	6.47258	5.40553	2.47039	4.22285	0.40018	5.92980
						12.05683	44.07965	75.66560	-6.00000	6.61714	3.38778	4.84537	0.17004	7.43201	5.76694	2.95250	4.33256	0.14819	6.47710
						13.06157	44.55786	74.78197	-6.00000	7.47307	3.82599	5.36169	0.19203	8.39333	6.62118	3.38985	4.84780	0.17014	7.43654
						14.06630	45.03607	73.89834	-6.00000	8.25591	4.22678	5.82857	0.21215	9.27258	7.47676	3.82788	5.36389	0.19213	8.39748
						15.07104	45.51429	73.01471	-6.00000	8.27441	4.23626	5.77315	0.21262	9.29336	8.25600	4.22683	5.82830	0.21215	9.27268
						16.07578	45.99250	72.13107	-6.00000	8.29292	4.24573	5.71973	0.21310	9.31415	8.27450	4.23630	5.77290	0.21263	9.29346
						17.08051	46.47071	71.24744	-6.00000	8.31143	4.25521	5.66943	0.21358	9.33494	8.29301	4.24577	5.71949	0.21310	9.31424
						18.08525	46.94892	70.36381	-6.00000	8.32994	4.26469	5.62337	0.21405	9.35573	8.31152	4.25525	5.66921	0.21358	9.33503
						19.08998	47.42714	69.48017	-6.00000	8.34846	4.27417	5.58255	0.21453	9.37653	8.33003	4.26473	5.62318	0.21405	9.35583
						20.09472	47.90535	68.59654	-6.00000	8.36699	4.28365	5.54781	0.21500	9.39734	8.34855	4.27421	5.58239	0.21453	9.37663
						21.09945	48.38356	67.71291	-6.00000	8.38552	4.29314	5.51974	0.21548	9.41815	8.36708	4.28370	5.54768	0.21501	9.39744
						22.10419	48.86177	66.82927	-6.00000	8.40406	4.30263	5.49871	0.21596	9.43897	8.38561	4.29318	5.51965	0.21548	9.41825
						23.10893	49.33998	65.94564	-6.00000	8.42260	4.31212	5.48481	0.21643	9.45979	8.40414	4.30267	5.49865	0.21596	9.43907
						24.11366	49.81820	65.06201	-6.00000	8.44114	4.32162	5.47789	0.21691	9.48062	8.42268	4.31217	5.48477	0.21643	9.45989
						25.11840	50.29641	64.17838	-6.00000	8.45969	4.33111	5.47760	0.21739	9.50146	8.44123	4.32166	5.47789	0.21691	9.48072
						26.12313	50.77462	63.29474	-6.00000	8.47825	4.34062	5.48342	0.21786	9.52230	8.45978	4.33116	5.47763	0.21739	9.50156
						27.12787	51.25283	62.41111	-6.00000	8.49682	4.35012	5.49470	0.21834	9.54315	8.47834	4.34066	5.48347	0.21786	9.52240
						28.13261	51.73105	61.52748	-6.00000	8.51539	4.35963	5.51073	0.21882	9.56401	8.49690	4.35016	5.49478	0.21834	9.54325
						29.13734	52.20926	60.64384	-6.00000	8.53396	4.36914	5.53073	0.21929	9.58487	8.51547	4.35967	5.51082	0.21882	9.56411
						30.14208	52.68747	59.76021	-6.00000	8.55255	4.37865	5.55397	0.21977	9.60574	8.53405	4.36918	5.53084	0.21930	9.58497
						31.14681	53.16568	58.87658	-6.00000	8.57114	4.38817	5.57973	0.22025	9.62662	8.55263	4.37870	5.55409	0.21977	9.60584
						32.15155	53.64390	57.99294	-6.00000	8.58973	4.39769	5.60738	0.22073	9.64751	8.57122	4.38821	5.57986	0.22025	9.62672
						33.15629	54.12211	57.10931	-6.00000	8.60833	4.40721	5.63639	0.22121	9.66840	8.58982	4.39773	5.60752	0.22073	9.64761
						34.16102	54.60032	56.22568	-6.00000	8.62694	4.41674	5.66633	0.22168	9.68931	8.60842	4.40726	5.63653	0.22121	9.66850
						35.16576	55.07853	55.34205	-6.00000	8.64556	4.42627	5.69686	0.22216	9.71022	8.62703	4.41679	5.66647	0.22169	9.68940
						36.17049	55.55675	54.45841	-6.00000	8.66419	4.43581	5.72779	0.22264	9.73113	8.64565	4.42632	5.69701	0.22216	9.71031
						37.17523	56.03496	53.57478	-6.00000	8.68282	4.44535	5.75900	0.22312	9.75206	8.66427	4.43585	5.72794	0.22264	9.73123
						38.17997	56.51317	52.69115	-6.00000	8.70146	4.45489	5.79045	0.22360	9.77300	8.68291	4.44539	5.75915	0.22312	9.75216
						39.18470	56.99138	51.80751	-6.00000	8.72011	4.46444	5.82218	0.22408	9.79394	8.70155	4.45494	5.79060	0.22360	9.77309
						40.18944	57.46959	50.92388	-6.00000	8.73876	4.47399	5.85428	0.22456	9.81489	8.72019	4.46448	5.82234	0.22408	9.79404
						41.19417	57.94781	50.04025	-6.00000	8.75743	4.48354	5.88685	0.22504	9.83585	8.73885	4.47403	5.85443	0.22456	9.81499
						42.19891	58.42602	49.15661	-6.00000	8.77610	4.49310	5.92006	0.22552	9.85682	8.75751	4.48359	5.88701	0.22504	9.83595
						43.20365	58.90423	48.27298	-6.00000	8.79478	4.50267	5.95405	0.22600	9.87781	8.77619	4.49315	5.92022	0.22552	9.85692
						44.20838	59.38244	47.38935	-6.00000	8.81347	4.51223	5.98899	0.22648	9.89880	8.79487	4.50271	5.95421	0.22600	9.87790
						45.21312	59.86066	46.50572	-6.00000	8.83216	4.52181	6.02503	0.22696	9.91980	8.81355	4.51228	5.98916	0.22648	9.89889
						46.21785	60.33887	45.62208	-6.00000	8.85087	4.53138	6.06232	0.22744	9.94080	8.83225	4.52185	6.02520	0.22696	9.91989
						47.22259	60.81708	44.73845	-6.00000	8.86958	4.54097	6.10101	0.22792	9.96182	8.85096	4.53143	6.06251	0.22744	9.94090
						48.22733	61.29529	43.85482	-6.00000	8.88831	4.55055	6.14120	0.22840	9.98285	8.86967	4.54101	6.10120	0.22792	9.96192
						49.23206	61.77351	42.97118	-6.00000	8.90704	4.56014	6.18301	0.22888	10.00389	8.88840	4.55060	6.14140	0.22840	9.98295
						50.23680	62.25172	42.08755	-6.00000	8.92578	4.56974	6.22651	0.22936	10.02494	8.90713	4.56019	6.18321	0.22888	10.00399
						51.24153	62.72993	41.20392	-6.00000	8.94454	4.57934	6.27176	0.22984	10.04601	8.92587	4.56978	6.22672	0.22936	10.02504
						52.24627	63.20814	40.32028	-6.00000	8.96330	4.58894	6.31881	0.23033	10.06708	8.94462	4.57938	6.27198	0.22985	10.04611
						53.25101	63.68636	39.43665	-6.00000	8.98207	4.59855	6.36768	0.23081	10.08816	8.96339	4.58899	6.31904	0.23033	10.06718
						54.25574	64.16457	38.55302	-6.00000	9.00085	4.60817	6.41837	0.23129	10.10926	8.98216	4.59860	6.36791	0.23081	10.08826
						55.26048	64.64278	37.66939	-6.00000	9.01964	4.61779	6.47087	0.23177	10.13036	9.00094	4.60822	6.41861	0.23129	10.10936
						56.26521	65.12099	36.78575	-6.00000	9.03844	4.62742	6.52514	0.23226	10.15148	9.01973	4.61784	6.47112	0.23178	10.13046
						57.26995	65.59921	35.90212	-6.00000	9.05726	4.63705	6.58114	0.23274	10.17261	9.03853	4.62746	6.52541	0.23226	10.15158
						58.27469	66.07742	35.01849	-6.00000	9.07608	4.64669	6.63879	0.23322	10.19375	9.05735	4.63709	6.58141	0.23274	10.17271
						59.27942	66.55563	34.13485	-6.00000	9.09491	4.65633	6.69798	0.23371	10.21490	9.07617	4.64673	6.63907	0.23323	10.19385
						60.28416	67.03384	33.25122	-6.00000	9.11376	4.66598	6.75858	0.23419	10.23607	9.09500	4.65637	6.69826	0.23371	10.21500
						61.28889	67.51205	32.36759	-6.00000	9.13261	4.67563	6.82043	0.23468	10.25724	9.11385	4.66602	6.75887	0.23420	10.23617
						62.29363	67.99027	31.48395	-6.00000	9.15148	4.68529	6.88329	0.23516	10.27843	9.13270	4.67567	6.82072	0.23468	10.25734
						63.29836	68.46848	30.60032	-6.00000	9.17036	4.69495	6.94688	0.23565	10.29964	9.15157	4.68533	6.88359	0.23516	10.27853
						64.30310	68.94669	29.71669	-6.00000	9.18925	4.70462	7.01085	0.23613	10.32085	9.17045	4.69500	6.94718	0.23565	10.29974
						65.30784	69.42490	28.83306	-6.00000	9.20815	4.71430	7.07477	0.23662	10.34208	9.18934	4.70467	7.01115	0.23613	10.32095
						66.31257	69.90312	27.94942	-6.00000	9.22706	4.72398	7.13813	0.23710	10.36332	9.20824	4.71435	7.07507	0.23662	10.34218
						67.31731	70.38133	27.06579	-6.00000	9.24598	4.73367	7.20040	0.23759	10.38458	9.22715	4.72403	7.13843	0.23711	

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
10.36342	9.26483	4.74332	7.26075	0.23807	10.38458														
						68.32204	70.85954	26.18216	-6.00000	9.26492	4.74337	7.26104	0.23808	10.40584	9.24607	4.73372	7.20069	0.23759	10.38468
8.98889	4.60205	7.11349	0.23098	10.40584															
						69.32678	71.33775	25.29852	-6.00000	8.98759	4.60138	7.11279	0.23095	10.09436	9.26361	4.74270	7.26034	0.23804	10.40438
8.11513	4.15471	6.54643	0.20853	10.09436															
						70.33152	71.81597	24.41489	-6.00000	8.11099	4.15259	6.54375	0.20843	9.10982	8.98346	4.59926	7.11011	0.23084	10.08972
7.23685	3.70505	5.97344	0.18596	9.10982															
						71.33625	72.29418	23.53126	-6.00000	7.23271	3.70293	5.97074	0.18586	8.12338	8.10685	4.15047	6.54105	0.20832	9.10517
6.41328	3.43654	5.56351	0.03013	8.12338															
						72.34099	72.77239	22.64762	-6.00000	6.40940	3.43528	5.56158	0.02939	7.27191	7.22883	3.70167	5.96881	0.18512	8.11937
5.65643	3.48694	5.42562	-0.37443	7.27191															
						73.34572	73.25060	21.76399	-6.00000	5.65286	3.48719	5.42498	-0.37634	6.63127	6.40583	3.43552	5.56094	0.02748	7.26889
4.87110	3.49318	5.22690	-0.75370	6.63127															
						74.35046	73.72882	20.88036	-6.00000	4.86739	3.49321	5.22596	-0.75549	5.94334	5.64916	3.48722	5.42404	-0.37813	6.62803
4.09366	3.45009	4.97218	-1.08583	5.94334															
						75.35520	74.20703	19.99673	-6.00000	4.08999	3.44988	4.97098	-1.08739	5.23902	4.86373	3.49300	5.22476	-0.75705	5.94002
3.35424	3.35678	4.66807	-1.35570	5.23902															
						76.35993	74.68524	19.11309	-6.00000	3.35076	3.35634	4.66663	-1.35697	4.54436	4.08651	3.44944	4.96955	-1.08867	5.23574
2.67413	3.21446	4.32099	-1.55424	4.54436															
						77.36467	75.16345	18.22946	-6.00000	2.67093	3.21378	4.31935	-1.55517	3.87862	3.34755	3.35567	4.66499	-1.35791	4.54122
2.07601	3.04207	3.93706	-1.68731	3.87862															
						78.36940	75.64166	17.34583	-6.00000	2.07319	3.04125	3.93525	-1.68793	3.27081	2.66811	3.21297	4.31754	-1.55580	3.87576
1.57554	2.87440	3.52195	-1.77805	3.27081															
						79.37414	76.11988	16.46219	-6.00000	1.57318	2.87361	3.51999	-1.77848	2.75128	2.07083	3.04046	3.93329	-1.68836	3.26837
1.14436	2.67592	3.08089	-1.80871	2.75128															
						80.37888	76.59809	15.57856	-6.00000	1.14233	2.67498	3.07881	-1.80886	2.27782	1.57115	2.87267	3.51791	-1.77862	2.74905
0.82380	2.58745	2.62194	-1.88348	2.27782															
						81.38361	77.07630	14.69493	-6.00000	0.82230	2.58703	2.61978	-1.88383	1.95450	1.14082	2.67457	3.07664	-1.80921	2.27630
0.59152	2.62372	2.23322	-2.02594	1.95450															
						82.38835	77.55451	13.81129	-6.00000	0.59043	2.62389	2.23138	-2.02661	1.76813	0.82120	2.58721	2.61795	-1.88451	1.95362
0.39300	2.63464	1.81013	-2.13003	1.76813															
						83.39308	78.03273	12.92766	-6.00000	0.39207	2.63469	1.80813	-2.13052	1.59881	0.58949	2.62394	2.22939	-2.02710	1.76733
0.22468	2.62230	1.46828	-2.19929	1.59881															
						84.39782	78.51094	12.04403	-6.00000	0.22389	2.62225	1.46667	-2.19962	1.44498	0.39127	2.63463	1.80652	-2.13084	1.59809
0.08337	2.58934	1.15315	-2.23756	1.44498															
						85.40256	78.98915	11.16040	-6.00000	0.08270	2.58918	1.15167	-2.23774	1.30508	0.22322	2.62209	1.46519	-2.19980	1.44432
-0.03389	2.53812	0.87971	-2.24832	1.30508															
						86.40729	79.46736	10.27676	-6.00000	-0.03445	2.53787	0.87842	-2.24837	1.17763	0.08215	2.58894	1.15038	-2.23779	1.30447
-0.12978	2.47075	0.75210	-2.23472	1.17763															
						87.41203	79.94558	9.39313	-6.00000	-0.13023	2.47044	0.75150	-2.23465	1.06129	-0.03490	2.53756	0.87782	-2.24831	1.17708
-0.20668	2.38912	0.62443	-2.19953	1.06129															
						88.41676	80.42379	8.50950	-6.00000	-0.20705	2.38874	0.62382	-2.19936	0.95485	-0.13059	2.47005	0.75090	-2.23449	1.06079
-0.26673	2.29486	0.49935	-2.14521	0.95485															
						89.42150	80.90200	7.62586	-6.00000	-0.26701	2.29442	0.49876	-2.14495	0.85722	-0.20733	2.38829	0.62323	-2.19911	0.95439
-0.31177	2.18941	0.37989	-2.07390	0.85722															
						90.42624	81.38021	6.74223	-6.00000	-0.31198	2.18891	0.37933	-2.07357	0.76745	-0.26722	2.29392	0.49820	-2.14462	0.85680
-0.34346	2.07400	0.26865	-1.98749	0.76745															
						91.43097	81.85843	5.85860	-6.00000	-0.34361	2.07346	0.26812	-1.98709	0.68469	-0.31213	2.18837	0.37880	-2.07316	0.76706
-0.36323	1.94974	0.16775	-1.88762	0.68469															
						92.43571	82.33664	4.97496	-6.00000	-0.36332	1.94916	0.16728	-1.88715	0.60819	-0.34370	2.07287	0.26765	-1.98662	0.68432
-0.37233	1.81757	0.07882	-1.77571	0.60819															
						93.44044	82.81485	4.09133	-6.00000	-0.37237	1.81695	0.07840	-1.77518	0.53730	-0.36336	1.94853	0.16686	-1.88662	0.60785
-0.37187	1.67832	0.00291	-1.65302	0.53730															
						94.44518	83.29306	3.20770	-6.00000	-0.37187	1.67767	0.00255	-1.65245	0.47146	-0.37237	1.81629	0.07804	-1.77460	0.53699
-0.36281	1.53272	-0.05950	-1.52066	0.47146															
						95.44992	83.77128	2.32407	-6.00000	-0.36276	1.53203	-0.05980	-1.52004	0.41014	-0.37182	1.67698	0.00226	-1.65182	0.47117
-0.34600	1.38140	-0.10853	-1.37958	0.41014															

Specific Utility Damage Results - Pullouts & Rotations

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility from start of utility	Iteration	Distance	x	y	z	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Seg.: Sagging vs Hogging	Pullout: Left Seg.: Flex.:	Pullout: Left Seg.:	Pullout: Right Seg.: Ax.:	Pullout: Right Seg.:	Pullout: Right Seg.:	Pullout: Right Seg.:	Pullout: Total: Ax.:
Pullout: Total: Ax.:	Pullout: Total: Flex.:	Pullout: Total: Ref. Flex.:	Pullout: Total: Name Total:	Pullout: Check: Threshold	Check: Pullout: Limit	Rotation: Unfactored	Rotation: Factored	Check: Threshold	Rotation: Unfactored	Rotation: Ax.: Limit	Ax.: Unfactored	Flex.: Unfactored	Flex.: Factored	Ax.: Unfactored	Ax.: Factored	Flex.: Unfactored	Flex.: Factored	Unfactored Factored
[mm]	[mm]	[mm]	[mm]	[mm]		[m]	[m]	[m]	[m]	[Deg]	[Deg]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00508	0.00508	1.36708	1.36708	0.00508	0.00508	0.09539
0.09539	0.01015	0.01015	0.10554	0.10554	-	-	0.00306	0.00306	-	-	Hogging							
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00529	0.00529	1.42120	1.42120	0.00529	0.00529	0.04152
0.04152	0.01059	0.01059	0.05211	0.05211	-	-	0.00319	0.00319	-	-	Hogging							
						9.02549	69.34164	108.56642	-0.90000	1.42138	1.42138	0.00423	0.00423	1.36600	1.36600	0.00423	0.00423	-0.05538
0.05538	0.00847	0.00847	0.00847	0.00847	-	-	0.00255	0.00255	-	-	Hogging							
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00660	0.00660	1.17977	1.17977	0.00660	0.00660	-0.17193
0.17193	0.01320	0.01320	0.01320	0.01320	-	-	0.00398	0.00398	-	-	Hogging							
						15.04249	64.40261	105.12983	-0.90000	1.15026	1.15026	0.00405	0.00405	0.86726	0.86726	0.00405	0.00405	-0.28300
0.28300	0.00810	0.00810	0.00810	0.00810	-	-	0.00244	0.00244	-	-	Sagging							
						18.05098	61.93309	103.41154	-0.90000	0.82467	0.82467	0.04096	0.04096	0.73392	0.73392	0.04096	0.04096	-0.09076
0.09076	0.08192	0.08192	0.08192	0.08192	-	-	0.02470	0.02470	-	-	Hogging							
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05842	0.05842	0.88860	0.88860	0.05842	0.05842	0.12430
0.12430	0.11684	0.11684	0.24114	0.24114	-	-	0.03523	0.03523	-	-	Sagging							
						24.06798	56.99405	99.97495	-0.90000	0.89070	0.89070	0.00631	0.00631	0.91459	0.91459	0.00631	0.00631	0.02390
0.02390	0.01262	0.01262	0.03652	0.03652	-	-	0.00381	0.00381	-	-	Sagging							
						27.07648	54.52453	98.25666	-0.90000	0.91662	0.91662	0.00125	0.00125	0.93251	0.93251	0.00125	0.00125	0.01589
0.01589	0.00249	0.00249	0.01838	0.01838	-	-	0.00075	0.00075	-	-	Hogging							
						30.08497	52.05501	96.53836	-0.90000	0.93453	0.93453	0.00453	0.00453	0.94455	0.94455	0.00453	0.00453	0.01002
0.01002	0.00906	0.00906	0.01908	0.01908	-	-	0.00273	0.00273	-	-	Sagging							
						33.09347	49.58549	94.82007	-0.90000	0.94652	0.94652	0.08269	0.08269	0.80292	0.80292	0.08269	0.08269	-0.14360
0.14360	0.16538	0.16538	0.16538	0.16538	-	-	0.04987	0.04987	-	-	Sagging							
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05229	0.05229	0.31515	0.31515	0.05229	0.05229	-0.45361
0.45361	0.10459	0.10459	0.10459	0.10459	-	-	0.03154	0.03154	-	-	Hogging							
						39.11047	44.64646	91.38348	-0.90000	0.23627	0.23627	0.01385	0.01385	-0.35660	-0.35660	0.01385	0.01385	-0.59287
0.59287	0.02771	0.02771	0.02771	0.02771	-	-	0.00836	0.00836	-	-	Sagging							
						42.11896	42.17694	89.66519	-0.90000	-0.42868	-0.42868	0.01049	0.01049	-0.92225	-0.92225	0.01049	0.01049	-0.49357
0.49357	0.02099	0.02099	0.02099	0.02099	-	-	0.00633	0.00633	-	-	Sagging							
						45.12746	39.70742	87.94689	-0.90000	-0.97590	-0.97590	0.00745	0.00745	-1.32049	-1.32049	0.00745	0.00745	-0.34459
0.34459	0.01490	0.01490	0.01490	0.01490	-	-	0.00449	0.00449	-	-	Hogging							
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00654	0.00654	1.39110	1.39110	0.00654	0.00654	0.07987
0.07987	0.01308	0.01308	0.09295	0.09295	-	-	0.00394	0.00394	-	-	Hogging							
						7.01983	70.98799	109.71195	-0.90000	1.39987	1.39987	0.00439	0.00439	1.41679	1.41679	0.00439	0.00439	0.01693
0.01693	0.00877	0.00877	0.02570	0.02570	-	-	0.00265	0.00265	-	-	Hogging							
						10.02832	68.51847	107.99365	-0.90000	1.41233	1.41233	0.00416	0.00416	1.31873	1.31873	0.00416	0.00416	-0.09361
0.09361	0.00832	0.00832	0.00832	0.00832	-	-	0.00251	0.00251	-	-	Hogging							
						13.03682	66.04895	106.27536	-0.90000	1.29933	1.29933	0.00682	0.00682	1.08864	1.08864	0.00682	0.00682	-0.21068
0.21068	0.01364	0.01364	0.01364	0.01364	-	-	0.00411	0.00411	-	-	Hogging							
						16.04532	63.57943	104.55707	-0.90000	1.05436	1.05436	0.00977	0.00977	0.79625	0.79625	0.00977	0.00977	-0.25811
0.25811	0.01953	0.01953	0.01953	0.01953	-	-	0.00589	0.00589	-	-	Sagging							
						19.05382	61.10991	102.83877	-0.90000	0.75091	0.75091	0.01954	0.01954	0.78359	0.78359	0.01954	0.01954	0.03268
0.03268	0.03908	0.03908	0.07176	0.07176	-	-	0.01179	0.01179	-	-	Hogging							
						22.06231	58.64040	101.12048	-0.90000	0.81436	0.81436	0.05299	0.05299	0.90265	0.90265	0.05299	0.05299	0.08829
0.08829	0.10598	0.10598	0.19428	0.19428	-	-	0.03196	0.03196	-	-	Sagging							
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00104	0.00104	0.92057	0.92057	0.00104	0.00104	0.01589
0.01589	0.00208	0.00208	0.01798	0.01798	-	-	0.00063	0.00063	-	-	Hogging							
						28.07931	53.70136	97.68389	-0.90000	0.92259	0.92259	0.00131	0.00131	0.93848	0.93848	0.00131	0.00131	0.01589
0.01589	0.00263	0.00263	0.01852	0.01852	-	-	0.00079	0.00079	-	-	Hogging							
						31.08781	51.23184	95.96560	-0.90000	0.94051	0.94051	0.03437	0.03437	0.91567	0.91567	0.03437	0.03437	-0.02484
0.02484	0.06874	0.06874	0.06874	0.06874	-	-	0.02073	0.02073	-	-	Sagging							
						34.09630	48.76232	94.24730	-0.90000	0.91147	0.91147	0.03345	0.03345	0.66021	0.66021	0.03345	0.03345	-0.25126
0.25126	0.06689	0.06689	0.06689	0.06689	-	-	0.02017	0.02017	-	-	Sagging							
						37.10480	46.29280	92.52901	-0.90000	0.61900	0.61900	0.02944	0.02944	0.08645	0.08645	0.02944	0.02944	-0.53255
0.53255	0.05887	0.05887	0.05887	0.05887	-	-	0.01775	0.01775	-	-	Hogging							
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01281	0.01281	-0.56186	-0.56186	0.01281	0.01281	-0.57000
0.57000	0.02562	0.02562	0.02562	0.02562	-	-	0.00773	0.00773	-	-	Sagging							
						43.12180	41.35376	89.09242	-0.90000	-0.62871	-0.62871	0.00674	0.00674	-1.07284	-1.07284	0.00674	0.00674	-0.44413
0.44413	0.01348	0.01348	0.01348	0.01348	-	-	0.00407	0.00407	-	-	Sagging							
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00604	0.00604	1.41240	1.41240	0.00604	0.00604	0.06528
0.06528	0.01207	0.01207	0.07736	0.07736	-	-	0.00364	0.00364	-	-	Hogging							
						8.02266	70.16482	109.13918	-0.90000	1.41700	1.41700	0.00433	0.00433	1.39857	1.39857	0.00433	0.00433	-0.01843
0.01843	0.00865	0.00865	0.00865	0.00865	-	-	0.00261	0.00261	-	-	Hogging							
						11.03116	67.69530	107.42089	-0.90000	1.38926	1.38926	0.00513	0.00513	1.25661	1.25661	0.00513	0.00513	-0.13265
0.13265	0.01026	0.01026	0.01026	0.01026	-	-	0.00309	0.00309	-	-	Hogging							
						14.03965	65.22578	105.70260	-0.90000	1.23211	1.23211	0.00255	0.00255	0.98406	0.98406	0.00255	0.00255	-0.24804
0.24804	0.00510	0.00510	0.00510	0.00510	-	-	0.00154	0.00154	-	-	Hogging							
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02400	0.02400	0.73917	0.73917	0.02400	0.02400	-0.20620
0.20620	0.04800	0.04800	0.04800	0.04800	-	-	0.01447	0.01447	-	-	Hogging							

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Pullout: Check:	Distance from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Left Seg.:	Pullout: Vertical Left	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout:	Unfactored	Factored	Rotation:	Rotation:	Sagging							
						20.05665	60.28674	102.26601	-0.90000	0.74843	0.74843	0.01964	0.01964	0.84612	0.84612	0.01964	0.01964	0.09769
0.09769	0.03928	0.03928	0.13697	0.13697	-	-	0.01185	0.01185	-	-	Sagging							
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.02976	0.02976	0.90862	0.90862	0.02976	0.02976	0.05216
0.05216	0.05951	0.05951	0.11167	0.11167	-	-	0.01795	0.01795	-	-	Sagging							
						26.07364	55.34770	98.82942	-0.90000	0.91065	0.91065	0.00115	0.00115	0.92654	0.92654	0.00115	0.00115	0.01589
0.01589	0.00231	0.00231	0.01820	0.01820	-	-	0.00070	0.00070	-	-	Hogging							
						29.08214	52.87819	97.11113	-0.90000	0.92856	0.92856	0.00136	0.00136	0.94445	0.94445	0.00136	0.00136	0.01589
0.01589	0.00271	0.00271	0.01861	0.01861	-	-	0.00082	0.00082	-	-	Hogging							
						32.09064	50.40867	95.39283	-0.90000	0.94648	0.94648	0.06501	0.06501	0.88019	0.88019	0.06501	0.06501	-0.06629
0.06629	0.13003	0.13003	0.13003	0.13003	-	-	0.03921	0.03921	-	-	Sagging							
						35.09914	47.93915	93.67454	-0.90000	0.84676	0.84676	0.01583	0.01583	0.50882	0.50882	0.01583	0.01583	-0.33794
0.33794	0.03165	0.03165	0.03165	0.03165	-	-	0.00954	0.00954	-	-	Hogging							
						38.10763	45.46963	91.95625	-0.90000	0.43145	0.43145	0.01123	0.01123	-0.13907	-0.13907	0.01123	0.01123	-0.57052
0.57052	0.02246	0.02246	0.02246	0.02246	-	-	0.00677	0.00677	-	-	Sagging							
						41.11613	43.00011	90.23795	-0.90000	-0.21505	-0.21505	0.01185	0.01185	-0.75131	-0.75131	0.01185	0.01185	-0.53626
0.53626	0.02371	0.02371	0.02371	0.02371	-	-	0.00715	0.00715	-	-	Sagging							
						44.12463	40.53059	88.51966	-0.90000	-0.81191	-0.81191	0.00443	0.00443	-1.20208	-1.20208	0.00443	0.00443	-0.39017
0.39017	0.00887	0.00887	0.00887	0.00887	-	-	0.00267	0.00267	-	-	Sagging							
	2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	1.49176	1.49176	0.00795	0.00795	1.27542	1.27542	0.00795	0.00795	-0.21634
0.21634	0.01589	0.01589	0.01589	0.01589	-	-	0.00479	0.00479	-	-	Hogging							
						6.01784	40.04419	80.90515	-0.90000	1.23736	1.23736	0.01326	0.01326	0.86351	0.86351	0.01326	0.01326	-0.37385
0.37385	0.02652	0.02652	0.02652	0.02652	-	-	0.00800	0.00800	-	-	Sagging							
						9.02675	41.44733	78.24343	-0.90000	0.80699	0.80699	0.01175	0.01175	0.34469	0.34469	0.01175	0.01175	-0.46230
0.46230	0.02349	0.02349	0.02349	0.02349	-	-	0.00708	0.00708	-	-	Sagging							
						12.03567	42.85048	75.58171	-0.90000	0.27093	0.27093	0.02673	0.02673	0.08658	0.08658	0.02673	0.02673	-0.18435
0.18435	0.05346	0.05346	0.05346	0.05346	-	-	0.01612	0.01612	-	-	Hogging							
						15.04459	44.25362	72.91998	-0.90000	0.09022	0.09022	0.07826	0.07826	0.10043	0.10043	0.07826	0.07826	0.01021
0.01021	0.15652	0.15652	0.16672	0.16672	-	-	0.04720	0.04720	-	-	Sagging							
						18.05351	45.65676	70.25826	-0.90000	0.10046	0.10046	0.00094	0.00094	0.10074	0.10074	0.00094	0.00094	0.00028
0.00028	0.00189	0.00189	0.00216	0.00216	-	-	0.00057	0.00057	-	-	Hogging							
						21.06242	47.05991	67.59654	-0.90000	0.10078	0.10078	0.00118	0.00118	0.10105	0.10105	0.00118	0.00118	0.00028
0.00028	0.00236	0.00236	0.00263	0.00263	-	-	0.00071	0.00071	-	-	Hogging							
						24.07134	48.46305	64.93481	-0.90000	0.10109	0.10109	0.00108	0.00108	0.10136	0.10136	0.00108	0.00108	0.00028
0.00028	0.00216	0.00216	0.00244	0.00244	-	-	0.00065	0.00065	-	-	Hogging							
						27.08026	49.86620	62.27309	-0.90000	0.10140	0.10140	0.00076	0.00076	0.10168	0.10168	0.00076	0.00076	0.00028
0.00028	0.00152	0.00152	0.00179	0.00179	-	-	0.00046	0.00046	-	-	Hogging							
						30.08918	51.06934	59.61136	-0.90000	0.10171	0.10171	0.00043	0.00043	0.10199	0.10199	0.00043	0.00043	0.00028
0.00028	0.00085	0.00085	0.00113	0.00113	-	-	0.00026	0.00026	-	-	Hogging							
					2	4.01189	39.10876	82.67964	-0.90000	1.42733	1.42733	0.00645	0.00645	1.15643	1.15643	0.00645	0.00645	-0.27090
0.27090	0.01290	0.01290	0.01290	0.01290	-	-	0.00389	0.00389	-	-	Sagging							
						7.02081	40.51190	80.01791	-0.90000	1.11115	1.11115	0.01473	0.01473	0.68896	0.68896	0.01473	0.01473	-0.42219
0.42219	0.02945	0.02945	0.02945	0.02945	-	-	0.00888	0.00888	-	-	Sagging							
						10.02973	41.91505	77.35619	-0.90000	0.62813	0.62813	0.02385	0.02385	0.20735	0.20735	0.02385	0.02385	-0.42078
0.42078	0.04771	0.04771	0.04771	0.04771	-	-	0.01439	0.01439	-	-	Hogging							
						13.03864	43.31819	74.69446	-0.90000	0.17847	0.17847	0.02487	0.02487	0.09382	0.09382	0.02487	0.02487	-0.08465
0.08465	0.04974	0.04974	0.04974	0.04974	-	-	0.01500	0.01500	-	-	Sagging							
						16.04756	44.72134	72.03274	-0.90000	0.09531	0.09531	0.04535	0.04535	0.10053	0.10053	0.04535	0.04535	0.00523
0.00523	0.09070	0.09070	0.09593	0.09593	-	-	0.02735	0.02735	-	-	Sagging							
						19.05648	46.12488	69.37102	-0.90000	0.10057	0.10057	0.00106	0.00106	0.10084	0.10084	0.00106	0.00106	0.00028
0.00028	0.00211	0.00211	0.00239	0.00239	-	-	0.00064	0.00064	-	-	Hogging							
						22.06540	47.52762	66.70929	-0.90000	0.10088	0.10088	0.00118	0.00118	0.10116	0.10116	0.00118	0.00118	0.00028
0.00028	0.00236	0.00236	0.00264	0.00264	-	-	0.00071	0.00071	-	-	Hogging							
						25.07431	48.93077	64.04757	-0.90000	0.10119	0.10119	0.00099	0.00099	0.10147	0.10147	0.00099	0.00099	0.00028
0.00028	0.00198	0.00198	0.00225	0.00225	-	-	0.00060	0.00060	-	-	Hogging							
						28.08323	50.33391	61.38585	-0.90000	0.10150	0.10150	0.00064	0.00064	0.10178	0.10178	0.00064	0.00064	0.00028
0.00028	0.00128	0.00128	0.00156	0.00156	-	-	0.00039	0.00039	-	-	Hogging							
						31.09215	51.73706	58.72412	-0.90000	0.10182	0.10182	0.00034	0.00034	0.10209	0.10209	0.00034	0.00034	0.00028
0.00028	0.00069	0.00069	0.00096	0.00096	-	-	0.00021	0.00021	-	-	Hogging							
					3	5.01486	39.57647	81.79239	-0.90000	1.34272	1.34272	0.00906	0.00906	1.01905	1.01905	0.00906	0.00906	-0.32368
0.32368	0.01812	0.01812	0.01812	0.01812	-	-	0.00547	0.00547	-	-	Sagging							
						8.02378	40.97962	79.13067	-0.90000	0.96681	0.96681	0.01458	0.01458	0.50084	0.50084	0.01458	0.01458	-0.46597
0.46597	0.02917	0.02917	0.02917	0.02917	-	-	0.00879	0.00879	-	-	Sagging							
						11.03270	42.38276	76.46895	-0.90000	0.43191	0.43191	0.04528	0.04528	0.10978	0.10978	0.04528	0.04528	-0.32213
0.32213	0.09056	0.09056	0.09056	0.09056	-	-	0.02731	0.02731	-	-	Hogging							
						14.04162	43.78591	73.80722	-0.90000	0.11315	0.11315	0.07660	0.07660	0.09891	0.09891	0.07660	0.07660	-0.01425
0.01425	0.15319	0.15319	0.15319	0.15319	-	-	0.04620	0.04620	-	-	Sagging							
						17.05053	45.18905	71.14550	-0.90000	0.09895	0.09895	0.01259	0.01259	0.10064	0.10064	0.01259	0.01259	0.00168
0.00168	0.02518	0.02518	0.02686	0.02686	-	-	0.00759	0.00759	-	-	Sagging							
						20.05945	46.59219	68.48378	-0.90000	0.10067	0.10067	0.00114	0.00114	0.10095	0.10095	0.00114	0.00114	0.00028
0.00028	0.00227	0.00227	0.00255	0.00255	-	-	0.00068	0.00068	-	-	Hogging							
						23.06837	47.99534	65.82205	-0.90000	0.10098	0.10098	0.00115	0.00115	0.10126	0.10126	0.00115	0.00115	0.00028
0.00028	0.00229	0.00229	0.00257	0.00257	-	-	0.00069	0.00069	-	-	Hogging							
						26.07729	49.39848	63.16033	-0.90000	0.10130	0.10130	0.00088	0.00088	0.10157	0.10157	0.00088	0.00088	0.00028
0.00028	0.00176	0.00176	0.00203	0.00203	-	-	0.00053	0.00053	-	-	Hogging							
						29.08620	50.80163	60.49861	-0.90000	0.10161	0.10161	0.00053	0.00053	0.10188	0.10188	0.00053	0.00053	0.00028
0.00028	0.00106	0.00106	0.00133	0.00133	-	-	0.00032	0.00032	-	-	Hogging							
	3	TW Main-3	1		1	3.98757	55.23844	52.67152	-0.90000	0.70330	0.70330	0.00053	0.00053	0.71750	0.71750	0.00053	0.00053	0.01420
0.01420	0.00105	0.00105	0.01525	0.01525	-	-	0.00032	0.00032	-	-	Hogging							
					2	4.98446	55.76300	51.82380	-0.90000	0.70802	0.70802	0.00042	0.00042	0.72246	0.72246	0.00042	0.00042	0.01444
0.01444	0.00085	0.00085	0.01528	0.01528	-	-	0.00026	0.00026	-	-	Hogging							
	4	TW Main-4	1		1	3.98331	60.26896	44.07515	-0.90000	0.17744	0.17744	0.00082	0.00082	0.17844	0.17844	0.00082	0.00082	0.00100
0.00100	0.00164	0.00164	0.00264	0.00264	-	-	0.00049	0.00049	-	-	Hogging							
						7.96662	62.15213	40.56510	-0.90000	0.17877	0.17877	0.00048	0.00048	0.17978	0.17978	0.00048	0.00048	0.00100
0.00100	0.00096	0.00096	0.00197	0.00197	-	-	0.00029	0.00029	-	-	Hogging							
						11.94993	64.03529	37.05504	-0.90000	0.18011	0.18011	0.00048	0.00048	0.18111	0.18111	0.00048	0.00048	0.00100
0.00100	0.00097	0.00097	0.00197	0.00197	-	-	0.00029	0.00029	-	-	Hogging							
						15.93324	65.91845	33.54499	-0.90000	0.18144	0.18144	0.00040	0.00040	0.18245	0.18245	0.00040	0.00040	0.00100
0.00100	0.00080	0.00080	0.00181	0.00181	-	-	0.00024	0.00024	-	-	Hogging							
						19.91656	67.80161	30.03494	-0.90000	0.18278	0.18278	0.00016	0.00016	0.18379	0.18379	0.00016	0.00016	0.00101
0.00101	0.00032	0.00032	0.00132	0.00132	-	-	0.00010	0.00010	-	-	Hogging							
						23.89987	69.68478	26.52489	-0.90000	0.18412	0.18412	0.05346	0.05346	0.17600	0.17600	0.05346	0.05346	-0.00812
0.00812	0.10692	0.10692	0.10692	0.10692	-	-	0.03224	0.03224	-	-	Sagging							
						27.88318	71.56794	23.01484	-0.90000	0.16491	0.16491	0.02575	0.02575	-0.22219	-0.22219	0.02575	0.02575	-0.38710
0.38710	0.05151	0.05151	0.05151	0.05151	-	-	0.01553	0.01553	-	-	Hogging							
						31.86649	73.45110	19.50479	-0.90000	-0.48497	-0.48497	0.01380	0.01380	-1.20059	-1.20059	0.01380	0.01380	-0.71562
0.71562	0.02759	0.02759	0.02759	0.02759	-	-	0.00832	0.00832	-	-	Sagging							
						35.84980	75.33427	15.99473	-0.90000	-1.34986	-1.34986	0.02215	0.02215	-1.66306	-1.66306	0.02215	0.02215	-0.31319
0.31319	0.04430	0.04430	0.04430	0.04430	-	-	0.01336	0.01336	-	-	Sagging							
						39.83311	77.21743	12.48468	-0.90000	-1.75688	-1.75688	0.01860	0.01860	-1.97904	-1.97904	0.01860	0.01860	-0.22216
0.22216	0.03720	0.03720	0.03720	0.03720	-	-	0.01122	0.01122	-	-	Hogging							
						43.81642	79.10059	8.97463	-0.90000	-2.01299	-2.01299	0.00697	0.00697	-1.97701	-1.97701	0.00697	0.00697	0.03598
0.03598	0.01394	0.01394	0.04992	0.04992	-	-	0.00420	0.00420	-	-	Hogging							
						47.79973	80.98376	5.46458	-0.90000	-1.92682	-1.92682	0.00323	0.00323	-1.68522	-1.68522	0.00323	0.00323	0.24160
0.24160	0.00645	0.00645	0.24805	0.24805	-	-	0.00195	0.00195	-	-	Hogging							
					2	4.97914	60.73975	43.19764	-0.90000	0.17777	0.17777	0.00077	0.00077	0.17878	0.17878	0.00077	0.00077	0.00100
0.00100	0.00154	0.00154	0.00254	0.00254	-	-	0.00046	0.00046	-	-	Hogging							
						8.96245	62.62292	39.68758	-0.90000	0.17911	0.17911	0.00049	0.00049	0.18011	0.18011	0.00049	0.00049	0.00100
0.00100	0.00098	0.00098	0.00198	0.00198	-	-	0.00029	0.00029	-	-	Hogging							
						12.94576	64.50608	36.17753	-0.90000	0.18044	0.18044	0.00047	0.00047	0.18145	0.18145	0.00047	0.00047	0.00100
0.00100	0.00095	0.00095	0.00195	0.00195	-	-	0.00029	0.00029	-	-	Hogging							
						16.92907	66.38924	32.66748	-0.90000	0.18178	0.18178	0.00036	0.00036	0.18278	0.18278	0.00036	0.00036	0.00101
0.00101	0.00072	0.00072	0.00173	0.00173	-	-	0.00022	0.00022	-	-	Hogging							
						20.91238	68.27241	29.15743	-0.90000	0.18312	0.18312	0.00006	0.00006	0.18412	0.18412	0.00006	0.00006	0.00101
0.00101	0.00013	0.00013	0.00114	0.00114	-	-	0.00004	0.00004	-	-	-							
						24.89569	70.15557	25.64738	-0.90000	0.18446	0.18446	0.08917	0.08917	0.16440	0.16440	0.08917	0.08917	-0.02006
0.02006	0.17835	0.17835	0.17835	0.17835	-	-	0.05378	0.05378	-	-	Sagging							
						28.87900	72.03873	22.13732	-0.90000	0.11261	0.11261	0.03910	0.03910	-0.48617	-0.48617	0.03910	0.03910	-0.59878
0.59878	0.07820	0.07820	0.07820	0.07820	-	-	0.02358	0.02358	-	-	Hogging							
						32.86232	73.92189	18.62727	-0.90000	-0.76177	-0.76177	0.01472	0.01472	-1.35090	-1.35090	0.01472	0.01472	-0.58913
0.58913	0.02944	0.02944	0.02944	0.02944	-	-	0.00888	0.00888	-	-	Sagging							
						36.84563	75.80506	15.11722	-0.90000	-1.47395	-1.47395	0.01919	0.01919	-1.75747	-1.75747	0.01919	0.01919	-0.28352
0.28352	0.03838	0.03838	0.03838	0.03838	-	-	0.01157	0.01157	-	-	Sagging							
						40.82894	77.68822	11.60717	-0.90000	-1.84208	-1.84208	0.01731	0.01731	-2.01314	-2.01314	0.01731	0.01731	-0.17107
0.17107	0.03461	0.03461	0.03461	0.03461	-	-	0.01044	0.01044	-	-	Hogging							
						44.81225	79.57138	8.09712	-0.90000	-2.02252	-2.02252	0.00273	0.00273	-1.92646	-1.92646	0.00273	0.00273	0.09605
0.09605	0.00545	0.00545	0.10150	0.10150	-	-	0.00164	0.00164	-	-	Hogging							
						48.79556	81.45455	4.58706	-0.90000	-1.86038	-1.86038	0.00349	0.00349	-1.57979	-1.57979	0.00349	0.00349	0.28059
0.28059	0.00697	0.00697	0.28756	0.28756	-	-	0.00210	0.00210	-	-	Hogging							
					3	5.97497	61.21054	42.32012	-0.90000	0.17811	0.17811	0.00046	0.00046	0.17911	0.17911	0.00046	0.00046	0.00100
0.00100	0.00092	0.00092	0.00193	0.00193	-	-	0.00028	0.00028	-	-	Hogging							
						9.95828	63.09371	38.81007	-0.90000	0.17944	0.17944	0.00049	0.00049	0.18044	0.18044	0.00049	0.00049	0.00100
0.00100	0.00098	0.00098	0.00199	0.00199	-	-	0.00030	0.00030	-	-	Hogging							
						13.94159	64.97687	35.30002	-0.90000	0.18078	0.18078	0.00046	0.00046	0.18178	0.18178	0.00046	0.00046	0.00100
0.00100	0.00091	0.00091	0.00192	0.00192	-	-	0.00028	0.00028	-	-	Hogging							
						17.92490	66.86003	31.78997	-0.90000	0.18211	0.18211	0.00031	0.00031	0.18312	0.18312	0.00031	0.00031	0.00101
0.00101	0.00061	0.00061	0.00162	0.00162	-	-	0.00019	0.00019	-	-	Hogging							
						21.90821	68.74320	28.27991	-0.90000	0.18345	0.18345	0.00024	0.00024	0.18443	0.18443	0.00024	0.00024	0.00098
0.00098	0.00047	0.00047	0.00145	0.00145	-	-	0.00014	0.00014	-	-	Sagging							
						25.89152	70.62636	24.76986	-0.90000	0.18257	0.18257	0.08135	0.08135	0.11156	0.11156	0.08135	0.08135	-0.07101
0.07101	0.16271	0.16271	0.16271	0.16271	-	-	0.04907	0.04907	-	-	Sagging							
						29.87483	72.50952	21.25981	-0.90000	-0.01878	-0.01878	0.01667	0.01667	-0.76335	-0.76335	0.01667	0.01667	-0.74457

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Vertical Left Seg.: Rotation:	Pullout: Left Sagging	Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.74457	0.03333	0.03333	0.03333	0.03333	-	-	0.01005	0.01005	-	-	Hogging							
						33.85814	74.39269	17.74976	-0.90000	-1.00255	-1.00255	0.01739	0.01739	-1.47478	-1.47478	0.01739	0.01739	-0.47223 -
0.47223	0.03478	0.03478	0.03478	0.03478	-	-	0.01049	0.01049	-	-	Sagging							
						37.84145	76.27585	14.23971	-0.90000	-1.57490	-1.57490	0.01793	0.01793	-1.84249	-1.84249	0.01793	0.01793	-0.26759 -
0.26759	0.03585	0.03585	0.03585	0.03585	-	-	0.01081	0.01081	-	-	Hogging							
						41.82477	78.15901	10.72966	-0.90000	-1.91719	-1.91719	0.01768	0.01768	-2.02253	-2.02253	0.01768	0.01768	-0.10534 -
0.10534	0.03536	0.03536	0.03536	0.03536	-	-	0.01066	0.01066	-	-	Hogging							
						45.80808	80.04217	7.21960	-0.90000	-2.00984	-2.00984	0.00266	0.00266	-1.85993	-1.85993	0.00266	0.00266	0.14992
0.14992	0.00532	0.00532	0.15524	0.15524	-	-	0.00161	0.00161	-	-	Hogging							
						49.79139	81.92534	3.70955	-0.90000	-1.77957	-1.77957	0.00365	0.00365	-1.46387	-1.46387	0.00365	0.00365	0.31570
0.31570	0.00731	0.00731	0.32300	0.32300	-	-	0.00220	0.00220	-	-	Hogging							
					4	6.97079	61.68134	41.44261	-0.90000	0.17844	0.17844	0.00047	0.00047	0.17944	0.17944	0.00047	0.00047	0.00100
0.00100	0.00094	0.00094	0.00195	0.00195	-	-	0.00028	0.00028	-	-	Hogging							
						10.95411	63.56450	37.93256	-0.90000	0.17977	0.17977	0.00049	0.00049	0.18078	0.18078	0.00049	0.00049	0.00100
0.00100	0.00098	0.00098	0.00198	0.00198	-	-	0.00030	0.00030	-	-	Hogging							
						14.93742	65.44766	34.42251	-0.90000	0.18111	0.18111	0.00043	0.00043	0.18212	0.18212	0.00043	0.00043	0.00100
0.00100	0.00087	0.00087	0.00187	0.00187	-	-	0.00026	0.00026	-	-	Hogging							
						18.92073	67.33082	30.91245	-0.90000	0.18245	0.18245	0.00024	0.00024	0.18345	0.18345	0.00024	0.00024	0.00101
0.00101	0.00048	0.00048	0.00149	0.00149	-	-	0.00014	0.00014	-	-	Hogging							
						22.90404	69.21399	27.40240	-0.90000	0.18379	0.18379	0.01769	0.01769	0.18251	0.18251	0.01769	0.01769	-0.00127 -
0.00127	0.03538	0.03538	0.03538	0.03538	-	-	0.01067	0.01067	-	-	Sagging							
						26.88735	71.09715	23.89235	-0.90000	0.17606	0.17606	0.02875	0.02875	-0.01979	-0.01979	0.02875	0.02875	-0.19585 -
0.19585	0.05749	0.05749	0.05749	0.05749	-	-	0.01734	0.01734	-	-	Sagging							
						30.87066	72.98031	20.38230	-0.90000	-0.22130	-0.22130	0.00772	0.00772	-1.00390	-1.00390	0.00772	0.00772	-0.78260 -
0.78260	0.01544	0.01544	0.01544	0.01544	-	-	0.00465	0.00465	-	-	Sagging							
						34.85397	74.86348	16.87225	-0.90000	-1.19951	-1.19951	0.01999	0.01999	-1.57553	-1.57553	0.01999	0.01999	-0.37602 -
0.37602	0.03998	0.03998	0.03998	0.03998	-	-	0.01206	0.01206	-	-	Sagging							
						38.83728	76.74664	13.36219	-0.90000	-1.66248	-1.66248	0.01843	0.01843	-1.91748	-1.91748	0.01843	0.01843	-0.25501 -
0.25501	0.03686	0.03686	0.03686	0.03686	-	-	0.01112	0.01112	-	-	Hogging							
						42.82059	78.62980	9.85214	-0.90000	-1.97872	-1.97872	0.01180	0.01180	-2.00971	-2.00971	0.01180	0.01180	-0.03099 -
0.03099	0.02359	0.02359	0.02359	0.02359	-	-	0.00711	0.00711	-	-	Hogging							
						46.80390	80.51296	6.34209	-0.90000	-1.97725	-1.97725	0.00292	0.00292	-1.77903	-1.77903	0.00292	0.00292	0.19823
0.19823	0.00585	0.00585	0.20407	0.20407	-	-	0.00176	0.00176	-	-	Hogging							
		5	TW Foul-1	1		1	1.00444	75.64700	113.52870	-6.00000	1.13520	1.13520	0.00880	0.00880	1.25379	1.25379	0.00880	0.00880	0.11859
0.11859	0.01760	0.01760	0.13619	0.13619	-	-	0.00057	0.00057	-	-	Hogging							
						2.00887	74.83601	112.93610	-6.00000	1.20134	1.20134	0.03451	0.03451	1.29249	1.29249	0.03451	0.03451	0.09115
0.09115	0.06903	0.06903	0.16018	0.16018	-	-	0.00223	0.00223	-	-	Sagging							
						3.01331	74.02501	112.34351	-6.00000	1.25419	1.25419	0.05068	0.05068	1.33244	1.33244	0.05068	0.05068	0.07825
0.07825	0.10135	0.10135	0.17960	0.17960	-	-	0.00328	0.00328	-	-	Hogging							
						4.01774	73.21401	111.75091	-6.00000	1.29284	1.29284	0.02502	0.02502	1.37530	1.37530	0.02502	0.02502	0.08246
0.08246	0.05004	0.05004	0.13251	0.13251	-	-	0.00162	0.00162	-	-	Hogging							
						5.02218	72.40301	111.15831	-6.00000	1.33281	1.33281	0.01394	0.01394	1.40729	1.40729	0.01394	0.01394	0.07448
0.07448	0.02788	0.02788	0.10237	0.10237	-	-	0.00090	0.00090	-	-	Hogging							
						6.02661	71.59201	110.56571	-6.00000	1.37563	1.37563	0.01394	0.01394	1.42763	1.42763	0.01394	0.01394	0.05199
0.05199	0.02788	0.02788	0.07987	0.07987	-	-	0.00090	0.00090	-	-	Hogging							
						7.03105	70.78101	109.97311	-6.00000	1.40752	1.40752	0.01387	0.01387	1.43557	1.43557	0.01387	0.01387	0.02805
0.02805	0.02774	0.02774	0.05579	0.05579	-	-	0.00090	0.00090	-	-	Hogging							
						8.03548	69.97102	109.38052	-6.00000	1.42775	1.42775	0.01374	0.01374	1.43045	1.43045	0.01374	0.01374	0.00270
0.00270	0.02747	0.02747	0.03017	0.03017	-	-	0.00089	0.00089	-	-	Hogging							
						9.03992	69.15902	108.78792	-6.00000	1.43559	1.43559	0.01353	0.01353	1.41164	1.41164	0.01353	0.01353	-0.02394 -
0.02394	0.02706	0.02706	0.02706	0.02706	-	-	0.00087	0.00087	-	-	Hogging							
						10.04435	68.34802	108.19532	-6.00000	1.43035	1.43035	0.01323	0.01323	1.37864	1.37864	0.01323	0.01323	-0.05170 -
0.05170	0.02646	0.02646	0.02646	0.02646	-	-	0.00086	0.00086	-	-	Hogging							
						11.04879	67.53702	107.60272	-6.00000	1.41141	1.41141	0.01281	0.01281	1.33111	1.33111	0.01281	0.01281	-0.08030 -
0.08030	0.02562	0.02562	0.02562	0.02562	-	-	0.00083	0.00083	-	-	Sagging							
						12.05322	66.72603	107.01013	-6.00000	1.37829	1.37829	0.01225	0.01225	1.26894	1.26894	0.01225	0.01225	-0.10935 -
0.10935	0.02449	0.02449	0.02449	0.02449	-	-	0.00079	0.00079	-	-	Sagging							
						13.05766	65.91503	106.41753	-6.00000	1.33063	1.33063	0.07015	0.07015	1.19227	1.19227	0.07015	0.07015	-0.13836 -
0.13836	0.14029	0.14029	0.14029	0.14029	-	-	0.00454	0.00454	-	-	Hogging							
						14.06209	65.10403	105.82493	-6.00000	1.26832	1.26832	0.00851	0.00851	1.10160	1.10160	0.00851	0.00851	-0.16672 -
0.16672	0.01701	0.01701	0.01701	0.01701	-	-	0.00055	0.00055	-	-	Hogging							
						15.06653	64.29303	105.23233	-6.00000	1.19153	1.19153	0.02168	0.02168	0.99783	0.99783	0.02168	0.02168	-0.19369 -
0.19369	0.04335	0.04335	0.04335	0.04335	-	-	0.00140	0.00140	-	-	Sagging							
						16.07096	63.48203	104.63973	-6.00000	1.10074	1.10074	0.02358	0.02358	0.88226	0.88226	0.02358	0.02358	-0.21848 -
0.21848	0.04717	0.04717	0.04717	0.04717	-	-	0.00153	0.00153	-	-	Sagging							
						17.07540	62.67104	104.04714	-6.00000	0.99686	0.99686	0.02586	0.02586	0.75661	0.75661	0.02586	0.02586	-0.24025 -
0.24025	0.05172	0.05172	0.05172	0.05172	-	-	0.00167	0.00167	-	-	Sagging							
						18.07983	61.86004	103.45454	-6.00000	0.88120	0.88120	0.32469	0.32469	0.80928	0.80928	0.32469	0.32469	-0.07191 -
0.07191	0.64938	0.64938	0.64938	0.64938	-	-	0.02100	0.02100	-	-	Hogging							
						19.08427	61.04904	102.86194	-6.00000	0.75630	0.75630	0.10785	0.10785	0.91631	0.91631	0.10785	0.10785	0.16001
0.16001	0.21569	0.21569	0.37571	0.37571	-	-	0.00697	0.00697	-	-	Hogging							
						20.08870	60.23804	102.26934	-6.00000	0.80999	0.80999	0.01435	0.01435	1.02518	1.02518	0.01435	0.01435	0.21519
0.21519	0.02871	0.02871	0.24390	0.24390	-	-	0.00093	0.00093	-	-	Hogging							
						21.09314	59.42704	101.67674	-6.00000	0.91726	0.91726	0.49134	0.49134	1.05841	1.05841	0.49134	0.49134	0.14114
0.14114	0.98269	0.98269	1.12383	1.12383	-	-	0.03177	0.03177	-	-	Sagging							
						22.09757	58.61605	101.08415	-6.00000	1.02581	1.02581	0.15872	0.15872	1.06687	1.06687	0.15872	0.15872	0.04106
0.04106	0.31744	0.31744	0.35850	0.35850	-	-	0.01026	0.01026	-	-	Sagging							
						23.10201	57.80505	100.49155	-6.00000	1.05859	1.05859	0.00182	0.00182	1.07522	1.07522	0.00182	0.00182	0.01664
0.01664	0.00363	0.00363	0.02027	0.02027	-	-	0.00012	0.00012	-	-	Hogging							
						24.10644	56.99405	99.89895	-6.00000	1.06694	1.06694	0.00237	0.00237	1.08358	1.08358	0.00237	0.00237	0.01664
0.01664	0.00474	0.00474	0.02137	0.02137	-	-	0.00015	0.00015	-	-	Hogging							
						25.11088	56.18305	99.30635	-6.00000	1.07530	1.07530	0.00293	0.00293	1.09193	1.09193	0.00293	0.00293	0.01664
0.01664	0.00586	0.00586	0.02250	0.02250	-	-	0.00019	0.00019	-	-	Hogging							
						26.11531	55.37206	98.71376	-6.00000	1.08365	1.08365	0.00348	0.00348	1.10029	1.10029	0.00348	0.00348	0.01664
0.01664	0.00696	0.00696	0.02360	0.02360	-	-	0.00023	0.00023	-	-	Hogging							
						27.11975	54.56106	98.12116	-6.00000	1.09201	1.09201	0.00400	0.00400	1.10864	1.10864	0.00400	0.00400	0.01664
0.01664	0.00799	0.00799	0.02463	0.02463	-	-	0.00026	0.00026	-	-	Hogging							
						28.12418	53.75006	97.52856	-6.00000	1.10036	1.10036	0.00446	0.00446	1.11700	1.11700	0.00446	0.00446	0.01664
0.01664	0.00891	0.00891	0.02555	0.02555	-	-	0.00029	0.00029	-	-	Hogging							
						29.12862	52.93906	96.93596	-6.00000	1.10871	1.10871	0.00484	0.00484	1.12535	1.12535	0.00484	0.00484	0.01664
0.01664	0.00968	0.00968	0.02632	0.02632	-	-	0.00031	0.00031	-	-	Hogging							
						30.13305	52.12806	96.34336	-6.00000	1.11707	1.11707	0.00513	0.00513	1.13370	1.13370	0.00513	0.00513	0.01664
0.01664	0.01026	0.01026	0.02690	0.02690	-	-	0.00033	0.00033	-	-	Hogging							
						31.13749	51.31707	95.75077	-6.00000	1.12542	1.12542	0.00531	0.00531	1.14206	1.14206	0.00531	0.00531	0.01664
0.01664	0.01063	0.01063	0.02726	0.02726	-	-	0.00034	0.00034	-	-	Hogging							
						32.14192	50.50697	95.15817	-6.00000	1.13378	1.13378	0.15875	0.15875	1.12661	1.12661	0.15875	0.15875	-0.00717 -
0.00717	0.31750	0.31750	0.31750	0.31750	-	-	0.01027	0.01027	-	-	Sagging							
						33.14636	49.69507	94.56557	-6.00000	1.14203	1.14203	0.68864	0.68864	1.00931	1.00931	0.68864	0.68864	-0.13272 -
0.13272	1.37728	1.37728	1.37728	1.37728	-	-	0.04453	0.04453	-	-	Sagging							
						34.15079	48.88407	93.97297	-6.00000	1.12602	1.12602	0.01234	0.01234	0.88975	0.88975	0.01234	0.01234	-0.23627 -
0.23627	0.02468	0.02468	0.02468	0.02468	-	-	0.00080	0.00080	-	-	Sagging							
						35.15523	48.07307	93.38037	-6.00000	1.00826	1.00826	0.09119	0.09119	0.74834	0.74834	0.09119	0.09119	-0.25992 -
0.25992	0.18237	0.18237	0.18237	0.18237	-	-	0.00590	0.00590	-	-	Hogging							
						36.15966	47.26208	92.78778	-6.00000	0.88860	0.88860	0.48101	0.48101	0.50450	0.50450	0.48101	0.48101	-0.38410 -
0.38410	0.96201	0.96201	0.96201	0.96201	-	-	0.03111	0.03111	-	-	Hogging							
						37.16410	46.45108	92.19518	-6.00000	0.74664	0.74664	0.05522	0.05522	0.25256	0.25256	0.05522	0.05522	-0.49408 -
0.49408	0.11045	0.11045	0.11045	0.11045	-	-	0.00357	0.00357	-	-	Sagging							
						38.16853	45.64008	91.60258	-6.00000	0.50231	0.50231	0.05766	0.05766	0.00134	0.00134	0.05766	0.05766	-0.50097 -
0.50097	0.11533	0.11533	0.11533	0.11533	-	-	0.00373	0.00373	-	-	Sagging							
						39.17297	44.82908	91.00998	-6.00000	0.25034	0.25034	0.04402	0.04402	-0.24300	-0.24300	0.04402	0.04402	-0.49334 -
0.49334	0.08803	0.08803	0.08803	0.08803	-	-	0.00285	0.00285	-	-	Sagging							
						40.17740	44.01809	90.41739	-6.00000	-0.00085	-0.00085	0.03995	0.03995	-0.47562	-0.47562	0.03995	0.03995	-0.47477 -
0.47477	0.07990	0.07990	0.07990	0.07990	-	-	0.00258	0.00258	-	-	Sagging							
						41.18184	43.20709	89.82479	-6.00000	-0.24510	-0.24510	0.03704	0.03704	-0.69199	-0.69199	0.03704	0.03704	-0.44688 -
0.44688	0.07408	0.07408	0.07408	0.07408	-	-	0.00240	0.00240	-	-	Sagging							
						42.18627	42.39609	89.23219	-6.00000	-0.47760	-0.47760	0.03455	0.03455	-0.88862	-0.88862	0.03455	0.03455	-0.41102 -
0.41102	0.06911	0.06911	0.06911	0.06911	-	-	0.00223	0.00223	-	-	Sagging							
						43.19071	41.58509	88.63959	-6.00000	-0.69381	-0.69381	0.03233	0.03233	-1.06311	-1.06311	0.03233	0.03233	-0.36930 -
0.36930	0.06466	0.06466	0.06466	0.06466	-	-	0.00209	0.00209	-	-	Sagging							
						44.19514	40.77409	88.04699	-6.00000	-0.89026	-0.89026	0.03020	0.03020	-1.21407	-1.21407	0.03020	0.03020	-0.32381 -
0.32381	0.06040	0.06040	0.06040	0.06040	-	-	0.00195	0.00195	-	-	Sagging							
						45.19958	39.96310	87.45440	-6.00000	-1.06455	-1.06455	0.01821	0.01821	-1.34101	-1.34101	0.01821	0.01821	-0.27647 -
0.27647	0.03641	0.03641	0.03641	0.03641	-	-	0.00118	0.00118	-	-	Hogging							
		6	TW Foul-2	1		1	1.00474	38.81931	85.38557	-6.00000	1.73206	1.73206	0.14967	0.14967	1.64203	1.64203	0.14967	0.14967	-0.09003 -
0.09003	0.29934	0.29934	0.29934	0.29934	-	-	0.00677	0.00677	-	-	Hogging							
						2.00947	39.29752	84.50193	-6.00000	1.69716	1.69716	0.03844	0.03844	1.56397	1.56397	0.03844	0.03844	-0.13319 -
0.13319	0.07688	0.07688	0.07688	0.07688	-	-	0.00174	0.00174	-	-	Sagging							
						3.01421	39.77574	83.61830	-6.00000	1.64140	1.64140	0.06565	0.06565	1.46196	1.46196	0.06565	0.06565	-0.17944 -
0.17944	0.13131	0.13131	0.13131	0.13131	-	-	0.00297	0.00297	-	-	Sagging							
						4.01894	40.25395	82.73467	-6.00000	1.56312	1.56312	0.09070	0.09070	1.34582	1.34582	0.09070	0.09070	-0.21730 -
0.21730	0.18139	0.18139	0.18139	0.18139	-	-	0.00410	0.00410	-	-	Sagging							
						5.02368	40.73216	81.85104	-6.00000	1.46093	1.46093	0.16482	0.16482	1.23870	1.23870	0.16482	0.16482	-0.22223 -
0.22223	0.32964	0.32964	0.32964	0.32964	-	-	0.00745	0.00745	-	-	Sagging							
						6.02842	41.21037	80.96740	-6.00000	1.34477	1.34477	0.05724	0.05724	1.08555	1.08555	0.05724	0.05724	-0.25922 -
0.25922	0.11449	0.11449	0.11449	0.11449	-	-	0.00259	0.00259	-	-	Sagging							
						7.03315	41.68859	80.08377	-6.00000	1.23747	1.23747	0.05870	0.05870	0.89000	0.89000	0.05870	0.05870	-0.34747 -
0.34747	0.11741	0.11741	0.11741	0.11741	-	-	0.00265	0.00265	-	-	Sagging							
						8.03789	42.16680	79.20014	-6.00000	1.08390	1.08390	0.06368	0.06368	0.65961	0.65961	0.06368	0.06368	-0.42429 -
0.42429	0.12736	0.12736	0.12736	0.12736	-	-	0.00288	0.00288	-	-	Sagging							
						9.04262	42.64501	78.31650	-6.00000	0.88799	0.88799	0.06919	0.06919	0.40258	0.40258	0.06919	0.06919	-0.48541 -
0.48541	0.13838	0.13838	0.13838	0.13838	-	-	0.00313	0.00313	-	-	Sagging							

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Pullout: Check:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Rotation:	Pullout: Vertical Seg.: Sagging	Pullout: Left	Pullout: Seg.: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
						10.04736	43.12322	77.43287	-6.00000	0.65731	0.65731	0.03291	0.03291	0.14928	0.14928	0.03291	0.03291	-0.50803 -
0.50803	0.06581	0.06581	0.06581	0.06581	-	-	0.00149	0.00149	-	-	Sagging							
						11.05210	43.60144	76.54924	-6.00000	0.40018	0.40018	0.73255	0.73255	0.16993	0.16993	0.73255	0.73255	-0.23024 -
0.23024	1.46511	1.46511	1.46511	1.46511	-	-	0.03313	0.03313	-	-	Hogging							
						12.05683	44.07965	75.66560	-6.00000	0.14819	0.14819	0.00276	0.00276	0.19193	0.19193	0.00276	0.00276	0.04374
0.04374	0.00551	0.00551	0.04925	0.04925	-	-	0.00012	0.00012	-	-	Hogging							
						13.06157	44.55786	74.78197	-6.00000	0.17014	0.17014	0.12083	0.12083	0.21205	0.21205	0.12083	0.12083	0.04191
0.04191	0.24167	0.24167	0.28358	0.28358	-	-	0.00546	0.00546	-	-	Sagging							
						14.06630	45.03607	73.89834	-6.00000	0.19213	0.19213	1.26716	1.26716	0.21262	0.21262	1.26716	1.26716	0.02049
0.02049	2.53433	2.53433	2.55482	2.55482	-	-	0.05730	0.05730	-	-	Sagging							
						15.07104	45.51429	73.01471	-6.00000	0.21215	0.21215	0.00251	0.00251	0.21310	0.21310	0.00251	0.00251	0.00095
0.00095	0.00502	0.00502	0.00597	0.00597	-	-	0.00011	0.00011	-	-	Hogging							
						16.07578	45.99250	72.13107	-6.00000	0.21263	0.21263	0.00394	0.00394	0.21357	0.21357	0.00394	0.00394	0.00095
0.00095	0.00788	0.00788	0.00883	0.00883	-	-	0.00018	0.00018	-	-	Hogging							
						17.08051	46.47071	71.24744	-6.00000	0.21310	0.21310	0.00534	0.00534	0.21405	0.21405	0.00534	0.00534	0.00095
0.00095	0.01069	0.01069	0.01163	0.01163	-	-	0.00024	0.00024	-	-	Hogging							
						18.08525	46.94892	70.36381	-6.00000	0.21358	0.21358	0.00661	0.00661	0.21453	0.21453	0.00661	0.00661	0.00095
0.00095	0.01323	0.01323	0.01417	0.01417	-	-	0.00030	0.00030	-	-	Hogging							
						19.08998	47.42714	69.48017	-6.00000	0.21405	0.21405	0.00766	0.00766	0.21500	0.21500	0.00766	0.00766	0.00095
0.00095	0.01532	0.01532	0.01627	0.01627	-	-	0.00035	0.00035	-	-	Hogging							
						20.09472	47.90535	68.59654	-6.00000	0.21453	0.21453	0.00842	0.00842	0.21548	0.21548	0.00842	0.00842	0.00095
0.00095	0.01684	0.01684	0.01779	0.01779	-	-	0.00038	0.00038	-	-	Hogging							
						21.09945	48.38356	67.71291	-6.00000	0.21501	0.21501	0.00887	0.00887	0.21595	0.21595	0.00887	0.00887	0.00095
0.00095	0.01773	0.01773	0.01868	0.01868	-	-	0.00040	0.00040	-	-	Hogging							
						22.10419	48.86177	66.82927	-6.00000	0.21548	0.21548	0.00899	0.00899	0.21643	0.21643	0.00899	0.00899	0.00095
0.00095	0.01798	0.01798	0.01893	0.01893	-	-	0.00041	0.00041	-	-	Hogging							
						23.10893	49.33998	65.94564	-6.00000	0.21596	0.21596	0.00881	0.00881	0.21691	0.21691	0.00881	0.00881	0.00095
0.00095	0.01762	0.01762	0.01857	0.01857	-	-	0.00040	0.00040	-	-	Hogging							
						24.11366	49.81820	65.06201	-6.00000	0.21643	0.21643	0.00836	0.00836	0.21738	0.21738	0.00836	0.00836	0.00095
0.00095	0.01673	0.01673	0.01767	0.01767	-	-	0.00038	0.00038	-	-	Hogging							
						25.11840	50.29641	64.17838	-6.00000	0.21691	0.21691	0.00770	0.00770	0.21786	0.21786	0.00770	0.00770	0.00095
0.00095	0.01541	0.01541	0.01636	0.01636	-	-	0.00035	0.00035	-	-	Hogging							
						26.12313	50.77462	63.29474	-6.00000	0.21739	0.21739	0.00689	0.00689	0.21834	0.21834	0.00689	0.00689	0.00095
0.00095	0.01378	0.01378	0.01473	0.01473	-	-	0.00031	0.00031	-	-	Hogging							
						27.12787	51.25283	62.41111	-6.00000	0.21786	0.21786	0.00598	0.00598	0.21881	0.21881	0.00598	0.00598	0.00095
0.00095	0.01195	0.01195	0.01290	0.01290	-	-	0.00027	0.00027	-	-	Hogging							
						28.13261	51.73105	61.52748	-6.00000	0.21834	0.21834	0.00502	0.00502	0.21929	0.21929	0.00502	0.00502	0.00095
0.00095	0.01004	0.01004	0.01099	0.01099	-	-	0.00023	0.00023	-	-	Hogging							
						29.13734	52.20926	60.64384	-6.00000	0.21882	0.21882	0.00408	0.00408	0.21977	0.21977	0.00408	0.00408	0.00095
0.00095	0.00815	0.00815	0.00910	0.00910	-	-	0.00018	0.00018	-	-	Hogging							
						30.14208	52.68747	59.76021	-6.00000	0.21930	0.21930	0.00319	0.00319	0.22025	0.22025	0.00319	0.00319	0.00095
0.00095	0.00637	0.00637	0.00732	0.00732	-	-	0.00014	0.00014	-	-	Hogging							
						31.14681	53.16568	58.87658	-6.00000	0.21977	0.21977	0.00239	0.00239	0.22072	0.22072	0.00239	0.00239	0.00095
0.00095	0.00477	0.00477	0.00573	0.00573	-	-	0.00011	0.00011	-	-	Hogging							
						32.15155	53.64390	57.99294	-6.00000	0.22025	0.22025	0.00171	0.00171	0.22120	0.22120	0.00171	0.00171	0.00095
0.00095	0.00342	0.00342	0.00437	0.00437	-	-	0.00008	0.00008	-	-	Hogging							
						33.15629	54.12211	57.10931	-6.00000	0.22073	0.22073	0.00117	0.00117	0.22168	0.22168	0.00117	0.00117	0.00095
0.00095	0.00233	0.00233	0.00328	0.00328	-	-	0.00005	0.00005	-	-	-							
						34.16102	54.60032	56.22568	-6.00000	0.22121	0.22121	0.00076	0.00076	0.22216	0.22216	0.00076	0.00076	0.00095
0.00095	0.00153	0.00153	0.00248	0.00248	-	-	0.00003	0.00003	-	-	-							
						35.16576	55.07853	55.34205	-6.00000	0.22169	0.22169	0.00050	0.00050	0.22264	0.22264	0.00050	0.00050	0.00095
0.00095	0.00099	0.00099	0.00194	0.00194	-	-	0.00002	0.00002	-	-	-							
						36.17049	55.55675	54.45841	-6.00000	0.22216	0.22216	0.00035	0.00035	0.22312	0.22312	0.00035	0.00035	0.00095
0.00095	0.00070	0.00070	0.00165	0.00165	-	-	0.00002	0.00002	-	-	-							
						37.17523	56.03496	53.57478	-6.00000	0.22264	0.22264	0.00031	0.00031	0.22360	0.22360	0.00031	0.00031	0.00095
0.00095	0.00062	0.00062	0.00157	0.00157	-	-	0.00001	0.00001	-	-	-							
						38.17997	56.51317	52.69115	-6.00000	0.22312	0.22312	0.00035	0.00035	0.22407	0.22407	0.00035	0.00035	0.00095
0.00095	0.00070	0.00070	0.00165	0.00165	-	-	0.00002	0.00002	-	-	-							
						39.18470	56.99138	51.80751	-6.00000	0.22360	0.22360	0.00046	0.00046	0.22455	0.22455	0.00046	0.00046	0.00095
0.00095	0.00091	0.00091	0.00187	0.00187	-	-	0.00002	0.00002	-	-	-							
						40.18944	57.46959	50.92388	-6.00000	0.22408	0.22408	0.00061	0.00061	0.22503	0.22503	0.00061	0.00061	0.00095
0.00095	0.00122	0.00122	0.00217	0.00217	-	-	0.00003	0.00003	-	-	-							
						41.19417	57.94781	50.04025	-6.00000	0.22456	0.22456	0.00079	0.00079	0.22551	0.22551	0.00079	0.00079	0.00095
0.00095	0.00159	0.00159	0.00254	0.00254	-	-	0.00004	0.00004	-	-	-							
						42.19891	58.42602	49.15661	-6.00000	0.22504	0.22504	0.00099	0.00099	0.22599	0.22599	0.00099	0.00099	0.00096
0.00096	0.00198	0.00198	0.00294	0.00294	-	-	0.00004	0.00004	-	-	-							
						43.20365	58.90423	48.27298	-6.00000	0.22552	0.22552	0.00119	0.00119	0.22647	0.22647	0.00119	0.00119	0.00096
0.00096	0.00239	0.00239	0.00334	0.00334	-	-	0.00005	0.00005	-	-	-							
						44.20838	59.38244	47.38935	-6.00000	0.22600	0.22600	0.00139	0.00139	0.22695	0.22695	0.00139	0.00139	0.00096
0.00096	0.00279	0.00279	0.00374	0.00374	-	-	0.00006	0.00006	-	-	Hogging							
						45.21312	59.86066	46.50572	-6.00000	0.22648	0.22648	0.00158	0.00158	0.22744	0.22744	0.00158	0.00158	0.00096
0.00096	0.00316	0.00316	0.00412	0.00412	-	-	0.00007	0.00007	-	-	Hogging							
						46.21785	60.33887	45.62208	-6.00000	0.22696	0.22696	0.00175	0.00175	0.22792	0.22792	0.00175	0.00175	0.00096
0.00096	0.00350	0.00350	0.00446	0.00446	-	-	0.00008	0.00008	-	-	Hogging							
						47.22259	60.81708	44.73845	-6.00000	0.22744	0.22744	0.00190	0.00190	0.22840	0.22840	0.00190	0.00190	0.00096
0.00096	0.00381	0.00381	0.00476	0.00476	-	-	0.00009	0.00009	-	-	Hogging							
						48.22733	61.29529	43.85482	-6.00000	0.22792	0.22792	0.00203	0.00203	0.22888	0.22888	0.00203	0.00203	0.00096
0.00096	0.00406	0.00406	0.00502	0.00502	-	-	0.00009	0.00009	-	-	Hogging							
						49.23206	61.77351	42.97118	-6.00000	0.22840	0.22840	0.00213	0.00213	0.22936	0.22936	0.00213	0.00213	0.00096
0.00096	0.00427	0.00427	0.00523	0.00523	-	-	0.00010	0.00010	-	-	Hogging							
						50.23680	62.25172	42.08755	-6.00000	0.22888	0.22888	0.00221	0.00221	0.22984	0.22984	0.00221	0.00221	0.00096
0.00096	0.00442	0.00442	0.00538	0.00538	-	-	0.00010	0.00010	-	-	Hogging							
						51.24153	62.72693	41.20392	-6.00000	0.22936	0.22936	0.00227	0.00227	0.23032	0.23032	0.00227	0.00227	0.00096
0.00096	0.00453	0.00453	0.00549	0.00549	-	-	0.00010	0.00010	-	-	Hogging							
						52.24627	63.20814	40.32028	-6.00000	0.22985	0.22985	0.00229	0.00229	0.23081	0.23081	0.00229	0.00229	0.00096
0.00096	0.00459	0.00459	0.00555	0.00555	-	-	0.00010	0.00010	-	-	Hogging							
						53.25101	63.68636	39.43665	-6.00000	0.23033	0.23033	0.00230	0.00230	0.23129	0.23129	0.00230	0.00230	0.00096
0.00096	0.00460	0.00460	0.00556	0.00556	-	-	0.00010	0.00010	-	-	Hogging							
						54.25574	64.16457	38.55302	-6.00000	0.23081	0.23081	0.00228	0.00228	0.23177	0.23177	0.00228	0.00228	0.00096
0.00096	0.00456	0.00456	0.00552	0.00552	-	-	0.00010	0.00010	-	-	Hogging							
						55.26048	64.64278	37.66939	-6.00000	0.23129	0.23129	0.00224	0.00224	0.23226	0.23226	0.00224	0.00224	0.00096
0.00096	0.00448	0.00448	0.00544	0.00544	-	-	0.00010	0.00010	-	-	Hogging							
						56.26521	65.12099	36.78575	-6.00000	0.23178	0.23178	0.00217	0.00217	0.23274	0.23274	0.00217	0.00217	0.00096
0.00096	0.00434	0.00434	0.00531	0.00531	-	-	0.00010	0.00010	-	-	Hogging							
						57.26995	65.59921	35.90212	-6.00000	0.23226	0.23226	0.00208	0.00208	0.23322	0.23322	0.00208	0.00208	0.00096
0.00096	0.00415	0.00415	0.00512	0.00512	-	-	0.00009	0.00009	-	-	Hogging							
						58.27469	66.07742	35.01849	-6.00000	0.23274	0.23274	0.00195	0.00195	0.23371	0.23371	0.00195	0.00195	0.00096
0.00096	0.00390	0.00390	0.00486	0.00486	-	-	0.00009	0.00009	-	-	Hogging							
						59.27942	66.55563	34.13485	-6.00000	0.23323	0.23323	0.00178	0.00178	0.23419	0.23419	0.00178	0.00178	0.00096
0.00096	0.00356	0.00356	0.00453	0.00453	-	-	0.00008	0.00008	-	-	Hogging							
						60.28416	67.03384	33.25122	-6.00000	0.23371	0.23371	0.00156	0.00156	0.23467	0.23467	0.00156	0.00156	0.00096
0.00096	0.00313	0.00313	0.00409	0.00409	-	-	0.00007	0.00007	-	-	Hogging							
						61.28889	67.51205	32.36759	-6.00000	0.23420	0.23420	0.00128	0.00128	0.23516	0.23516	0.00128	0.00128	0.00096
0.00096	0.00256	0.00256	0.00353	0.00353	-	-	0.00006	0.00006	-	-	Hogging							
						62.29363	67.99027	31.48395	-6.00000	0.23468	0.23468	0.00092	0.00092	0.23564	0.23564	0.00092	0.00092	0.00097
0.00097	0.00185	0.00185	0.00281	0.00281	-	-	0.00004	0.00004	-	-	-							
						63.29836	68.46848	30.60032	-6.00000	0.23516	0.23516	0.00048	0.00048	0.23613	0.23613	0.00048	0.00048	0.00097
0.00097	0.00095	0.00095	0.00192	0.00192	-	-	0.00002	0.00002	-	-	-							
						64.30310	68.94669	29.71669	-6.00000	0.23565	0.23565	0.00007	0.00007	0.23662	0.23662	0.00007	0.00007	0.00097
0.00097	0.00014	0.00014	0.00111	0.00111	-	-	0.00000	0.00000	-	-	-							
						65.30784	69.42490	28.83306	-6.00000	0.23613	0.23613	0.00070	0.00070	0.23710	0.23710	0.00070	0.00070	0.00097
0.00097	0.00139	0.00139	0.00236	0.00236	-	-	0.00003	0.00003	-	-	-							
						66.31257	69.90312	27.94942	-6.00000	0.23662	0.23662	0.00138	0.00138	0.23759	0.23759	0.00138	0.00138	0.00097
0.00097	0.00276	0.00276	0.00373	0.00373	-	-	0.00006	0.00006	-	-	Sagging							
						67.31731	70.38133	27.06579	-6.00000	0.23711	0.23711	0.00207	0.00207	0.23807	0.23807	0.00207	0.00207	0.00097
0.00097	0.00413	0.00413	0.00510	0.00510	-	-	0.00009	0.00009	-	-	Sagging							
						68.32204	70.85954	26.18216	-6.00000	0.23759	0.23759	0.49543	0.49543	0.23098	0.23098	0.49543	0.49543	-0.00661 -
0.00661	0.99086	0.99086	0.99086	0.99086	-	-	0.02240	0.02240	-	-	Sagging							
						69.32678	71.33775	25.29852	-6.00000	0.23804	0.23804	1.00097	1.00097	0.20853	0.20853	1.00097	1.00097	-0.02951 -
0.02951	2.00194	2.00194	2.00194	2.00194	-	-	0.04527	0.04527	-	-	Sagging							
						70.33152	71.81597	24.41489	-6.00000	0.23084	0.23084	0.00555	0.00555	0.18596	0.18596	0.00555	0.00555	-0.04488 -
0.04488	0.01109	0.01109	0.01109	0.01109	-	-	0.00025	0.00025	-	-	Sagging							
						71.33625	72.29418	23.53126	-6.00000	0.20832	0.20832	0.26770	0.26770	0.03013	0.03013	0.26770	0.26770	-0.17819 -
0.17819	0.53540	0.53540	0.53540	0.53540	-	-	0.01211	0.01211	-	-	Hogging							
						72.34099	72.77239	22.64762	-6.00000	0.18512	0.18512	0.43452	0.43452	-0.37443	-0.37443	0.43452	0.43452	-0.55955 -
0.55955	0.86904	0.86904	0.86904	0.86904	-	-	0.01965	0.01965	-	-	Hogging							
						73.34572	73.25060	21.76399	-6.00000	0.02748	0.02748	0.09874	0.09874	-0.75370	-0.75370	0.09874	0.09874	-0.78118 -
0.78118	0.19749	0.19749	0.19749	0.19749	-	-	0.00447	0.00447	-	-	Sagging							
						74.35046	73.72882	20.88036	-6.00000	-0.37813	-0.37813	0.07354	0.07354	-1.08583	-1.08583	0.07354	0.07354	-0.70770 -
0.70770	0.14708	0.14708	0.14708	0.14708	-	-	0.00333	0.00333	-	-	Sagging							
						75.35520	74.20703	19.99673	-6.00000	-0.75705	-0.75705	0.06344	0.06344	-1.35570	-1.35570	0.06344	0.06344	-0.59865 -
0.59865	0.12687	0.12687	0.12687	0.12687	-	-	0.00287	0.00287	-	-	Sagging							
						76.35993	74.68524	19.11309	-6.00000	-1.08867	-1.08867	0.06527	0.06527	-1.55424	-1.55424	0.06527	0.06527	-0.46557 -
0.46557	0.13053	0.13053	0.13053	0.13053	-	-	0.00295	0.00295	-	-	Sagging							
						77.36467	75.16345	18.22946	-6.00000	-1.35791	-1.35791	0.08657	0.08657	-1.68731	-1.68731	0.08657	0.08657	-0.32940 -
0.32940	0.17314	0.17314	0.17314	0.17314	-	-	0.00391	0.00391	-	-	Sagging							
						78.36940	75.64166	17.34583	-6.00000	-1.55580	-1.55580	0.11805	0.11805	-1.77805	-1.77805	0.11805	0.11805	-0.22226 -
0.22226	0.23609	0.23609	0.23609	0.23609	-	-	0.00534	0.00534	-	-	Sagging							
						79.37414	76.11988	16.46219	-6.00000	-1.68836	-1.68836	0.06666	0.06666	-1.80871	-1.80871	0.06666	0.06666	-0.12036 -
0.12036	0.13332	0.13332	0.13332	0.13332	-	-	0.00301	0.00301	-	-	Sagging							
						80.37888	76.59809	15.57856	-6.00000	-1.77862	-1.77862	0.19066	0.19066	-1.88348	-1.88348	0.19066	0.19066	-0.10486 -

Stage: Ref.	Stage: Name	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.:	Pullout: Vertical Left Sagging	Pullout: Left	Pullout: Left Seg.:	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.10486	0.38133	0.38133	0.38133	0.38133	–	–	0.00862	0.00862	–	–	Sagging							
0.21673	0.38862	0.38862	0.38862	0.38862	–	81.38361 –	77.07630 0.00879	14.69493 0.00879	-6.00000 –	-1.80921 –	-1.80921 Hogging	0.19431	0.19431	-2.02594	-2.02594	0.19431	0.19431	-0.21673
0.24552	0.09788	0.09788	0.09788	0.09788	–	82.38835 –	77.55451 0.00221	13.81129 0.00221	-6.00000 –	-1.88451 –	-1.88451 Sagging	0.04894	0.04894	-2.13003	-2.13003	0.04894	0.04894	-0.24552
0.17220	0.20995	0.20995	0.20995	0.20995	–	83.39308 –	78.03273 0.00475	12.92766 0.00475	-6.00000 –	-2.02710 –	-2.02710 Hogging	0.10498	0.10498	-2.19929	-2.19929	0.10498	0.10498	-0.17220
0.10672	0.07539	0.07539	0.07539	0.07539	–	84.39782 –	78.51094 0.00170	12.04403 0.00170	-6.00000 –	-2.13084 –	-2.13084 Hogging	0.03769	0.03769	-2.23756	-2.23756	0.03769	0.03769	-0.10672
0.04852	0.10991	0.10991	0.10991	0.10991	–	85.40256 –	78.98915 0.00249	11.16040 0.00249	-6.00000 –	-2.19980 –	-2.19980 Hogging	0.05496	0.05496	-2.24832	-2.24832	0.05496	0.05496	-0.04852
0.00307	0.37011	0.37011	0.37318	0.37318	–	86.40729 –	79.46736 0.00837	10.27676 0.00837	-6.00000 –	-2.23779 –	-2.23779 Hogging	0.18505	0.18505	-2.23472	-2.23472	0.18505	0.18505	0.00307
0.04878	0.02503	0.02503	0.07381	0.07381	–	87.41203 –	79.94558 0.00057	9.39313 0.00057	-6.00000 –	-2.24831 –	-2.24831 Sagging	0.01252	0.01252	-2.19953	-2.19953	0.01252	0.01252	0.04878
0.08928	0.02318	0.02318	0.11246	0.11246	–	88.41676 –	80.42379 0.00052	8.50950 0.00052	-6.00000 –	-2.23449 –	-2.23449 Hogging	0.01159	0.01159	-2.14521	-2.14521	0.01159	0.01159	0.08928
0.12520	0.02437	0.02437	0.14958	0.14958	–	89.42150 –	80.90200 0.00055	7.62586 0.00055	-6.00000 –	-2.19911 –	-2.19911 Hogging	0.01219	0.01219	-2.07390	-2.07390	0.01219	0.01219	0.12520
0.15712	0.02727	0.02727	0.18439	0.18439	–	90.42624 –	81.38021 0.00062	6.74223 0.00062	-6.00000 –	-2.14462 –	-2.14462 Hogging	0.01363	0.01363	-1.98749	-1.98749	0.01363	0.01363	0.15712
0.18554	0.03053	0.03053	0.21607	0.21607	–	91.43097 –	81.85843 0.00069	5.85860 0.00069	-6.00000 –	-2.07316 –	-2.07316 Hogging	0.01526	0.01526	-1.88762	-1.88762	0.01526	0.01526	0.18554
0.21090	0.03334	0.03334	0.24424	0.24424	–	92.43571 –	82.33664 0.00075	4.97496 0.00075	-6.00000 –	-1.98662 –	-1.98662 Hogging	0.01667	0.01667	-1.77571	-1.77571	0.01667	0.01667	0.21090
0.23359	0.03523	0.03523	0.26882	0.26882	–	93.44044 –	82.81485 0.00080	4.09133 0.00080	-6.00000 –	-1.88662 –	-1.88662 Hogging	0.01761	0.01761	-1.65302	-1.65302	0.01761	0.01761	0.23359
0.25395	0.03593	0.03593	0.28988	0.28988	–	94.44518 –	83.29306 0.00081	3.20770 0.00081	-6.00000 –	-1.77460 –	-1.77460 Hogging	0.01796	0.01796	-1.52066	-1.52066	0.01796	0.01796	0.25395
0.27225	0.03528	0.03528	0.30753	0.30753	–	95.44992 –	83.77128 0.00080	2.32407 0.00080	-6.00000 –	-1.65182 –	-1.65182 Hogging	0.01764	0.01764	-1.37958	-1.37958	0.01764	0.01764	0.27225

Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility Damage Results - Strains

Stage: Ref.	Stage: Name	Specific Rad. of Utility: Curv. Total:	Specific Check: Utility: Rad. of Name Curv.:	Sub-utility Check: Name Rad. of Curv.:	Distance Peak Flex. from start of Orientn. Angle utility	x	y	z	Ax. Strain: Unfactored	Ax. Strain: Factored	Flexural: Tension: Unfactored	Flexural: Tension: Factored	Flexural: Compn.: Unfactored	Flexural: Compn.: Factored	Tension: Total: Unfactored	Tension: Total: Factored	Check: Tension	Compn.: Total: Unfactored
Compn.: Ref.	Check: Compn.																	
Factored																		
Threshold	Limit	(w.r.t. Global Axis)			[m]	[m]	[m]	[m]	[με]	[με]	[με]	[με]	[με]	[με]	[με]	[με]		[με]
[με]		[m]			[Deg]													
0	Base Model	1	TW Main-1	1	1.00283	75.92703	113.14854	-0.90000	56.125	11.225	0.89619	0.89619	-0.89619	-0.89619	57.02121	12.12119	OK	-0.89619
-0.89619	OK	1.0600E+5	OK	OK	-38.94980													
					2.00566	75.10385	112.57577	-0.90000	41.850	8.3700	0.84781	0.84781	-0.84781	-0.84781	42.69779	9.21781	OK	-0.84781
-0.84781	OK	1.1205E+5	OK	OK	-44.89489													
					3.00850	74.28068	112.00301	-0.90000	27.711	5.5422	1.0205	1.0205	-1.0205	-1.0205	28.73142	6.56265	OK	-1.02045
-1.02045	OK	9.3096E+4	OK	OK	-55.73630													
					4.01133	73.45751	111.43024	-0.90000	29.132	5.8263	4.0910	4.0910	-4.0910	-4.0910	33.22254	9.91728	OK	-4.09097
-4.09097	OK	2.3222E+4	OK	OK	-61.70945													
					5.01416	72.63434	110.85748	-0.90000	31.548	6.3096	1.4880	1.4880	-1.4880	-1.4880	33.03599	7.79759	OK	-1.48798
-1.48798	OK	6.3845E+4	OK	OK	-59.25745													
					6.01699	71.81116	110.28471	-0.90000	19.677	3.9354	1.4852	1.4852	-1.4852	-1.4852	21.16223	5.42063	OK	-1.48523
-1.48523	OK	6.3963E+4	OK	OK	-63.99946													
					7.01983	70.98799	109.71195	-0.90000	7.0643	1.4129	1.4751	1.4751	-1.4751	-1.4751	8.53945	2.88798	OK	-1.47511
-1.47511	OK	6.4402E+4	OK	OK	-69.31302													
					8.02266	70.16482	109.13918	-0.90000	-6.2545	-1.2509	1.4575	1.4575	-1.4575	-1.4575	1.45751	1.45751	OK	-7.71197
-2.70840	OK	6.5180E+4	OK	OK	-75.16254													
					9.02549	69.34164	108.56642	-0.90000	-20.210	-4.0421	1.4308	1.4308	-1.4308	-1.4308	1.43079	1.43079	OK	-21.64117
-5.47287	OK	6.6397E+4	OK	OK	-81.54988													
					10.02832	68.51847	107.99365	-0.90000	-34.692	-6.9385	1.3920	1.3920	-1.3920	-1.3920	1.39198	1.39198	OK	-36.08439
-8.33046	OK	6.8248E+4	OK	OK	-88.55898													
					11.03116	67.69530	107.42089	-0.90000	-49.539	-9.9078	1.3378	1.3378	-1.3378	-1.3378	1.33776	1.33776	OK	-50.87697
-11.24560	OK	7.1014E+4	OK	OK	263.57934													
					12.03399	66.87213	106.84812	-0.90000	-64.531	-12.906	1.9325	1.9325	-1.9325	-1.9325	1.93253	1.93253	OK	-66.46349
-14.83872	OK	4.9158E+4	OK	OK	-39.14210													
					13.03682	66.04895	106.27536	-0.90000	-79.383	-15.877	7.2716	7.2716	-7.2716	-7.2716	7.27163	7.27163	OK	-86.65431
-23.14816	OK	1.3064E+4	Fails	Fails	-8.33964													
					14.03965	65.22578	105.70260	-0.90000	-93.761	-18.752	2.1377	2.1377	-2.1377	-2.1377	2.13772	2.13772	OK	-95.89897
-20.88997	OK	4.4440E+4	OK	OK	202.75108													
					15.04249	64.40261	105.12983	-0.90000	-107.28	-21.456	2.3102	2.3102	-2.3102	-2.3102	2.31018	2.31018	OK	-109.59178
-23.76650	OK	4.1122E+4	OK	OK	193.31124													
					16.04532	63.57943	104.55707	-0.90000	-119.51	-23.902	2.5181	2.5181	-2.5181	-2.5181	2.51808	2.51808	OK	-122.02559
-26.41958	OK	3.7727E+4	OK	OK	183.88282													
					17.04815	62.75626	103.98430	-0.90000	-130.00	-26.001	2.7683	2.7683	-2.7683	-2.7683	2.76835	2.76835	OK	-132.77204
-28.76909	OK	3.4316E+4	OK	OK	174.78871													
					18.05098	61.93309	103.41154	-0.90000	-53.247	-10.649	32.941	32.941	-32.941	-32.941	32.94124	32.94124	OK	-86.18777
-43.59054	OK	2.8839E+3	Fails	Fails	-56.41998													
					19.05382	61.10991	102.83877	-0.90000	59.249	11.850	13.556	13.556	-13.556	-13.556	72.80490	25.40600	OK	-13.55627
-13.55627	OK	7.0078E+3	Fails	Fails	-52.98345													
					20.05665	60.28674	102.26601	-0.90000	90.782	18.156	1.3713	1.3713	-1.3713	-1.3713	92.15330	19.52773	OK	-1.37134
-1.37134	OK	6.9275E+4	OK	OK	-38.84130													
					21.05948	59.46357	101.69324	-0.90000	60.722	12.144	50.225	50.225	-50.225	-50.225	110.94785	62.36988	OK	-50.22539
-50.22539	OK	1.8915E+3	Fails	Fails	115.23806													
					22.06231	58.64040	101.12048	-0.90000	18.050	3.6099	19.931	19.931	-19.931	-19.931	37.98021	23.54047	OK	-19.93053
-19.93053	OK	4.7666E+3	Fails	Fails	115.34286													
					23.06515	57.81722	100.54771	-0.90000	5.9594	1.1919	0.26157	0.26157	-0.26157	-0.26157	6.22097	1.45345	OK	-0.26157
-0.26157	OK	3.6319E+5	OK	OK	0.00000													
					24.06798	56.99405	99.97495	-0.90000	5.9596	1.1919	0.30740	0.30740	-0.30740	-0.30740	6.26703	1.49933	OK	-0.30740
-0.30740	OK	3.0904E+5	OK	OK	-0.00000													
					25.07081	56.17088	99.40219	-0.90000	5.9599	1.1920	0.35019	0.35019	-0.35019	-0.35019	6.31012	1.54218	OK	-0.35019
-0.35019	OK	2.7128E+5	OK	OK	0.00000													
					26.07364	55.34770	98.82942	-0.90000	5.9603	1.1921	0.38825	0.38825	-0.38825	-0.38825	6.34852	1.58030	OK	-0.38825
-0.38825	OK	2.4469E+5	OK	OK	-0.00000													
					27.07648	54.52453	98.25666	-0.90000	5.9607	1.1921	0.41997	0.41997	-0.41997	-0.41997	6.38063	1.61210	OK	-0.41997
-0.41997	OK	2.2621E+5	OK	OK	0.00000													
					28.07931	53.70136	97.68389	-0.90000	5.9611	1.1922	0.44389	0.44389	-0.44389	-0.44389	6.40498	1.63611	OK	-0.44389
-0.44389	OK	2.1402E+5	OK	OK	-0.00000													
					29.08214	52.87819	97.11113	-0.90000	5.9616	1.1923	0.45872	0.45872	-0.45872	-0.45872	6.42029	1.65103	OK	-0.45872
-0.45872	OK	2.0710E+5	OK	OK	0.00000													
					30.08497	52.05501	96.53836	-0.90000	5.9621	1.1924	0.46337	0.46337	-0.46337	-0.46337	6.42545	1.65579	OK	-0.46337
-0.46337	OK	2.0502E+5	OK	OK	-0.00000													
					31.08781	51.23184	95.96560	-0.90000	5.9626	1.1925	0.45709	0.45709	-0.45709	-0.45709	6.41971	1.64962	OK	-0.45709
-0.45709	OK	2.0783E+5	OK	OK	-0.00000													
					32.09064	50.40867	95.39283	-0.90000	-2.9054	-0.58109	14.966	14.966	-14.966	-14.966	14.96550	14.96550	OK	-17.87094
-15.54659	OK	6.3479E+3	Fails	Fails	117.94620													
					33.09347	49.58549	94.82007	-0.90000	-55.303	-11.061	74.656	74.656	-74.656	-74.656	74.65558	74.65558	OK	-129.95826
-85.71612	OK	1.2725E+3	Fails	Fails	119.33383													
					34.09630	48.76232	94.24730	-0.90000	-99.326	-19.865	1.1763	1.1763	-1.1763	-1.1763	1.17630	1.17630	OK	-100.50184
-21.04141	OK	8.0762E+4	OK	OK	124.72443													
					35.09914	47.93915	93.67454	-0.90000	-110.08	-22.016	8.7165	8.7165	-8.7165	-8.7165	8.71649	8.71649	OK	-118.79552
-30.73230	OK	1.0899E+4	Fails	Fails	-53.54714													
					36.10197	47.11598	93.10178	-0.90000	-174.34	-34.868	50.911	50.911	-50.911	-50.911	50.91062	50.91062	OK	-225.24911
-85.77832	OK	1.8660E+3	Fails	Fails	-55.31739													
					37.10480	46.29280	92.52901	-0.90000	-230.23	-46.047	5.3946	5.3946	-5.3946	-5.3946	5.39456	5.39456	OK	-235.62838
-51.44132	OK	1.7610E+4	OK	OK	158.61641													
					38.10763	45.46963	91.95625	-0.90000	-231.20	-46.240	5.0242	5.0242	-5.0242	-5.0242	5.02423	5.02423	OK	-236.22551
-51.26449	OK	1.8908E+4	OK	OK	164.69703													
					39.11047	44.64646	91.38348	-0.90000	-226.92	-45.385	4.6480	4.6480	-4.6480	-4.6480	4.64800	4.64800	OK	-231.57243
-50.03289	OK	2.0439E+4	OK	OK	171.60423													
					40.11330	43.82328	90.81072	-0.90000	-217.74	-43.548	4.2936	4.2936	-4.2936	-4.2936	4.29359	4.29359	OK	-222.03509
-47.84189	OK	2.2126E+4	OK	OK	179.09732													
					41.11613	43.00011	90.23795	-0.90000	-204.29	-40.857	3.9735	3.9735	-3.9735	-3.9735	3.97347	3.97347	OK	-208.25975
-44.83072	OK	2.3909E+4	OK	OK	186.82596													
					42.11896	42.17694	89.66519	-0.90000	-187.39	-37.478	3.6856	3.6856	-3.6856	-3.6856	3.68562	3.68562	OK	-191.07717
-41.16393	OK	2.5776E+4	OK	OK	194.43126													
					43.12180	41.35376	89.09242	-0.90000	-167.98	-33.595	3.4197	3.4197	-3.4197	-3.4197	3.41967	3.41967	OK	-171.39710
-37.01516	OK	2.7780E+4	OK	OK	201.65325													
					44.12463	40.53059	88.51966	-0.90000	-146.95	-29.390	1.9535	1.9535	-1.9535	-1.9535	1.95348	1.95348	OK	-148.90545
-31.34387	OK	4.8631E+4	OK	OK	230.35680													
					45.12746	39.70742	87.94689	-0.90000	-125.14	-25.028	6.2617	6.2617	-6.2617	-6.2617	6.26170	6.26170	OK	-131.40312
-31.28999	OK	1.5172E+4	OK	OK	-15.33501													
					46.13029	38.88425	87.37413	-0.90000	-103.21	-20.642	2.0870	2.0870	-2.0870	-2.0870	2.08698	2.08698	OK	-105.29707
-22.72899	OK	4.5520E+4	OK	OK	236.07519													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x Strain:	y Strain:	z	Ax. Tension:	Ax. Tension:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
		2	TW Main-2	1	2.00595	38.17333	84.45412	-0.90000	-60.125	-12.025	2.6538	2.6538	-2.6538	-2.6538	2.65379	2.65379	OK	-62.77840
-14.67871	OK	3.5798E+4	OK	OK	-56.55799													
					3.00892	38.64104	83.56688	-0.90000	-80.253	-16.051	7.1774	7.1774	-7.1774	-7.1774	7.17744	7.17744	OK	-87.43049
-23.22805	OK	1.3236E+4	Fails	Fails	-18.22275													
					4.01189	39.10876	82.67964	-0.90000	-101.15	-20.229	3.3566	3.3566	-3.3566	-3.3566	3.35660	3.35660	OK	-104.50365
-23.58601	OK	2.8302E+4	OK	OK	221.02386													
					5.01486	39.57647	81.79239	-0.90000	-122.36	-24.471	3.6059	3.6059	-3.6059	-3.6059	3.60595	3.60595	OK	-125.96172
-28.07710	OK	2.6345E+4	OK	OK	214.95075													
					6.01784	40.04419	80.90515	-0.90000	-143.22	-28.645	3.8431	3.8431	-3.8431	-3.8431	3.84309	3.84309	OK	-147.06654
-32.48778	OK	2.4720E+4	OK	OK	208.05128													
					7.02081	40.51190	80.01791	-0.90000	-159.73	-31.947	5.6038	5.6038	-5.6038	-5.6038	5.60378	5.60378	OK	-165.33772
-37.55057	OK	1.6953E+4	OK	OK	226.84367													
					8.02378	40.97962	79.13067	-0.90000	-172.27	-34.453	6.9625	6.9625	-6.9625	-6.9625	6.96253	6.96253	OK	-179.22864
-41.41575	OK	1.3644E+4	Fails	Fails	232.18212													
					9.02675	41.44733	78.24343	-0.90000	-190.53	-38.107	4.8904	4.8904	-4.8904	-4.8904	4.89042	4.89042	OK	-195.42400
-42.99714	OK	1.9426E+4	OK	OK	163.38447													
					10.02973	41.91505	77.35619	-0.90000	-210.25	-42.050	5.7326	5.7326	-5.7326	-5.7326	5.73262	5.73262	OK	-215.98105
-47.78230	OK	1.6572E+4	OK	OK	152.11338													
					11.03270	42.38276	76.46895	-0.90000	-151.13	-30.226	32.804	32.804	-32.804	-32.804	32.80420	32.80420	OK	-183.93648
-63.03065	OK	2.8960E+3	Fails	Fails	-51.75742													
					12.03567	42.85048	75.58171	-0.90000	-36.505	-7.3010	25.647	25.647	-25.647	-25.647	25.64693	25.64693	OK	-62.15193
-32.94793	OK	3.7041E+3	Fails	Fails	-49.68124													
					13.03864	43.31819	74.69446	-0.90000	11.276	2.2551	0.18560	0.18560	-0.18560	-0.18560	11.46121	2.44072	OK	-0.18560
-0.18560	OK	5.1186E+5	OK	OK	-30.13108													
					14.04162	43.78591	73.80722	-0.90000	7.8074	1.5615	58.923	58.923	-58.923	-58.923	66.73023	60.48434	OK	-58.92287
-58.92287	OK	1.6123E+3	Fails	Fails	120.46882													
					15.04459	44.25362	72.91998	-0.90000	2.2457	0.44913	38.977	38.977	-38.977	-38.977	41.22216	39.42564	OK	-38.97651
-38.97651	OK	2.4374E+3	Fails	Fails	120.37819													
					16.04756	44.72134	72.03274	-0.90000	0.10447	0.020894	0.21823	0.21823	-0.21823	-0.21823	0.32270	0.23913	OK	-0.21823
-0.21823	OK	4.3531E+5	OK	OK	0.00877													
					17.05053	45.18905	71.14550	-0.90000	0.10437	0.020873	0.27170	0.27170	-0.27170	-0.27170	0.37607	0.29258	OK	-0.27170
-0.27170	OK	3.4965E+5	OK	OK	0.00674													
					18.05351	45.65676	70.25826	-0.90000	0.10425	0.020851	0.31991	0.31991	-0.31991	-0.31991	0.42416	0.34076	OK	-0.31991
-0.31991	OK	2.9696E+5	OK	OK	0.00546													
					19.05648	46.12448	69.37102	-0.90000	0.10414	0.020827	0.35921	0.35921	-0.35921	-0.35921	0.46334	0.38003	OK	-0.35921
-0.35921	OK	2.6447E+5	OK	OK	0.00463													
					20.05946	46.59219	68.48378	-0.90000	0.10402	0.020805	0.38687	0.38687	-0.38687	-0.38687	0.49090	0.40768	OK	-0.38687
-0.38687	OK	2.4556E+5	OK	OK	0.00409													
					21.06242	47.05991	67.59654	-0.90000	0.10392	0.020784	0.40126	0.40126	-0.40126	-0.40126	0.50519	0.42205	OK	-0.40126
-0.40126	OK	2.3675E+5	OK	OK	0.00373													
					22.06540	47.52762	66.70929	-0.90000	0.10384	0.020767	0.40190	0.40190	-0.40190	-0.40190	0.50574	0.42267	OK	-0.40190
-0.40190	OK	2.3638E+5	OK	OK	0.00352													
					23.06837	47.99534	65.82205	-0.90000	0.10377	0.020754	0.38944	0.38944	-0.38944	-0.38944	0.49321	0.41019	OK	-0.38944
-0.38944	OK	2.4394E+5	OK	OK	0.00342													
					24.07134	48.46305	64.93481	-0.90000	0.10372	0.020744	0.36558	0.36558	-0.36558	-0.36558	0.46930	0.38632	OK	-0.36558
-0.36558	OK	2.5986E+5	OK	OK	0.00341													
					25.07431	48.93077	64.04757	-0.90000	0.10369	0.020738	0.33282	0.33282	-0.33282	-0.33282	0.43651	0.35356	OK	-0.33282
-0.33282	OK	2.8544E+5	OK	OK	0.00350													
					26.07729	49.39848	63.16033	-0.90000	0.10368	0.020735	0.29415	0.29415	-0.29415	-0.29415	0.39783	0.31489	OK	-0.29415
-0.29415	OK	3.2296E+5	OK	OK	0.00367													
					27.08026	49.86620	62.27309	-0.90000	0.10367	0.020734	0.25271	0.25271	-0.25271	-0.25271	0.35638	0.27344	OK	-0.25271
-0.25271	OK	3.7593E+5	OK	OK	0.00395													
					28.08323	50.33391	61.38585	-0.90000	0.10367	0.020735	0.21142	0.21142	-0.21142	-0.21142	0.31510	0.23216	OK	-0.21142
-0.21142	OK	4.4934E+5	OK	OK	0.00432													
					29.08620	50.80163	60.49861	-0.90000	0.10368	0.020736	0.17278	0.17278	-0.17278	-0.17278	0.27646	0.19352	OK	-0.17278
-0.17278	OK	5.4984E+5	OK	OK	0.00481													
					30.08918	51.26934	59.61136	-0.90000	0.10369	0.020738	0.13864	0.13864	-0.13864	-0.13864	0.24233	0.15937	OK	-0.13864
-0.13864	OK	6.8524E+5	OK	OK	0.00539													
					31.09215	51.73706	58.72412	-0.90000	0.10370	0.020739	0.11017	0.11017	-0.11017	-0.11017	0.21387	0.13091	OK	-0.11017
-0.11017	OK	8.6229E+5	OK	OK	0.00602													
					32.09512	52.20477	57.83688	-0.90000	0.10370	0.020741	0.087908	0.087908	-0.087908	-0.087908	0.19161	0.10865	OK	-0.08791
-0.08791	OK	1.0807E+6	OK	OK	0.00660													
		3	TW Main-3	1	0.99689	53.66476	55.21468	-0.90000	4.7412	0.94825	1.2319	1.2319	-1.2319	-1.2319	5.97315	2.18016	OK	-1.23191
-1.23191	OK	7.7116E+4	OK	OK	180.00544													
					1.99378	54.18932	54.36696	-0.90000	4.7415	0.94830	1.0683	1.0683	-1.0683	-1.0683	5.80980	2.01662	OK	-1.06832
-1.06832	OK	8.8925E+4	OK	OK	-0.03019													
					2.99067	54.71388	53.51924	-0.90000	4.7425	0.94850	0.062712	0.062712	-0.062712	-0.062712	4.80522	1.01121	OK	-0.06271
-0.06271	OK	1.5149E+6	OK	OK	-0.92174													
					3.98757	55.23844	52.67152	-0.90000	4.7436	0.94872	0.063035	0.063035	-0.063035	-0.063035	4.80663	1.01175	OK	-0.06304
-0.06304	OK	1.5071E+6	OK	OK	-1.32239													
					4.98446	55.76300	51.82380	-0.90000	4.7451	0.94901	0.066376	0.066376	-0.066376	-0.066376	4.81144	1.01539	OK	-0.06638
-0.06638	OK	1.4312E+6	OK	OK	-1.64058													
					5.98135	56.28756	50.97608	-0.90000	4.7469	0.94938	0.072116	0.072116	-0.072116	-0.072116	4.81904	1.02150	OK	-0.07212
-0.07212	OK	1.3173E+6	OK	OK	-1.86465													
					6.97824	56.81212	50.12836	-0.90000	5.2118	1.0424	1.0918	1.0918	-1.0918	-1.0918	6.30360	2.13417	OK	-1.09181
-1.09181	OK	8.7011E+4	OK	OK	-85.81806													
					7.97513	57.33668	49.28064	-0.90000	5.7906	1.1581	0.28394	0.28394	-0.28394	-0.28394	6.07456	1.44206	OK	-0.28394
-0.28394	OK	3.3458E+5	OK	OK	-71.85173													
		4	TW Main-4	1	1.99166	59.32738	45.83017	-0.90000	0.33507	0.067014	0.65095	0.65095	-0.65095	-0.65095	0.98602	0.71796	OK	-0.65095
-0.65095	OK	1.4594E+5	OK	OK	180.02513													
					2.98748	59.79817	44.95266	-0.90000	0.33518	0.067037	1.1219	1.1219	-1.1219	-1.1219	1.45706	1.18891	OK	-1.12187
-1.12187	OK	8.4680E+4	OK	OK	-0.01505													
					3.98331	60.26896	44.07515	-0.90000	0.33542	0.067084	0.14047	0.14047	-0.14047	-0.14047	0.47589	0.20755	OK	-0.14047
-0.14047	OK	6.7630E+5	OK	OK	-0.12390													
					4.97914	60.73975	43.19764	-0.90000	0.33553	0.067106	0.14740	0.14740	-0.14740	-0.14740	0.48293	0.21450	OK	-0.14740
-0.14740	OK	6.4452E+5	OK	OK	-0.12162													
					5.97497	61.21054	42.32012	-0.90000	0.33565	0.067129	0.15319	0.15319	-0.15319	-0.15319	0.48883	0.22031	OK	-0.15319
-0.15319	OK	6.2016E+5	OK	OK	-0.12043													
					6.97079	61.68134	41.44261	-0.90000	0.33577	0.067153	0.15779	0.15779	-0.15779	-0.15779	0.49356	0.22495	OK	-0.15779
-0.15779	OK	6.0205E+5	OK	OK	-0.12022													
					7.96662	62.15213	40.56510	-0.90000	0.33589	0.067179	0.16120	0.16120	-0.16120	-0.16120	0.49710	0.22838	OK	-0.16120
-0.16120	OK	5.8931E+5	OK	OK	-0.12092													
					8.96245	62.62292	39.68758	-0.90000	0.33603	0.067205	0.16340	0.16340	-0.16340	-0.16340	0.49943	0.23061	OK	-0.16340
-0.16340	OK	5.8139E+5	OK	OK	-0.12249													
					9.95828	63.09371	38.81007	-0.90000	0.33617	0.067233	0.16436	0.16436	-0.16436	-0.16436	0.50052	0.23159	OK	-0.16436
-0.16436	OK	5.7801E+5	OK	OK	-0.12496													
					10.95411	63.56450	37.93256	-0.90000	0.33631	0.067262	0.16402	0.16402	-0.16402	-0.16402	0.50033	0.23128	OK	-0.16402
-0.16402	OK	5.7920E+5	OK	OK	-0.12839													
					11.94993	64.03529	37.05504	-0.90000	0.33646	0.067291	0.16229	0.16229	-0.16229	-0.16229	0.49874	0.22958	OK	-0.16229
-0.16229	OK	5.8539E+5	OK	OK	-0.13298													
					12.94576	64.50608	36.17753	-0.90000	0.33661	0.067322	0.15897	0.15897	-0.15897	-0.15897	0.49558	0.22629	OK	-0.15897
-0.15897	OK	5.9758E+5	OK	OK	-0.13904													
					13.94159	64.97687	35.30002	-0.90000	0.33676	0.067352	0.15381	0.15381	-0.15381	-0.15381	0.49057	0.22116	OK	-0.15381
-0.15381	OK	6.1764E+5	OK	OK	-0.14710													
					14.93742	65.44766	34.42251	-0.90000	0.33692	0.067383	0.14641	0.14641	-0.14641	-0.14641	0.48333	0.21379	OK	-0.14641
-0.14641	OK	6.4886E+5	OK	OK	-0.15810													
					15.93325	65.91845	33.54499	-0.90000	0.33707	0.067414	0.13627	0.13627	-0.13627	-0.13627	0.47334	0.20368	OK	-0.13627
-0.13627	OK	6.9717E+5	OK	OK	-0.17370													
					16.92907	66.38924	32.66748	-0.90000	0.33722	0.067445	0.12276	0.12276	-0.12276	-0.12276	0.45999	0.19021	OK	-0.12276
-0.12276	OK	7.7384E+5	OK	OK	-0.19706													
					17.92490	66.86003	31.78997	-0.90000	0.33737	0.067475	0.10525	0.10525	-0.10525	-0.10525	0.44262	0.17272	OK	-0.10525
-0.10525	OK	9.0265E+5	OK	OK	-0.23482													
					18.92073	67.33082	30.91245	-0.90000	0.33751	0.067503	0.083105	0.083105	-0.083105	-0.083105	0.42062	0.15061	OK	-0.08311
-0.08311	OK	1.1431E+6	OK	OK	-0.30367													
					19.91656	67.80161	30.03494	-0.90000	0.33764	0.067528	0.055983	0.055983	-0.055983	-0.055983	0.39362	0.12351	OK	-0.05598
-0.05598	OK	1.6969E+6	OK	OK	-0.46012													
					20.91238	68.27241	29.15743	-0.90000	0.33776	0.067551	0.024019	0.024019	-0.024019	-0.024019	0.36178	0.09157	OK	-0.02402
-0.02402	OK	3.9552E+6	OK	OK	-1.09421													
					21.90821	68.74320	28.27991	-0.90000	0.33785	0.067571	0.011865	0.011865	-0.011865	-0.011865	0.34972	0.07944	OK	-0.01186
-0.01186	OK	8.0069E+6	OK	OK	182.25961													
					22.90404	69.21399	27.40240	-0.90000	0.33793	0.067586	0.049614	0.049614	-0.049614	-0.049614	0.38754	0.11720	OK	-0.04961
-0.04961	OK	1.9148E+6	OK	OK	180.55076													
					23.89987	69.68478	26.52489	-0.90000	0.33799	0.067598	0.086046	0.086046	-0.086046	-0.086046	0.42404	0.15364	OK	-0.08605
-0.08605	OK	1.1041E+6	OK	OK	180.32363													
					24.89569	70.15557	25.64738	-0.90000	-4.1000	-0.82000	51.988	51.988	-51.988	-51.988	51.98825	51.98825	OK	-56.08826
-52.80825	OK	1.8273E+3	Fails	Fails	121.67456													
					25.89152	70.62636	24.76986	-0.90000	-13.096	-2.6192	56.200	56.200	-56.200	-56.200	56.20015	56.20015	OK	-69.29600
-58.81932	OK	1.6904E+3	Fails	Fails	121.70858													
					26.88735	71.09715	23.89235	-0.90000	-17.655	-3.5310	0.31387	0.31387	-0.31387	-0.31387	0.31387	0.31387	OK	-17.96867
-3.84483	OK	3.0268E+5	OK	OK	151.27636													
					27.88318	71.56794	23.01484	-0.90000	-91.236	-18.247	28.721	28.721	-28.721	-28.721	28.72122	28.72122	OK	-119.95739
-46.96846	OK	3.3077E+3	Fails	Fails	-44.07412													
					28.87900	72.03873	22.13732	-0.90000	-245.46	-49.092	26.664	26.664	-26.664	-26.664	26.66387	26.66387	OK	-272.12233
-75.75556	OK	3.5629E+3	Fails	Fails	-43.64326													
					29.87483	72.50952	21.25981	-0.90000	-314.88	-62.975	6.9422	6.9422	-6.9422	-6.9422	6.94215	6.94215	OK	-321.81833
-69.91739	OK	1.3685E+4	Fails	Fails	143.63294													
					30.87066	72.98031	20.38230	-0.90000	-284.57	-56.914	5.4136	5.4136	-5.4136	-5.4136	5.41365	5.41365	OK	-289.98301
-62.32752	OK	1.7548E+4	OK	OK	159.59144													
					31.86649	73.45110	19.50479	-0.90000	-241.66	-48.332	4.5955	4.5955	-4.5955	-4.5955	4.59552	4.59552	OK	-246.25511
-52.92744	OK	2.0672E+4	OK	OK	189.54486													
					32.86232	73.92189	18.62727	-0.90000	-198.46	-39.693	6.8706	6.8706	-6.8706	-6.8706	6.87058	6.87058	OK	-205.33393

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
-46.56325	OK	1.3827E+4	Fails	Fails	234.51758													
					33.85814	74.39269	17.74976	-0.90000	-153.26	-30.652	4.3744	4.3744	-4.3744	-4.3744	4.37437	4.37437	OK	-157.63408
-35.02631	OK	2.1717E+4	OK	OK	217.74842													
					34.85397	74.86348	16.87225	-0.90000	-102.79	-20.558	4.7530	4.7530	-4.7530	-4.7530	4.75296	4.75296	OK	-107.54141
-25.31065	OK	1.9988E+4	OK	OK	231.56643													
					35.84980	75.33427	15.99473	-0.90000	-95.339	-19.068	14.498	14.498	-14.498	-14.498	14.49792	14.49792	OK	-109.83702
-33.56574	OK	6.5527E+3	Fails	Fails	260.14907													
					36.84563	75.80506	15.11722	-0.90000	-99.312	-19.862	3.6150	3.6150	-3.6150	-3.6150	3.61499	3.61499	OK	-102.92692
-23.47737	OK	2.6279E+4	OK	OK	235.66476													
					37.84145	76.27585	14.23971	-0.90000	-79.931	-15.986	4.0716	4.0716	-4.0716	-4.0716	4.07160	4.07160	OK	-84.00216
-20.05771	OK	2.3332E+4	OK	OK	264.64421													
					38.83728	76.74664	13.36219	-0.90000	-90.270	-18.054	14.246	14.246	-14.246	-14.246	14.24633	14.24633	OK	-104.51589
-32.30024	OK	6.6684E+3	Fails	Fails	-34.91725													
					39.83311	77.21743	12.48468	-0.90000	-90.809	-18.162	4.2514	4.2514	-4.2514	-4.2514	4.25140	4.25140	OK	-95.05995
-22.41311	OK	2.2346E+4	OK	OK	-18.10670													
					40.82894	77.68822	11.60717	-0.90000	-60.358	-12.072	2.0336	2.0336	-2.0336	-2.0336	2.03358	2.03358	OK	-62.39136
-14.10514	OK	4.6716E+4	OK	OK	216.55373													
					41.82477	78.15901	10.72966	-0.90000	-32.889	-6.5779	16.584	16.584	-16.584	-16.584	16.58429	16.58429	OK	-49.47373
-23.16218	OK	5.7283E+3	Fails	Fails	-3.80981													
					42.82059	78.62980	9.85214	-0.90000	-8.1917	-1.6383	1.3206	1.3206	-1.3206	-1.3206	1.32057	1.32057	OK	-9.51231
-2.95892	OK	7.1939E+4	OK	OK	-49.06887													
					43.81642	79.10059	8.97463	-0.90000	13.976	2.7952	0.90131	0.90131	-0.90131	-0.90131	14.87719	3.69648	OK	-0.90131
-0.90131	OK	1.0540E+5	OK	OK	267.75005													
					44.81225	79.57138	8.09712	-0.90000	33.842	6.7683	0.85082	0.85082	-0.85082	-0.85082	34.69244	7.61914	OK	-0.85082
-0.85082	OK	1.1166E+5	OK	OK	-72.55756													
					45.80808	80.04217	7.21960	-0.90000	51.643	10.329	0.89449	0.89449	-0.89449	-0.89449	52.53752	11.22310	OK	-0.89449
-0.89449	OK	1.0621E+5	OK	OK	-54.82508													
					46.80390	80.51296	6.34209	-0.90000	67.605	13.521	0.99028	0.99028	-0.99028	-0.99028	68.59512	14.51125	OK	-0.99028
-0.99028	OK	9.5932E+4	OK	OK	-41.69882													
					47.79973	80.98376	5.46458	-0.90000	81.934	16.387	1.0970	1.0970	-1.0970	-1.0970	83.03060	17.48373	OK	-1.09702
-1.09702	OK	8.6598E+4	OK	OK	-32.78181													
					48.79556	81.45455	4.58706	-0.90000	94.816	18.963	1.1877	1.1877	-1.1877	-1.1877	96.00350	20.15090	OK	-1.18775
-1.18775	OK	7.9983E+4	OK	OK	-26.83568													
					49.79139	81.92534	3.70955	-0.90000	106.42	21.284	1.2466	1.2466	-1.2466	-1.2466	107.66443	22.53017	OK	-1.24660
-1.24660	OK	7.6207E+4	OK	OK	-22.88270													
					50.78722	82.39613	2.83204	-0.90000	116.89	23.377	1.2641	1.2641	-1.2641	-1.2641	118.15132	24.64152	OK	-1.26407
-1.26407	OK	7.5154E+4	OK	OK	-20.31935													
					51.78304	82.86692	1.95453	-0.90000	126.35	25.271	1.2342	1.2342	-1.2342	-1.2342	127.58811	26.50494	OK	-1.23415
-1.23415	OK	7.6976E+4	OK	OK	-18.82349													
	5	TW Foul-1	1		2.00887	74.83600	112.93610	-6.00000	45.585	45.585	34.361	68.722	-34.361	-34.361	79.94568	114.30683	OK	-34.36115
-34.36115	OK	2.5785E+4	OK	OK	189.55613													
					3.01331	74.02501	112.34351	-6.00000	39.134	39.134	50.453	100.91	-50.453	-50.453	89.58639	140.03921	OK	-50.45282
-50.45282	OK	1.7561E+4	OK	OK	-22.16690													
					4.01774	73.21401	111.75091	-6.00000	41.245	41.245	24.911	49.823	-24.911	-24.911	66.15680	91.06811	OK	-24.91131
-24.91131	OK	3.5566E+4	OK	OK	-59.48741													
					5.02218	72.40301	111.15831	-6.00000	37.261	37.261	13.880	27.760	-13.880	-13.880	51.14066	65.02074	OK	-13.88008
-13.88008	OK	6.3832E+4	OK	OK	-58.48788													
					6.02661	71.59201	110.56571	-6.00000	26.018	26.018	13.878	27.757	-13.878	-13.878	39.89671	53.77501	OK	-13.87830
-13.87830	OK	6.3841E+4	OK	OK	-63.14519													
					7.03105	70.78101	109.97311	-6.00000	14.050	14.050	13.808	27.616	-13.808	-13.808	27.85800	41.66621	OK	-13.80821
-13.80821	OK	6.4165E+4	OK	OK	-68.41510													
					8.03548	69.97002	109.38052	-6.00000	1.3790	1.3790	13.675	27.350	-13.675	-13.675	15.05405	28.72907	OK	-13.67502
-13.67502	OK	6.4790E+4	OK	OK	-74.25801													
					9.03992	69.15902	108.78792	-6.00000	-11.940	-11.940	13.470	26.940	-13.470	-13.470	13.47007	26.94013	OK	-25.40998
-25.40998	OK	6.5775E+4	OK	OK	-80.66127													
					10.04435	68.34802	108.19532	-6.00000	-25.815	-25.815	13.172	26.343	-13.172	-13.172	13.17151	26.34302	OK	-38.98694
-38.98694	OK	6.7266E+4	OK	OK	-87.67835													
					11.04879	67.53702	107.60272	-6.00000	-40.110	-40.110	12.751	25.502	-12.751	-12.751	12.75125	25.50250	OK	-52.86139
-52.86139	OK	6.9483E+4	OK	OK	264.51422													
					12.05322	66.72603	107.01013	-6.00000	-54.633	-54.633	12.192	24.383	-12.192	-12.192	12.19165	24.38331	OK	-66.82511
-66.82511	OK	7.2673E+4	OK	OK	255.54159													
					13.05766	65.91503	106.41753	-6.00000	-69.131	-69.131	69.838	139.68	-69.838	-69.838	69.83771	139.67542	OK	-138.96910
-138.96910	OK	1.2687E+4	Fails	Fails	-8.57829													
					14.06209	65.10403	105.82493	-6.00000	-83.299	-83.299	8.4696	16.939	-8.4696	-8.4696	8.46962	16.93924	OK	-91.76884
-91.76884	OK	1.0461E+5	OK	OK	-86.74596													
					15.06653	64.29303	105.23233	-6.00000	-96.786	-96.786	21.580	43.160	-21.580	-21.580	21.57987	43.15975	OK	-118.36562
-118.36562	OK	4.1057E+4	OK	OK	195.79453													
					16.07096	63.48203	104.63973	-6.00000	-109.18	-109.18	23.479	46.958	-23.479	-23.479	23.47895	46.95791	OK	-132.66189
-132.66189	OK	3.7736E+4	OK	OK	186.50275													
					17.07540	62.67104	104.04714	-6.00000	-120.07	-120.07	25.747	51.494	-25.747	-25.747	25.74678	51.49355	OK	-145.81673
-145.81673	OK	3.4412E+4	OK	OK	177.44083													
					18.07983	61.86004	103.45454	-6.00000	-35.828	-35.828	323.26	646.51	-323.26	-323.26	323.25693	646.51387	Fails	-359.08530
-359.08530	OK	2.7409E+3	Fails	Fails	-56.09764													
					19.08427	61.04904	102.86194	-6.00000	80.286	80.286	107.37	214.74	-107.37	-107.37	187.65567	295.02562	OK	-107.36996
-107.36996	OK	8.2518E+3	Fails	Fails	-52.62385													
					20.08870	60.23804	102.26934	-6.00000	107.93	107.93	14.290	28.581	-14.290	-14.290	122.21572	136.50610	OK	-14.29038
-14.29038	OK	6.2000E+4	OK	OK	-41.23196													
					21.09314	59.42704	101.67674	-6.00000	70.719	70.719	489.17	978.35	-489.17	-489.17	559.89267	1049.06652	Fails	-489.17385
-489.17385	OK	1.8112E+3	Fails	Fails	115.06739													
					22.09757	58.61605	101.08415	-6.00000	20.547	20.547	158.02	316.04	-158.02	-158.02	178.56737	336.58796	OK	-158.02059
-158.02059	OK	5.6069E+3	Fails	Fails	115.14246													
					23.10201	57.80505	100.49155	-6.00000	8.3228	8.3228	1.8077	3.6154	-1.8077	-1.8077	10.13056	11.93827	OK	-1.80771
-1.80771	OK	4.9012E+5	OK	OK	0.00000													
					24.10644	56.99405	99.89895	-6.00000	8.3231	8.3231	2.3591	4.7181	-2.3591	-2.3591	10.68212	13.04118	OK	-2.35906
-2.35906	OK	3.7557E+5	OK	OK	0.00000													
					25.11088	56.18305	99.30635	-6.00000	8.3233	8.3233	2.9184	5.8369	-2.9184	-2.9184	11.24176	14.16020	OK	-2.91844
-2.91844	OK	3.0359E+5	OK	OK	-0.00000													
					26.11531	55.37206	98.71376	-6.00000	8.3237	8.3237	3.4654	6.9309	-3.4654	-3.4654	11.78908	15.25451	OK	-3.46543
-3.46543	OK	2.5567E+5	OK	OK	0.00000													
					27.11975	54.56106	98.12116	-6.00000	8.3241	8.3241	3.9786	7.9572	-3.9786	-3.9786	12.30266	16.28126	OK	-3.97860
-3.97860	OK	2.2269E+5	OK	OK	-0.00000													
					28.12418	53.75006	97.52856	-6.00000	8.3245	8.3245	4.4367	8.8733	-4.4367	-4.4367	12.76121	17.19788	OK	-4.43667
-4.43667	OK	1.9970E+5	OK	OK	-0.00000													
					29.12862	52.93906	96.93596	-6.00000	8.3251	8.3251	4.8195	9.6389	-4.8195	-4.8195	13.14456	17.96401	OK	-4.81945
-4.81945	OK	1.8384E+5	OK	OK	0.00000													
					30.13305	52.12806	96.34336	-6.00000	8.3257	8.3257	5.1087	10.217	-5.1087	-5.1087	13.43447	18.54320	OK	-5.10874
-5.10874	OK	1.7343E+5	OK	OK	-0.00000													
					31.13749	51.31707	95.75077	-6.00000	8.3264	8.3264	5.2892	10.578	-5.2892	-5.2892	13.61559	18.90476	OK	-5.28917
-5.28917	OK	1.6751E+5	OK	OK	0.00000													
					32.14192	50.50607	95.15817	-6.00000	-3.5804	-3.5804	158.05	316.10	-158.05	-158.05	158.05143	316.10286	OK	-161.63186
-161.63186	OK	5.6058E+3	Fails	Fails	118.10885													
					33.14636	49.69507	94.56557	-6.00000	-66.249	-66.249	685.60	1371.2	-685.60	-685.60	685.59975	1371.19950	Fails	-751.84900
-751.84900	OK	1.2923E+3	Fails	Fails	119.63927													
					34.15079	48.88407	93.97297	-6.00000	-117.77	-117.77	12.287	24.573	-12.287	-12.287	12.28667	24.57334	OK	-130.05250
-130.05250	OK	7.2111E+4	OK	OK	120.48736													
					35.15523	48.07307	93.38037	-6.00000	-129.63	-129.63	90.783	181.57	-90.783	-90.783	90.78272	181.56544	OK	-220.41165
-220.41165	OK	9.7596E+3	Fails	Fails	-52.31493													
					36.15966	47.26208	92.78778	-6.00000	-191.92	-191.92	478.88	957.77	-478.88	-478.88	478.88278	957.76557	Fails	-670.80607
-670.80607	OK	1.8501E+3	Fails	Fails	-55.62580													
					37.16410	46.45108	92.19518	-6.00000	-247.00	-247.00	54.981	109.96	-54.981	-54.981	54.98061	109.96122	OK	-301.98041
-301.98041	OK	1.6115E+4	OK	OK	147.49107													
					38.16853	45.64008	91.60258	-6.00000	-250.43	-250.43	57.408	114.82	-57.408	-57.408	57.40796	114.81591	OK	-307.84181
-307.84181	OK	1.5433E+4	OK	OK	141.23740													
					39.17297	44.82908	91.00998	-6.00000	-246.61	-246.61	43.821	87.642	-43.821	-43.821	43.82100	87.64200	OK	-290.42904
-290.42904	OK	2.0219E+4	OK	OK	194.01624													
					40.17740	44.01809	90.41739	-6.00000	-237.32	-237.32	39.772	79.545	-39.772	-39.772	39.77231	79.54461	OK	-277.09060
-277.09060	OK	2.2277E+4	OK	OK	178.34712													
					41.18184	43.20709	89.82479	-6.00000	-223.37	-223.37	36.875	73.750	-36.875	-36.875	36.87494	73.74987	OK	-260.24495
-260.24495	OK	2.4027E+4	OK	OK	186.74499													
					42.18627	42.39609	89.23219	-6.00000	-205.43	-205.43	34.401	68.801	-34.401	-34.401	34.40068	68.80136	OK	-239.83375
-239.83375	OK	2.5755E+4	OK	OK	194.93182													
					43.19071	41.58509	88.63959	-6.00000	-184.57	-184.57	32.189	64.377	-32.189	-32.189	32.18867	64.37734	OK	-216.75410
-216.75410	OK	2.7525E+4	OK	OK	202.54135													
					44.19514	40.77409	88.04699	-6.00000	-161.82	-161.82	30.067	60.134	-30.067	-30.067	30.06715	60.13430	OK	-191.88595
-191.88595	OK	2.9467E+4	OK	OK	209.42762													
					45.19958	39.96310	87.45440	-6.00000	-138.15	-138.15	18.126	36.252	-18.126	-18.126	18.12605	36.25210	OK	-156.27381
-156.27381	OK	4.8880E+4	OK	OK	-63.84115													
	6	TW Foul-2	1		1.00474	38.81931	85.38557	-6.00000	-44.901	-44.901	148.96	297.93	-148.96	-148.96	148.96309	297.92618	OK	-193.86409
-193.86409	OK	8.5055E+3	Fails	Fails	-13.21803													
					2.00947	39.29752	84.50193	-6.00000	-66.455	-66.455	38.258	76.515	-38.258	-38.258	38.25756	76.51513	OK	-104.71303
-104.71303	OK	3.3118E+4	OK	OK	250.18662													
					3.01421	39.77574	83.61830	-6.00000	-89.582	-89.582	65.343	130.69	-65.343	-65.343	65.34344	130.68688	OK	-154.92509
-154.92509	OK	1.9390E+4	OK	OK	214.68734													
					4.01894	40.25395	82.73467	-6.00000	-108.51	-108.51	90.269	180.54	-90.269	-90.269	90.26865	180.53731	OK	-198.78207
-198.78207	OK	1.4036E+4	Fails	Fails	226.18877													
					5.02368	40.73216	81.85104	-6.00000	-110.96	-110.96	164.04	328.09	-164.04	-164.04	164.04373	328.08745	OK	-275.00404
-275.00404	OK	7.7236E+3	Fails	Fails	254.82553													
					6.02842	41.21037	80.96740	-6.00000	-129.43	-129.43	56.973	113.95	-56.973	-56.973	56.97281	113.94562	OK	-186.40437
-186.40437	OK	2.2239E+4	OK	OK	210.01471													
					7.03315	41.68859	80.08377	-6.00000	-173.56	-173.56	58.426	116.85	-58.426	-58.426	58.42618	116.85236	OK	-231.98517
-231.98517	OK	2.1685E+4	OK	OK	196.95296													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility:	Specific Check: Utility:	Sub-utility Check: Name	Distance from	x	y	z	Ax.	Ax.	Flexural:	Flexural:	Flexural:	Flexural:	Tension:	Tension:	Check:	Compn.:
Total:	Compn.	Curv.	Rad. of	Rad. of	Tens. Strain				Strain:	Strain:	Tension:	Tension:	Compn.:	Compn.:	Total:	Total:	Tension	Total:
					8.03789	42.16680	79.20014	-6.00000	-211.97	-211.97	63.379	126.76	-63.379	-63.379	63.37875	126.75750	OK	-275.35220
-275.35220	OK	1.9991E+4	OK	OK	189.81187													
					9.04262	42.64501	78.31650	-6.00000	-242.54	-242.54	68.864	137.73	-68.864	-68.864	68.86376	137.72752	OK	-311.40288
-311.40288	OK	1.8399E+4	OK	OK	182.57208													
					10.04736	43.12322	77.43287	-6.00000	-253.86	-253.86	32.752	65.504	-32.752	-32.752	32.75206	65.50412	OK	-286.61091
-286.61091	OK	3.8685E+4	OK	OK	155.61471													
					11.05210	43.60144	76.54924	-6.00000	-114.79	-114.79	729.10	1458.2	-729.10	-729.10	729.10129	1458.20258	Fails	-843.89467
-843.89467	OK	1.7378E+3	Fails	Fails	-45.46246													
					12.05683	44.07965	75.66560	-6.00000	22.458	22.458	2.7444	5.4888	-2.7444	-2.7444	25.20205	27.94647	OK	-2.74442
-2.74442	OK	4.6166E+5	OK	OK	-60.24116													
					13.06157	44.55786	74.78197	-6.00000	21.495	21.495	120.26	240.53	-120.26	-120.26	141.75856	262.02179	OK	-120.26323
-120.26323	OK	1.0535E+4	Fails	Fails	121.06508													
					14.06630	45.03607	73.89834	-6.00000	10.369	10.369	1261.2	2522.4	-1261.2	-1261.2	1271.55947	2532.75025	Fails	-1261.19079 -
1261.19079	Fails	1.0046E+3	Fails	Fails	121.31632													
					15.07104	45.51429	73.01471	-6.00000	0.47492	0.47492	2.5006	5.0012	-2.5006	-2.5006	2.97553	5.47613	OK	-2.50061
-2.50061	OK	5.0668E+5	OK	OK	-0.14236													
					16.07578	45.99250	72.13107	-6.00000	0.47490	0.47490	3.9210	7.8420	-3.9210	-3.9210	4.39592	8.31694	OK	-3.92102
-3.92102	OK	3.2313E+5	OK	OK	-0.09380													
					17.08051	46.47071	71.24744	-6.00000	0.47484	0.47484	5.3181	10.636	-5.3181	-5.3181	5.79289	11.11094	OK	-5.31805
-5.31805	OK	2.3825E+5	OK	OK	-0.07138													
					18.08525	46.94892	70.36381	-6.00000	0.47474	0.47474	6.5815	13.163	-6.5815	-6.5815	7.05621	13.63768	OK	-6.58147
-6.58147	OK	1.9251E+5	OK	OK	-0.05947													
					19.08998	47.42714	69.48017	-6.00000	0.47464	0.47464	7.6230	15.246	-7.6230	-7.6230	8.09764	15.72065	OK	-7.62300
-7.62300	OK	1.6621E+5	OK	OK	-0.05289													
					20.09472	47.90535	68.59654	-6.00000	0.47455	0.47455	8.3818	16.764	-8.3818	-8.3818	8.85637	17.23818	OK	-8.38182
-8.38182	OK	1.5116E+5	OK	OK	-0.04951													
					21.09945	48.38356	67.71291	-6.00000	0.47450	0.47450	8.8252	17.650	-8.8252	-8.8252	9.29972	18.12494	OK	-8.82522
-8.82522	OK	1.4357E+5	OK	OK	-0.04836													
					22.10419	48.86177	66.82927	-6.00000	0.47449	0.47449	8.9475	17.895	-8.9475	-8.9475	9.42197	18.36945	OK	-8.94748
-8.94748	OK	1.4160E+5	OK	OK	-0.04901													
					23.10893	49.33998	65.94564	-6.00000	0.47453	0.47453	8.7673	17.535	-8.7673	-8.7673	9.24181	18.00909	OK	-8.76728
-8.76728	OK	1.4451E+5	OK	OK	-0.05137													
					24.11366	49.81820	65.06201	-6.00000	0.47463	0.47463	8.3231	16.646	-8.3231	-8.3231	8.79778	17.12093	OK	-8.32315
-8.32315	OK	1.5223E+5	OK	OK	-0.05553													
					25.11840	50.29641	64.17838	-6.00000	0.47477	0.47477	7.6667	15.333	-7.6667	-7.6667	8.14147	15.80816	OK	-7.66669
-7.66669	OK	1.6526E+5	OK	OK	-0.06182													
					26.12315	50.77462	63.29474	-6.00000	0.47496	0.47496	6.8554	13.711	-6.8554	-6.8554	7.33040	14.18583	OK	-6.85544
-6.85544	OK	1.8482E+5	OK	OK	-0.07085													
					27.12787	51.25283	62.41111	-6.00000	0.47517	0.47517	5.9473	11.895	-5.9473	-5.9473	6.42247	12.36977	OK	-5.94730
-5.94730	OK	2.1304E+5	OK	OK	-0.08366													
					28.13261	51.73105	61.52748	-6.00000	0.47540	0.47540	4.9975	9.9950	-4.9975	-4.9975	5.47289	10.47039	OK	-4.99750
-4.99750	OK	2.5353E+5	OK	OK	-0.10192													
					29.13734	52.20926	60.64384	-6.00000	0.47563	0.47563	4.0569	8.1138	-4.0569	-4.0569	4.53254	8.58944	OK	-4.05691
-4.05691	OK	3.1231E+5	OK	OK	-0.12845													
					30.14208	52.68747	59.76021	-6.00000	0.47586	0.47586	3.1706	6.3412	-3.1706	-3.1706	3.64647	6.81708	OK	-3.17061
-3.17061	OK	3.9961E+5	OK	OK	-0.16808													
					31.14681	53.16568	58.87658	-6.00000	0.47609	0.47609	2.3759	4.7518	-2.3759	-2.3759	2.85201	5.22792	OK	-2.37592
-2.37592	OK	5.3327E+5	OK	OK	-0.22927													
					32.15155	53.64390	57.99294	-6.00000	0.47631	0.47631	1.7003	3.4005	-1.7003	-1.7003	2.17657	3.87683	OK	-1.70026
-1.70026	OK	7.4518E+5	OK	OK	-0.32731													
					33.15629	54.12211	57.10931	-6.00000	0.47652	0.47652	1.1598	2.3195	-1.1598	-1.1598	1.63627	2.79602	OK	-1.15975
-1.15975	OK	1.0925E+6	OK	OK	-0.49003													
					34.16102	54.60032	56.22568	-6.00000	0.47673	0.47673	0.75904	1.5181	-0.75904	-0.75904	1.23576	1.99480	OK	-0.75904
-0.75904	OK	1.6692E+6	OK	OK	-0.76428													
					35.16576	55.07853	55.34205	-6.00000	0.47693	0.47693	0.49273	0.98547	-0.49273	-0.49273	0.96966	1.46240	OK	-0.49273
-0.49273	OK	2.5714E+6	OK	OK	-1.20133													
					36.17049	55.55675	54.45841	-6.00000	0.47713	0.47713	0.34780	0.69561	-0.34780	-0.34780	0.82493	1.17274	OK	-0.34780
-0.34780	OK	3.6428E+6	OK	OK	-1.73598													
					37.17523	56.03496	53.57478	-6.00000	0.47733	0.47733	0.30646	0.61292	-0.30646	-0.30646	0.78379	1.09025	OK	-0.30646
-0.30646	OK	4.1343E+6	OK	OK	-2.00878													
					38.17997	56.51317	52.69115	-6.00000	0.47753	0.47753	0.34886	0.69771	-0.34886	-0.34886	0.82639	1.17525	OK	-0.34886
-0.34886	OK	3.6319E+6	OK	OK	-1.79840													
					39.18470	56.99138	51.80751	-6.00000	0.47774	0.47774	0.45524	0.91047	-0.45524	-0.45524	0.93298	1.38822	OK	-0.45524
-0.45524	OK	2.7832E+6	OK	OK	-1.40397													
					40.18944	57.46959	50.92388	-6.00000	0.47796	0.47796	0.60729	1.2146	-0.60729	-0.60729	1.08526	1.69255	OK	-0.60729
-0.60729	OK	2.0863E+6	OK	OK	-1.07182													
					41.19417	57.94781	50.04025	-6.00000	0.47819	0.47819	0.78890	1.5778	-0.78890	-0.78890	1.26709	2.05599	OK	-0.78890
-0.78890	OK	1.6060E+6	OK	OK	-0.84002													
					42.19891	58.42602	49.15661	-6.00000	0.47842	0.47842	0.98642	1.9728	-0.98642	-0.98642	1.46485	2.45127	OK	-0.98642
-0.98642	OK	1.2844E+6	OK	OK	-0.68376													
					43.20365	58.90423	48.27298	-6.00000	0.47867	0.47867	1.1887	2.3773	-1.1887	-1.1887	1.66734	2.85600	OK	-1.18867
-1.18867	OK	1.0659E+6	OK	OK	-0.57734													
					44.20838	59.38244	47.38935	-6.00000	0.47892	0.47892	1.3867	2.7734	-1.3867	-1.3867	1.86562	3.25232	OK	-1.38670
-1.38670	OK	9.1368E+5	OK	OK	-0.50340													
					45.21312	59.86066	46.50572	-6.00000	0.47919	0.47919	1.5735	3.1471	-1.5735	-1.5735	2.05272	3.62626	OK	-1.57354
-1.57354	OK	8.0519E+5	OK	OK	-0.45112													
					46.21785	60.33887	45.62208	-6.00000	0.47946	0.47946	1.7439	3.4878	-1.7439	-1.7439	2.22337	3.96728	OK	-1.74391
-1.74391	OK	7.2653E+5	OK	OK	-0.41381													
					47.22259	60.81708	44.73845	-6.00000	0.47975	0.47975	1.8940	3.7880	-1.8940	-1.8940	2.37375	4.26776	OK	-1.89400
-1.89400	OK	6.6895E+5	OK	OK	-0.38725													
					48.22733	61.29529	43.85482	-6.00000	0.48005	0.48005	2.0212	4.0425	-2.0212	-2.0212	2.50129	4.52254	OK	-2.02125
-2.02125	OK	6.2684E+5	OK	OK	-0.36870													
					49.23206	61.77351	42.97118	-6.00000	0.48035	0.48035	2.1241	4.2483	-2.1241	-2.1241	2.60449	4.72863	OK	-2.12414
-2.12414	OK	5.9648E+5	OK	OK	-0.35640													
					50.23680	62.25172	42.08755	-6.00000	0.48067	0.48067	2.2021	4.4041	-2.2021	-2.2021	2.68273	4.88479	OK	-2.20206
-2.20206	OK	5.7537E+5	OK	OK	-0.34914													
					51.24153	62.72993	41.20392	-6.00000	0.48099	0.48099	2.2551	4.5101	-2.2551	-2.2551	2.73607	4.99114	OK	-2.25507
-2.25507	OK	5.6184E+5	OK	OK	-0.34616													
					52.24627	63.20814	40.32028	-6.00000	0.48133	0.48133	2.2837	4.5674	-2.2837	-2.2837	2.76502	5.04872	OK	-2.28370
-2.28370	OK	5.5480E+5	OK	OK	-0.34699													
					53.25101	63.68636	39.43665	-6.00000	0.48167	0.48167	2.2886	4.5772	-2.2886	-2.2886	2.77026	5.05885	OK	-2.28859
-2.28859	OK	5.5362E+5	OK	OK	-0.35140													
					54.25574	64.16457	38.55302	-6.00000	0.48202	0.48202	2.2702	4.5404	-2.2702	-2.2702	2.75222	5.02242	OK	-2.27020
-2.27020	OK	5.5810E+5	OK	OK	-0.35945													
					55.26048	64.64278	37.66939	-6.00000	0.48237	0.48237	2.2284	4.4567	-2.2284	-2.2284	2.71072	4.93908	OK	-2.22835
-2.22835	OK	5.6858E+5	OK	OK	-0.37134													
					56.26521	65.12099	36.78575	-6.00000	0.48273	0.48273	2.1618	4.3235	-2.1618	-2.1618	2.64449	4.80626	OK	-2.16176
-2.16176	OK	5.8610E+5	OK	OK	-0.38839													
					57.26995	65.59921	35.90212	-6.00000	0.48309	0.48309	2.0675	4.1351	-2.0675	-2.0675	2.55064	4.61819	OK	-2.06755
-2.06755	OK	6.1280E+5	OK	OK	-0.41179													
					58.27469	66.07742	35.01849	-6.00000	0.48345	0.48345	1.9407	3.8815	-1.9407	-1.9407	2.42419	4.36492	OK	-1.94073
-1.94073	OK	6.5285E+5	OK	OK	-0.44478													
					59.27942	66.55563	34.13485	-6.00000	0.48381	0.48381	1.7738	3.5475	-1.7738	-1.7738	2.25759	4.03136	OK	-1.77377
-1.77377	OK	7.1430E+5	OK	OK	-0.49330													
					60.28416	67.03384	33.25122	-6.00000	0.48417	0.48417	1.5564	3.1128	-1.5564	-1.5564	2.04056	3.59694	OK	-1.55639
-1.55639	OK	8.1407E+5	OK	OK	-0.56978													
					61.28889	67.51205	32.36759	-6.00000	0.48453	0.48453	1.2759	2.5518	-1.2759	-1.2759	1.76043	3.03634	OK	-1.27591
-1.27591	OK	9.9302E+5	OK	OK	-0.70428													
					62.29363	67.99027	31.48395	-6.00000	0.48487	0.48487	0.91865	1.8373	-0.91865	-0.91865	1.40351	2.32216	OK	-0.91865
-0.91865	OK	1.3792E+6	OK	OK	-0.99104													
					63.29836	68.46848	30.60032	-6.00000	0.48519	0.48519	0.47286	0.94573	-0.47286	-0.47286	0.95805	1.43092	OK	-0.47286
-0.47286	OK	2.6794E+6	OK	OK	-1.95055													
					64.30310	68.94669	29.71669	-6.00000	0.48550	0.48550	0.069044	0.13809	-0.069044	-0.069044	0.55454	0.62358	OK	-0.06904
-0.06904	OK	1.8351E+7	OK	OK	193.65591													
					65.30784	69.42490	28.83306	-6.00000	0.48577	0.48577	0.69253	1.3851	-0.69253	-0.69253	1.17830	1.87083	OK	-0.69253
-0.69253	OK	1.8295E+6	OK	OK	181.36579													
					66.31257	69.90312	27.94942	-6.00000	0.48602	0.48602	1.3740	2.7480	-1.3740	-1.3740	1.86001	3.23400	OK	-1.37399
-1.37399	OK	9.2213E+5	OK	OK	180.69693													
					67.31731	70.38133	27.06579	-6.00000	0.48625	0.48625	2.0555	4.1110	-2.0555	-2.0555	2.54173	4.59721	OK	-2.05548
-2.05548	OK	6.1640E+5	OK	OK	180.47160													
					68.32204	70.85954	26.18216	-6.00000	-3.2929	-3.2929	493.09	986.19	-493.09	-493.09	493.09450	986.18900	Fails	-496.38743
-496.38743	OK	2.5695E+3	Fails	Fails	122.11705													
					69.32678	71.33775	25.29852	-6.00000	-14.484	-14.484	996.25	1992.5	-996.25	-996.25	996.25373	1992.50746	Fails	-1010.73815 -
1010.73815	Fails	1.2718E+3	Fails	Fails	122.01402													
					70.33152	71.81597	24.41489	-6.00000	-21.798	-21.798	5.5202	11.040	-5.5202	-5.5202	5.52024	11.04047	OK	-27.31861
-27.31861	OK	2.2952E+5	OK	OK	154.44552													
					71.33625	72.29418	23.53126	-6.00000	-88.557	-88.557	266.44	532.87	-266.44	-266.44	266.43647	532.87294	Fails	-354.99372
-354.99372	OK	4.7554E+3	Fails	Fails	-39.47897													
					72.34099	72.77239	22.64762	-6.00000	-279.46	-279.46	432.47	864.94	-432.47	-432.47	432.47072	864.94145	Fails	-711.93339
-711.93339	OK	2.9297E+3	Fails	Fails	-37.72282													
					73.34572	73.25060	21.76399	-6.00000	-390.36	-390.36	98.279	196.56	-98.279	-98.279	98.27852	196.55703	OK	-488.63573
-488.63573	OK	1.2892E+4	Fails	Fails	142.84959													
					74.35046	73.72882	20.88036	-6.00000	-353.58	-353.58	73.191	146.38	-73.191	-73.191	73.19124	146.38248	OK	-426.77499
-426.77499	OK	1.7311E+4	OK	OK	163.67875													
					75.35520	74.20703	19.99673	-6.00000	-299.04	-299.04	63.137	126.27	-63.137	-63.137	63.13726	126.27452	OK	-362.18135
-362.18135	OK	2.0067E+4	OK	OK	191.07743													
					76.35993	74.68524	19.11309	-6.00000	-232.50	-232.50	64.959	129.92	-64.959	-64.959	64.95880	129.91761	OK	-297.46175
-297.46175	OK	1.9505E+4	OK	OK	213.96121													
					77.36467	75.16345	18.22946	-6.00000	-164.43	-164.43	86.160	172.32	-86.160	-86.160	86.15970	172.31940	OK	-250.59146
-250.59146	OK	1.4705E+4	Fails	Fails	237.55628													
					78.36940	75.64166	17.34583	-6.00000	-110.89	-110.89	117.49	234.98	-117.49	-117.49	117.49078	234.98156	OK	-228.38231

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
-228.38231	OK	1.0784E+4	Fails	Fails	250.56223													
					79.37414	76.11988	16.46219	-6.00000	-59.965	-59.965	66.347	132.69	-66.347	-66.347	66.34661	132.69323	OK	-126.31145
-126.31145	OK	1.9097E+4	OK	OK	240.63577													
					80.37888	76.59809	15.57856	-6.00000	-52.251	-52.251	189.77	379.53	-189.77	-189.77	189.76547	379.53095	OK	-242.01628
-242.01628	OK	6.6767E+3	Fails	Fails	263.22017													
					81.38361	77.07630	14.69493	-6.00000	-108.24	-108.24	193.39	386.79	-193.39	-193.39	193.39370	386.78740	OK	-301.63570
-301.63570	OK	6.5514E+3	Fails	Fails	-62.71523													
					82.38835	77.55451	13.81129	-6.00000	-122.66	-122.66	48.711	97.422	-48.711	-48.711	48.71110	97.42220	OK	-171.37400
-171.37400	OK	2.6010E+4	OK	OK	206.08097													
					83.39308	78.03273	12.92766	-6.00000	-86.012	-86.012	104.48	208.96	-104.48	-104.48	104.48203	208.96406	OK	-190.49427
-190.49427	OK	1.2126E+4	Fails	Fails	-10.71810													
					84.39782	78.51094	12.04403	-6.00000	-53.295	-53.295	37.517	75.034	-37.517	-37.517	37.51712	75.03424	OK	-90.81234
-90.81234	OK	3.3771E+4	OK	OK	-27.76571													
					85.40256	78.98915	11.16040	-6.00000	-24.210	-24.210	54.696	109.39	-54.696	-54.696	54.69633	109.39266	OK	-78.90620
-78.90620	OK	2.3164E+4	OK	OK	-16.61032													
					86.40729	79.46736	10.27676	-6.00000	1.5638	1.5638	184.18	368.36	-184.18	-184.18	185.74589	369.92799	OK	-184.18210
-184.18210	OK	6.8791E+3	Fails	Fails	-4.34223													
					87.41203	79.94558	9.39313	-6.00000	24.404	24.404	12.457	24.914	-12.457	-12.457	36.86087	49.31808	OK	-12.45720
-12.45720	OK	1.0171E+5	OK	OK	265.61121													
					88.41676	80.42379	8.50950	-6.00000	44.652	44.652	11.537	23.075	-11.537	-11.537	56.18945	67.72686	OK	-11.53740
-11.53740	OK	1.0982E+5	OK	OK	-73.48375													
					89.42150	80.90200	7.62586	-6.00000	62.613	62.613	12.130	24.260	-12.130	-12.130	74.74296	86.87293	OK	-12.12997
-12.12997	OK	1.0445E+5	OK	OK	-54.35987													
					90.42624	81.38021	6.74223	-6.00000	78.571	78.571	13.568	27.137	-13.568	-13.568	92.13972	105.70801	OK	-13.56829
-13.56829	OK	9.3379E+4	OK	OK	-40.41803													
					91.43097	81.85843	5.85860	-6.00000	92.780	92.780	15.193	30.386	-15.193	-15.193	107.97274	123.16567	OK	-15.19293
-15.19293	OK	8.3394E+4	OK	OK	-31.17304													
					92.43571	82.33664	4.97496	-6.00000	105.46	105.46	16.591	33.182	-16.591	-16.591	122.05015	138.64093	OK	-16.59077
-16.59077	OK	7.6368E+4	OK	OK	-25.12591													
					93.44044	82.81485	4.09133	-6.00000	116.80	116.80	17.531	35.062	-17.531	-17.531	134.33357	151.86436	OK	-17.53079
-17.53079	OK	7.2273E+4	OK	OK	-21.14684													
					94.44518	83.29306	3.20770	-6.00000	126.98	126.98	17.880	35.761	-17.880	-17.880	144.85722	162.73750	OK	-17.88029
-17.88029	OK	7.0860E+4	OK	OK	-18.55943													
					95.44992	83.77128	2.32407	-6.00000	136.13	136.13	17.558	35.117	-17.558	-17.558	153.68454	171.24285	OK	-17.55831
-17.55831	OK	7.2160E+4	OK	OK	-16.99960													

Summary: There is failure at one(or many) location(s). e.g. Stage 0, Specific Utility 6, location (79.467364|10.276763|-6.000000)
Note: Tensile strains are +ve, compressive strains are -ve.
Note: The peak flexural tensile strain orientation angle is measured with respect to the global z-axis by looking at the end point of the utility from the start point. Anti-clockwise is positive.

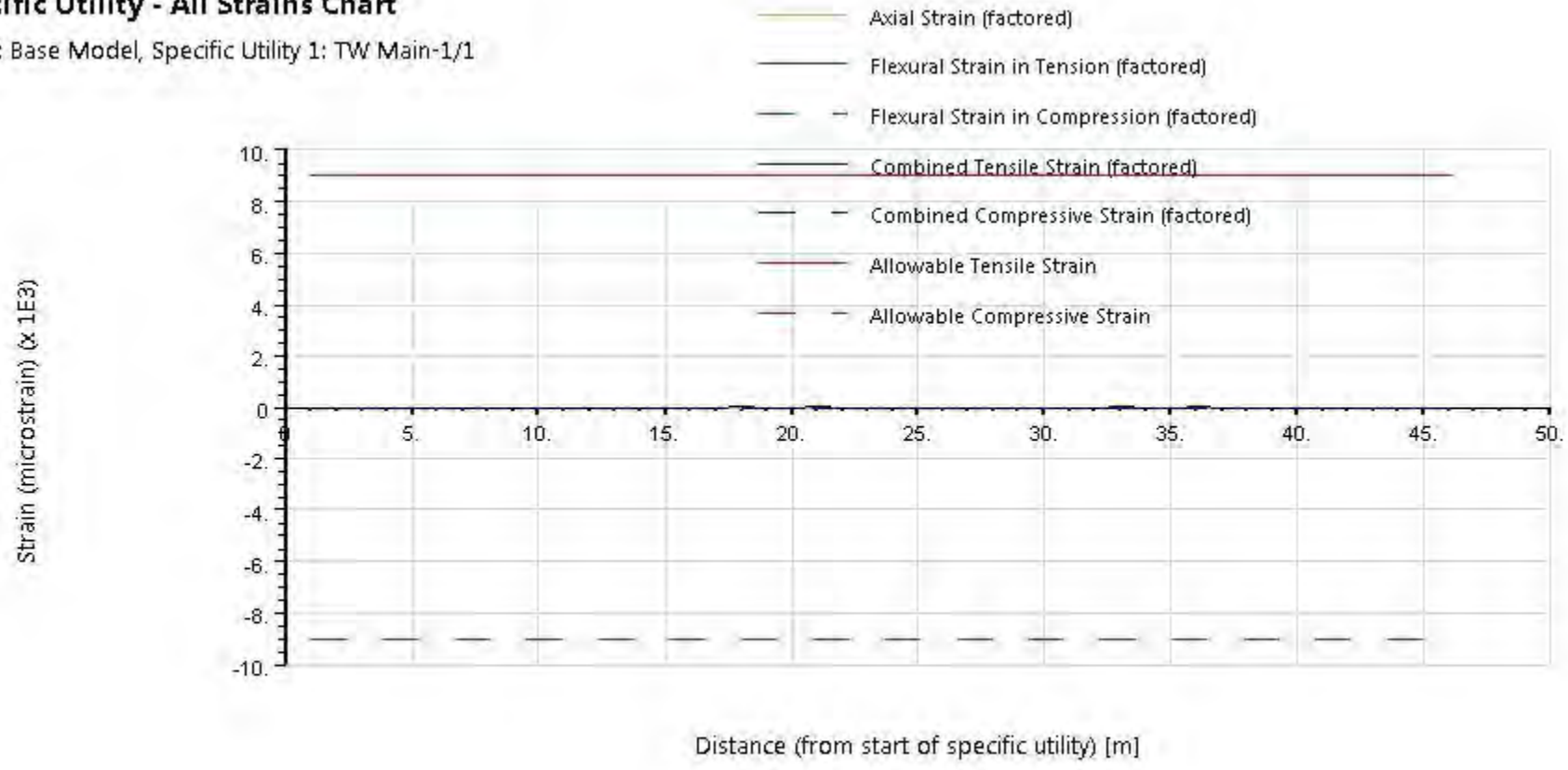
Specific Utility Damage Results - Maximum Values

Stage: Max. Disp: Horiz. y: Location	Stage: Name Max. Disp: Horiz. y: Value	Specific Utility: Ref.	Specific Utility: Name	Jointed	Max. Pullout: Factored: Location	Max. Pullout: Factored: Value	Max. Rotation: Factored: Location	Max. Rotation: Factored: Value	Max. Strain: Tension: Factored: Location	Max. Strain: Tension: Factored: Value	Max. Strain: Compn.: Factored: Location	Max. Strain: Value	Min. Rad. of Curv.: Location	Min. Rad. of Curv.: Value	Max. Disp.: Vert. : Location	Max.Disp.: Vert.: Value	Max. Disp: Horiz. x: Location	Max. Disp: Horiz. x: Value
[mm]					[m]	[mm]	[m]	[Deg]	[m]	[με]	[m]	[με]	[m]	[m]	[m]	[mm]	[m]	[mm] [m]
0	Base Model	1	TW Main-1	Yes	21.059	0.24114	33.093	0.04987	33.09347	74.65558	36.10197	-85.77832	33.093	1.2725E+3*	33.093	4.2123	48.135	-1.4901
32.091	7.5133																	
		2	TW Main-2	Yes	15.045	0.16672	15.045	0.04720	14.04162	60.48434	11.03270	-63.03065	14.042	1.6123E+3*	15.045	5.2091	0.0	1.5703
34.101	8.5518																	
		3	TW Main-3	Yes	4.9845	0.015284	3.9876	0.00032	0.99689	2.18016	0.99689	-1.23191	0.99689	7.7116E+4	9.9680	5.6360	9.9680	0.74199
9.9680	9.1469																	
		4	TW Main-4	Yes	49.791	0.32300	24.896	0.05378	25.89152	56.20015	28.87900	-75.75556	25.892	1.6904E+3*	24.896	6.6823	42.821	-2.0354
24.896	9.6092																	
		5	TW Foul-1	Yes	33.146	1.3773	33.146	0.04453	33.14636	1371.19950*	33.14636	-751.84900	33.146	1.2923E+3*	33.146	4.1413	47.208	-1.4513
32.142	7.5831																	
		6	TW Foul-2	Yes	14.066	2.5548	14.066	0.05730	14.06630	2532.75025*	14.06630	-1261.19079*	14.066	1.0046E+3*	68.322	7.2610	86.407	-2.2484
68.322	10.406																	

Note: * symbol indicates that the value has exceeded one of (or both) the limiting criteria

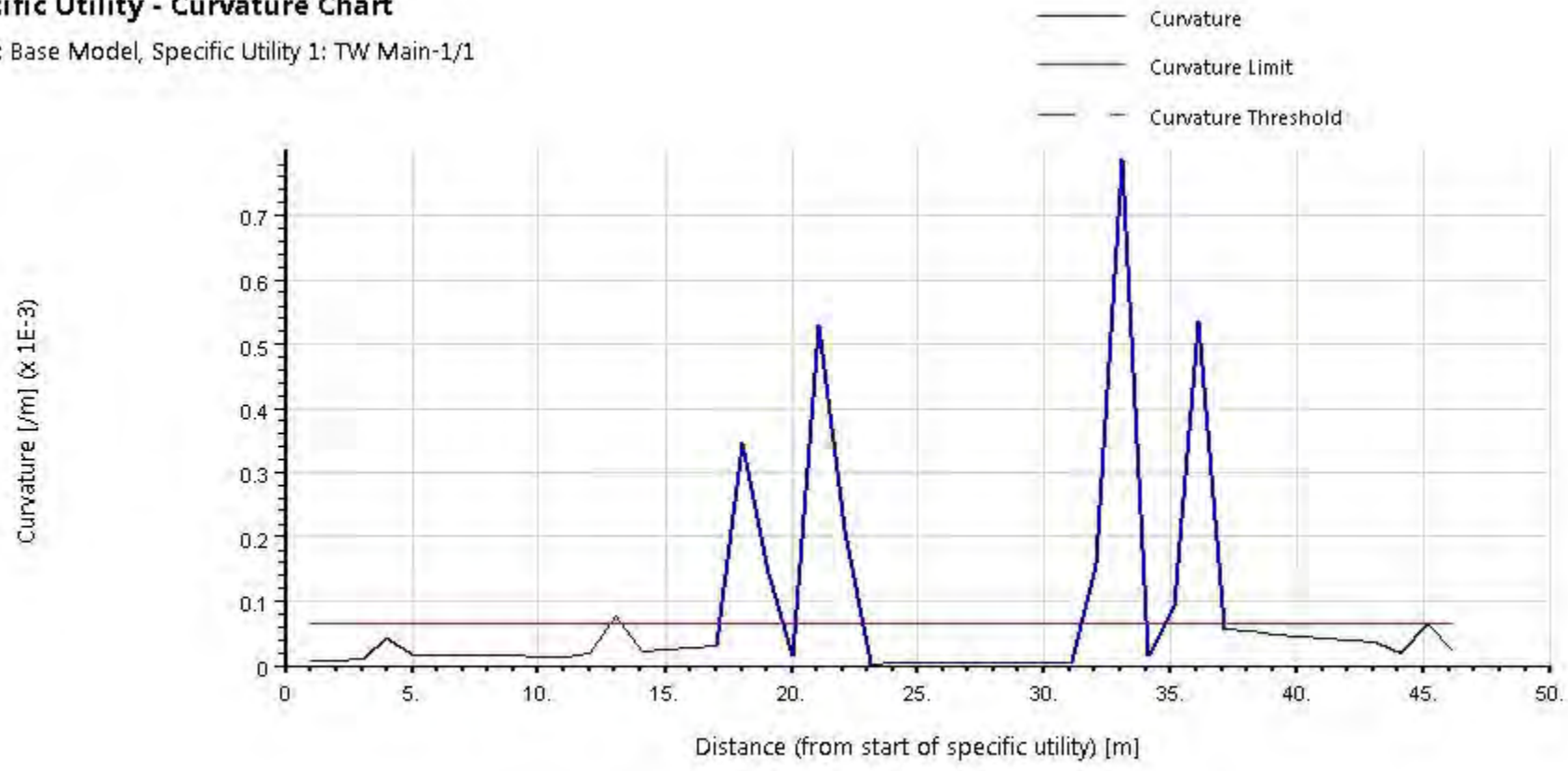
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



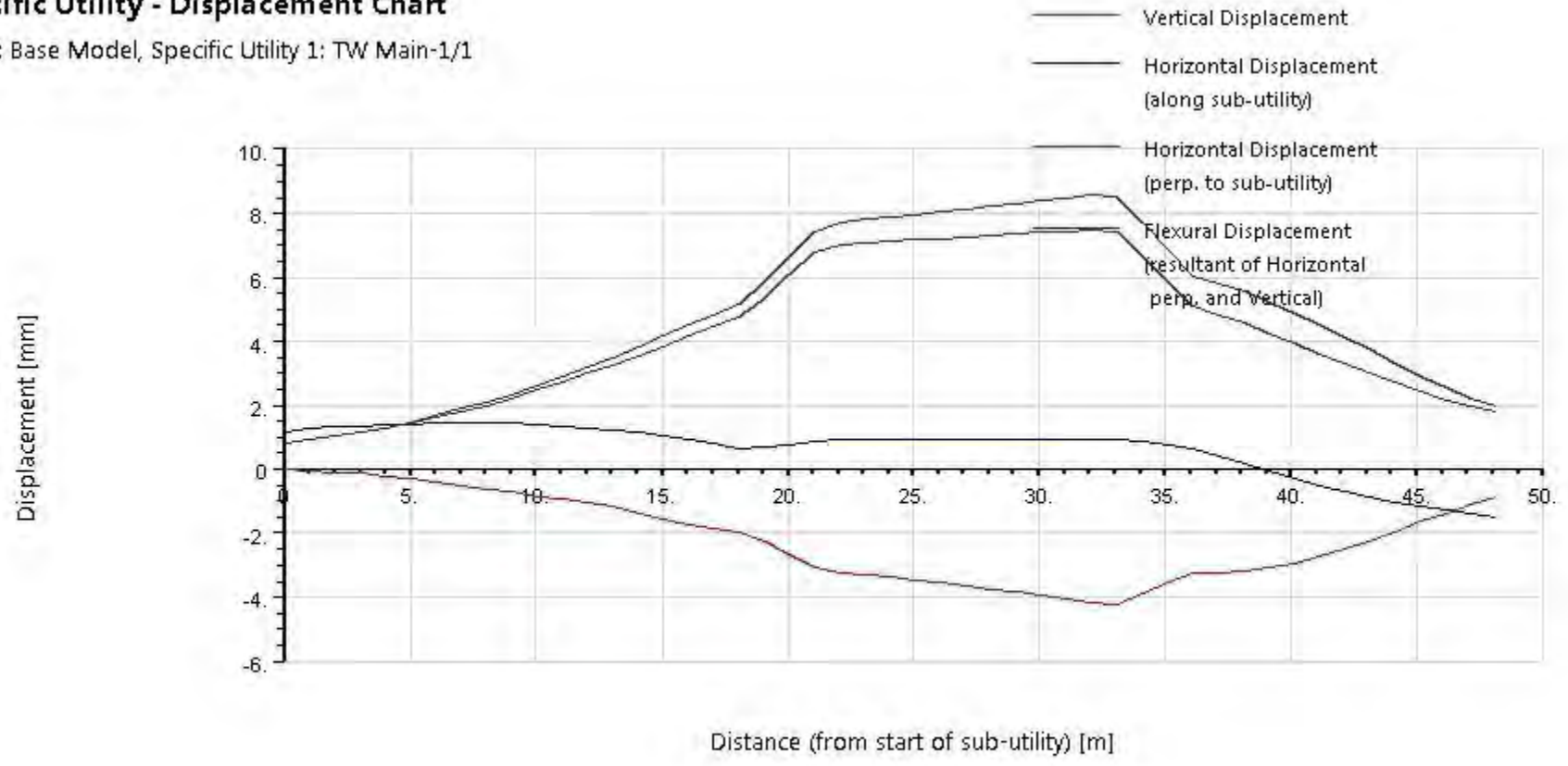
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



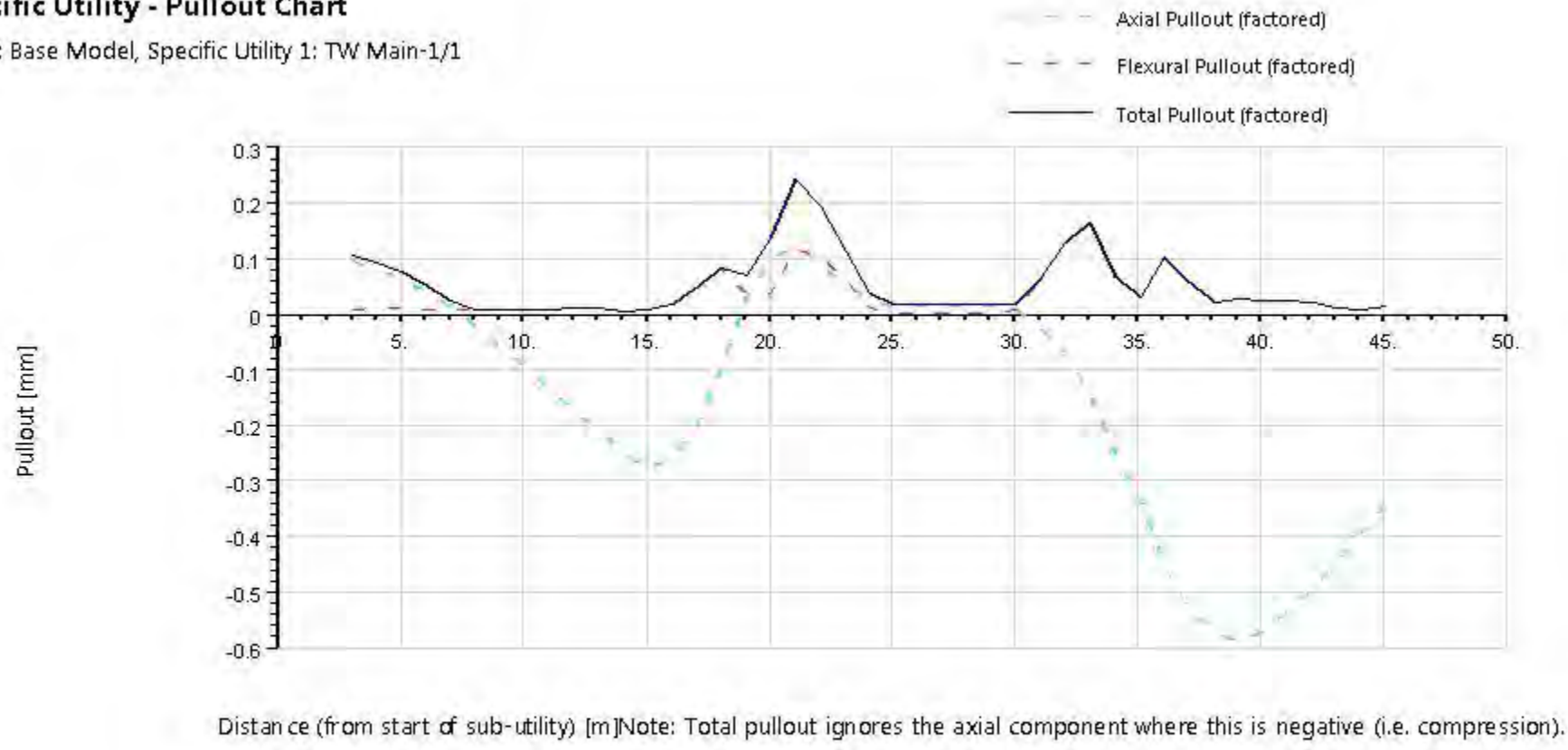
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



Specific Utility - Pullout Chart

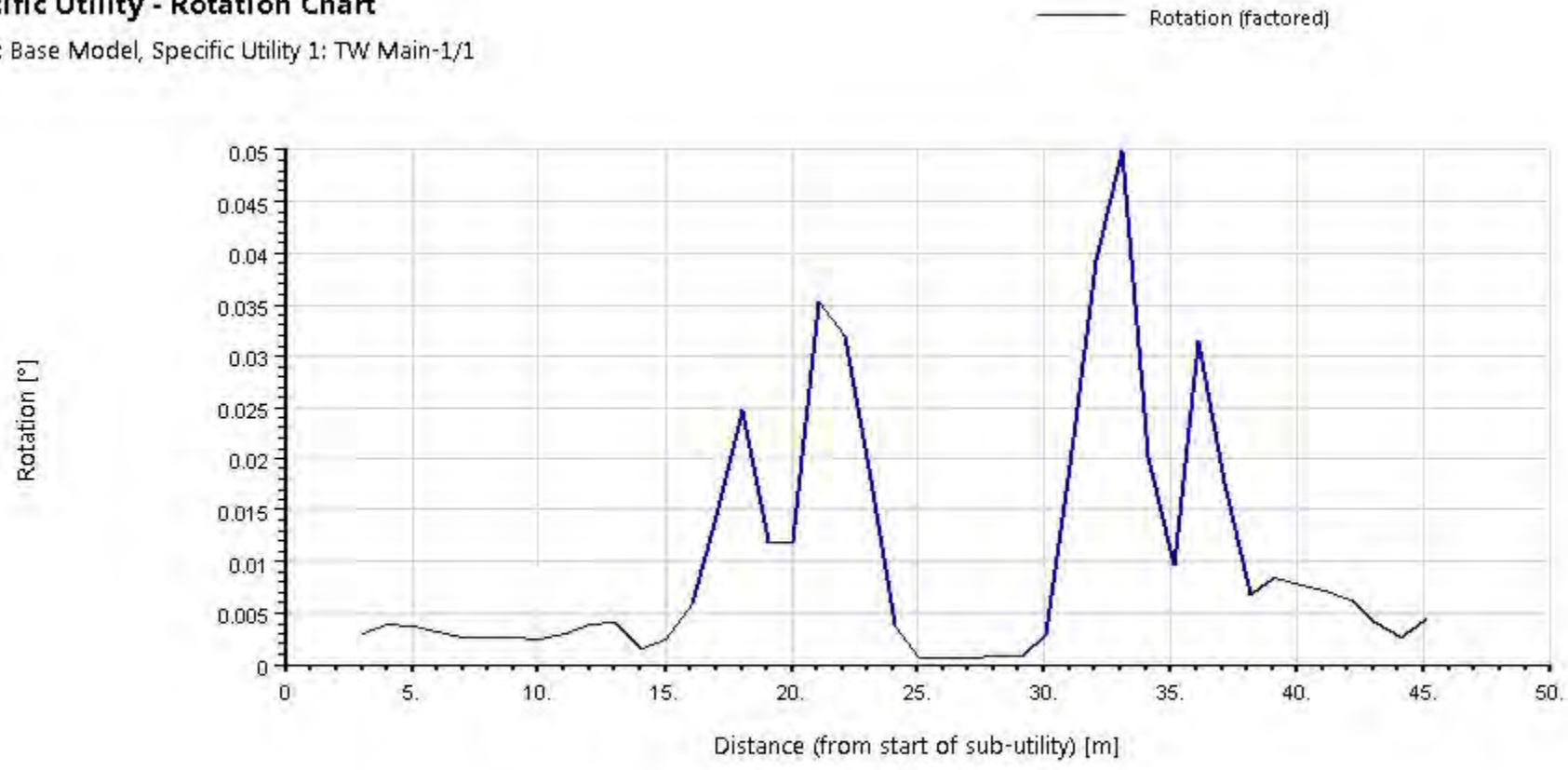
Stage: Base Model, Specific Utility 1: TW Main-1/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

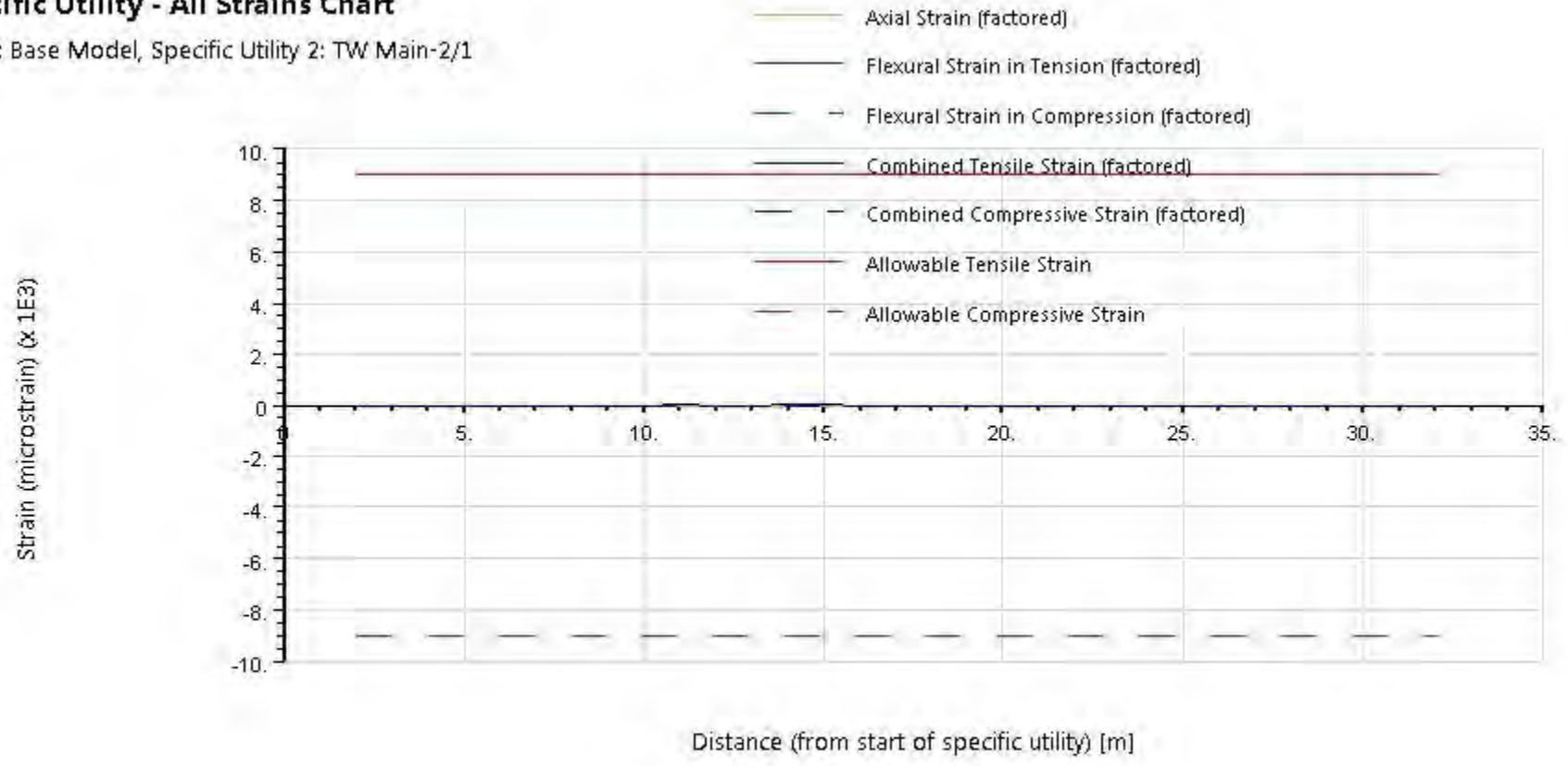
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 1: TW Main-1/1



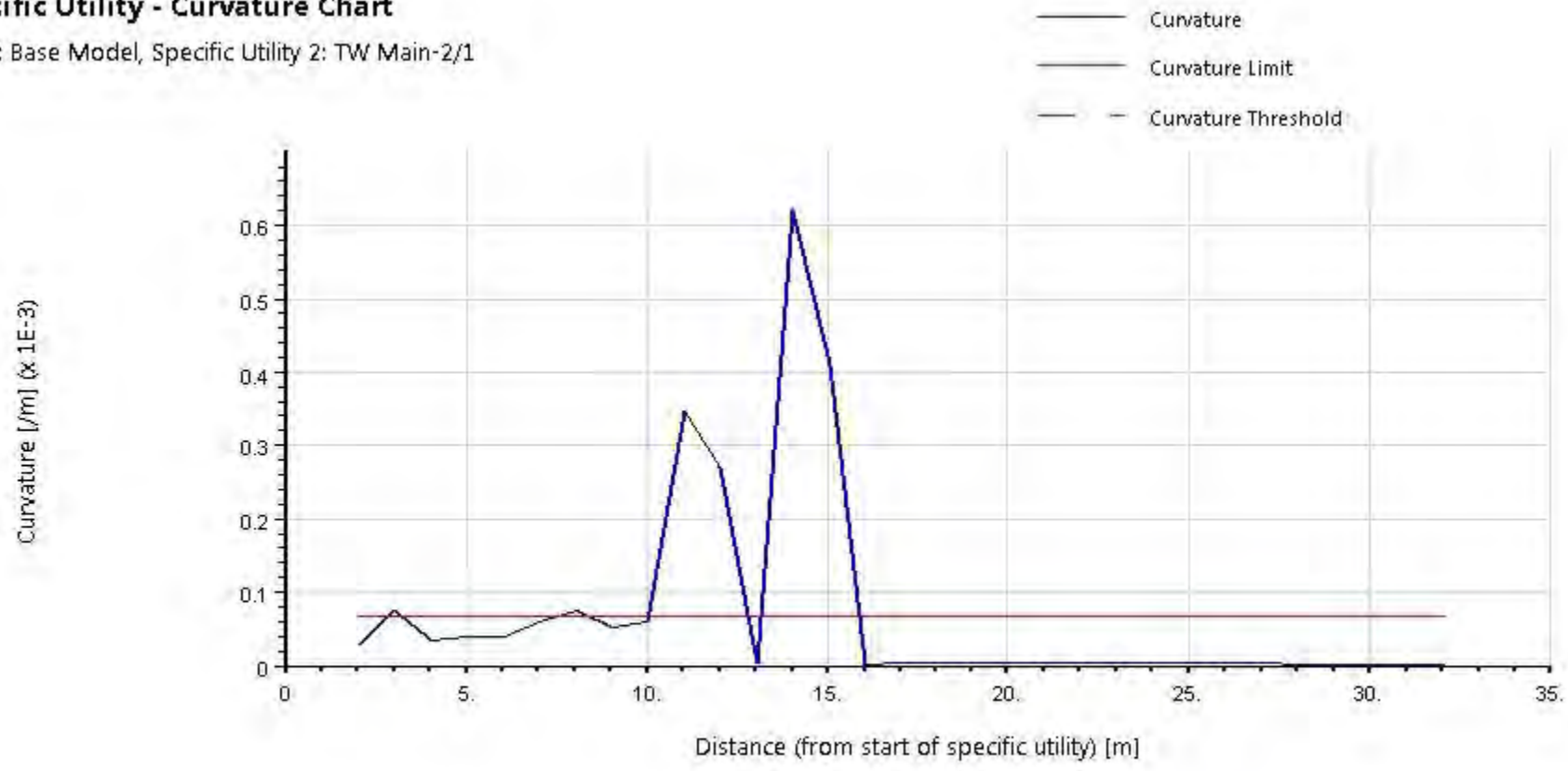
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



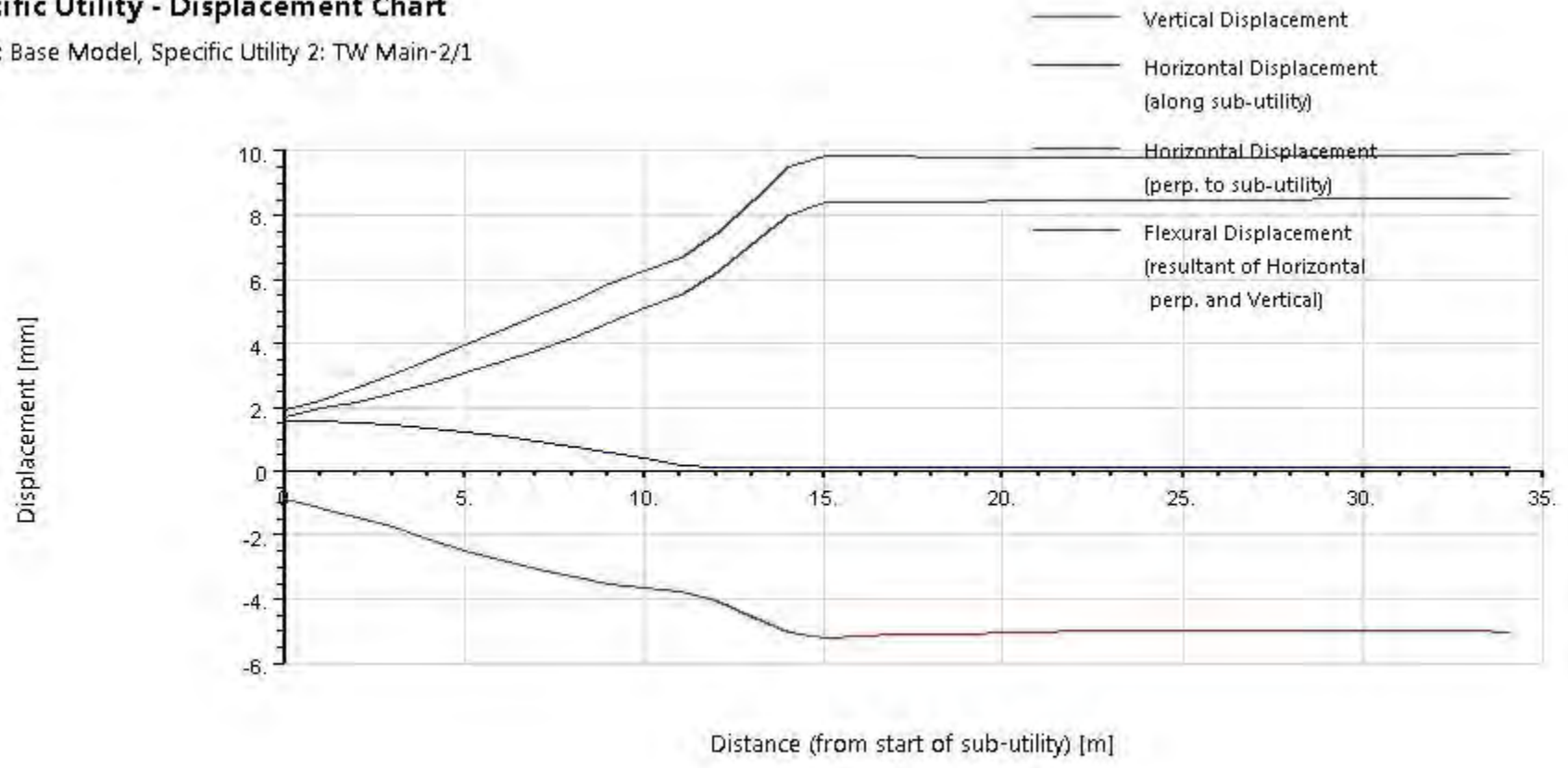
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



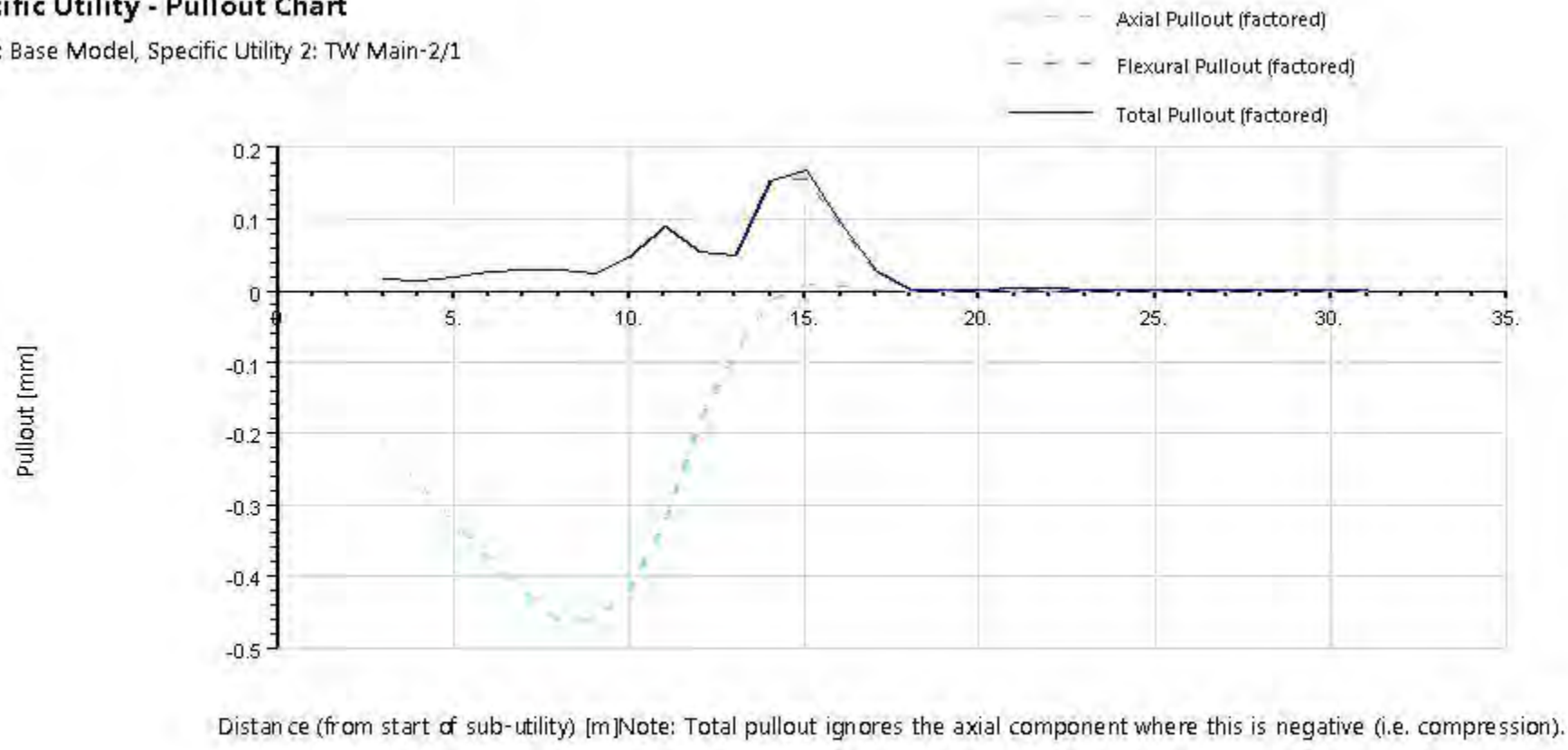
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



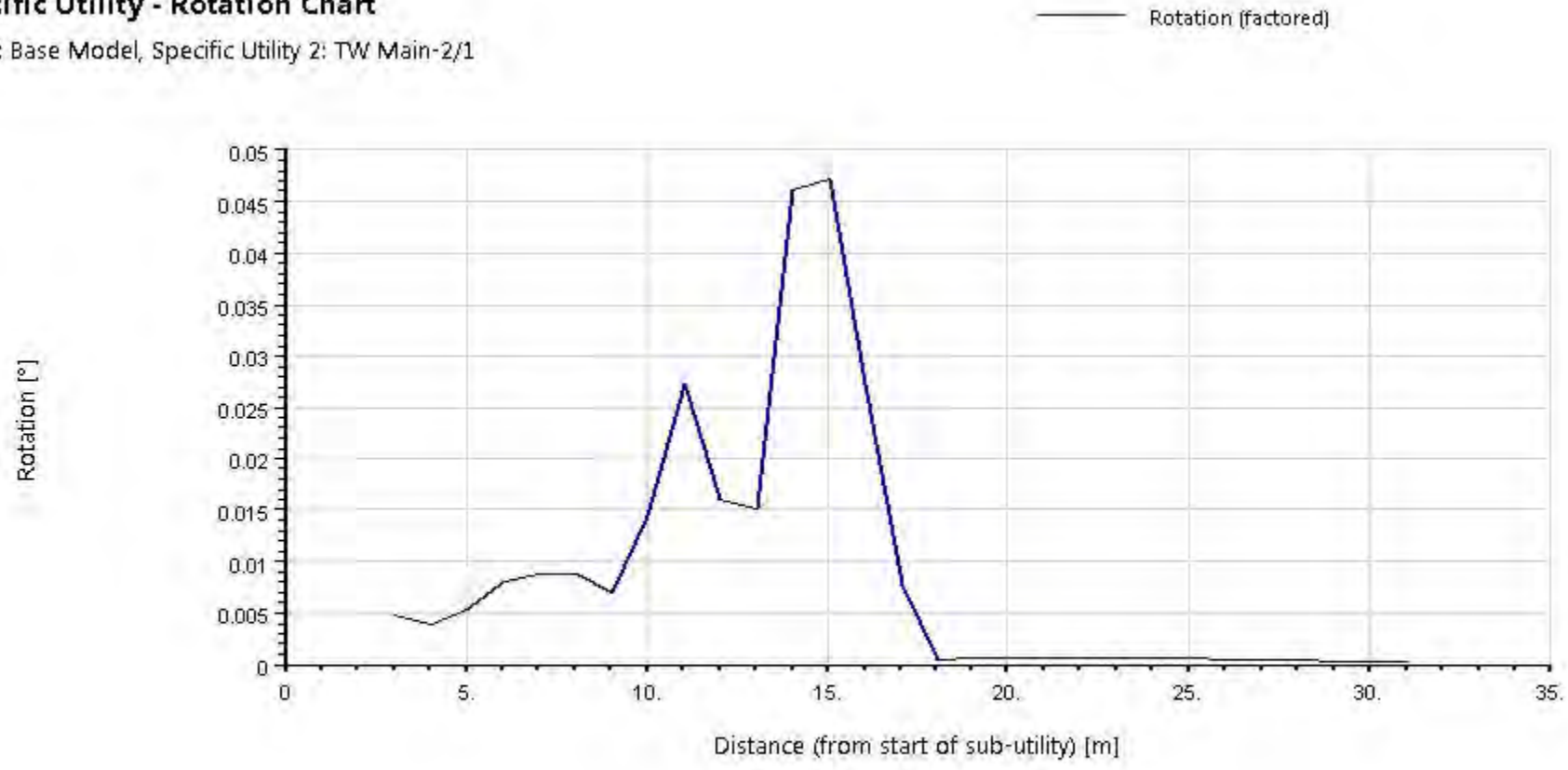
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



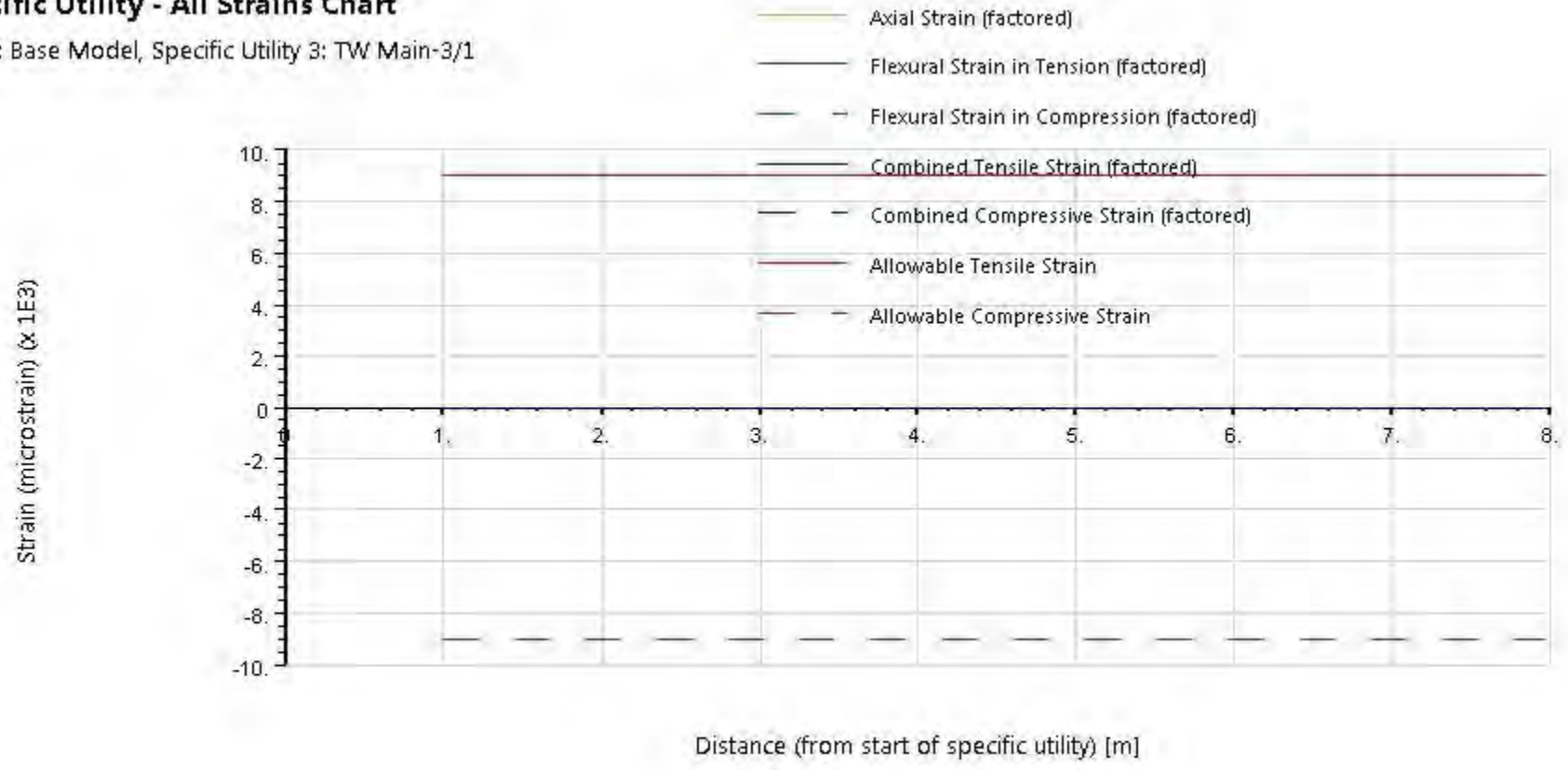
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 2: TW Main-2/1



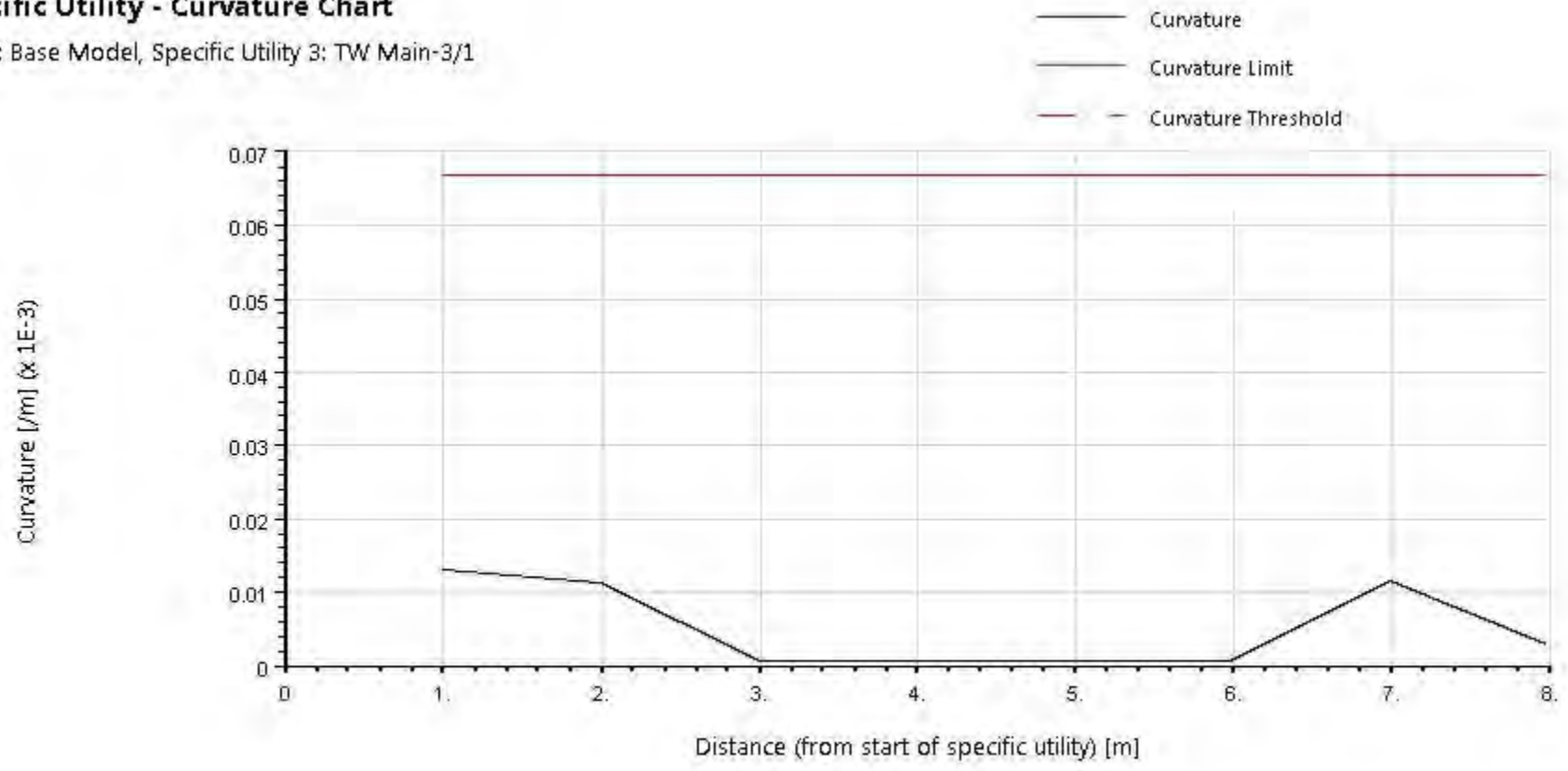
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



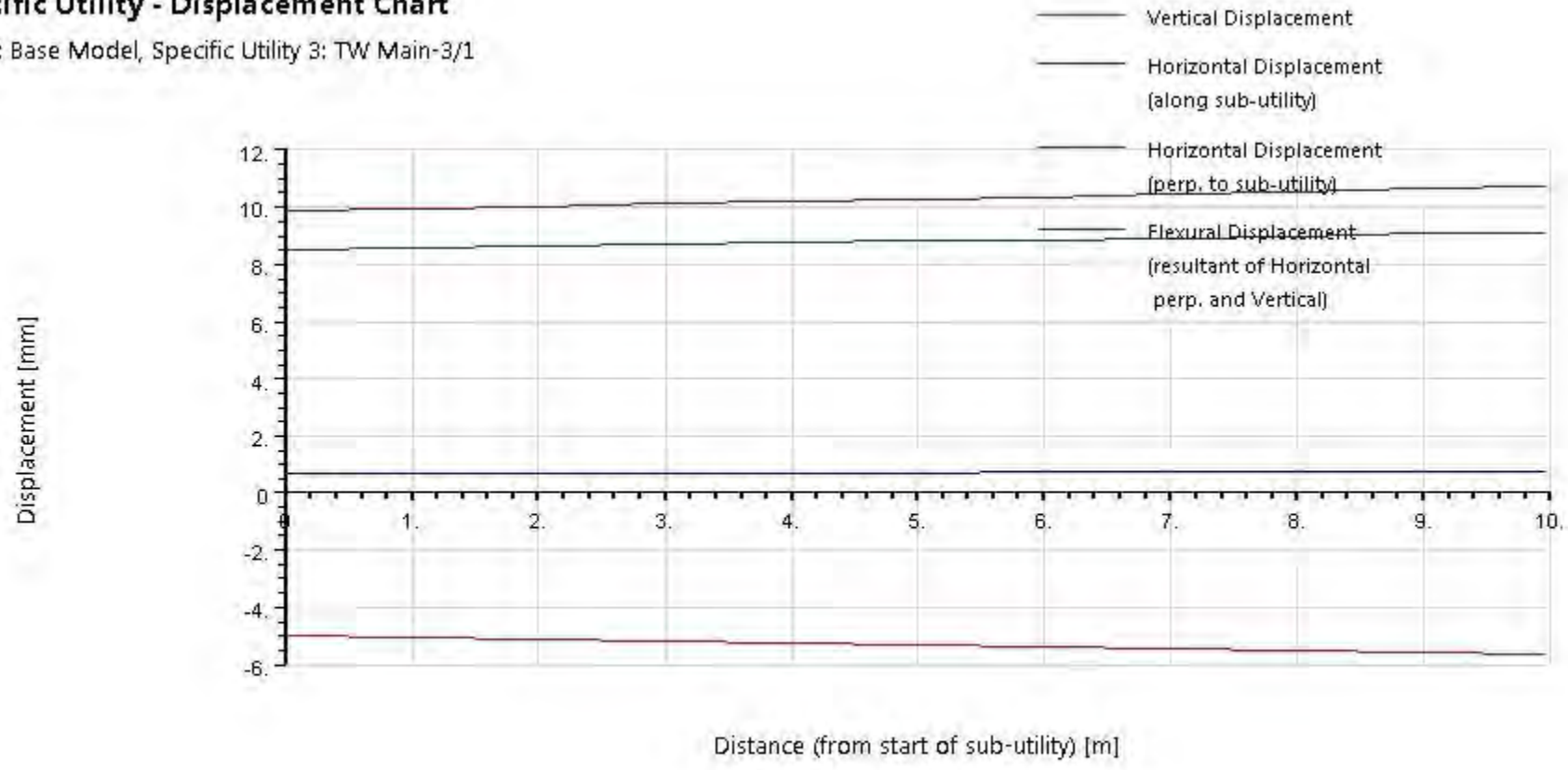
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



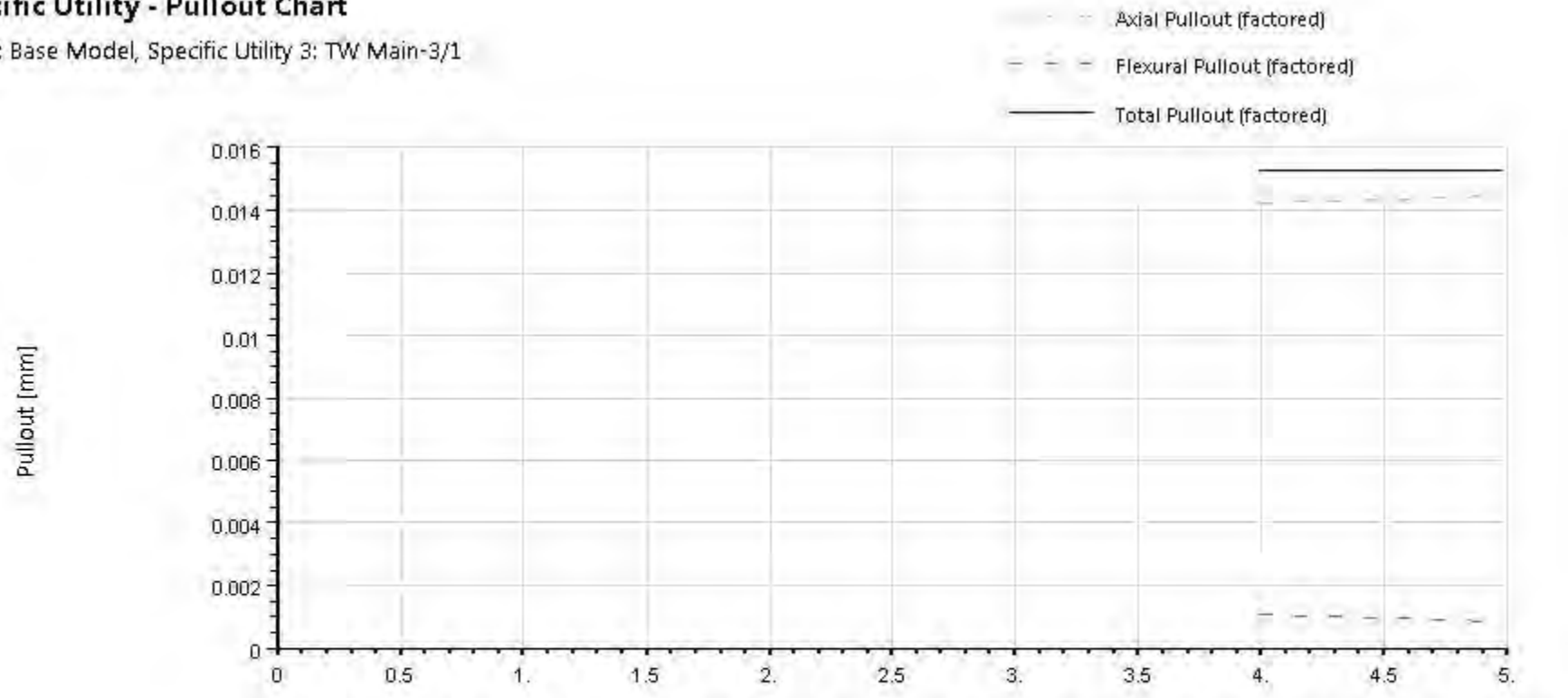
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



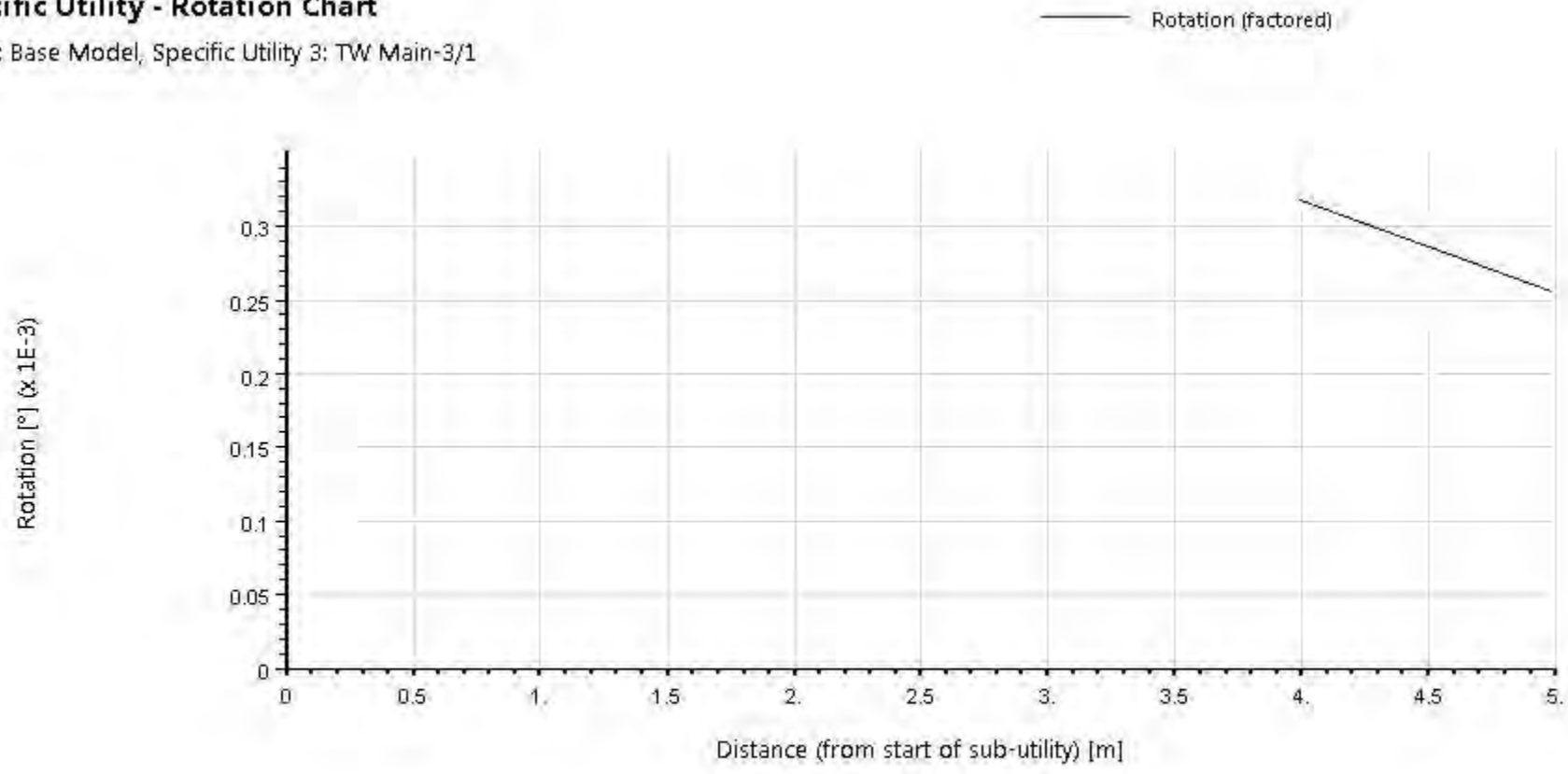
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



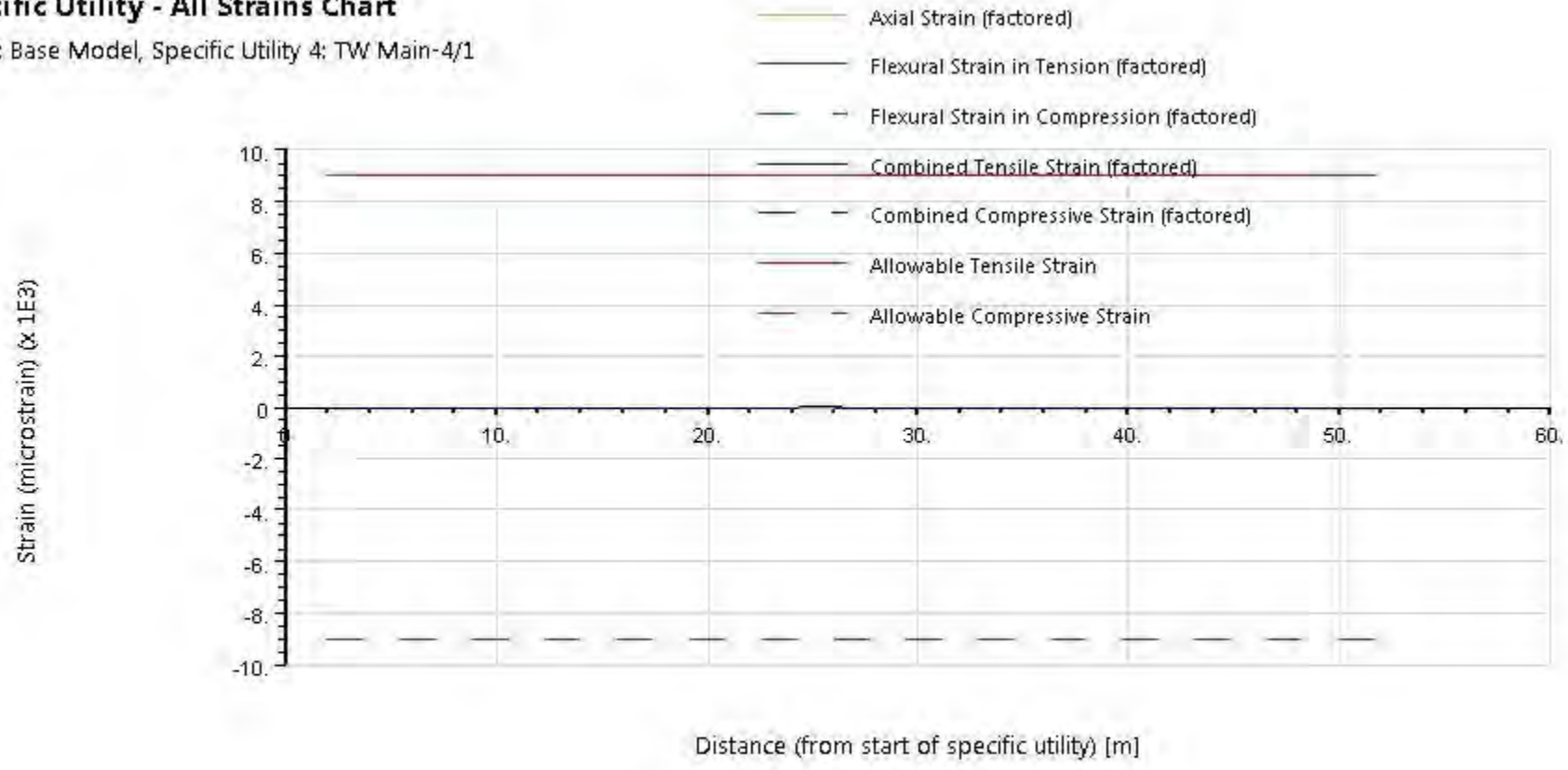
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 3: TW Main-3/1



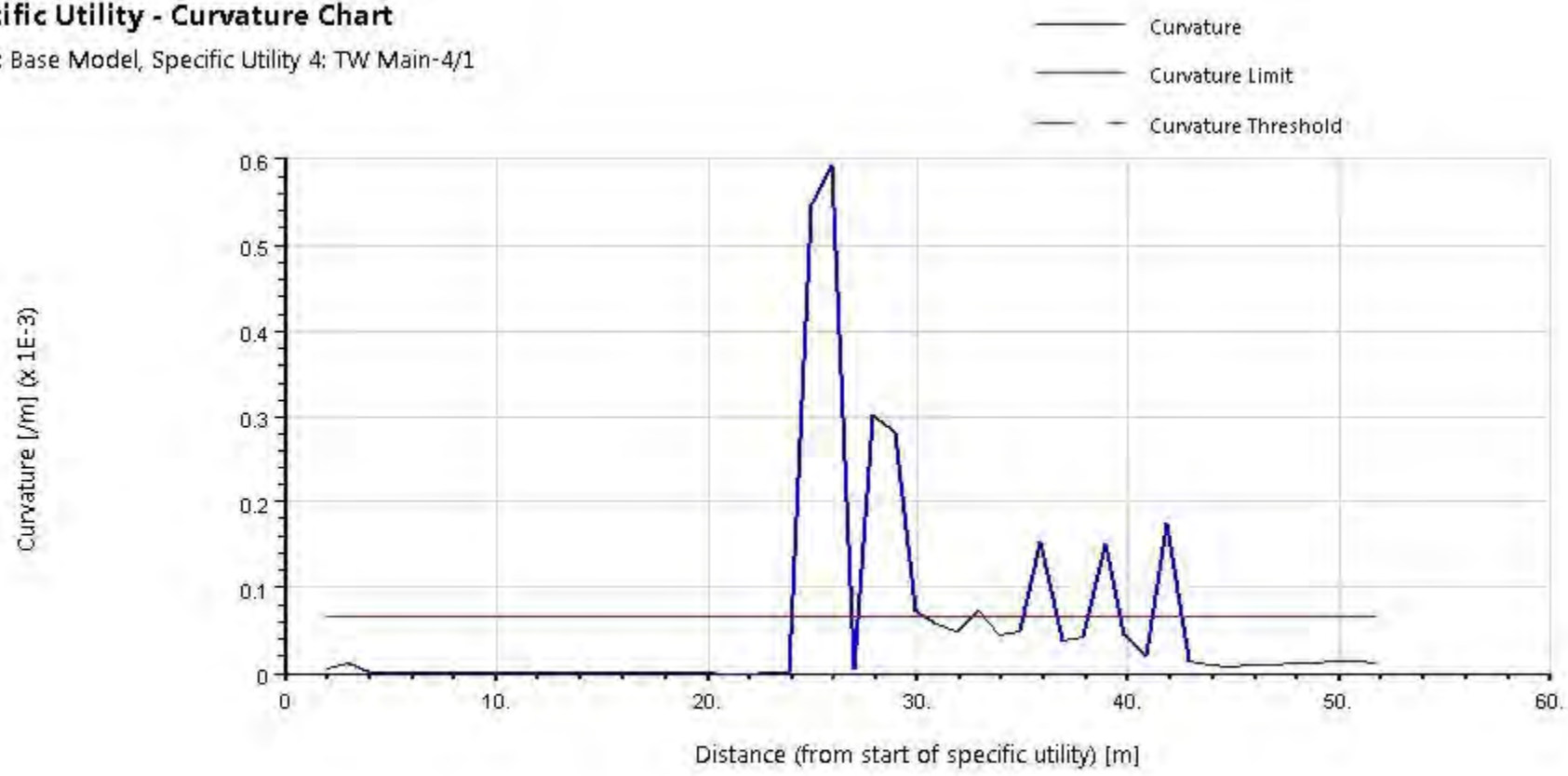
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1

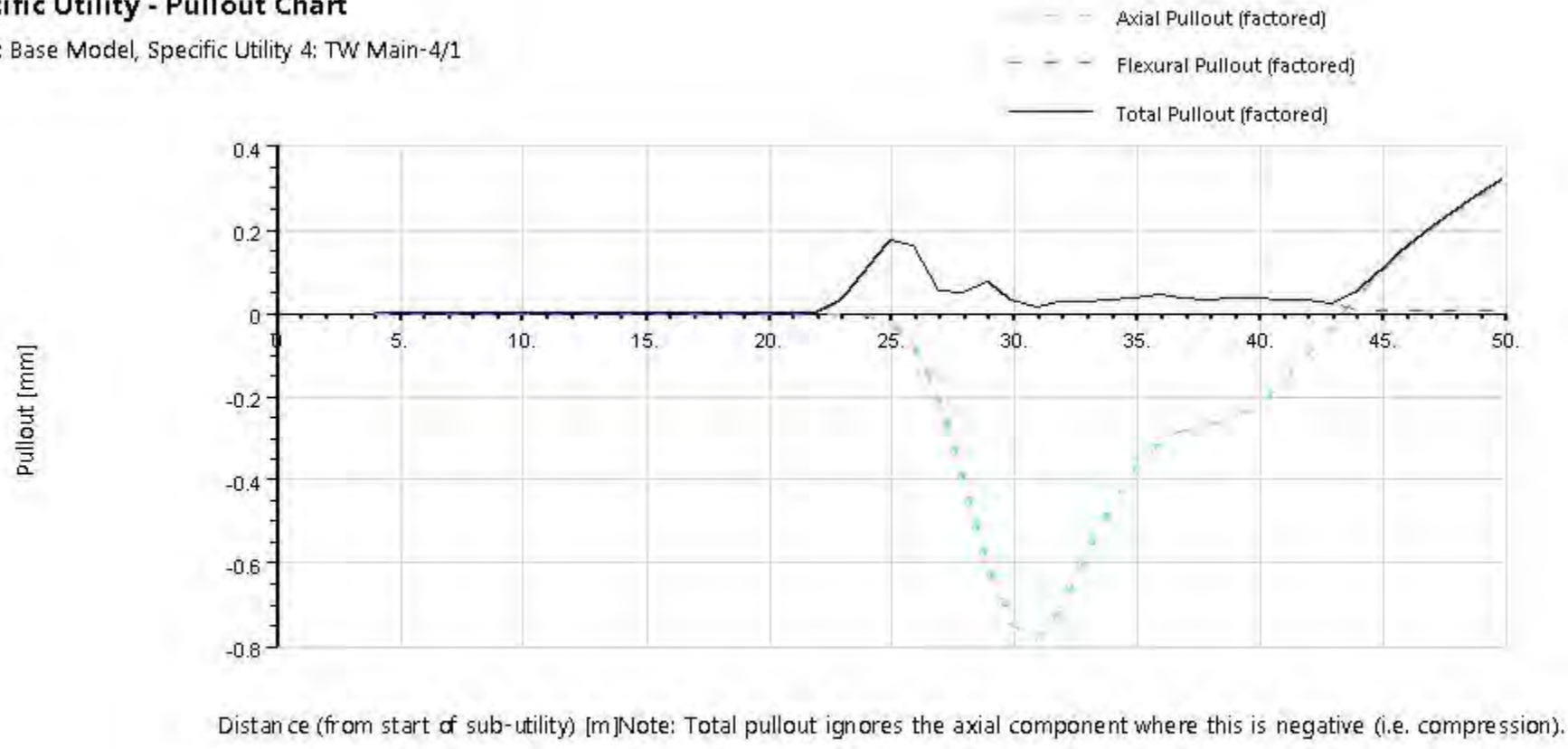


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1

Specific Utility - Pullout Chart

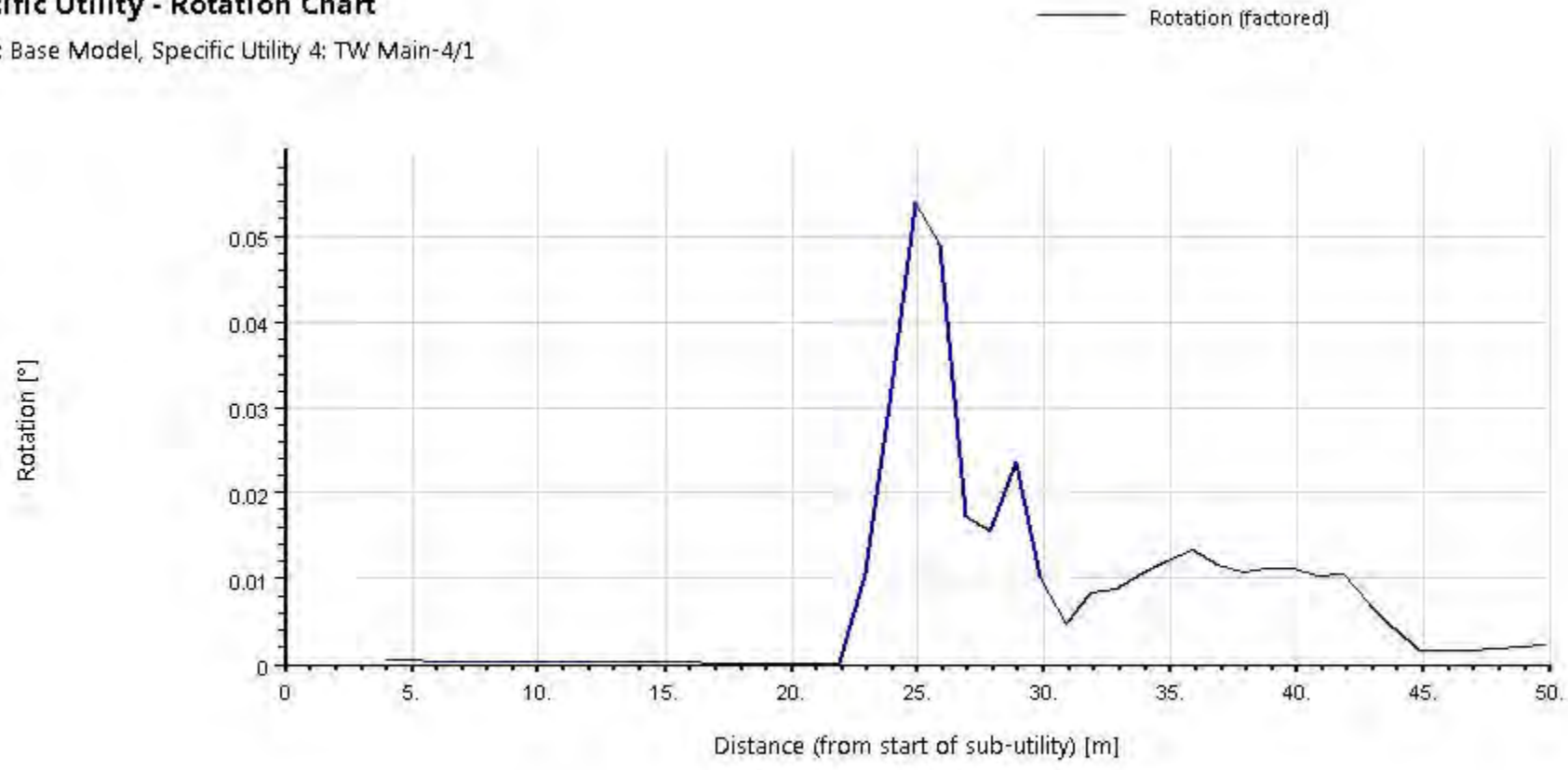
Stage: Base Model, Specific Utility 4: TW Main-4/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

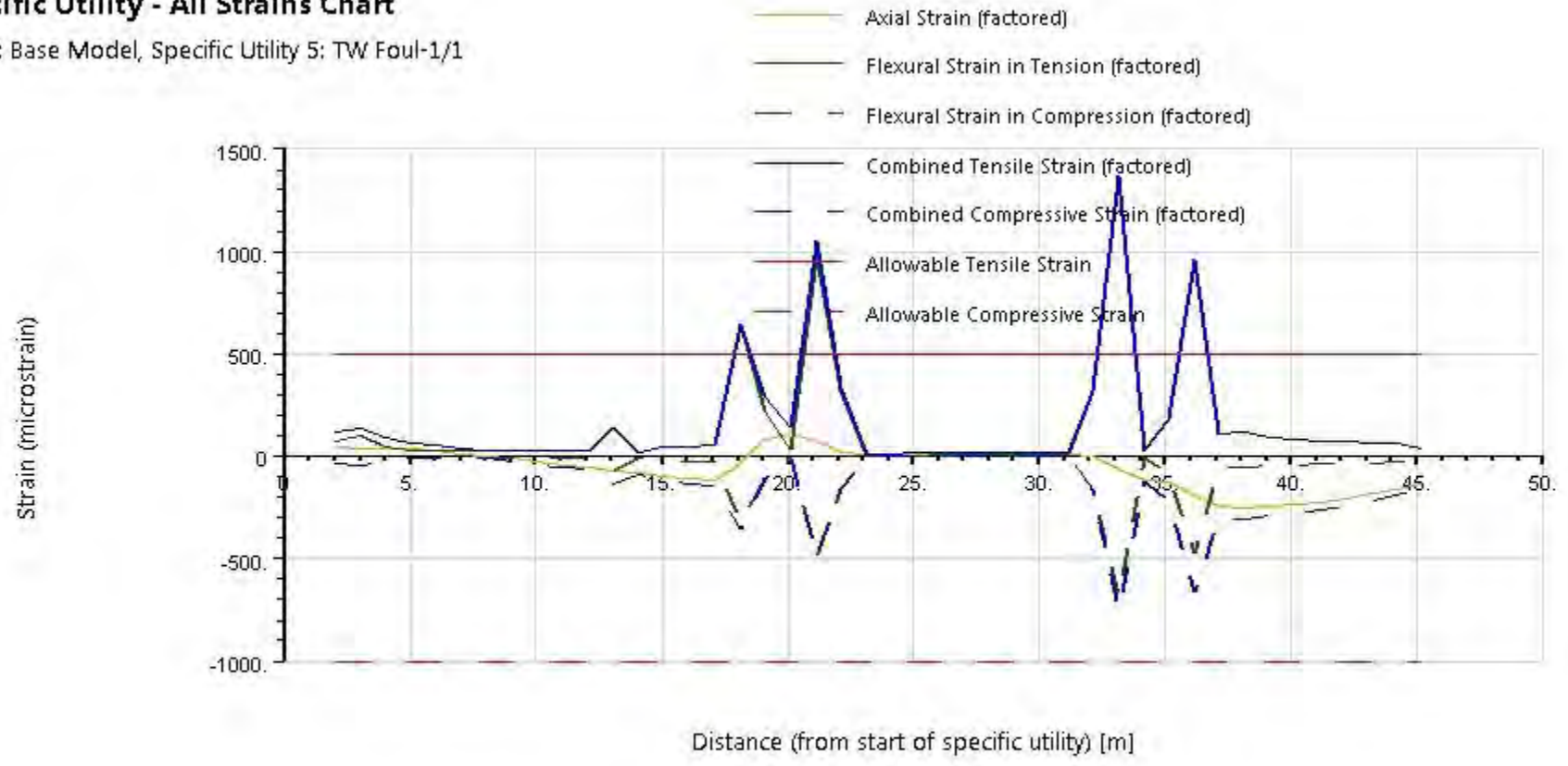
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 4: TW Main-4/1



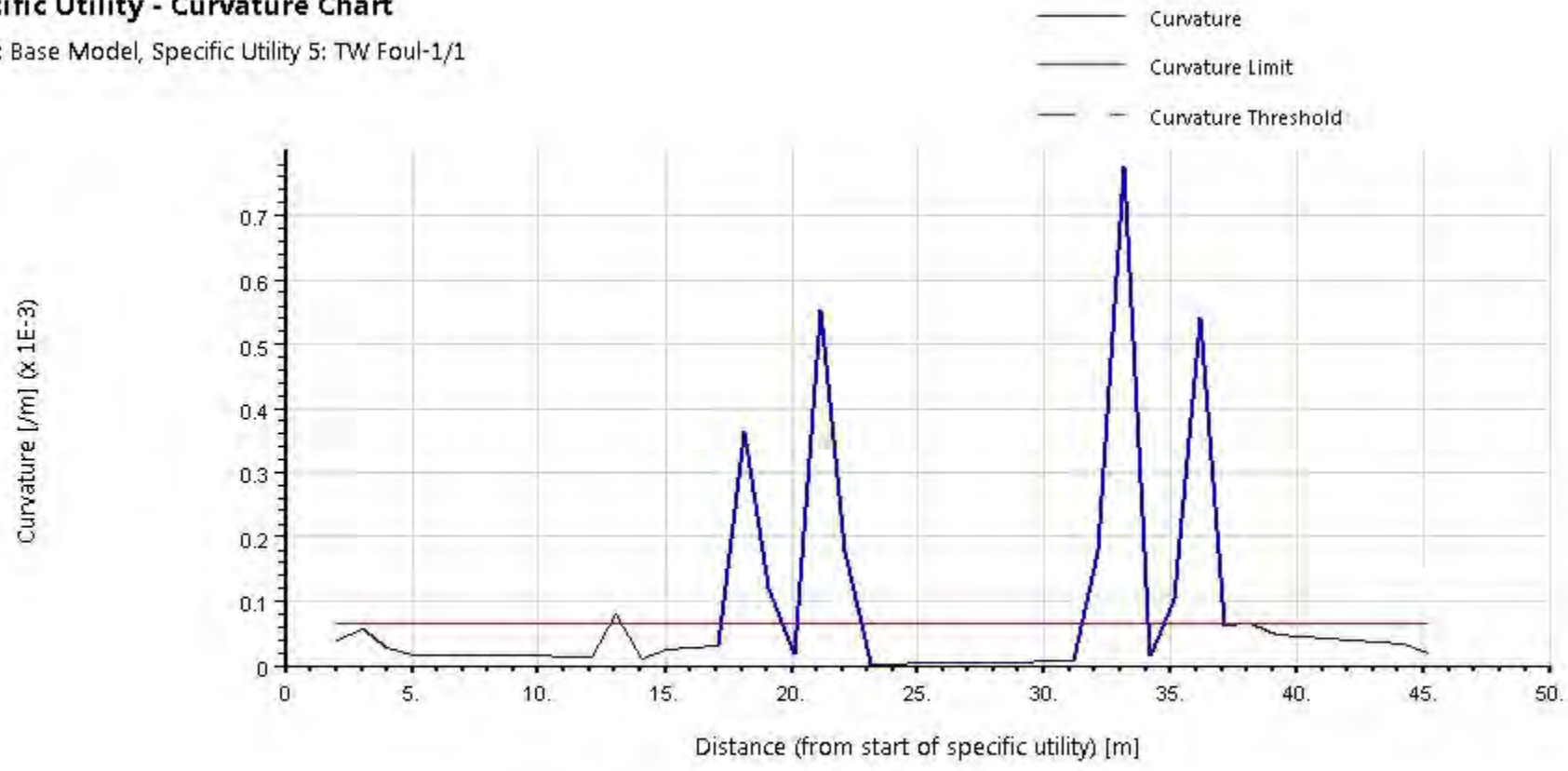
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



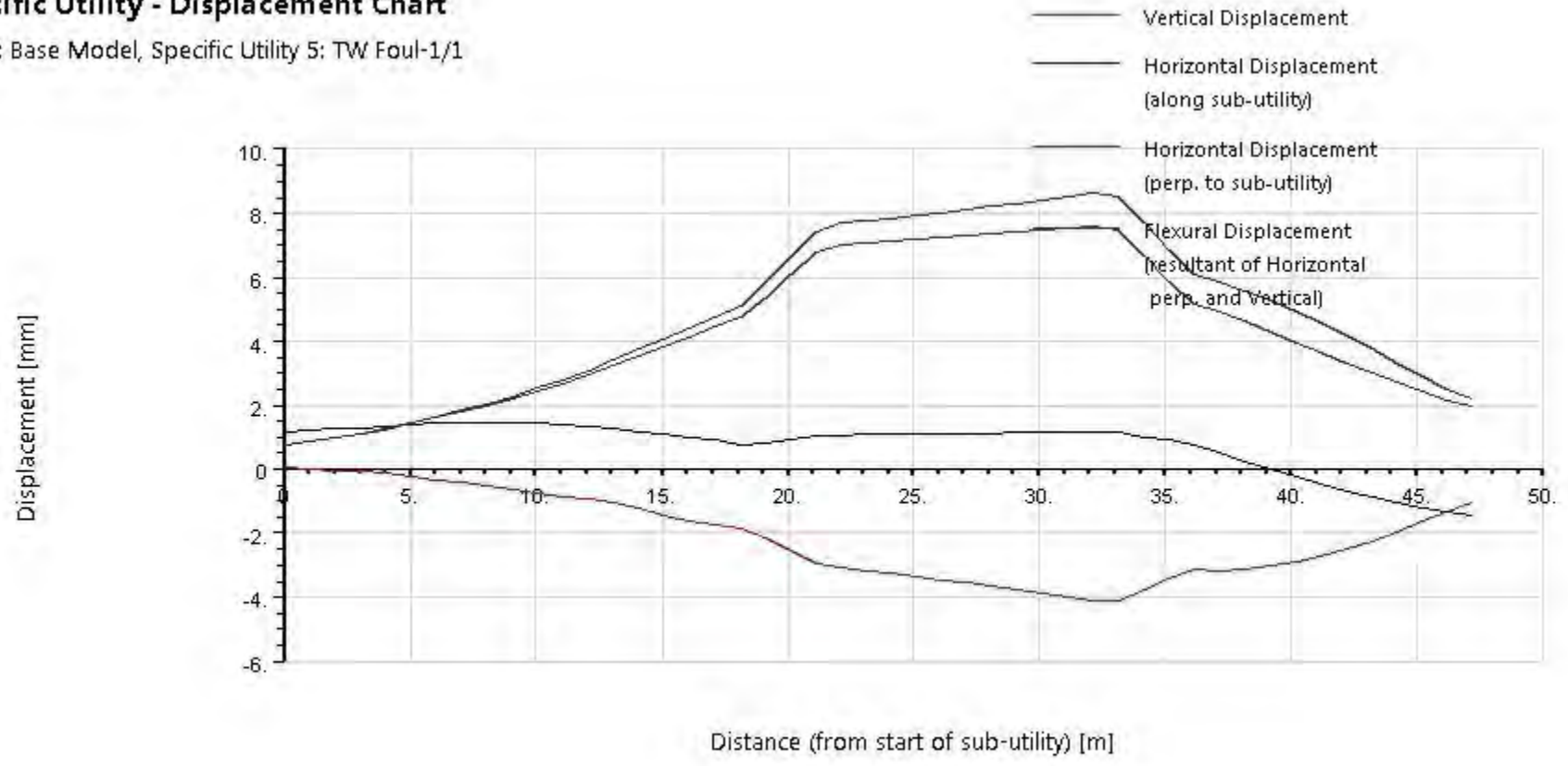
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



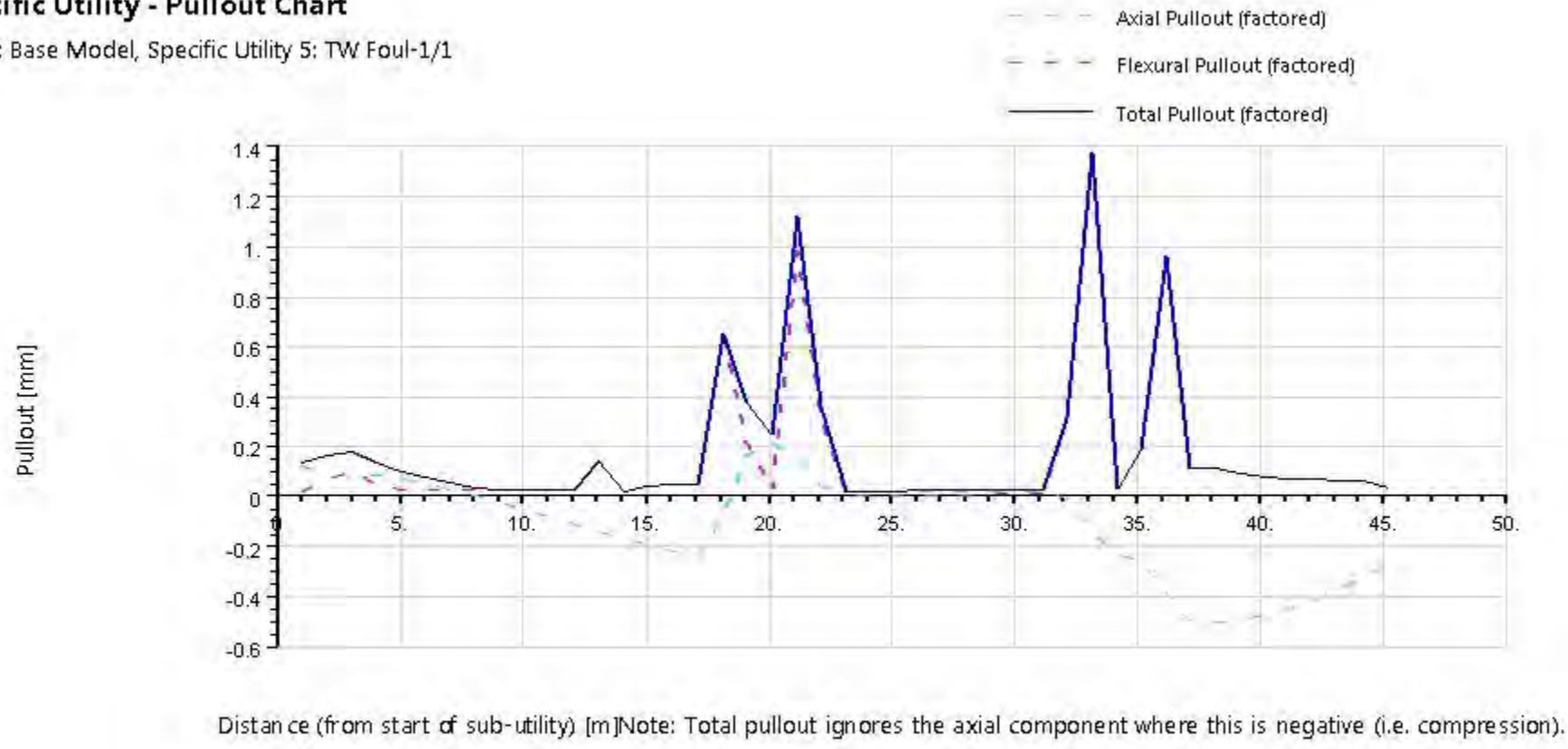
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



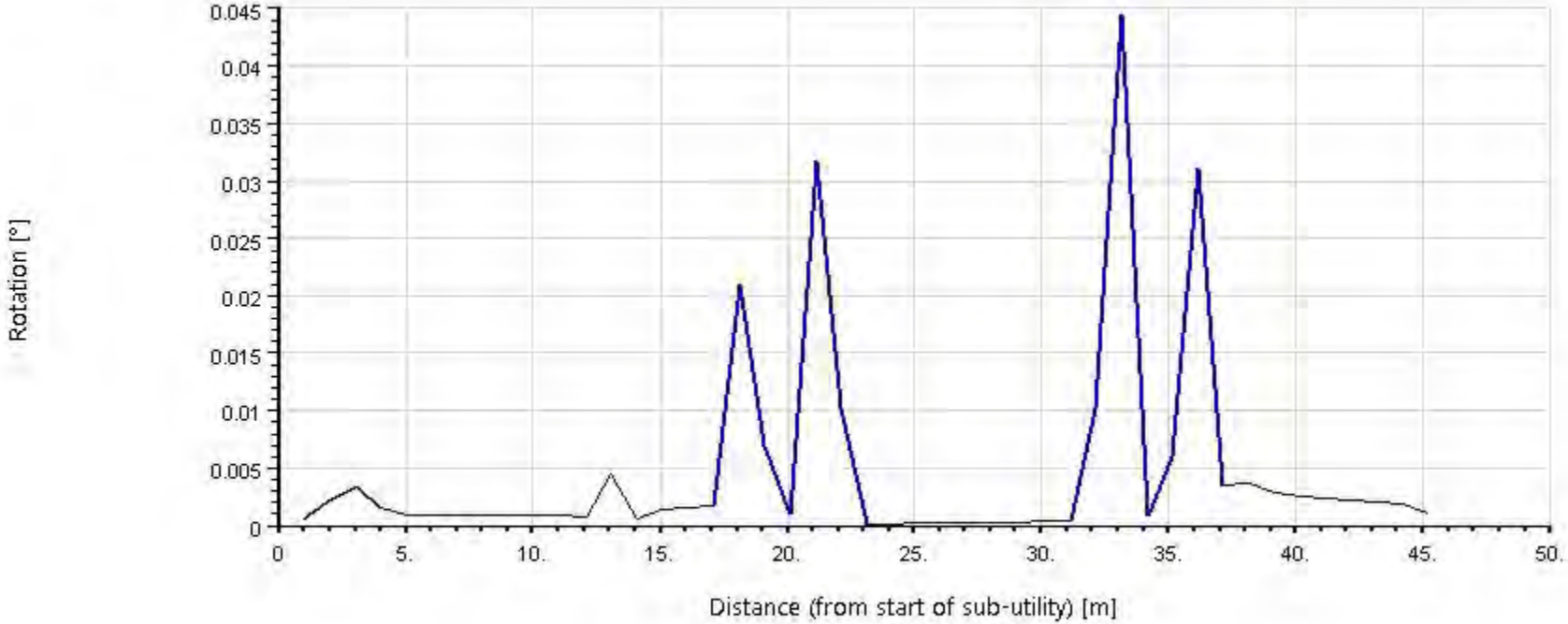
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



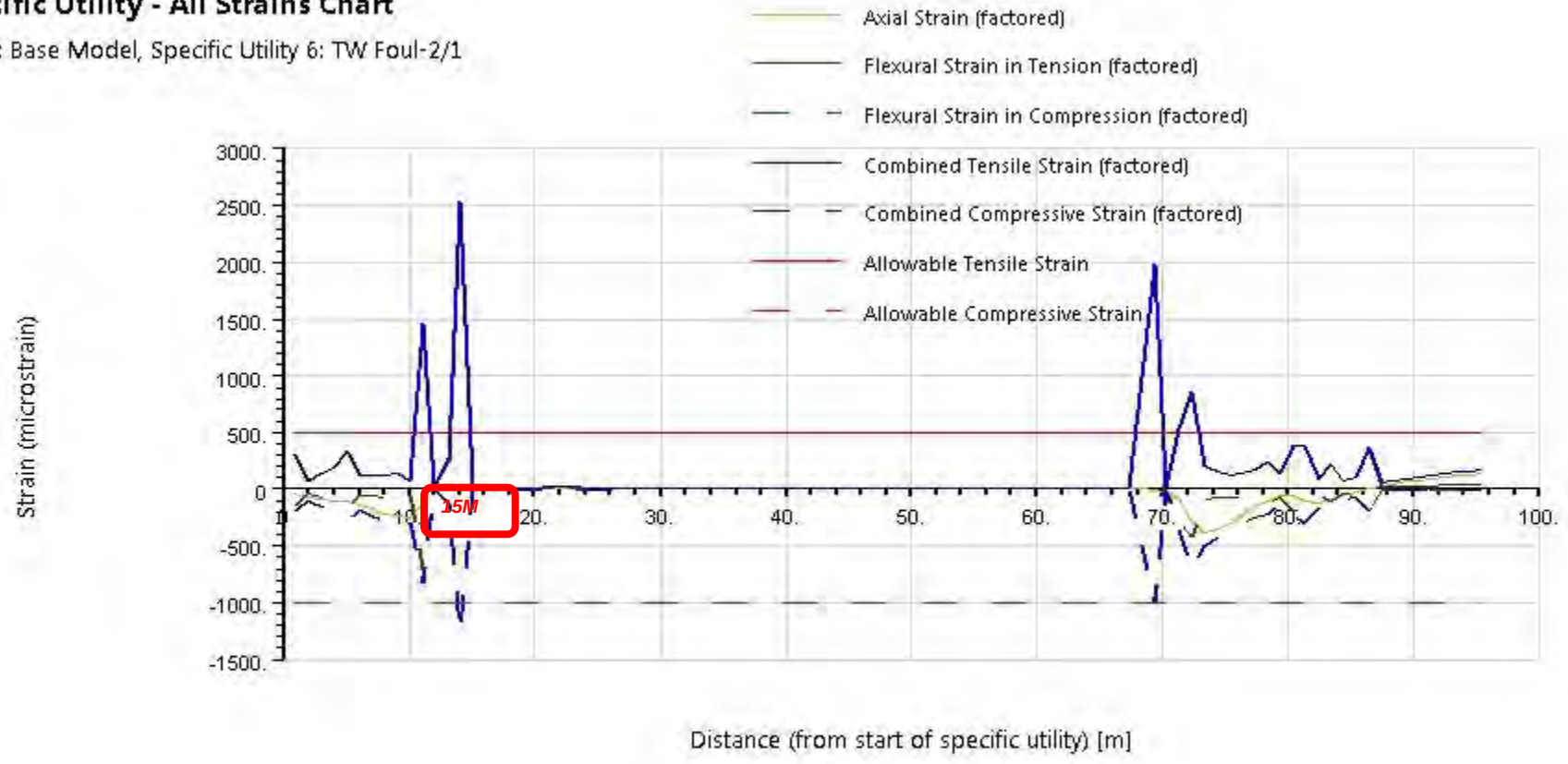
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



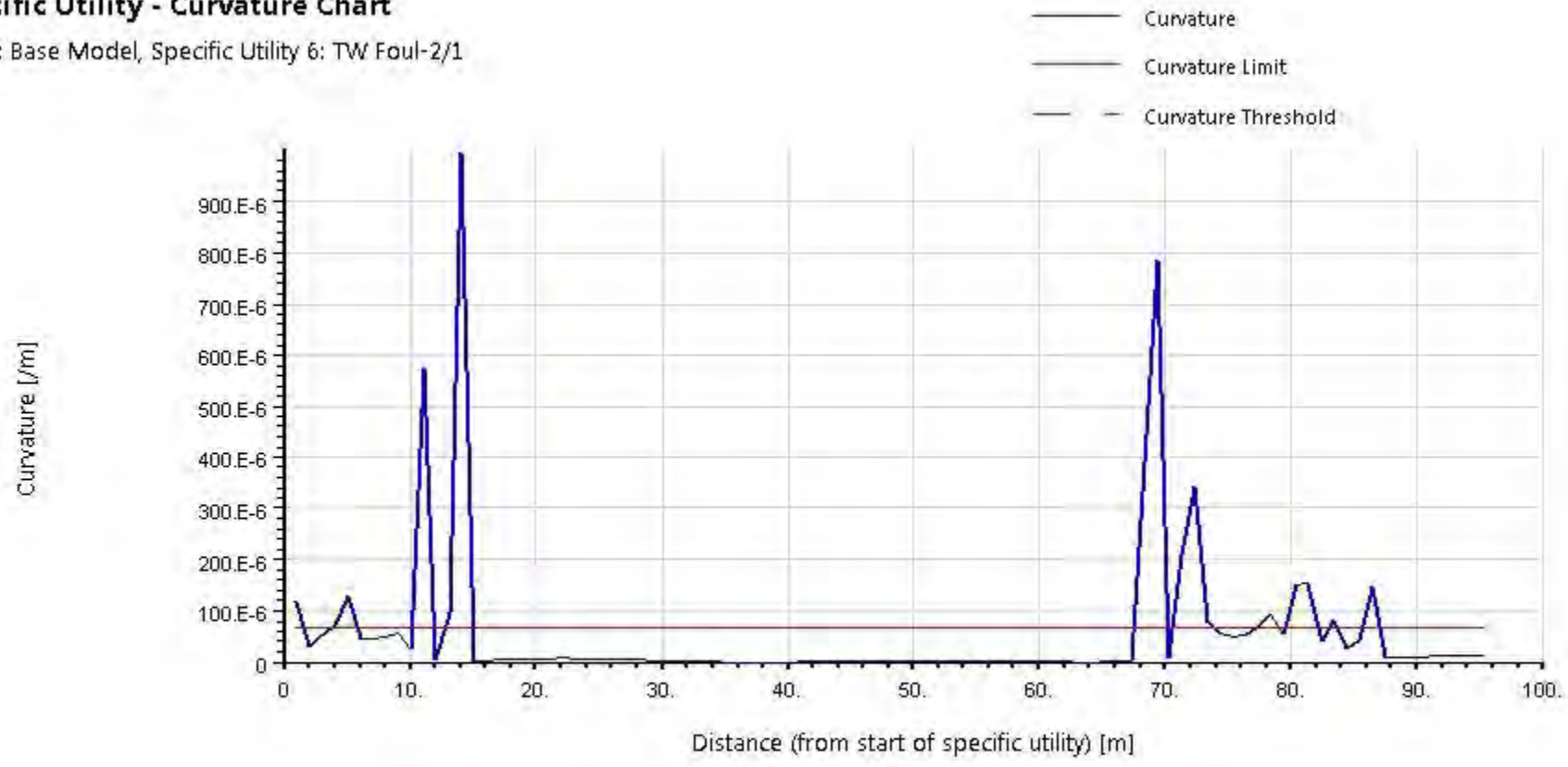
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

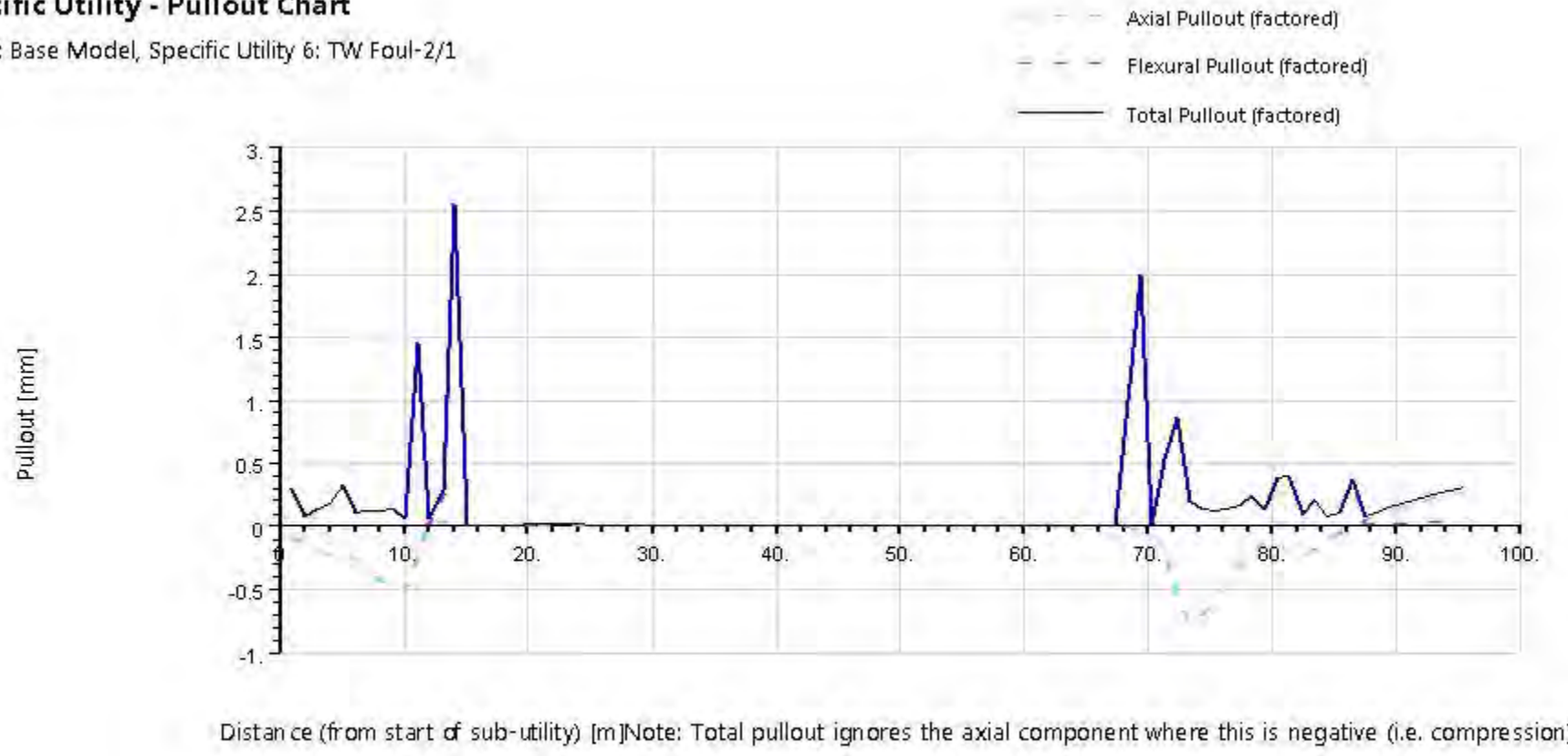


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

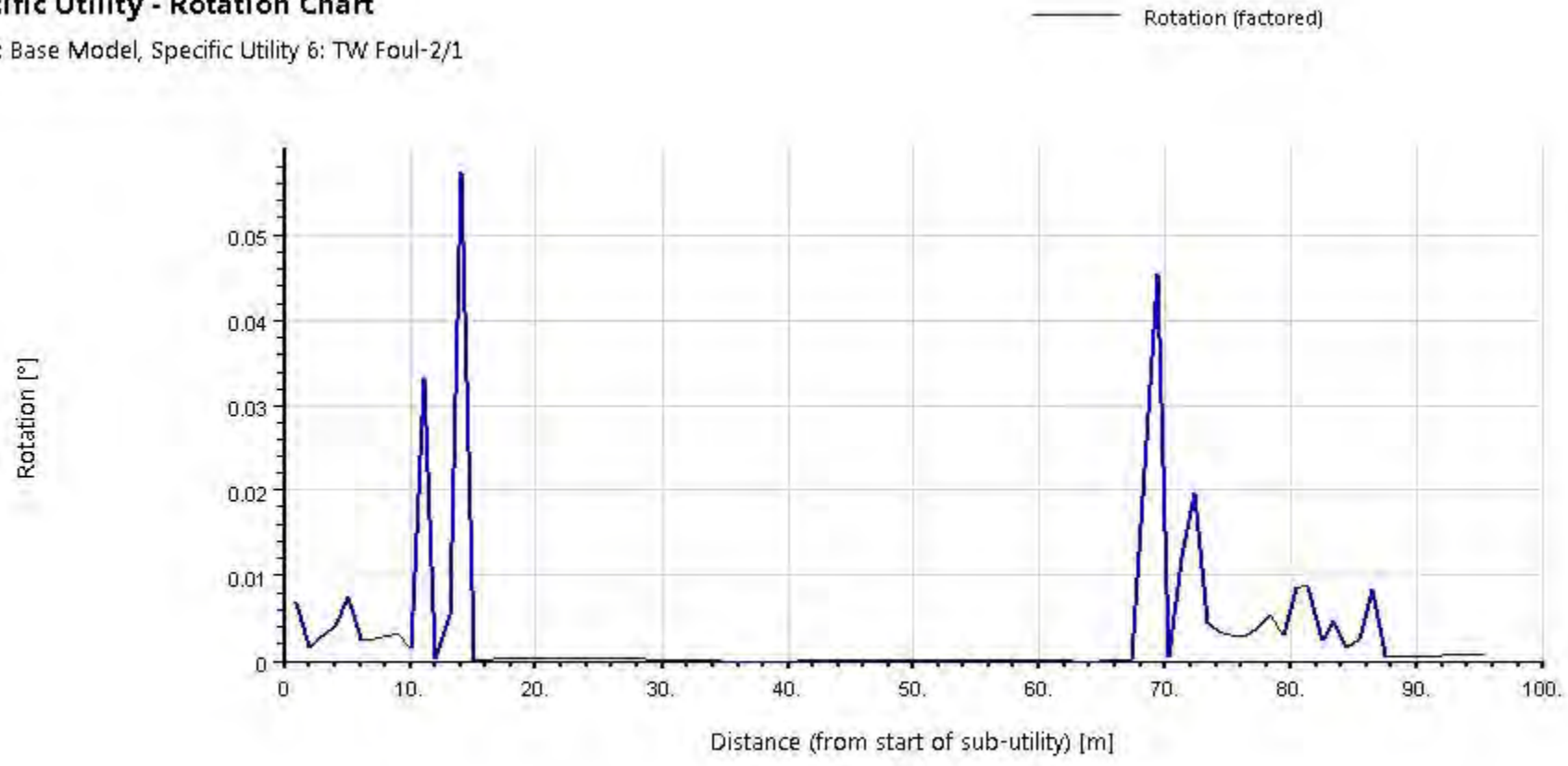
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



APPENDIX D4
XDISP BASEMENT CONSTRUCTION – UNDRAINED (STAGE 2B)

Titles

Job No.: 371944
Job Title: 60-86 Royal College Street, London
Sub-title: Basement Construction - Undrained
Calculation Heading: Smoothed
Initials: SA
Checker:
Date Saved: 04-Mar-2021
Date Checked:
Notes:
File Name: XDisp1 Basement Construction - Undrained - Smoothed.xdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\XDISP\Thames Water\02\Smoothing

History

Date	Time	By	Notes
05-Sep-2019	13:52	SAlHilly	New
05-Sep-2019	15:38	SAlHilly	
16-Sep-2019	16:58	SAlHilly	
17-Sep-2019	14:57	SAlHilly	
17-Sep-2019	15:05	SAlHilly	
17-Sep-2019	16:55	SAlHilly	
20-Sep-2019	15:42	TYLER_A	
20-Sep-2019	15:53	TYLER_A	
03-Oct-2019	12:16	TYLER_A	
14-Oct-2019	14:55	TYLER_A	
14-Oct-2019	14:56	TYLER_A	
18-Nov-2019	11:12	TYLER_A	
22-Nov-2019	16:02	TYLER_A	
04-Dec-2019	10:18	TYLER_A	
04-Dec-2019	10:21	TYLER_A	
04-Dec-2019	10:27	TYLER_A	
22-Apr-2020	09:24	TYLER_A	
22-Apr-2020	10:32	TYLER_A	
22-Apr-2020	15:06	TYLER_A	
22-Apr-2020	17:31	TYLER_A	
22-Apr-2020	19:43	TYLER_A	
22-Apr-2020	19:51	TYLER_A	
18-Jun-2020	12:42	TYLER_A	
18-Jun-2020	14:18	TYLER_A	
18-Jun-2020	14:58	TYLER_A	
18-Jun-2020	15:00	TYLER_A	
22-Jun-2020	12:11	TYLER_A	
22-Jun-2020	12:21	TYLER_A	
22-Jun-2020	14:37	TYLER_A	
25-Jun-2020	12:30	TYLER_A	
26-Jun-2020	09:51	TYLER_A	
29-Jun-2020	13:28	TYLER_A	
29-Jun-2020	14:17	TYLER_A	
29-Jun-2020	15:52	TYLER_A	
16-Jul-2020	15:49	TYLER_A	
20-Jul-2020	08:07	TYLER_A	
20-Jul-2020	08:57	TYLER_A	
20-Jul-2020	09:01	TYLER_A	
13-Nov-2020	14:27	SAlHilly	
16-Nov-2020	14:44	TYLER_A	
16-Nov-2020	15:25	TYLER_A	
16-Nov-2020	15:45	TYLER_A	
16-Nov-2020	15:51	TYLER_A	
20-Nov-2020	08:37	TYLER_A	
20-Nov-2020	08:42	TYLER_A	
20-Nov-2020	16:58	SAlHilly	
20-Nov-2020	17:15	SAlHilly	
02-Dec-2020	15:44	TYLER_A	
02-Dec-2020	16:44	TYLER_A	
02-Dec-2020	16:49	TYLER_A	
02-Dec-2020	17:14	TYLER_A	
09-Dec-2020	18:10	TYLER_A	
09-Dec-2020	18:13	TYLER_A	
10-Dec-2020	09:36	TYLER_A	
04-Mar-2021	12:04	TYLER_A	

Displacement Lines

Ref.	Name	x1 [m]	y1 [m]	z1 [m]	x2 [m]	y2 [m]	z2 [m]	Intervals [No.]	Surface type for tunnels	Interpolate imported displacements	Calculate
1	TW Main-1	76.75020	113.72130	-0.90000	37.23790	86.22860	-0.90000	48	Surface	Yes	Yes
2	TW Main-2	37.23790	86.22860	-0.90000	53.14020	56.06240	-0.90000	34	Surface	Yes	Yes
3	TW Main-3	53.14020	56.06240	-0.90000	58.38580	47.58520	-0.90000	10	Surface	Yes	Yes
4	TW Main-4	58.38580	47.58520	-0.90000	83.80850	0.19950	-0.90000	54	Surface	Yes	Yes
5	TW Foul-1	76.45800	114.12130	-6.00000	38.34110	86.26920	-6.00000	47	Surface	Yes	Yes
6	TW Foul-2	38.34110	86.26920	-6.00000	84.72770	0.55680	-6.00000	97	Surface	Yes	Yes

Displacement Grids

Ref.	Name	Extrusion: Direction	Base line start: X [m]	Base line start: Y [m]	Base line start: Z(level) [m]	Base line end: X [m]	Base line end: Y [m]	Base line end: Z(level) [m]	Base line: Intervals [No.]	Extrusion: Distance [m]	Extrusion: Intervals [No.]	Surface type for tunnels	Calculate
1	Grid1	Global X	30.00000	0.00000	-3.00000	-	120.00000	-3.00000	120	80.00000	50	Surface	No

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	-0.51428	-1.33560	0.48725
		2	75.92703	113.14854	-0.90000	-0.50532	-1.45910	0.55712
		3	75.10385	112.57577	-0.90000	-0.48164	-1.57960	0.63551
		4	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.72140
		5	73.45751	111.43024	-0.90000	-0.38647	-1.81360	0.81456
		6	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.92943
		7	71.81116	110.28471	-0.90000	-0.24121	-2.13310	1.05350
		8	70.98799	109.71195	-0.90000	-0.14183	-2.29970	1.18570
		9	70.16482	109.13918	-0.90000	-0.02342	-2.47080	1.32450
		10	69.34164	108.56642	-0.90000	0.11476	-2.64640	1.46840
		11	68.51847	107.99365	-0.90000	0.27323	-2.82610	1.61550
		12	67.69530	107.42089	-0.90000	0.45222	-3.00940	1.76400
		13	66.87213	106.84812	-0.90000	0.65159	-3.19580	1.91160
		14	66.04895	106.27536	-0.90000	0.87069	-3.38410	2.07590
		15	65.22578	105.70260	-0.90000	1.10830	-3.57320	2.31690
		16	64.40261	105.12983	-0.90000	1.36240	-3.76140	2.53730
		17	63.57943	104.55707	-0.90000	1.63050	-3.94670	2.73410
		18	62.75626	103.98430	-0.90000	1.90900	-4.12700	2.90410
		19	61.93309	103.41154	-0.90000	2.19390	-4.29970	3.04450
		20	61.10991	102.83877	-0.90000	2.51060	-4.80410	3.37710
		21	60.28674	102.26601	-0.90000	2.84180	-5.43800	3.79490
		22	59.46357	101.69324	-0.90000	3.17730	-6.08010	4.22250
		23	58.64040	101.12048	-0.90000	3.28830	-6.29240	4.42140

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		24	57.81722	100.54771	-0.90000	3.31020	-6.33440	4.52780
		25	56.99405	99.97495	-0.90000	3.33220	-6.37640	4.63410
		26	56.17088	99.40219	-0.90000	3.35410	-6.41840	4.74050
		27	55.34770	98.82942	-0.90000	3.37610	-6.46040	4.84700
		28	54.52453	98.25666	-0.90000	3.39800	-6.50240	4.95370
		29	53.70136	97.68389	-0.90000	3.42000	-6.54440	5.06070
		30	52.87819	97.11113	-0.90000	3.44190	-6.58640	5.16800
		31	52.05501	96.53836	-0.90000	3.46390	-6.62840	5.27560
		32	51.23184	95.96560	-0.90000	3.48580	-6.67040	5.38360
		33	50.40867	95.39283	-0.90000	3.50780	-6.71240	5.49190
		34	49.58549	94.82007	-0.90000	3.46440	-6.62940	5.52170
		35	48.76232	94.24730	-0.90000	3.09930	-5.93080	5.16010
		36	47.93915	93.67454	-0.90000	2.72950	-5.22310	4.78770
		37	47.11598	93.10178	-0.90000	2.41860	-4.56480	4.46680
		38	46.29280	92.52901	-0.90000	2.44980	-4.20840	4.44960
		39	45.46963	91.95625	-0.90000	2.47200	-3.83290	4.37670
		40	44.64646	91.38348	-0.90000	2.48490	-3.44680	4.25040
		41	43.82328	90.81072	-0.90000	2.48790	-3.05870	4.07380
		42	43.00011	90.23795	-0.90000	2.48120	-2.67660	3.85050
		43	42.17694	89.66519	-0.90000	2.46460	-2.30750	3.58450
		44	41.35376	89.09242	-0.90000	2.43840	-1.95680	3.28010
		45	40.53059	88.51966	-0.90000	2.40300	-1.62880	2.94150
		46	39.70742	87.94689	-0.90000	2.35890	-1.32630	2.58960
		47	38.88425	87.37413	-0.90000	2.30680	-1.05080	2.30170
		48	38.06107	86.80136	-0.90000	2.24710	-0.80281	2.00160
		49	37.23790	86.22860	-0.90000	2.23190	-0.59855	1.72730
		50	37.70561	85.34136	-0.90000	2.41970	-0.46340	2.06820
		51	38.17333	84.45412	-0.90000	2.61880	-0.30131	2.40300
		52	38.64104	83.56688	-0.90000	2.82950	-0.11082	2.75460
		53	39.10876	82.67964	-0.90000	3.05160	0.10905	3.17970
		54	39.57647	81.79239	-0.90000	3.28440	0.35860	3.57900
		55	40.04419	80.90515	-0.90000	3.52670	0.63717	3.94790
		56	40.51190	80.01791	-0.90000	3.77620	0.94287	4.28150
		57	40.97962	79.13067	-0.90000	4.05830	1.27990	4.57510
		58	41.44733	78.24343	-0.90000	4.38590	1.65520	4.82400
		59	41.91505	77.35619	-0.90000	4.68920	2.04480	5.02360
		60	42.38276	76.46895	-0.90000	4.96030	2.43490	5.16970
		61	42.85048	75.58171	-0.90000	5.53500	2.83380	5.53100
		62	43.31819	74.69446	-0.90000	6.33760	3.24470	6.06790
		63	43.78591	73.80722	-0.90000	7.14100	3.65600	6.60610
		64	44.25362	72.91998	-0.90000	7.46570	3.82220	6.82700
		65	44.72134	72.03274	-0.90000	7.47340	3.82620	6.83790
		66	45.18905	71.14550	-0.90000	7.48120	3.83010	6.84930
		67	45.65676	70.25826	-0.90000	7.48890	3.83410	6.86120
		68	46.12448	69.37102	-0.90000	7.49670	3.83810	6.87360
		69	46.59219	68.48378	-0.90000	7.50440	3.84200	6.88640
		70	47.05991	67.59654	-0.90000	7.51210	3.84600	6.89970
		71	47.52762	66.70929	-0.90000	7.51990	3.85000	6.91340
		72	47.99534	65.82205	-0.90000	7.52760	3.85390	6.92740
		73	48.46305	64.93481	-0.90000	7.53540	3.85790	6.94170
		74	48.93077	64.04757	-0.90000	7.54310	3.86180	6.95600
		75	49.39848	63.16033	-0.90000	7.55080	3.86580	6.97040
		76	49.86620	62.27309	-0.90000	7.55860	3.86980	6.98470
		77	50.33391	61.38585	-0.90000	7.56630	3.87370	6.99870
		78	50.80163	60.49861	-0.90000	7.57400	3.87770	7.01250
		79	51.26934	59.61136	-0.90000	7.58180	3.88160	7.02590
		80	51.73706	58.72412	-0.90000	7.58950	3.88560	7.03880
		81	52.20477	57.83688	-0.90000	7.59730	3.88960	7.05120
		82	52.67249	56.94964	-0.90000	7.60500	3.89350	7.06310
		83	53.14020	56.06240	-0.90000	7.61270	3.89750	7.07450
		84	53.66476	55.21468	-0.90000	7.66470	3.92410	7.14160
		85	54.18932	54.36696	-0.90000	7.71670	3.95070	7.20800
		86	54.71388	53.51924	-0.90000	7.76870	3.97740	7.27380
		87	55.23844	52.67152	-0.90000	7.82070	4.00400	7.33890
		88	55.76300	51.82380	-0.90000	7.87280	4.03060	7.40340
		89	56.28756	50.97608	-0.90000	7.92480	4.05730	7.46730
		90	56.81212	50.12836	-0.90000	7.97690	4.08390	7.53070
		91	57.33668	49.28064	-0.90000	8.03910	4.11580	7.59340
		92	57.86124	48.43292	-0.90000	8.10390	4.14890	7.65560
		93	58.38580	47.58520	-0.90000	8.16870	4.18210	7.71740
		94	58.85659	46.70769	-0.90000	8.18410	4.19000	7.72980
		95	59.32738	45.83017	-0.90000	8.19950	4.19790	7.74200
		96	59.79817	44.95266	-0.90000	8.21490	4.20580	7.75400
		97	60.26896	44.07515	-0.90000	8.23030	4.21370	7.76590
		98	60.73975	43.19764	-0.90000	8.24580	4.22160	7.77750
		99	61.21054	42.32012	-0.90000	8.26120	4.22950	7.78910
		100	61.68134	41.44261	-0.90000	8.27660	4.23740	7.80050
		101	62.15213	40.56510	-0.90000	8.29200	4.24530	7.81180
		102	62.62292	39.68758	-0.90000	8.30750	4.25320	7.82300
		103	63.09371	38.81007	-0.90000	8.32290	4.26110	7.83410
		104	63.56450	37.93256	-0.90000	8.33840	4.26900	7.84510
		105	64.03529	37.05504	-0.90000	8.35380	4.27690	7.85600
		106	64.50608	36.17753	-0.90000	8.36930	4.28480	7.86680
		107	64.97687	35.30002	-0.90000	8.38470	4.29270	7.87760
		108	65.44766	34.42251	-0.90000	8.40020	4.30060	7.88820
		109	65.91845	33.54499	-0.90000	8.41560	4.30860	7.89880
		110	66.38924	32.66748	-0.90000	8.43110	4.31650	7.90940
		111	66.86003	31.78997	-0.90000	8.44660	4.32440	7.91990
		112	67.33082	30.91245	-0.90000	8.46200	4.33230	7.93030
		113	67.80161	30.03494	-0.90000	8.47750	4.34020	7.94070
		114	68.27241	29.15743	-0.90000	8.49300	4.34820	7.95110
		115	68.74320	28.27991	-0.90000	8.50850	4.35610	7.96150
		116	69.21399	27.40240	-0.90000	8.52400	4.36400	7.97180
		117	69.68478	26.52489	-0.90000	8.53940	4.37190	7.98220
		118	70.15557	25.64738	-0.90000	8.55490	4.37990	7.99260
		119	70.62636	24.76986	-0.90000	8.15930	4.17730	7.71920
		120	71.09715	23.89235	-0.90000	7.31920	3.74720	7.13900
		121	71.56794	23.01484	-0.90000	6.47780	3.31650	6.55750
		122	72.03873	22.13732	-0.90000	5.75100	3.11310	6.19280
		123	72.50952	21.25981	-0.90000	5.11770	3.14200	6.03090
		124	72.98031	20.38230	-0.90000	4.45700	3.13090	5.81150
		125	73.45110	19.50479	-0.90000	3.79690	3.07710	5.53980
		126	73.92189	18.62727	-0.90000	3.16620	2.98510	5.22100
		127	74.39269	17.74976	-0.90000	2.60530	2.88680	4.86060
		128	74.86348	16.87225	-0.90000	2.09330	2.75630	4.46400
		129	75.33427	15.99473	-0.90000	1.63880	2.60100	4.03630
		130	75.80506	15.11722	-0.90000	1.29950	2.54630	3.58260
		131	76.27585	14.23971	-0.90000	1.00010	2.48310	3.10760
		132	76.74664	13.36219	-0.90000	0.74378	2.42910	2.62870
		133	77.21743	12.48468	-0.90000	0.54697	2.44430	2.27210
		134	77.68822	11.60717	-0.90000	0.37737	2.43790	1.95800
		135	78.15901	10.72966	-0.90000	0.23253	2.41210	1.62750
		136	78.62980	9.85214	-0.90000	0.11009	2.36890	1.47060
		137	79.10059	8.97463	-0.90000	0.00783	2.31010	1.32350
		138	79.57138	8.09712	-0.90000	-0.07627	2.23740	1.17700
		139	80.04217	7.21960	-0.90000	-0.14407	2.15220	1.03430
		140	80.51296	6.34209	-0.90000	-0.19722	2.05580	0.89799
		141	80.98376	5.46458	-0.90000	-0.23721	1.94940	0.77057
		142	81.45455	4.58706	-0.90000	-0.26534	1.83410	0.65392
		143	81.92534	3.70955	-0.90000	-0.28280	1.71070	0.54950
		144	82.39613	2.83204	-0.90000	-0.29062	1.58000	0.45820
		145	82.86692	1.95453	-0.90000	-0.28972	1.44280	0.38039
		146	83.33771	1.07701	-0.90000	-0.28092	1.29960	0.31587
		147	83.80850	0.19950	-0.90000	-0.26495	1.15110	0.26383
		148	76.45800	114.12130	-6.00000	-0.46413	-1.28850	0.41583
		149	75.64700	113.52870	-6.00000	-0.45521	-1.41290	0.47918
		150	74.83600	112.93610	-6.00000	-0.43197	-1.53440	0.55099
		151	74.02501	112.34351	-6.00000	-0.39337	-1.65270	0.63041
		152	73.21401	111.75091	-6.00000	-0.34304	-1.78930	0.72355
		153	72.40301	111.15831	-6.00000	-0.28065	-1.94730	0.83221
		154	71.59201	110.56571	-6.00000	-0.20148	-2.10980	0.95023
		155	70.78101	109.97311	-6.00000	-0.10458	-2.27680	1.07650
		156	69.97002	109.38052	-6.00000	0.01094	-2.44830	1.20970
		157	69.15902	108.78792	-6.00000	0.14587	-2.62420	1.34810
		158	68.34802	108.19532	-6.00000	0.30078	-2.80420	1.49010
		159	67.53702	107.60272	-6.00000	0.47599	-2.98790	1.63370
		160	66.72603	107.01013	-6.00000	0.67146	-3.17480	1.77670
		161	65.91503	106.41753	-6.00000	0.88669	-3.36380	1.91720
		162	65.10403	105.82493	-6.00000	1.12060	-3.55390	2.13710
		163	64.29303	105.23233	-6.00000	1.37150	-3.74350	2.35810
		164	63.48203	104.63973	-6.00000	1.63690	-3.93080	2.55600

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		165	62.67104	104.04714	-6.00000	1.91370	-4.11350	2.72770
		166	61.86004	103.45454	-6.00000	2.19780	-4.50000	3.00000
		167	61.04904	102.86194	-6.00000	2.51750	-4.90000	3.30000
		168	60.23804	102.26934	-6.00000	2.85110	-5.45570	3.64000
		169	59.42704	101.67674	-6.00000	3.10000	-5.80000	3.90000
		170	58.61605	101.08415	-6.00000	3.25000	-6.10000	4.15000
		171	57.80505	100.49155	-6.00000	3.31790	-6.30000	4.38900
		172	56.99405	99.89895	-6.00000	3.34390	-6.40000	4.50840
		173	56.18305	99.30635	-6.00000	3.36990	-6.44850	4.62840
		174	55.37206	98.71376	-6.00000	3.39590	-6.49820	4.74920
		175	54.56106	98.12116	-6.00000	3.42180	-6.54800	4.87100
		176	53.75006	97.52856	-6.00000	3.44780	-6.59770	4.99410
		177	52.93906	96.93596	-6.00000	3.47380	-6.64740	5.11840
		178	52.12806	96.34336	-6.00000	3.49980	-6.65000	5.24410
		179	51.31707	95.75077	-6.00000	3.52580	-6.60000	5.29000
		180	50.50607	95.15817	-6.00000	3.50000	-6.50000	5.30000
		181	49.69507	94.56557	-6.00000	3.35000	-6.30000	5.25000
		182	48.88407	93.97297	-6.00000	3.10000	-5.90000	5.10000
		183	48.07307	93.38037	-6.00000	2.90000	-5.40000	4.90000
		184	47.26208	92.78778	-6.00000	2.70000	-4.80000	4.70000
		185	46.45108	92.19518	-6.00000	2.60000	-4.27760	4.51970
		186	45.64008	91.60258	-6.00000	2.53120	-3.89030	4.46210
		187	44.82908	91.00998	-6.00000	2.53550	-3.47030	4.34990
		188	44.01809	90.41739	-6.00000	2.54130	-3.06420	4.18600
		189	43.20709	89.82479	-6.00000	2.53690	-2.66390	3.97380
		190	42.39609	89.23219	-6.00000	2.52220	-2.27720	3.71740
		191	41.58509	88.63959	-6.00000	2.49760	-1.91040	3.42110
		192	40.77409	88.04699	-6.00000	2.46330	-1.56790	3.08930
		193	39.96310	87.45440	-6.00000	2.42000	-1.25290	2.72640
		194	39.15210	86.86180	-6.00000	2.36820	-0.96707	2.37180
		195	38.34110	86.26920	-6.00000	2.31950	-0.71434	2.08300
		196	38.81931	85.38557	-6.00000	2.51860	-0.56699	2.43390
		197	39.29752	84.50193	-6.00000	2.73180	-0.38838	2.90130
		198	39.77574	83.61830	-6.00000	2.95940	-0.17632	3.35930
		199	40.25395	82.73467	-6.00000	3.20160	0.07090	3.79380
		200	40.73216	81.85104	-6.00000	3.48280	0.35522	4.20010
		201	41.21037	80.96740	-6.00000	3.87930	0.69155	4.57340
		202	41.68859	80.08377	-6.00000	4.27370	1.07940	4.90840
		203	42.16680	79.20014	-6.00000	4.65990	1.51100	5.20010
		204	42.64501	78.31650	-6.00000	5.03710	1.97730	5.44350
		205	43.12322	77.43287	-6.00000	5.40380	2.40000	5.70000
		206	43.60144	76.54924	-6.00000	6.00000	2.70000	6.00000
		207	44.07965	75.66560	-6.00000	6.50000	3.00000	6.40000
		208	44.55786	74.78197	-6.00000	7.00000	3.25000	6.70000
		209	45.03607	73.89834	-6.00000	7.45000	3.45000	7.00000
		210	45.51429	73.01471	-6.00000	7.80000	3.65000	7.20000
		211	45.99250	72.13107	-6.00000	8.00000	3.85000	7.30000
		212	46.47071	71.24744	-6.00000	8.20000	4.00000	7.40000
		213	46.94892	70.36381	-6.00000	8.30000	4.10000	7.50000
		214	47.42714	69.48017	-6.00000	8.34850	4.15000	7.56510
		215	47.90535	68.59654	-6.00000	8.36700	4.20000	7.58600
		216	48.38356	67.71291	-6.00000	8.38550	4.25000	7.60890
		217	48.86177	66.82927	-6.00000	8.40410	4.28000	7.63360
		218	49.33998	65.94564	-6.00000	8.42260	4.31210	7.66000
		219	49.81820	65.06201	-6.00000	8.44110	4.32160	7.68770
		220	50.29641	64.17838	-6.00000	8.45970	4.33110	7.71640
		221	50.77462	63.29474	-6.00000	8.47830	4.34060	7.74580
		222	51.25283	62.41111	-6.00000	8.49680	4.35010	7.77560
		223	51.73105	61.52748	-6.00000	8.51540	4.35960	7.80540
		224	52.20926	60.64384	-6.00000	8.53400	4.36910	7.83500
		225	52.68747	59.76021	-6.00000	8.55250	4.37870	7.86400
		226	53.16568	58.87658	-6.00000	8.57110	4.38820	7.89250
		227	53.64390	57.99294	-6.00000	8.58970	4.39770	7.92010
		228	54.12211	57.10931	-6.00000	8.60830	4.40720	7.94690
		229	54.60032	56.22568	-6.00000	8.62690	4.41670	7.97270
		230	55.07853	55.34205	-6.00000	8.64560	4.42630	7.99770
		231	55.55675	54.45841	-6.00000	8.66420	4.43580	8.02180
		232	56.03496	53.57478	-6.00000	8.68280	4.44530	8.04500
		233	56.51317	52.69115	-6.00000	8.70150	4.45490	8.06760
		234	56.99138	51.80751	-6.00000	8.72010	4.46440	8.08940
		235	57.46959	50.92388	-6.00000	8.73880	4.47400	8.11070
		236	57.94781	50.04025	-6.00000	8.75740	4.48350	8.13140
		237	58.42602	49.15661	-6.00000	8.77610	4.49310	8.15170
		238	58.90423	48.27298	-6.00000	8.79480	4.50270	8.17170
		239	59.38244	47.38935	-6.00000	8.81350	4.51220	8.19130
		240	59.86066	46.50572	-6.00000	8.83220	4.52180	8.21070
		241	60.33887	45.62208	-6.00000	8.85090	4.53140	8.22990
		242	60.81708	44.73845	-6.00000	8.86960	4.54100	8.24890
		243	61.29529	43.85482	-6.00000	8.88830	4.55060	8.26780
		244	61.77351	42.97118	-6.00000	8.90700	4.56010	8.28650
		245	62.25172	42.08755	-6.00000	8.92580	4.56970	8.30500
		246	62.72993	41.20392	-6.00000	8.94450	4.57930	8.32350
		247	63.20814	40.32028	-6.00000	8.96330	4.58890	8.34180
		248	63.68636	39.43665	-6.00000	8.98210	4.59860	8.35990
		249	64.16457	38.55302	-6.00000	9.00090	4.60820	8.37790
		250	64.64278	37.66939	-6.00000	9.01960	4.61780	8.39560
		251	65.12099	36.78575	-6.00000	9.03840	4.62740	8.41320
		252	65.59921	35.90212	-6.00000	9.05730	4.63700	8.43060
		253	66.07742	35.01849	-6.00000	9.07610	4.64670	8.44770
		254	66.55563	34.13485	-6.00000	9.09490	4.65630	8.46460
		255	67.03384	33.25122	-6.00000	9.11380	4.66600	8.48130
		256	67.51205	32.36759	-6.00000	9.13260	4.67560	8.49770
		257	67.99027	31.48395	-6.00000	9.10000	4.68530	8.48000
		258	68.46848	30.60032	-6.00000	9.05000	4.65000	8.45000
		259	68.94669	29.71669	-6.00000	9.00000	4.60000	8.40000
		260	69.42490	28.83306	-6.00000	8.90000	4.55000	8.37000
		261	69.90312	27.94942	-6.00000	8.70000	4.50000	8.34000
		262	70.38133	27.06579	-6.00000	8.40000	4.40000	8.25000
		263	70.85954	26.18216	-6.00000	8.00000	4.30000	8.10000
		264	71.33775	25.29852	-6.00000	7.50000	4.20000	7.90000
		265	71.81597	24.41489	-6.00000	7.00000	4.10000	7.70000
		266	72.29418	23.53126	-6.00000	6.50000	3.95000	7.40000
		267	72.77239	22.64762	-6.00000	5.90000	3.80000	7.10000
		268	73.25060	21.76399	-6.00000	5.20000	3.65000	6.80000
		269	73.72882	20.88036	-6.00000	4.60000	3.50000	6.40000
		270	74.20703	19.99673	-6.00000	3.90000	3.40000	6.05450
		271	74.68524	19.11309	-6.00000	3.35080	3.30000	5.71770
		272	75.16345	18.22946	-6.00000	2.67090	3.15000	5.33770
		273	75.64166	17.34583	-6.00000	2.07320	3.00000	4.92040
		274	76.11988	16.46219	-6.00000	1.57320	2.87360	4.47130
		275	76.59809	15.57856	-6.00000	1.14230	2.67500	3.99570
		276	77.07630	14.69493	-6.00000	0.82230	2.58700	3.50190
		277	77.55451	13.81129	-6.00000	0.59043	2.62390	3.07850
		278	78.03273	12.92766	-6.00000	0.39207	2.63470	2.62020
		279	78.51094	12.04403	-6.00000	0.22389	2.62220	2.24410
		280	78.98915	11.16040	-6.00000	0.08270	2.58920	1.89490
		281	79.46736	10.27676	-6.00000	-0.03445	2.53790	1.58820
		282	79.94558	9.39313	-6.00000	-0.13023	2.47040	1.42870
		283	80.42379	8.50950	-6.00000	-0.20705	2.38870	1.26940
		284	80.90200	7.62586	-6.00000	-0.26701	2.29440	1.11390
		285	81.38021	6.74223	-6.00000	-0.31198	2.18890	0.96510
		286	81.85843	5.85860	-6.00000	-0.34361	2.07350	0.82578
		287	82.33664	4.97496	-6.00000	-0.36332	1.94920	0.69805
		288	82.81485	4.09133	-6.00000	-0.37237	1.81690	0.58352
		289	83.29306	3.20770	-6.00000	-0.37187	1.67770	0.48325
		290	83.77128	2.32407	-6.00000	-0.36276	1.53200	0.39770
		291	84.24949	1.44043	-6.00000	-0.34592	1.38070	0.32669
		292	84.72770	0.55680	-6.00000	-0.32208	1.22420	0.26945

Utility Dimensions

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick 1372-762	1372.0	200.00
2	Brick 2134-1829	2134.0	200.00
3	HPPE	180.00	5.0000
4	BP	180.00	5.0000

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]

Acceptance Criteria/Parameters

Ref.	Name	Criteria: Pullout: Threshold Strain: Tension	Criteria: Pullout: Threshold Strain: Compn.	Criteria: Pullout: Limit Value [mm]	Criteria: Pullout: Limit Strain: Tension	Criteria: Pullout: Limit Strain: Compn.	Criteria: Rotn.: Threshold [Deg]	Criteria: Rotn.: Limit [Deg]	Criteria: Allowable Strain: Tension	Criteria: Allowable Tension: Value [με]	Criteria: Allowable Strain: Compn.	Criteria: Allowable Compn.: Value [με]	Criteria: Rad. of Curv.: Threshold [m]	Criteria: Rad. of Curv.: Limit Value [m]	Factors: Rad. of Curv.: Ax.	Factors: Rad. of Curv.: Flex.	Factors: Pullout: Ax.	Factors: Pullout: Flex.
1	Brick	No	-	No	-	No	-	No	-	Yes	500.00	Yes	1000.0	Yes	15000.	Yes	15000.	1.0000	1.0000
1.0000	1.0000	1.0000	2.0000	1.0000															
2	HPPE	No	-	No	-	No	-	No	-	Yes	9000.0	Yes	9000.0	Yes	15000.	Yes	15000.	1.0000	1.0000
1.0000	0.20000	0.20000	1.0000	1.0000															

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : Yes

Utilities

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length [m]	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line [m]	End Distance Along Line [m]	Pipe Segment Length [m]
1	TW Main-1	1	Yes	BP	HPPE	Line	TW Main-1	-	48.136	-	-	0.0	48.135	3.0000
2	TW Main-2	1	Yes	HPPE	HPPE	Line	TW Main-2	-	34.101	-	-	0.0	34.101	3.0000
3	TW Main-3	1	Yes	HPPE	HPPE	Line	TW Main-3	-	9.9689	-	-	0.0	9.9680	3.0000
4	TW Main-4	1	Yes	HPPE	HPPE	Line	TW Main-4	-	53.775	-	-	0.0	53.774	3.0000
5	TW Foul-1	1	Yes	Brick 1372-762	Brick	Line	TW Foul-1	-	47.208	-	-	0.0	47.208	1.0000
6	TW Foul-2	1	Yes	Brick 2134-1829	Brick	Line	TW Foul-2	-	97.459	-	-	0.0	97.459	1.0000

Warnings

None

Errors

None

Displacement Results - Displacement Lines

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
0	Base Model	1	TW Main-1	0.0	76.75020	113.72130	-0.90000	-0.51428	-1.3356	0.48725	1.1850	0.80260	214.83	*
				1.0028	75.92703	113.14854	-0.90000	-0.50532	-1.4591	0.55712	1.2482	0.90909	214.83	*
				2.0057	75.10385	112.57577	-0.90000	-0.48164	-1.5796	0.63551	1.2975	1.0215	214.83	*
				3.0085	74.28068	112.00301	-0.90000	-0.44215	-1.6968	0.72140	1.3321	1.1403	214.83	*
				4.0113	73.45751	111.43024	-0.90000	-0.38647	-1.8136	0.81456	1.3531	1.2680	214.83	*
				5.0142	72.63434	110.85748	-0.90000	-0.32244	-1.9711	0.92943	1.3905	1.4338	214.83	*
				6.0170	71.81116	110.28471	-0.90000	-0.24121	-2.1331	1.0535	1.4163	1.6132	214.83	*
				7.0198	70.98799	109.71195	-0.90000	-0.14183	-2.2997	1.1857	1.4299	1.8067	214.83	*
				8.0227	70.16482	109.13918	-0.90000	-0.023421	-2.4708	1.3245	1.4304	2.0148	214.83	*
				9.0255	69.34164	108.56642	-0.90000	0.11476	-2.6464	1.4684	1.4173	2.2378	214.83	*
				10.028	68.51847	107.99365	-0.90000	0.27323	-2.8261	1.6155	1.3898	2.4759	214.83	*
				11.031	67.69530	107.42089	-0.90000	0.45222	-3.0094	1.7640	1.3476	2.7285	214.83	*
				12.034	66.87213	106.84812	-0.90000	0.65159	-3.1958	1.9116	1.2904	2.9954	214.83	*
				13.037	66.04895	106.27536	-0.90000	0.87069	-3.3841	2.0759	1.2181	3.2751	214.83	*
				14.040	65.22578	105.70260	-0.90000	1.1083	-3.5732	2.3169	1.1311	3.5661	214.83	*
				15.042	64.40261	105.12983	-0.90000	1.3624	-3.7614	2.5373	1.0300	3.8657	214.83	*
				16.045	63.57943	104.55707	-0.90000	1.6305	-3.9467	2.7341	0.91575	4.1709	214.83	*
				17.048	62.75626	103.98430	-0.90000	1.9090	-4.1270	2.9041	0.79012	4.4780	214.83	*
				18.051	61.93309	103.41154	-0.90000	2.1939	-4.2997	3.0445	0.65490	4.7824	214.83	*
				19.054	61.10991	102.83877	-0.90000	2.5106	-4.8041	3.3771	0.68303	5.3774	214.83	*
				20.057	60.28674	102.26601	-0.90000	2.8418	-5.4380	3.7949	0.77321	6.0869	214.83	*
				21.059	59.46357	101.69324	-0.90000	3.1773	-6.0801	4.2225	0.86455	6.8055	214.83	*
				22.062	58.64040	101.12048	-0.90000	3.2883	-6.2924	4.4214	0.89469	7.0432	214.83	*
				23.065	57.81722	100.54771	-0.90000	3.3102	-6.3344	4.5278	0.90070	7.0902	214.83	*
				24.068	56.99405	99.97495	-0.90000	3.3322	-6.3764	4.6341	0.90663	7.1372	214.83	*
				25.071	56.17088	99.40219	-0.90000	3.3541	-6.4184	4.7405	0.91264	7.1842	214.83	*
				26.074	55.34770	98.82942	-0.90000	3.3761	-6.4604	4.8470	0.91857	7.2313	214.83	*
				27.076	54.52453	98.25666	-0.90000	3.3980	-6.5024	4.9537	0.92458	7.2782	214.83	*
				28.079	53.70136	97.68389	-0.90000	3.4200	-6.5444	5.0607	0.93051	7.3253	214.83	*
				29.082	52.87819	97.11113	-0.90000	3.4419	-6.5864	5.1680	0.93653	7.3723	214.83	*
				30.085	52.05501	96.53836	-0.90000	3.4639	-6.6284	5.2756	0.94245	7.4193	214.83	*
				31.088	51.23184	95.96560	-0.90000	3.4858	-6.6704	5.3836	0.94847	7.4663	214.83	*
				32.091	50.40867	95.39283	-0.90000	3.5078	-6.7124	5.4919	0.95440	7.5133	214.83	*
				33.093	49.58549	94.82007	-0.90000	3.4644	-6.6294	5.5217	0.94262	7.4204	214.83	*
				34.096	48.76232	94.24730	-0.90000	3.0993	-5.9308	5.1601	0.84330	6.6384	214.83	*
				35.099	47.93915	93.67454	-0.90000	2.7295	-5.2231	4.7877	0.74265	5.8463	214.83	*
				36.102	47.11598	93.10178	-0.90000	2.4186	-4.5648	4.4668	0.62187	5.1284	214.83	*
				37.105	46.29280	92.52901	-0.90000	2.4498	-4.2084	4.4496	0.39270	4.8537	214.83	*
				38.108	45.46963	91.95625	-0.90000	2.4720	-3.8329	4.3767	0.16001	4.5581	214.83	*
				39.110	44.64646	91.38348	-0.90000	2.4849	-3.4468	4.2504	-0.071097	4.2485	214.83	*
				40.113	43.82328	90.81072	-0.90000	2.4879	-3.0587	4.0738	-0.29522	3.9317	214.83	*
				41.116	43.00011	90.23795	-0.90000	2.4812	-2.6766	3.8505	-0.50796	3.6142	214.83	*
				42.119	42.17694	89.66519	-0.90000	2.4646	-2.3075	3.5845	-0.70514	3.3018	214.83	*
				43.122	41.35376	89.09242	-0.90000	2.4384	-1.9568	3.2801	-0.88393	2.9989	214.83	*
				44.125	40.53059	88.51966	-0.90000	2.4030	-1.6288	2.9415	-1.0422	2.7095	214.83	*
				45.127	39.70742	87.94689	-0.90000	2.3589	-1.3263	2.5896	-1.1788	2.4360	214.83	*
				46.130	38.88425	87.37413	-0.90000	2.3068	-1.0508	2.3017	-1.2934	2.1801	214.83	*
				47.133	38.06107	86.80136	-0.90000	2.2471	-0.80281	2.0016	-1.3860	1.9424	214.83	*
				48.136	37.23790	86.22860	-0.90000	2.2319	-0.59855	1.7273	-1.4902	1.7661	214.83	*
		2	TW Main-2	0.0	37.23790	86.22860	-0.90000	2.2319	-0.59855	1.7273	1.5703	1.6952	297.80	*
				1.0030	37.70561	85.34136	-0.90000	2.4197	-0.46340	2.0682	1.5383	1.9244	297.80	*
				2.0059	38.17333	84.45412	-0.90000	2.6188	-0.30131	2.4030	1.4878	2.1761	297.80	*
				3.0089	38.64104	83.56688	-0.90000	2.8295	-0.11082	2.7546	1.4175	2.4513	297.80	*
				4.0119	39.10876	82.67964	-0.90000	3.0516	0.10905	3.1797	1.3266	2.7503	297.80	*
				5.0149	39.57647	81.79239	-0.90000	3.2844	0.35860	3.5790	1.2144	3.0726	297.80	*
				6.0178	40.04419	80.90515	-0.90000	3.5267	0.63717	3.9479	1.0810	3.4169	297.80	*
				7.0208	40.51190	80.01791	-0.90000	3.7762	0.94287	4.2815	0.92688	3.7802	297.80	*
				8.0238	40.97962	79.13067	-0.90000	4.0583	1.2799	4.5751	0.76029	4.1869	297.80	*
				9.0268	41.44733	78.24343	-0.90000	4.3859	1.6552	4.8240	0.58106	4.6517	297.80	*
				10.030	41.91505	77.35619	-0.90000	4.6892	2.0448	5.0236	0.37785	5.1017	297.80	*
				11.033	42.38276	76.46895	-0.90000	4.9603	2.4349	5.1697	0.15919	5.5234	297.80	*
				12.036	42.85048	75.58171	-0.90000	5.5350	2.8338	5.5310	0.074316	6.2178	297.80	*
				13.039	43.31819	74.69446	-0.90000	6.3376	3.2447	6.0679	0.085104	7.1194	297.80	*
				14.042	43.78591	73.80722	-0.90000	7.1410	3.6560	6.6061	0.095912	8.0219	297.80	*
				15.045	44.25362	72.91998	-0.90000	7.4657	3.8222	6.8270	0.10031	8.3866	297.80	*
				16.048	44.72134	72.03274	-0.90000	7.4734	3.8262	6.8379	0.10036	8.3953	297.80	*
				17.051	45.18905	71.14550	-0.90000	7.4812	3.8301	6.8493	0.10055	8.4040	297.80	*
				18.054	45.65676	70.25826	-0.90000	7.4889	3.8341	6.8612	0.10060	8.4127	297.80	*
				19.056	46.12448	69.37102	-0.90000	7.4967	3.8381	6.8736	0.10070	8.4215	297.80	*
				20.059	46.59219	68.48378	-0.90000	7.5044	3.8420	6.8864	0.10084	8.4301	297.80	*
				21.062	47.05991	67.59654	-0.90000	7.5121	3.8460	6.8997	0.10089	8.4388	297.80	*
				22.065	47.52762	66.70929	-0.90000	7.5199	3.8500	6.9134	0.10099	8.4476	297.80	*
				23.068	47.99534	65.82205	-0.90000	7.5276	3.8539	6.9274	0.10113	8.4562	297.80	*
				24.071	48.46305	64.93481	-0.90000	7.5354	3.8579	6.9417	0.10123	8.4650	297.80	*
				25.074	48.93077	64.04757	-0.90000	7.5431	3.8618	6.9560	0.10137	8.4736	297.80	*
				26.077	49.39848	63.16033	-0.90000	7.5508	3.8658	6.9704	0.10142	8.4823	297.80	*
				27.080	49.86620	62.27309	-0.90000	7.5586	3.8698	6.9847	0.10152	8.4910	297.80	*
				28.083	50.33391	61.38585	-0.90000	7.5663	3.8737	6.9987	0.10166	8.4997	297.80	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				29.086	50.80163	60.49861	-0.90000	7.5740	3.8777	7.0125	0.10171	8.5083	297.80	*
				30.089	51.26934	59.61136	-0.90000	7.5818	3.8816	7.0259	0.10190	8.5170	297.80	*
				31.092	51.73706	58.72412	-0.90000	7.5895	3.8856	7.0388	0.10195	8.5257	297.80	*
				32.095	52.20477	57.83688	-0.90000	7.5973	3.8896	7.0512	0.10205	8.5345	297.80	*
				33.098	52.67249	56.94964	-0.90000	7.6050	3.8935	7.0631	0.10219	8.5431	297.80	*
				34.101	53.14020	56.06240	-0.90000	7.6127	3.8975	7.0745	0.10225	8.5518	297.80	*
		3	TW Main-3	0.0	53.14020	56.06240	-0.90000	7.6127	3.8975	7.0745	0.69148	8.5244	301.75	*
				0.99689	53.66476	55.21468	-0.90000	7.6647	3.9241	7.1416	0.69622	8.5826	301.75	*
				1.9938	54.18932	54.36696	-0.90000	7.7167	3.9507	7.2080	0.70096	8.6408	301.75	*
				2.9907	54.71388	53.51924	-0.90000	7.7687	3.9774	7.2738	0.70562	8.6991	301.75	*
				3.9876	55.23844	52.67152	-0.90000	7.8207	4.0040	7.3389	0.71036	8.7573	301.75	*
				4.9845	55.76300	51.82380	-0.90000	7.8728	4.0306	7.4034	0.71516	8.8156	301.75	*
				5.9813	56.28756	50.97608	-0.90000	7.9248	4.0573	7.4673	0.71982	8.8739	301.75	*
				6.9782	56.81212	50.12836	-0.90000	7.9769	4.0839	7.5307	0.72461	8.9322	301.75	*
				7.9751	57.33668	49.28064	-0.90000	8.0391	4.1158	7.5934	0.73021	9.0019	301.75	*
				8.9720	57.86124	48.43292	-0.90000	8.1039	4.1489	7.6556	0.73616	9.0744	301.75	*
				9.9689	58.38580	47.58520	-0.90000	8.1687	4.1821	7.7174	0.74203	9.1470	301.75	*
		4	TW Main-4	0.0	58.38580	47.58520	-0.90000	8.1687	4.1821	7.7174	0.17664	9.1753	298.21	*
				0.99583	58.85659	46.70769	-0.90000	8.1841	4.1900	7.7298	0.17696	9.1926	298.21	*
				1.9917	59.32738	45.83017	-0.90000	8.1995	4.1979	7.7420	0.17728	9.2099	298.21	*
				2.9875	59.79817	44.95266	-0.90000	8.2149	4.2058	7.7540	0.17760	9.2272	298.21	*
				3.9833	60.26896	44.07515	-0.90000	8.2303	4.2137	7.7659	0.17791	9.2445	298.21	*
				4.9791	60.73975	43.19764	-0.90000	8.2458	4.2216	7.7775	0.17828	9.2619	298.21	*
				5.9750	61.21054	42.32012	-0.90000	8.2612	4.2295	7.7891	0.17860	9.2792	298.21	*
				6.9708	61.68134	41.44261	-0.90000	8.2766	4.2374	7.8005	0.17892	9.2965	298.21	*
				7.9666	62.15213	40.56510	-0.90000	8.2920	4.2453	7.8118	0.17924	9.3138	298.21	*
				8.9624	62.62292	39.68758	-0.90000	8.3075	4.2532	7.8230	0.17961	9.3312	298.21	*
				9.9583	63.09371	38.81007	-0.90000	8.3229	4.2611	7.8341	0.17992	9.3485	298.21	*
				10.954	63.56450	37.93256	-0.90000	8.3384	4.2690	7.8451	0.18029	9.3659	298.21	*
				11.950	64.03529	37.05504	-0.90000	8.3538	4.2769	7.8560	0.18061	9.3832	298.21	*
				12.946	64.50608	36.17753	-0.90000	8.3693	4.2848	7.8668	0.18098	9.4006	298.21	*
				13.942	64.97687	35.30002	-0.90000	8.3847	4.2927	7.8776	0.18130	9.4179	298.21	*
				14.937	65.44766	34.42251	-0.90000	8.4002	4.3006	7.8882	0.18166	9.4353	298.21	*
				15.933	65.91845	33.54499	-0.90000	8.4156	4.3086	7.8988	0.18189	9.4527	298.21	*
				16.929	66.38924	32.66748	-0.90000	8.4311	4.3165	7.9094	0.18226	9.4701	298.21	*
				17.925	66.86003	31.78997	-0.90000	8.4466	4.3244	7.9199	0.18263	9.4875	298.21	*
				18.921	67.33082	30.91245	-0.90000	8.4620	4.3323	7.9303	0.18295	9.5048	298.21	*
				19.917	67.80161	30.03494	-0.90000	8.4775	4.3402	7.9407	0.18331	9.5222	298.21	*
				20.912	68.27241	29.15743	-0.90000	8.4930	4.3482	7.9511	0.18359	9.5396	298.21	*
				21.908	68.74320	28.27991	-0.90000	8.5085	4.3561	7.9615	0.18396	9.5570	298.21	*
				22.904	69.21399	27.40240	-0.90000	8.5240	4.3640	7.9718	0.18432	9.5744	298.21	*
				23.900	69.68478	26.52489	-0.90000	8.5394	4.3719	7.9822	0.18464	9.5917	298.21	*
				24.896	70.15557	25.64738	-0.90000	8.5549	4.3799	7.9926	0.18492	9.6091	298.21	*
				25.892	70.62636	24.76986	-0.90000	8.1593	4.1773	7.7192	0.17642	9.1648	298.21	*
				26.887	71.09715	23.89235	-0.90000	7.3192	3.7472	7.1390	0.15826	8.2211	298.21	*
				27.883	71.56794	23.01484	-0.90000	6.4778	3.3165	6.5575	0.14000	7.2761	298.21	*
				28.879	72.03873	22.13732	-0.90000	5.7510	3.1131	6.1928	-0.024369	6.5395	298.21	*
				29.875	72.50952	21.25981	-0.90000	5.1177	3.1420	6.0309	-0.34924	5.9951	298.21	*
				30.871	72.98031	20.38230	-0.90000	4.4570	3.1309	5.8115	-0.65181	5.4076	298.21	*
				31.866	73.45110	19.50479	-0.90000	3.7969	3.0771	5.5398	-0.91648	4.8005	298.21	*
				32.862	73.92189	18.62727	-0.90000	3.1662	2.9851	5.2210	-1.1336	4.2013	298.21	*
				33.858	74.39269	17.74976	-0.90000	2.6053	2.8868	4.8606	-1.3121	3.6605	298.21	*
				34.854	74.86348	16.87225	-0.90000	2.0933	2.7563	4.4640	-1.4392	3.1477	298.21	*
				35.850	75.33427	15.99473	-0.90000	1.6388	2.6010	4.0363	-1.5172	2.6738	298.21	*
				36.846	75.80506	15.11722	-0.90000	1.2995	2.5463	3.5826	-1.6294	2.3489	298.21	*
				37.841	76.27585	14.23971	-0.90000	1.0001	2.4831	3.1076	-1.7153	2.0552	298.21	*
				38.837	76.74664	13.36219	-0.90000	0.74378	2.4291	2.6287	-1.7889	1.8038	298.21	*
				39.833	77.21743	12.48468	-0.90000	0.54697	2.4443	2.2721	-1.8953	1.6376	298.21	*
				40.829	77.68822	11.60717	-0.90000	0.37737	2.4379	1.9580	-1.9698	1.4851	298.21	*
				41.825	78.15901	10.72966	-0.90000	0.23253	2.4121	1.6275	-2.0156	1.3453	298.21	*
				42.821	78.62980	9.85214	-0.90000	0.11009	2.3689	1.4706	-2.0354	1.2169	298.21	*
				43.816	79.10059	8.97463	-0.90000	0.0078311	2.3101	1.3235	-2.0319	1.0990	298.21	*
				44.812	79.57138	8.09712	-0.90000	-0.076274	2.2374	1.1770	-2.0076	0.99055	298.21	*
				45.808	80.04217	7.21960	-0.90000	-0.14407	2.1522	1.0343	-1.9646	0.89053	298.21	*
				46.804	80.51296	6.34209	-0.90000	-0.19722	2.0558	0.89799	-1.9048	0.79812	298.21	*
				47.800	80.98376	5.46458	-0.90000	-0.23721	1.9494	0.77057	-1.8299	0.71258	298.21	*
				48.796	81.45455	4.58706	-0.90000	-0.26534	1.8341	0.65392	-1.7416	0.63328	298.21	*
				49.791	81.92534	3.70955	-0.90000	-0.28280	1.7107	0.54950	-1.6411	0.55956	298.21	*
				50.787	82.39613	2.83204	-0.90000	-0.29062	1.5800	0.45820	-1.5297	0.49087	298.21	*
				51.783	82.86692	1.95453	-0.90000	-0.28972	1.4428	0.38039	-1.4083	0.42680	298.21	*
				52.779	83.33771	1.07701	-0.90000	-0.28092	1.2996	0.31587	-1.2780	0.36686	298.21	*
				53.775	83.80850	0.19950	-0.90000	-0.26495	1.1511	0.26383	-1.1396	0.31973	298.21	*
		5	TW Foul-1	0.0	76.45800	114.12130	-6.00000	-0.46413	-1.2885	0.41583	1.1349	0.76653	216.16	*
				1.0044	75.64700	113.52870	-6.00000	-0.45521	-1.4129	0.47918	1.2011	0.87223	216.16	*
				2.0089	74.83600	112.93610	-6.00000	-0.43197	-1.5344	0.55099	1.2540	0.98405	216.16	*
				3.0133	74.02501	112.34351	-6.00000	-0.39337	-1.6527	0.63041	1.2927	1.1023	216.16	*
				4.0177	73.21401	111.75091	-6.00000	-0.34304	-1.7893	0.72355	1.3326	1.2423	216.16	*
				5.0222	72.40301	111.15831	-6.00000	-0.28065	-1.9473	0.83221	1.3755	1.4067	216.16	*
				6.0266	71.59201	110.56571	-6.00000	-0.20148	-2.1098	0.95023	1.4074	1.5846	216.16	*
				7.0310	70.78101	109.97311	-6.00000	-0.10458	-2.2768	1.0765	1.4277	1.7766	216.16	*
				8.0355	69.97002	109.38052	-6.00000	0.010944	-2.4483	1.2097	1.4356	1.9833	216.16	*
				9.0399	69.15902	108.78792	-6.00000	0.14587	-2.6242	1.3481	1.4305	2.2049	216.16	*
				10.044	68.34802	108.1932	-6.00000	0.30078	-2.8042	1.4901	1.4116	2.4416	216.16	*
				11.049	67.53702	107.60272	-6.00000	0.47599	-2.9879	1.6337	1.3785	2.6933	216.16	*
				12.053	66.72603	107.01013	-6.00000	0.67146	-3.1748	1.7767	1.3309	2.9595	216.16	*
				13.058	65.91503	106.41753	-6.00000	0.88669	-3.3638	1.9172	1.2687	3.2391	216.16	*
				14.062	65.10403	105.82493	-6.00000	1.1206	-3.5539	2.1371	1.1919	3.5306	216.16	*
				15.067	64.29303	105.23233	-6.00000	1.3715	-3.7435	2.3581	1.1012	3.8317	216.16	*
				16.071	63.48203	104.63973	-6.00000	1.6369	-3.9308	2.5560	0.99744	4.1395	216.16	*
				17.075	62.67104	104.04714	-6.00000	1.9137	-4.1135	2.7277	0.88173	4.4504	216.16	*
				18.080	61.86004	103.45454	-6.00000	2.1978	-4.5000	3.0000	0.88037	4.9300	216.16	*
				19.084	61.04904	102.86194	-6.00000	2.5175	-4.9000	3.3000	0.85824	5.4416	216.16	*
				20.089	60.23804	102.26934	-6.00000	2.8511	-5.4557	3.6400	0.91673	6.0871	216.16	*
				21.093	59.42704	101.67674	-6.00000	3.1000	-5.8000	3.9000	0.91890	6.5120	216.16	*
				22.098	58.61605	101.08415	-6.00000	3.2500	-6.1000	4.1500	0.97478	6.8427	216.16	*
				23.102	57.80505	100.49155	-6.00000	3.3179	-6.3000	4.3890	1.0380	7.0442	216.16	*
				24.106	56.99405	99.89895	-6.00000	3.3439	-6.4000	4.5084	1.0760	7.1403	216.16	*
				25.111	56.18305	99.30635	-6.00000	3.3699	-6.4485	4.6284	1.0836	7.1948	216.16	*
				26.115	55.37206	98.71376	-6.00000	3.3959	-6.4982	4.7492	1.0919	7.2503	216.16	*
				27.120	54.56106	98.12116	-6.00000	3.4218	-6.5480	4.8710	1.1004	7.3058	216.16	*
				28.124	53.75006	97.52856	-6.00000	3.4478	-6.5977	4.9941	1.1087	7.3612	216.16	*
				29.129	52.93906	96.93596	-6.00000	3.4738	-6.6474	5.1184	1.1170	7.4167	216.16	*
				30.133	52.12806	96.34336	-6.00000	3.4998	-6.6500	5.2441	1.0976	7.4341	216.16	*
				31.137	51.31707	95.75077	-6.00000	3.5258	-6.6000	5.2900	1.0471	7.4091	216.16	*
				32.142	50.50607	95.15817	-6.00000	3.5000	-6.5000	5.3000	1.0089	7.3131	216.16	*
				33.146	49.69507	94.56557	-6.00000	3.3500	-6.3000	5.2500	1.0120	7.0632	216.16	*
				34.151	48.88407	93.97297	-6.00000	3.1000	-5.9000	5.1000	0.99790	6.5927	216.16	*
				35.155	48.07307	93.38037	-6.00000	2.9000	-5.4000	4.9000	0.84439	6.0710	216.16	*
				36.160	47.26208	92.78778	-6.00000	2.7000	-4.8000	4.7000	0.65188	5.4685	216.16	*
				37.164	46.45108	92.19518	-6.00000	2.6000	-4.2776	4.5197	0.42442	4.9878	216.16	*
				38.169	45.64008	91.60258	-6.00000	2.5312	-3.8903	4.4621	0.25147	4.6345	216.16	*
				39.173	44.82908	91.00998	-6.00000	2.5355	-3.4703	4.3499	207.42E-6	4.2979	216.16	*
				40.177	44.01809	90.41739	-6.00000	2.5413	-3.0642	4.1860	-0.24407	3.9734	216.16	*
				41.182	43.20709	89.82479	-6.00000	2.5369	-2.6639	3.9738	-0.47669	3.6476	216.16	*
				42.186	42.39609	89.23219	-6.00000	2.5222	-2.2772	3.7174	-0.69296	3.3267	216.16	*
				43.191	41.58509	88.63959	-6.00000	2.4976	-1.9104	3.4211	-0.88950	3.0160	216.16	*
				44.195	40.77409	88.04699	-6.00000	2.4633	-1.5679	3.0893	-1.0639	2.7193	216.16	*
				45.200	39.96310	87.45440	-6.00000	2.4200	-1.2529	2.7264	-1.2148	2.4394	216.16	*
				46.204	39.15210	86.86180	-6.00000	2.3682	-0.96707	2.3718	-1.3416	2.1780	216.16	*
				47.208	38.34110	86.26920	-6.00000	2.3195	-0.71434	2.0830	-1.4514	1.9452	216.16	*
		6	TW Foul-2	0.0	38.34110	86.26920	-6.00000	2.3195	-0.71434	2.0830	1.7322	1.6999	298.42	*
				1.0047	38.81931	85.38557	-6.00000	2.5186	-0.56699	2.4339	1.6974	1.9452	298.42	*
				2.0095	39.29752	84.50193	-6.00000	2.7318	-0.38838	2.9013	1.6418	2.2177	298.42	*
				3.0142	39.77574	83.61830	-6.00000	2.9594	-0.17632	3.3593	1.5636	2.5188	298.42	*
				4.0189	40.25395	82.73467	-6.00000	3.2016	0.070905	3.7938	1.4615	2.8495	298.42	*
				5.0237	40.73216	81.85104	-6.00000	3.4828	0.35522	4.2001	1.3453	3.2321	298.42	*
				6.0284	41.21037	80.96740	-6.00000	3.8793	0.69155	4.5734	1.2382	3.7409	298.42	*
				7.0332	41.68859	80.08377	-6.00000	4.2737	1.0794	4.9084	1.0848	4.2723	298.42	*
				8.0379	42.16680	79.20014	-6.00000	4.6599	1.5110	5.2001	0.88904	4.8174	298.42	*
				9.0426	42.64501	78.31650	-6.00000	5.0371	1.9773	5.4435	0.65848	5.3711	298.42	*
				10.047	43.12322	77.43287	-6.00000	5.4038	2.4000	5.7000	0.46126	5.8948	298.42	*
				11.052	43.60144	76.54924	-6.00000	6.0000	2.7000	6.0000	0.48119	6.5619	298.42	*
				12.057	44.07965	75.66560	-6.00000	6.5000	3.0000	6.4000	0.45533	7.1444	298.42	*
				13.062	44.55786	74.78197	-6.00000	7.0000	3.2500	6.7000	0.47344	7.7031	298.42	*
				14.066	45.03607	73.89834	-6.00000	7.4500	3.4500	7.0000	0.51172	8.1941	298.42	*
				15.071	45.51429	73.01471	-6.00000	7.8000	3.6500	7.2000	0.50242	8.5971	298.42	*
				16.076	45.99250	72.13107	-6.00000	8.0000	3.8500	7.3000	0.42171	8.8682	298.42	*
				17.081	46.47071	71.24744	-6.00000	8.2000	4.0000	7.4000	0.38499	9.1155	298.42	*
				18.085	46.94892	70.36381	-6.00000	8.3000	4.1000	7.5000	0.34464	9.2510	298.42	*
				19.090	47.42714	69.48017	-6.00000	8.3485	4.1500	7.5651	0.32375	9.3175	298.42	*
				20.095	47.90535	68.59654	-6.00000	8.3670	4.2000	7.5860	0.28858	9.3575	298.42	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				21.099	48.38356	67.71291	-6.00000	8.3855	4.2500	7.6089	0.25341	9.3976	298.42	*
				22.104	48.86177	66.82927	-6.00000	8.4041	4.2800	7.6336	0.23588	9.4282	298.42	*
				23.109	49.33998	65.94564	-6.00000	8.4226	4.3121	7.6600	0.21645	9.4598	298.42	*
				24.114	49.81820	65.06201	-6.00000	8.4411	4.3216	7.6877	0.21690	9.4806	298.42	*
				25.118	50.29641	64.17838	-6.00000	8.4597	4.3311	7.7164	0.21740	9.5015	298.42	*
				26.123	50.77462	63.29474	-6.00000	8.4783	4.3406	7.7458	0.21790	9.5223	298.42	*
				27.128	51.25283	62.41111	-6.00000	8.4968	4.3501	7.7756	0.21835	9.5431	298.42	*
				28.133	51.73105	61.52748	-6.00000	8.5154	4.3596	7.8054	0.21885	9.5640	298.42	*
				29.137	52.20926	60.64384	-6.00000	8.5340	4.3691	7.8350	0.21934	9.5849	298.42	*
				30.142	52.68747	59.76021	-6.00000	8.5525	4.3787	7.8640	0.21971	9.6057	298.42	*
				31.147	53.16568	58.87658	-6.00000	8.5711	4.3882	7.8925	0.22020	9.6266	298.42	*
				32.152	53.64390	57.99294	-6.00000	8.5897	4.3977	7.9201	0.22070	9.6475	298.42	*
				33.156	54.12211	57.10931	-6.00000	8.6083	4.4072	7.9469	0.22120	9.6684	298.42	*
				34.161	54.60032	56.22568	-6.00000	8.6269	4.4167	7.9727	0.22170	9.6892	298.42	*
				35.166	55.07853	55.34205	-6.00000	8.6456	4.4263	7.9977	0.22216	9.7103	298.42	*
				36.170	55.55675	54.45841	-6.00000	8.6642	4.4358	8.0218	0.22265	9.7311	298.42	*
				37.175	56.03496	53.57478	-6.00000	8.6828	4.4453	8.0450	0.22315	9.7520	298.42	*
				38.180	56.51317	52.69115	-6.00000	8.7015	4.4549	8.0676	0.22361	9.7730	298.42	*
				39.185	56.99138	51.80751	-6.00000	8.7201	4.4644	8.0894	0.22411	9.7939	298.42	*
				40.189	57.46959	50.92388	-6.00000	8.7388	4.4740	8.1107	0.22456	9.8149	298.42	*
				41.194	57.94781	50.04025	-6.00000	8.7574	4.4835	8.1314	0.22506	9.8358	298.42	*
				42.199	58.42602	49.15661	-6.00000	8.7761	4.4931	8.1517	0.22552	9.8568	298.42	*
				43.204	58.90423	48.27298	-6.00000	8.7948	4.5027	8.1717	0.22598	9.8778	298.42	*
				44.208	59.38244	47.38935	-6.00000	8.8135	4.5122	8.1913	0.22652	9.8988	298.42	*
				45.213	59.86066	46.50572	-6.00000	8.8322	4.5218	8.2107	0.22698	9.9198	298.42	*
				46.218	60.33887	45.62208	-6.00000	8.8509	4.5314	8.2299	0.22744	9.9408	298.42	*
				47.223	60.81708	44.73845	-6.00000	8.8696	4.5410	8.2489	0.22790	9.9619	298.42	*
				48.227	61.29529	43.85482	-6.00000	8.8883	4.5506	8.2678	0.22835	9.9829	298.42	*
				49.232	61.77351	42.97118	-6.00000	8.9070	4.5601	8.2865	0.22890	10.004	298.42	*
				50.237	62.25172	42.08755	-6.00000	8.9258	4.5697	8.3050	0.22940	10.025	298.42	*
				51.242	62.72993	41.20392	-6.00000	8.9445	4.5793	8.3235	0.22986	10.046	298.42	*
				52.246	63.20814	40.32028	-6.00000	8.9633	4.5889	8.3418	0.23037	10.067	298.42	*
				53.251	63.68636	39.43665	-6.00000	8.9821	4.5986	8.3599	0.23078	10.088	298.42	*
				54.256	64.16457	38.55302	-6.00000	9.0009	4.6082	8.3779	0.23129	10.109	298.42	*
				55.260	64.64278	37.66939	-6.00000	9.0196	4.6178	8.3956	0.23175	10.130	298.42	*
				56.265	65.12099	36.78575	-6.00000	9.0384	4.6274	8.4132	0.23225	10.151	298.42	*
				57.270	65.59921	35.90212	-6.00000	9.0573	4.6370	8.4306	0.23280	10.173	298.42	*
				58.275	66.07742	35.01849	-6.00000	9.0761	4.6467	8.4477	0.23322	10.194	298.42	*
				59.279	66.55563	34.13485	-6.00000	9.0949	4.6563	8.4646	0.23373	10.215	298.42	*
				60.284	67.03384	33.25122	-6.00000	9.1138	4.6660	8.4813	0.23419	10.236	298.42	*
				61.289	67.51205	32.36759	-6.00000	9.1326	4.6756	8.4977	0.23470	10.257	298.42	*
				62.294	67.99027	31.48395	-6.00000	9.1000	4.6853	8.4800	0.21065	10.233	298.42	*
				63.298	68.46848	30.60032	-6.00000	9.0500	4.6500	8.4500	0.21790	10.172	298.42	*
				64.303	68.94669	29.71669	-6.00000	9.0000	4.6000	8.4000	0.23807	10.105	298.42	*
				65.308	69.42490	28.83306	-6.00000	8.9000	4.5500	8.3700	0.23445	9.9929	298.42	*
				66.313	69.90312	27.94942	-6.00000	8.7000	4.5000	8.3400	0.18323	9.7932	298.42	*
				67.317	70.38133	27.06579	-6.00000	8.4000	4.4000	8.2500	0.12839	9.4817	298.42	*
				68.322	70.85954	26.18216	-6.00000	8.0000	4.3000	8.1000	0.025954	9.0824	298.42	*
				69.327	71.33775	25.29852	-6.00000	7.5000	4.2000	7.9000	-0.12408	8.5950	298.42	*
				70.332	71.81597	24.41489	-6.00000	7.0000	4.1000	7.7000	-0.27411	8.1077	298.42	*
				71.336	72.29418	23.53126	-6.00000	6.5000	3.9500	7.4000	-0.38017	7.5966	298.42	*
				72.341	72.77239	22.64762	-6.00000	5.9000	3.8000	7.1000	-0.53382	6.9975	298.42	*
				73.346	73.25060	21.76399	-6.00000	5.2000	3.6500	6.8000	-0.73507	6.3105	298.42	*
				74.350	73.72882	20.88036	-6.00000	4.6000	3.5000	6.4000	-0.88873	5.7114	298.42	*
				75.355	74.20703	19.99673	-6.00000	3.9000	3.4000	6.0545	-1.1340	5.0482	298.42	*
				76.360	74.68524	19.11309	-6.00000	3.3508	3.3000	5.7177	-1.3074	4.5176	298.42	*
				77.365	75.16345	18.22946	-6.00000	2.6709	3.1500	5.3377	-1.4991	3.8482	298.42	*
				78.369	75.64166	17.34583	-6.00000	2.0732	3.0000	4.9204	-1.6516	3.2512	298.42	*
				79.374	76.11988	16.46219	-6.00000	1.5732	2.8736	4.4713	-1.7785	2.7513	298.42	*
				80.379	76.59809	15.57856	-6.00000	1.1423	2.6750	3.9957	-1.8089	2.2778	298.42	*
				81.384	77.07630	14.69493	-6.00000	0.82230	2.5870	3.5019	-1.8838	1.9545	298.42	*
				82.388	77.55451	13.81129	-6.00000	0.59043	2.6239	3.0785	-2.0266	1.7681	298.42	*
				83.393	78.03273	12.92766	-6.00000	0.39207	2.6347	2.6202	-2.1305	1.5988	298.42	*
				84.398	78.51094	12.04403	-6.00000	0.22389	2.6222	2.2441	-2.1996	1.4450	298.42	*
				85.403	78.98915	11.16040	-6.00000	0.082700	2.5892	1.8949	-2.2378	1.3051	298.42	*
				86.407	79.46736	10.27676	-6.00000	-0.034446	2.5379	1.5882	-2.2484	1.1776	298.42	*
				87.412	79.94558	9.39313	-6.00000	-0.13023	2.4704	1.4287	-2.2346	1.0613	298.42	*
				88.417	80.42379	8.50950	-6.00000	-0.20705	2.3887	1.2694	-2.1993	0.95483	298.42	*
				89.421	80.90200	7.62586	-6.00000	-0.26701	2.2944	1.1139	-2.1449	0.85721	298.42	*
				90.426	81.38021	6.74223	-6.00000	-0.31198	2.1889	0.96510	-2.0736	0.76745	298.42	*
				91.431	81.85843	5.85860	-6.00000	-0.34361	2.0735	0.82578	-1.9871	0.68471	298.42	*
				92.436	82.33664	4.97496	-6.00000	-0.36332	1.9492	0.69805	-1.8872	0.60821	298.42	*
				93.440	82.81485	4.09133	-6.00000	-0.37237	1.8169	0.58352	-1.7751	0.53728	298.42	*
				94.445	83.29306	3.20770	-6.00000	-0.37187	1.6777	0.48325	-1.6525	0.47147	298.42	*
				95.450	83.77128	2.32407	-6.00000	-0.36276	1.5320	0.39770	-1.5200	0.41013	298.42	*
				96.455	84.24949	1.44043	-6.00000	-0.34592	1.3807	0.32669	-1.3789	0.35293	298.42	*
				97.459	84.72770	0.55680	-6.00000	-0.32208	1.2242	0.26945	-1.2299	0.29941	298.42	*

* Result includes imported displacement(s).

Displacement Results - Displacement Grids

Stage: Ref.	Stage: Name	Disp. Grid: Ref.	Disp. Grid: Name	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]

Specific Utility Damage Results - Coordinates & Displacements

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility [m]	x [m]	y [m]	z [m]	δx(n) [mm]	δy(n) [mm]	δz(n) [mm]	δH//(n) [mm]	δHperp.(n) [mm]	δx(n-Lp) [mm]	δy(n-Lp) [mm]	δz(n-Lp) [mm]	δH//(n-Lp) [mm]	δHperp.(n+Lp) [mm]	δx(n+Lp) [mm]	δy(n+Lp) [mm]	δz(n+Lp) [mm]	δH//(n+Lp) [mm]	δHperp.(n+Lp) [mm]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.72140	1.33206	1.14028	-0.51420	-1.33665	0.48784	1.18550	0.80350	-0.24190	-2.13173	1.05245	1.41609	1.14028
						6.01699	71.81116	110.28471	-0.90000	-0.24121	-2.13310	1.05350	1.41631	1.61318	-0.44168	-1.69779	0.72219	1.33224	1.14136	0.11359	-2.64491	1.46718	1.41739	1.61318
						9.02549	69.34164	108.56642	-0.90000	0.11476	-2.64640	1.46840	1.41728	2.23784	-0.24037	-2.13451	1.05462	1.41643	1.61482	0.64990	-3.19422	1.91035	1.29090	2.23784
						12.03399	66.87213	106.84812	-0.90000	0.65159	-3.19580	1.91160	1.29041	2.99542	0.11610	-2.64792	1.46965	1.41705	2.23985	1.36025	-3.75981	2.53543	1.03084	2.99542
						15.04249	64.40261	105.12983	-0.90000	1.36240	-3.76140	2.53730	1.02999	3.86567	0.65345	-3.19740	1.91299	1.28980	2.99779	2.19149	-4.29824	3.04331	0.65605	3.86567
						18.05098	61.93309	103.41154	-0.90000	2.19390	-4.29970	3.04450	0.65490	4.78244	1.36467	-3.76297	2.53897	1.02902	3.86825	3.17446	-6.07466	4.21888	0.86378	4.78244
						21.05948	59.46357	101.69324	-0.90000	3.17730	-6.08010	4.22250	0.86455	6.80554	2.19658	-4.30397	3.04732	0.65514	4.78748	3.33201	-6.37604	4.63320	0.90658	6.80554
						24.06798	56.99405	99.97495	-0.90000	3.33220	-6.37640	4.63410	0.90663	7.13723	3.17824	-6.08190	4.22418	0.86481	6.80756	3.39781	-6.50204	4.95280	0.92453	7.13723
						27.07648	54.52453	98.25666	-0.90000	3.39800	-6.50240	4.95370	0.92458	7.27824	3.33239	-6.37676	4.63500	0.90668	7.13763	3.46371	-6.62804	5.27469	0.94240	7.27824
						30.08497	52.05501	96.53836	-0.90000	3.46390	-6.62840	5.27560	0.94245	7.41930	3.39819	-6.50276	4.95461	0.92463	7.27864	3.46477	-6.63010	5.52145	0.94272	7.41930
						33.09347	49.58549	94.82007	-0.90000	3.46440	-6.62940	5.52170	0.94262	7.42041	3.46409	-6.62876	5.27651	0.94251	7.41970	2.42123	-4.57037	4.46952	0.62289	7.42041
						36.10197	47.11598	93.10178	-0.90000	2.41860	-4.56480	4.46680	0.62187	5.12838	3.46131	-6.62348	5.51864	0.94177	7.41378	2.48479	-3.45007	4.25147	-0.06914	5.12838
						39.11047	44.64646	91.38348	-0.90000	2.48490	-3.44680	4.25040	-0.07110	4.24854	2.41886	-4.56178	4.46665	0.61993	5.12605	2.46474	-2.31063	3.58675	-0.70347	4.24854
						42.11896	42.17694	89.66519	-0.90000	2.46460	-2.30750	3.58450	-0.70514	3.30175	2.48493	-3.44351	4.24890	-0.07300	4.24586	2.35927	-1.32886	2.59258	-1.17763	3.30175
						45.12746	39.70742	87.94689	-0.90000	2.35890	-1.32630	2.58960	-1.17879	2.43597	2.46438	-2.30453	3.58192	-0.70666	3.29919	2.23203	-0.60028	1.72962	-1.48931	2.43597
					2	4.01133	73.45751	111.43024	-0.90000	-0.38647	-1.81360	0.81456	1.35307	1.26796	-0.50512	-1.46012	0.55778	1.24857	0.91004	-0.14267	-2.29829	1.18458	1.42977	1.26796
						7.01983	70.98799	109.71195	-0.90000	-0.14183	-2.29970	1.18570	1.42989	1.80670	-0.38593	-1.81493	0.81553	1.35338	1.26936	0.27189	-2.82458	1.61425	1.39007	1.80670
						10.02832	68.51847	107.99365	-0.90000	0.27323	-2.82610	1.61550	1.38984	2.47585	-0.14083	-2.30115	1.18688	1.42989	1.80846	0.86883	-3.38250	2.07451	1.21873	2.47585
						13.03682	66.04895	106.27536	-0.90000	0.87069	-3.38410	2.07590	1.21811	3.27512	0.27475	-2.82765	1.61676	1.38948	2.47799	1.62823	-3.94513	2.73243	0.91672	3.27512
						16.04532	63.57943	104.55707	-0.90000	1.63050	-3.94670	2.73410	0.91575	4.17090	0.87270	-3.38570	2.07794	1.21738	3.27759	2.50791	-4.79982	3.37428	0.68279	4.17090
						19.05382	61.10991	102.83877	-0.90000	2.51060	-4.80410	3.37710	0.68303	5.37735	1.63286	-3.94823	2.73554	0.91469	4.17350	3.28736	-6.29060	4.41972	0.89443	5.37735

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
						22.06231	58.64040	101.12048	-0.90000	3.28830	-6.29240	4.42140	0.89469	7.04321	2.51340	-4.80947	3.38064	0.68379	5.38337
						25.07081	56.17088	99.40219	-0.90000	3.35410	-6.41840	4.74050	0.91264	7.18421	3.28849	-6.29276	4.42230	0.89474	7.04360
						28.07931	53.70136	97.68389	-0.90000	3.42000	-6.54440	5.06070	0.93051	7.32528	3.35429	-6.41876	4.74140	0.91269	7.18461
						31.08781	51.23184	95.96560	-0.90000	3.48580	-6.67040	5.38360	0.94847	7.46629	3.42019	-6.54476	5.06161	0.93056	7.32568
						34.09630	48.76232	94.24730	-0.90000	3.09930	-5.93080	5.16010	0.84330	6.63844	3.48599	-6.67076	5.38452	0.94852	7.46669
						37.10480	46.29280	92.52901	-0.90000	2.44980	-4.20840	4.44960	0.39270	4.85365	3.09617	-5.92481	5.15695	0.84245	6.63173
						40.11330	43.82328	90.81072	-0.90000	2.48790	-3.05870	4.07380	-0.29522	3.93168	2.44999	-4.20522	4.44898	0.39073	4.85115
						43.12180	41.35376	89.09242	-0.90000	2.43840	-1.95680	3.28010	-0.88393	2.99892	2.48784	-3.05546	4.07191	-0.29702	3.92899
				3		5.01416	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.92943	1.39046	1.43381	-0.48131	-1.58059	0.63624	1.29783	1.02253
						8.02266	70.16482	109.13918	-0.90000	-0.02342	-2.47080	1.32450	1.43041	2.01477	-0.32175	-1.97247	0.93048	1.39068	1.43533
						11.03116	67.69530	107.42089	-0.90000	0.45222	-3.00940	1.76400	1.34761	2.72854	-0.02225	-2.47229	1.32572	1.43030	2.01666
						14.03965	65.22578	105.70260	-0.90000	1.10830	-3.57320	2.31690	1.13108	3.56606	0.45391	-3.01098	1.76525	1.34712	2.73081
						17.04815	62.75626	103.98430	-0.90000	1.90900	-4.12700	2.90410	0.79012	4.47796	1.11045	-3.57480	2.31877	1.13022	3.56860
						20.05665	60.28674	102.26601	-0.90000	2.84180	-5.43800	3.79490	0.77321	6.08686	1.91141	-4.12846	2.90529	0.78898	4.48054
						23.06515	57.81722	100.54771	-0.90000	3.31020	-6.33440	4.52780	0.90070	7.09019	2.84464	-5.44344	3.79852	0.77398	6.09295
						26.07364	55.34770	98.82942	-0.90000	3.37610	-6.46040	4.84700	0.91857	7.23125	3.31039	-6.33476	4.52870	0.90075	7.09059
						29.08214	52.87819	97.11113	-0.90000	3.44190	-6.58640	5.16800	0.93653	7.37226	3.37629	-6.46076	4.84790	0.91862	7.23165
						32.09064	50.40867	95.39283	-0.90000	3.50780	-6.71240	5.49190	0.95440	7.51333	3.44209	-6.58676	5.16891	0.93658	7.37266
						35.09914	47.93915	93.67454	-0.90000	2.72950	-5.22310	4.78770	0.74265	5.84631	3.50743	-6.71170	5.49215	0.95430	7.51254
						38.10763	45.46963	91.95625	-0.90000	2.47200	-3.83290	4.37670	0.16001	4.55810	2.72686	-5.21752	4.78498	0.74163	5.84023
						41.11613	43.00011	90.23795	-0.90000	2.48120	-2.67660	3.85050	-0.50796	3.61421	2.47211	-3.82963	4.37563	0.15805	4.55548
						44.12463	40.53059	88.51966	-0.90000	2.40300	-1.62880	2.94150	-1.04221	2.70946	2.48106	-2.67347	3.84825	-0.50963	3.61156
		2	TW Main-2	1		3.00892	38.64104	83.56688	-0.90000	2.82950	-0.11082	2.75460	1.41751	2.45133	2.23357	-0.59735	1.73033	1.57000	1.69728
						6.01784	40.04419	80.90515	-0.90000	3.52670	0.63717	3.94790	1.08095	3.41689	2.83148	-0.10886	2.75838	1.41670	2.45399
						9.02675	41.44733	78.24343	-0.90000	4.38590	1.65520	4.82400	0.58106	4.65169	3.52892	0.63989	3.95086	1.07958	3.42012
						12.03567	42.85048	75.58171	-0.90000	5.53500	2.83380	5.53100	0.07432	6.21781	4.38860	1.65866	4.82578	0.57925	4.65569
						15.04459	44.25362	72.91998	-0.90000	7.46570	3.82220	6.82700	0.10031	8.38665	5.54214	2.83745	5.53577	0.07441	6.22582
						18.05351	45.65676	70.25826	-0.90000	7.48890	3.83410	6.86120	0.10060	8.41272	7.46577	3.82224	6.82710	0.10031	8.38672
						21.06242	47.05991	67.59654	-0.90000	7.51210	3.84600	6.89970	0.10089	8.43879	7.48897	3.83414	6.86131	0.10060	8.41280
						24.07134	48.46305	64.93481	-0.90000	7.53540	3.85790	6.94170	0.10123	8.46495	7.51217	3.84604	6.89982	0.10089	8.43887
						27.08026	49.86620	62.27309	-0.90000	7.55860	3.86980	6.98470	0.10152	8.49102	7.53547	3.85793	6.94183	0.10123	8.46503
						30.08918	51.26934	59.61136	-0.90000	7.58180	3.88160	7.02590	0.10190	8.51705	7.55867	3.86983	6.98482	0.10152	8.49110
				2		4.01189	39.10876	82.67964	-0.90000	3.05160	0.10905	3.17970	1.32658	2.75034	2.42147	-0.46196	2.07118	1.53785	1.92664
						7.02081	40.51190	80.01791	-0.90000	3.77620	0.94287	4.28150	0.92688	3.78016	3.05367	0.11127	3.18325	1.32558	2.75320
						10.02973	41.91505	77.35619	-0.90000	4.68920	2.04480	5.02360	0.37785	5.10167	3.77871	0.94587	4.28411	0.92539	3.78377
						13.03864	43.31819	74.69446	-0.90000	6.33760	3.24470	6.06790	0.08510	7.11941	4.69161	2.04827	5.02490	0.37591	5.10542
						16.04756	44.72134	72.03274	-0.90000	7.47340	3.82620	6.83790	0.10036	8.39532	6.34474	3.24836	6.07268	0.08520	7.12743
						19.05648	46.12448	69.37102	-0.90000	7.49670	3.83810	6.87360	0.10070	8.42148	7.47347	3.82623	6.83800	0.10036	8.39540
						22.06540	47.52762	66.70929	-0.90000	7.51990	3.85000	6.91340	0.10099	8.44756	7.49677	3.83813	6.87371	0.10070	8.42156
						25.07431	48.93077	64.04757	-0.90000	7.54310	3.86180	6.95600	0.10137	8.47358	7.51997	3.85003	6.91352	0.10099	8.44763
						28.08323	50.33391	61.38585	-0.90000	7.56630	3.87370	6.99870	0.10166	8.49965	7.54317	3.86184	6.95613	0.10137	8.47366
						31.09215	51.73706	58.72412	-0.90000	7.58950	3.88560	7.03880	0.10195	8.52573	7.56637	3.87374	6.99882	0.10166	8.49973
				3		5.01486	39.57647	81.79239	-0.90000	3.28440	0.35860	3.57900	1.21439	3.07264	2.62067	-0.29962	2.40613	1.48714	2.17856
						8.02378	40.97962	79.13067	-0.90000	4.05830	1.27990	4.57510	0.76029	4.18687	3.28655	0.36108	3.58228	1.21320	3.07570
						11.03270	42.38276	76.46895	-0.90000	4.96030	2.43490	5.16970	0.15919	5.52340	4.06121	1.28324	4.57731	0.75869	4.19101
						14.04162	43.78591	73.80722	-0.90000	7.14100	3.65600	6.60610	0.09591	8.02190	4.96541	2.43845	5.17291	0.15843	5.52958
						17.05053	45.18905	71.14550	-0.90000	7.48120	3.83010	6.84930	0.10055	8.40404	7.14388	3.65748	6.60806	0.09595	8.02515
						20.05945	46.59219	68.48378	-0.90000	7.50440	3.84200	6.88640	0.10084	8.43011	7.48127	3.83014	6.84941	0.10055	8.40412
						23.06837	47.99534	65.82205	-0.90000	7.52760	3.85390	6.92740	0.10113	8.45619	7.50447	3.84204	6.88652	0.10084	8.43019
						26.07729	49.39848	63.16033	-0.90000	7.55080	3.86580	6.97040	0.10142	8.48226	7.52767	3.85394	6.92753	0.10113	8.45626
						29.08620	50.80163	60.49861	-0.90000	7.57400	3.87770	7.01250	0.10171	8.50833	7.55087	3.86584	6.97053	0.10142	8.48234
				3	TW Main-3	1		3.98757	55.23844	52.67152	-0.90000	7.82070	4.00400	7.33890	0.71036	8.75733	7.66421	3.92385	7.14097	0.69618	8.58208
							4.98446	55.76300	51.82380	-0.90000	7.87280	4.03060	7.40340	0.71516	8.81563	7.71621	3.95045	7.20738	0.70092	8.64030
		4	TW Main-4	1		3.98331	60.26896	44.07515	-0.90000	8.23030	4.21370	7.76590	0.17791	9.24454	8.18391	4.18990	7.72964	0.17695	9.19240
						7.96662	62.15213	40.56510	-0.90000	8.29200	4.24530	7.81180	0.17924	9.31385	8.24561	4.22150	7.77735	0.17828	9.26171
						11.94993	64.03529	37.05504	-0.90000	8.35380	4.27690	7.85600	0.18061	9.38324	8.30731	4.25310	7.82286	0.17960	9.33102
						15.93324	65.91845	33.54499	-0.90000	8.41560	4.30860	7.89880	0.18189	9.45269	8.36911	4.28470	7.86666	0.18097	9.40042
						19.91656	67.80161	30.03494	-0.90000	8.47750	4.34020	7.94070	0.18331	9.52217	8.43091	4.31640	7.90927	0.18225	9.46986
						23.89987	69.68478	26.52489	-0.90000	8.53940	4.37190	7.98220	0.18464	9.59170	8.49281	4.34810	7.95097	0.18359	9.53939
						27.88318	71.56794	23.01484	-0.90000	6.47780	3.31650	6.55750	0.14000	7.27609	8.55471	4.37980	7.99247	0.18492	9.60892
						31.86649	73.45110	19.50479	-0.90000	3.79690	3.07710	5.53980	-0.91648	4.80052	5.76014	3.11566	6.19738	-0.02230	6.54874
						35.84980	75.33427	15.99473	-0.90000	1.63880	2.60100	4.03630	-1.51721	2.67375	3.17413	2.98626	5.22501	-1.13085	4.20880
						39.83311	77.21743	12.48468	-0.90000	0.54697	2.44430	2.27210	-1.89530	1.63756	1.30377	2.54699	3.58830	-1.62801	2.35299
						43.81642	79.10059	8.97463	-0.90000	0.00783	2.31010	1.32350	-2.03193	1.09903	0.37950	2.43798	1.96195	-1.96891	1.48700
						47.79973	80.98376	5.46458	-0.90000	-0.23721	1.94940	0.77057	-1.82993	0.71258	-0.07522	2.23831	1.17884	-2.00794	0.99191
				2		4.97914	60.73975	43.19764	-0.90000	8.24580	4.22160	7.77750	0.17828	9.26193	8.19931	4.19780	7.74185	0.17727	9.20971
						8.96245	62.62292	39.68758	-0.90000	8.30750	4.25320	7.82300	0.17961	9.33124	8.26101	4.22940	7.78895	0.17860	9.27902
						12.94576	64.50608	36.17753	-0.90000	8.36930	4.28480	7.86680	0.18098	9.40064	8.32271	4.26100	7.83396	0.17992	9.34833
						16.92907	66.38924	32.66748	-0.90000	8.43110	4.31650	7.90940	0.18226	9.47008	8.38451	4.29260	7.87746	0.18129	9.41772
						20.91238	68.27241	29.15743	-0.90000	8.49300	4.34820	7.95110	0.18359	9.53961	8.44641	4.32430	7.91977	0.18262	9.48725
						24.89569	70.15557	25.64738	-0.90000	8.55490	4.37990	7.99260	0.18492	9.60914	8.50831	4.35600	7.96137	0.18395	9.53961

Stage: Stage: Name Specific Specific Sub-utility Iteration δHperp.(n-Lp) δx(n+Lp) δy(n+Lp) δz(n+Lp) δH//(n+Lp) δHperp.(n+Lp) Ref. Utility: Utility: Name	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)
9.55679 6.46866 3.31394 6.55291 0.13793 9.60914	28.87900	72.03873	22.13732	-0.90000	5.75100	3.11310	6.19280	-0.02437	6.53948	8.16427	4.17985	7.72264	0.17653
9.17035 3.78897 3.07594 5.53579 -0.91920 6.53948	32.86232	73.92189	18.62727	-0.90000	3.16620	2.98510	5.22100	-1.13358	4.20127	5.12566	3.14164	6.03293	-0.34515
6.00193 1.63454 2.60031 4.03060 -1.51862 4.20127	36.84563	75.80506	15.11722	-0.90000	1.29950	2.54630	3.58260	-1.62942	2.34890	2.61235	2.88804	4.86513	-1.30988
3.66733 0.54484 2.44422 2.26815 -1.89624 2.34890	40.82894	77.68822	11.60717	-0.90000	0.37737	2.43790	1.95800	-1.96985	1.48508	1.00386	2.48389	3.11357	-1.71419
2.05889 0.00677 2.30919 1.32166 -2.03163 1.48508	44.81225	79.57138	8.09712	-0.90000	-0.07627	2.23740	1.17700	-2.00763	0.99055	0.23435	2.41242	1.63165	-2.01501
1.34701 -0.23756 1.94795 0.76910 -1.82883 0.99055	48.79556	81.45455	4.58706	-0.90000	-0.26534	1.83410	0.65392	-1.74163	0.63328	-0.14322	2.15327	1.03609	-1.96515
0.89179 -0.28961 1.44100 0.37958 -1.40671 0.63328													
3	5.97497	61.21054	42.32012	-0.90000	8.26120	4.22950	7.78910	0.17860	9.27923	8.21471	4.20570	7.75385	0.17759
9.22701 8.30769 4.25330 7.82314 0.17961 9.27923	9.95828	63.09371	38.81007	-0.90000	8.32290	4.26110	7.83410	0.17992	9.34854	8.27641	4.23730	7.80036	0.17892
9.29632 8.36949 4.28490 7.86694 0.18098 9.34854	13.94159	64.97687	35.30002	-0.90000	8.38470	4.29270	7.87760	0.18130	9.41794	8.33821	4.26890	7.84496	0.18029
9.36572 8.43129 4.31660 7.90953 0.18226 9.41794	17.92490	66.86003	31.78997	-0.90000	8.44660	4.32440	7.91990	0.18263	9.48747	8.40001	4.30050	7.88807	0.18166
9.43512 8.49319 4.34830 7.95123 0.18359 9.48747	21.90821	68.74320	28.27991	-0.90000	8.50850	4.35610	7.96150	0.18396	9.55700	8.46181	4.33220	7.93017	0.18294
9.50456 8.54993 4.37735 7.98916 0.18481 9.55700	25.89152	70.62636	24.76986	-0.90000	8.15930	4.17730	7.71920	0.17642	9.16476	8.52381	4.36390	7.97167	0.18432
9.57418 5.74304 3.11346 6.19077 -0.02845 9.16476	29.87483	72.50952	21.25981	-0.90000	5.11770	3.14200	6.03090	-0.34924	5.99509	7.32976	3.75261	7.14629	0.15848
8.23300 3.15915 2.98386 5.21647 -1.13582 5.99509	33.85814	74.39269	17.74976	-0.90000	2.60530	2.88680	4.86060	-1.31213	3.66054	4.46530	3.13104	5.81426	-0.64801
5.41502 1.29574 2.54551 3.57663 -1.63050 3.66054	37.84145	76.27585	14.23971	-0.90000	1.00010	2.48310	3.10760	-1.71527	2.05520	2.09973	2.75794	4.46898	-1.43759
3.15412 0.37555 2.43758 1.95385 -1.97042 2.05520	41.82477	78.15901	10.72966	-0.90000	0.23253	2.41210	1.62750	-2.01559	1.34525	0.74700	2.42978	2.63472	-1.78794
1.80696 -0.07713 2.23633 1.17521 -2.00709 1.34525	45.80808	80.04217	7.21960	-0.90000	-0.14407	2.15220	1.03430	-1.96461	0.89053	0.11163	2.36944	1.47257	-2.03515
1.21855 -0.26556 1.83255 0.65261 -1.74037 0.89053	49.79139	81.92534	3.70955	-0.90000	-0.28280	1.71070	0.54950	-1.64115	0.55956	-0.19655	2.05701	0.89970	-1.90554
0.79928 -0.28072 1.29773 0.31522 -1.27626 0.55956													
4	6.97079	61.68134	41.44261	-0.90000	8.27660	4.23740	7.80050	0.17892	9.29654	8.23011	4.21360	7.76575	0.17791
9.24432 8.32309 4.26120 7.83424 0.17993 9.29654	10.95411	63.56450	37.93256	-0.90000	8.33840	4.26900	7.84510	0.18029	9.36594	8.29181	4.24520	7.81166	0.17923
9.31363 8.38489 4.29280 7.87773 0.18130 9.36594	14.93742	65.44766	34.42251	-0.90000	8.40020	4.30060	7.88820	0.18166	9.43533	8.35361	4.27680	7.85586	0.18061
9.38302 8.44679 4.32450 7.92003 0.18263 9.43533	18.92073	67.33082	30.91245	-0.90000	8.46200	4.33230	7.93030	0.18295	9.50478	8.41541	4.30850	7.89867	0.18189
9.45247 8.50869 4.35620 7.96163 0.18396 9.50478	22.90404	69.21399	27.40240	-0.90000	8.52400	4.36400	7.97180	0.18432	9.57440	8.47731	4.34010	7.94057	0.18331
9.52195 8.14874 4.17189 7.71191 0.17620 9.57440	26.88735	71.09715	23.89235	-0.90000	7.31920	3.74720	7.13900	0.15826	8.22114	8.53921	4.37180	7.98207	0.18464
9.59149 5.10940 3.14186 6.02814 -0.35304 8.22114	30.87066	72.98031	20.38230	-0.90000	4.45700	3.13090	5.81150	-0.65181	5.40763	6.48837	3.32191	6.56481	0.14023
7.28796 2.59887 2.88516 4.85562 -1.31372 5.40763	34.85397	74.86348	16.87225	-0.90000	2.09330	2.75630	4.46400	-1.43919	3.14767	3.80519	3.07778	5.54321	-0.91315
4.80816 0.99688 2.48242 3.10158 -1.71620 3.14767	38.83728	76.74664	13.36219	-0.90000	0.74378	2.42910	2.62870	-1.78887	1.80380	1.64451	2.60295	4.04168	-1.51623
2.67971 0.23099 2.41156 1.62553 -2.01583 1.80380	42.82059	78.62980	9.85214	-0.90000	0.11009	2.36890	1.47060	-2.03540	1.21694	0.54944	2.44411	2.27658	-1.89397
1.63965 -0.14474 2.15099 1.03259 -1.96386 1.21694	46.80390	80.51296	6.34209	-0.90000	-0.19722	2.05580	0.89799	-1.90479	0.79812	0.00912	2.31084	1.32535	-2.03198
1.10051 -0.28290 1.70906 0.54835 -1.63975 0.79812													
5 TW Foul-1 1 1	1.00444	75.64700	113.52870	-6.00000	-0.45521	-1.41290	0.47918	1.20113	0.87223	-0.46409	-1.28905	0.41611	1.13523
0.76700 -0.43207 -1.53386 0.55067 1.25381 0.87223	2.00887	74.83600	112.93610	-6.00000	-0.43197	-1.53440	0.55099	1.25405	0.98405	-0.45511	-1.41344	0.47950	1.20136
0.87273 -0.39354 -1.65218 0.63006 1.29251 0.98405	3.01331	74.02501	112.34351	-6.00000	-0.39337	-1.65270	0.63041	1.29268	1.10234	-0.43180	-1.53492	0.55134	1.25422
0.98457 -0.34326 -1.78870 0.72314 1.33245 1.10234	4.01774	73.21401	111.75091	-6.00000	-0.34304	-1.78930	0.72355	1.33263	1.24232	-0.39315	-1.65330	0.63082	1.29285
1.10296 -0.28093 -1.94660 0.83173 1.37528 1.24232	5.02218	72.40301	111.15831	-6.00000	-0.28065	-1.94730	0.83221	1.37547	1.40670	-0.34276	-1.79000	0.72403	1.33282
1.24305 -0.20183 -2.10908 0.94971 1.40728 1.40670	6.02661	71.59201	110.56571	-6.00000	-0.20148	-2.10980	0.95023	1.40742	1.58462	-0.28030	-1.94802	0.83273	1.37561
1.40749 -0.10501 -2.27606 1.07594 1.42762 1.58462	7.03105	70.78101	109.97311	-6.00000	-0.10458	-2.27680	1.07650	1.42771	1.77663	-0.20105	-2.11054	0.95079	1.40751
1.58547 0.01043 -2.44754 1.20911 1.43558 1.77663	8.03548	69.97002	109.38052	-6.00000	0.01094	-2.44830	1.20970	1.43561	1.98326	-0.10407	-2.27756	1.07709	1.42774
1.77754 0.14527 -2.62342 1.34749 1.43047 1.98326	9.03992	69.15902	108.78792	-6.00000	0.14587	-2.62420	1.34810	1.43045	2.20488	0.01154	-2.44908	1.21031	1.43559
1.98424 0.30010 -2.80340 1.48947 1.41165 2.20488	10.04435	68.34802	108.19532	-6.00000	0.30078	-2.80420	1.49010	1.41157	2.44161	0.14655	-2.62499	1.34873	1.43037
2.20593 0.47522 -2.98709 1.63307 1.37863 2.44161	11.04879	67.53702	107.60272	-6.00000	0.47599	-2.98790	1.63370	1.37848	2.69331	0.30155	-2.80501	1.49073	1.41142
2.44272 0.67060 -3.17398 1.77607 1.33113 2.69331	12.05322	66.72603	107.01013	-6.00000	0.67146	-3.17480	1.77670	1.33092	2.95954	0.47685	-2.98872	1.63433	1.37827
2.69448 0.88574 -3.36297 1.91658 1.26893 2.95954	13.05766	65.91503	106.41753	-6.00000	0.88669	-3.36380	1.91720	1.26865	3.23912	0.67241	-3.17564	1.77732	1.33065
2.96077 1.11957 -3.55306 2.13613 1.19228 3.23912	14.06209	65.10403	105.82493	-6.00000	1.12060	-3.55390	2.13710	1.19194	3.53061	0.88772	-3.36464	1.91817	1.26831
3.24041 1.37039 -3.74266 2.35712 1.10162 3.53061	15.06653	64.29303	105.23233	-6.00000	1.37150	-3.74350	2.35810	1.10122	3.83172	1.12171	-3.55474	2.13808	1.19154
3.53194 1.63573 -3.92997 2.55513 0.99790 3.83172	16.07096	63.48203	104.63973	-6.00000	1.63690	-3.93080	2.55600	0.99744	4.13953	1.37267	-3.74433	2.35897	1.10076
3.83308 1.91248 -4.11269 2.72694 0.88224 4.13953	17.07540	62.67104	104.04714	-6.00000	1.91370	-4.11350	2.72770	0.88173	4.45036	1.63812	-3.93161	2.55676	0.99693
4.14091 2.19655 -4.49829 2.99880 0.88038 4.45036	18.07983	61.86004	103.45454	-6.00000	2.19780	-4.50000	3.00000	0.88037	4.93004	1.91496	-4.11521	2.72890	0.88173
4.45248 2.51609 -4.89823 3.29868 0.85833 4.93004	19.08427	61.04904	102.86194	-6.00000	2.51750	-4.90000	3.30000	0.85824	5.44162	2.19921	-4.50177	3.00133	0.88028
4.93230 2.84963 -5.45324 3.63850 0.91648 5.44162	20.08870	60.23804	102.26934	-6.00000	2.85110	-5.45570	3.64000	0.91673	6.08712	2.51897	-4.90245	3.30150	0.85849
5.44447 3.09890 -5.79848 3.89885 0.91889 6.08712	21.09314	59.42704	101.67674	-6.00000	3.10000	-5.80000	3.90000	0.91890	6.51196	2.85220	-5.45722	3.64115	0.91674
6.08899 3.24934 -6.09868 4.14890 0.97453 6.51196	22.09757	58.61605	101.08415	-6.00000	3.25000	-6.10000	4.15000	0.97478	6.84268	3.10066	-5.80132	3.90110	0.91915
6.51342 3.31760 -6.29912 4.38795 1.03767 6.84268	23.10201	57.80505	100.49155	-6.00000	3.31790	-6.30000	4.38900	1.03795	7.04423	3.25030	-6.10088	4.15106	0.97506
6.84357 3.34379 -6.39956 4.50787 1.07579 7.04423	24.10644	56.99405	99.89895	-6.00000	3.34390	-6.40000	4.50840	1.07596	7.14031	3.31801	-6.30044	4.38953	1.03812
7.04465 3.36979 -6.44829 4.62787 1.08355 7.14031	25.11088	56.18305	99.30635	-6.00000	3.36990	-6.44850	4.62840	1.08358	7.19481	3.34401	-6.40021	4.50893	1.07599
7.14055 3.39579 -6.49798 4.74867 1.09187 7.19481	26.11531	55.37206	98.71376	-6.00000	3.39590	-6.49820	4.74920	1.09191	7.25027	3.37001	-6.44872	4.62893	1.08362
7.19505 3.42169 -6.54778 4.87046 1.10034 7.25027	27.11975	54.56106	98.12116	-6.00000	3.42180	-6.54800	4.87100	1.10038	7.30576	3.39601	-6.49842	4.74974	1.09195
7.25052 3.44769 -6.59748 4.99356 1.10867 7.30576	28.12418	53.75006	97.52856	-6.00000	3.44780	-6.59770	4.99410	1.10871	7.36123	3.42191	-6.54822	4.87154	1.10041
7.30601 3.47369 -6.64718 5.11785 1.11700 7.36123	29.12862	52.93906	96.93596	-6.00000	3.47380	-6.64740	5.11840	1.11704	7.41670	3.44791	-6.59792	4.99465	1.10874
7.36148 3.49969 -6.64999 5.24354 1.09766 7.41670	30.13305	52.12806	96.34336	-6.00000	3.49980	-6.65000	5.24410	1.09758	7.43414	3.47391	-6.64741	5.11895	1.11695
7.41678 3.52569 -6.60022 5.28980 1.04731 7.43414	31.13749	51.31707	95.75077	-6.00000	3.52580	-6.60000	5.29000	1.04709	7.40911	3.49991	-6.64978	5.24430	1.09735
7.43403 3.50011 -6.50044 5.29996 1.00909 7.40911	32.14192	50.50607	95.15817	-6.00000	3.50000	-6.50000	5.30000	1.00892	7.31314	3.52569	-6.59956	5.29004	1.04692
7.40868 3.35066 -6.30088 5.25022 1.01202 7.31314	33.14636	49.69507	94.56557	-6.00000	3.35000	-6.30000	5.25000	1.01204	7.06316	3.49934	-6.49912	5.29978	1.00893
7.31204 3.10110 -5.90177 5.10066 0.97805 7.06316	34.15079	48.88407	93.97297	-6.00000	3.10000	-5.90000	5.10000	0.97790	6.59270	3.34890	-6.29823	5.24934	1.01188
7.06109 2.90088 -5.40221 4.90088 0.84498 6.59270	35.15523	48.07307	93.38037	-6.00000	2.90000	-5.40000	4.90000	0.84439	6.07100	3.09912	-5.89779	5.09912	0.97731
6.59040 2.70088 -4.80265 4.70088 0.65273 6.07100	36.15966	47.26208	92.78778	-6.00000	2.70000	-4.80000	4.70000	0.65188	5.46855	2.89912	-5.39735	4.89912	0.84354
6.06834 2.60044 -4.27991 4.52050 0.42542 5.46855	37.16410	46.45108	92.19518	-6.00000	2.60000	-4.27760	4.51970	0.42442	4.98776	2.69956	-4.79769	4.69920	0.65088
5.46642 2.53150 -3.89201 4.46235 0.25223 4.98776	38.16853	45.64008	91.60258	-6.00000	2.53120	-3.89030	4.46210	0.25147	4.63446	2.59970	-4.27589	4.51945	0.42366
4.98620 2.53548 -3.47216 4.35040 0.00132 4.63446	39.17297	44.82908	91.00998	-6.00000	2.53550	-3.47030	4.34990	0.00021	4.29788	2.53122	-3.88845	4.46160	0.25036
4.63297 2.54127 -3.06599 4.18672 -0.24299 4.29788	40.17740	44.01809	90.41739	-6.00000	2.54130	-3.06420	4.18600	-0.24407	3.97340	2.53553	-3.46851	4.34918	-0.00087
4.29645 2.53692 -2.66567 3.97474 -0.47566 3.97340	41.18184	43.20709	89.82479	-6.00000	2.53690	-2.66390	3.97380	-0.47669	3.64760	2.54128	-3.06243	4.18506	-0.24510
3.97197 2.52226 -2.27891 3.71853 -0.69201 3.64760													

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
						42.18627	42.39609	89.23219	-6.00000	2.52220	-2.27720	3.71740	-0.69296	3.32670	2.53684	-2.66219	3.97267	-0.47764	3.64618	2.49771	-1.91202	3.42241	-0.88864	3.32670
						43.19071	41.58509	88.63959	-6.00000	2.49760	-1.91040	3.42110	-0.88950	3.01603	2.52209	-2.27558	3.71609	-0.69383	3.32533	2.46345	-1.56941	3.09077	-1.06311	3.01603
						44.19514	40.77409	88.04699	-6.00000	2.46330	-1.56790	3.08930	-1.06388	2.71925	2.49745	-1.90889	3.41964	-0.89027	3.01472	2.42019	-1.25429	2.72800	-1.21410	2.71925
						45.19958	39.96310	87.45440	-6.00000	2.42000	-1.25290	2.72640	-1.21476	2.43937	2.46311	-1.56651	3.08770	-1.06454	2.71802	2.36843	-0.96833	2.37336	-1.34101	2.43937
						1.00474	38.81931	85.38557	-6.00000	2.51860	-0.56699	2.43390	1.69740	1.94517	2.32044	-0.71365	2.08465	1.73206		6		TW Foul-2	1	1
						2.00947	39.29752	84.50193	-6.00000	2.73180	-0.38838	2.90130	1.64179	2.21768	2.51961	-0.56615	2.43610	1.69714	1.70109	2.73079	-0.38922	2.89910	1.64205	1.94517
						3.01421	39.77574	83.61830	-6.00000	2.95940	-0.17632	3.35930	1.56362	2.51878	2.73287	-0.38738	2.90346	1.64142	1.94645	2.95833	-0.17732	3.35714	1.56399	2.21768
						4.01894	40.25395	82.73467	-6.00000	3.20160	0.07091	3.79380	1.46147	2.84945	2.96054	-0.17516	3.36135	1.56314	2.21910	3.20046	0.06974	3.79175	1.46195	2.51878
						5.02368	40.73216	81.85104	-6.00000	3.48280	0.35522	4.20010	1.34526	3.23208	3.20293	0.07225	3.79572	1.46092	2.52033	3.48148	0.35388	4.19819	1.34581	2.84945
						6.02842	41.21037	80.96740	-6.00000	3.87930	0.69155	4.57340	1.23819	3.74087	3.48467	0.35681	4.20186	1.34476	2.85126	3.87743	0.68996	4.57164	1.23869	3.23208
						7.03315	41.68859	80.08377	-6.00000	4.27370	1.07940	4.90840	1.08481	4.27233	3.88116	0.69338	4.57498	1.23747	3.23448	4.27184	1.07757	4.90682	1.08553	3.74087
						8.03789	42.16680	79.20014	-6.00000	4.65990	1.51100	5.20010	0.88904	4.81741	4.27552	1.08143	4.90977	1.08388	3.74337	4.65808	1.50897	5.19873	0.88996	4.27233
						9.04262	42.64501	78.31650	-6.00000	5.03710	1.97730	5.44350	0.65848	5.37108	4.66168	1.51320	5.20125	0.88795	4.27490	5.03532	1.97510	5.44235	0.65956	4.81741
						10.04736	43.12322	77.43287	-6.00000	5.40380	2.40000	5.70000	0.46126	5.89477	5.03883	1.97929	5.44471	0.65755	4.82002	5.40207	2.39801	5.69879	0.46219	5.37108
						11.05210	43.60144	76.54924	-6.00000	6.00000	2.70000	6.00000	0.48119	6.56189	5.40661	2.40141	5.70141	0.46135	5.37355	5.99719	2.69859	5.99859	0.48109	5.89477
						12.05683	44.07965	75.66560	-6.00000	6.50000	3.00000	6.40000	0.45533	7.14441	6.00236	2.70141	6.00189	0.48106	5.89791	6.49764	2.99858	6.39811	0.45545	6.56189
						13.06157	44.55786	74.78197	-6.00000	7.00000	3.25000	6.70000	0.47344	7.70314	6.50235	3.00118	6.40141	0.45541	6.56464	6.99764	3.24882	6.69859	0.47335	7.14441
						14.06630	45.03607	73.89834	-6.00000	7.45000	3.45000	7.00000	0.51172	8.19409	7.00212	3.25094	6.70141	0.47362	7.14705	7.44788	3.44906	6.99859	0.51154	7.70314
						15.07104	45.51429	73.01471	-6.00000	7.80000	3.65000	7.20000	0.50242	8.59710	7.45165	3.45094	7.00094	0.51168	7.70545	7.79835	3.64906	7.19906	0.50246	8.19409
						16.07578	45.99250	72.13107	-6.00000	8.00000	3.85000	7.30000	0.42171	8.86818	7.80094	3.65094	7.20047	0.50204	8.19599	7.99906	3.84906	7.29953	0.42210	8.59710
						17.08051	46.47071	71.24744	-6.00000	8.20000	4.00000	7.40000	0.38499	9.11547	8.00094	3.85071	7.30047	0.42154	8.59838	8.19906	3.99929	7.39953	0.38516	8.86818
						18.08525	46.94892	70.36381	-6.00000	8.30000	4.10000	7.50000	0.34464	9.25101	8.20047	4.00047	7.40047	0.38480	8.86935	8.29953	4.09953	7.49953	0.34483	9.11547
						19.08998	47.42714	69.48017	-6.00000	8.34850	4.15000	7.56510	0.32375	9.31746	8.30023	4.10024	7.50031	0.34454	9.11611	8.34827	4.14976	7.56479	0.32384	9.25101
						20.09472	47.90535	68.59654	-6.00000	8.36700	4.20000	7.58600	0.28858	9.35753	8.34859	4.15024	7.56520	0.32358	9.25133	8.36691	4.19976	7.58590	0.28874	9.31746
						21.09945	48.38356	67.71291	-6.00000	8.38550	4.25000	7.60890	0.25341	9.39760	8.36709	4.20024	7.58611	0.28841	9.31765	8.38541	4.24976	7.60879	0.25358	9.35753
						22.10419	48.86177	66.82927	-6.00000	8.40410	4.28000	7.63360	0.23588	9.42824	8.38559	4.25014	7.60902	0.25333	9.35772	8.40401	4.27986	7.63348	0.23596	9.39760
						23.10893	49.33998	65.94564	-6.00000	8.42260	4.31210	7.66000	0.21645	9.45979	8.40419	4.28015	7.63372	0.23579	9.39774	8.42251	4.31195	7.65988	0.21654	9.42824
						24.11366	49.81820	65.06201	-6.00000	8.44110	4.32160	7.68770	0.21690	9.48058	8.42269	4.31214	7.66013	0.21645	9.42839	8.44101	4.32156	7.68757	0.21690	9.45979
						25.11840	50.29641	64.17838	-6.00000	8.45970	4.33110	7.71640	0.21740	9.50146	8.44119	4.32164	7.68784	0.21691	9.45988	8.45961	4.33106	7.71626	0.21740	9.48058
						26.12313	50.77462	63.29474	-6.00000	8.47830	4.34060	7.74580	0.21790	9.52234	8.45979	4.33114	7.71654	0.21740	9.48068	8.47821	4.34056	7.74566	0.21790	9.50146
						27.12787	51.25283	62.41111	-6.00000	8.49680	4.35010	7.77560	0.21835	9.54313	8.47839	4.34064	7.74594	0.21790	9.50156	8.49671	4.35006	7.77546	0.21835	9.52234
						28.13261	51.73105	61.52748	-6.00000	8.51540	4.35960	7.80540	0.21885	9.56401	8.49689	4.35014	7.77574	0.21835	9.52243	8.51531	4.35956	7.80526	0.21884	9.54313
						29.13734	52.20926	60.64384	-6.00000	8.53400	4.36910	7.83500	0.21934	9.58489	8.51549	4.35964	7.80554	0.21885	9.54323	8.53391	4.36906	7.83486	0.21934	9.56401
						30.14208	52.68747	59.76021	-6.00000	8.55250	4.37870	7.86400	0.21971	9.60573	8.53409	4.36915	7.83514	0.21935	9.56411	8.55241	4.37865	7.86386	0.21971	9.58489
						31.14681	53.16568	58.87658	-6.00000	8.57110	4.38820	7.89250	0.22020	9.62661	8.55259	4.37874	7.86413	0.21971	9.58499	8.57101	4.38816	7.89237	0.22020	9.60573
						32.15155	53.64390	57.99294	-6.00000	8.58970	4.39770	7.92010	0.22070	9.64749	8.57119	4.38824	7.89263	0.22021	9.60583	8.58961	4.39766	7.91997	0.22070	9.62661
						33.15629	54.12211	57.10931	-6.00000	8.60830	4.40720	7.94690	0.22120	9.66837	8.58979	4.39774	7.92023	0.22071	9.62671	8.60821	4.40716	7.94677	0.22120	9.64749
						34.16102	54.60032	56.22568	-6.00000	8.62690	4.41670	7.97270	0.22170	9.68925	8.60839	4.40724	7.94702	0.22120	9.64759	8.62681	4.41666	7.97258	0.22170	9.66837
						35.16576	55.07853	55.34205	-6.00000	8.64560	4.42630	7.99770	0.22216	9.71026	8.62699	4.41675	7.97282	0.22170	9.66846	8.64551	4.42625	7.99758	0.22215	9.68925
						36.17049	55.55675	54.45841	-6.00000	8.66420	4.43580	8.02180	0.22265	9.73114	8.64569	4.42634	7.99781	0.22216	9.68935	8.66411	4.43576	8.02169	0.22265	9.71026
						37.17523	56.03496	53.57478	-6.00000	8.68280	4.44530	8.04500	0.22315	9.75202	8.66429	4.43584	8.02191	0.22266	9.71036	8.68271	4.44526	8.04489	0.22315	9.73114
						38.17997	56.51317	52.69115	-6.00000	8.70150	4.45490	8.06760	0.22361	9.77304	8.68289	4.44535	8.04511	0.22315	9.73124	8.70141	4.45485	8.06749	0.22361	9.75202
						39.18470	56.99138	51.80751	-6.00000	8.72010	4.46440	8.08940	0.22411	9.79392	8.70159	4.45494	8.06770	0.22361	9.75212	8.72001	4.46436	8.08930	0.22410	9.77304
						40.18944	57.46959	50.92388	-6.00000	8.73880	4.47400	8.11070	0.22456	9.81493	8.72019	4.46445	8.08950	0.22411	9.77313	8.73871	4.47395	8.11060	0.22456	9.79392
						41.19417	57.94781	50.04025	-6.00000	8.75740	4.48350	8.13140	0.22506	9.83581	8.73889	4.47404	8.11080	0.22457	9.79401	8.75731	4.48346	8.13130	0.22506	9.81493
						42.19891	58.42602	49.15661	-6.00000	8.77610	4.49310	8.15170	0.22552	9.85683	8.75749	4.48355	8.13150	0.22506	9.81503	8.77601	4.49305	8.15160	0.22552	9.83581
						43.20365	58.90423	48.27298	-6.00000	8.79480	4.50270	8.17170	0.22598	9.87784	8.77619	4.49315	8.15179	0.22552	9.83591	8.79471	4.50265	8.17161	0.22598	9.85683
						44.20838	59.38244	47.38935	-6.00000	8.81350	4.51220	8.19130	0.22652	9.89881	8.79489	4.50274	8.17179	0.22598	9.85693	8.81341	4.51216	8.19121	0.22652	9.87784
						45.21312	59.86066	46.50572	-6.00000	8.83220	4.52180	8.21070	0.22698	9.91982	8.81359	4.51225	8.19139	0.22653	9.87794	8.83211	4.52175	8.21061	0.22698	9.89881
						46.21785	60.33887	45.62208	-6.00000	8.85090	4.53140	8.22990	0.22744	9.94084	8.83229	4.52185	8.21079	0.22698	9.89891	8.85081	4.53135	8.22981	0.22744	9.91982
						47.22259	60.81708	44.73845	-6.00000	8.86960	4.54100	8.24890	0.22790	9.96185	8.85099	4.53145	8.22999	0.22744	9.91992	8.86951	4.54095	8.24881	0.22789	9.94084
						48.22733	61.29529	43.85482	-6.00000	8.88830	4.55060	8.26780	0.22835	9.98287	8.86969	4.54105	8.24899	0.22790	9.94094	8.88821	4.55055	8.26771	0.22835	9.96185
						49.23206	61.77351	42.97118	-6.00000	8.90700	4.56010	8.28650	0.22890	10.00384	8.88839	4.55064	8.26789	0.22836	9.96195	8.90691	4.56006	8.28641	0.22890	9.98287
						50.23680	62.25172	42.08755	-6.00000	8.92580	4.56970	8.30500	0.22940	10.02494	8.90709	4.56015	8.28659	0.22890	9.98297	8.92571	4.56965	8.30491	0.22940	10.00384
						51.24153	62.72993	41.20392	-6.00000	8.94450	4.57930	8.32350	0.22986	10.04596	8.92589	4.56975	8.30509	0.22941	10.00394	8.94441	4.57925	8.32341	0.22986	10.02494
						52.24627	63.20814	40.32028	-6.00000	8.96330	4.58890	8.34180	0.23037	10.06706	8.94459	4.57935	8.32359	0.22986	10.02504	8.96321	4.58885	8.34171	0.23036	10.04596
						53.25101	63.68636	39.43665	-6.00000	8.98210	4.59860	8.35990	0.23078	10.08821	8.96339	4.58895	8.34189	0.23037	10.04606	8.98201	4.59855	8.35981	0.23078	10.06706
						54.25574	64.16457	38.55302	-6.00000	9.00090	4.60820	8.37790	0.23129	10.10931	8.98219	4.59865	8.35998	0.23079	10.06716	9.00081	4.60815	8.37782	0.23129	10.08821
						55.26048	64.64278	37.66939	-6.00000	9.01960	4.61780	8.39560	0.23175	10.13033	9.00099	4.60825	8.37798	0.23129	10.08831	9.01951	4.61775	8.39552	0.23174	10.10931
						56.26521	65.12099	36.78575	-6.00000	9.03840	4.62740	8.41320	0.23225	10.15143	9.01969	4.61785	8.39568	0.23175	10.10941	9.03831	4.62735	8.41312	0.23225	10.13033
						57.26995	65.59921	35.90212	-6.00000	9.05730	4.63700	8.43060	0.23280	10.17262	9.03849	4.62745	8.41328	0.23225	10.13043	9.05721	4.63695	8.43052	0.23280	10.15143
						58.27469	66.07742	35.01849	-6.00000	9.07610	4.64670	8.44770	0.23322	10.19377	9.05739	4.63705	8.43068	0.23281	10.15153	9.07601	4.64665	8.44762	0.23322	10.17262
						59.27942	66.55563	34.13485	-6.00000	9.09490	4.65630	8.46460	0.23373	10.21488	9.07619	4.64675	8.44778	0.23322	10.17272	9.09481	4.65625	8.46452	0.23372	10.19377
						60.28416	67.03384	33.25122	-6.00000	9.11380	4.66600	8.48130	0.23419	10.23612	9.09499	4.65635	8.46468	0.23373	10.19387	9.11371	4.66595	8.48122	0.23419	10.21488
						61.28889	67.51205	32.36759	-6.00000	9.13260	4.67560	8.49770	0.23470	10.25722	9.11389	4.66605	8.48138	0.23419	10.21498	9.13251	4.67555	8.49762	0.23469	10.23612
						62.29363	67.99027	31.48395	-6.00000	9.10000	4.68530	8.48000	0.21065	10.23316	9.13245	4.67565	8.49762	0.23458	10.23622	9.10015	4.68525	8.48008	0.21076	10.25722
						63.29836	68.46848	30.60032	-6.00000	9.05000	4.65000	8.45000	0.21790	10.17239	9.09976	4.68513	8.47986	0.21068	10.25711	9.05024	4.65017	8.45014	0.21786	10.23316
						64.30310	68.94669	29.71669	-6.00000	9.00000	4.60000	8.40000	0.23807	10.10462	9.04976	4.64976	8.44976	0.21799	10.23288	9.00024	4.60024	8.40024	0.23798	10.17239
						65.30784	69.42490	28.83306	-6.00000	8.90000	4.55000	8.37000	0.23445	9.99287	8.99953	4.59976	8.39986	0.23806	10.17207	8.90047	4.55024	8.37014	0.23447	10.10462
						66.31257	69.90312	27.94942	-6.00000	8.70000	4.50000	8.34000	0.18323	9.79318	8.89906	4.54976	8.36986	0.23421	10.10409	8.70094	4.50024	8.34014	0.18347	9.99287
						67.31731	70.38133	27.06579	-6.00000	8.40000	4.40000	8.25000	0.12839	9.48175	8.69859	4.49953	8.33958	0.18297	9.99193	8.40141	4.40047	8.25042	0.12865	9.79318

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00526	0.00526	1.36707	1.36707	0.00526	0.00526	0.09537	0.09537
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00545	0.00545	1.42120	1.42120	0.00545	0.00545	0.04153	0.04153
						9.02549	69.34164	108.56642	-0.90000	1.42137	1.42137	0.00428	0.00428	1.36601	1.36601	0.00428	0.00428	-0.05537	-0.05537
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00677	0.00677	1.17979	1.17979	0.00677	0.00677	-0.17190	-0.17190
						15.04249	64.40261	105.12983	-0.90000	1.15029	1.15029	0.00402	0.00402	0.86726	0.86726	0.00402	0.00402	-0.28303	-0.28303
						18.05098	61.93309	103.41154	-0.90000	0.82468	0.82468	0.04084	0.04084	0.73390	0.73390	0.04084	0.04084	-0.09078	-0.09078
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05864	0.05864	0.88861	0.88861	0.05864	0.05864	0.12431	0.12431
						24.06798	56.99405	99.97495	-0.90000	0.89071	0.89071	0.00665	0.00665	0.91460	0.91460	0.00665	0.00665	0.02389	0.02389
						27.07648	54.52453	98.25666	-0.90000	0.91661	0.91661	0.00007	0.00007	0.93250	0.93250	0.00007	0.00007	0.01589	0.01589
						30.08497	52.05501	96.53836	-0.90000	0.93454	0.93454	0.00500	0.00500	0.94455	0.94455	0.00500	0.00500	0.01001	0.01001
						33.09347	49.58549	94.82007	-0.90000	0.94651	0.94651	0.08325	0.08325	0.80294	0.80294	0.08325	0.08325	-0.14357	-0.14357
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05187	0.05187	0.31514	0.31514	0.05187	0.05187	-0.45362	-0.45362
						39.11047	44.64646	91.38348	-0.90000	0.23628	0.23628	0.01432	0.01432	-0.35660	-0.35660	0.01432	0.01432	-0.59288	-0.59288
						42.11896	42.17694	89.66519	-0.90000	-0.42870	-0.42870	0.01068	0.01068	-0.92223	-0.92223	0.01068	0.01068	-0.49354	-0.49354
						45.12746	39.70742	87.94689	-0.90000	-0.97589	-0.97589	0.00746	0.00746	-1.32049	-1.32049	0.00746	0.00746	-0.34460	-0.34460
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00671	0.00671	1.39110	1.39110	0.00671	0.00671	0.07987	0.07987
						7.01983	70.98799	109.71195	-0.90000	1.39986	1.39986	0.00451	0.00451	1.41679	1.41679	0.00451	0.00451	0.01693	0.01693
						10.02832	68.51847	107.99365	-0.90000	1.41234	1.41234	0.00421	0.00421	1.31872	1.31872	0.00421	0.00421	-0.09361	-0.09361
						13.03682	66.04895	106.27536	-0.90000	1.29934	1.29934	0.00695	0.00695	1.08864	1.08864	0.00695	0.00695	-0.21070	-0.21070
						16.04532	63.57943	104.55707	-0.90000	1.05437	1.05437	0.00977	0.00977	0.79622	0.79622	0.00977	0.00977	-0.25815	-0.25815
						19.05382	61.10991	102.83877	-0.90000	0.75087	0.75087	0.01933	0.01933	0.78356	0.78356	0.01933	0.01933	0.03269	0.03269
						22.06231	58.64040	101.12048	-0.90000	0.81434	0.81434	0.05327	0.05327	0.90266	0.90266	0.05327	0.05327	0.08832	0.08832
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00003	0.00003	0.92056	0.92056	0.00003	0.00003	0.01589	0.01589
						28.07931	53.70136	97.68389	-0.90000	0.92260	0.92260	0.00009	0.00009	0.93848	0.93848	0.00009	0.00009	0.01589	0.01589
						31.08781	51.23184	95.96560	-0.90000	0.94050	0.94050	0.03497	0.03497	0.91567	0.91567	0.03497	0.03497	-0.02483	-0.02483
						34.09630	48.76232	94.24730	-0.90000	0.91148	0.91148	0.03391	0.03391	0.66020	0.66020	0.03391	0.03391	-0.25128	-0.25128
						37.10480	46.29280	92.52901	-0.90000	0.61901	0.61901	0.02917	0.02917	0.08646	0.08646	0.02917	0.02917	-0.53254	-0.53254
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01318	0.01318	-0.56187	-0.56187	0.01318	0.01318	-0.57000	-0.57000
						43.12180	41.35376	89.09242	-0.90000	-0.62870	-0.62870	0.00685	0.00685	-1.07285	-1.07285	0.00685	0.00685	-0.44415	-0.44415
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00620	0.00620	1.41239	1.41239	0.00620	0.00620	0.06528	0.06528
						8.02266	70.16482	109.13918	-0.90000	1.41699	1.41699	0.00441	0.00441	1.39855	1.39855	0.00441	0.00441	-0.01844	-0.01844
						11.03116	67.69530	107.42089	-0.90000	1.38925	1.38925	0.00528	0.00528	1.25661	1.25661	0.00528	0.00528	-0.13264	-0.13264
						14.03965	65.22578	105.70260	-0.90000	1.23210	1.23210	0.00258	0.00258	0.98408	0.98408	0.00258	0.00258	-0.24802	-0.24802
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02395	0.02395	0.73916	0.73916	0.02395	0.02395	-0.20621	-0.20621

Specific Utility Damage Results - Pullouts & Rotations

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration	Distance from start of utility	x	y	z	Pullout: Check: Left Seg.: Rotation: Limit Unfactored	Pullout: Vertical Check: Left Seg.: Sagging vs Hogging Ax.: Factored	Pullout: Left Seg.: Flex.: Unfactored	Pullout: Left Seg.: Flex.: Factored	Pullout: Right Seg.: Ax.: Unfactored	Pullout: Right Seg.: Ax.: Factored	Pullout: Right Seg.: Flex.: Unfactored	Pullout: Right Seg.: Flex.: Factored	Pullout: Total: Ax.: Unfactored
						[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
							[Deg]	[Deg]										
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00526	0.00526	1.36707	1.36707	0.00526	0.00526	0.09537
0.09537	0.01053	0.01053	0.10590	0.10590	-	-	0.00317	0.00317	-	-	Hogging							
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00545	0.00545	1.42120	1.42120	0.00545	0.00545	0.04153
0.04153	0.01089	0.01089	0.05242	0.05242	-	-	0.00328	0.00328	-	-	Hogging							
						9.02549	69.34164	108.56642	-0.90000	1.42137	1.42137	0.00428	0.00428	1.36601	1.36601	0.00428	0.00428	-0.05537
0.05537	0.00857	0.00857	0.00857	0.00857	-	-	0.00258	0.00258	-	-	Hogging							
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00677	0.00677	1.17979	1.17979	0.00677	0.00677	-0.17190
0.17190	0.01353	0.01353	0.01353	0.01353	-	-	0.00408	0.00408	-	-	Hogging							
						15.04249	64.40261	105.12983	-0.90000	1.15029	1.15029	0.00402	0.00402	0.86726	0.86726	0.00402	0.00402	-0.28303
0.28303	0.00805	0.00805	0.00805	0.00805	-	-	0.00243	0.00243	-	-	Sagging							
						18.05098	61.93309	103.41154	-0.90000	0.82468	0.82468	0.04084	0.04084	0.73390	0.73390	0.04084	0.04084	-0.09078
0.09078	0.08169	0.08169	0.08169	0.08169	-	-	0.02463	0.02463	-	-	Hogging							
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05864	0.05864	0.88861	0.88861	0.05864	0.05864	0.12431
0.12431	0.11729	0.11729	0.24160	0.24160	-	-	0.03537	0.03537	-	-	Sagging							
						24.06798	56.99405	99.97495	-0.90000	0.89071	0.89071	0.00665	0.00665	0.91460	0.91460	0.00665	0.00665	0.02389
0.02389	0.01329	0.01329	0.03718	0.03718	-	-	0.00401	0.00401	-	-	Sagging							
						27.07648	54.52453	98.25666	-0.90000	0.91661	0.91661	0.00007	0.00007	0.93250	0.93250	0.00007	0.00007	0.01589
0.01589	0.00015	0.00015	0.01603	0.01603	-	-	0.00004	0.00004	-	-	-							
						30.08497	52.05501	96.53836	-0.90000	0.93454	0.93454	0.00500	0.00500	0.94455	0.94455	0.00500	0.00500	0.01001
0.01001	0.00999	0.00999	0.02000	0.02000	-	-	0.00301	0.00301	-	-	Sagging							
						33.09347	49.58549	94.82007	-0.90000	0.94651	0.94651	0.08325	0.08325	0.80294	0.80294	0.08325	0.08325	-0.14357
0.14357	0.16651	0.16651	0.16651	0.16651	-	-	0.05021	0.05021	-	-	Sagging							
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05187	0.05187	0.31514	0.31514	0.05187	0.05187	-0.45362
0.45362	0.10373	0.10373	0.10373	0.10373	-	-	0.03128	0.03128	-	-	Hogging							
						39.11047	44.64646	91.38348	-0.90000	0.23628	0.23628	0.01432	0.01432	-0.35660	-0.35660	0.01432	0.01432	-0.59288
0.59288	0.02865	0.02865	0.02865	0.02865	-	-	0.00864	0.00864	-	-	Sagging							
						42.11896	42.17694	89.66519	-0.90000	-0.42870	-0.42870	0.01068	0.01068	-0.92223	-0.92223	0.01068	0.01068	-0.49354
0.49354	0.02136	0.02136	0.02136	0.02136	-	-	0.00644	0.00644	-	-	Sagging							
						45.12746	39.70742	87.94689	-0.90000	-0.97589	-0.97589	0.00746	0.00746	-1.32049	-1.32049	0.00746	0.00746	-0.34460
0.34460	0.01492	0.01492	0.01492	0.01492	-	-	0.00450	0.00450	-	-	Hogging							
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00671	0.00671	1.39110	1.39110	0.00671	0.00671	0.07987
0.07987	0.01342	0.01342	0.09329	0.09329	-	-	0.00405	0.00405	-	-	Hogging							
						7.01983	70.98799	109.71195	-0.90000	1.39986	1.39986	0.00451	0.00451	1.41679	1.41679	0.00451	0.00451	0.01693
0.01693	0.00901	0.00901	0.02595	0.02595	-	-	0.00272	0.00272	-	-	Hogging							
						10.02832	68.51847	107.99365	-0.90000	1.41234	1.41234	0.00421	0.00421	1.31872	1.31872	0.00421	0.00421	-0.09361
0.09361	0.00843	0.00843	0.00843	0.00843	-	-	0.00254	0.00254	-	-	Hogging							
						13.03682	66.04895	106.27536	-0.90000	1.29934	1.29934	0.00695	0.00695	1.08864	1.08864	0.00695	0.00695	-0.21070
0.21070	0.01390	0.01390	0.01390	0.01390	-	-	0.00419	0.00419	-	-	Hogging							
						16.04532	63.57943	104.55707	-0.90000	1.05437	1.05437	0.00977	0.00977	0.79622	0.79622	0.00977	0.00977	-0.25815
0.25815	0.01954	0.01954	0.01954	0.01954	-	-	0.00589	0.00589	-	-	Sagging							
						19.05382	61.10991	102.83877	-0.90000	0.75087	0.75087	0.01933	0.01933	0.78356	0.78356	0.01933	0.01933	0.03269
0.03269	0.03865	0.03865	0.07134	0.07134	-	-	0.01166	0.01166	-	-	Hogging							
						22.06231	58.64040	101.12048	-0.90000	0.81434	0.81434	0.05327	0.05327	0.90266	0.90266	0.05327	0.05327	0.08832
0.08832	0.10655	0.10655	0.19486	0.19486	-	-	0.03213	0.03213	-	-	Sagging							
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00003	0.00003	0.92056	0.92056	0.00003	0.00003	0.01589
0.01589	0.00007	0.00007	0.01596	0.01596	-	-	0.00002	0.00002	-	-	-							
						28.07931	53.70136	97.68389	-0.90000	0.92260	0.92260	0.00009	0.00009	0.93848	0.93848	0.00009	0.00009	0.01589
0.01589	0.00017	0.00017	0.01606	0.01606	-	-	0.00005	0.00005	-	-	-							
						31.08781	51.23184	95.96560	-0.90000	0.94050	0.94050	0.03497	0.03497	0.91567	0.91567	0.03497	0.03497	-0.02483
0.02483	0.06994	0.06994	0.06994	0.06994	-	-	0.02109	0.02109	-	-	Sagging							
						34.09630	48.76232	94.24730	-0.90000	0.91148	0.91148	0.03391	0.03391	0.66020	0.66020	0.03391	0.03391	-0.25128
0.25128	0.06782	0.06782	0.06782	0.06782	-	-	0.02045	0.02045	-	-	Sagging							
						37.10480	46.29280	92.52901	-0.90000	0.61901	0.61901	0.02917	0.02917	0.08646	0.08646	0.02917	0.02917	-0.53254
0.53254	0.05834	0.05834	0.05834	0.05834	-	-	0.01759	0.01759	-	-	Hogging							
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01318	0.01318	-0.56187	-0.56187	0.01318	0.01318	-0.57000
0.57000	0.02635	0.02635	0.02635	0.02635	-	-	0.00795	0.00795	-	-	Sagging							
						43.12180	41.35376	89.09242	-0.90000	-0.62870	-0.62870	0.00685	0.00685	-1.07285	-1.07285	0.00685	0.00685	-0.44415
0.44415	0.01370	0.01370	0.01370	0.01370	-	-	0.00413	0.00413	-	-	Sagging							
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00620	0.00620	1.41239	1.41239	0.00620	0.00620	0.06528
0.06528	0.01240	0.01240	0.07768	0.07768	-	-	0.00374	0.00374	-	-	Hogging							
						8.02266	70.16482	109.13918	-0.90000	1.41699	1.41699	0.00441	0.00441	1.39855	1.39855	0.00441	0.00441	-0.01844
0.01844	0.00883	0.00883	0.00883	0.00883	-	-	0.00266	0.00266	-	-	Hogging							
						11.03116	67.69530	107.42089	-0.90000	1.38925	1.38925	0.00528	0.00528	1.25661	1.25661	0.00528	0.00528	-0.13264
0.13264	0.01057	0.01057	0.01057	0.01057	-	-	0.00319	0.00319	-	-	Hogging							
						14.03965	65.22578	105.70260	-0.90000	1.23210	1.23210	0.00258	0.00258	0.98408	0.98408	0.00258	0.00258	-0.24802
0.24802	0.00516	0.00516	0.00516	0.00516	-	-	0.00156	0.00156	-	-	Hogging							
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02395	0.02395	0.73916	0.73916	0.02395	0.02395	-0.20621
0.20621	0.04791	0.04791	0.04791	0.04791	-	-	0.01445	0.01445	-	-	Hogging							

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance x Check: from	Rotation: Unfactored	y Rotation: Factored	z Check:	Pullout: Check: Rotation:	Pullout: Vertical Check: Sagging	Pullout: Left Seg.: Left	Pullout: Left Seg.:	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout:												
						20.05665	60.28674	102.26601	-0.90000	0.74841	0.74841	0.01975	0.01975	0.84614	0.84614	0.01975	0.01975	0.09773
0.09773	0.03950	0.03950	0.13723	0.13723	-	-	0.01191	0.01191	-	-	Sagging							
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.03009	0.03009	0.90862	0.90862	0.03009	0.03009	0.05216
0.05216	0.06017	0.06017	0.11233	0.11233	-	-	0.01814	0.01814	-	-	Sagging							
						26.07364	55.34770	98.82942	-0.90000	0.91066	0.91066	0.00006	0.00006	0.92654	0.92654	0.00006	0.00006	0.01589
0.01589	0.00011	0.00011	0.01600	0.01600	-	-	0.00003	0.00003	-	-	-							
						29.08214	52.87819	97.11113	-0.90000	0.92855	0.92855	0.00009	0.00009	0.94444	0.94444	0.00009	0.00009	0.01589
0.01589	0.00018	0.00018	0.01607	0.01607	-	-	0.00006	0.00006	-	-	-							
						32.09064	50.40867	95.39283	-0.90000	0.94648	0.94648	0.06561	0.06561	0.88017	0.88017	0.06561	0.06561	-0.06631 -
0.06631	0.13121	0.13121	0.13121	0.13121	-	-	0.03957	-	-	-	Sagging							
						35.09914	47.93915	93.67454	-0.90000	0.84675	0.84675	0.01523	0.01523	0.50883	0.50883	0.01523	0.01523	-0.33792 -
0.33792	0.03046	0.03046	0.03046	0.03046	-	-	0.00918	-	-	-	Hogging							
						38.10763	45.46963	91.95625	-0.90000	0.43145	0.43145	0.01140	0.01140	-0.13908	-0.13908	0.01140	0.01140	-0.57053 -
0.57053	0.02281	0.02281	0.02281	0.02281	-	-	0.00688	-	-	-	Sagging							
						41.11613	43.00011	90.23795	-0.90000	-0.21504	-0.21504	0.01213	0.01213	-0.75132	-0.75132	0.01213	0.01213	-0.53628 -
0.53628	0.02426	0.02426	0.02426	0.02426	-	-	0.00731	0.00731	-	-	Sagging							
						44.12463	40.53059	88.51966	-0.90000	-0.81192	-0.81192	0.00445	0.00445	-1.20207	-1.20207	0.00445	0.00445	-0.39015 -
0.39015	0.00889	0.00889	0.00889	0.00889	-	-	0.00268	0.00268	-	-	Sagging							
	2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	1.49176	1.49176	0.00843	0.00843	1.27541	1.27541	0.00843	0.00843	-0.21635 -
0.21635	0.01687	0.01687	0.01687	0.01687	-	-	0.00509	0.00509	-	-	Hogging							
						6.01784	40.04419	80.90515	-0.90000	1.23735	1.23735	0.01311	0.01311	0.86349	0.86349	0.01311	0.01311	-0.37385 -
0.37385	0.02621	0.02621	0.02621	0.02621	-	-	0.00791	0.00791	-	-	Sagging							
						9.02675	41.44733	78.24343	-0.90000	0.80698	0.80698	0.01170	0.01170	0.34466	0.34466	0.01170	0.01170	-0.46232 -
0.46232	0.02340	0.02340	0.02340	0.02340	-	-	0.00706	0.00706	-	-	Sagging							
						12.03567	42.85048	75.58171	-0.90000	0.27092	0.27092	0.02670	0.02670	0.08656	0.08656	0.02670	0.02670	-0.18436 -
0.18436	0.05340	0.05340	0.05340	0.05340	-	-	0.01610	0.01610	-	-	Hogging							
						15.04459	44.25362	72.91998	-0.90000	0.09021	0.09021	0.07845	0.07845	0.10042	0.10042	0.07845	0.07845	0.01021
0.01021	0.15691	0.15691	0.16712	0.16712	-	-	0.04732	0.04732	-	-	Sagging							
						18.05351	45.65676	70.25826	-0.90000	0.10048	0.10048	0.00014	0.00014	0.10073	0.10073	0.00014	0.00014	0.00024
0.00024	0.00027	0.00027	0.00052	0.00052	-	-	0.00008	0.00008	-	-	Hogging							
						21.06242	47.05991	67.59654	-0.90000	0.10078	0.10078	0.00011	0.00011	0.10104	0.10104	0.00011	0.00011	0.00026
0.00026	0.00022	0.00022	0.00048	0.00048	-	-	0.00007	0.00007	-	-	Hogging							
						24.07134	48.46305	64.93481	-0.90000	0.10108	0.10108	0.00003	0.00003	0.10137	0.10137	0.00003	0.00003	0.00029
0.00029	0.00006	0.00006	0.00035	0.00035	-	-	0.00002	0.00002	-	-	-							
						27.08026	49.86620	62.27309	-0.90000	0.10139	0.10139	0.00006	0.00006	0.10169	0.10169	0.00006	0.00006	0.00030
0.00030	0.00011	0.00011	0.00042	0.00042	-	-	0.00003	0.00003	-	-	-							
						30.08918	51.26934	59.61136	-0.90000	0.10171	0.10171	0.00013	0.00013	0.10202	0.10202	0.00013	0.00013	0.00030
0.00030	0.00025	0.00025	0.00056	0.00056	-	-	0.00008	0.00008	-	-	Sagging							
					2	4.01189	39.10876	82.67964	-0.90000	1.42731	1.42731	0.00643	0.00643	1.15640	1.15640	0.00643	0.00643	-0.27091 -
0.27091	0.01286	0.01286	0.01286	0.01286	-	-	0.00388	0.00388	-	-	Sagging							
						7.02081	40.51190	80.01791	-0.90000	1.11114	1.11114	0.01460	0.01460	0.68894	0.68894	0.01460	0.01460	-0.42220 -
0.42220	0.02920	0.02920	0.02920	0.02920	-	-	0.00880	0.00880	-	-	Sagging							
						10.02973	41.91505	77.35619	-0.90000	0.62810	0.62810	0.02388	0.02388	0.20735	0.20735	0.02388	0.02388	-0.42075 -
0.42075	0.04776	0.04776	0.04776	0.04776	-	-	0.01440	0.01440	-	-	Hogging							
						13.03864	43.31819	74.69446	-0.90000	0.17844	0.17844	0.02492	0.02492	0.09379	0.09379	0.02492	0.02492	-0.08465 -
0.08465	0.04985	0.04985	0.04985	0.04985	-	-	0.01503	0.01503	-	-	Sagging							
						16.04756	44.72134	72.03274	-0.90000	0.09529	0.09529	0.04561	0.04561	0.10053	0.10053	0.04561	0.04561	0.00525
0.00525	0.09122	0.09122	0.09646	0.09646	-	-	0.02751	0.02751	-	-	Sagging							
						19.05648	46.12448	69.37102	-0.90000	0.10055	0.10055	0.00013	0.00013	0.10084	0.10084	0.00013	0.00013	0.00029
0.00029	0.00026	0.00026	0.00055	0.00055	-	-	0.00008	0.00008	-	-	Hogging							
						22.06540	47.52762	66.70929	-0.90000	0.10086	0.10086	0.00009	0.00009	0.10116	0.10116	0.00009	0.00009	0.00030
0.00030	0.00018	0.00018	0.00048	0.00048	-	-	0.00005	0.00005	-	-	-							
						25.07431	48.93077	64.04757	-0.90000	0.10120	0.10120	0.00000	0.00000	0.10148	0.10148	0.00000	0.00000	0.00029
0.00029	0.00001	0.00001	0.00029	0.00029	-	-	0.00000	0.00000	-	-	-							
						28.08323	50.33391	61.38585	-0.90000	0.10152	0.10152	0.00008	0.00008	0.10178	0.10178	0.00008	0.00008	0.00026
0.00026	0.00016	0.00016	0.00042	0.00042	-	-	0.00005	0.00005	-	-	-							
						31.09215	51.73706	58.72412	-0.90000	0.10184	0.10184	0.00014	0.00014	0.10208	0.10208	0.00014	0.00014	0.00024
0.00024	0.00028	0.00028	0.00052	0.00052	-	-	0.00008	0.00008	-	-	Sagging							
					3	5.01486	39.57647	81.79239	-0.90000	1.34270	1.34270	0.00890	0.00890	1.01904	1.01904	0.00890	0.00890	-0.32367 -
0.32367	0.01781	0.01781	0.01781	0.01781	-	-	0.00537	0.00537	-	-	Sagging							
						8.02378	40.97962	79.13067	-0.90000	0.96679	0.96679	0.01447	0.01447	0.50083	0.50083	0.01447	0.01447	-0.46596 -
0.46596	0.02893	0.02893	0.02893	0.02893	-	-	0.00873	0.00873	-	-	Sagging							
						11.03270	42.38276	76.46895	-0.90000	0.43191	0.43191	0.04529	0.04529	0.10977	0.10977	0.04529	0.04529	-0.32214 -
0.32214	0.09058	0.09058	0.09058	0.09058	-	-	0.02731	0.02731	-	-	Hogging							
						14.04162	43.78591	73.80722	-0.90000	0.11315	0.11315	0.07672	0.07672	0.09892	0.09892	0.07672	0.07672	-0.01423 -
0.01423	0.15344	0.15344	0.15344	0.15344	-	-	0.04627	0.04627	-	-	Sagging							
						17.05053	45.18905	71.14550	-0.90000	0.09895	0.09895	0.01291	0.01291	0.10066	0.10066	0.01291	0.01291	0.00171
0.00171	0.02582	0.02582	0.02753	0.02753	-	-	0.00779	0.00779	-	-	Sagging							
						20.05945	46.59219	68.48378	-0.90000	0.10069	0.10069	0.00012	0.00012	0.10095	0.10095	0.00012	0.00012	0.00026
0.00026	0.00025	0.00025	0.00050	0.00050	-	-	0.00007	0.00007	-	-	Hogging							
						23.06837	47.99534	65.82205	-0.90000	0.10099	0.10099	0.00006	0.00006	0.10126	0.10126	0.00006	0.00006	0.00027
0.00027	0.00013	0.00013	0.00040	0.00040	-	-	0.00004	0.00004	-	-	-							
						26.07729	49.39848	63.16033	-0.90000	0.10131	0.10131	0.00003	0.00003	0.10155	0.10155	0.00003	0.00003	0.00024
0.00024	0.00006	0.00006	0.00030	0.00030	-	-	0.00002	0.00002	-	-	-							
						29.08620	50.80163	60.49861	-0.90000	0.10160	0.10160	0.00011	0.00011	0.10189	0.10189	0.00011	0.00011	0.00029
0.00029	0.00021	0.00021	0.00050	0.00050	-	-	0.00006	0.00006	-	-	Sagging							
	3	TW Main-3	1		1	3.98757	55.23844	52.67152	-0.90000	0.70328	0.70328	0.00018	0.00018	0.71750	0.71750	0.00018	0.00018	0.01422
0.01422	0.00035	0.00035	0.01457	0.01457	-	-	0.00011	0.00011	-	-	Sagging							
					2	4.98446	55.76300	51.82380	-0.90000	0.70802	0.70802	0.00041	0.00041	0.72246	0.72246	0.00041	0.00041	0.01445
0.01445	0.00081	0.00081	0.01526	0.01526	-	-	0.00024	0.00024	-	-	Sagging							
	4	TW Main-4	1		1	3.98331	60.26896	44.07515	-0.90000	0.17744	0.17744	0.00005	0.00005	0.17843	0.17843	0.00005	0.00005	0.00099
0.00099	0.00010	0.00010	0.00109	0.00109	-	-	0.00003	0.00003	-	-	-							
						7.96662	62.15213	40.56510	-0.90000	0.17876	0.17876	0.00003	0.00003	0.17977	0.17977	0.00003	0.00003	0.00101
0.00101	0.00006	0.00006	0.00107	0.00107	-	-	0.00002	0.00002	-	-	-							
						11.94993	64.03529	37.05504	-0.90000	0.18011	0.18011	0.00003	0.00003	0.18114	0.18114	0.00003	0.00003	0.00103
0.00103	0.00005	0.00005	0.00108	0.00108	-	-	0.00002	0.00002	-	-	-							
						15.93324	65.91845	33.54499	-0.90000	0.18146	0.18146	0.00002	0.00002	0.18243	0.18243	0.00002	0.00002	0.00098
0.00098	0.00003	0.00003	0.00101	0.00101	-	-	0.00001	0.00001	-	-	-							
						19.91656	67.80161	30.03494	-0.90000	0.18278	0.18278	0.00001	0.00001	0.18380	0.18380	0.00001	0.00001	0.00101
0.00101	0.00002	0.00002	0.00103	0.00103	-	-	0.00000	0.00000	-	-	-							
						23.89987	69.68478	26.52489	-0.90000	0.18413	0.18413	0.05333	0.05333	0.17600	0.17600	0.05333	0.05333	-0.00812 -
0.00812	0.10666	0.10666	0.10666	0.10666	-	-	0.03216	0.03216	-	-	Sagging							
						27.88318	71.56794	23.01484	-0.90000	0.16490	0.16490	0.02609	0.02609	-0.22219	-0.22219	0.02609	0.02609	-0.38709 -
0.38709	0.05217	0.05217	0.05217	0.05217	-	-	0.01573	0.01573	-	-	Hogging							
						31.86649	73.45110	19.50479	-0.90000	-0.48496	-0.48496	0.01371	0.01371	-1.20059	-1.20059	0.01371	0.01371	-0.71563 -
0.71563	0.02742	0.02742	0.02742	0.02742	-	-	0.00827	0.00827	-	-	Sagging							
						35.84980	75.33427	15.99473	-0.90000	-1.34984	-1.34984	0.02215	0.02215	-1.66303	-1.66303	0.02215	0.02215	-0.31318 -
0.31318	0.04431	0.04431	0.04431	0.04431	-	-	0.01336	0.01336	-	-	Sagging							
						39.83311	77.21743	12.48468	-0.90000	-1.75686	-1.75686	0.01871	0.01871	-1.97902	-1.97902	0.01871	0.01871	-0.22216 -
0.22216	0.03742	0.03742	0.03742	0.03742	-	-	0.01128	0.01128	-	-	Hogging							
						43.81642	79.10059	8.97463	-0.90000	-2.01296	-2.01296	0.00722	0.00722	-1.97701	-1.97701	0.00722	0.00722	0.03595
0.03595	0.01445	0.01445	0.05040	0.05040	-	-	0.00436	0.00436	-	-	Hogging							
						47.79973	80.98376	5.46458	-0.90000	-1.92682	-1.92682	0.00350	0.00350	-1.68522	-1.68522	0.00350	0.00350	0.24160
0.24160	0.00701	0.00701	0.24861	0.24861	-	-	0.00211	0.00211	-	-	Hogging							
					2	4.97914	60.73975	43.19764	-0.90000	0.17777	0.17777	0.00004	0.00004	0.17876	0.17876	0.00004	0.00004	0.00100
0.00100	0.00008	0.00008	0.00107	0.00107	-	-	0.00002	0.00002	-	-	-							
						8.96245	62.62292	39.68758	-0.90000	0.17909	0.17909	0.00003	0.00003	0.18011	0.18011	0.00003	0.00003	0.00102
0.00102	0.00006	0.00006	0.00108	0.00108	-	-	0.00002	0.00002	-	-	-							
						12.94576	64.50608	36.17753	-0.90000	0.18045	0.18045	0.00002	0.00002	0.18146	0.18146	0.00002	0.00002	0.00101
0.00101	0.00004	0.00004	0.00105	0.00105	-	-	0.00001	0.00001	-	-	-							
						16.92907	66.38924	32.66748	-0.90000	0.18178	0.18178	0.00002	0.00002	0.18279	0.18279	0.00002	0.00002	0.00101
0.00101	0.00003	0.00003	0.00104	0.00104	-	-	0.00001	0.00001	-	-	-							
						20.91238	68.27241	29.15743	-0.90000	0.18312	0.18312	0.00000	0.00000	0.18413	0.18413	0.00000	0.00000	0.00101
0.00101	0.00001	0.00001	0.00102	0.00102	-	-	0.00000	0.00000	-	-	-							
						24.89569	70.15557	25.64738	-0.90000	0.18446	0.18446	0.08899	0.08899	0.16438	0.16438	0.08899	0.08899	-0.02008 -
0.02008	0.17799	0.17799	0.17799	0.17799	-	-	0.05367	0.05367	-	-	Sagging							
						28.87900	72.03873	22.13732	-0.90000	0.11260	0.11260	0.03935	0.03935	-0.48616	-0.48616	0.03935	0.03935	-0.59876 -
0.59876	0.07870	0.07870	0.07870	0.07870	-	-	0.02373	0.02373	-	-	Hogging							
						32.86232	73.92189	18.62727	-0.90000	-0.76175	-0.76175	0.01470	0.01470	-1.35088	-1.35088	0.01470	0.01470	-0.58912 -
0.58912	0.02941	0.02941	0.02941	0.02941	-	-	0.00887	0.00887	-	-	Sagging							
						36.84563	75.80506	15.11722	-0.90000	-1.47392	-1.47392	0.01919	0.01919	-1.75745	-1.75745	0.01919	0.01919	-0.28352 -
0.28352	0.03838	0.03838	0.03838	0.03838	-	-	0.01157	0.01157	-	-	Sagging							
						40.82894	77.68822	11.60717	-0.90000	-1.84205	-1.84205	0.01747	0.01747	-2.01312	-2.01312	0.01747	0.01747	-0.17106 -
0.17106	0.03494	0.03494	0.03494	0.03494	-	-	0.01054	0.01054	-	-	Hogging							
						44.81225	79.57138	8.09712	-0.90000	-2.02250	-2.02250	0.00287	0.00287	-1.92646	-1.92646	0.00287	0.00287	0.09603
0.09603	0.00573	0.00573	0.10176	0.10176	-	-	0.00173	0.00173	-	-	Hogging							
						48.79556	81.45455	4.58706	-0.90000	-1.86038	-1.86038	0.00378	0.00378	-1.57979	-1.57979	0.00378	0.00378	0.28058
0.28058	0.00756	0.00756	0.28815	0.28815	-	-	0.00228	0.00228	-	-	Hogging							
					3	5.97497	61.21054	42.32012	-0.90000	0.17810	0.17810	0.00004	0.00004	0.17909	0.17909	0.00004	0.00004	0.00099
0.00099	0.00008	0.00008	0.00107	0.00107	-	-	0.00002	0.00002	-	-	-							
						9.95828	63.09371	38.81007	-0.90000	0.17942	0.17942	0.00003	0.00003	0.18045	0.18045	0.00003	0.00003	0.00103
0.00103	0.00006	0.00006	0.00109	0.00109	-	-	0.00002	0.00002	-	-	-							
						13.94159	64.97687	35.30002	-0.90000	0.18079	0.18079	0.00002	0.00002	0.18178	0.18178	0.00002	0.00002	0.00099
0.00099	0.00005	0.00005	0.00103	0.00103	-	-	0.00001	0.00001	-	-	-							
						17.92490	66.86003	31.78997	-0.90000	0.18211	0.18211	0.00002	0.00002	0.18312	0.18312	0.00002	0.00002	0.00101
0.00101	0.00003	0.00003	0.00104	0.00104	-	-	0.00001	0.00001	-	-	-							
						21.90821	68.74320	28.27991	-0.90000	0.18345	0.18345	0.00022	0.00022	0.18443	0.18443	0.00022	0.00022	0.00098
0.00098	0.00044	0.00044	0.00142	0.00142	-	-	0.00013	0.00013	-	-	Sagging							
						25.89152	70.62636	24.76986	-0.90000	0.18258	0.18258	0.08116	0.08116	0.11156	0.11156	0.08116	0.08116	-0.07102 -
0.07102	0.16232	0.16232	0.16232	0.16232	-	-	0.04895	0.04895	-	-	Sagging							
						29.87483	72.50952	21.25981	-0.90000	-0.01878	-0.01878	0.01681	0.01681	-0.76334	-0.76334	0.01681	0.01681	-0.74456 -

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.:	Pullout: Vertical Left Rotation:	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.74456	0.03362	0.03362	0.03362	0.03362	–	–	0.01014	0.01014	–	–	Hogging							
						33.85814	74.39269	17.74976	-0.90000	-1.00255	-1.00255	0.01740	0.01740	-1.47476	-1.47476	0.01740	0.01740	-0.47221 –
0.47221	0.03480	0.03480	0.03480	0.03480	–	–	0.01049	0.01049	–	–	Sagging							
						37.84145	76.27585	14.23971	-0.90000	-1.57487	-1.57487	0.01794	0.01794	-1.84247	-1.84247	0.01794	0.01794	-0.26759 –
0.26759	0.03588	0.03588	0.03588	0.03588	–	–	0.01082	0.01082	–	–	Hogging							
						41.82477	78.15901	10.72966	-0.90000	-1.91717	-1.91717	0.01789	0.01789	-2.02250	-2.02250	0.01789	0.01789	-0.10533 –
0.10533	0.03578	0.03578	0.03578	0.03578	–	–	0.01079	0.01079	–	–	Hogging							
						45.80808	80.04217	7.21960	-0.90000	-2.00983	-2.00983	0.00285	0.00285	-1.85992	-1.85992	0.00285	0.00285	0.14991
0.14991	0.00569	0.00569	0.15560	0.15560	–	–	0.00172	0.00172	–	–	Hogging							
						49.79139	81.92534	3.70955	-0.90000	-1.77956	-1.77956	0.00395	0.00395	-1.46386	-1.46386	0.00395	0.00395	0.31571
0.31571	0.00791	0.00791	0.32361	0.32361	–	–	0.00238	0.00238	–	–	Hogging							
					4	6.97079	61.68134	41.44261	-0.90000	0.17843	0.17843	0.00003	0.00003	0.17942	0.17942	0.00003	0.00003	0.00100
0.00100	0.00006	0.00006	0.00106	0.00106	–	–	0.00002	0.00002	–	–	–							
						10.95411	63.56450	37.93256	-0.90000	0.17976	0.17976	0.00003	0.00003	0.18079	0.18079	0.00003	0.00003	0.00103
0.00103	0.00005	0.00005	0.00108	0.00108	–	–	0.00002	0.00002	–	–	–							
						14.93742	65.44766	34.42251	-0.90000	0.18114	0.18114	0.00002	0.00002	0.18211	0.18211	0.00002	0.00002	0.00098
0.00098	0.00003	0.00003	0.00101	0.00101	–	–	0.00001	0.00001	–	–	–							
						18.92073	67.33082	30.91245	-0.90000	0.18243	0.18243	0.00001	0.00001	0.18345	0.18345	0.00001	0.00001	0.00102
0.00102	0.00002	0.00002	0.00104	0.00104	–	–	0.00001	0.00001	–	–	–							
						22.90404	69.21399	27.40240	-0.90000	0.18379	0.18379	0.01761	0.01761	0.18252	0.18252	0.01761	0.01761	-0.00127 –
0.00127	0.03523	0.03523	0.03523	0.03523	–	–	0.01062	0.01062	–	–	Sagging							
						26.88735	71.09715	23.89235	-0.90000	0.17606	0.17606	0.02862	0.02862	-0.01979	-0.01979	0.02862	0.02862	-0.19585 –
0.19585	0.05723	0.05723	0.05723	0.05723	–	–	0.01726	0.01726	–	–	Sagging							
						30.87066	72.98031	20.38230	-0.90000	-0.22130	-0.22130	0.00757	0.00757	-1.00390	-1.00390	0.00757	0.00757	-0.78260 –
0.78260	0.01514	0.01514	0.01514	0.01514	–	–	0.00456	0.00456	–	–	Sagging							
						34.85397	74.86348	16.87225	-0.90000	-1.19951	-1.19951	0.02001	0.02001	-1.57550	-1.57550	0.02001	0.02001	-0.37599 –
0.37599	0.04002	0.04002	0.04002	0.04002	–	–	0.01207	0.01207	–	–	Sagging							
						38.83728	76.74664	13.36219	-0.90000	-1.66245	-1.66245	0.01849	0.01849	-1.91746	-1.91746	0.01849	0.01849	-0.25502 –
0.25502	0.03697	0.03697	0.03697	0.03697	–	–	0.01115	0.01115	–	–	Hogging							
						42.82059	78.62980	9.85214	-0.90000	-1.97870	-1.97870	0.01204	0.01204	-2.00971	-2.00971	0.01204	0.01204	-0.03101 –
0.03101	0.02407	0.02407	0.02407	0.02407	–	–	0.00726	0.00726	–	–	Hogging							
						46.80390	80.51296	6.34209	-0.90000	-1.97725	-1.97725	0.00317	0.00317	-1.77903	-1.77903	0.00317	0.00317	0.19823
0.19823	0.00634	0.00634	0.20456	0.20456	–	–	0.00191	0.00191	–	–	Hogging							
		5	TW Foul-1	1		1	1.00444	75.64700	113.52870	-6.00000	1.13523	1.13523	0.00920	0.00920	1.25381	1.25381	0.00920	0.00920	0.11858
0.11858	0.01841	0.01841	0.13699	0.13699	–	–	0.00060	0.00060	–	–	Hogging							
						2.00887	74.83601	112.93610	-6.00000	1.20136	1.20136	0.00882	0.00882	1.29251	1.29251	0.00882	0.00882	0.09114
0.09114	0.01763	0.01763	0.10878	0.10878	–	–	0.00057	0.00057	–	–	Hogging							
						3.01331	74.02501	112.34351	-6.00000	1.25422	1.25422	0.02264	0.02264	1.33245	1.33245	0.02264	0.02264	0.07824
0.07824	0.04528	0.04528	0.12352	0.12352	–	–	0.00146	0.00146	–	–	Hogging							
						4.01774	73.21401	111.75091	-6.00000	1.29285	1.29285	0.02550	0.02550	1.37528	1.37528	0.02550	0.02550	0.08243
0.08243	0.05101	0.05101	0.13344	0.13344	–	–	0.00165	0.00165	–	–	Hogging							
						5.02218	72.40301	111.15831	-6.00000	1.33282	1.33282	0.01451	0.01451	1.40728	1.40728	0.01451	0.01451	0.07446
0.07446	0.02903	0.02903	0.10349	0.10349	–	–	0.00094	0.00094	–	–	Hogging							
						6.02661	71.59201	110.56571	-6.00000	1.37561	1.37561	0.01441	0.01441	1.42762	1.42762	0.01441	0.01441	0.05201
0.05201	0.02881	0.02881	0.08082	0.08082	–	–	0.00093	0.00093	–	–	Hogging							
						7.03105	70.78101	109.97311	-6.00000	1.40751	1.40751	0.01428	0.01428	1.43558	1.43558	0.01428	0.01428	0.02807
0.02807	0.02855	0.02855	0.05662	0.05662	–	–	0.00092	0.00092	–	–	Hogging							
						8.03548	69.97022	109.38052	-6.00000	1.42774	1.42774	0.01400	0.01400	1.43047	1.43047	0.01400	0.01400	0.00273
0.00273	0.02800	0.02800	0.03073	0.03073	–	–	0.00091	0.00091	–	–	Hogging							
						9.03992	69.15902	108.78792	-6.00000	1.43559	1.43559	0.01369	0.01369	1.41165	1.41165	0.01369	0.01369	-0.02394 –
0.02394	0.02739	0.02739	0.02739	0.02739	–	–	0.00089	0.00089	–	–	Hogging							
						10.04435	68.34802	108.19532	-6.00000	1.43037	1.43037	0.01327	0.01327	1.37863	1.37863	0.01327	0.01327	-0.05174 –
0.05174	0.02655	0.02655	0.02655	0.02655	–	–	0.00086	0.00086	–	–	Hogging							
						11.04879	67.53702	107.60272	-6.00000	1.41142	1.41142	0.01284	0.01284	1.33113	1.33113	0.01284	0.01284	-0.08029 –
0.08029	0.02567	0.02567	0.02567	0.02567	–	–	0.00083	0.00083	–	–	Sagging							
						12.05322	66.72603	107.01013	-6.00000	1.37827	1.37827	0.01198	0.01198	1.26893	1.26893	0.01198	0.01198	-0.10935 –
0.10935	0.02396	0.02396	0.02396	0.02396	–	–	0.00077	0.00077	–	–	Sagging							
						13.05766	65.91503	106.41753	-6.00000	1.33065	1.33065	0.07082	0.07082	1.19228	1.19228	0.07082	0.07082	-0.13837 –
0.13837	0.14164	0.14164	0.14164	0.14164	–	–	0.00458	0.00458	–	–	Hogging							
						14.06209	65.10403	105.82493	-6.00000	1.26831	1.26831	0.00854	0.00854	1.10162	1.10162	0.00854	0.00854	-0.16669 –
0.16669	0.01708	0.01708	0.01708	0.01708	–	–	0.00055	0.00055	–	–	Hogging							
						15.06653	64.29303	105.23233	-6.00000	1.19154	1.19154	0.02122	0.02122	0.99790	0.99790	0.02122	0.02122	-0.19365 –
0.19365	0.04243	0.04243	0.04243	0.04243	–	–	0.00137	0.00137	–	–	Sagging							
						16.07096	63.48203	104.63973	-6.00000	1.10076	1.10076	0.02326	0.02326	0.88224	0.88224	0.02326	0.02326	-0.21852 –
0.21852	0.04652	0.04652	0.04652	0.04652	–	–	0.00150	0.00150	–	–	Sagging							
						17.07540	62.67104	104.04714	-6.00000	0.99693	0.99693	0.17337	0.17337	0.88038	0.88038	0.17337	0.17337	-0.11655 –
0.11655	0.34675	0.34675	0.34675	0.34675	–	–	0.01121	0.01121	–	–	Hogging							
						18.07983	61.86004	103.45454	-6.00000	0.88173	0.88173	0.03727	0.03727	0.85833	0.85833	0.03727	0.03727	-0.02339 –
0.02339	0.07454	0.07454	0.07454	0.07454	–	–	0.00241	0.00241	–	–	Hogging							
						19.08427	61.04904	102.86194	-6.00000	0.88028	0.88028	0.12328	0.12328	0.91648	0.91648	0.12328	0.12328	0.03620
0.03620	0.24656	0.24656	0.28276	0.28276	–	–	0.00797	0.00797	–	–	Hogging							
						20.08870	60.23804	102.26934	-6.00000	0.85849	0.85849	0.20704	0.20704	0.91889	0.91889	0.20704	0.20704	0.06039
0.06039	0.41407	0.41407	0.47447	0.47447	–	–	0.01339	0.01339	–	–	Sagging							
						21.09314	59.42704	101.67674	-6.00000	0.91674	0.91674	0.08348	0.08348	0.97453	0.97453	0.08348	0.08348	0.05779
0.05779	0.16697	0.16697	0.22476	0.22476	–	–	0.00540	0.00540	–	–	Sagging							
						22.09757	58.61605	101.08415	-6.00000	0.91915	0.91915	0.11436	0.11436	1.03767	1.03767	0.11436	0.11436	0.11853
0.11853	0.22873	0.22873	0.34726	0.34726	–	–	0.00740	0.00740	–	–	Sagging							
						23.10201	57.80505	100.49155	-6.00000	0.97506	0.97506	0.14065	0.14065	1.07579	1.07579	0.14065	0.14065	0.10073
0.10073	0.28131	0.28131	0.38204	0.38204	–	–	0.00910	0.00910	–	–	Sagging							
						24.10644	56.99405	99.89895	-6.00000	1.03812	1.03812	0.03668	0.03668	1.08355	1.08355	0.03668	0.03668	0.04542
0.04542	0.07336	0.07336	0.11879	0.11879	–	–	0.00237	0.00237	–	–	Hogging							
						25.11088	56.18305	99.30635	-6.00000	1.07599	1.07599	0.00111	0.00111	1.09187	1.09187	0.00111	0.00111	0.01588
0.01588	0.00222	0.00222	0.01810	0.01810	–	–	0.00007	0.00007	–	–	Hogging							
						26.11531	55.37206	98.71376	-6.00000	1.08362	1.08362	0.00088	0.00088	1.10034	1.10034	0.00088	0.00088	0.01672
0.01672	0.00176	0.00176	0.01849	0.01849	–	–	0.00006	0.00006	–	–	–							
						27.11975	54.56106	98.12116	-6.00000	1.09195	1.09195	0.00115	0.00115	1.10867	1.10867	0.00115	0.00115	0.01672
0.01672	0.00229	0.00229	0.01902	0.01902	–	–	0.00007	0.00007	–	–	Hogging							
						28.12418	53.75006	97.52856	-6.00000	1.10041	1.10041	0.00106	0.00106	1.11700	1.11700	0.00106	0.00106	0.01658
0.01658	0.00212	0.00212	0.01870	0.01870	–	–	0.00007	0.00007	–	–	Hogging							
						29.12862	52.93906	96.93596	-6.00000	1.10874	1.10874	0.03357	0.03357	1.09766	1.09766	0.03357	0.03357	-0.01108 –
0.01108	0.06714	0.06714	0.06714	0.06714	–	–	0.00217	0.00217	–	–	Hogging							
						30.13305	52.12806	96.34336	-6.00000	1.11695	1.11695	0.07974	0.07974	1.04731	1.04731	0.07974	0.07974	-0.06964 –
0.06964	0.15948	0.15948	0.15948	0.15948	–	–	0.00516	0.00516	–	–	Sagging							
						31.13749	51.31707	95.75077	-6.00000	1.09735	1.09735	0.07013	0.07013	1.00909	1.00909	0.07013	0.07013	-0.08827 –
0.08827	0.14025	0.14025	0.14025	0.14025	–	–	0.00453	0.00453	–	–	Sagging							
						32.14192	50.50607	95.15817	-6.00000	1.04692	1.04692	0.14580	0.14580	1.01202	1.01202	0.14580	0.14580	-0.03490 –
0.03490	0.29160	0.29160	0.29160	0.29160	–	–	0.00943	0.00943	–	–	Sagging							
						33.14636	49.69507	94.56557	-6.00000	1.00893	1.00893	0.21355	0.21355	0.97805	0.97805	0.21355	0.21355	-0.03088 –
0.03088	0.42710	0.42710	0.42710	0.42710	–	–	0.01381	0.01381	–	–	Sagging							
						34.15079	48.88407	93.97297	-6.00000	1.01188	1.01188	0.06315	0.06315	0.84498	0.84498	0.06315	0.06315	-0.16690 –
0.16690	0.12631	0.12631	0.12631	0.12631	–	–	0.00408	0.00408	–	–	Sagging							
						35.15523	48.07307	93.38037	-6.00000	0.97731	0.97731	0.07123	0.07123	0.65273	0.65273	0.07123	0.07123	-0.32457 –
0.32457	0.14246	0.14246	0.14246	0.14246	–	–	0.00461	0.00461	–	–	Sagging							
						36.15966	47.26208	92.78778	-6.00000	0.84354	0.84354	0.10871	0.10871	0.42542	0.42542	0.10871	0.10871	-0.41812 –
0.41812	0.21743	0.21743	0.21743	0.21743	–	–	0.00703	0.00703	–	–	Hogging							
						37.16410	46.45108	92.19518	-6.00000	0.65088	0.65088	0.15608	0.15608	0.25223	0.25223	0.15608	0.15608	-0.39864 –
0.39864	0.31216	0.31216	0.31216	0.31216	–	–	0.01009	0.01009	–	–	Hogging							
						38.16853	45.64008	91.60258	-6.00000	0.42366	0.42366	0.05037	0.05037	0.00132	0.00132	0.05037	0.05037	-0.42234 –
0.42234	0.10074	0.10074	0.10074	0.10074	–	–	0.00326	0.00326	–	–	Sagging							
						39.17297	44.82908	91.00998	-6.00000	0.25036	0.25036	0.04684	0.04684	-0.24299	-0.24299	0.04684	0.04684	-0.49335 –
0.49335	0.09368	0.09368	0.09368	0.09368	–	–	0.00303	0.00303	–	–	Sagging							
						40.17740	44.01809	90.41739	-6.00000	-0.00087	-0.00087	0.04262	0.04262	-0.47566	-0.47566	0.04262	0.04262	-0.47479 –
0.47479	0.08524	0.08524	0.08524	0.08524	–	–	0.00276	0.00276	–	–	Sagging							
						41.18184	43.20709	89.82479	-6.00000	-0.24510	-0.24510	0.03923	0.03923	-0.69201	-0.69201	0.03923	0.03923	-0.44691 –
0.44691	0.07845	0.07845	0.07845	0.07845	–	–	0.00254	0.00254	–	–	Sagging							
						42.18627	42.39609	89.23219	-6.00000	-0.47764	-0.47764	0.03633	0.03633	-0.88864	-0.88864	0.03633	0.03633	-0.41100 –
0.41100	0.07267	0.07267	0.07267	0.07267	–	–	0.00235	0.00235	–	–	Sagging							
						43.19071	41.58509	88.63959	-6.00000	-0.69383	-0.69383	0.03363	0.03363	-1.06311	-1.06311	0.03363	0.03363	-0.36928 –
0.36928	0.06726	0.06726	0.06726	0.06726	–	–	0.00217	0.00217	–	–	Sagging							
						44.19514	40.77409	88.04699	-6.00000	-0.89027	-0.89027	0.03122	0.03122	-1.21410	-1.21410	0.03122	0.03122	-0.32382 –
0.32382	0.06244	0.06244	0.06244	0.06244	–	–	0.00202	0.00202	–	–	Sagging							
						45.19958	39.96310	87.45440	-6.00000	-1.06454	-1.06454	0.01792	0.01792	-1.34101	-1.34101	0.01792	0.01792	-0.27647 –
0.27647	0.03584	0.03584	0.03584	0.03584	–	–	0.00116	0.00116	–	–	Hogging							
		6	TW Foul-2	1		1	1.00474	38.81931	85.38557	-6.00000	1.73206	1.73206	0.15088	0.15088	1.64205	1.64205	0.15088	0.15088	-0.09001 –
0.09001	0.30176	0.30176	0.30176	0.30176	–	–	0.00682	0.00682	–	–	Hogging							
						2.00947	39.29752	84.50193	-6.00000	1.69714	1.69714	0.03795	0.03795	1.56399	1.56399	0.03795	0.03795	-0.13315 –
0.13315	0.07589	0.07589	0.07589	0.07589	–	–	0.00172	0.00172	–	–	Sagging							
						3.01421	39.77574	83.61830	-6.00000	1.64142	1.64142	0.04764	0.04764	1.46195	1.46195	0.04764	0.04764	-0.17947 –
0.17947	0.09527	0.09527	0.09527	0.09527	–	–	0.00215	0.00215	–	–	Sagging							
						4.01894	40.25395	82.73467	-6.00000	1.56314	1.56314	0.07454	0.07454	1.34581	1.34581	0.07454	0.07454	-0.21733 –
0.21733	0.14909	0.14909	0.14909	0.14909	–	–	0.00337	0.00337	–	–	Sagging							
						5.02368	40.73216	81.85104	-6.00000	1.46092	1.46092	0.16444	0.16444	1.23869	1.23869	0.16444	0.16444	-0.22223 –
0.22223	0.32888	0.32888	0.32888	0.32888	–	–	0.00744	0.00744	–	–	Sagging							
						6.02842	41.21037	80.96740	-6.00000	1.34476	1.34476	0.05613	0.05613	1.08553	1.08553	0.05613	0.05613	-0.25923 –
0.25923	0.11225	0.11225	0.11225	0.11225	–	–	0.00254	0.00254	–	–	Sagging							
						7.03315	41.68859	80.08377	-6.00000	1.23747	1.23747	0.05724	0.05724	0.88996	0.88996	0.05724	0.05724	-0.34750 –
0.34750	0.11447	0.11447	0.11447	0.11447	–	–	0.00259	0.00259	–	–	Sagging							
						8.03789	42.16680	79.20014	-6.00000	1.08388	1.08388	0.06187	0.06187	0.65956	0.65956	0.06187	0.06187	-0.42432 –
0.42432	0.12374	0.12374	0.12374	0.12374	–	–	0.00280	0.00280	–	–	Sagging							
						9.04262	42.64501	78.31650	-6.00000	0.88795	0.88795	0.04126	0.04126	0.46219	0.46219	0.04126	0.04126	-0.42576 –
0.42576	0.08252	0.08252	0.08252	0.08252	–	–	0.00187	0.00187	–	–	Hogging							

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Pullout: Check:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Rotation:	Pullout: Vertical Seg.: Sagging	Pullout: Left	Pullout: Left Seg.:	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
						10.04736	43.12322	77.43287	-6.00000	0.65755	0.65755	0.18901	0.18901	0.48109	0.48109	0.18901	0.18901	-0.17646
0.17646	0.37802	0.37802	0.37802	0.37802	-	-	0.00855	-	-	-	Hogging							
						11.05210	43.60144	76.54924	-6.00000	0.46135	0.46135	0.16518	0.16518	0.45545	0.45545	0.16518	0.16518	-0.00591
0.00591	0.33036	0.33036	0.33036	0.33036	-	-	0.00747	0.00747	-	-	Hogging							
						12.05683	44.07965	75.66560	-6.00000	0.48106	0.48106	0.12962	0.12962	0.47335	0.47335	0.12962	0.12962	-0.00771
0.00771	0.25924	0.25924	0.25924	0.25924	-	-	0.00586	0.00586	-	-	Sagging							
						13.06157	44.55786	74.78197	-6.00000	0.45541	0.45541	0.08546	0.08546	0.51154	0.51154	0.08546	0.08546	0.05613
0.05613	0.17092	0.17092	0.22706	0.22706	-	-	0.00386	0.00386	-	-	Sagging							
						14.06630	45.03607	73.89834	-6.00000	0.47362	0.47362	0.16794	0.16794	0.50246	0.50246	0.16794	0.16794	0.02884
0.02884	0.33587	0.33587	0.36472	0.36472	-	-	0.00759	-	-	-	Sagging							
						15.07104	45.51429	73.01471	-6.00000	0.51168	0.51168	0.20875	0.20875	0.42210	0.42210	0.20875	0.20875	-0.08959
0.08959	0.41750	0.41750	0.41750	0.41750	-	-	0.00944	0.00944	-	-	Sagging							
						16.07578	45.99250	72.13107	-6.00000	0.50204	0.50204	0.03001	0.03001	0.38516	0.38516	0.03001	0.03001	-0.11688
0.11688	0.06001	0.06001	0.06001	0.06001	-	-	0.00136	0.00136	-	-	Hogging							
						17.08051	46.47071	71.24744	-6.00000	0.42154	0.42154	0.14091	0.14091	0.34483	0.34483	0.14091	0.14091	-0.07672
0.07672	0.28183	0.28183	0.28183	0.28183	-	-	0.00637	0.00637	-	-	Hogging							
						18.08525	46.94892	70.36381	-6.00000	0.38480	0.38480	0.09761	0.09761	0.32384	0.32384	0.09761	0.09761	-0.06095
0.06095	0.19522	0.19522	0.19522	0.19522	-	-	0.00441	0.00441	-	-	Sagging							
						19.08998	47.42714	69.48017	-6.00000	0.34454	0.34454	0.06491	0.06491	0.28874	0.28874	0.06491	0.06491	-0.05579
0.05579	0.12982	0.12982	0.12982	0.12982	-	-	0.00294	0.00294	-	-	Sagging							
						20.09472	47.90535	68.59654	-6.00000	0.32358	0.32358	0.00252	0.00252	0.25358	0.25358	0.00252	0.00252	-0.07000
0.07000	0.00504	0.00504	0.00504	0.00504	-	-	0.00011	0.00011	-	-	Hogging							
						21.09945	48.38356	67.71291	-6.00000	0.28841	0.28841	0.01211	0.01211	0.23596	0.23596	0.01211	0.01211	-0.05245
0.05245	0.02422	0.02422	0.02422	0.02422	-	-	0.00055	0.00055	-	-	Hogging							
						22.10419	48.86177	66.82927	-6.00000	0.25333	0.25333	0.00243	0.00243	0.21654	0.21654	0.00243	0.00243	-0.03678
0.03678	0.00487	0.00487	0.00487	0.00487	-	-	0.00011	0.00011	-	-	Hogging							
						23.10893	49.33998	65.94564	-6.00000	0.23579	0.23579	0.01366	0.01366	0.21690	0.21690	0.01366	0.01366	-0.01889
0.01889	0.02733	0.02733	0.02733	0.02733	-	-	0.00062	0.00062	-	-	Hogging							
						24.11366	49.81820	65.06201	-6.00000	0.21645	0.21645	0.00127	0.00127	0.21740	0.21740	0.00127	0.00127	0.00094
0.00094	0.00253	0.00253	0.00348	0.00348	-	-	0.00006	0.00006	-	-	-							
						25.11840	50.29641	64.17838	-6.00000	0.21691	0.21691	0.00088	0.00088	0.21790	0.21790	0.00088	0.00088	0.00099
0.00099	0.00176	0.00176	0.00276	0.00276	-	-	0.00004	0.00004	-	-	-							
						26.12313	50.77462	63.29474	-6.00000	0.21740	0.21740	0.00052	0.00052	0.21835	0.21835	0.00052	0.00052	0.00094
0.00094	0.00103	0.00103	0.00198	0.00198	-	-	0.00002	0.00002	-	-	-							
						27.12787	51.25283	62.41111	-6.00000	0.21790	0.21790	0.00011	0.00011	0.21884	0.21884	0.00011	0.00011	0.00094
0.00094	0.00022	0.00022	0.00117	0.00117	-	-	0.00001	0.00001	-	-	-							
						28.13261	51.73105	61.52748	-6.00000	0.21835	0.21835	0.00025	0.00025	0.21934	0.21934	0.00025	0.00025	0.00099
0.00099	0.00050	0.00050	0.00150	0.00150	-	-	0.00001	0.00001	-	-	-							
						29.13734	52.20926	60.64384	-6.00000	0.21885	0.21885	0.00076	0.00076	0.21971	0.21971	0.00076	0.00076	0.00086
0.00086	0.00152	0.00152	0.00237	0.00237	-	-	0.00003	0.00003	-	-	-							
						30.14208	52.68747	59.76021	-6.00000	0.21935	0.21935	0.00063	0.00063	0.22020	0.22020	0.00063	0.00063	0.00086
0.00086	0.00127	0.00127	0.00212	0.00212	-	-	0.00003	0.00003	-	-	-							
						31.14681	53.16568	58.87658	-6.00000	0.21971	0.21971	0.00114	0.00114	0.22070	0.22070	0.00114	0.00114	0.00099
0.00099	0.00227	0.00227	0.00326	0.00326	-	-	0.00005	0.00005	-	-	-							
						32.15155	53.64390	57.99294	-6.00000	0.22021	0.22021	0.00101	0.00101	0.22120	0.22120	0.00101	0.00101	0.00099
0.00099	0.00202	0.00202	0.00301	0.00301	-	-	0.00005	0.00005	-	-	-							
						33.15629	54.12211	57.10931	-6.00000	0.22071	0.22071	0.00126	0.00126	0.22170	0.22170	0.00126	0.00126	0.00099
0.00099	0.00252	0.00252	0.00351	0.00351	-	-	0.00006	0.00006	-	-	-							
						34.16102	54.60032	56.22568	-6.00000	0.22120	0.22120	0.00102	0.00102	0.22215	0.22215	0.00102	0.00102	0.00095
0.00095	0.00205	0.00205	0.00300	0.00300	-	-	0.00005	0.00005	-	-	-							
						35.16576	55.07853	55.34205	-6.00000	0.22170	0.22170	0.00115	0.00115	0.22265	0.22265	0.00115	0.00115	0.00095
0.00095	0.00230	0.00230	0.00325	0.00325	-	-	0.00005	0.00005	-	-	-							
						36.17049	55.55675	54.45841	-6.00000	0.22216	0.22216	0.00113	0.00113	0.22315	0.22315	0.00113	0.00113	0.00099
0.00099	0.00227	0.00227	0.00326	0.00326	-	-	0.00005	0.00005	-	-	-							
						37.17523	56.03496	53.57478	-6.00000	0.22266	0.22266	0.00078	0.00078	0.22361	0.22361	0.00078	0.00078	0.00095
0.00095	0.00155	0.00155	0.00250	0.00250	-	-	0.00004	0.00004	-	-	-							
						38.17997	56.51317	52.69115	-6.00000	0.22315	0.22315	0.00102	0.00102	0.22410	0.22410	0.00102	0.00102	0.00095
0.00095	0.00205	0.00205	0.00300	0.00300	-	-	0.00005	0.00005	-	-	-							
						39.18470	56.99138	51.80751	-6.00000	0.22361	0.22361	0.00065	0.00065	0.22456	0.22456	0.00065	0.00065	0.00095
0.00095	0.00131	0.00131	0.00226	0.00226	-	-	0.00003	0.00003	-	-	-							
						40.18944	57.46959	50.92388	-6.00000	0.22411	0.22411	0.00078	0.00078	0.22506	0.22506	0.00078	0.00078	0.00095
0.00095	0.00155	0.00155	0.00250	0.00250	-	-	0.00004	0.00004	-	-	-							
						41.19417	57.94781	50.04025	-6.00000	0.22457	0.22457	0.00053	0.00053	0.22552	0.22552	0.00053	0.00053	0.00095
0.00095	0.00107	0.00107	0.00202	0.00202	-	-	0.00002	0.00002	-	-	-							
						42.19891	58.42602	49.15661	-6.00000	0.22506	0.22506	0.00038	0.00038	0.22598	0.22598	0.00038	0.00038	0.00091
0.00091	0.00076	0.00076	0.00167	0.00167	-	-	0.00002	0.00002	-	-	-							
						43.20365	58.90423	48.27298	-6.00000	0.22552	0.22552	0.00051	0.00051	0.22652	0.22652	0.00051	0.00051	0.00100
0.00100	0.00102	0.00102	0.00201	0.00201	-	-	0.00002	0.00002	-	-	-							
						44.20838	59.38244	47.38935	-6.00000	0.22598	0.22598	0.00026	0.00026	0.22698	0.22698	0.00026	0.00026	0.00100
0.00100	0.00052	0.00052	0.00152	0.00152	-	-	0.00001	0.00001	-	-	-							
						45.21312	59.86066	46.50572	-6.00000	0.22653	0.22653	0.00025	0.00025	0.22744	0.22744	0.00025	0.00025	0.00091
0.00091	0.00050	0.00050	0.00142	0.00142	-	-	0.00001	0.00001	-	-	-							
						46.21785	60.33887	45.62208	-6.00000	0.22698	0.22698	0.00025	0.00025	0.22789	0.22789	0.00025	0.00025	0.00091
0.00091	0.00050	0.00050	0.00141	0.00141	-	-	0.00001	0.00001	-	-	-							
						47.22259	60.81708	44.73845	-6.00000	0.22744	0.22744	0.00013	0.00013	0.22835	0.22835	0.00013	0.00013	0.00091
0.00091	0.00025	0.00025	0.00116	0.00116	-	-	0.00001	0.00001	-	-	-							
						48.22733	61.29529	43.85482	-6.00000	0.22790	0.22790	0.00026	0.00026	0.22890	0.22890	0.00026	0.00026	0.00100
0.00100	0.00052	0.00052	0.00152	0.00152	-	-	0.00001	0.00001	-	-	-							
						49.23206	61.77351	42.97118	-6.00000	0.22836	0.22836	0.00030	0.00030	0.22940	0.22940	0.00030	0.00030	0.00105
0.00105	0.00061	0.00061	0.00165	0.00165	-	-	0.00001	0.00001	-	-	-							
						50.23680	62.25172	42.08755	-6.00000	0.22890	0.22890	0.00011	0.00011	0.22986	0.22986	0.00011	0.00011	0.00096
0.00096	0.00022	0.00022	0.00118	0.00118	-	-	0.00001	0.00001	-	-	-							
						51.24153	62.72493	41.20392	-6.00000	0.22941	0.22941	0.00028	0.00028	0.23036	0.23036	0.00028	0.00028	0.00096
0.00096	0.00055	0.00055	0.00151	0.00151	-	-	0.00001	0.00001	-	-	-							
						52.24627	63.20814	40.32028	-6.00000	0.22986	0.22986	0.00026	0.00026	0.23078	0.23078	0.00026	0.00026	0.00092
0.00092	0.00052	0.00052	0.00144	0.00144	-	-	0.00001	0.00001	-	-	-							
						53.25101	63.68636	39.43665	-6.00000	0.23037	0.23037	0.00014	0.00014	0.23129	0.23129	0.00014	0.00014	0.00092
0.00092	0.00028	0.00028	0.00120	0.00120	-	-	0.00001	0.00001	-	-	-							
						54.25574	64.16457	38.55302	-6.00000	0.23079	0.23079	0.00039	0.00039	0.23174	0.23174	0.00039	0.00039	0.00096
0.00096	0.00079	0.00079	0.00175	0.00175	-	-	0.00002	0.00002	-	-	-							
						55.26048	64.64278	37.66939	-6.00000	0.23129	0.23129	0.00017	0.00017	0.23225	0.23225	0.00017	0.00017	0.00096
0.00096	0.00034	0.00034	0.00129	0.00129	-	-	0.00001	0.00001	-	-	-							
						56.26521	65.12099	36.78575	-6.00000	0.23175	0.23175	0.00028	0.00028	0.23280	0.23280	0.00028	0.00028	0.00105
0.00105	0.00055	0.00055	0.00160	0.00160	-	-	0.00001	0.00001	-	-	-							
						57.26995	65.59921	35.90212	-6.00000	0.23225	0.23225	0.00038	0.00038	0.23322	0.23322	0.00038	0.00038	0.00097
0.00097	0.00076	0.00076	0.00173	0.00173	-	-	0.00002	0.00002	-	-	-							
						58.27469	66.07742	35.01849	-6.00000	0.23281	0.23281	0.00026	0.00026	0.23372	0.23372	0.00026	0.00026	0.00092
0.00092	0.00052	0.00052	0.00144	0.00144	-	-	0.00001	0.00001	-	-	-							
						59.27942	66.55563	34.13485	-6.00000	0.23322	0.23322	0.00030	0.00030	0.23419	0.23419	0.00030	0.00030	0.00097
0.00097	0.00061	0.00061	0.00157	0.00157	-	-	0.00001	0.00001	-	-	-							
						60.28416	67.03384	33.25122	-6.00000	0.23373	0.23373	0.00042	0.00042	0.23469	0.23469	0.00042	0.00042	0.00097
0.00097	0.00083	0.00083	0.00180	0.00180	-	-	0.00002	0.00002	-	-	-							
						61.28889	67.51205	32.36759	-6.00000	0.23419	0.23419	0.07136	0.07136	0.21076	0.21076	0.07136	0.07136	-0.02343
0.02343	0.14271	0.14271	0.14271	0.14271	-	-	0.00323	0.00323	-	-	Sagging							
						62.29363	67.99027	31.48395	-6.00000	0.23458	0.23458	0.04883	0.04883	0.21786	0.21786	0.04883	0.04883	-0.01672
0.01672	0.09767	0.09767	0.09767	0.09767	-	-	0.00221	0.00221	-	-	Sagging							
						63.29836	68.46848	30.60032	-6.00000	0.21068	0.21068	0.02672	0.02672	0.23798	0.23798	0.02672	0.02672	0.02729
0.02729	0.05344	0.05344	0.08073	0.08073	-	-	0.00121	0.00121	-	-	Sagging							
						64.30310	68.94669	29.71669	-6.00000	0.21799	0.21799	0.06092	0.06092	0.23447	0.23447	0.06092	0.06092	0.01648
0.01648	0.12184	0.12184	0.13831	0.13831	-	-	0.00275	0.00275	-	-	Hogging							
						65.30784	69.42490	28.83306	-6.00000	0.23806	0.23806	0.11090	0.11090	0.18347	0.18347	0.11090	0.11090	-0.05458
0.05458	0.22180	0.22180	0.22180	0.22180	-	-	0.00502	0.00502	-	-	Hogging							
						66.31257	69.90312	27.94942	-6.00000	0.23421	0.23421	0.15994	0.15994	0.12865	0.12865	0.15994	0.15994	-0.10556
0.10556	0.31989	0.31989	0.31989	0.31989	-	-	0.00723	0.00723	-	-	Sagging							
						67.31731	70.38133	27.06579	-6.00000	0.18297	0.18297	0.13426	0.13426	0.02644	0.02644	0.13426	0.13426	-0.15654
0.15654	0.26851	0.26851	0.26851	0.26851	-	-	0.00607	0.00607	-	-	Sagging							
						68.32204	70.85954	26.18216	-6.00000	0.12791	0.12791	0.12757	0.12757	-0.12337	-0.12337	0.12757	0.12757	-0.25128
0.25128	0.25514	0.25514	0.25514	0.25514	-	-	0.00577	0.00577	-	-	Sagging							
						69.32678	71.33775	25.29852	-6.00000	0.02525	0.02525	0.00000	0.00000	-0.27340	-0.27340	0.00000	0.00000	-0.29865
0.29865	0.00000	0.00000	0.00000	0.00000	-	-	0.00000	0.00000	-	-	-							
						70.33152	71.81597	24.41489	-6.00000	-0.12479	-0.12479	0.12963	0.12963	-0.37967	-0.37967	0.12963	0.12963	-0.25488
0.25488	0.25925	0.25925	0.25925	0.25925	-	-	0.00586	0.00586	-	-	Sagging							
						71.33625	72.29418	23.53126	-6.00000	-0.27461	-0.27461	0.11090	0.11090	-0.53310	-0.53310	0.11090	0.11090	-0.25849
0.25849	0.22179	0.22179	0.22179	0.22179	-	-	0.00501	0.00501	-	-	Hogging							
						72.34099	72.77239	22.64762	-6.00000	-0.38089	-0.38089	0.11091	0.11091	-0.73413	-0.73413	0.11091	0.11091	-0.35323
0.35323	0.22182	0.22182	0.22182	0.22182	-	-	0.00502	0.00502	-	-	Sagging							
						73.34572	73.25060	21.76399	-6.00000	-0.53477	-0.53477	0.16793	0.16793	-0.88801	-0.88801	0.16793	0.16793	-0.35323
0.35323	0.33587	0.33587	0.33587	0.33587	-	-	0.00759	0.00759	-	-	Sagging							
						74.35046	73.72882	20.88036	-6.00000	-0.73580	-0.73580	0.10615	0.10615	-1.13280	-1.13280	0.10615	0.10615	-0.39700
0.39700	0.21230	0.21230	0.21230	0.21230	-	-	0.00480	0.00480	-	-	Hogging							
						75.35520	74.20703	19.99673	-6.00000	-0.88989	-0.88989	0.16761	0.16761	-1.30659	-1.30659	0.16761	0.16761	-0.41670
0.41670	0.33522	0.33522	0.33522	0.33522	-	-	0.00758	0.00758	-	-	Hogging							
						76.35993	74.68524	19.11309	-6.00000	-1.13477	-1.13477	0.18325	0.18325	-1.49818	-1.49818	0.18325	0.18325	-0.36341
0.36341	0.36651	0.36651	0.36651	0.36651	-	-	0.00829	0.00829	-	-	Sagging							
						77.36467	75.16345	18.22946	-6.00000	-1.30831	-1.30831	0.10258	0.10258	-1.65093	-1.65093	0.10258	0.10258	-0.34262
0.34262	0.20516	0.20516	0.20516	0.20516	-	-	0.00464	0.00464	-	-	Sagging							
						78.36940	75.64166	17.34583	-6.00000	-1.49981	-1.49981	0.12892	0.12892	-1.77786	-1.77786	0.12892	0.12892	-0.27806
0.27806	0.25784	0.25784	0.25784	0.25784	-	-	0.00583	0.00583	-	-	Sagging							
						79.37414	76.11988	16.46219	-6.00000	-1.65225	-1.65225	0.04718	0.04718	-1.80875	-1.80875	0.04718	0.04718	-0.15650
0.15650	0.09435	0.09435	0.09435	0.09435	-	-	0.00213	0.00213	-	-	Sagging							
						80.37888	76.59809	15.57856	-6.00000	-1.77860	-1.77860	0.19076	0.19076	-1.88345	-1.88345	0.19076	0.19076	-0.10485

Stage: Ref.	Stage: Name	Specific Pullout: Total:	Specific Pullout: Total:	Sub-utility Pullout: Total:	Iteration Check: Pullout:	Distance from Unfactored	x Rotation: Factored	y Rotation:	z Check: Rotation:	Pullout: Check: Left Seg.:	Pullout: Vertical Left Sagging	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.10485	0.38152	0.38152	0.38152	0.38152	–	–	0.00863	0.00863	–	–	Sagging							
0.21670	0.38838	0.38838	0.38838	0.38838	–	81.38361 –	77.07630 0.00878	14.69493 0.00878	-6.00000 –	-1.80924 –	-1.80924 Hogging	0.19419	0.19419	-2.02594	-2.02594	0.19419	0.19419	-0.21670 -
0.24556	0.09796	0.09796	0.09796	0.09796	–	82.38835 –	77.55451 0.00222	13.81129 0.00222	-6.00000 –	-1.88448 –	-1.88448 Sagging	0.04898	0.04898	-2.13003	-2.13003	0.04898	0.04898	-0.24556 -
0.17215	0.21094	0.21094	0.21094	0.21094	–	83.39308 –	78.03273 0.00477	12.92766 0.00477	-6.00000 –	-2.02711 –	-2.02711 Hogging	0.10547	0.10547	-2.19925	-2.19925	0.10547	0.10547	-0.17215 -
0.10673	0.07646	0.07646	0.07646	0.07646	–	84.39782 –	78.51094 0.00173	12.04403 0.00173	-6.00000 –	-2.13085 –	-2.13085 Hogging	0.03823	0.03823	-2.23758	-2.23758	0.03823	0.03823	-0.10673 -
0.04859	0.11169	0.11169	0.11169	0.11169	–	85.40256 –	78.98915 0.00253	11.16040 0.00253	-6.00000 –	-2.19976 –	-2.19976 Hogging	0.05584	0.05584	-2.24835	-2.24835	0.05584	0.05584	-0.04859 -
0.00312	0.37229	0.37229	0.37541	0.37541	–	86.40729 –	79.46736 0.00842	10.27676 0.00842	-6.00000 –	-2.23781 –	-2.23781 Hogging	0.18615	0.18615	-2.23469	-2.23469	0.18615	0.18615	0.00312
0.04883	0.02502	0.02502	0.07385	0.07385	–	87.41203 –	79.94558 0.00057	9.39313 0.00057	-6.00000 –	-2.24833 –	-2.24833 Hogging	0.01251	0.01251	-2.19950	-2.19950	0.01251	0.01251	0.04883
0.08926	0.02425	0.02425	0.11351	0.11351	–	88.41676 –	80.42379 0.00055	8.50950 0.00055	-6.00000 –	-2.23446 –	-2.23446 Hogging	0.01212	0.01212	-2.14519	-2.14519	0.01212	0.01212	0.08926
0.12518	0.02603	0.02603	0.15121	0.15121	–	89.42150 –	80.90200 0.00059	7.62586 0.00059	-6.00000 –	-2.19908 –	-2.19908 Hogging	0.01301	0.01301	-2.07389	-2.07389	0.01301	0.01301	0.12518
0.15707	0.02975	0.02975	0.18683	0.18683	–	90.42624 –	81.38021 0.00067	6.74223 0.00067	-6.00000 –	-2.14460 –	-2.14460 Hogging	0.01488	0.01488	-1.98753	-1.98753	0.01488	0.01488	0.15707
0.18549	0.03321	0.03321	0.21870	0.21870	–	91.43097 –	81.85843 0.00075	5.85860 0.00075	-6.00000 –	-2.07315 –	-2.07315 Hogging	0.01660	0.01660	-1.88766	-1.88766	0.01660	0.01660	0.18549
0.21098	0.03613	0.03613	0.24711	0.24711	–	92.43571 –	82.33664 0.00082	4.97496 0.00082	-6.00000 –	-1.98665 –	-1.98665 Hogging	0.01806	0.01806	-1.77567	-1.77567	0.01806	0.01806	0.21098
0.23360	0.03821	0.03821	0.27181	0.27181	–	93.44044 –	82.81485 0.00086	4.09133 0.00086	-6.00000 –	-1.88666 –	-1.88666 Hogging	0.01910	0.01910	-1.65306	-1.65306	0.01910	0.01910	0.23360
0.25393	0.03881	0.03881	0.29274	0.29274	–	94.44518 –	83.29306 0.00088	3.20770 0.00088	-6.00000 –	-1.77456 –	-1.77456 Hogging	0.01940	0.01940	-1.52063	-1.52063	0.01940	0.01940	0.25393
0.27226	0.03812	0.03812	0.31039	0.31039	–	95.44992 –	83.77128 0.00086	2.32407 0.00086	-6.00000 –	-1.65185 –	-1.65185 Hogging	0.01906	0.01906	-1.37959	-1.37959	0.01906	0.01906	0.27226

Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility Damage Results - Strains

Stage: Ref.	Stage: Name	Specific Rad. of Utility: Total:	Specific Utility: Rad. of Curv. Ref.	Sub-utility Check: Name Rad. of Curv.:	Distance from Peak Flex. Tens. Strain Orientn. Angle	x start of utility	y	z	Ax. Strain: Unfactored	Ax. Strain: Factored	Flexural: Tension: Unfactored	Flexural: Tension: Factored	Flexural: Compn.: Unfactored	Flexural: Compn.: Factored	Tension: Total: Unfactored	Tension: Total: Factored	Check: Tension	Compn.: Total: Unfactored
Compn.: Ref.	Check: Compn.	Check: Utility: Rad. of Curv.:																
Threshold Factored	Limit	(w.r.t. Global Axis)			[m] [Deg]	[m]	[m]	[m]	[με]	[με]	[με]	[με]	[με]	[με]	[με]	[με]		[με]
0	Base Model 1	TW Main-1 1			1.00283 75.92703	113.14854	-0.90000	56.133	11.227	0.98122	0.98122	-0.98122	-0.98122	57.11452	12.20788	OK	-0.98122	
-0.98122	OK	9.6818E+4	OK	OK	-34.90137													
-0.92672	OK	1.0251E+5	OK	OK	2.00566 75.10385 -40.12724	112.57577	-0.90000	41.846	8.3691	0.92672	0.92672	-0.92672	-0.92672	42.77240	9.29585	OK	-0.92672	
-1.08685	OK	8.7409E+4	OK	OK	3.00850 74.28068 -50.81429	112.00301	-0.90000	27.697	5.5395	1.0868	1.0868	-1.0868	-1.0868	28.78420	6.62632	OK	-1.08685	
-4.14885	OK	2.2898E+4	OK	OK	4.01133 73.45751 -60.37479	111.43024	-0.90000	29.135	5.8269	4.1488	4.1488	-4.1488	-4.1488	33.28348	9.97577	OK	-4.14885	
-1.54434	OK	6.1515E+4	OK	OK	5.01416 72.63434 -55.76098	110.85748	-0.90000	31.555	6.3110	1.5443	1.5443	-1.5443	-1.5443	33.09940	7.85535	OK	-1.54434	
-1.54123	OK	6.1639E+4	OK	OK	6.01699 71.81116 -60.10564	110.28471	-0.90000	19.682	3.9365	1.5412	1.5412	-1.5412	-1.5412	21.22366	5.47772	OK	-1.54123	
-1.51018	OK	6.2907E+4	OK	OK	7.01983 70.98799 -65.61939	109.71195	-0.90000	7.0616	1.4123	1.5102	1.5102	-1.5102	-1.5102	8.57180	2.92250	OK	-1.51018	
-2.74566	OK	6.3530E+4	OK	OK	8.02266 70.16482 -71.20686	109.13918	-0.90000	-6.2515	-1.2503	1.4954	1.4954	-1.4954	-1.4954	1.49536	1.49536	OK	-7.74689	
-5.48343	OK	6.5762E+4	OK	OK	9.02549 69.34164 -77.92018	108.56642	-0.90000	-20.194	-4.0388	1.4446	1.4446	-1.4446	-1.4446	1.44460	1.44460	OK	-21.63875	
-8.33257	OK	6.8213E+4	OK	OK	10.02832 68.51847 -84.54769	107.99365	-0.90000	-34.699	-6.9399	1.3927	1.3927	-1.3927	-1.3927	1.39269	1.39269	OK	-36.09208	
11.24785	OK	7.0763E+4	OK	OK	11.03116 67.69530 266.36576	107.42089	-0.90000	-49.527	-9.9053	1.3425	1.3425	-1.3425	-1.3425	1.34251	1.34251	OK	-50.86924	-
14.89190	OK	4.7758E+4	OK	OK	12.03399 66.87213 -37.52928	106.84812	-0.90000	-64.514	-12.903	1.9892	1.9892	-1.9892	-1.9892	1.98919	1.98919	OK	-66.50273	-
23.19950	OK	1.2973E+4	Fails	Fails	13.03682 66.04895 -8.33025	106.27536	-0.90000	-79.383	-15.877	7.3228	7.3228	-7.3228	-7.3228	7.32280	7.32280	OK	-86.70630	-
20.85717	OK	4.4988E+4	OK	OK	14.03965 65.22578 202.84219	105.70260	-0.90000	-93.727	-18.745	2.1117	2.1117	-2.1117	-2.1117	2.11168	2.11168	OK	-95.83909	-
23.74969	OK	4.1455E+4	OK	OK	15.04249 64.40261 193.38253	105.12983	-0.90000	-107.29	-21.458	2.2916	2.2916	-2.2916	-2.2916	2.29162	2.29162	OK	-109.58196	-
26.44348	OK	3.7438E+4	OK	OK	16.04532 63.57943 183.92007	104.55707	-0.90000	-119.53	-23.906	2.5375	2.5375	-2.5375	-2.5375	2.53752	2.53752	OK	-122.06733	-
28.80645	OK	3.3848E+4	OK	OK	17.04815 62.75626 175.01581	103.98430	-0.90000	-130.00	-26.000	2.8067	2.8067	-2.8067	-2.8067	2.80667	2.80667	OK	-132.80554	-
43.55277	OK	2.8876E+3	Fails	Fails	18.05098 61.93309 -56.50490	103.41154	-0.90000	-53.270	-10.654	32.899	32.899	-32.899	-32.899	32.89880	32.89880	OK	-86.16865	-
13.48895	OK	7.0428E+3	Fails	Fails	19.05382 61.10991 -53.36686	102.83877	-0.90000	59.269	11.854	13.489	13.489	-13.489	-13.489	72.75810	25.34278	OK	-13.48895	-
-1.26856	OK	7.4888E+4	OK	OK	20.05665 60.28674 -43.14542	102.26601	-0.90000	90.848	18.170	1.2686	1.2686	-1.2686	-1.2686	92.11659	19.43817	OK	-1.26856	
50.31345	OK	1.8882E+3	Fails	Fails	21.05948 59.46357 115.42848	101.69324	-0.90000	60.731	12.146	50.313	50.313	-50.313	-50.313	111.04407	62.45958	OK	-50.31345	-
20.02027	OK	4.7452E+3	Fails	Fails	22.06231 58.64040 115.87863	101.12048	-0.90000	18.047	3.6093	20.020	20.020	-20.020	-20.020	38.06688	23.62959	OK	-20.02027	-
-0.01080	OK	8.8003E+6	OK	OK	23.06515 57.81722 210.79584	100.54771	-0.90000	5.9604	1.1921	0.010795	0.010795	-0.010795	-0.010795	5.97115	1.20287	OK	-0.01080	
-0.01088	OK	8.7327E+6	OK	OK	24.06798 56.99405 29.73271	99.97495	-0.90000	5.9604	1.1921	0.010879	0.010879	-0.010879	-0.010879	5.97132	1.20297	OK	-0.01088	
-0.01073	OK	8.8563E+6	OK	OK	25.07081 56.17088 -29.81655	99.40219	-0.90000	5.9604	1.1921	0.010727	0.010727	-0.010727	-0.010727	5.97114	1.20281	OK	-0.01073	
-0.01977	OK	4.8063E+6	OK	OK	26.07364 55.34770 15.65497	98.82942	-0.90000	5.9604	1.1921	0.019766	0.019766	-0.019766	-0.019766	5.98019	1.21185	OK	-0.01977	
-0.02879	OK	3.3001E+6	OK	OK	27.07648 54.52453 -10.75098	98.25666	-0.90000	5.9605	1.1921	0.028787	0.028787	-0.028787	-0.028787	5.98927	1.22088	OK	-0.02879	
-0.02890	OK	3.2872E+6	OK	OK	28.07931 53.70136 10.70849	97.68389	-0.90000	5.9605	1.1921	0.028900	0.028900	-0.028900	-0.028900	5.98941	1.22100	OK	-0.02890	
-0.02870	OK	3.3103E+6	OK	OK	29.08214 52.87819 -10.71082	97.11113	-0.90000	5.9605	1.1921	0.028698	0.028698	-0.028698	-0.028698	5.98922	1.22080	OK	-0.02870	
-0.03830	OK	2.4804E+6	OK	OK	30.08497 52.05501 8.00504	96.53836	-0.90000	5.9606	1.1921	0.038300	0.038300	-0.038300	-0.038300	5.99886	1.23041	OK	-0.03830	
-0.02879	OK	3.3001E+6	OK	OK	31.08781 51.23184 -10.71123	95.96560	-0.90000	5.9606	1.1921	0.028787	0.028787	-0.028787	-0.028787	5.98941	1.22091	OK	-0.02879	
15.74159	OK	6.2670E+3	Fails	Fails	32.09064 50.40867 119.28720	95.39283	-0.90000	-2.9145	-0.58291	15.159	15.159	-15.159	-15.159	15.15869	15.15869	OK	-18.07322	-
85.91444	OK	1.2691E+3	Fails	Fails	33.09347 49.58549 119.59773	94.82007	-0.90000	-55.280	-11.056	74.858	74.858	-74.858	-74.858	74.85841	74.85841	OK	-130.13855	-
21.26574	OK	6.7813E+4	OK	OK	34.09630 48.76232 136.75632	94.24730	-0.90000	-99.324	-19.865	1.4009	1.4009	-1.4009	-1.4009	1.40092	1.40092	OK	-100.72500	-
30.54388	OK	1.1135E+4	Fails	Fails	35.09914 47.93915 -55.23319	93.67454	-0.90000	-110.06	-22.012	8.5314	8.5314	-8.5314	-8.5314	8.53141	8.53141	OK	-118.59376	-
85.62287	OK	1.8718E+3	Fails	Fails	36.10197 47.11598 -55.57976	93.10178	-0.90000	-174.34	-34.869	50.754	50.754	-50.754	-50.754	50.75397	50.75397	OK	-225.09850	-
51.66443	OK	1.6911E+4	OK	OK	37.10480 46.29280 159.50077	92.52901	-0.90000	-230.23	-46.047	5.6176	5.6176	-5.6176	-5.6176	5.61761	5.61761	OK	-235.85169	-
51.45384	OK	1.8216E+4	OK	OK	38.10763 45.46963 165.29813	91.95625	-0.90000	-231.19	-46.239	5.2151	5.2151	-5.2151	-5.2151	5.21511	5.21511	OK	-236.40876	-
50.18384	OK	1.9787E+4	OK	OK	39.11047 44.64646 171.74760	91.38348	-0.90000	-226.91	-45.383	4.8012	4.8012	-4.8012	-4.8012	4.80121	4.80121	OK	-231.71436	-
47.96044	OK	2.1533E+4	OK	OK	40.11330 43.82328 179.24452	90.81072	-0.90000	-217.74	-43.549	4.4119	4.4119	-4.4119	-4.4119	4.41188	4.41188	OK	-222.15468	-
44.92194	OK	2.3391E+4	OK	OK	41.11613 43.00011 186.69816	90.23795	-0.90000	-204.30	-40.860	4.0615	4.0615	-4.0615	-4.0615	4.06148	4.06148	OK	-208.36379	-
41.21344	OK	2.5406E+4	OK	OK	42.11896 42.17694 194.07253	89.66519	-0.90000	-187.37	-37.474	3.7393	3.7393	-3.7393	-3.7393	3.73928	3.73928	OK	-191.11008	-
37.06232	OK	2.7383E+4	OK	OK	43.12180 41.35376 201.35646	89.09242	-0.90000	-167.97	-33.593	3.4693	3.4693	-3.4693	-3.4693	3.46928	3.46928	OK	-171.43444	-
31.34486	OK	4.8402E+4	OK	OK	44.12463 40.53059 230.20583	88.51966	-0.90000	-146.91	-29.382	1.9627	1.9627	-1.9627	-1.9627	1.96273	1.96273	OK	-148.87341	-
31.29748	OK	1.5152E+4	OK	OK	45.12746 39.70742 -15.37019	87.94689	-0.90000	-125.14	-25.028	6.2698	6.2698	-6.2698	-6.2698	6.26979	6.26979	OK	-131.40828	-
22.72171	OK	4.5826E+4	OK	OK	46.13029 38.88425 236.23822	87.37413	-0.90000	-103.24	-20.649	2.0730	2.0730	-2.0730	-2.0730	2.07304	2.07304	OK	-105.31641	-

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
	2		TW Main-2	1														
14.75377	OK	3.4816E+4	OK	OK	-54.44401	2.00595	38.17333	84.45412	-0.90000	-60.126	-12.025	2.7287	2.7287	-2.7287	-2.7287	2.72866	2.72866	OK	-62.85420
23.34270	OK	1.3022E+4	Fails	Fails	-17.93153	3.00892	38.64104	83.56688	-0.90000	-80.236	-16.047	7.2954	7.2954	-7.2954	-7.2954	7.29541	7.29541	OK	-87.53186
23.50887	OK	2.8933E+4	OK	OK	222.08849	4.01189	39.10876	82.67964	-0.90000	-101.13	-20.225	3.2835	3.2835	-3.2835	-3.2835	3.28346	3.28346	OK	-104.41051
28.00449	OK	2.6834E+4	OK	OK	215.81738	5.01486	39.57647	81.79239	-0.90000	-122.32	-24.464	3.5402	3.5402	-3.5402	-3.5402	3.54024	3.54024	OK	-125.86151
32.42800	OK	2.5088E+4	OK	OK	208.32031	6.01784	40.04419	80.90515	-0.90000	-143.21	-28.641	3.7867	3.7867	-3.7867	-3.7867	3.78673	3.78673	OK	-146.99306
37.52431	OK	1.7034E+4	OK	OK	227.36408	7.02081	40.51190	80.01791	-0.90000	-159.74	-31.947	5.5772	5.5772	-5.5772	-5.5772	5.57722	5.57722	OK	-165.31265
41.37543	OK	1.3723E+4	Fails	Fails	232.42659	8.02378	40.97962	79.13067	-0.90000	-172.26	-34.453	6.9226	6.9226	-6.9226	-6.9226	6.92260	6.92260	OK	-179.18678
42.96613	OK	1.9539E+4	OK	OK	163.25890	9.02675	41.44733	78.24343	-0.90000	-190.52	-38.104	4.8620	4.8620	-4.8620	-4.8620	4.86197	4.86197	OK	-195.38278
47.75384	OK	1.6627E+4	OK	OK	152.16448	10.02973	41.91505	77.35619	-0.90000	-210.20	-42.040	5.7134	5.7134	-5.7134	-5.7134	5.71343	5.71343	OK	-215.91549
63.03051	OK	2.8960E+3	Fails	Fails	-51.71842	11.03270	42.38276	76.46895	-0.90000	-151.13	-30.226	32.804	32.804	-32.804	-32.804	32.80404	32.80404	OK	-183.93643
32.95185	OK	3.7039E+3	Fails	Fails	-49.71874	12.03567	42.85048	75.58171	-0.90000	-36.515	-7.3030	25.649	25.649	-25.649	-25.649	25.64881	25.64881	OK	-62.16401
-0.14933	OK	6.3615E+5	OK	OK	-34.58374	13.03864	43.31819	74.69446	-0.90000	11.314	2.2628	0.14933	0.14933	-0.14933	-0.14933	11.46341	2.41215	OK	-0.14933
58.96562	OK	1.6111E+3	Fails	Fails	120.54228	14.04162	43.78591	73.80722	-0.90000	7.8496	1.5699	58.966	58.966	-58.966	-58.966	66.81525	60.53555	OK	-58.96562
39.03856	OK	2.4335E+3	Fails	Fails	120.53158	15.04459	44.25362	72.91998	-0.90000	2.2408	0.44816	39.039	39.039	-39.039	-39.039	41.27935	39.48672	OK	-39.03856
-0.04735	OK	2.0064E+6	OK	OK	-4.71669	16.04756	44.72134	72.03274	-0.90000	0.11958	0.023916	0.047348	0.047348	-0.047348	-0.047348	0.16693	0.07126	OK	-0.04735
-0.04738	OK	2.0049E+6	OK	OK	4.78201	17.05053	45.18905	71.14550	-0.90000	0.11958	0.023916	0.047384	0.047384	-0.047384	-0.047384	0.16696	0.07130	OK	-0.04738
-0.04795	OK	1.9814E+6	OK	OK	-10.02968	18.05351	45.65676	70.25826	-0.90000	0.075487	0.015097	0.047946	0.047946	-0.047946	-0.047946	0.12343	0.06304	OK	-0.04795
-0.03988	OK	2.3824E+6	OK	OK	18.65399	19.05648	46.12448	69.37102	-0.90000	0.11959	0.023918	0.039875	0.039875	-0.039875	-0.039875	0.15947	0.06379	OK	-0.03988
-0.04742	OK	2.0035E+6	OK	OK	-5.32442	20.05945	46.59219	68.48378	-0.90000	0.096350	0.019270	0.047418	0.047418	-0.047418	-0.047418	0.14377	0.06669	OK	-0.04742
-0.03868	OK	2.4559E+6	OK	OK	-12.46719	21.06242	47.05991	67.59654	-0.90000	0.075503	0.015101	0.038682	0.038682	-0.038682	-0.038682	0.11419	0.05378	OK	-0.03868
-0.03107	OK	3.0572E+6	OK	OK	24.23294	22.06540	47.52762	66.70929	-0.90000	0.11961	0.023922	0.031075	0.031075	-0.031075	-0.031075	0.15068	0.05500	OK	-0.03107
-0.03108	OK	3.0568E+6	OK	OK	-24.24431	23.06837	47.99534	65.82205	-0.90000	0.11961	0.023922	0.031079	0.031079	-0.031079	-0.031079	0.15069	0.05500	OK	-0.03108
-0.01276	OK	7.4441E+6	OK	OK	90.02776	24.07134	48.46305	64.93481	-0.90000	0.11961	0.023923	0.012762	0.012762	-0.012762	-0.012762	0.13238	0.03668	OK	-0.01276
-0.01043	OK	9.1106E+6	OK	OK	-25.00526	25.07431	48.93077	64.04757	-0.90000	0.096367	0.019273	0.010427	0.010427	-0.010427	-0.010427	0.10679	0.02970	OK	-0.01043
-0.01261	OK	7.5333E+6	OK	OK	221.46442	26.07729	49.39848	63.16033	-0.90000	0.075516	0.015103	0.012611	0.012611	-0.012611	-0.012611	0.08813	0.02771	OK	-0.01261
-0.03106	OK	3.0582E+6	OK	OK	155.75901	27.08026	49.86620	62.27309	-0.90000	0.11961	0.023922	0.031064	0.031064	-0.031064	-0.031064	0.15068	0.05499	OK	-0.03106
-0.01940	OK	4.8971E+6	OK	OK	193.10982	28.08323	50.33391	61.38585	-0.90000	0.096361	0.019272	0.019399	0.019399	-0.019399	-0.019399	0.11576	0.03867	OK	-0.01940
-0.03799	OK	2.5009E+6	OK	OK	185.96378	29.08620	50.80163	60.49861	-0.90000	0.11960	0.023921	0.037986	0.037986	-0.037986	-0.037986	0.15759	0.06191	OK	-0.03799
-0.04738	OK	2.0052E+6	OK	OK	175.22155	30.08918	51.26934	59.61136	-0.90000	0.11960	0.023920	0.047378	0.047378	-0.047378	-0.047378	0.16698	0.07130	OK	-0.04738
-0.04795	OK	1.9813E+6	OK	OK	190.03869	31.09215	51.73706	58.72412	-0.90000	0.075493	0.015099	0.047947	0.047947	-0.047947	-0.047947	0.12344	0.06305	OK	-0.04795
-0.04892	OK	1.9420E+6	OK	OK	164.87782	32.09512	52.20477	57.83688	-0.90000	0.11959	0.023917	0.048918	0.048918	-0.048918	-0.048918	0.16850	0.07284	OK	-0.04892
-0.06692	OK	1.4197E+6	OK	OK	180.00000	0.99689	53.66476	55.21468	-0.90000	4.7612	0.95225	0.066915	0.066915	-0.066915	-0.066915	4.82816	1.01916	OK	-0.06692
-0.05758	OK	1.6500E+6	OK	OK	185.01198	1.99378	54.18932	54.36696	-0.90000	4.7186	0.94371	0.057576	0.057576	-0.057576	-0.057576	4.77613	1.00129	OK	-0.05758
-0.06710	OK	1.4157E+6	OK	OK	175.70111	2.99067	54.71388	53.51924	-0.90000	4.7185	0.94370	0.067104	0.067104	-0.067104	-0.067104	4.78561	1.01081	OK	-0.06710
-0.05793	OK	1.6399E+6	OK	OK	188.06665	3.98757	55.23844	52.67152	-0.90000	4.7875	0.95750	0.057929	0.057929	-0.057929	-0.057929	4.84544	1.01543	OK	-0.05793
-0.05744	OK	1.6539E+6	OK	OK	176.90743	4.98446	55.76300	51.82380	-0.90000	4.7448	0.94896	0.057440	0.057440	-0.057440	-0.057440	4.80226	1.00640	OK	-0.05744
-0.04790	OK	1.9834E+6	OK	OK	183.70950	5.98135	56.28756	50.97608	-0.90000	4.7448	0.94896	0.047897	0.047897	-0.047897	-0.047897	4.79269	0.99685	OK	-0.04790
-1.08967	OK	8.7182E+4	OK	OK	266.47932	6.97824	56.81212	50.12836	-0.90000	5.2192	1.0438	1.0897	1.0897	-1.0897	-1.0897	6.30890	2.13352	OK	-1.08967
-0.27588	OK	3.4435E+5	OK	OK	260.02323	7.97513	57.33668	49.28064	-0.90000	5.7991	1.1598	0.27588	0.27588	-0.27588	-0.27588	6.07502	1.43571	OK	-0.27588
-0.01915	OK	4.9611E+6	OK	OK	180.04389	1.99166	59.32738	45.83017	-0.90000	0.32072	0.064144	0.019149	0.019149	-0.019149	-0.019149	0.33987	0.08329	OK	-0.01915
-0.00958	OK	9.9166E+6	OK	OK	180.00000	2.98748	59.79817	44.95266	-0.90000	0.32072	0.064144	0.0095799	0.0095799	-0.0095799	-0.0095799	0.33030	0.07372	OK	-0.00958
-0.02995	OK	3.1716E+6	OK	OK	196.36909	3.98331	60.26896	44.07515	-0.90000	0.34445	0.068891	0.029954	0.029954	-0.029954	-0.029954	0.37441	0.09884	OK	-0.02995
-0.00846	OK	1.1234E+7	OK	OK	90.06603	4.97914	60.73975	43.19764	-0.90000	0.34445	0.068890	0.0084564	0.0084564	-0.0084564	-0.0084564	0.35291	0.07735	OK	-0.00846
-0.01915	OK	4.9596E+6	OK	OK	180.02049	5.97497	61.21054	42.32012	-0.90000	0.32071	0.064142	0.019155	0.019155	-0.019155	-0.019155	0.33987	0.08330	OK	-0.01915
-0.00957	OK	9.9221E+6	OK	OK	180.04710	6.97079	61.68134	41.44261	-0.90000	0.32071	0.064142	0.0095746	0.0095746	-0.0095746	-0.0095746	0.33028	0.07372	OK	-0.00957
-0.01277	OK	7.4417E+6	OK	OK	221.30830	7.96662	62.15213	40.56510	-0.90000	0.34445	0.068889	0.012766	0.012766	-0.012766	-0.012766	0.35721	0.08166	OK	-0.01277
-0.01275	OK	7.4501E+6	OK	OK	138.63526	8.96245	62.62292	39.68758	-0.90000	0.34444	0.068889	0.012752	0.012752	-0.012752	-0.012752	0.35720	0.08164	OK	-0.01275
-0.01277	OK	7.4402E+6	OK	OK	221.38591	9.95828	63.09371	38.81007	-0.90000	0.34445	0.068889	0.012768	0.012768	-0.012768	-0.012768	0.35721	0.08166	OK	-0.01277
-0.01279	OK	7.4305E+6	OK	OK	138.59198	10.95411	63.56450	37.93256	-0.90000	0.34444	0.068889	0.012785	0.012785	-0.012785	-0.012785	0.35723	0.08167	OK	-0.01279
-0.01277	OK	7.4386E+6	OK	OK	221.46303	11.94993	64.03529	37.05504	-0.90000	0.34444	0.068888	0.012771	0.012771	-0.012771	-0.012771	0.35721	0.08166	OK	-0.01277
-0.00844	OK	1.1254E+7	OK	OK	90.00029	12.94576	64.50608	36.17753	-0.90000	0.34444	0.068889	0.0084416	0.0084416	-0.0084416	-0.0084416	0.35288	0.07733	OK	-0.00844
-0.02094	OK	4.5375E+6	OK	OK	203.77801	13.94159	64.97687	35.30002	-0.90000	0.34444	0.068888	0.020937	0.020937	-0.020937	-0.020937	0.36538	0.08983	OK	-0.02094
-0.00393	OK	2.4189E+7	OK	OK	90.13067	14.93742	65.44766	34.42251	-0.90000	0.30020	0.060039	0.0039274	0.0039274	-0.0039274	-0.0039274	0.30412	0.06397	OK	-0.00393
-0.00393	OK	2.4189E+7	OK	OK	-89.86891	15.93324	65.91845	33.54499	-0.90000	0.30020	0.060039	0.0039274	0.0039274	-0.0039274	-0.0039274	0.30412	0.06397	OK	-0.00393
-0.00958	OK	9.9167E+6	OK	OK	180.00003	16.92907	66.38924	32.66748	-0.90000	0.36818	0.073636	0.0095798	0.0095798	-0.0095798	-0.0095798	0.37776	0.08322	OK	-0.00958
-0.01278	OK	7.4307E+6	OK	OK	138.59059	17.92490	66.86003	31.78997	-0.90000	0.34444	0.068887	0.012785	0.012785	-0.012785	-0.012785	0.35722	0.08167	OK	-0.01278
-0.00846	OK	1.1234E+7	OK	OK	-89.93997	18.92073	67.33082	30.91245	-0.90000	0.34444	0.068887	0.0084563	0.0084563	-0.0084563	-0.0084563	0.35289	0.07734	OK	-0.00846
-0.00452	OK	2.1013E+7	OK	OK	269.94006	19.91656	67.80161	30.03494	-0.90000	0.32393	0.064786	0.0045211	0.0045211	-0.0045211	-0.0045211	0.32845	0.06931	OK	-0.00452
-0.00454	OK	2.0944E+7	OK	OK	90.05162	20.91238	68.27241	29.15743	-0.90000	0.32393	0.064786	0.0045358	0.0045358	-0.0045358	-0.0045358	0.32847	0.06932	OK	-0.00454
-0.00957	OK	9.9259E+6	OK	OK	180.08826	21.90821	68.74320	28.27991	-0.90000	0.36817	0.073635	0.0095709	0.0095709	-0.0095709	-0.0095709	0.37775	0.08321	OK	-0.00957
-0.01277	OK	7.4403E+6	OK	OK	41.38633	22.90404	69.21399	27.40240	-0.90000	0.34444	0.068888	0.012768	0.012768	-0.012768	-0.012768	0.35721	0.08166	OK	-0.01277
-0.01297	OK	7.3243E+6	OK	OK	-89.99987	23.89987	69.68478	26.52489	-0.90000	0.30019	0.060039	0.012971	0.012971	-0.012971	-0.012971	0.31317	0.07301	OK	-0.01297
52.74614	OK	1.8295E+3	Fails	Fails	121.57172	24.89569	70.15557	25.64738	-0.90000	-4.0944	-0.81888	51.927	51.927	-51.927	-51.927	51.92726	51.92726	OK	-56.02168
58.74628	OK	1.6923E+3	Fails	Fails	121.57202	25.89152	70.62636	24.76986	-0.90000	-13.054	-2.6107	56.136	56.136	-56.136	-56.136	56.13556	56.13556	OK	-69.18919
-3.71891	OK	5.1283E+5	OK	OK	132.27996	26.88735	71.09715	23.89235	-0.90000	-17.668	-3.5337	0.18525	0.18525	-0.18525	-0.18525	0.18525	0.18525	OK	-17.85355
47.05714	OK	3.2972E+3	Fails	Fails	-43.87468	27.88318	71.56794	23.01484	-0.90000	-91.225	-18.245	28.812	28.812	-28.812	-28.812	28.81204	28.81204	OK	-120.03753
75.84719	OK	3.5492E+3	Fails	Fails	-43.46440	28.87900	72.03873	22.13732	-0.90000	-245.40	-49.080	26.767	26.767	-26.767	-26.767	26.76681	26.76681	OK	-272.16867
69.85252	OK	1.3805E+4	Fails	Fails	143.17477	29.87483	72.50952	21.25981	-0.90000	-314.86	-62.971	6.8814	6.8814	-6.8814	-6.8814	6.88139	6.88139	OK	-321.73702
62.27189	OK	1.7749E+4	OK	OK	159.40000	30.87066	72.98031	20.38230	-0.90000	-284.60	-56.919	5.3525	5.3525	-5.3525	-5.3525	5.35249	5.35249	OK	-289.94946
52.90692	OK	2.0769E+4	OK	OK	189.46620	31.86649	73.45110	19.50479	-0.90000	-241.66	-48.333	4.5741	4.5741	-4.5741	-4.5741	4.57411	4.57411	OK	-246.23812
						32.86232	73.92189	18.62727	-0.90000	-198.43	-39.687	6.8787	6.8787	-6.8787	-6.8787	6.87874	6.87874	OK	-205.31178

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x Strain	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
46.56535	OK	1.3811E+4	Fails	Fails	234.59435													
					33.85814	74.39269	17.74976	-0.90000	-153.23	-30.647	4.3764	4.3764	-4.3764	-4.3764	4.37640	4.37640	OK	-157.61025 -
35.02317	OK	2.1707E+4	OK	OK	217.58564													
					34.85397	74.86348	16.87225	-0.90000	-102.76	-20.552	4.7745	4.7745	-4.7745	-4.7745	4.77449	4.77449	OK	-107.53652 -
25.32690	OK	1.9897E+4	OK	OK	231.39604													
					35.84980	75.33427	15.99473	-0.90000	-95.335	-19.067	14.496	14.496	-14.496	-14.496	14.49607	14.49607	OK	-109.83087 -
33.56303	OK	6.5535E+3	Fails	Fails	260.10482													
					36.84563	75.80506	15.11722	-0.90000	-99.289	-19.858	3.6144	3.6144	-3.6144	-3.6144	3.61438	3.61438	OK	-102.90339 -
23.47218	OK	2.6284E+4	OK	OK	235.62884													
					37.84145	76.27585	14.23971	-0.90000	-79.906	-15.981	4.0707	4.0707	-4.0707	-4.0707	4.07068	4.07068	OK	-83.97675 -
20.05190	OK	2.3338E+4	OK	OK	264.73960													
					38.83728	76.74664	13.36219	-0.90000	-90.284	-18.057	14.276	14.276	-14.276	-14.276	14.27583	14.27583	OK	-104.55938 -
32.33254	OK	6.6546E+3	Fails	Fails	-34.8486													
					39.83311	77.21743	12.48468	-0.90000	-90.800	-18.160	4.2797	4.2797	-4.2797	-4.2797	4.27970	4.27970	OK	-95.07936 -
22.43964	OK	2.2198E+4	OK	OK	-17.94706													
					40.82894	77.68822	11.60717	-0.90000	-60.330	-12.066	1.9840	1.9840	-1.9840	-1.9840	1.98396	1.98396	OK	-62.31365 -
14.04990	OK	4.7884E+4	OK	OK	217.63729													
					41.82477	78.15901	10.72966	-0.90000	-32.877	-6.5755	16.667	16.667	-16.667	-16.667	16.66728	16.66728	OK	-49.54457 -
23.24274	OK	5.6998E+3	Fails	Fails	-3.79444													
					42.82059	78.62980	9.85214	-0.90000	-8.1888	-1.6378	1.3693	1.3693	-1.3693	-1.3693	1.36930	1.36930	OK	-9.55813
-3.00707	OK	6.9378E+4	OK	OK	-46.72761													
					43.81642	79.10059	8.97463	-0.90000	13.961	2.7921	0.90474	0.90474	-0.90474	-0.90474	14.86547	3.69689	OK	-0.90474
-0.90474	OK	1.0500E+5	OK	OK	-86.35743													
					44.81225	79.57138	8.09712	-0.90000	33.820	6.7641	0.88876	0.88876	-0.88876	-0.88876	34.70903	7.65282	OK	-0.88876
-0.88876	OK	1.0689E+5	OK	OK	-65.81196													
					45.80808	80.04217	7.21960	-0.90000	51.653	10.331	0.95187	0.95187	-0.95187	-0.95187	52.60438	11.28237	OK	-0.95187
-0.95187	OK	9.9804E+4	OK	OK	-49.98610													
					46.80390	80.51296	6.34209	-0.90000	67.631	13.526	1.0763	1.0763	-1.0763	-1.0763	68.70724	14.60250	OK	-1.07631
-1.07631	OK	8.8265E+4	OK	OK	-37.69109													
					47.79973	80.98376	5.46458	-0.90000	81.930	16.386	1.1926	1.1926	-1.1926	-1.1926	83.12256	17.57860	OK	-1.19261
-1.19261	OK	7.9657E+4	OK	OK	-30.10083													
					48.79556	81.45455	4.58706	-0.90000	94.798	18.960	1.2874	1.2874	-1.2874	-1.2874	96.08516	20.24694	OK	-1.28739
-1.28739	OK	7.3793E+4	OK	OK	-24.49669													
					49.79139	81.92534	3.70955	-0.90000	106.43	21.286	1.3465	1.3465	-1.3465	-1.3465	107.77761	22.63275	OK	-1.34654
-1.34654	OK	7.0551E+4	OK	OK	-21.02742													
					50.78722	82.39613	2.83204	-0.90000	116.89	23.379	1.3657	1.3657	-1.3657	-1.3657	118.25914	24.74441	OK	-1.36573
-1.36573	OK	6.9560E+4	OK	OK	-18.87093													
					51.78304	82.86692	1.95453	-0.90000	126.37	25.273	1.3331	1.3331	-1.3331	-1.3331	127.70033	26.60658	OK	-1.33314
-1.33314	OK	7.1260E+4	OK	OK	-17.24417													
	5		TW Foul-1	1	2.00887	74.83600	112.93610	-6.00000	45.581	45.581	8.7783	17.557	-8.7783	-8.7783	54.35925	63.13760	OK	-8.77835
-8.77835	OK	1.0093E+5	OK	OK	-40.41075													
					3.01331	74.02501	112.34351	-6.00000	39.130	39.130	22.542	45.084	-22.542	-22.542	61.67181	84.21364	OK	-22.54183 -
22.54183	OK	3.9305E+4	OK	OK	-57.69211													
					4.01774	73.21401	111.75091	-6.00000	41.232	41.232	25.391	50.781	-25.391	-25.391	66.62246	92.01308	OK	-25.39062 -
25.39062	OK	3.4895E+4	OK	OK	-57.53447													
					5.02218	72.40301	111.15831	-6.00000	37.251	37.251	14.450	28.901	-14.450	-14.450	51.70153	66.15187	OK	-14.45034 -
14.45034	OK	6.1313E+4	OK	OK	-55.33112													
					6.02661	71.59201	110.56571	-6.00000	26.027	26.027	14.342	28.683	-14.342	-14.342	40.36898	54.71052	OK	-14.34154 -
14.34154	OK	6.1779E+4	OK	OK	-59.65674													
					7.03105	70.78101	109.97311	-6.00000	14.063	14.063	14.212	28.425	-14.212	-14.212	28.27520	42.48757	OK	-14.21237 -
14.21237	OK	6.2340E+4	OK	OK	-64.63888													
					8.03548	69.97002	109.38052	-6.00000	1.3968	1.3968	13.939	27.877	-13.939	-13.939	15.33556	29.27429	OK	-13.93873 -
13.93873	OK	6.3564E+4	OK	OK	-70.88250													
					9.03992	69.15902	108.78792	-6.00000	-11.933	-11.933	13.633	27.266	-13.633	-13.633	13.63280	27.26560	OK	-25.56602 -
25.56602	OK	6.4990E+4	OK	OK	-76.59094													
					10.04435	68.34802	108.19532	-6.00000	-25.830	-25.830	13.216	26.432	-13.216	-13.216	13.21616	26.43233	OK	-39.04583 -
39.04583	OK	6.7039E+4	OK	OK	-83.89697													
					11.04879	67.53702	107.60272	-6.00000	-40.102	-40.102	12.780	25.560	-12.780	-12.780	12.78005	25.56010	OK	-52.88188 -
52.88188	OK	6.9327E+4	OK	OK	267.64492													
					12.05322	66.72603	107.01013	-6.00000	-54.627	-54.627	11.928	23.856	-11.928	-11.928	11.92801	23.85602	OK	-66.55492 -
66.55492	OK	7.4279E+4	OK	OK	259.38502													
					13.05766	65.91503	106.41753	-6.00000	-69.127	-69.127	70.509	141.02	-70.509	-70.509	70.50850	141.01701	OK	-139.63570 -
139.63570	OK	1.2566E+4	Fails	Fails	-8.53001													
					14.06209	65.10403	105.82493	-6.00000	-83.276	-83.276	8.5032	17.006	-8.5032	-8.5032	8.50325	17.00650	OK	-91.77975 -
91.77975	OK	1.0420E+5	OK	OK	-83.47838													
					15.06653	64.29303	105.23233	-6.00000	-96.755	-96.755	21.122	42.243	-21.122	-21.122	21.12163	42.24327	OK	-117.87694 -
117.87694	OK	4.1948E+4	OK	OK	196.16911													
					16.07096	63.48203	104.63973	-6.00000	-109.20	-109.20	23.158	46.317	-23.158	-23.158	23.15838	46.31675	OK	-132.35408 -
132.35408	OK	3.8258E+4	OK	OK	186.56727													
					17.07540	62.67104	104.04714	-6.00000	-58.171	-58.171	172.61	345.22	-172.61	-172.61	172.60850	345.21700	OK	-230.77990 -
230.77990	OK	5.1330E+3	Fails	Fails	-59.21497													
					18.07983	61.86004	103.45454	-6.00000	-11.535	-11.535	37.103	74.207	-37.103	-37.103	37.10334	74.20667	OK	-48.63786 -
48.63786	OK	2.3879E+4	OK	OK	-49.03379													
					19.08427	61.04904	102.86194	-6.00000	18.316	18.316	122.74	245.47	-122.74	-122.74	141.05343	263.79081	OK	-122.73737 -
122.73737	OK	7.2187E+3	Fails	Fails	-73.36936													
					20.08870	60.23804	102.26934	-6.00000	30.384	30.384	206.12	412.25	-206.12	-206.12	236.50656	442.62914	OK	-206.12258 -
206.12258	OK	4.2984E+3	Fails	Fails	109.92810													
					21.09314	59.42704	101.67674	-6.00000	28.998	28.998	83.114	166.23	-83.114	-83.114	112.11253	195.22687	OK	-83.11434 -
83.11434	OK	1.0660E+4	Fails	Fails	96.06324													
					22.09757	58.61605	101.08415	-6.00000	59.329	59.329	113.86	227.72	-113.86	-113.86	173.18896	287.04875	OK	-113.85978 -
113.85978	OK	7.7815E+3	Fails	Fails	94.86853													
					23.10201	57.80505	100.49155	-6.00000	50.392	50.392	140.03	280.07	-140.03	-140.03	190.42534	330.45835	OK	-140.03301 -
140.03301	OK	6.3271E+3	Fails	Fails	138.59466													
					24.10645	56.99405	99.89895	-6.00000	22.722	22.722	36.521	73.041	-36.521	-36.521	59.24289	95.76339	OK	-36.52050 -
36.52050	OK	2.4260E+4	OK	OK	89.17307													
					25.11088	56.18305	99.30635	-6.00000	7.9488	7.9488	1.1049	2.2097	-1.1049	-1.1049	9.05362	10.15847	OK	-1.10485
-1.10485	OK	8.0192E+5	OK	OK	-50.41579													
					26.11531	55.37206	98.71376	-6.00000	8.3709	8.3709	0.87692	1.7538	-0.87692	-0.87692	9.24778	10.12470	OK	-0.87692
-0.87692	OK	1.0104E+6	OK	OK	-1.20369													
					27.11975	54.56106	98.12116	-6.00000	8.3709	8.3709	1.1418	2.2836	-1.1418	-1.1418	9.51275	10.65456	OK	-1.14181
-1.14181	OK	7.7596E+5	OK	OK	0.95824													
					28.12418	53.75006	97.52856	-6.00000	8.3015	8.3015	1.0538	2.1077	-1.0538	-1.0538	9.35536	10.40918	OK	-1.05383
-1.05383	OK	8.4075E+5	OK	OK	-0.00000													
					29.12862	52.93906	96.93596	-6.00000	-5.5318	-5.5318	33.420	66.839	-33.420	-33.420	33.41954	66.83909	OK	-38.95135 -
38.95135	OK	2.6511E+4	OK	OK	87.89168													
					30.13305	52.12806	96.34336	-6.00000	-34.817	-34.817	79.386	158.77	-79.386	-79.386	79.38570	158.77139	OK	-114.20313 -
114.20313	OK	1.1161E+4	Fails	Fails	151.97734													
					31.13749	51.31707	95.75077	-6.00000	-44.132	-44.132	69.816	139.63	-69.816	-69.816	69.81626	139.63252	OK	-113.94776 -
113.94776	OK	1.2690E+4	Fails	Fails	116.84558													
					32.14192	50.50607	95.15817	-6.00000	-17.433	-17.433	145.16	290.32	-145.16	-145.16	145.15760	290.31519	OK	-162.59029 -
162.59029	OK	6.1037E+3	Fails	Fails	111.28420													
					33.14636	49.69507	94.56557	-6.00000	-15.373	-15.373	212.61	425.22	-212.61	-212.61	212.60889	425.21778	OK	-227.98203 -
227.98203	OK	4.1673E+3	Fails	Fails	114.39681													
					34.15079	48.88407	93.97297	-6.00000	-83.315	-83.315	62.874	125.75	-62.874	-62.874	62.87367	125.74735	OK	-146.18875 -
146.18875	OK	1.4092E+4	Fails	Fails	134.29678													
					35.15523	48.07307	93.38037	-6.00000	-162.11	-162.11	70.914	141.83	-70.914	-70.914	70.91365	141.82730	OK	-233.02430 -
233.02430	OK	1.2494E+4	Fails	Fails	90.00209													
					36.15966	47.26208	92.78778	-6.00000	-208.90	-208.90	108.23	216.47	-108.23	-108.23	108.23454	216.46907	OK	-317.12958 -
317.12958	OK	8.1859E+3	Fails	Fails	-80.80096													
					37.16410	46.45108	92.19518	-6.00000	-199.23	-199.23	155.39	310.78	-155.39	-155.39	155.38956	310.77913	OK	-354.61876 -
354.61876	OK	5.7018E+3	Fails	Fails	-46.09659													
					38.16853	45.64008	91.60258	-6.00000	-211.11	-211.11	50.148	100.30	-50.148	-50.148	50.14842	100.29684	OK	-261.25534 -
261.25534	OK	1.7668E+4	OK	OK	197.03062													
					39.17297	44.82908	91.00998	-6.00000	-246.61	-246.61	46.632	93.264	-46.632	-46.632	46.63188	93.26375	OK	-293.24440 -
293.24440	OK	1.9000E+4	OK	OK	193.17573													
					40.17740	44.01809	90.41739	-6.00000	-237.32	-237.32	42.431	84.862	-42.431	-42.431	42.43116	84.86231	OK	-279.75498 -
279.75498	OK	2.0881E+4	OK	OK	178.42235													
					41.18185	43.20709	89.82479	-6.00000	-223.38	-223.38	39.054	78.108	-39.054	-39.054	39.05407	78.10814	OK	-262.43005 -
262.43005	OK	2.2686E+4	OK	OK	186.33123													
					42.18627	42.39609	89.23219	-6.00000	-205.41	-205.41	36.172	72.345	-36.172	-36.172	36.17235	72.34469	OK	-241.58271 -
241.58271	OK	2.4494E+4	OK	OK	194.37606													
					43.19071	41.58509	88.63959	-6.00000	-184.54	-184.54	33.479	66.959	-33.479	-33.479	33.47944	66.95888	OK	-218.02384 -
218.02384	OK	2.6464E+4	OK	OK	201.37918													
					44.19514	40.77409	88.04699	-6.00000	-161.81	-161.81	31.083	62.167	-31.083	-31.083	31.08344	62.16688	OK	-192.89356 -
192.89356	OK	2.8504E+4	OK	OK	208.50223													
					45.19958	39.96310	87.45440	-6.00000	-138.13	-138.13	17.842	35.684	-17.842	-17.842	17.84182	35.68363	OK	-155.97582 -
155.97582	OK	4.9659E+4	OK	OK	-65.87198													
	6		TW Foul-2	1	1.00474	38.81931	85.38557	-6.00000	-44.888	-44.888	150.17	300.34	-150.17	-150.17	150.16763	300.33526	OK	-195.05522 -
195.05522	OK	8.4372E+3	Fails	Fails	-13.17795													
					2.00947	39.29752	84.50193	-6.00000	-66.427	-66.427	37.767	75.535	-37.767	-37.767	37.76730	75.53460	OK	-104.19472 -
104.19472	OK	3.3548E+4	OK	OK	251.80015													
					3.01421	39.77574	83.61830	-6.00000	-89.588	-89.588	47.413	94.825	-47.413	-47.413	47.41254	94.82509	OK	-137.00021 -
137.00021	OK	2.6723E+4	OK	OK	231.53581													
					4.01894	40.25395	82.73467	-6.00000	-108.51	-108.51	74.192	148.38	-74.192	-74.192	74.19183	148.38366	OK	-182.70494 -
182.70494	OK	1.7077E+4	OK	OK	241.50674													
					5.02368	40.73216	81.85104	-6.00000	-110.94	-110.94	163.67	327.33	-163.67	-163.67	163.66516	327.33031	OK	-274.60540 -
274.60540	OK	7.7414E+3	Fails	Fails	255.33950													
					6.02842	41.21037	80.96740	-6.00000	-129.42	-129.42	55.861	111.72	-55.861	-55.861	55.86116	111.72231	OK	-185.27964 -
185.27964	OK	2.2681E+4	OK	OK	210.62915													
					7.03315	41.68859	80.08377	-6.00000	-173.56	-173.56	56.966	113.93	-56.966	-56.966	56.96624	113.93248	OK	-230.52494 -
230.52494	OK	2.2241E+4	OK	OK	197.45439													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance Peak Flex. from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
Total:																		
					8.03789	42.16680	79.20014	-6.00000	-211.97	-211.97	61.576	123.15	-61.576	-61.576	61.57612	123.15225	OK	-273.55003 -
273.55003	OK	2.0576E+4	OK	OK	190.09055													
					9.04262	42.64501	78.31650	-6.00000	-212.71	-212.71	41.066	82.131	-41.066	-41.066	41.06552	82.13105	OK	-253.77329 -
253.77329	OK	3.0853E+4	OK	OK	66.39401													
					10.04736	43.12322	77.43287	-6.00000	-88.014	-88.014	188.12	376.24	-188.12	-188.12	188.11964	376.23929	OK	-276.13369 -
276.13369	OK	6.7351E+3	Fails	Fails	-73.12932													
					11.05210	43.60144	76.54924	-6.00000	-2.6994	-2.6994	164.40	328.80	-164.40	-164.40	164.40191	328.80382	OK	-167.10130 -
167.10130	OK	7.7067E+3	Fails	Fails	40.23416													
					12.05683	44.07965	75.66560	-6.00000	-3.6343	-3.6343	129.01	258.02	-129.01	-129.01	129.00769	258.01539	OK	-132.64203 -
132.64203	OK	9.8211E+3	Fails	Fails	166.61615													
					13.06157	44.55786	74.78197	-6.00000	28.248	28.248	85.059	170.12	-85.059	-85.059	113.30705	198.36612	OK	-85.05907 -
85.05907	OK	1.4896E+4	Fails	Fails	90.00037													
					14.06630	45.03607	73.89834	-6.00000	14.551	14.551	167.15	334.29	-167.15	-167.15	181.69633	348.84134	OK	-167.14500 -
167.14500	OK	7.5802E+3	Fails	Fails	138.66905													
					15.07104	45.51429	73.01471	-6.00000	-44.725	-44.725	207.77	415.53	-207.77	-207.77	207.76558	415.53115	OK	-252.49103 -
252.49103	OK	6.0982E+3	Fails	Fails	127.16322													
					16.07578	45.99250	72.13107	-6.00000	-58.400	-58.400	29.865	59.730	-29.865	-29.865	29.86507	59.73014	OK	-88.26531 -
88.26531	OK	4.2424E+4	OK	OK	89.99738													
					17.08051	46.47071	71.24744	-6.00000	-38.335	-38.335	140.25	280.50	-140.25	-140.25	140.24970	280.49939	OK	-178.58489 -
178.58489	OK	9.0339E+3	Fails	Fails	90.00000													
					18.08525	46.94892	70.36381	-6.00000	-30.467	-30.467	97.152	194.30	-97.152	-97.152	97.15176	194.30352	OK	-127.61912 -
127.61912	OK	1.3041E+4	Fails	Fails	116.80023													
					19.08998	47.42714	69.48017	-6.00000	-27.894	-27.894	64.604	129.21	-64.604	-64.604	64.60444	129.20889	OK	-92.49868 -
92.49868	OK	1.9612E+4	OK	OK	149.16658													
					20.09472	47.90535	68.59654	-6.00000	-35.001	-35.001	2.5099	5.0198	-2.5099	-2.5099	2.50989	5.01978	OK	-37.51135 -
37.51135	OK	5.0480E+5	OK	OK	0.00389													
					21.09945	48.38356	67.71291	-6.00000	-26.225	-26.225	12.051	24.102	-12.051	-12.051	12.05098	24.10196	OK	-38.27557 -
38.27557	OK	1.0514E+5	OK	OK	79.19628													
					22.10419	48.86177	66.82927	-6.00000	-18.391	-18.391	2.4214	4.8429	-2.4214	-2.4214	2.42144	4.84287	OK	-20.81196 -
20.81196	OK	5.2324E+5	OK	OK	-28.20550													
					23.10893	49.33998	65.94564	-6.00000	-9.4423	-9.4423	13.599	27.198	-13.599	-13.599	13.59891	27.19782	OK	-23.04121 -
23.04121	OK	9.3169E+4	OK	OK	83.10964													
					24.11366	49.81820	65.06201	-6.00000	0.47247	0.47247	1.2601	2.5202	-1.2601	-1.2601	1.73257	2.99268	OK	-1.26011
-1.26011	OK	1.0055E+6	OK	OK	-5.03165													
					25.11840	50.29641	64.17838	-6.00000	0.49617	0.49617	0.87824	1.7565	-0.87824	-0.87824	1.37441	2.25265	OK	-0.87824
-0.87824	OK	1.4427E+6	OK	OK	0.01497													
					26.12311	50.77462	63.29474	-6.00000	0.47249	0.47249	0.51429	1.0286	-0.51429	-0.51429	0.98678	1.50107	OK	-0.51429
-0.51429	OK	2.4636E+6	OK	OK	12.36754													
					27.12787	51.25283	62.41111	-6.00000	0.47250	0.47250	0.11026	0.22051	-0.11026	-0.11026	0.58276	0.69302	OK	-0.11026
-0.11026	OK	1.1491E+7	OK	OK	269.90824													
					28.13261	51.73105	61.52748	-6.00000	0.49618	0.49618	0.25117	0.50233	-0.25117	-0.25117	0.74735	0.99852	OK	-0.25117
-0.25117	OK	5.0445E+6	OK	OK	179.97593													
					29.13734	52.20926	60.64384	-6.00000	0.42872	0.42872	0.75441	1.5088	-0.75441	-0.75441	1.18313	1.93754	OK	-0.75441
-0.75441	OK	1.6795E+6	OK	OK	176.16828													
					30.14208	52.68747	59.76021	-6.00000	0.42871	0.42871	0.62959	1.2592	-0.62959	-0.62959	1.05829	1.68788	OK	-0.62959
-0.62959	OK	2.0124E+6	OK	OK	184.61385													
					31.14681	53.16568	58.87658	-6.00000	0.49614	0.49614	1.1301	2.2601	-1.1301	-1.1301	1.62619	2.75624	OK	-1.13005
-1.13005	OK	1.1212E+6	OK	OK	179.99207													
					32.15155	53.64390	57.99294	-6.00000	0.49611	0.49611	1.0036	2.0072	-1.0036	-1.0036	1.49971	2.50330	OK	-1.00359
-1.00359	OK	1.2625E+6	OK	OK	180.02018													
					33.15629	54.12211	57.10931	-6.00000	0.49609	0.49609	1.2551	2.5102	-1.2551	-1.2551	1.75118	3.00628	OK	-1.25509
-1.25509	OK	1.0095E+6	OK	OK	180.00000													
					34.16102	54.60032	56.22568	-6.00000	0.47599	0.47599	1.0184	2.0368	-1.0184	-1.0184	1.49437	2.51276	OK	-1.01838
-1.01838	OK	1.2441E+6	OK	OK	189.61618													
					35.16576	55.07853	55.34205	-6.00000	0.47597	0.47597	1.1428	2.2856	-1.1428	-1.1428	1.61874	2.76152	OK	-1.14278
-1.14278	OK	1.1087E+6	OK	OK	171.42095													
					36.17049	55.55675	54.45841	-6.00000	0.49602	0.49602	1.1292	2.2583	-1.1292	-1.1292	1.62518	2.75434	OK	-1.12916
-1.12916	OK	1.1221E+6	OK	OK	180.01799													
					37.17523	56.03496	53.57478	-6.00000	0.47593	0.47593	0.77203	1.5441	-0.77203	-0.77203	1.24796	2.02000	OK	-0.77203
-0.77203	OK	1.6411E+6	OK	OK	192.72961													
					38.17997	56.51317	52.69115	-6.00000	0.47591	0.47591	1.0187	2.0373	-1.0187	-1.0187	1.49457	2.51323	OK	-1.01866
-1.01866	OK	1.2438E+6	OK	OK	170.37333													
					39.18470	56.99138	51.80751	-6.00000	0.47590	0.47590	0.65002	1.3000	-0.65002	-0.65002	1.12592	1.77594	OK	-0.65002
-0.65002	OK	1.9492E+6	OK	OK	195.19267													
					40.18944	57.46959	50.92388	-6.00000	0.47589	0.47589	0.77218	1.5444	-0.77218	-0.77218	1.24807	2.02025	OK	-0.77218
-0.77218	OK	1.6408E+6	OK	OK	167.26338													
					41.19417	57.94781	50.04025	-6.00000	0.47588	0.47588	0.53013	1.0603	-0.53013	-0.53013	1.00601	1.53615	OK	-0.53013
-0.53013	OK	2.3900E+6	OK	OK	198.70498													
					42.19891	58.42602	49.15661	-6.00000	0.45579	0.45579	0.37630	0.75260	-0.37630	-0.37630	0.83209	1.20839	OK	-0.37630
-0.37630	OK	3.3670E+6	OK	OK	180.03513													
					43.20365	58.90423	48.27298	-6.00000	0.49955	0.49955	0.50558	1.0112	-0.50558	-0.50558	1.00513	1.51071	OK	-0.50558
-0.50558	OK	2.5060E+6	OK	OK	173.21433													
					44.20838	59.38244	47.38935	-6.00000	0.49954	0.49954	0.25811	0.51622	-0.25811	-0.25811	0.75766	1.01577	OK	-0.25811
-0.25811	OK	4.9087E+6	OK	OK	193.35328													
					45.21312	59.86066	46.50572	-6.00000	0.45577	0.45577	0.25111	0.50223	-0.25111	-0.25111	0.70689	0.95800	OK	-0.25111
-0.25111	OK	5.0455E+6	OK	OK	179.97578													
					46.21785	60.33887	45.62208	-6.00000	0.45577	0.45577	0.25081	0.50161	-0.25081	-0.25081	0.70658	0.95738	OK	-0.25081
-0.25081	OK	5.0517E+6	OK	OK	180.05274													
					47.22259	60.81708	44.73845	-6.00000	0.45577	0.45577	0.12551	0.25102	-0.12551	-0.12551	0.58128	0.70679	OK	-0.12551
-0.12551	OK	1.0095E+7	OK	OK	180.00000													
					48.22733	61.29529	43.85482	-6.00000	0.49953	0.49953	0.25842	0.51684	-0.25842	-0.25842	0.75795	1.01637	OK	-0.25842
-0.25842	OK	4.9029E+6	OK	OK	166.55347													
					49.23206	61.77351	42.97118	-6.00000	0.52321	0.52321	0.30317	0.60634	-0.30317	-0.30317	0.82638	1.12955	OK	-0.30317
-0.30317	OK	4.1792E+6	OK	OK	214.21529													
					50.23680	62.25172	42.08755	-6.00000	0.47945	0.47945	0.11038	0.22076	-0.11038	-0.11038	0.58983	0.70021	OK	-0.11038
-0.11038	OK	1.1479E+7	OK	OK	90.00063													
					51.24153	62.72993	41.20392	-6.00000	0.47944	0.47944	0.27431	0.54861	-0.27431	-0.27431	0.75375	1.02806	OK	-0.27431
-0.27431	OK	4.6189E+6	OK	OK	203.67546													
					52.24627	63.20814	40.32028	-6.00000	0.45936	0.45936	0.25796	0.51592	-0.25796	-0.25796	0.71732	0.97528	OK	-0.25796
-0.25796	OK	4.9116E+6	OK	OK	193.41390													
					53.25101	63.68636	39.43665	-6.00000	0.45936	0.45936	0.13885	0.27770	-0.13885	-0.13885	0.59821	0.73706	OK	-0.13885
-0.13885	OK	9.1250E+6	OK	OK	154.57543													
					54.25574	64.16457	38.55302	-6.00000	0.47944	0.47944	0.39237	0.78475	-0.39237	-0.39237	0.87181	1.26418	OK	-0.39237
-0.39237	OK	3.2291E+6	OK	OK	163.66118													
					55.26048	64.64278	37.66939	-6.00000	0.47943	0.47943	0.16713	0.33427	-0.16713	-0.16713	0.64657	0.81370	OK	-0.16713
-0.16713	OK	7.5807E+6	OK	OK	221.22717													
					56.26521	65.12099	36.78575	-6.00000	0.52680	0.52680	0.27417	0.54835	-0.27417	-0.27417	0.80097	1.07515	OK	-0.27417
-0.27417	OK	4.6211E+6	OK	OK	203.76449													
					57.26995	65.59921	35.90212	-6.00000	0.48303	0.48303	0.37980	0.75959	-0.37980	-0.37980	0.86283	1.24263	OK	-0.37980
-0.37980	OK	3.3360E+6	OK	OK	172.35629													
					58.27469	66.07742	35.01849	-6.00000	0.45934	0.45934	0.25826	0.51653	-0.25826	-0.25826	0.71760	0.97587	OK	-0.25826
-0.25826	OK	4.9058E+6	OK	OK	166.57331													
					59.27942	66.55563	34.13485	-6.00000	0.48302	0.48302	0.30321	0.60642	-0.30321	-0.30321	0.78623	1.08944	OK	-0.30321
-0.30321	OK	4.1787E+6	OK	OK	214.18202													
					60.28416	67.03384	33.25122	-6.00000	0.48302	0.48302	0.41317	0.82635	-0.41317	-0.41317	0.89620	1.30937	OK	-0.41317
-0.41317	OK	3.0665E+6	OK	OK	155.68625													
					61.28889	67.51205	32.36759	-6.00000	-11.715	-11.715	71.020	142.04	-71.020	-71.020	71.02017	142.04034	OK	-82.73560 -
82.73560	OK	1.7840E+4	OK	OK	127.05800													
					62.29363	67.99027	31.48395	-6.00000	-8.3591	-8.3591	48.605	97.209	-48.605	-48.605	48.60463	97.20925	OK	-56.96375 -
56.96375	OK	2.6067E+4	OK	OK	108.51883													
					63.29836	68.46848	30.60032	-6.00000	13.650	13.650	26.594	53.187	-26.594	-26.594	40.24311	66.83666	OK	-26.59355 -
26.59355	OK	4.7643E+4	OK	OK	160.71821													
					64.30310	68.94669	29.71669	-6.00000	8.2423	8.2423	60.631	121.26	-60.631	-60.631	68.87318	129.50407	OK	-60.63089 -
60.63089	OK	2.0897E+4	OK	OK	65.54303													
					65.30784	69.42490	28.83306	-6.00000	-27.279	-27.279	110.38	220.76	-110.38	-110.38	110.37814	220.75629	OK	-137.65670 -
137.65670	OK	1.1479E+4	Fails	Fails	89.99976													
					66.31257	69.90312	27.94942	-6.00000	-52.745	-52.745	159.19	318.38	-159.19	-159.19	159.18999	318.37998	OK	-211.93535 -
211.93535	OK	7.9590E+3	Fails	Fails	118.23274													
					67.31731	70.38133	27.06579	-6.00000	-78.199	-78.199	133.62	267.25	-133.62	-133.62	133.62266	267.24532	OK	-211.82117 -
211.82117	OK	9.4819E+3	Fails	Fails	124.30298													
					68.32204	70.85954	26.18216	-6.00000	-125.53	-125.53	126.97	253.94	-126.97	-126.97	126.96750	253.93501	OK	-252.49426 -
252.49426	OK	9.9789E+3	Fails	Fails	119.61967													
					69.32678	71.33775	25.29852	-6.00000	-149.19	-149.19	0.0022184	0.0044369	-0.0022184	-0.0022184	0.00222	0.00444	OK	-149.18954 -
149.18954	OK	5.7112E+8	OK	OK	110.86442													
					70.33152	71.81597	24.41489	-6.00000	-127.29	-127.29	129.02	258.03	-129.02	-129.02	129.01545	258.03089	OK	-256.30329 -
256.30329	OK	9.8205E+3	Fails	Fails	166.61267													
					71.33625	72.29418	23.53126	-6.00000	-129.05	-129.05	110.37	220.75	-110.37	-110.37	110.37463	220.74926	OK	-239.42207 -
239.42207	OK	1.1479E+4	Fails	Fails	89.99845													
					72.34099	72.77239	22.64762	-6.00000	-176.37	-176.37	110.39	220.77	-110.39	-110.39	110.38703	220.77406	OK	-286.75377 -
286.75377	OK	1.1478E+4	Fails	Fails	90.00171													
					73.34572	73.25060	21.76399	-6.00000	-176.35	-176.35	167.14	334.28	-167.14	-167.14	167.14224	334.28449	OK	-343.49316 -
343.49316	OK	7.5804E+3	Fails	Fails	221.33194													
					74.35046	73.72882	20.88036	-6.00000	-198.23	-198.23	105.65	211.29	-105.65	-105.65	105.64736	211.29472	OK	-303.88082 -
303.88082	OK	1.1993E+4	Fails	Fails	49.65146													
					75.35520	74.20703	19.99673	-6.00000	-208.12	-208.12	166.82	333.64	-166.82	-166.82	166.81874	333.63748	OK	-374.93445 -
374.93445	OK	7.5951E+3	Fails	Fails	-86.24566													
					76.35993	74.68524	19.11309	-6.00000	-181.46	-181.46	182.39	364.78	-182.39	-182.39	182.38895	364.77790	OK	-363.85291 -
363.85291	OK	6.9467E+3	Fails	Fails	107.29524													
					77.36467	75.16345	18.22946	-6.00000	-171.03	-171.03	102.10	204.20	-102.10	-102.10	102.09850	204.19700	OK	-273.13238 -
273.13238	OK	1.2410E+4	Fails	Fails	242.70785													
					78.36940	75.64166	17.34583	-6.00000	-138.79	-138.79	128.31	256.62	-128.31	-128.31	128.31191	256.62383	OK	-267.09831 -

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x Strain	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
267.09831	OK	9.8744E+3	Fails	Fails	251.88080													
					79.37414	76.11988	16.46219	-6.00000	-78.027	-78.027	46.953	93.905	-46.953	-46.953	46.95271	93.90542	OK	-124.97974 -
124.97974	OK	2.6985E+4	OK	OK	224.88510													
					80.37888	76.59809	15.57856	-6.00000	-52.228	-52.228	189.86	379.72	-189.86	-189.86	189.86076	379.72153	OK	-242.08868 -
242.08868	OK	6.6733E+3	Fails	Fails	263.08982													
					81.38361	77.07630	14.69493	-6.00000	-108.21	-108.21	193.28	386.55	-193.28	-193.28	193.27501	386.55002	OK	-301.48852 -
301.48852	OK	6.5554E+3	Fails	Fails	-62.79416													
					82.38835	77.55451	13.81129	-6.00000	-122.67	-122.67	48.751	97.501	-48.751	-48.751	48.75067	97.50133	OK	-171.41805 -
171.41805	OK	2.5989E+4	OK	OK	206.03251													
					83.39308	78.03273	12.92766	-6.00000	-85.975	-85.975	104.97	209.94	-104.97	-104.97	104.97210	209.94421	OK	-190.94681 -
190.94681	OK	1.2070E+4	Fails	Fails	-10.64636													
					84.39782	78.51094	12.04403	-6.00000	-53.287	-53.287	38.050	76.099	-38.050	-38.050	38.04974	76.09948	OK	-91.33690 -
91.33690	OK	3.3299E+4	OK	OK	-27.46183													
					85.40256	78.98915	11.16040	-6.00000	-24.232	-24.232	55.581	111.16	-55.581	-55.581	55.58114	111.16228	OK	-79.81294 -
79.81294	OK	2.2796E+4	OK	OK	-16.30818													
					86.40729	79.46736	10.27676	-6.00000	1.5942	1.5942	185.27	370.54	-185.27	-185.27	186.86282	372.13143	OK	-185.26861 -
185.26861	OK	6.8387E+3	Fails	Fails	-4.30351													
					87.41203	79.94558	9.39313	-6.00000	24.435	24.435	12.452	24.904	-12.452	-12.452	36.88710	49.33891	OK	-12.45181 -
12.45181	OK	1.0175E+5	OK	OK	-88.84868													
					88.41676	80.42379	8.50950	-6.00000	44.648	44.648	12.068	24.135	-12.068	-12.068	56.71606	68.78374	OK	-12.06768 -
12.06768	OK	1.0499E+5	OK	OK	-66.71170													
					89.42150	80.90200	7.62586	-6.00000	62.607	62.607	12.954	25.907	-12.954	-12.954	75.56059	88.51410	OK	-12.95352 -
12.95352	OK	9.7811E+4	OK	OK	-49.53075													
					90.42624	81.38021	6.74223	-6.00000	78.550	78.550	14.806	29.613	-14.806	-14.806	93.35651	108.16290	OK	-14.80639 -
14.80639	OK	8.5571E+4	OK	OK	-36.52029													
					91.43097	81.85843	5.85860	-6.00000	92.759	92.759	16.526	33.051	-16.526	-16.526	109.28456	125.81030	OK	-16.52574 -
16.52574	OK	7.6668E+4	OK	OK	-28.32562													
					92.43571	82.33664	4.97496	-6.00000	105.50	105.50	17.979	35.958	-17.979	-17.979	123.48052	141.45931	OK	-17.97879 -
17.97879	OK	7.0472E+4	OK	OK	-22.86819													
					93.44044	82.81485	4.09133	-6.00000	116.81	116.81	19.014	38.028	-19.014	-19.014	135.82240	154.83649	OK	-19.01409 -
19.01409	OK	6.6635E+4	OK	OK	-19.73202													
					94.44518	83.29306	3.20770	-6.00000	126.97	126.97	19.312	38.623	-19.312	-19.312	146.28403	165.59574	OK	-19.31171 -
19.31171	OK	6.5608E+4	OK	OK	-16.92273													
					95.44992	83.77128	2.32407	-6.00000	136.14	136.14	18.972	37.944	-18.972	-18.972	155.10839	174.08059	OK	-18.97220 -
18.97220	OK	6.6782E+4	OK	OK	-15.86807													

Summary: There is failure at one(or many) location(s). e.g. Stage 0, Specific Utility 6, location (79.467364|10.276763|-6.000000)
Note: Tensile strains are +ve, compressive strains are -ve.
Note: The peak flexural tensile strain orientation angle is measured with respect to the global z-axis by looking at the end point of the utility from the start point. Anti-clockwise is positive.

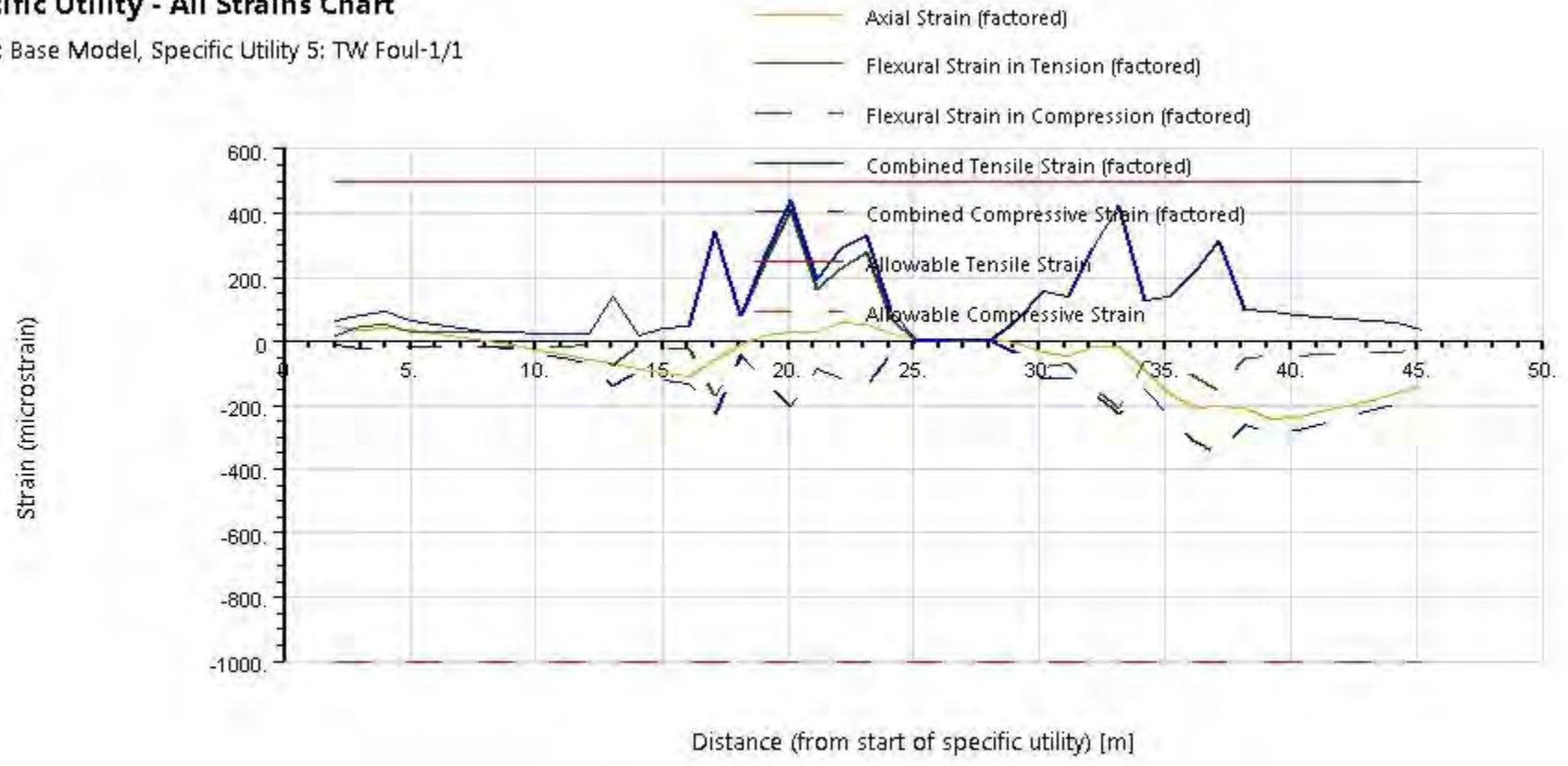
Specific Utility Damage Results - Maximum Values

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Jointed	Max. Pullout: Factored: Location [m]	Max. Pullout: Factored: Value [mm]	Max. Rotation: Factored: Location [m]	Max. Rotation: Factored: Value [Deg]	Max. Strain: Tension: Factored: Location [m]	Max. Strain: Tension: Factored: Value [με]	Max. Strain: Compn.: Factored: Location [m]	Max. Strain: Compn.: Factored: Value [με]	Min. Rad. of Curv.: Location [m]	Min. Rad. of Curv.: Value [m]	Max. Disp.: Vert.: Location [m]	Max.Disp.: Vert. : Value [mm]	Max. Disp: Horiz. x: Location [m]	Max. Disp: Horiz. x: Value [mm]	Max. Disp: Horiz. y: Location [m]	Max. Disp: Horiz. y: Value [mm]
0	Base Model	1	TW Main-1	Yes	21.059	0.24160	33.093	0.05021	33.09347	74.85841	33.09347	-85.91444	33.093	1.2691E+3*	33.093	5.5217	48.135	-1.4901	32.091	7.5133
		2	TW Main-2	Yes	15.045	0.16712	15.045	0.04732	14.04162	60.53555	11.03270	-63.03051	14.042	1.6111E+3*	34.101	7.0745	0.0	1.5703	34.101	8.5518
		3	TW Main-3	Yes	4.9845	0.015260	4.9845	0.00024	6.97824	2.13352	6.97824	-1.08967	6.9782	8.7182E+4	9.9680	7.7173	9.9680	0.74202	9.9680	9.1469
		4	TW Main-4	Yes	49.791	0.32361	24.896	0.05367	25.89152	56.13556	28.87900	-75.84719	25.892	1.6923E+3*	24.896	7.9926	42.821	-2.0354	24.896	9.6091
		5	TW Foul-1	Yes	20.089	0.47447	33.146	0.01381	20.08870	442.62914	37.16410	-354.61876	33.146	4.1673E+3*	32.142	5.3000	47.208	-1.4513	30.133	7.4341
		6	TW Foul-2	Yes	15.071	0.41750	15.071	0.00944	15.07104	415.53115	75.35520	-374.93445	15.071	6.0982E+3*	61.289	8.4977	86.407	-2.2484	61.289	10.257

Note: * symbol indicates that the value has exceeded one of (or both) the limiting criteria

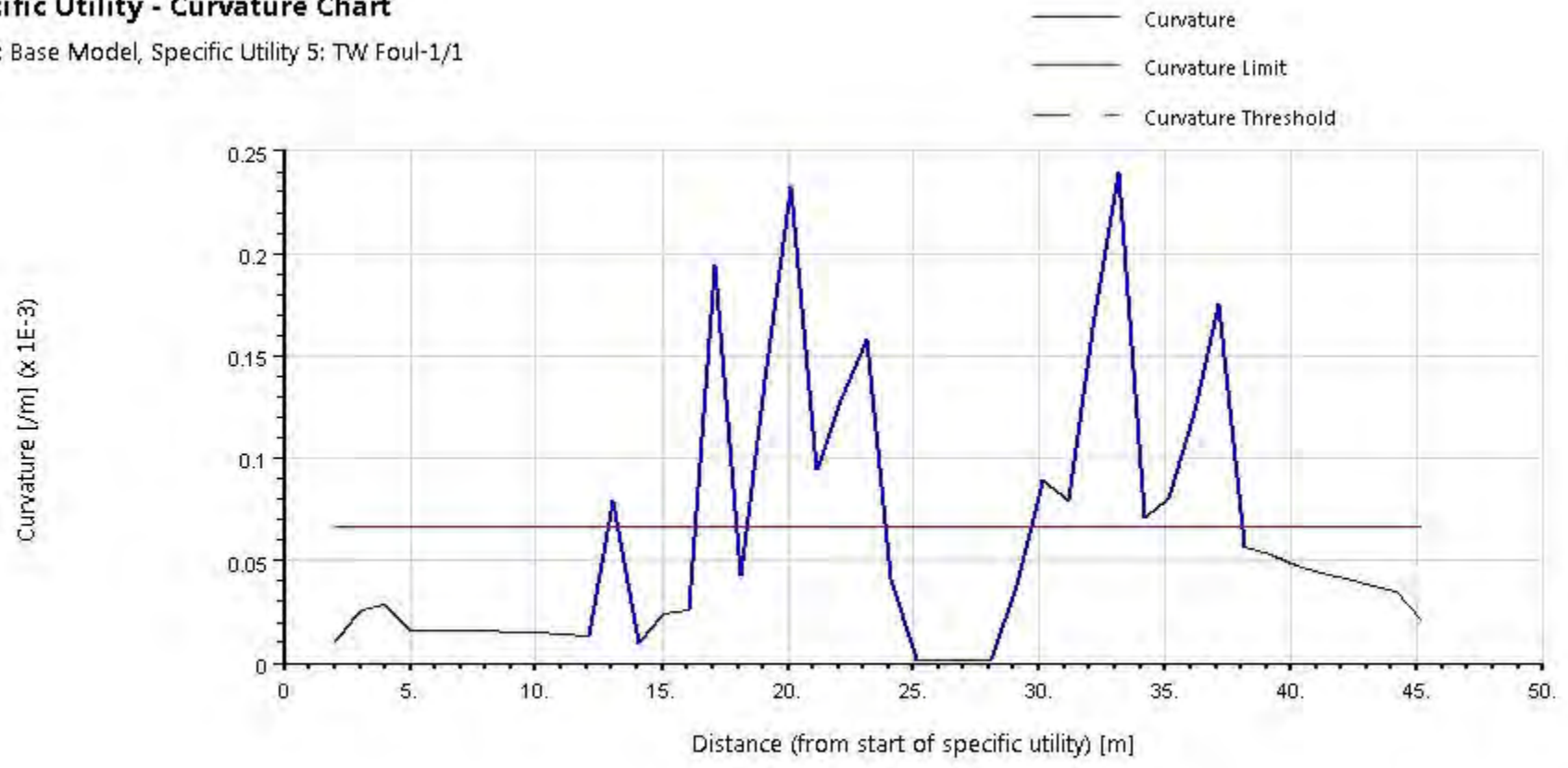
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



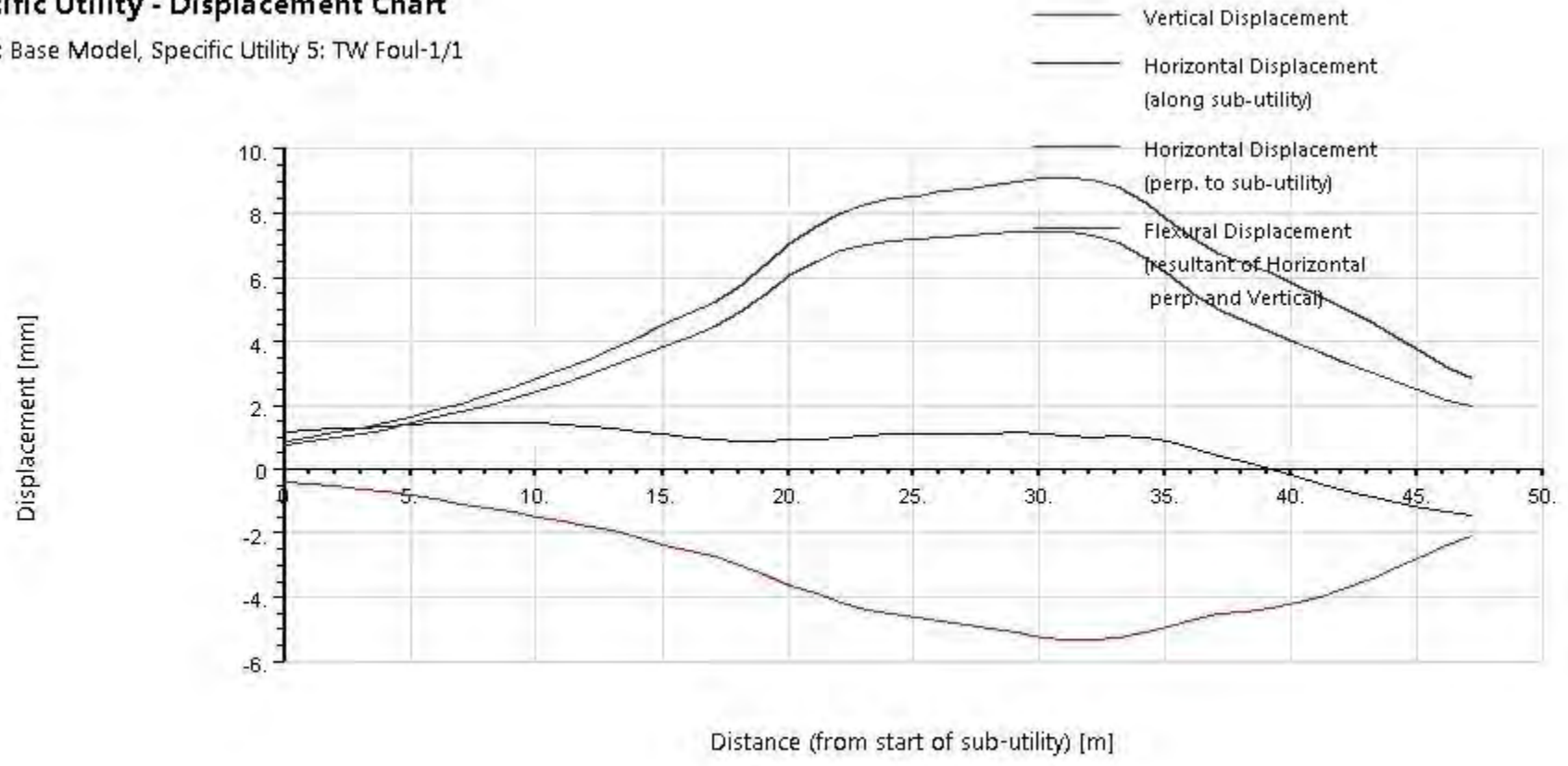
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



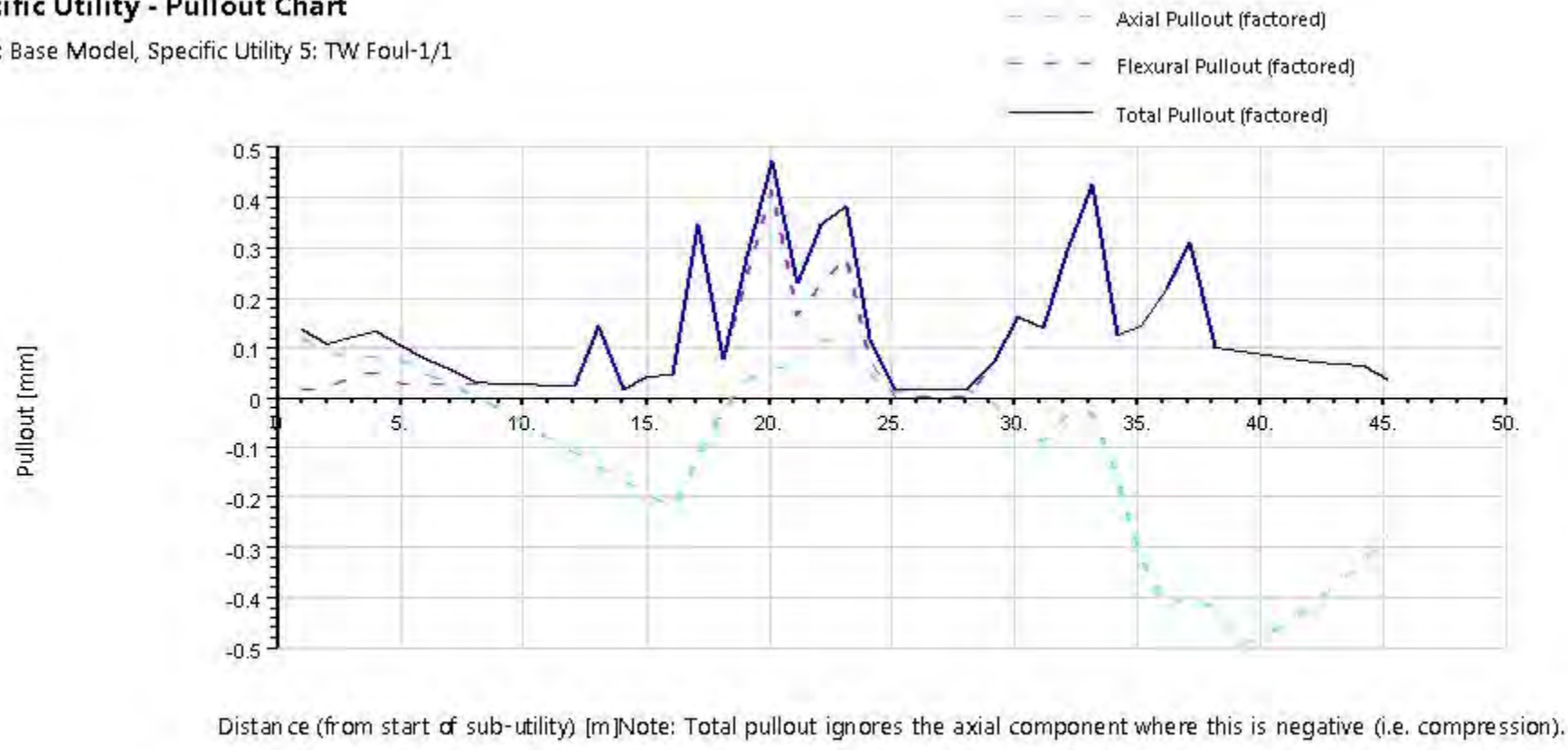
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



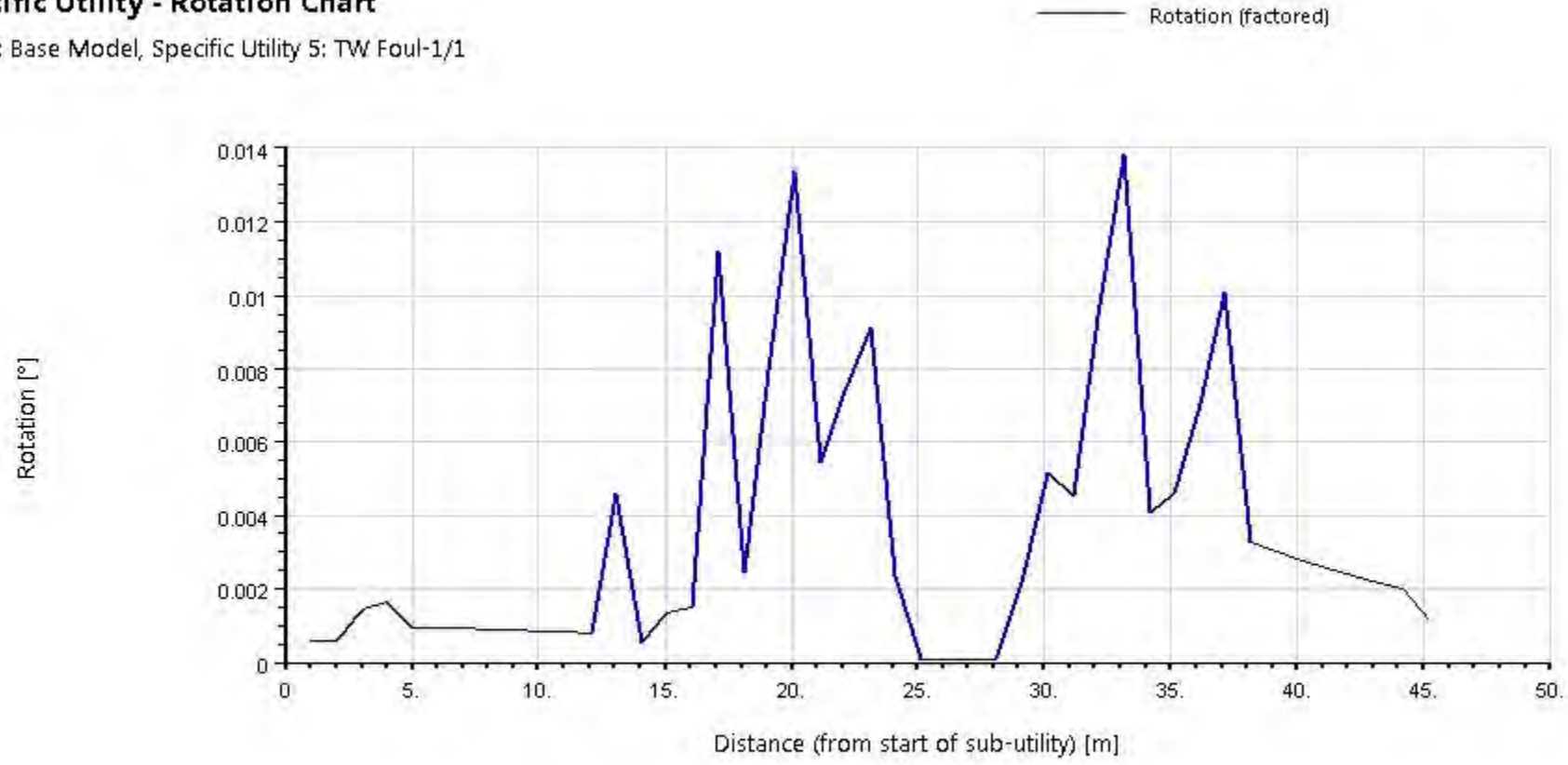
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



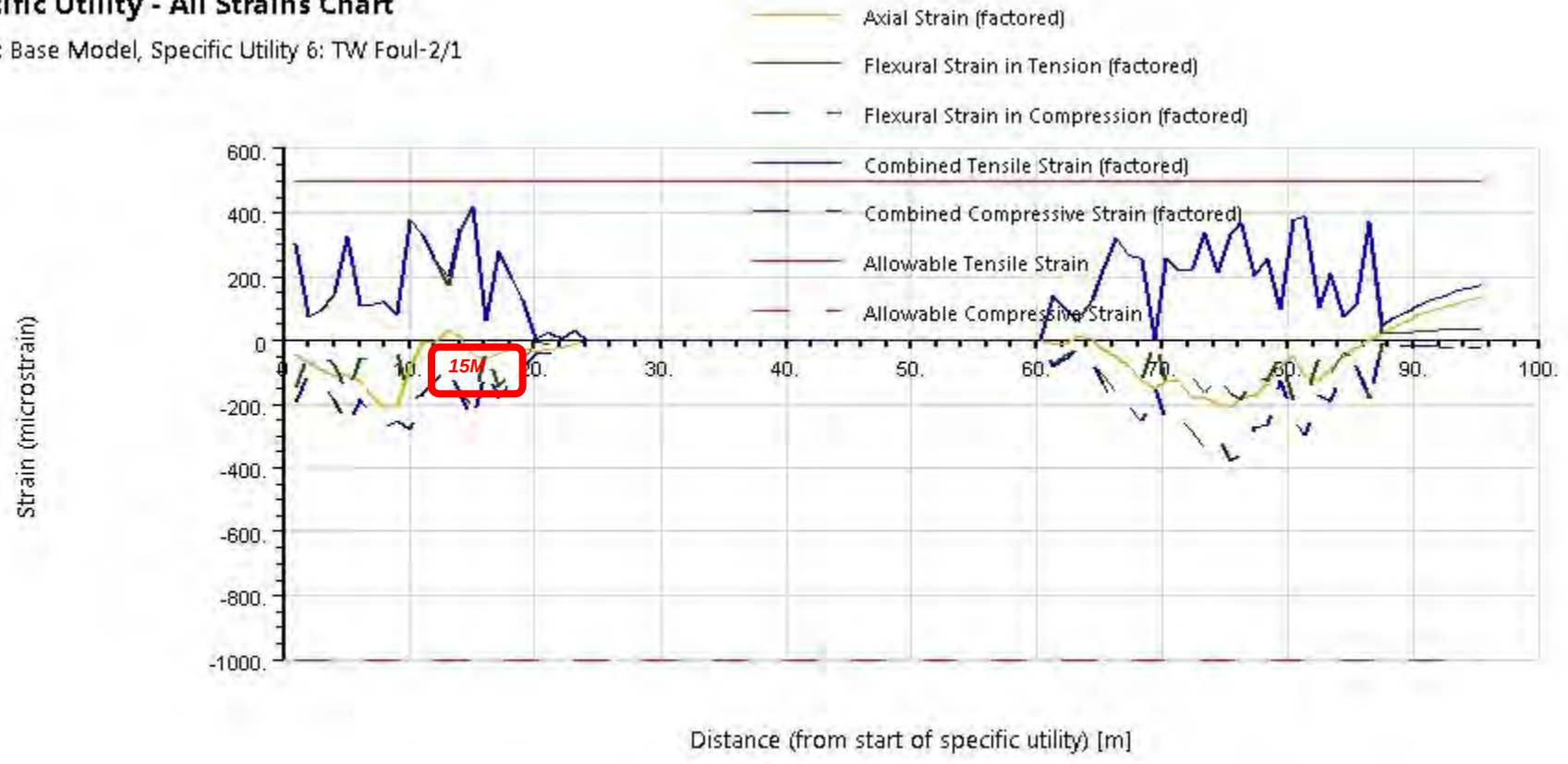
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



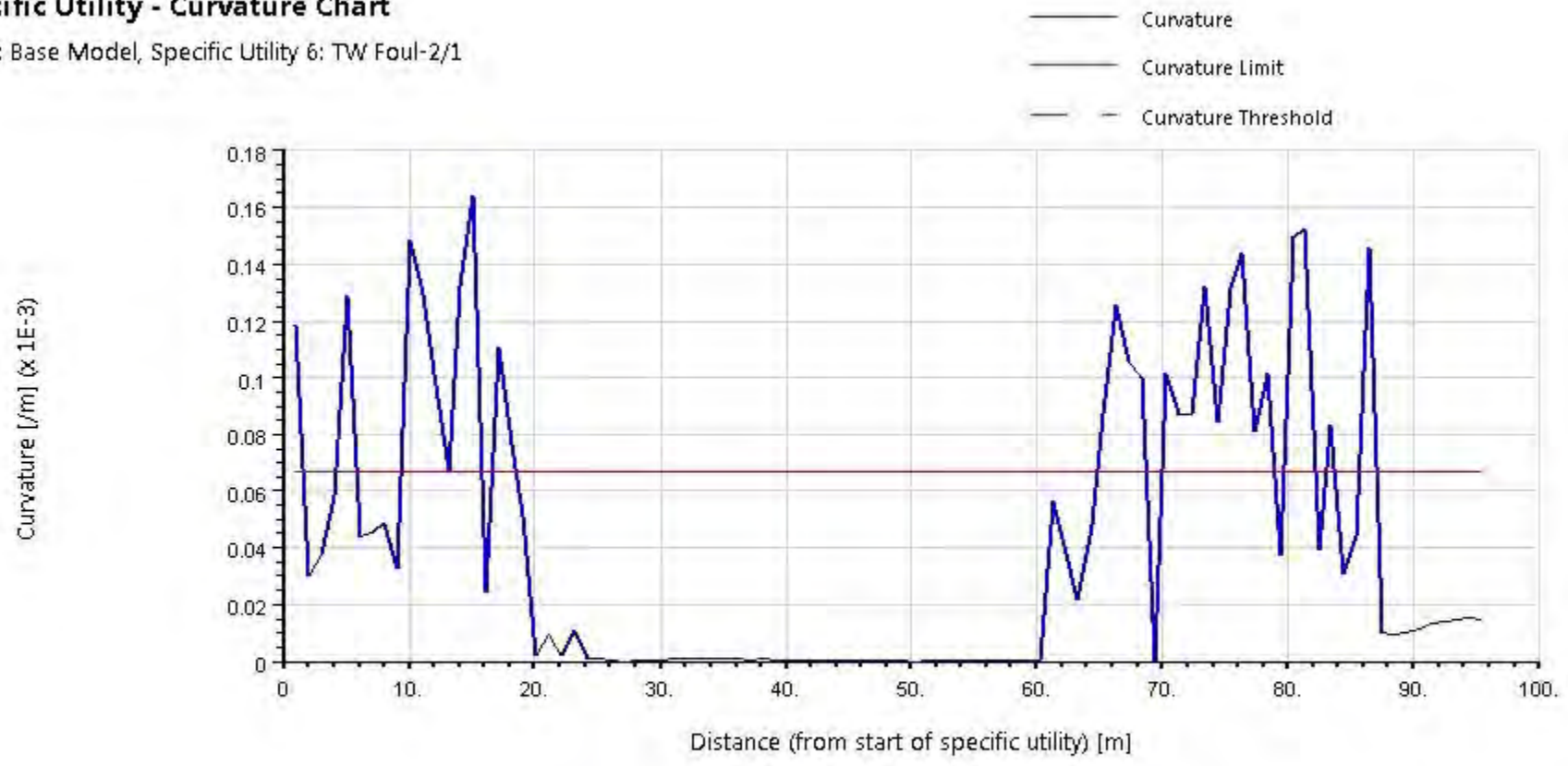
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

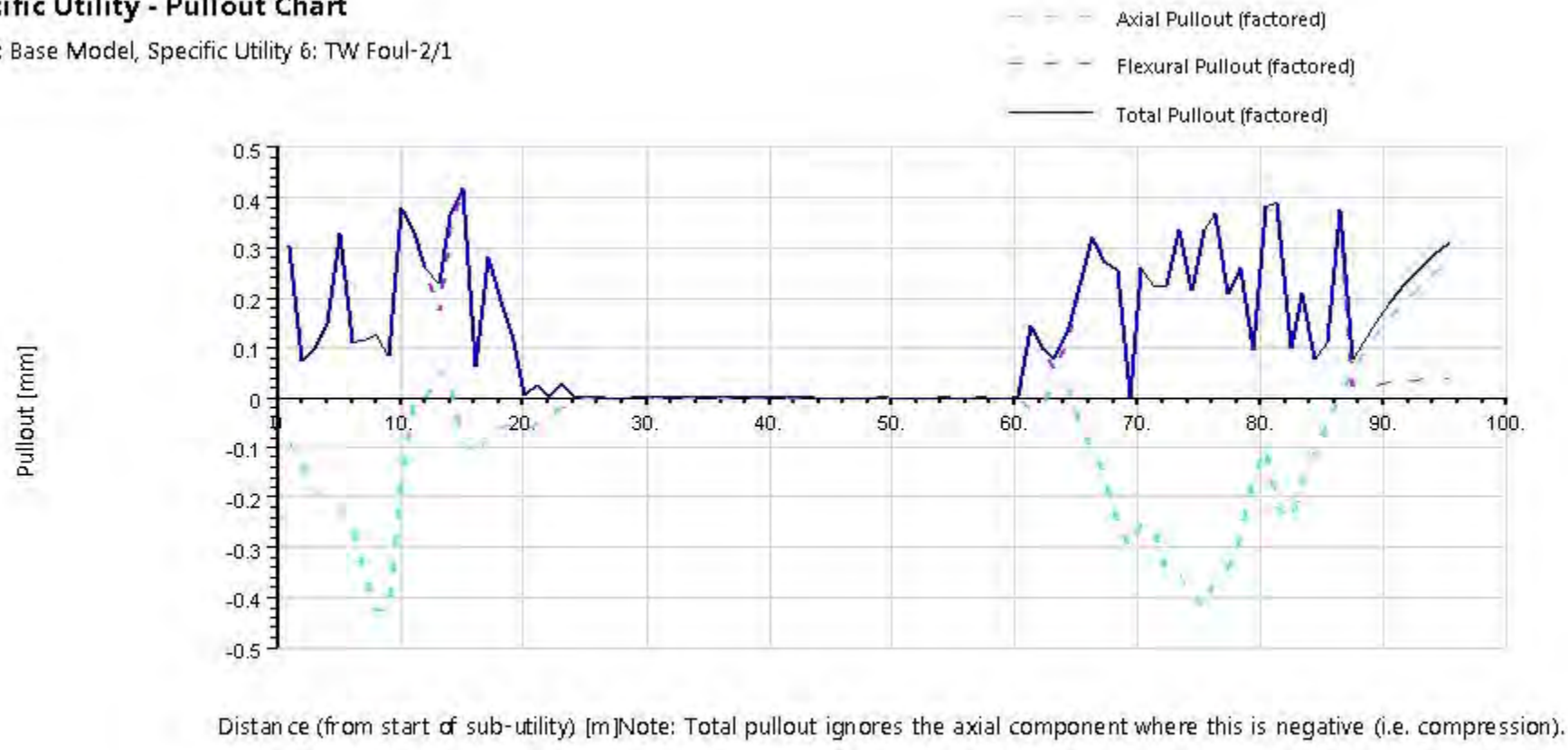


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

Specific Utility - Pullout Chart

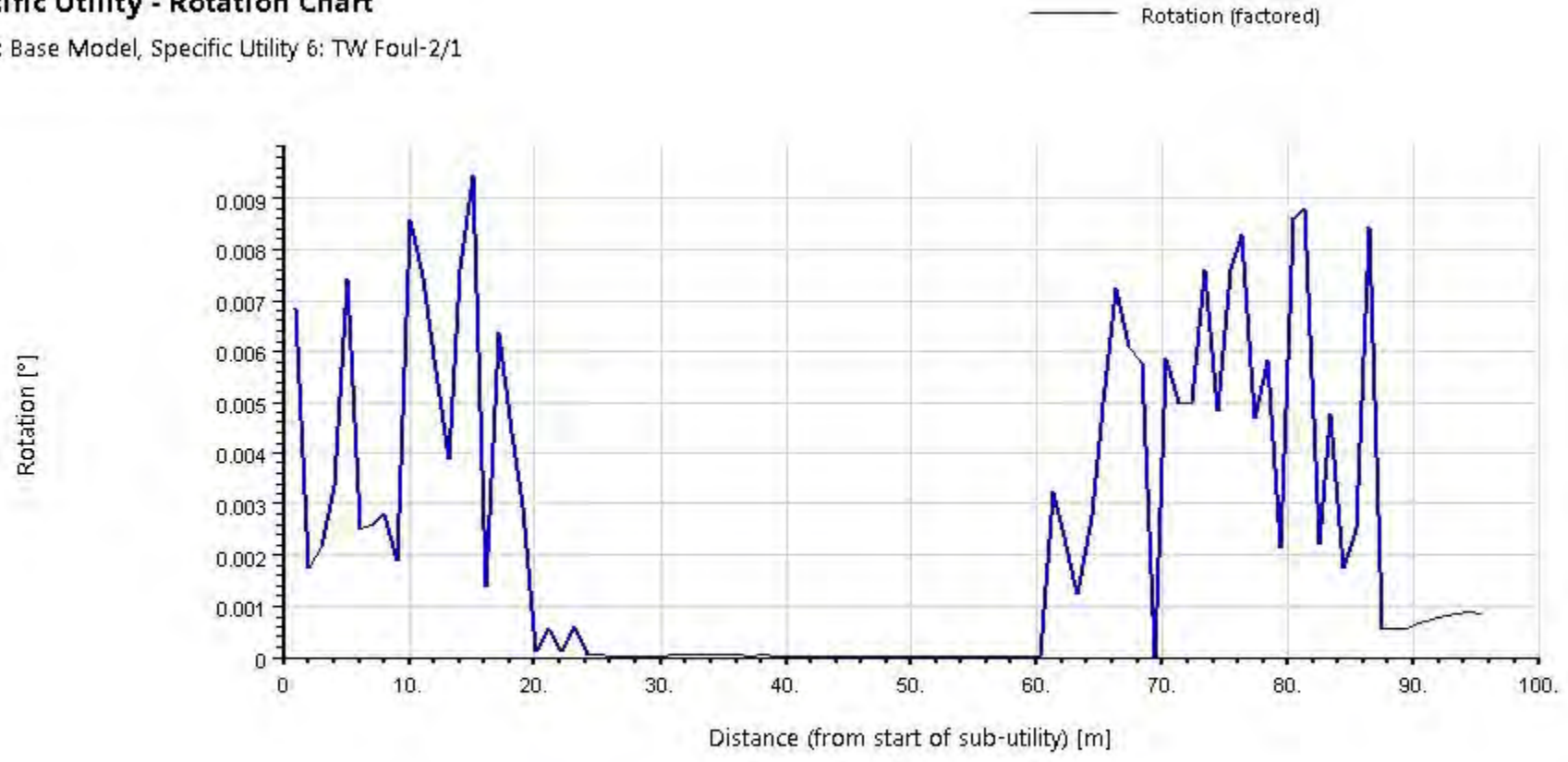
Stage: Base Model, Specific Utility 6: TW Foul-2/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



APPENDIX D5
XDISP PROPOSED DEVELOPMENT – DRAINED (STAGE 2B)

Titles

Job No.: 371944
Job Title: 60-86 Royal College Street, London
Sub-title: Proposed - Drained
Calculation Heading: Smoothed
Initials: SA
Checker:
Date Saved: 04-Mar-2021
Date Checked:
Notes:
File Name: XDisp1 Proposed - Drained - Smoothed.xdd
File Path: G:\Geoconsult\Projects\371900 - 371999\371944 Royal College Street\GMA\XDISP\Thames Water\02\Smoothing

History

Date	Time	By	Notes
05-Sep-2019	13:52	SAlHilly	New
05-Sep-2019	15:38	SAlHilly	
16-Sep-2019	16:58	SAlHilly	
17-Sep-2019	14:57	SAlHilly	
17-Sep-2019	15:05	SAlHilly	
17-Sep-2019	16:55	SAlHilly	
20-Sep-2019	15:42	TYLER_A	
20-Sep-2019	15:53	TYLER_A	
03-Oct-2019	12:16	TYLER_A	
14-Oct-2019	14:55	TYLER_A	
14-Oct-2019	14:56	TYLER_A	
18-Nov-2019	11:12	TYLER_A	
22-Nov-2019	16:02	TYLER_A	
04-Dec-2019	10:18	TYLER_A	
04-Dec-2019	10:21	TYLER_A	
04-Dec-2019	10:27	TYLER_A	
22-Apr-2020	09:24	TYLER_A	
22-Apr-2020	10:32	TYLER_A	
22-Apr-2020	15:06	TYLER_A	
22-Apr-2020	17:31	TYLER_A	
22-Apr-2020	19:43	TYLER_A	
22-Apr-2020	19:51	TYLER_A	
18-Jun-2020	12:42	TYLER_A	
18-Jun-2020	14:18	TYLER_A	
18-Jun-2020	14:58	TYLER_A	
18-Jun-2020	15:00	TYLER_A	
22-Jun-2020	12:11	TYLER_A	
22-Jun-2020	12:21	TYLER_A	
22-Jun-2020	14:37	TYLER_A	
25-Jun-2020	12:30	TYLER_A	
26-Jun-2020	09:51	TYLER_A	
29-Jun-2020	13:28	TYLER_A	
29-Jun-2020	14:17	TYLER_A	
29-Jun-2020	15:52	TYLER_A	
16-Jul-2020	15:49	TYLER_A	
20-Jul-2020	08:07	TYLER_A	
20-Jul-2020	08:57	TYLER_A	
20-Jul-2020	09:01	TYLER_A	
13-Nov-2020	14:27	SAlHilly	
16-Nov-2020	14:44	TYLER_A	
16-Nov-2020	15:25	TYLER_A	
16-Nov-2020	15:45	TYLER_A	
16-Nov-2020	15:51	TYLER_A	
20-Nov-2020	08:48	TYLER_A	
20-Nov-2020	17:18	SAlHilly	
02-Dec-2020	15:58	TYLER_A	
02-Dec-2020	16:44	TYLER_A	
02-Dec-2020	16:49	TYLER_A	
09-Dec-2020	18:45	TYLER_A	
10-Dec-2020	09:37	TYLER_A	
04-Mar-2021	12:48	TYLER_A	

Displacement Lines

Ref.	Name	x1 [m]	y1 [m]	z1 [m]	x2 [m]	y2 [m]	z2 [m]	Intervals [No.]	Surface type for tunnels	Interpolate imported displacements	Calculate
1	TW Main-1	76.75020	113.72130	-0.90000	37.23790	86.22860	-0.90000	48	Surface	Yes	Yes
2	TW Main-2	37.23790	86.22860	-0.90000	53.14020	56.06240	-0.90000	34	Surface	Yes	Yes
3	TW Main-3	53.14020	56.06240	-0.90000	58.38580	47.58520	-0.90000	10	Surface	Yes	Yes
4	TW Main-4	58.38580	47.58520	-0.90000	83.80850	0.19950	-0.90000	54	Surface	Yes	Yes
5	TW Foul-1	76.45800	114.12130	-6.00000	38.34110	86.26920	-6.00000	47	Surface	Yes	Yes
6	TW Foul-2	38.34110	86.26920	-6.00000	84.72770	0.55680	-6.00000	97	Surface	Yes	Yes

Displacement Grids

Ref.	Name	Extrusion: Direction	Base line start: X [m]	Base line start: Y [m]	Base line start: Z(level) [m]	Base line end: X [m]	Base line end: Y [m]	Base line end: Z(level) [m]	Base line: Intervals [No.]	Extrusion: Distance [m]	Extrusion: Intervals [No.]	Surface type for tunnels	Calculate
1	Grid1	Global X	30.00000	0.00000	-3.00000	-	120.00000	-3.00000	120	80.00000	50	Surface	No

Imported Displacements

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
1	ID Set #	1	76.75020	113.72130	-0.90000	-0.51428	-1.33560	-0.00528
		2	75.92703	113.14854	-0.90000	-0.50532	-1.45910	0.04146
		3	75.10385	112.57577	-0.90000	-0.48164	-1.57960	0.09557
		4	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.15604
		5	73.45751	111.43024	-0.90000	-0.38647	-1.81360	0.22260
		6	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.30967
		7	71.81116	110.28471	-0.90000	-0.24121	-2.13310	0.40480
		8	70.98799	109.71195	-0.90000	-0.14183	-2.29970	0.50683
		9	70.16482	109.13918	-0.90000	-0.02342	-2.47080	0.61437
		10	69.34164	108.56642	-0.90000	0.11476	-2.64640	0.72586
		11	68.51847	107.99365	-0.90000	0.27323	-2.82610	0.83957
		12	67.69530	107.42089	-0.90000	0.45222	-3.00940	0.95366
		13	66.87213	106.84812	-0.90000	0.65159	-3.19580	1.06620
		14	66.04895	106.27536	-0.90000	0.87069	-3.38410	1.19450
		15	65.22578	105.70260	-0.90000	1.10830	-3.57320	1.39910
		16	64.40261	105.12983	-0.90000	1.36240	-3.76140	1.58270
		17	63.57943	104.55707	-0.90000	1.63050	-3.94670	1.74260
		18	62.75626	103.98430	-0.90000	1.90900	-4.12700	1.87590
		19	61.93309	103.41154	-0.90000	2.19390	-4.29970	1.97990
		20	61.10991	102.83877	-0.90000	2.51060	-4.80410	2.27690
		21	60.28674	102.26601	-0.90000	2.84180	-5.43800	2.66030
		22	59.46357	101.69324	-0.90000	3.17730	-6.08010	3.05490
		23	58.64040	101.12048	-0.90000	3.28830	-6.29240	3.22290
		24	57.81722	100.54771	-0.90000	3.31020	-6.33440	3.30060
		25	56.99405	99.97495	-0.90000	3.33220	-6.37640	3.38100
		26	56.17088	99.40219	-0.90000	3.35410	-6.41840	3.46470
		27	55.34770	98.82942	-0.90000	3.37610	-6.46040	3.55200

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		28	54.52453	98.25666	-0.90000	3.39800	-6.50240	3.64350
		29	53.70136	97.68389	-0.90000	3.42000	-6.54440	3.73950
		30	52.87819	97.11113	-0.90000	3.44190	-6.58640	3.84010
		31	52.05501	96.53836	-0.90000	3.46390	-6.62840	3.94560
		32	51.23184	95.96560	-0.90000	3.48580	-6.67040	4.05600
		33	50.40867	95.39283	-0.90000	3.50780	-6.71240	4.17130
		34	49.58549	94.82007	-0.90000	3.46440	-6.62940	4.21230
		35	48.76232	94.24730	-0.90000	3.09930	-5.93080	3.86610
		36	47.93915	93.67454	-0.90000	2.72950	-5.22310	3.51280
		37	47.11598	93.10178	-0.90000	2.41860	-4.56480	3.21440
		38	46.29280	92.52901	-0.90000	2.44980	-4.20840	3.22260
		39	45.46963	91.95625	-0.90000	2.47200	-3.83290	3.17770
		40	44.64646	91.38348	-0.90000	2.48490	-3.44680	3.08140
		41	43.82328	90.81072	-0.90000	2.48790	-3.05870	2.93650
		42	43.00011	90.23795	-0.90000	2.48120	-2.67660	2.74620
		43	42.17694	89.66519	-0.90000	2.46460	-2.30750	2.51400
		44	41.35376	89.09242	-0.90000	2.43840	-1.95680	2.24410
		45	40.53059	88.51966	-0.90000	2.40300	-1.62880	1.94050
		46	39.70742	87.94689	-0.90000	2.35890	-1.32630	1.62380
		47	38.88425	87.37413	-0.90000	2.30680	-1.05080	1.37100
		48	38.06107	86.80136	-0.90000	2.24710	-0.80281	1.10580
		49	37.23790	86.22860	-0.90000	2.23190	-0.59855	0.86603
		50	37.70561	85.34136	-0.90000	2.41970	-0.46340	1.17640
		51	38.17333	84.45412	-0.90000	2.61880	-0.30131	1.46420
		52	38.64104	83.56688	-0.90000	2.82950	-0.11082	1.76750
		53	39.10876	82.67964	-0.90000	3.05160	0.10905	2.14300
		54	39.57647	81.79239	-0.90000	3.28440	0.35860	2.49160
		55	40.04419	80.90515	-0.90000	3.52670	0.63717	2.80900
		56	40.51190	80.01791	-0.90000	3.77620	0.94287	3.09040
		57	40.97962	79.13067	-0.90000	4.05830	1.27990	3.33130
		58	41.44733	78.24343	-0.90000	4.38590	1.65520	3.52690
		59	41.91505	77.35619	-0.90000	4.68920	2.04480	3.67300
		60	42.38276	76.46895	-0.90000	4.96030	2.43490	3.76530
		61	42.85048	75.58171	-0.90000	5.53500	2.83380	4.07270
		62	43.31819	74.69446	-0.90000	6.33760	3.24470	4.55580
		63	43.78591	73.80722	-0.90000	7.14100	3.65600	5.04070
		64	44.25362	72.91998	-0.90000	7.46570	3.82220	5.20910
		65	44.72134	72.03274	-0.90000	7.47340	3.82620	5.16880
		66	45.18905	71.14550	-0.90000	7.48120	3.83010	5.13080
		67	45.65676	70.25826	-0.90000	7.48890	3.83410	5.09570
		68	46.12448	69.37102	-0.90000	7.49670	3.83810	5.06400
		69	46.59219	68.48378	-0.90000	7.50440	3.84200	5.03610
		70	47.05991	67.59654	-0.90000	7.51210	3.84600	5.01230
		71	47.52762	66.70929	-0.90000	7.51990	3.85000	4.99270
		72	47.99534	65.82205	-0.90000	7.52760	3.85390	4.97740
		73	48.46305	64.93481	-0.90000	7.53540	3.85790	4.96630
		74	48.93077	64.04757	-0.90000	7.54310	3.86180	4.95900
		75	49.39848	63.16033	-0.90000	7.55080	3.86580	4.95520
		76	49.86620	62.27309	-0.90000	7.55860	3.86980	4.95450
		77	50.33391	61.38585	-0.90000	7.56630	3.87370	4.95650
		78	50.80163	60.49861	-0.90000	7.57400	3.87770	4.96080
		79	51.26934	59.61136	-0.90000	7.58180	3.88160	4.96680
		80	51.73706	58.72412	-0.90000	7.58950	3.88560	4.97440
		81	52.20477	57.83688	-0.90000	7.59730	3.88960	4.98310
		82	52.67249	56.94964	-0.90000	7.60500	3.89350	4.99270
		83	53.14020	56.06240	-0.90000	7.61270	3.89750	5.00310
		84	53.66476	55.21468	-0.90000	7.66470	3.92410	5.06700
		85	54.18932	54.36696	-0.90000	7.71670	3.95070	5.11810
		86	54.71388	53.51924	-0.90000	7.76870	3.97740	5.18020
		87	55.23844	52.67152	-0.90000	7.82070	4.00400	5.24310
		88	55.76300	51.82380	-0.90000	7.87280	4.03060	5.30660
		89	56.28756	50.97608	-0.90000	7.92480	4.05730	5.37080
		90	56.81212	50.12836	-0.90000	7.97690	4.08390	5.43580
		91	57.33668	49.28064	-0.90000	8.03910	4.11580	5.50160
		92	57.86124	48.43292	-0.90000	8.10390	4.14890	5.56830
		93	58.38580	47.58520	-0.90000	8.16870	4.18210	5.63600
		94	58.85659	46.70769	-0.90000	8.18410	4.19000	5.65890
		95	59.32738	45.83017	-0.90000	8.19950	4.19790	5.68320
		96	59.79817	44.95266	-0.90000	8.21490	4.20580	5.70070
		97	60.26896	44.07515	-0.90000	8.23030	4.21370	5.72980
		98	60.73975	43.19764	-0.90000	8.24580	4.22160	5.76050
		99	61.21054	42.32012	-0.90000	8.26120	4.22950	5.79270
		100	61.68134	41.44261	-0.90000	8.27660	4.23740	5.82640
		101	62.15213	40.56510	-0.90000	8.29200	4.24530	5.86190
		102	62.62292	39.68758	-0.90000	8.30750	4.25320	5.89900
		103	63.09371	38.81007	-0.90000	8.32290	4.26110	5.93780
		104	63.56450	37.93256	-0.90000	8.33840	4.26900	5.97840
		105	64.03529	37.05504	-0.90000	8.35380	4.27690	6.02060
		106	64.50608	36.17753	-0.90000	8.36930	4.28480	6.06450
		107	64.97687	35.30002	-0.90000	8.38470	4.29270	6.11010
		108	65.44766	34.42251	-0.90000	8.40020	4.30060	6.15740
		109	65.91845	33.54499	-0.90000	8.41560	4.30860	6.20610
		110	66.38924	32.66748	-0.90000	8.43110	4.31650	6.25620
		111	66.86003	31.78997	-0.90000	8.44660	4.32440	6.30770
		112	67.33082	30.91245	-0.90000	8.46200	4.33230	6.36020
		113	67.80161	30.03494	-0.90000	8.47750	4.34020	6.41360
		114	68.27241	29.15743	-0.90000	8.49300	4.34820	6.46760
		115	68.74320	28.27991	-0.90000	8.50850	4.35610	6.52190
		116	69.21399	27.40240	-0.90000	8.52400	4.36400	6.57600
		117	69.68478	26.52489	-0.90000	8.53940	4.37190	6.62960
		118	70.15557	25.64738	-0.90000	8.55490	4.37990	6.68230
		119	70.62636	24.76986	-0.90000	8.15930	4.17730	6.45000
		120	71.09715	23.89235	-0.90000	7.31920	3.74720	5.90940
		121	71.56794	23.01484	-0.90000	6.47780	3.31650	5.36590
		122	72.03873	22.13732	-0.90000	5.75100	3.11310	5.03780
		123	72.50952	21.25981	-0.90000	5.11770	3.14200	4.91120
		124	72.98031	20.38230	-0.90000	4.45700	3.13090	4.72620
		125	73.45110	19.50479	-0.90000	3.79690	3.07710	4.48820
		126	73.92189	18.62727	-0.90000	3.16620	2.98510	4.20290
		127	74.39269	17.74976	-0.90000	2.60530	2.88680	3.87600
		128	74.86348	16.87225	-0.90000	2.09330	2.75630	3.51290
		129	75.33427	15.99473	-0.90000	1.63880	2.60100	3.11910
		130	75.80506	15.11722	-0.90000	1.29950	2.54630	2.69930
		131	76.27585	14.23971	-0.90000	1.00010	2.48310	2.25830
		132	76.74664	13.36219	-0.90000	0.74378	2.42910	1.81330
		133	77.21743	12.48468	-0.90000	0.54697	2.44430	1.49020
		134	77.68822	11.60717	-0.90000	0.37737	2.43790	1.20930
		135	78.15901	10.72966	-0.90000	0.23253	2.41210	0.91137
		136	78.62980	9.85214	-0.90000	0.11009	2.36890	0.78617
		137	79.10059	8.97463	-0.90000	0.00783	2.31010	0.67000
		138	79.57138	8.09712	-0.90000	-0.07627	2.23740	0.55345
		139	80.04217	7.21960	-0.90000	-0.14407	2.15220	0.43957
		140	80.51296	6.34209	-0.90000	-0.19722	2.05580	0.33107
		141	80.98376	5.46458	-0.90000	-0.23721	1.94940	0.23029
		142	81.45455	4.58706	-0.90000	-0.26534	1.83410	0.13914
		143	81.92534	3.70955	-0.90000	-0.28280	1.71070	0.05905
		144	82.39613	2.83204	-0.90000	-0.29062	1.58000	-0.00906
		145	82.86692	1.95453	-0.90000	-0.28972	1.44280	-0.06479
		146	83.33771	1.07701	-0.90000	-0.28092	1.29960	-0.10832
		147	83.80850	0.19950	-0.90000	-0.26495	1.15110	-0.14043
		148	76.45800	114.12130	-6.00000	-0.46413	-1.28850	-0.03461
		149	75.64700	113.52870	-6.00000	-0.45521	-1.41290	0.01069
		150	74.83600	112.93610	-6.00000	-0.43197	-1.53440	0.06388
		151	74.02501	112.34351	-6.00000	-0.39337	-1.65270	0.07849
		152	73.21401	111.75091	-6.00000	-0.34304	-1.78930	0.14630
		153	72.40301	111.15831	-6.00000	-0.28065	-1.94730	0.22852
		154	71.59201	110.56571	-6.00000	-0.20148	-2.10980	0.31899
		155	70.78101	109.97311	-6.00000	-0.10458	-2.27680	0.41661
		156	69.97002	109.38052	-6.00000	0.01094	-2.44830	0.52001
		157	69.15902	108.7792	-6.00000	0.14587	-2.62420	0.62763
		158	68.34802	108.19532	-6.00000	0.30078	-2.80420	0.73775
		159	67.53702	107.60272	-6.00000	0.47599	-2.98790	0.84847
		160	66.72603	107.01013	-6.00000	0.67146	-3.17480	0.95780
		161	65.91503	106.41753	-6.00000	0.88669	-3.36380	1.06370
		162	65.10403	105.82493	-6.00000	1.12060	-3.55390	1.24820
		163	64.29303	105.23233	-6.00000	1.30000	-3.74350	1.43320
		164	63.48203	104.63973	-6.00000	1.55000	-3.93080	1.59460
		165	62.67104	104.04714	-6.00000	1.80000	-4.20000	1.80000
		166	61.86004	103.45454	-6.00000	2.10000	-4.40000	2.05000
		167	61.04904	102.86194	-6.00000	2.35000	-4.80000	2.30000
		168	60.23804	102.26934	-6.00000	2.60000	-5.30000	2.55000

Set: Ref.	Set: Name	Result: Ref.	Coordinates: x [m]	Coordinates: y [m]	Coordinates: z [m]	Displacements: x [mm]	Displacements: y [mm]	Displacements: z [mm]
		169	59.42704	101.67674	-6.00000	2.80000	-5.70000	2.80000
		170	58.61605	101.08415	-6.00000	2.95000	-6.00000	3.00000
		171	57.80505	100.49155	-6.00000	3.10000	-6.20000	3.17450
		172	56.99405	99.89895	-6.00000	3.20000	-6.30000	3.26140
		173	56.18305	99.30635	-6.00000	3.30000	-6.44850	3.35100
		174	55.37206	98.71376	-6.00000	3.40000	-6.49820	3.44400
		175	54.56106	98.12116	-6.00000	3.42180	-6.54800	3.54080
		176	53.75006	97.52856	-6.00000	3.44780	-6.50000	3.64230
		177	52.93906	96.93596	-6.00000	3.47380	-6.45000	3.74870
		178	52.12806	96.34336	-6.00000	3.49980	-6.35000	3.75000
		179	51.31707	95.75077	-6.00000	3.45000	-6.20000	3.70000
		180	50.50607	95.15817	-6.00000	3.40000	-6.00000	3.60000
		181	49.69507	94.56557	-6.00000	3.30000	-5.80000	3.50000
		182	48.88407	93.97297	-6.00000	3.20000	-5.50000	3.40000
		183	48.07307	93.38037	-6.00000	3.10000	-5.10000	3.30000
		184	47.26208	92.78778	-6.00000	3.00000	-4.70000	3.20000
		185	46.45108	92.19518	-6.00000	2.90000	-4.30000	3.10000
		186	45.64008	91.60258	-6.00000	2.80000	-3.89030	3.00000
		187	44.82908	91.00998	-6.00000	2.70000	-3.47030	2.90000
		188	44.01809	90.41739	-6.00000	2.60000	-3.06420	2.80000
		189	43.20709	89.82479	-6.00000	2.53690	-2.66390	2.72730
		190	42.39609	89.23219	-6.00000	2.52220	-2.27720	2.50500
		191	41.58509	88.63959	-6.00000	2.49760	-1.91040	2.24490
		192	40.77409	88.04699	-6.00000	2.46330	-1.56790	1.95090
		193	39.96310	87.45440	-6.00000	2.42000	-1.25290	1.62720
		194	39.15210	86.86180	-6.00000	2.36820	-0.96707	1.31250
		195	38.34110	86.26920	-6.00000	2.31950	-0.71434	1.06400
		196	38.81931	85.38557	-6.00000	2.51860	-0.56699	1.40560
		197	39.29752	84.50193	-6.00000	2.73180	-0.38838	1.86270
		198	39.77574	83.61830	-6.00000	2.95940	-0.17632	2.30950
		199	40.25395	82.73467	-6.00000	3.20160	0.07090	2.71350
		200	40.73216	81.85104	-6.00000	3.48280	0.35522	3.06760
		201	41.21037	80.96740	-6.00000	3.87930	0.69155	3.38760
		202	41.68859	80.08377	-6.00000	4.27370	1.00000	3.66830
		203	42.16680	79.20014	-6.00000	4.65990	1.40000	3.90440
		204	42.64501	78.31650	-6.00000	5.03710	1.80000	4.09080
		205	43.12322	77.43287	-6.00000	5.50000	2.15000	4.30000
		206	43.60144	76.54924	-6.00000	6.00000	2.50000	4.50000
		207	44.07965	75.66560	-6.00000	6.50000	2.90000	4.65000
		208	44.55786	74.78197	-6.00000	6.90000	3.30000	4.80000
		209	45.03607	73.89834	-6.00000	7.30000	3.65000	4.90000
		210	45.51429	73.01471	-6.00000	7.60000	3.90000	5.00000
		211	45.99250	72.13107	-6.00000	7.90000	4.10000	5.10000
		212	46.47071	71.24744	-6.00000	8.05000	4.20000	5.20000
		213	46.94892	70.36381	-6.00000	8.15000	4.26470	5.30000
		214	47.42714	69.48017	-6.00000	8.25000	4.27420	5.35000
		215	47.90535	68.59654	-6.00000	8.30000	4.28370	5.40000
		216	48.38356	67.71291	-6.00000	8.35000	4.29310	5.45000
		217	48.86177	66.82927	-6.00000	8.40000	4.30260	5.49870
		218	49.33998	65.94564	-6.00000	8.42260	4.31210	5.48480
		219	49.81820	65.06201	-6.00000	8.44110	4.32160	5.47790
		220	50.29641	64.17838	-6.00000	8.45970	4.33110	5.47760
		221	50.77462	63.29474	-6.00000	8.47830	4.34060	5.48340
		222	51.25283	62.41111	-6.00000	8.49680	4.35010	5.49470
		223	51.73105	61.52748	-6.00000	8.51540	4.35960	5.51070
		224	52.20926	60.64384	-6.00000	8.53400	4.36910	5.53070
		225	52.68747	59.76021	-6.00000	8.55250	4.37870	5.55400
		226	53.16568	58.87658	-6.00000	8.57110	4.38820	5.57970
		227	53.64390	57.99294	-6.00000	8.58970	4.39770	5.60740
		228	54.12211	57.10931	-6.00000	8.60830	4.40720	5.63640
		229	54.60032	56.22568	-6.00000	8.62690	4.41670	5.66630
		230	55.07853	55.34205	-6.00000	8.64560	4.42630	5.69690
		231	55.55675	54.45841	-6.00000	8.66420	4.43580	5.72780
		232	56.03496	53.57478	-6.00000	8.68280	4.44530	5.75900
		233	56.51317	52.69115	-6.00000	8.70150	4.45490	5.79050
		234	56.99138	51.80751	-6.00000	8.72010	4.46440	5.82220
		235	57.46959	50.92388	-6.00000	8.73880	4.47400	5.85430
		236	57.94781	50.04025	-6.00000	8.75740	4.48350	5.88690
		237	58.42602	49.15661	-6.00000	8.77610	4.49310	5.92010
		238	58.90423	48.27298	-6.00000	8.79480	4.50270	5.95400
		239	59.38244	47.38935	-6.00000	8.81350	4.51220	5.98900
		240	59.86066	46.50572	-6.00000	8.83220	4.52180	6.02500
		241	60.33887	45.62208	-6.00000	8.85090	4.53140	6.06230
		242	60.81708	44.73845	-6.00000	8.86960	4.54100	6.10100
		243	61.29529	43.85482	-6.00000	8.88830	4.55060	6.14120
		244	61.77351	42.97118	-6.00000	8.90700	4.56010	6.18300
		245	62.25172	42.08755	-6.00000	8.92580	4.56970	6.22650
		246	62.72993	41.20392	-6.00000	8.94450	4.57930	6.27180
		247	63.20814	40.32028	-6.00000	8.96330	4.58890	6.31880
		248	63.68636	39.43665	-6.00000	8.98210	4.59860	6.36770
		249	64.16457	38.55302	-6.00000	9.00090	4.60820	6.41840
		250	64.64278	37.66939	-6.00000	9.01960	4.61780	6.47090
		251	65.12099	36.78575	-6.00000	9.03840	4.62740	6.52510
		252	65.59921	35.90212	-6.00000	9.05730	4.63700	6.58110
		253	66.07742	35.01849	-6.00000	9.07610	4.64670	6.63880
		254	66.55563	34.13485	-6.00000	9.05000	4.65630	6.69800
		255	67.03384	33.25122	-6.00000	9.00000	4.66600	6.75860
		256	67.51205	32.36759	-6.00000	8.90000	4.67560	6.82040
		257	67.99027	31.48395	-6.00000	8.80000	4.68530	6.80000
		258	68.46848	30.60032	-6.00000	8.70000	4.69500	6.75000
		259	68.94669	29.71669	-6.00000	8.60000	4.65000	6.70000
		260	69.42490	28.83306	-6.00000	8.50000	4.60000	6.60000
		261	69.90312	27.94942	-6.00000	8.40000	4.55000	6.50000
		262	70.38133	27.06579	-6.00000	8.30000	4.50000	6.40000
		263	70.85954	26.18216	-6.00000	8.10000	4.40000	6.20000
		264	71.33775	25.29852	-6.00000	7.85000	4.30000	6.05000
		265	71.81597	24.41489	-6.00000	7.50000	4.15000	5.90000
		266	72.29418	23.53126	-6.00000	7.00000	4.00000	5.75000
		267	72.77239	22.64762	-6.00000	6.40940	3.85000	5.60000
		268	73.25060	21.76399	-6.00000	5.65290	3.70000	5.42500
		269	73.72882	20.88036	-6.00000	4.86740	3.55000	5.22600
		270	74.20703	19.99673	-6.00000	4.09000	3.44990	4.97100
		271	74.68524	19.11309	-6.00000	3.35080	3.35630	4.66660
		272	75.16345	18.22946	-6.00000	2.67090	3.21380	4.31940
		273	75.64166	17.34583	-6.00000	2.07320	3.04130	3.93520
		274	76.11988	16.46219	-6.00000	1.57320	2.87360	3.52000
		275	76.59809	15.57856	-6.00000	1.14230	2.67500	3.07880
		276	77.07630	14.69493	-6.00000	0.82230	2.58700	2.61980
		277	77.55451	13.81129	-6.00000	0.59043	2.62390	2.23140
		278	78.03273	12.92766	-6.00000	0.39207	2.63470	1.80810
		279	78.51094	12.04403	-6.00000	0.22389	2.62220	1.46670
		280	78.98915	11.16040	-6.00000	0.08270	2.58920	1.15170
		281	79.46736	10.27676	-6.00000	-0.03445	2.53790	0.87842
		282	79.94558	9.39313	-6.00000	-0.13023	2.47040	0.75150
		283	80.42379	8.50950	-6.00000	-0.20705	2.38870	0.62382
		284	80.90200	7.62586	-6.00000	-0.26701	2.29440	0.49876
		285	81.38021	6.74223	-6.00000	-0.31198	2.18890	0.37933
		286	81.85843	5.85860	-6.00000	-0.34361	2.07350	0.26812
		287	82.33664	4.97496	-6.00000	-0.36332	1.94920	0.16728
		288	82.81485	4.09133	-6.00000	-0.37237	1.81690	0.07840
		289	83.29306	3.20770	-6.00000	-0.37187	1.67770	0.00255
		290	83.77128	2.32407	-6.00000	-0.36276	1.53200	-0.05980
		291	84.24949	1.44043	-6.00000	-0.34592	1.38070	-0.10876
		292	84.72770	0.55680	-6.00000	-0.32208	1.22420	-0.14510

Utility Dimensions

Ref.	Name	Internal Diameter [mm]	Wall Thickness [mm]
1	Brick 1372-762	1372.0	200.00
2	Brick 2134-1829	2134.0	200.00
3	HPPE	180.00	5.0000
4	BP	180.00	5.0000

Acceptance Criteria/Parameters

Ref.	Name	Criteria: Pullout: Rotn.	Criteria: Pullout: Ax.	Criteria: Pullout: Flex.	Criteria: Pullout: Threshold	Criteria: Pullout: Limit	Criteria: Rotn.: Threshold	Criteria: Rotn.: Limit	Criteria: Rotn.: Value	Criteria: Allowable Strain: Tension	Criteria: Allowable Strain: Compn.	Criteria: Allowable Strain: Tension	Criteria: Allowable Strain: Compn.	Criteria: Rad. of Curv.: Threshold	Criteria: Rad. of Curv.: Limit	Criteria: Rad. of Curv.: Value	Criteria: Rad. of Curv.: Value	Factors: Pullout: Ax.	Factors: Pullout: Flex.	Factors: Rotn.	Factors: Strain: Tension	Factors: Strain: Compn.	Factors: Strain: Tension	Factors: Strain: Compn.
					[mm]		[Deg]			[με]		[με]		[m]										
1	Brick	No	-	No		-	No		-	Yes	500.00	Yes	1000.0	Yes	15000.	Yes	15000.	1.0000	1.0000	1.0000	1.0000	1.0000	2.0000	1.0000
2	HPPE	No	-	No		-	No		-	Yes	9000.0	Yes	9000.0	Yes	15000.	Yes	15000.	1.0000	1.0000	1.0000	1.0000	0.20000	0.20000	1.0000

Utility Strain Calculation Options

Neglect beneficial contribution of axial strains : Yes

Utilities

Ref.	Utility Name	Sub-Utility Name	Jointed	Dimension	Acceptance Criteria/Parameters	Displacement Data Type	Displacement Line	Displacement Polyline	Line Length [m]	Poly segs continuous : Pullout	Poly segs continuous : Strain	Start Distance Along Line [m]	End Distance Along Line [m]	Pipe Segment Length [m]
1	TW Main-1	1	Yes	BP	HPPE	Line	TW Main-1	-	48.136	-	-	0.0	48.135	3.0000
2	TW Main-2	1	Yes	HPPE	HPPE	Line	TW Main-2	-	34.101	-	-	0.0	34.101	3.0000
3	TW Main-3	1	Yes	HPPE	HPPE	Line	TW Main-3	-	9.9689	-	-	0.0	9.9680	3.0000
4	TW Main-4	1	Yes	HPPE	HPPE	Line	TW Main-4	-	53.775	-	-	0.0	53.774	3.0000
5	TW Foul-1	1	Yes	Brick 1372-762	Brick	Line	TW Foul-1	-	47.208	-	-	0.0	47.208	1.0000
6	TW Foul-2	1	Yes	Brick 2134-1829	Brick	Line	TW Foul-2	-	97.459	-	-	0.0	97.459	1.0000

Warnings

None

Errors

None

Displacement Results - Displacement Lines

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
0	Base Model	1	TW Main-1	0.0	76.75020	113.72130	-0.90000	-0.51428	-1.3356	-0.0052772	1.1850	0.80260	214.83	*
				1.0028	75.92703	113.14854	-0.90000	-0.50532	-1.4591	0.041458	1.2482	0.90909	214.83	*
				2.0057	75.10385	112.57577	-0.90000	-0.48164	-1.5796	0.095571	1.2975	1.0215	214.83	*
				3.0085	74.28068	112.00301	-0.90000	-0.44215	-1.6968	0.15604	1.3321	1.1403	214.83	*
				4.0113	73.45751	111.43024	-0.90000	-0.38647	-1.8136	0.22260	1.3531	1.2680	214.83	*
				5.0142	72.63434	110.85748	-0.90000	-0.32244	-1.9711	0.30967	1.3905	1.4338	214.83	*
				6.0170	71.81116	110.28471	-0.90000	-0.24121	-2.1331	0.40480	1.4163	1.6132	214.83	*
				7.0198	70.98799	109.71195	-0.90000	-0.14183	-2.2997	0.50683	1.4299	1.8067	214.83	*
				8.0227	70.16482	109.13918	-0.90000	-0.023421	-2.4708	0.61437	1.4304	2.0148	214.83	*
				9.0255	69.34164	108.56642	-0.90000	0.11476	-2.6464	0.72586	1.4173	2.2378	214.83	*
				10.028	68.51847	107.99365	-0.90000	0.27323	-2.8261	0.83957	1.3898	2.4759	214.83	*
				11.031	67.69530	107.42089	-0.90000	0.45222	-3.0094	0.95366	1.3476	2.7285	214.83	*
				12.034	66.87213	106.84812	-0.90000	0.65159	-3.1958	1.0662	1.2904	2.9954	214.83	*
				13.037	66.04895	106.27536	-0.90000	0.87069	-3.3841	1.1945	1.2181	3.2751	214.83	*
				14.040	65.22578	105.70260	-0.90000	1.1083	-3.5732	1.3991	1.1311	3.5661	214.83	*
				15.042	64.40261	105.12983	-0.90000	1.3624	-3.7614	1.5827	1.0300	3.8657	214.83	*
				16.045	63.57943	104.55707	-0.90000	1.6305	-3.9467	1.7426	0.91575	4.1709	214.83	*
				17.048	62.75626	103.98430	-0.90000	1.9090	-4.1270	1.8759	0.79012	4.4780	214.83	*
				18.051	61.93309	103.41154	-0.90000	2.1939	-4.2997	1.9799	0.65490	4.7824	214.83	*
				19.054	61.10991	102.83877	-0.90000	2.5106	-4.8041	2.2769	0.68303	5.3774	214.83	*
				20.057	60.28674	102.26601	-0.90000	2.8418	-5.4380	2.6603	0.77321	6.0869	214.83	*
				21.059	59.46357	101.69324	-0.90000	3.1773	-6.0801	3.0549	0.86455	6.8055	214.83	*
				22.062	58.64040	101.12048	-0.90000	3.2883	-6.2924	3.2229	0.89469	7.0432	214.83	*
				23.065	57.81722	100.54771	-0.90000	3.3102	-6.3344	3.3006	0.90070	7.0902	214.83	*
				24.068	56.99405	99.97495	-0.90000	3.3322	-6.3764	3.3810	0.90663	7.1372	214.83	*
				25.071	56.17088	99.40219	-0.90000	3.3541	-6.4184	3.4647	0.91264	7.1842	214.83	*
				26.074	55.34770	98.82942	-0.90000	3.3761	-6.4604	3.5520	0.91857	7.2313	214.83	*
				27.076	54.52453	98.25666	-0.90000	3.3980	-6.5024	3.6435	0.92458	7.2782	214.83	*
				28.079	53.70136	97.68389	-0.90000	3.4200	-6.5444	3.7395	0.93051	7.3253	214.83	*
				29.082	52.87819	97.11113	-0.90000	3.4419	-6.5864	3.8401	0.93653	7.3723	214.83	*
				30.085	52.05501	96.53836	-0.90000	3.4639	-6.6284	3.9456	0.94245	7.4193	214.83	*
				31.088	51.23184	95.96560	-0.90000	3.4858	-6.6704	4.0560	0.94847	7.4663	214.83	*
				32.091	50.40867	95.39283	-0.90000	3.5078	-6.7124	4.1713	0.95440	7.5133	214.83	*
				33.093	49.58549	94.82007	-0.90000	3.4644	-6.6294	4.2123	0.94262	7.4204	214.83	*
				34.096	48.76232	94.24730	-0.90000	3.0993	-5.9308	3.8661	0.84330	6.6384	214.83	*
				35.099	47.93915	93.67454	-0.90000	2.7295	-5.2231	3.5128	0.74265	5.8463	214.83	*
				36.102	47.11598	93.10178	-0.90000	2.4186	-4.5648	3.2144	0.62187	5.1284	214.83	*
				37.105	46.29280	92.52901	-0.90000	2.4498	-4.2084	3.2226	0.39270	4.8537	214.83	*
				38.108	45.46963	91.95625	-0.90000	2.4720	-3.8329	3.1777	0.16001	4.5581	214.83	*
				39.110	44.64646	91.38348	-0.90000	2.4849	-3.4468	3.0814	-0.071097	4.2485	214.83	*
				40.113	43.82328	90.81072	-0.90000	2.4879	-3.0587	2.9365	-0.29522	3.9317	214.83	*
				41.116	43.00011	90.23795	-0.90000	2.4812	-2.6766	2.7462	-0.50796	3.6142	214.83	*
				42.119	42.17694	89.66519	-0.90000	2.4646	-2.3075	2.5140	-0.70514	3.3018	214.83	*
				43.122	41.35376	89.09242	-0.90000	2.4384	-1.9568	2.2441	-0.88393	2.9989	214.83	*
				44.125	40.53059	88.51966	-0.90000	2.4030	-1.6288	1.9405	-1.0422	2.7095	214.83	*
				45.127	39.70742	87.94689	-0.90000	2.3589	-1.3263	1.6238	-1.1788	2.4360	214.83	*
				46.130	38.88425	87.37413	-0.90000	2.3068	-1.0508	1.3710	-1.2934	2.1801	214.83	*
				47.133	38.06107	86.80136	-0.90000	2.2471	-0.80281	1.1058	-1.3860	1.9424	214.83	*
				48.136	37.23790	86.22860	-0.90000	2.2319	-0.59855	0.86603	-1.4902	1.7661	214.83	*
		2	TW Main-2	0.0	37.23790	86.22860	-0.90000	2.2319	-0.59855	0.86603	1.5703	1.6952	297.80	*
				1.0030	37.70561	85.34136	-0.90000	2.4197	-0.46340	1.1764	1.5383	1.9244	297.80	*
				2.0059	38.17333	84.45412	-0.90000	2.6188	-0.30131	1.4642	1.4878	2.1761	297.80	*
				3.0089	38.64104	83.56688	-0.90000	2.8295	-0.11082	1.7675	1.4175	2.4513	297.80	*
				4.0119	39.10876	82.67964	-0.90000	3.0516	0.10905	2.1430	1.3266	2.7503	297.80	*
				5.0149	39.57647	81.79239	-0.90000	3.2844	0.35860	2.4916	1.2144	3.0726	297.80	*
				6.0178	40.04419	80.90515	-0.90000	3.5267	0.63717	2.8090	1.0810	3.4169	297.80	*
				7.0208	40.51190	80.01791	-0.90000	3.7762	0.94287	3.0904	0.92688	3.7802	297.80	*
				8.0238	40.97962	79.13067	-0.90000	4.0583	1.2799	3.3313	0.76029	4.1869	297.80	*
				9.0268	41.44733	78.24343	-0.90000	4.3859	1.6552	3.5269	0.58106	4.6517	297.80	*
				10.030	41.91505	77.35619	-0.90000	4.6892	2.0448	3.6730	0.37785	5.1017	297.80	*
				11.033	42.38276	76.46895	-0.90000	4.9603	2.4349	3.7653	0.15919	5.5234	297.80	*
				12.036	42.85048	75.58171	-0.90000	5.5350	2.8338	4.0727	0.074316	6.2178	297.80	*
				13.039	43.31819	74.69446	-0.90000	6.3376	3.2447	4.5558	0.085104	7.1194	297.80	*
				14.042	43.78591	73.80722	-0.90000	7.1410	3.6560	5.0407	0.095912	8.0219	297.80	*
				15.045	44.25362	72.91998	-0.90000	7.4657	3.8222	5.2091	0.10031	8.3866	297.80	*
				16.048	44.72134	72.03274	-0.90000	7.4734	3.8262	5.1688	0.10036	8.3953	297.80	*
				17.051	45.18905	71.14550	-0.90000	7.4812	3.8301	5.1308	0.10055	8.4040	297.80	*
				18.054	45.65676	70.25826	-0.90000	7.4889	3.8341	5.0957	0.10060	8.4127	297.80	*
				19.056	46.12448	69.37102	-0.90000	7.4967	3.8381	5.0640	0.10070	8.4215	297.80	*
				20.059	46.59219	68.48378	-0.90000	7.5044	3.8420	5.0361	0.10084	8.4301	297.80	*
				21.062	47.05991	67.59654	-0.90000	7.5121	3.8460	5.0123	0.10089	8.4388	297.80	*
				22.065	47.52762	66.70929	-0.90000	7.5199	3.8500	4.9927	0.10099	8.4476	297.80	*
				23.068	47.99534	65.82205	-0.90000	7.5276	3.8539	4.9774	0.10113	8.4562	297.80	*
				24.071	48.46305	64.93481	-0.90000	7.5354	3.8579	4.9663	0.10123	8.4650	297.80	*
				25.074	48.93077	64.04757	-0.90000	7.5431	3.8618	4.9590	0.10137	8.4736	297.80	*
				26.077	49.39848	63.16033	-0.90000	7.5508	3.8658	4.9552	0.10142	8.4823	297.80	*
				27.080	49.86620	62.27309	-0.90000	7.5586	3.8698	4.9545	0.10152	8.4910	297.80	*
				28.083	50.33391	61.38585	-0.90000	7.5663	3.8737	4.9565	0.10166	8.4997	297.80	*
				29.086	50.80163	60.49861	-0.90000	7.5740	3.8777	4.9608	0.10171	8.5083	297.80	*
				30.089	51.26934	59.61136	-0.90000	7.5818	3.8816	4.9668	0.10190	8.5170	297.80	*
				31.092	51.73706	58.72412	-0.90000	7.5895	3.8856	4.9744	0.10195	8.5257	297.80	*
				32.095	52.20477	57.83688	-0.90000	7.5973	3.8896	4.9831	0.10205	8.5345	297.80	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				33.098	52.67249	56.94964	-0.90000	7.6050	3.8935	4.9927	0.10219	8.5431	297.80	*
				34.101	53.14020	56.06240	-0.90000	7.6127	3.8975	5.0031	0.10225	8.5518	297.80	*
		3	TW Main-3	0.0	53.14020	56.06240	-0.90000	7.6127	3.8975	5.0031	0.69148	8.5244	301.75	*
				0.99689	53.66476	55.21468	-0.90000	7.6647	3.9241	5.0670	0.69622	8.5826	301.75	*
				1.9938	54.18932	54.36696	-0.90000	7.7167	3.9507	5.1181	0.70096	8.6408	301.75	*
				2.9907	54.71388	53.51924	-0.90000	7.7687	3.9774	5.1802	0.70562	8.6991	301.75	*
				3.9876	55.23844	52.67152	-0.90000	7.8207	4.0040	5.2431	0.71036	8.7573	301.75	*
				4.9845	55.76300	51.82380	-0.90000	7.8728	4.0306	5.3066	0.71516	8.8156	301.75	*
				5.9813	56.28756	50.97608	-0.90000	7.9248	4.0573	5.3708	0.71982	8.8739	301.75	*
				6.9782	56.81212	50.12836	-0.90000	7.9769	4.0839	5.4358	0.72461	8.9322	301.75	*
				7.9751	57.33668	49.28064	-0.90000	8.0391	4.1158	5.5016	0.73021	9.0019	301.75	*
				8.9720	57.86124	48.43292	-0.90000	8.1039	4.1489	5.5683	0.73616	9.0744	301.75	*
				9.9689	58.38580	47.58520	-0.90000	8.1687	4.1821	5.6360	0.74203	9.1470	301.75	*
		4	TW Main-4	0.0	58.38580	47.58520	-0.90000	8.1687	4.1821	5.6360	0.17664	9.1753	298.21	*
				0.99583	58.85659	46.70769	-0.90000	8.1841	4.1900	5.6589	0.17696	9.1926	298.21	*
				1.9917	59.32738	45.83017	-0.90000	8.1995	4.1979	5.6832	0.17728	9.2099	298.21	*
				2.9875	59.79817	44.95266	-0.90000	8.2149	4.2058	5.7007	0.17760	9.2272	298.21	*
				3.9833	60.26896	44.07515	-0.90000	8.2303	4.2137	5.7298	0.17791	9.2445	298.21	*
				4.9791	60.73975	43.19764	-0.90000	8.2458	4.2216	5.7605	0.17828	9.2619	298.21	*
				5.9750	61.21054	42.32012	-0.90000	8.2612	4.2295	5.7927	0.17860	9.2792	298.21	*
				6.9708	61.68134	41.44261	-0.90000	8.2766	4.2374	5.8264	0.17892	9.2965	298.21	*
				7.9666	62.15213	40.56510	-0.90000	8.2920	4.2453	5.8619	0.17924	9.3138	298.21	*
				8.9624	62.62292	39.68758	-0.90000	8.3075	4.2532	5.8990	0.17961	9.3312	298.21	*
				9.9583	63.09371	38.81007	-0.90000	8.3229	4.2611	5.9378	0.17992	9.3485	298.21	*
				10.954	63.56450	37.93256	-0.90000	8.3384	4.2690	5.9784	0.18029	9.3659	298.21	*
				11.950	64.03529	37.05504	-0.90000	8.3538	4.2769	6.0206	0.18061	9.3832	298.21	*
				12.946	64.50608	36.17753	-0.90000	8.3693	4.2848	6.0645	0.18098	9.4006	298.21	*
				13.942	64.97687	35.30002	-0.90000	8.3847	4.2927	6.1101	0.18130	9.4179	298.21	*
				14.937	65.44766	34.42251	-0.90000	8.4002	4.3006	6.1574	0.18166	9.4353	298.21	*
				15.933	65.91845	33.54499	-0.90000	8.4156	4.3086	6.2061	0.18189	9.4527	298.21	*
				16.929	66.38924	32.66748	-0.90000	8.4311	4.3165	6.2562	0.18226	9.4701	298.21	*
				17.925	66.86003	31.78997	-0.90000	8.4466	4.3244	6.3077	0.18263	9.4875	298.21	*
				18.921	67.33082	30.91245	-0.90000	8.4620	4.3323	6.3602	0.18295	9.5048	298.21	*
				19.917	67.80161	30.03494	-0.90000	8.4775	4.3402	6.4136	0.18331	9.5222	298.21	*
				20.912	68.27241	29.15743	-0.90000	8.4930	4.3482	6.4676	0.18359	9.5396	298.21	*
				21.908	68.74320	28.27991	-0.90000	8.5085	4.3561	6.5219	0.18396	9.5570	298.21	*
				22.904	69.21399	27.40240	-0.90000	8.5240	4.3640	6.5760	0.18432	9.5744	298.21	*
				23.900	69.68478	26.52489	-0.90000	8.5394	4.3719	6.6296	0.18464	9.5917	298.21	*
				24.896	70.15557	25.64738	-0.90000	8.5549	4.3799	6.6823	0.18492	9.6091	298.21	*
				25.892	70.62636	24.76986	-0.90000	8.1593	4.1773	6.4500	0.17642	9.1648	298.21	*
				26.887	71.09715	23.89235	-0.90000	7.3192	3.7472	5.9094	0.15826	8.2211	298.21	*
				27.883	71.56794	23.01484	-0.90000	6.4778	3.3165	5.3659	0.14000	7.2761	298.21	*
				28.879	72.03873	22.13732	-0.90000	5.7510	3.1131	5.0378	-0.024369	6.5395	298.21	*
				29.875	72.50952	21.25981	-0.90000	5.1177	3.1420	4.9112	-0.34924	5.9951	298.21	*
				30.871	72.98031	20.38230	-0.90000	4.4570	3.1309	4.7262	-0.65181	5.4076	298.21	*
				31.866	73.45110	19.50479	-0.90000	3.7969	3.0771	4.4882	-0.91648	4.8005	298.21	*
				32.862	73.92189	18.62727	-0.90000	3.1662	2.9851	4.2029	-1.1336	4.2013	298.21	*
				33.858	74.39269	17.74976	-0.90000	2.6053	2.8868	3.8760	-1.3121	3.6605	298.21	*
				34.854	74.86348	16.87225	-0.90000	2.0933	2.7563	3.5129	-1.4392	3.1477	298.21	*
				35.850	75.33427	15.99473	-0.90000	1.6388	2.6010	3.1191	-1.5172	2.6738	298.21	*
				36.846	75.80506	15.11722	-0.90000	1.2995	2.5463	2.6993	-1.6294	2.3489	298.21	*
				37.841	76.27585	14.23971	-0.90000	1.0001	2.4831	2.2583	-1.7153	2.0552	298.21	*
				38.837	76.74664	13.36219	-0.90000	0.74378	2.4291	1.8133	-1.7889	1.8038	298.21	*
				39.833	77.21743	12.48468	-0.90000	0.54697	2.4443	1.4902	-1.8953	1.6376	298.21	*
				40.829	77.68822	11.60717	-0.90000	0.37737	2.4379	1.2093	-1.9698	1.4851	298.21	*
				41.825	78.15901	10.72966	-0.90000	0.23253	2.4121	0.91137	-2.0156	1.3453	298.21	*
				42.821	78.62980	9.85214	-0.90000	0.11009	2.3689	0.78617	-2.0354	1.2169	298.21	*
				43.816	79.10059	8.97463	-0.90000	0.0078311	2.3101	0.67000	-2.0319	1.0990	298.21	*
				44.812	79.57138	8.09712	-0.90000	-0.076274	2.2374	0.55345	-2.0076	0.99055	298.21	*
				45.808	80.04217	7.21960	-0.90000	-0.14407	2.1522	0.43957	-1.9646	0.89053	298.21	*
				46.804	80.51296	6.34209	-0.90000	-0.19722	2.0558	0.33107	-1.9048	0.79812	298.21	*
				47.800	80.98376	5.46458	-0.90000	-0.23721	1.9494	0.23029	-1.8299	0.71258	298.21	*
				48.796	81.45455	4.58706	-0.90000	-0.26534	1.8341	0.13914	-1.7416	0.63328	298.21	*
				49.791	81.92534	3.70955	-0.90000	-0.28280	1.7107	0.059045	-1.6411	0.55956	298.21	*
				50.787	82.39613	2.83204	-0.90000	-0.29062	1.5800	-0.0090572	-1.5297	0.49087	298.21	*
				51.783	82.86692	1.95453	-0.90000	-0.28972	1.4428	-0.064786	-1.4083	0.42680	298.21	*
				52.779	83.33771	1.07701	-0.90000	-0.28092	1.2996	-0.10832	-1.2780	0.36686	298.21	*
				53.775	83.80850	0.19950	-0.90000	-0.26495	1.1511	-0.14043	-1.1396	0.31073	298.21	*
		5	TW Foul-1	0.0	76.45800	114.12130	-6.00000	-0.46413	-1.2885	-0.034615	1.1349	0.76653	216.16	*
				1.0044	75.64700	113.52870	-6.00000	-0.45521	-1.4129	0.010688	1.2011	0.87223	216.16	*
				2.0089	74.83600	112.93610	-6.00000	-0.43197	-1.5344	0.063880	1.2540	0.98405	216.16	*
				3.0133	74.02501	112.34351	-6.00000	-0.39337	-1.6527	0.078489	1.2927	1.1023	216.16	*
				4.0177	73.21401	111.75091	-6.00000	-0.34304	-1.7893	0.14630	1.3326	1.2423	216.16	*
				5.0222	72.40301	111.15831	-6.00000	-0.28065	-1.9473	0.22852	1.3755	1.4067	216.16	*
				6.0266	71.59201	110.56571	-6.00000	-0.20148	-2.1098	0.31899	1.4074	1.5846	216.16	*
				7.0310	70.78101	109.97311	-6.00000	-0.10458	-2.2768	0.41661	1.4277	1.7766	216.16	*
				8.0355	69.97002	109.38052	-6.00000	0.010944	-2.4483	0.52001	1.4356	1.9833	216.16	*
				9.0399	69.15902	108.78792	-6.00000	0.14587	-2.6242	0.62763	1.4305	2.2049	216.16	*
				10.044	68.34802	108.19532	-6.00000	0.30078	-2.8042	0.73775	1.4116	2.4416	216.16	*
				11.049	67.53702	107.60272	-6.00000	0.47599	-2.9879	0.84847	1.3785	2.6933	216.16	*
				12.053	66.72603	107.01013	-6.00000	0.67146	-3.1748	0.95780	1.3309	2.9595	216.16	*
				13.058	65.91503	106.41753	-6.00000	0.88669	-3.3638	1.0637	1.2687	3.2391	216.16	*
				14.062	65.10403	105.82493	-6.00000	1.1206	-3.5539	1.2482	1.1919	3.5306	216.16	*
				15.067	64.29303	105.23233	-6.00000	1.3000	-3.7435	1.4332	1.1590	3.7895	216.16	*
				16.071	63.48203	104.63973	-6.00000	1.5500	-3.9308	1.5946	1.0676	4.0883	216.16	*
				17.075	62.67104	104.04714	-6.00000	1.8000	-4.2000	1.8000	1.0246	4.4531	216.16	*
				18.080	61.86004	103.45454	-6.00000	2.1000	-4.4000	2.0500	0.90034	4.7916	216.16	*
				19.084	61.04904	102.86194	-6.00000	2.3500	-4.8000	2.3000	0.93448	5.2621	216.16	*
				20.089	60.23804	102.26934	-6.00000	2.6000	-5.3000	2.5500	1.0276	5.8133	216.16	*
				21.093	59.42704	101.67674	-6.00000	2.8000	-5.7000	2.8000	1.1021	6.2542	216.16	*
				22.098	58.61605	101.08415	-6.00000	2.9500	-6.0000	3.0000	1.1580	6.5849	216.16	*
				23.102	57.80505	100.49155	-6.00000	3.1000	-6.2000	3.1745	1.1549	6.8349	216.16	*
				24.106	56.99405	99.89895	-6.00000	3.2000	-6.3000	3.2614	1.1331	6.9747	216.16	*
				25.111	56.18305	99.30635	-6.00000	3.3000	-6.4485	3.3510	1.1400	7.1536	216.16	*
				26.115	55.37206	98.71376	-6.00000	3.4000	-6.4982	3.4440	1.0886	7.2527	216.16	*
				27.120	54.56106	98.12116	-6.00000	3.4218	-6.5480	3.5408	1.1004	7.3058	216.16	*
				28.124	53.75006	97.52856	-6.00000	3.4478	-6.5000	3.6423	1.0511	7.2823	216.16	*
				29.129	52.93906	96.93596	-6.00000	3.4738	-6.4500	3.7487	1.0006	7.2573	216.16	*
				30.133	52.12806	96.34336	-6.00000	3.4998	-6.3500	3.7500	0.92058	7.1919	216.16	*
				31.137	51.31707	95.75077	-6.00000	3.4500	-6.2000	3.7000	0.87230	7.0414	216.16	*
				32.142	50.50607	95.15817	-6.00000	3.4000	-6.0000	3.6000	0.79467	6.8504	216.16	*
				33.146	49.69507	94.56557	-6.00000	3.3000	-5.8000	3.5000	0.75742	6.6300	216.16	*
				34.151	48.88407	93.97297	-6.00000	3.2000	-5.5000	3.4000	0.66116	6.3287	216.16	*
				35.155	48.07307	93.38037	-6.00000	3.1000	-5.1000	3.3000	0.50591	5.9468	216.16	*
				36.160	47.26208	92.78778	-6.00000	3.0000	-4.7000	3.2000	0.35066	5.5648	216.16	*
				37.164	46.45108	92.19518	-6.00000	2.9000	-4.3000	3.1000	0.19541	5.1828	216.16	*
				38.169	45.64008	91.60258	-6.00000	2.8000	-3.8903	3.0000	0.034437	4.7930	216.16	*
				39.173	44.82908	91.00998	-6.00000	2.7000	-3.4703	2.9000	-0.13261	4.3949	216.16	*
				40.177	44.01809	90.41739	-6.00000	2.6000	-3.0642	2.8000	-0.29146	4.0080	216.16	*
				41.182	43.20709	89.82479	-6.00000	2.5369	-2.6639	2.7273	-0.47669	3.6476	216.16	*
				42.186	42.39609	89.23219	-6.00000	2.5222	-2.2772	2.5050	-0.69296	3.3267	216.16	*
				43.191	41.58509	88.63959	-6.00000	2.4976	-1.9104	2.2449	-0.88950	3.0160	216.16	*
				44.195	40.77409	88.04699	-6.00000	2.4633	-1.5679	1.9509	-1.0639	2.7193	216.16	*
				45.200	39.96310	87.45440	-6.00000	2.4200	-1.2529	1.6272	-1.2148	2.4394	216.16	*
				46.204	39.15210	86.86180	-6.00000	2.3682	-0.96707	1.3125	-1.3416	2.1780	216.16	*
				47.208	38.34110	86.26920	-6.00000	2.3195	-0.71434	1.0640	-1.4514	1.9452	216.16	*
		6	TW Foul-2	0.0	38.34110	86.26920	-6.00000	2.3195	-0.71434	1.0640	1.7322	1.6999	298.42	*
				1.0047	38.81931	85.38557	-6.00000	2.5186	-0.56699	1.4056	1.6974	1.9452	298.42	*
				2.0095	39.29752	84.50193	-6.00000	2.7318	-0.38838	1.8627	1.6418	2.2177	298.42	*
				3.0142	39.77574	83.61830	-6.00000	2.9594	-0.17632	2.3095	1.5636	2.5188	298.42	*
				4.0189	40.25395	82.73467	-6.00000	3.2016	0.070905	2.7135	1.4615	2.8495	298.42	*
				5.0237	40.73216	81.85104	-6.00000	3.4828	0.35522	3.0676	1.3453	3.2321	298.42	*
				6.0284	41.21037	80.96740	-6.00000	3.8793	0.69155	3.3876	1.2382	3.7409	298.42	*
				7.0332	41.68859	80.08377	-6.00000	4.2737	1.0000	3.6683	1.1546	4.2345	298.42	*
				8.0379	42.16680	79.20014	-6.00000	4.6599	1.4000	3.9044	0.98666	4.7646	298.42	*
				9.0426	42.64501	78.31650	-6.00000	5.0371	1.8000	4.0908	0.81441	5.2867	298.42	*
				10.047	43.12322	77.43287	-6.00000	5.5000	2.1500	4.3000	0.72691	5.8604	298.42	*
				11.052	43.60144	76.54924	-6.00000	6.0000	2.5000	4.5000	0.65708	6.4667	298.42	*
				12.057	44.07965	75.66560	-6.00000	6.5000	2.9000	4.6500	0.54327	7.0968	298.42	*
				13.062	44.55786	74.78197	-6.00000	6.9000	3.3000	4.8000	0.38187	7.6390	298.42	*
				14.066	45.03607	73.89834	-6.00000	7.3000	3.6500	4.9000	0.26444	8.1574	298.42	*
				15.071	45.51429	73.01471	-6.00000	7.6000	3.9000	5.0000	0.18736	8.5402	298.42	*
				16.076	45.99250	72.13107	-6.00000	7.9000	4.1000	5.1000	0.15425	8.8992	298.42	*
				17.081	46.47071	71.24744	-6.00000	8.0500	4.2000	5.2000	0.13770	9.0787	298.42	*
				18.085	46.94892	70.36381	-6.00000	8.1500	4.2647	5.3000	0.12839	9.1975	298.42	*
				19.090	47.42714	69.48017	-6.00000	8.2500	4.2742	5.3500	0.16763	9.2900	298.42	*
				20.095	47.90535	68.59654	-6.00000	8.3000	4.2837	5.4000	0.18308	9.3384	298.42	*
				21.099	48.38356	67.71291	-6.00000	8.3500	4.2931	5.4500	0.19861	9.3869	298.42	*
				22.104	48.86177	66.82927	-6.00000	8.4000	4.3026	5.4987	0.21405	9.4354	298.42	*
				23.109	49.33998	65.94564	-6.00000	8.4226	4.3121	5.4848	0.21645	9.4598	298.42	*
				24.114	49.81820	65.06201	-6.00000	8.4411	4.3216	5.4779	0.21690	9.4806	298.42	*

Stage: Ref.	Stage: Name	Disp. Line: Ref.	Disp. Line: Name	Chainage [m]	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]	δH// [mm]	δHperp. [mm]	Angle [°]	
				25.118	50.29641	64.17838	-6.00000	8.4597	4.3311	5.4776	0.21740	9.5015	298.42	*
				26.123	50.77462	63.29474	-6.00000	8.4783	4.3406	5.4834	0.21790	9.5223	298.42	*
				27.128	51.25283	62.41111	-6.00000	8.4968	4.3501	5.4947	0.21835	9.5431	298.42	*
				28.133	51.73105	61.52748	-6.00000	8.5154	4.3596	5.5107	0.21885	9.5640	298.42	*
				29.137	52.20926	60.64384	-6.00000	8.5340	4.3691	5.5307	0.21934	9.5849	298.42	*
				30.142	52.68747	59.76021	-6.00000	8.5525	4.3787	5.5540	0.21971	9.6057	298.42	*
				31.147	53.16568	58.87658	-6.00000	8.5711	4.3882	5.5797	0.22020	9.6266	298.42	*
				32.152	53.64390	57.99294	-6.00000	8.5897	4.3977	5.6074	0.22070	9.6475	298.42	*
				33.156	54.12211	57.10931	-6.00000	8.6083	4.4072	5.6364	0.22120	9.6684	298.42	*
				34.161	54.60032	56.22568	-6.00000	8.6269	4.4167	5.6663	0.22170	9.6892	298.42	*
				35.166	55.07853	55.34205	-6.00000	8.6456	4.4263	5.6969	0.22216	9.7103	298.42	*
				36.170	55.55675	54.45841	-6.00000	8.6642	4.4358	5.7278	0.22265	9.7311	298.42	*
				37.175	56.03496	53.57478	-6.00000	8.6828	4.4453	5.7590	0.22315	9.7520	298.42	*
				38.180	56.51317	52.69115	-6.00000	8.7015	4.4549	5.7905	0.22361	9.7730	298.42	*
				39.185	56.99138	51.80751	-6.00000	8.7201	4.4644	5.8222	0.22411	9.7939	298.42	*
				40.189	57.46959	50.92388	-6.00000	8.7388	4.4740	5.8543	0.22456	9.8149	298.42	*
				41.194	57.94781	50.04025	-6.00000	8.7574	4.4835	5.8869	0.22506	9.8358	298.42	*
				42.199	58.42602	49.15661	-6.00000	8.7761	4.4931	5.9201	0.22552	9.8568	298.42	*
				43.204	58.90423	48.27298	-6.00000	8.7948	4.5027	5.9540	0.22598	9.8778	298.42	*
				44.208	59.38244	47.38935	-6.00000	8.8135	4.5122	5.9890	0.22652	9.8988	298.42	*
				45.213	59.86066	46.50572	-6.00000	8.8322	4.5218	6.0250	0.22698	9.9198	298.42	*
				46.218	60.33887	45.62208	-6.00000	8.8509	4.5314	6.0623	0.22744	9.9408	298.42	*
				47.223	60.81708	44.73845	-6.00000	8.8696	4.5410	6.1010	0.22790	9.9619	298.42	*
				48.227	61.29529	43.85482	-6.00000	8.8883	4.5506	6.1412	0.22835	9.9829	298.42	*
				49.232	61.77351	42.97118	-6.00000	8.9070	4.5601	6.1830	0.22890	10.004	298.42	*
				50.237	62.25172	42.08755	-6.00000	8.9258	4.5697	6.2265	0.22940	10.025	298.42	*
				51.242	62.72993	41.20392	-6.00000	8.9445	4.5793	6.2718	0.22986	10.046	298.42	*
				52.246	63.20814	40.32028	-6.00000	8.9633	4.5889	6.3188	0.23037	10.067	298.42	*
				53.251	63.68636	39.43665	-6.00000	8.9821	4.5986	6.3677	0.23078	10.088	298.42	*
				54.256	64.16457	38.55302	-6.00000	9.0009	4.6082	6.4184	0.23129	10.109	298.42	*
				55.260	64.64278	37.66939	-6.00000	9.0196	4.6178	6.4709	0.23175	10.130	298.42	*
				56.265	65.12099	36.78575	-6.00000	9.0384	4.6274	6.5251	0.23225	10.151	298.42	*
				57.270	65.59921	35.90212	-6.00000	9.0573	4.6370	6.5811	0.23280	10.173	298.42	*
				58.275	66.07742	35.01849	-6.00000	9.0761	4.6467	6.6388	0.23322	10.194	298.42	*
				59.279	66.55563	34.13485	-6.00000	9.0500	4.6563	6.6980	0.21236	10.175	298.42	*
				60.284	67.03384	33.25122	-6.00000	9.0000	4.6660	6.7586	0.18003	10.136	298.42	*
				61.289	67.51205	32.36759	-6.00000	8.9000	4.6756	6.8204	0.12399	10.053	298.42	*
				62.294	67.99027	31.48395	-6.00000	8.8000	4.6853	6.8000	0.067862	9.9693	298.42	*
				63.298	68.46848	30.60032	-6.00000	8.7000	4.6950	6.7500	0.011735	9.8860	298.42	*
				64.303	68.94669	29.71669	-6.00000	8.6000	4.6500	6.7000	0.0037154	9.7766	298.42	*
				65.308	69.42490	28.83306	-6.00000	8.5000	4.6000	6.6000	92.941E-6	9.6649	298.42	*
				66.313	69.90312	27.94942	-6.00000	8.4000	4.5500	6.5000	-0.0035295	9.5531	298.42	*
				67.317	70.38133	27.06579	-6.00000	8.3000	4.5000	6.4000	-0.0071519	9.4414	298.42	*
				68.322	70.85954	26.18216	-6.00000	8.1000	4.4000	6.2000	-0.014397	9.2179	298.42	*
				69.327	71.33775	25.29852	-6.00000	7.8500	4.3000	6.0500	-0.045439	8.9504	298.42	*
				70.332	71.81597	24.41489	-6.00000	7.5000	4.1500	5.9000	-0.080105	8.5712	298.42	*
				71.336	72.29418	23.53126	-6.00000	7.0000	4.0000	5.7500	-0.18616	8.0601	298.42	*
				72.341	72.77239	22.64762	-6.00000	6.4094	3.8500	5.6000	-0.33534	7.4693	298.42	*
				73.346	73.25060	21.76399	-6.00000	5.6529	3.7000	5.4250	-0.56349	6.7326	298.42	*
				74.350	73.72882	20.88036	-6.00000	4.8674	3.5500	5.2260	-0.80543	5.9704	298.42	*
				75.355	74.20703	19.99673	-6.00000	4.0900	3.4499	4.9710	-1.0874	5.2390	298.42	*
				76.360	74.68524	19.11309	-6.00000	3.3508	3.3563	4.6666	-1.3569	4.5444	298.42	*
				77.365	75.16345	18.22946	-6.00000	2.6709	3.2138	4.3194	-1.5552	3.8786	298.42	*
				78.369	75.64166	17.34583	-6.00000	2.0732	3.0413	3.9352	-1.6880	3.2708	298.42	*
				79.374	76.11988	16.46219	-6.00000	1.5732	2.8736	3.5200	-1.7785	2.7513	298.42	*
				80.379	76.59809	15.57856	-6.00000	1.1423	2.6750	3.0788	-1.8089	2.2778	298.42	*
				81.384	77.07630	14.69493	-6.00000	0.82230	2.5870	2.6198	-1.8838	1.9545	298.42	*
				82.388	77.55451	13.81129	-6.00000	0.59043	2.6239	2.2314	-2.0266	1.7681	298.42	*
				83.393	78.03273	12.92766	-6.00000	0.39207	2.6347	1.8081	-2.1305	1.5988	298.42	*
				84.398	78.51094	12.04403	-6.00000	0.22389	2.6222	1.4667	-2.1996	1.4450	298.42	*
				85.403	78.98915	11.16040	-6.00000	0.082700	2.5892	1.1517	-2.2378	1.3051	298.42	*
				86.407	79.46736	10.27676	-6.00000	-0.034446	2.5379	0.87842	-2.2484	1.1776	298.42	*
				87.412	79.94558	9.39313	-6.00000	-0.13023	2.4704	0.75150	-2.2346	1.0613	298.42	*
				88.417	80.42379	8.50950	-6.00000	-0.20705	2.3887	0.62382	-2.1993	0.95483	298.42	*
				89.421	80.90200	7.62586	-6.00000	-0.26701	2.2944	0.49876	-2.1449	0.85721	298.42	*
				90.426	81.38021	6.74223	-6.00000	-0.31198	2.1889	0.37933	-2.0736	0.76745	298.42	*
				91.431	81.85843	5.85860	-6.00000	-0.34361	2.0735	0.26812	-1.9871	0.68471	298.42	*
				92.436	82.33664	4.97496	-6.00000	-0.36332	1.9492	0.16728	-1.8872	0.60821	298.42	*
				93.440	82.81485	4.09133	-6.00000	-0.37237	1.8169	0.078400	-1.7751	0.53728	298.42	*
				94.445	83.29306	3.20770	-6.00000	-0.37187	1.6777	0.0025493	-1.6525	0.47147	298.42	*
				95.450	83.77128	2.32407	-6.00000	-0.36276	1.5320	-0.059795	-1.5200	0.41013	298.42	*
				96.455	84.24949	1.44043	-6.00000	-0.34592	1.3807	-0.10876	-1.3789	0.35293	298.42	*
				97.459	84.72770	0.55680	-6.00000	-0.32208	1.2242	-0.14510	-1.2299	0.29941	298.42	*

* Result includes imported displacement(s).

Displacement Results - Displacement Grids

Stage: Ref.	Stage: Name	Disp. Grid: Ref.	Disp. Grid: Name	x [m]	y [m]	z [m]	δx [mm]	δy [mm]	δz [mm]

Specific Utility Damage Results - Coordinates & Displacements

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility [m]	x [m]	y [m]	z [m]	δx(n) [mm]	δy(n) [mm]	δz(n) [mm]	δH//(n) [mm]	δHperp.(n) [mm]	δx(n-Lp) [mm]	δy(n-Lp) [mm]	δz(n-Lp) [mm]	δH//(n-Lp) [mm]	δHperp.(n-Lp) [mm]	δx(n+Lp) [mm]	δy(n+Lp) [mm]	δz(n+Lp) [mm]	δH//(n+Lp) [mm]	δHperp.(n+Lp) [mm]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	-0.44215	-1.69680	0.15604	1.33206	1.14028	-0.51420	-1.33665	-0.00488	1.18550	0.80350	-0.24190	-2.13173	0.40399	1.41609	1.14028
						6.01699	71.81116	110.28471	-0.90000	-0.24121	-2.13310	0.40480	1.41631	1.61318	-0.44168	-1.69779	0.15660	1.33224	1.14136	0.11359	-2.64491	0.72492	1.41739	1.61318
						9.02549	69.34164	108.56642	-0.90000	0.11476	-2.64640	0.72586	1.41728	2.23784	-0.24037	-2.13451	0.40566	1.41643	1.61482	0.64990	-3.19422	1.06525	1.29090	2.23784
						12.03399	66.87213	106.84812	-0.90000	0.65159	-3.19580	1.06620	1.29041	2.99542	0.11610	-2.64792	0.72682	1.41705	2.23985	1.36025	-3.75981	1.58114	1.03084	2.99542
						15.04249	64.40261	105.12983	-0.90000	1.36240	-3.76140	1.58270	1.02999	3.86567	0.65345	-3.19740	1.06729	1.28980	2.99779	2.19149	-4.29824	1.97902	0.65605	3.86567
						18.05098	61.93309	103.41154	-0.90000	2.19390	-4.29970	1.97990	0.65490	4.78244	1.36467	-3.76297	1.58406	1.02902	3.86825	3.17446	-6.07466	3.05156	0.86378	4.78244
						21.05948	59.46357	101.69324	-0.90000	3.17730	-6.08010	3.05490	0.86455	6.80554	2.19658	-4.30397	1.98242	0.65514	4.78748	3.33201	-6.37604	3.38032	0.90658	6.80554
						24.06798	56.99405	99.97495	-0.90000	3.33220	-6.37640	3.38100	0.90663	7.13723	3.17824	-6.08190	3.05632	0.86481	6.80756	3.39781	-6.50204	3.64272	0.92453	7.13723
						27.07648	54.52453	98.25666	-0.90000	3.39800	-6.50240	3.64350	0.92458	7.27824	3.33239	-6.37676	3.38171	0.90668	7.13763	3.46371	-6.62804	3.94471	0.94240	7.27824
						30.08497	52.05501	96.53836	-0.90000	3.46390	-6.62840	3.94560	0.94245	7.41930	3.39819	-6.50276	3.64431	0.92463	7.27864	3.46477	-6.63010	4.21195	0.94272	7.41930
						33.09347	49.58549	94.82007	-0.90000	3.46440	-6.62940	4.21230	0.94262	7.42041	3.46409	-6.62876	3.94654	0.94251	7.41970	2.42123	-4.57037	3.21693	0.62289	7.42041
						36.10197	47.11598	93.10178	-0.90000	2.41860	-4.56480	3.21440	0.62187	5.12838	3.46131	-6.62348	4.20937	0.94177	7.41378	2.48479	-3.45007	3.08222	-0.06914	5.12838
						39.11047	44.64646	91.38348	-0.90000	2.48490	-3.44680	3.08140	-0.07110	4.24854	2.41886	-4.56178	3.21447	0.61993	5.12605	2.46474	-2.31063	2.51597	-0.70347	4.24854
						42.11896	42.17694	89.66519	-0.90000	2.46460	-2.30750	2.51400	-0.70514	3.30175	2.48493	-3.44351	3.08017	-0.07300	4.24586	2.35927	-1.32886	1.62648	-1.17763	3.30175
						45.12746	39.70742	87.94689	-0.90000	2.35890	-1.32630	1.62380	-1.17879	2.43597	2.46438	-2.30453	2.51171	-0.70666	3.29919	2.23203	-0.60028	0.86806	-1.48931	2.43597
						4.01133	73.45751	111.43024	-0.90000	-0.38647	-1.81360	0.22260	1.35307	1.26796	-0.50512	-1.46012	0.04192	1.24857	0.91004	-0.14267	-2.29829	0.50597	1.42977	1.26796
						7.01983	70.98799	109.71195	-0.90000	-0.14183	-2.29970	0.50683	1.42989	1.80670	-0.38593	-1.81493	0.22334	1.35338	1.26936	0.27189	-2.82458	0.83861	1.39007	1.80670
						10.02832	68.51847	107.99365	-0.90000	0.27323	-2.82610	0.83957	1.38984	2.47585	-0.14083	-2.30115	0.50774	1.42989	1.80846	0.86883	-3.38250	1.19341	1.21873	2.47585
						13.03682	66.04895	106.27536	-0.90000	0.87069	-3.38410	1.19450	1.21811	3.27512	0.27475	-2.82765	0.84054	1.38948	2.47799	1.62823	-3.94513	1.74124	0.91672	3.27512
						16.04532	63.57943	104.55707	-0.90000	1.63050	-3.94670	1.74260	0.91575	4.17090	0.87270	-3.38570	1.19623	1.21738	3.27759	2.50791	-4.79982	2.27438	0.68279	4.17090
						19.05382	61.10991	102.83877	-0.90000	2.51060	-4.80410	2.27690	0.68303	5.37735	1.63286	-3.94823	1.74373	0.91469	4.17350	3.28736	-6.29060	3.22148	0.89443	5.37735
						22.06231	58.64040	101.12048	-0.90000	3.28830	-6.29240	3.22290	0.89469	7.04321	2.51340	-4.80947	2.28015	0.68379	5.38337	3.35391	-6.41804	3.46399	0.91259	7.04321
						25.07081	56.17088	99.40219	-0.90000	3.35410	-6.41840	3.46470	0.91264	7.18421	3.28849	-6.29276	3.22356	0.89474	7.04360	3.41981	-6.54404	3.73869	0.93046	7.18421

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
						28.07931	53.70136	97.68389	-0.90000	3.42000	-6.54440	3.73950	0.93051	7.32528	3.35429	-6.41876	3.46544	0.91269	7.18461	3.48561	-6.67004	4.05506	0.94842	7.32528
						31.08781	51.23184	95.96560	-0.90000	3.48580	-6.67040	4.05600	0.94847	7.46629	3.42019	-6.54476	3.74035	0.93056	7.32568	3.10239	-5.93672	3.86903	0.84415	7.46629
						34.09630	48.76232	94.24730	-0.90000	3.09930	-5.93080	3.86610	0.84330	6.63844	3.48599	-6.67076	4.05698	0.94852	7.46669	2.44954	-4.21142	3.22253	0.39464	6.63844
						37.10480	46.29280	92.52901	-0.90000	2.44980	-4.20840	3.22260	0.39270	4.85365	3.09617	-5.92481	3.86311	0.84245	6.63173	2.48787	-3.06199	2.93773	-0.29332	4.85365
						40.11330	43.82328	90.81072	-0.90000	2.48790	-3.05870	2.93650	-0.29522	3.93168	2.44999	-4.20522	3.22222	0.39073	4.85115	2.43862	-1.95977	2.24639	-0.88242	3.93168
						43.12180	41.35376	89.09242	-0.90000	2.43840	-1.95680	2.24410	-0.88393	2.99892	2.48784	-3.05546	2.93489	-0.29702	3.92899	2.30724	-1.05313	1.37314	-1.29240	2.99892
					3	5.01416	72.63434	110.85748	-0.90000	-0.32244	-1.97110	0.30967	1.39046	1.43381	-0.48131	-1.58059	0.09608	1.29783						
						8.02266	70.16482	109.13918	-0.90000	-0.02342	-2.47080	0.61437	1.43041	2.01477	-0.32175	-1.97247	0.31048	1.39068	1.02253	-0.02442	-2.46935	0.61346	1.43041	1.43381
						11.03116	67.69530	107.42089	-0.90000	0.45222	-3.00940	0.95366	1.34761	2.72854	-0.02225	-2.47229	0.61531	1.43030	1.43533	0.45070	-3.00785	0.95269	1.34796	2.01477
						14.03965	65.22578	105.70260	-0.90000	1.10830	-3.57320	1.39910	1.13108	3.56606	0.45391	-3.01098	0.95461	1.34712	2.01666	1.10629	-3.57160	1.39737	1.13181	2.72854
						17.04815	62.75626	103.98430	-0.90000	1.90900	-4.12700	1.87590	0.79012	4.47796	1.11045	-3.57480	1.40066	1.13022	2.73081	1.90664	-4.12547	1.87477	0.79119	3.56606
						20.05665	60.28674	102.26601	-0.90000	2.84180	-5.43800	2.66030	0.77321	6.08686	1.91141	-4.12846	1.87678	0.78898	3.56860	2.83899	-5.43263	2.65705	0.77245	4.47796
						23.06515	57.81722	100.54771	-0.90000	3.31020	-6.33440	3.30060	0.90070	7.09019	2.84464	-5.44344	2.66364	0.77398	4.48054	3.31001	-6.33404	3.29994	0.90065	6.08686
						26.07364	55.34770	98.82942	-0.90000	3.37610	-6.46040	3.55200	0.91857	7.23125	3.31039	-6.33476	3.30128	0.90075	6.09295	3.37591	-6.46004	3.55126	0.91852	7.09019
						29.08214	52.87819	97.11113	-0.90000	3.44190	-6.58640	3.84010	0.93653	7.37226	3.37629	-6.46076	3.55277	0.91862	7.09059	3.44171	-6.58604	3.83925	0.93647	7.23125
						32.09064	50.40867	95.39283	-0.90000	3.50780	-6.71240	4.17130	0.95440	7.51333	3.44209	-6.58676	3.84099	0.93658	7.23165	3.50761	-6.71204	4.17032	0.95435	7.37226
						35.09914	47.93915	93.67454	-0.90000	2.72950	-5.22310	3.51280	0.74265	5.84631	3.50743	-6.71170	4.17165	0.95430	7.37266	2.73263	-5.22910	3.51579	0.74351	7.51333
						38.10763	45.46963	91.95625	-0.90000	2.47200	-3.83290	3.17770	0.16001	4.55810	2.72686	-5.21752	3.51027	0.74163	7.51254	2.47181	-3.83608	3.17808	0.16198	5.84631
						41.11613	43.00011	90.23795	-0.90000	2.48120	-2.67660	2.74620	-0.50796	3.61421	2.47211	-3.82963	3.17688	0.15805	5.84023	2.48126	-2.67984	2.74781	-0.50615	4.55810
						44.12463	40.53059	88.51966	-0.90000	2.40300	-1.62880	1.94050	-1.04221	2.70946	2.48106	-2.67347	2.74423	-0.50963	4.55548	2.40330	-1.63158	1.94307	-1.04087	3.61421
						47.13312	38.64104	86.80233	-0.90000	2.47140	-0.53659	1.87590	-0.79012	4.47796	2.47211	-0.52781	1.88737	-0.79169	3.61156	2.24761	-0.80491	1.10805	-1.38522	2.70946
						50.14161	36.84107	85.08501	-0.90000	2.54160	0.56600	1.80180	0.84330	6.63844	2.54142	0.57218	1.80328	0.84330	1.69728	3.52454	0.63469	2.80618	1.08214	2.45133
						53.15010	35.04110	83.36769	-0.90000	2.61180	1.69700	1.72770	0.89447	6.08686	2.61072	1.69918	1.72919	0.89447	2.45399	4.38299	1.65186	3.52516	0.58265	3.41689
						56.15858	33.24113	81.65037	-0.90000	2.68200	2.82720	1.65360	0.94563	7.09019	2.68002	2.83091	1.65511	0.94563	3.42012	5.52989	2.83025	4.06997	0.07507	4.65169
						59.16707	31.44116	79.93305	-0.90000	2.75220	3.95660	1.57950	0.99679	7.23125	2.74932	3.96283	1.58102	0.99679	4.65569	7.46281	3.82072	5.20760	0.10027	6.21781
						62.17555	29.64119	78.21573	-0.90000	2.82240	5.08840	1.50540	1.04795	7.37226	2.81862	5.09613	1.50693	1.04795	6.22582	7.48883	3.83406	5.09601	0.10060	8.38665
						65.18404	27.84122	76.49841	-0.90000	2.89260	6.21970	1.43130	1.09911	7.51333	2.88792	6.22743	1.43284	1.09911	8.38672	7.51203	3.84596	5.01251	0.10089	8.41272
						68.19252	26.04125	74.78109	-0.90000	2.96280	7.34100	1.35720	1.15027	7.65440	2.95722	7.35373	1.35874	1.15027	8.41280	7.53533	3.85786	4.96640	0.10123	8.43879
						71.20101	24.24128	73.06377	-0.90000	3.03300	8.46370	1.28310	1.20143	7.79547	3.02652	8.47003	1.28464	1.20143	8.43887	7.55853	3.86976	4.95451	0.10152	8.46495
						74.20949	22.44131	71.34645	-0.90000	3.10320	9.57640	1.20900	1.25259	7.93654	3.09582	9.58633	1.21054	1.25259	8.46503	7.58173	3.88157	4.96675	0.10190	8.49102
						77.21797	20.64134	69.62913	-0.90000	3.17340	10.68910	1.13490	1.30375	8.07761	3.16512	10.69263	1.13644	1.30375	8.49110	7.60493	3.89347	4.99261	0.10219	8.51705
					2	4.01189	39.10876	82.67964	-0.90000	3.05160	0.10905	2.14300	1.32658	2.75034	2.42147	-0.46196	1.17896	1.53785						2
						7.02081	40.51190	80.01791	-0.90000	3.77620	0.94287	3.09040	0.92688	3.78016	3.05367	0.11127	2.14610	1.32558	1.92664	3.77398	0.94015	3.08790	0.92825	2.75034
						10.02973	41.91505	77.35619	-0.90000	4.68920	2.04480	3.67300	0.37785	5.10167	3.77871	0.94587	3.09254	0.92539	2.75320	4.68650	2.04134	3.67170	0.37966	3.78016
						13.03864	43.31819	74.69446	-0.90000	6.33760	3.24470	4.55580	0.08510	7.11941	4.69161	2.04827	3.67382	0.37591	3.78377	6.33046	3.24105	4.55150	0.08501	5.10167
						16.04756	44.72134	72.03274	-0.90000	7.47340	3.82620	5.16880	0.10036	8.39532	6.34474	3.24836	4.56011	0.08520	5.10542	7.47333	3.82616	5.16916	0.10036	7.11941
						19.05648	46.12448	69.37102	-0.90000	7.49670	3.83810	5.06400	0.10070	8.42148	7.47347	3.82623	5.16846	0.10036	7.12743	7.49663	3.83806	5.06428	0.10070	8.39532
						22.06540	47.52762	66.70929	-0.90000	7.51990	3.85000	4.99270	0.10099	8.44756	7.49677	3.83813	5.06375	0.10070	8.39540	7.51983	3.84996	4.99287	0.10099	8.42148
						25.07431	48.93077	64.04757	-0.90000	7.54310	3.86180	4.95900	0.10137	8.47358	7.51997	3.85003	4.99256	0.10099	8.42156	7.54303	3.86177	4.95906	0.10137	8.44756
						28.08323	50.33391	61.38585	-0.90000	7.56630	3.87370	4.95650	0.10166	8.49965	7.54317	3.86184	4.95897	0.10137	8.44763	7.56623	3.87367	4.95648	0.10166	8.47358
						31.09215	51.73706	58.72412	-0.90000	7.58950	3.88560	4.97440	0.10195	8.52573	7.56637	3.87374	4.95654	0.10166	8.47366	7.58943	3.88556	4.97433	0.10195	8.49965
					3	5.01486	39.57647	81.79239	-0.90000	3.28440	0.35860	2.49160	1.21439	3.07264	2.62067	-0.29962	1.46690	1.48714						3
						8.02378	40.97962	79.13067	-0.90000	4.05830	1.27990	3.33130	0.76029	4.18687	3.28655	0.36108	2.49442	1.21320	2.17856	4.05579	1.27690	3.32916	0.76177	3.07264
						11.03270	42.38276	76.46895	-0.90000	4.96030	2.43490	3.76530	0.15919	5.52340	4.06121	1.28324	3.33304	0.75869	3.07570	4.95789	2.43143	3.76448	0.16113	4.18687
						14.04162	43.78591	73.80722	-0.90000	7.14100	3.65600	5.04070	0.09591	8.02190	4.96541	2.43845	3.76803	0.15843	4.19101	7.13385	3.65234	5.03639	0.09582	5.52340
						17.05053	45.18905	71.14550	-0.90000	7.48120	3.83010	5.13080	0.10055	8.40404	7.14388	3.65748	5.04219	0.09595	5.52958	7.48113	3.83007	5.13114	0.10054	8.02190
						20.05945	46.59219	68.48378	-0.90000	7.50440	3.84200	5.03610	0.10084	8.43011	7.48127	3.83014	5.13049	0.10055	8.02515	7.50433	3.84197	5.03635	0.10084	8.40404
						23.06837	47.99534	65.82205	-0.90000	7.52760	3.85390	4.97740	0.10113	8.45619	7.50447	3.84204	5.03589	0.10084	8.40412	7.52753	3.85387	4.97754	0.10113	8.43011
						26.07729	49.39848	63.16033	-0.90000	7.55080	3.86580	4.95520	0.10142	8.48226	7.52767	3.85394	4.97730	0.10113	8.43019	7.55073	3.86576	4.95523	0.10142	8.45619
						29.08620	50.80163	60.49861	-0.90000	7.57400	3.87770	4.96080	0.10171	8.50833	7.55087	3.86584	4.95519	0.10142	8.45626	7.57393	3.87766	4.96076	0.10171	8.48226
						32.09512	52.20477	57.84139	-0.90000	7.59720	3.88950	4.96660	0.10205	8.53440	7.57407	3.87964	4.95500	0.10171	8.48234	7.59723	3.88956	4.96302	0.10205	8.50833
					3	3.98757	55.23844	52.67152	-0.90000	7.82070	4.00400	5.24310	0.71036	8.75733	7.66421	3.92385	5.06640	0.69618						3
						4.98446	55.76300	51.82380	-0.90000	7.87280	4.03060	5.30660	0.71516	8.81563	7.71621	3.95045	5.11762	0.70092	8.58208	7.97748	4.08420	5.43642	0.72466	8.75733
						3.98331	60.26896	44.07515	-0.90000	8.23030	4.21370	5.72980	0.17791	9.24454	8.18391	4.18990	5.65861	0.17695	8.64030	8.03971	4.11611	5.50222	0.73027	8.81563
					4	7.96662	62.15213	40.56510	-0.90000	8.29200	4.24530	5.86190	0.17924	9.31385	8.24561	4.22150	5.76011	0.17828						4
						11.94993	64.03529	37.05504	-0.90000	8.35380	4.27690	6.02060	0.18061	9.38324	8.30731	4.25310	5.89853	0.17960	9.19240	8.27679	4.23750	5.82685	0.17892	9.24454
						15.93324	65.91845	33.54499	-0.90000	8.41560	4.30860	6.20610	0.18189	9.45269	8.36911	4.28470	6.06395	0.18097	9.26171	8.33859	4.26910	5.97893	0.18029	9.31385
						19.91656	67.80161	30.03494	-0.90000	8.47750	4.34020	6.41360	0.18331	9.52217	8.43091	4.31640	6.25557	0.18225	9.33102	8.40039	4.30070	6.15801	0.18166	9.38324
						23.89987	69.68478	26.52489	-0.90000	8.53940	4.37190	6.62960	0.18464	9.59170	8.49281	4.34810	6.46692	0.18359	9.40042	8.46219	4.33240	6.36087	0.18295	9.45269
						27.88318	71.56794	23.01484	-0.90000	6.47780	3.31650	5.36590	0.14000	7.27609	8.55471	4.37980	6.68164	0.18492	9.46986	8.52419	4.36410	6.57667	0.18433	9.52217
						31.86649	73.45110	19.50479	-0.90000	3.79690	3.07710	4.48820	-0.91648	4.80052	5.76014	3.11566	5.04192	-0.02230	9.53939	7.30862	3.74179	5.90257	0.15803	9.59170
						35.84980	75.33427	15.99473	-0.90000	1.63880	2.60100	3.11910	-1.51721	2.67375	3.17413	2.98626	4.20649	-1.13085	9.60892	4.44870	3.13022	4.72321	-0.65514	7.27609
						39.83311	77.21743	12.48468	-0.90000	0.54697	2.44430	1.49020	-1.89530	1.63756	1.30377	2.54699	2.70458	-1.62801	6.54874	2.08759	2.75435	3.50795	-1.44017	4.80052
						43.81642	79.10059	8.97463	-0.90000	0.00783	2.31010	0.67000	-2.03193	1.09903	0.37950	2.43798	1.21283	-1.96891	4.20880	0.74131	2.42929	1.80924	-1.79020	2.67375
						47.79973	80.98376	5.46458	-0.90000	-0.23721	1.94940	0.23029	-1.82993	0.71258	-0.07522	2.23831	0.55491	-2.00794	2.35299	0.10880	2.36816	0.78471	-2.03536	1.63756
					2	4.97914	60.73975	43.19764	-0.90000	8.24580	4.22160	5.76050	0.17828	9.26193	8.19931	4.19780	5.68289	0.17727	1.48700	-0.19772	2.05446	0.32980	-1.90385	1.09903
						8.96245	62.62292	39.68758	-0.90000	8.30750	4.25320	5.89900	0.17961	9.33124	8.26101	4.22940	5.79230	0.17860	0.99191	-0.29061	1.57828	-0.00976	-1.52815	0.71258
						12.94576	64.50608	36.17753	-0.90000	8.36930	4.28480	6.06450	0.18098	9.40064	8.32271	4.26100	5.93731	0.17992	9.20971	8.29219	4.24540	5.86237	0.17924	9.26193
						16.92907	66.38924	32.66748	-0.90000	8.43110	4.31650	6.25620	0.18226	9.47008	8.38451	4.29260	6.10953	0.18129	9.27902	8.35399	4.27700	6.02115	0.18061	9.33124
						20.91238	68.27241	29.15743	-0.90000	8.49300	4.34820	6.46760	0.18359	9.53961	8.44641	4.32430	6.30705	0.18262	9.34833	8.41579	4.30870	6.20673	0.18190	9.40064
						24.89569	70.15557	25.64738	-0.90000	8.55490	4.37990	6.68230	0.18492	9.60914	8.50831	4.35600	6.52122	0.18395	9.41772	8.47769	4.34030	6.41428	0.18332	9.47008
						28.87900	72.03873	22.13732	-0.90000	5.75100	3.11310	5.03780	-0.02437	6.53948	8.16427	4.17985	6.45292	0.17653	9.48725	8.53959	4.37200	6.63026	0.18465	9.53961
						32.86232	73.92189	18.62727	-0.90000	3.16620	2.98510	4.20290	-1.13358	4.20127	5.12566	3.14164	4.91279	-0.34515	9.55679	6.46866	3.31394	5.36177	0.13793	9.60914
																			9.17035	3.78897	3.07594	4.48461	-0.91920	6.53948

Stage: Ref.	Stage: δHperp.(n-Lp)	Name	Specific Utility: δx(n+Lp)	Specific Utility: δy(n+Lp)	Specific Utility: δz(n+Lp)	Sub-utility Name δH//(n+Lp)	Iteration δHperp.(n+Lp)	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)
6.00193	1.63454	2.60031	3.11383	-1.51862	4.20127															
								36.84563	75.80506	15.11722	-0.90000	1.29950	2.54630	2.69930	-1.62942	2.34890	2.61235	2.88804	3.88011	-1.30988
3.66733	0.54484	2.44422	1.48667	-1.89624	2.34890															
								40.82894	77.68822	11.60717	-0.90000	0.37737	2.43790	1.20930	-1.96985	1.48508	1.00386	2.48389	2.26384	-1.71419
2.05889	0.00677	2.30919	0.66853	-2.03163	1.48508															
								44.81225	79.57138	8.09712	-0.90000	-0.07627	2.23740	0.55345	-2.00763	0.99055	0.23435	2.41242	0.91511	-2.01501
1.34701	-0.23756	1.94795	0.22914	-1.82883	0.99055															
								48.79556	81.45455	4.58706	-0.90000	-0.26534	1.83410	0.13914	-1.74163	0.63328	-0.14322	2.15327	0.44100	-1.96515
0.89179	-0.28961	1.44100	-0.06533	-1.40671	0.63328															
				3				5.97497	61.21054	42.32012	-0.90000	8.26120	4.22950	5.79270	0.17860	9.27923	8.21471	4.20570	5.70048	0.17759
9.22701	8.30769	4.25330	5.89949	0.17961	9.27923															
								9.95828	63.09371	38.81007	-0.90000	8.32290	4.26110	5.93780	0.17992	9.34854	8.27641	4.23730	5.82598	0.17892
9.29632	8.36949	4.28490	6.06507	0.18098	9.34854															
								13.94159	64.97687	35.30002	-0.90000	8.38470	4.29270	6.11010	0.18130	9.41794	8.33821	4.26890	5.97789	0.18029
9.36572	8.43129	4.31660	6.25685	0.18226	9.41794															
								17.92490	66.86003	31.78997	-0.90000	8.44660	4.32440	6.30770	0.18263	9.48747	8.40001	4.30050	6.15681	0.18166
9.43512	8.49319	4.34830	6.46828	0.18359	9.48747															
								21.90821	68.74320	28.27991	-0.90000	8.50850	4.35610	6.52190	0.18396	9.55700	8.46181	4.33220	6.35954	0.18294
9.50456	8.54993	4.37735	6.67938	0.18481	9.55700															
								25.89152	70.62636	24.76986	-0.90000	8.15930	4.17730	6.45000	0.17642	9.16476	8.52381	4.36390	6.57532	0.18432
9.57418	5.74304	3.11346	5.03621	-0.02845	9.16476															
								29.87483	72.50952	21.25981	-0.90000	5.11770	3.14200	4.91120	-0.34924	5.99509	7.32976	3.75261	5.91619	0.15848
8.23300	3.15915	2.98386	4.19879	-1.13582	5.99509															
								33.85814	74.39269	17.74976	-0.90000	2.60530	2.88680	3.87600	-1.31213	3.66054	4.46530	3.13104	4.72852	-0.64801
5.41502	1.29574	2.54551	2.69376	-1.63050	3.66054															
								37.84145	76.27585	14.23971	-0.90000	1.00010	2.48310	2.25830	-1.71527	2.05520	2.09973	2.75794	3.51746	-1.43759
3.15412	0.37555	2.43758	1.20555	-1.97042	2.05520															
								41.82477	78.15901	10.72966	-0.90000	0.23253	2.41210	0.91137	-2.01559	1.34525	0.74700	2.42978	1.81890	-1.78794
1.80696	-0.07713	2.23633	0.55202	-2.00709	1.34525															
								45.80808	80.04217	7.21960	-0.90000	-0.14407	2.15220	0.43957	-1.96461	0.89053	0.11163	2.36944	0.78774	-2.03515
1.21855	-0.26556	1.83255	0.13813	-1.74037	0.89053															
								49.79139	81.92534	3.70955	-0.90000	-0.28280	1.71070	0.05905	-1.64115	0.55956	-0.19655	2.05701	0.33243	-1.90554
0.79928	-0.28072	1.29773	-0.10872	-1.27626	0.55956															
				4				6.97079	61.68134	41.44261	-0.90000	8.27660	4.23740	5.82640	0.17892	9.29654	8.23011	4.21360	5.72943	0.17791
9.24432	8.32309	4.26120	5.93831	0.17993	9.29654															
								10.95411	63.56450	37.93256	-0.90000	8.33840	4.26900	5.97840	0.18029	9.36594	8.29181	4.24520	5.86145	0.17923
9.31363	8.38489	4.29280	6.11069	0.18130	9.36594															
								14.93742	65.44766	34.42251	-0.90000	8.40020	4.30060	6.15740	0.18166	9.43533	8.35361	4.27680	6.02007	0.18061
9.38302	8.44679	4.32450	6.30836	0.18263	9.43533															
								18.92073	67.33082	30.91245	-0.90000	8.46200	4.33230	6.36020	0.18295	9.50478	8.41541	4.30850	6.20549	0.18189
9.45247	8.50869	4.35620	6.52258	0.18396	9.50478															
								22.90404	69.21399	27.40240	-0.90000	8.52400	4.36400	6.57600	0.18432	9.57440	8.47731	4.34010	6.41293	0.18331
9.52195	8.14874	4.17189	6.44321	0.17620	9.57440															
								26.88735	71.09715	23.89235	-0.90000	7.31920	3.74720	5.90940	0.15826	8.22114	8.53921	4.37180	6.62893	0.18464
9.59149	5.10940	3.14186	4.90887	-0.35304	8.22114															
								30.87066	72.98031	20.38230	-0.90000	4.45700	3.13090	4.72620	-0.65181	5.40763	6.48837	3.32191	5.37273	0.14023
7.28796	2.59887	2.88516	3.87144	-1.31372	5.40763															
								34.85397	74.86348	16.87225	-0.90000	2.09330	2.75630	3.51290	-1.43919	3.14767	3.80519	3.07778	4.49119	-0.91315
4.80816	0.99688	2.48242	2.25271	-1.71620	3.14767															
								38.83728	76.74664	13.36219	-0.90000	0.74378	2.42910	1.81330	-1.78887	1.80380	1.64451	2.60295	3.12405	-1.51623
2.67971	0.23099	2.41156	0.90980	-2.01583	1.80380															
								42.82059	78.62980	9.85214	-0.90000	0.11009	2.36890	0.78617	-2.03540	1.21694	0.54944	2.44411	1.49426	-1.89397
1.63965	-0.14474	2.15099	0.43821	-1.96386	1.21694															
								46.80390	80.51296	6.34209	-0.90000	-0.19722	2.05580	0.33107	-1.90479	0.79812	0.00912	2.31084	0.67146	-2.03198
1.10051	-0.28290	1.70906	0.05819	-1.63975	0.79812															
		5	TW Foul-1	1		1		1.00444	75.64700	113.52870	-6.00000	-0.45521	-1.41290	0.01069	1.20113	0.87223	-0.46409	-1.28905	-0.03441	1.13523
0.76700	-0.43207	-1.53386	0.06364	1.25381	0.87223															
								2.00887	74.83600	112.93610	-6.00000	-0.43197	-1.53440	0.06388	1.25405	0.98405	-0.45511	-1.41344	0.01092	1.20136
0.87273	-0.39354	-1.65218	0.07842	1.29251	0.98405															
								3.01331	74.02501	112.34351	-6.00000	-0.39337	-1.65270	0.07849	1.29268	1.10234	-0.43180	-1.53492	0.06394	1.25422
0.98457	-0.34326	-1.78870	0.14600	1.33245	1.10234															
								4.01774	73.21401	111.75091	-6.00000	-0.34304	-1.78930	0.14630	1.33263	1.24232	-0.39315	-1.65330	0.07879	1.29285
1.10296	-0.28093	-1.94660	0.22816	1.37528	1.24232															
								5.02218	72.40301	111.15831	-6.00000	-0.28065	-1.94730	0.22852	1.37547	1.40670	-0.34276	-1.79000	0.14666	1.33282
1.24305	-0.20183	-2.10908	0.31859	1.40728	1.40670															
								6.02661	71.59201	110.56571	-6.00000	-0.20148	-2.10980	0.31899	1.40742	1.58462	-0.28030	-1.94802	0.22892	1.37561
1.40749	-0.10501	-2.27606	0.41618	1.42762	1.58462															
								7.03105	70.78101	109.97311	-6.00000	-0.10458	-2.27680	0.41661	1.42771	1.77663	-0.20105	-2.11054	0.31942	1.40751
1.58547	0.01043	-2.44754	0.51955	1.43558	1.77663															
								8.03548	69.97002	109.38052	-6.00000	0.01094	-2.44830	0.52001	1.43561	1.98326	-0.10407	-2.27756	0.41707	1.42774
1.77754	0.14527	-2.62342	0.62715	1.43047	1.98326															
								9.03992	69.15902	108.78792	-6.00000	0.14587	-2.62420	0.62763	1.43045	2.20488	0.01154	-2.44908	0.52049	1.43559
1.98424	0.30010	-2.80340	0.73726	1.41165	2.20488															
								10.04435	68.34802	108.19532	-6.00000	0.30078	-2.80420	0.73775	1.41157	2.44161	0.14655	-2.62499	0.62812	1.43037
2.20593	0.47522	-2.98709	0.84798	1.37863	2.44161															
								11.04879	67.53702	107.60272	-6.00000	0.47599	-2.98790	0.84847	1.37848	2.69331	0.30155	-2.80501	0.73824	1.41142
2.44272	0.67060	-3.17398	0.95732	1.33113	2.69331															
								12.05322	66.72603	107.01013	-6.00000	0.67146	-3.17480	0.95780	1.33092	2.95954	0.47685	-2.98872	0.84895	1.37827
2.69448	0.88574	-3.36297	1.06323	1.26893	2.95954															
								13.05766	65.91503	106.41753	-6.00000	0.88669	-3.36380	1.06370	1.26865	3.23912	0.67241	-3.17564	0.95827	1.33065
2.96077	1.11957	-3.55306	1.24739	1.19228	3.23912															
								14.06209	65.10403	105.82493	-6.00000	1.12060	-3.55390	1.24820	1.19194	3.53061	0.88772	-3.36464	1.06451	1.26831
3.24041	1.29921	-3.74266	1.43238	1.15910	3.53061															
								15.06653	64.29303	105.23233	-6.00000	1.30000	-3.74350	1.43320	1.15895	3.78954	1.12139	-3.55474	1.24902	1.19180
3.53176	1.54889	-3.92997	1.59389	1.06801	3.78954															
								16.07096	63.48203	104.63973	-6.00000	1.55000	-3.93080	1.59460	1.06760	4.08826	1.30110	-3.74433	1.43391	1.15855
3.79086	1.79890	-4.19881	1.79909	1.02476	4.08826															
								17.07540	62.67104	104.04714	-6.00000	1.80000	-4.20000	1.80000	1.02457	4.45312	1.55110	-3.93199	1.59551	1.06741
4.08987	2.09868	-4.39912	2.04890	0.90089	4.45312															
								18.07983	61.86004	103.45454	-6.00000	2.10000	-4.40000	2.05000	0.90034	4.79160	1.80133	-4.20088	1.80110	1.02402
4.45461	2.34890	-4.79823	2.29890	0.93433	4.79160															
								19.08427	61.04904	102.86194	-6.00000	2.35000	-4.80000	2.30000	0.93448	5.26206	2.10110	-4.40177	2.05110	0.90049
4.79367	2.59890	-5.29779	2.54890	1.02721	5.26206															
								20.08870	60.23804	102.26934	-6.00000	2.60000	-5.30000	2.55000	1.02762	5.81326	2.35110	-4.80221	2.30110	0.93489
5.26449	2.79912	-5.69823	2.79889	1.10180	5.81326															
								21.09314	59.42704	101.67674	-6.00000	2.80000	-5.70000	2.80000	1.10213	6.25422	2.60088	-5.30176	2.55110	1.02795
5.81521	2.94934	-5.99868	2.99912	1.15776	6.25422															
								22.09757	58.61605	101.08415	-6.00000	2.95000	-6.00000	3.00000	1.15801	6.58495	2.80066	-5.70132	2.80088	1.10237
6.25568	3.09934	-6.19912	3.17373	1.15491	6.58495															
								23.10201	57.80505	100.49155	-6.00000	3.10000	-6.20000	3.17450	1.15489	6.83493	2.95066	-6.00088	3.00077	1.15799
6.58605	3.19956	-6.29956	3.26102	1.13324	6.83493															
								24.10644	56.99405	99.89895	-6.00000	3.20000	-6.30000	3.26140	1.13315	6.97467	3.10044	-6.20044	3.17488	1.15480
6.83554	3.29956	-6.44784	3.35060	1.13999	6.97467															
								25.11088	56.18305	99.30635	-6.00000	3.30000	-6.44850	3.35100	1.14002	7.15357	3.20044	-6.30066	3.26180	1.13318
6.97546	3.39956	-6.49798	3.44359	1.08883	7.15357															
								26.11531	55.37206	98.71376	-6.00000	3.40000	-6.49820	3.44400	1.08860	7.25269	3.30044	-6.44872	3.35141	1.13979
7.15400	3.42170	-6.54778	3.54037	1.10033	7.25269															
								27.11975	54.56106	98.12116	-6.00000	3.42180	-6.54800	3.54080	1.10038	7.30576	3.40010	-6.49842	3.44443	1.08865
7.25293	3.44769	-6.50021	3.64185	1.05128	7.30576															
								28.12418	53.75006	97.52856	-6.00000	3.44780	-6.50000	3.64230	1.05107	7.28235	3.42191	-6.54779	3.54125	1.10016
7.30566	3.47369	-6.45022	3.74823	1.00080	7.28235															
								29.12862	52.93906	96.93596	-6.00000	3.47380	-6.45000	3.74870	1.00057	7.25732	3.44791	-6.49978	3.64277	1.05084
7.28224	3.49969	-6.35044	3.74999	0.92094	7.25732															
								30.13305	52.12806	96.34336	-6.00000	3.49980	-6.35000	3.75000	0.92058	7.19191	3.47391	-6.44956	3.74871	1.00022
7.25703	3.45022	-6.20066	3.70022	0.87251	7.19191															
								31.13749	51.31707	95.75077	-6.00000	3.45000	-6.20000	3.70000	0.87230	7.04142	3.49958	-6.34934	3.74978	0.92037
7.19125	3.40022	-6.00088	3.60044	0.79501	7.04142															
								32.14192	50.50607	95.15817	-6.00000	3.40000	-6.00000	3.60000	0.79467	6.85044	3.44978	-6.19912	3.69956	0.87195
7.04058	3.30044	-5.80088	3.50044	0.75758	6.85044															
								33.14636	49.69507	94.56557	-6.00000	3.30000	-5.80000	3.50000	0.75742	6.62996	3.39956	-5.99912	3.59956	0.79451
6.84946	3.20044	-5.50133	3.40044	0.66159	6.62996															
								34.15079	48.88407	93.97297	-6.00000	3.20000	-5.50000	3.40000	0.66116	6.32873	3.29956	-5.79868	3.49956	0.75699
6.62863	3.10044	-5.10177	3.30044	0.50660	6.32873															
								35.15523	48.07307	93.38037	-6.00000	3.10000	-5.10000	3.30000	0.50591	5.94677	3.19956	-5.49823	3.39956	0.66048
6.32705	3.00044	-4.70176	3.20044	0.35135	5.94677															
								36.15966	47.26208	92.78778	-6.00000	3.00000	-4.70000	3.20000	0.35066	5.56480	3.09956	-5.09824	3.29956	0.50523
5.94508	2.90044	-4.30177	3.10044	0.19610	5.56480															
								37.16410	46.45108	92.19518	-6.00000	2.90000	-4.30000	3.10000	0.19541	5.18284	2.99956	-4.69823	3.19956	0.34997
5.56312	2.80044	-3.89211	3.00044	0.03515	5.18284															
								38.16853	45.64008	91.60258	-6.00000	2.80000	-3.89030	3.00000	0.03444	4.79304	2.89956	-4.29819	3.09956	0.19470
5.18112	2.70044	-3.47216	2.90044	-0.13188	4.79304															
								39.17297	44.82908	91.00998	-6.00000	2.70000	-3.47030	2.90000	-0.13261	4.39493	2.79956	-3.88845	2.99956	0.03370
4.79128	2.60044	-3.06599	2.80044	-0.29076	4.39493															
								40.17740	44.01809	90.41739	-6.00000	2.60000	-3.06420	2.80000	-0.29146	4.00804	2.69956	-3.46851	2.89956	-0.13331
4.39322	2.53718	-2.66567	2.72762	-0.47587	4.00804															
								41.18184	43.20709	89.82479	-6.00000	2.53690	-2.66390	2.72730	-0.47669	3.64760	2.59972	-3.06243	2.79968	-0.29228
4.00644	2.52226	-2.27891	2.50598	-0.69201	3.64760															
								42.18627	42.39609	89.23219	-6.00000	2.52220	-2.27720	2.50500	-0.69296	3.32670	2.53683	-2.66219	2.72632	-0.47764
3.64618	2.49771	-1.91202	2.24605	-0.88864	3.32670															
								43.19071	41.58509	88.63959	-6.00000	2.49760	-1.91040	2.24490	-0.88950	3.01603	2.52209	-2.27558	2.50385	-0.69383
3.32533	2.46345	-1.56941	1.95220	-1.06311	3.01603															

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility Name	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n-Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
						44.19514	40.77409	88.04699	-6.00000	2.46330	-1.56790	1.95090	-1.06388	2.71925	2.49745	-1.90889	2.24360	-0.89027	3.01472	2.42019	-1.25429	1.62863	-1.21410	2.71925
						45.19958	39.96310	87.45440	-6.00000	2.42000	-1.25290	1.62720	-1.21476	2.43937	2.46311	-1.56651	1.94947	-1.06454	2.71802	2.36843	-0.96833	1.31389	-1.34101	2.43937
		6	TW Foul-2	1		1.00474	38.81931	85.38557	-6.00000	2.51860	-0.56699	1.40560	1.69740	1.94517	2.32044	-0.71365	1.06561	1.73206	1.70109	2.73079	-0.38922	1.86054	1.64205	1.94517
						2.00947	39.29752	84.50193	-6.00000	2.73180	-0.38838	1.86270	1.64179	2.21768	2.51961	-0.56615	1.40776	1.69714	1.94645	2.95833	-0.17732	2.30739	1.56399	2.21768
						3.01421	39.77574	83.61830	-6.00000	2.95940	-0.17632	2.30950	1.56362	2.51878	2.73287	-0.38738	1.86481	1.64142	2.21910	3.20046	0.06974	2.71160	1.46195	2.51878
						4.01894	40.25395	82.73467	-6.00000	3.20160	0.07091	2.71350	1.46147	2.84945	2.96054	-0.17516	2.31140	1.56314	2.52033	3.48148	0.35388	3.06593	1.34581	2.84945
						5.02368	40.73216	81.85104	-6.00000	3.48280	0.35522	3.06760	1.34526	3.23208	3.20293	0.07225	2.71517	1.46092	2.85126	3.87743	0.68996	3.38609	1.23869	3.23208
						6.02842	41.21037	80.96740	-6.00000	3.87930	0.69155	3.38760	1.23819	3.74087	3.48467	0.35681	3.06911	1.34476	3.23448	4.27184	0.99855	3.66698	1.15503	3.74087
						7.03315	41.68859	80.08377	-6.00000	4.27370	1.00000	3.66830	1.15463	4.23454	3.88116	0.69300	3.38892	1.23779	3.74320	4.65808	1.39812	3.90329	0.98745	4.23454
						8.03789	42.16680	79.20014	-6.00000	4.65990	1.40000	3.90440	0.98666	4.76458	4.27552	1.00189	3.66941	1.15384	4.23704	5.03532	1.79811	4.08992	0.81522	4.76458
						9.04262	42.64501	78.31650	-6.00000	5.03710	1.80000	4.09080	0.81441	5.28669	4.66168	1.40189	3.90528	0.98585	4.76704	5.49782	2.14835	4.29901	0.72733	5.28669
						10.04736	43.12322	77.43287	-6.00000	5.50000	2.15000	4.30000	0.72691	5.86038	5.03928	1.80165	4.09179	0.81400	5.28940	5.99764	2.49835	4.49906	0.65741	5.86038
						11.05210	43.60144	76.54924	-6.00000	6.00000	2.50000	4.50000	0.65708	6.46670	5.50236	2.15165	4.30094	0.72659	5.86324	6.49764	2.89811	4.64929	0.54381	6.46670
						12.05683	44.07965	75.66560	-6.00000	6.50000	2.90000	4.65000	0.54327	7.09682	6.00236	2.50189	4.50071	0.65654	6.46967	6.89811	3.29811	4.79929	0.38263	7.09682
						13.06157	44.55786	74.78197	-6.00000	6.90000	3.30000	4.80000	0.38187	7.63899	6.50188	2.90188	4.65071	0.54251	7.09937	7.29812	3.64835	4.89953	0.26499	7.63899
						14.06630	45.03607	73.89834	-6.00000	7.30000	3.65000	4.90000	0.26444	8.15736	6.90189	3.30165	4.80047	0.38131	7.64143	7.59859	3.89882	4.99953	0.18772	8.15736
						15.07104	45.51429	73.01471	-6.00000	7.60000	3.90000	5.00000	0.18736	8.54019	7.30142	3.65118	4.90047	0.26407	8.15917	7.89859	4.09906	5.09953	0.15441	8.54019
						16.07578	45.99250	72.13107	-6.00000	7.90000	4.10000	5.10000	0.15425	8.89922	7.60141	3.90094	5.00047	0.18720	8.54189	8.04929	4.19953	5.19953	0.13778	8.89922
						17.08051	46.47071	71.24744	-6.00000	8.05000	4.20000	5.20000	0.13770	9.07874	7.90071	4.10047	5.10047	0.15417	8.90007	8.14953	4.26440	5.29953	0.12844	9.07874
						18.08525	46.94892	70.36381	-6.00000	8.15000	4.26470	5.30000	0.12839	9.19748	8.05047	4.20031	5.20047	0.13766	9.07930	8.24953	4.27416	5.34976	0.16745	9.19748
						19.08998	47.42714	69.48017	-6.00000	8.25000	4.27420	5.35000	0.16763	9.28995	8.15047	4.26475	5.30024	0.12858	9.19792	8.29976	4.28366	5.39976	0.18300	9.28995
						20.09472	47.90535	68.59654	-6.00000	8.30000	4.28370	5.40000	0.18308	9.33845	8.25024	4.27424	5.35024	0.16771	9.29018	8.34976	4.29306	5.44976	0.19853	9.33845
						21.09945	48.38356	67.71291	-6.00000	8.35000	4.29310	5.45000	0.19861	9.38689	8.30024	4.28374	5.40024	0.18315	9.33867	8.39976	4.30256	5.49847	0.21398	9.38689
						22.10419	48.86177	66.82927	-6.00000	8.40000	4.30260	5.49870	0.21405	9.43539	8.35024	4.29314	5.45023	0.19868	9.38712	8.42249	4.31206	5.48487	0.21644	9.43539
						23.10893	49.33998	65.94564	-6.00000	8.42260	4.31210	5.48480	0.21645	9.45979	8.40011	4.30264	5.49863	0.21406	9.43550	8.44101	4.32156	5.47793	0.21690	9.45979
						24.11366	49.81820	65.06201	-6.00000	8.44110	4.32160	5.47790	0.21690	9.48058	8.42269	4.31214	5.48477	0.21645	9.45988	8.45961	4.33106	5.47760	0.21740	9.48058
						25.11840	50.29641	64.17838	-6.00000	8.45970	4.33110	5.47760	0.21740	9.50146	8.44119	4.32164	5.47790	0.21691	9.48068	8.47821	4.34056	5.48337	0.21790	9.50146
						26.12313	50.77462	63.29474	-6.00000	8.47830	4.34060	5.48340	0.21790	9.52234	8.45979	4.33114	5.47763	0.21740	9.50156	8.49671	4.35006	5.49465	0.21835	9.52234
						27.12787	51.25283	62.41111	-6.00000	8.49680	4.35010	5.49470	0.21835	9.54313	8.47839	4.34064	5.48345	0.21790	9.52243	8.51531	4.35956	5.51062	0.21884	9.54313
						28.13261	51.73105	61.52748	-6.00000	8.51540	4.35960	5.51070	0.21885	9.56401	8.49689	4.35014	5.49478	0.21835	9.54323	8.53391	4.36906	5.53061	0.21934	9.56401
						29.13734	52.20926	60.64384	-6.00000	8.53400	4.36910	5.53070	0.21934	9.58489	8.51549	4.35964	5.51079	0.21885	9.56411	8.55241	4.37865	5.55389	0.21971	9.58489
						30.14208	52.68747	59.76021	-6.00000	8.55250	4.37870	5.55400	0.21971	9.60573	8.53409	4.36915	5.53081	0.21935	9.58499	8.57101	4.38816	5.57958	0.22020	9.60573
						31.14681	53.16568	58.87658	-6.00000	8.57110	4.38820	5.57970	0.22020	9.62661	8.55259	4.37874	5.55412	0.21971	9.60583	8.58961	4.39766	5.60727	0.22070	9.62661
						32.15155	53.64390	57.99294	-6.00000	8.58970	4.39770	5.60740	0.22070	9.64749	8.57119	4.38824	5.57983	0.22021	9.62671	8.60821	4.40716	5.63626	0.22120	9.64749
						33.15629	54.12211	57.10931	-6.00000	8.60830	4.40720	5.63640	0.22120	9.66837	8.58979	4.39774	5.60754	0.22071	9.64759	8.62681	4.41666	5.66616	0.22170	9.66837
						34.16102	54.60032	56.22568	-6.00000	8.62690	4.41670	5.66630	0.22170	9.68925	8.60839	4.40724	5.63654	0.22120	9.66846	8.64551	4.42625	5.69676	0.22215	9.68925
						35.16576	55.07853	55.34205	-6.00000	8.64560	4.42630	5.69690	0.22216	9.71026	8.62699	4.41675	5.66644	0.22170	9.68935	8.66411	4.43576	5.72765	0.22265	9.71026
						36.17049	55.55675	54.45841	-6.00000	8.66420	4.43580	5.72780	0.22265	9.73114	8.64569	4.42634	5.69705	0.22216	9.71036	8.68271	4.44526	5.75885	0.22315	9.73114
						37.17523	56.03496	53.57478	-6.00000	8.68280	4.44530	5.75900	0.22315	9.75202	8.66429	4.43584	5.72795	0.22266	9.73124	8.70141	4.45485	5.79035	0.22361	9.75202
						38.17997	56.51317	52.69115	-6.00000	8.70150	4.45490	5.79050	0.22361	9.77304	8.68289	4.44535	5.75915	0.22315	9.75212	8.72001	4.46436	5.82205	0.22410	9.77304
						39.18470	56.99138	51.80751	-6.00000	8.72010	4.46440	5.82220	0.22411	9.79392	8.70159	4.45494	5.79065	0.22361	9.77313	8.73871	4.47395	5.85415	0.22456	9.79392
						40.18944	57.46959	50.92388	-6.00000	8.73880	4.47400	5.85430	0.22456	9.81493	8.72019	4.46445	5.82235	0.22411	9.79401	8.75731	4.48346	5.88675	0.22506	9.81493
						41.19417	57.94781	50.04025	-6.00000	8.75740	4.48350	5.88690	0.22506	9.83581	8.73889	4.47404	5.85445	0.22457	9.81503	8.77601	4.49305	5.91994	0.22552	9.83581
						42.19891	58.42602	49.15661	-6.00000	8.77610	4.49310	5.92010	0.22552	9.85683	8.75749	4.48355	5.88706	0.22506	9.83591	8.79471	4.50265	5.95384	0.22598	9.85683
						43.20365	58.90423	48.27298	-6.00000	8.79480	4.50270	5.95400	0.22598	9.87784	8.77619	4.49315	5.92026	0.22552	9.85693	8.81341	4.51216	5.98884	0.22652	9.87784
						44.20838	59.38244	47.38935	-6.00000	8.81350	4.51220	5.98900	0.22652	9.89881	8.79489	4.50274	5.95416	0.22598	9.87794	8.83211	4.52175	6.02483	0.22698	9.89881
						45.21312	59.86066	46.50572	-6.00000	8.83220	4.52180	6.02500	0.22698	9.91982	8.81359	4.51225	5.98917	0.22653	9.89891	8.85081	4.53135	6.06212	0.22744	9.91982
						46.21785	60.33887	45.62208	-6.00000	8.85090	4.53140	6.06230	0.22744	9.94084	8.83229	4.52185	6.02518	0.22698	9.91992	8.86951	4.54095	6.10082	0.22789	9.94084
						47.22259	60.81708	44.73845	-6.00000	8.86960	4.54100	6.10100	0.22790	9.96185	8.85099	4.53145	6.06248	0.22744	9.94094	8.88821	4.55055	6.14101	0.22835	9.96185
						48.22733	61.29529	43.85482	-6.00000	8.88830	4.55060	6.14120	0.22835	9.98287	8.86969	4.54105	6.10119	0.22790	9.96195	8.90691	4.56006	6.18280	0.22890	9.98287
						49.23206	61.77351	42.97118	-6.00000	8.90700	4.56010	6.18300	0.22890	10.00384	8.88839	4.55064	6.14140	0.22836	9.98297	8.92571	4.56965	6.22629	0.22940	10.00384
						50.23680	62.25172	42.08755	-6.00000	8.92580	4.56970	6.22650	0.22940	10.02494	8.90709	4.56015	6.18320	0.22890	10.00394	8.94441	4.57925	6.27159	0.22986	10.02494
						51.24153	62.72993	41.20392	-6.00000	8.94450	4.57930	6.27180	0.22986	10.04596	8.92589	4.56975	6.22671	0.22941	10.02504	8.96321	4.58885	6.31858	0.23036	10.04596
						52.24627	63.20814	40.32028	-6.00000	8.96330	4.58890	6.31880	0.23037	10.06706	8.94459	4.57935	6.27202	0.22986	10.04606	8.98201	4.59855	6.36747	0.23078	10.06706
						53.25101	63.68636	39.43665	-6.00000	8.98210	4.59860	6.36770	0.23078	10.08821	8.96339	4.58895	6.31903	0.23037	10.06716	9.00081	4.60815	6.41816	0.23129	10.08821
						54.25574	64.16457	38.55302	-6.00000	9.00090	4.60820	6.41840	0.23129	10.10931	8.98219	4.59865	6.36794	0.23079	10.08831	9.01951	4.61775	6.47065	0.23174	10.10931
						55.26048	64.64278	37.66939	-6.00000	9.01960	4.61780	6.47090	0.23175	10.13033	9.00099	4.60825	6.41865	0.23129	10.10941	9.03831	4.62735	6.52484	0.23225	10.13033
						56.26521	65.12099	36.78575	-6.00000	9.03840	4.62740	6.52510	0.23225	10.15143	9.01969	4.61785	6.47116	0.23175	10.13043	9.05721	4.63695	6.58084	0.23280	10.15143
						57.26995	65.59921	35.90212	-6.00000	9.05730	4.63700	6.58110	0.23280	10.17262	9.03849	4.62745	6.52536	0.23225	10.15153	9.07601	4.64665	6.63853	0.23322	10.17262
						58.27469	66.07742	35.01849	-6.00000	9.07610	4.64670	6.63880	0.23322	10.19377	9.05739	4.63705	6.58137	0.23281	10.17272	9.05012	4.65625	6.69772	0.21245	10.19377
						59.27942	66.55563	34.13485	-6.00000	9.05000	4.65630	6.69800	0.21236	10.17539	9.07598	4.64675	6.63908	0.23312	10.19369	9.00024	4.66595	6.75831	0.18018	10.17539
						60.28416	67.03384	33.25122	-6.00000	9.00000	4.66600	6.75860	0.18003	10.13603	9.04976	4.65635	6.69829	0.21220	10.17520	8.90047	4.67555	6.82011	0.12425	10.13603
						61.28889	67.51205	32.36759	-6.00000	8.90000	4.67560	6.82040	0.12399	10.05265	8.99953	4.66605	6.75889	0.17976	10.13564	8.80047	4.68525	6.80010	0.06813	10.05265
						62.29363	67.99027	31.48395	-6.00000	8.80000	4.68530	6.80000	0.06786	9.96932	8.89953	4.67565	6.82030	0.12372	10.05226	8.70047	4.69495	6.75024	0.01200	9.96932
						63.29836	68.46848	30.60032	-6.00000	8.70000	4.69500	6.75000	0.01174	9.88599	8.79953	4.68535	6.79976	0.06760	9.96893	8.60047	4.65021	6.70024	0.00375	9.88599
						64.30310	68.94669	29.71669	-6.00000	8.60000	4.65000	6.70000	0.00372	9.77663	8.69953	4.69479	6.74976	0.01170	9.88548	8.50047	4.60024	6.60047	0.00011	9.77663
						65.30784	69.42490	28.83306	-6.00000	8.50000	4.60000	6.60000	0.00009	9.66488	8.59953	4.64976	6.69953	0.00370	9.77610	8.40047	4.55024	6.50047	-0.00351	9.66488
						66.31257	69.90312	27.94942	-6.00000	8.40000	4.55000	6.50000	-0.00353	9.55314	8.49953	4.59976	6.59953	0.00008	9.66436	8.30047	4.50024	6.40047	-0.00713	9.55314
						67.31731	70.38133	27.06579	-6.00000	8.30000	4.50000	6.40000	-0.00715	9.44140	8.39953	4.54976	6.49953	-0.00355	9.55261	8.10094	4.40047	6.20094	-0.01436	9.44140
						68.32204	70.85954	26.18216	-6.00000	8.10000	4.40000	6.20000	-0.01440	9.21791	8.29906	4.49953	6.39906	-0.00719	9.44034	7.85118	4.30047	6.05071	-0.04529	9.21791
						69.32678	71.33775	25.29852	-6.00000	7.85000	4.30000	6.05000	-0.04544	8.95044	8.09882	4.39953	6.19929	-0.01454						

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration	Distance from start of utility	x	y	z	δx(n)	δy(n)	δz(n)	δH//(n)	δHperp.(n)	δx(n-Lp)	δy(n-Lp)	δz(n-Lp)	δH//(n-Lp)	δHperp.(n+Lp)	δx(n+Lp)	δy(n+Lp)	δz(n+Lp)	δH//(n+Lp)	δHperp.(n+Lp)
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00508	0.00508	1.36707	1.36707	0.00508	0.00508	0.09537	0.09537	0.01015	0.01015	0.10552	–
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00529	0.00529	1.42120	1.42120	0.00529	0.00529	0.04153	0.04153	0.01059	0.01059	0.05212	0.05212	–
						9.02549	69.34164	108.56642	-0.90000	1.42137	1.42137	0.00423	0.00423	1.36601	1.36601	0.00423	0.00423	-0.05537	0.05537	0.00847	0.00847	0.00847	0.00847	–
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00660	0.00660	1.17979	1.17979	0.00660	0.00660	-0.17190	0.17190	0.01319	0.01319	0.01319	0.01319	–
						15.04249	64.40261	105.12983	-0.90000	1.15029	1.15029	0.00405	0.00405	0.86726	0.86726	0.00405	0.00405	-0.28303	0.28303	0.00809	0.00809	0.00809	0.00809	–
						18.05098	61.93309	103.41154	-0.90000	0.82468	0.82468	0.04096	0.04096	0.73390	0.73390	0.04096	0.04096	-0.09078	0.09078	0.08192	0.08192	0.08192	0.08192	–
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05842	0.05842	0.88861	0.88861	0.05842	0.05842	0.12431	0.12431	0.11684	0.11684	0.24114	0.24114	–
						24.06798	56.99405	99.97495	-0.90000	0.89071	0.89071	0.00631	0.00631	0.91460	0.91460	0.00631	0.00631	0.02389	0.02389	0.01262	0.01262	0.03651	0.03651	–
						27.07648	54.52453	98.25666	-0.90000	0.91661	0.91661	0.00125	0.00125	0.93250	0.93250	0.00125	0.00125	0.01589	0.01589	0.00250	0.00250	0.01838	0.01838	–
						30.08497	52.05501	96.53836	-0.90000	0.93454	0.93454	0.00453	0.00453	0.94455	0.94455	0.00453	0.00453	0.01001	0.01001	0.00906	0.00906	0.01907	0.01907	–
						33.09347	49.58549	94.82007	-0.90000	0.94651	0.94651	0.08269	0.08269	0.80294	0.80294	0.08269	0.08269	-0.14357	0.14357	0.16539	0.16539	0.16539	0.16539	–
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05230	0.05230	0.31514	0.31514	0.05230	0.05230	-0.45362	0.45362	0.10459	0.10459	0.10459	0.10459	–
						39.11047	44.64646	91.38348	-0.90000	0.23628	0.23628	0.01385	0.01385	-0.35660	-0.35660	0.01385	0.01385	-0.59288	0.59288	0.02771	0.02771	0.02771	0.02771	–
						42.11896	42.17694	89.66519	-0.90000	-0.42870	-0.42870	0.01049	0.01049	-0.92223	-0.92223	0.01049	0.01049	-0.49354	0.49354	0.02098	0.02098	0.02098	0.02098	–
						45.12746	39.70742	87.94689	-0.90000	-0.97589	-0.97589	0.00745	0.00745	-1.32049	-1.32049	0.00745	0.00745	-0.34460	0.34460	0.01491	0.01491	0.01491	0.01491	–
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00654	0.00654	1.39110	1.39110	0.00654	0.00654	0.07987	0.07987	0.01308	0.01308	0.09295	0.09295	–
						7.01983	70.98799	109.71195	-0.90000	1.39986	1.39986	0.00439	0.00439	1.41679	1.41679	0.00439	0.00439	0.01693	0.01693	0.00877	0.00877	0.02570	0.02570	–
						10.02832	68.51847	107.99365	-0.90000	1.41234	1.41234	0.00416	0.00416	1.31872	1.31872	0.00416	0.00416	-0.09361	0.09361	0.00832	0.00832	0.00832	0.00832	–
						13.03682	66.04895	106.27536	-0.90000	1.29934	1.29934	0.00682	0.00682	1.08864	1.08864	0.00682	0.00682	-0.21070	0.21070	0.01364	0.01364	0.01364	0.01364	–
						16.04532	63.57943	104.55707	-0.90000	1.05437	1.05437	0.00977	0.00977	0.79622	0.79622	0.00977	0.00977	-0.25815	0.25815	0.01954	0.01954	0.01954	0.01954	–
						19.05382	61.10991	102.83877	-0.90000	0.75087	0.75087	0.01954	0.01954	0.78356	0.78356	0.01954	0.01954	0.03269	0.03269	0.03908	0.03908	0.07177	0.07177	–
						22.06231	58.64040	101.12048	-0.90000	0.81434	0.81434	0.05299	0.05299	0.90266	0.90266	0.05299	0.05299	0.08832	0.08832	0.10598	0.10598	0.19430	0.19430	–
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00104	0.00104	0.92056	0.92056	0.00104	0.00104	0.01589	0.01589	0.00208	0.00208	0.01797	0.01797	–
						28.07931	53.70136	97.68389	-0.90000	0.92260	0.92260	0.00131	0.00131	0.93848	0.93848	0.00131	0.00131	0.01589	0.01589	0.00263	0.00263	0.01852	0.01852	–
						31.08781	51.23184	95.96560	-0.90000	0.94050	0.94050	0.03437	0.03437	0.91567	0.91567	0.03437	0.03437	-0.02483	0.02483	0.06873	0.06873	0.06873	0.06873	–
						34.09630	48.76232	94.24730	-0.90000	0.91148	0.91148	0.03344	0.03344	0.66020	0.66020	0.03344	0.03344	-0.25128	0.25128	0.06689	0.06689	0.06689	0.06689	–
						37.10480	46.29280	92.52901	-0.90000	0.61901	0.61901	0.02943	0.02943	0.08646	0.08646	0.02943	0.02943	-0.53254	0.53254	0.05887	0.05887	0.05887	0.05887	–
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01281	0.01281	-0.56187	-0.56187	0.01281	0.01281	-0.57000	0.57000	0.02562	0.02562	0.02562	0.02562	–
						43.12180	41.35376	89.09242	-0.90000	-0.62870	-0.62870	0.00674	0.00674	-1.07285	-1.07285	0.00674	0.00674	-0.44415	0.44415	0.01348	0.01348	0.01348	0.01348	–
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00604	0.00604	1.41239	1.41239	0.00604	0.00604	0.06528	0.06528	0.01207	0.01207	0.07735	0.07735	–
						8.02266	70.16482	109.13918	-0.90000	1.41699	1.41699	0.00433	0.00433	1.39855	1.39855	0.00433	0.00433	-0.01844	0.01844	0.00865	0.00865	0.00865	0.00865	–
						11.03116	67.69530	107.42089	-0.90000	1.38925	1.38925	0.00513	0.00513	1.25661	1.25661	0.00513	0.00513	-0.13264	0.13264	0.01027	0.01027	0.01027	0.01027	–
						14.03965	65.22578	105.70260	-0.90000	1.23210	1.23210	0.00254	0.00254	0.98408	0.98408	0.00254	0.00254	-0.24802	0.24802	0.00509	0.00509	0.00509	0.00509	–
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02400	0.02400	0.73916	0.73916	0.02400	0.02400	-0.20621	0.20621	0.04801	0.04801	0.04801	0.04801	–
						20.05665	60.28674	102.26601	-0.90000	0.74841	0.74841	0.01964	0.01964	0.84614	0.84614	0.01964	0.01964	0.09773	0.09773	0.03929	0.03929	0.13702	0.13702	–
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.02976	0.02976	0.90862	0.90862	0.02976	0.02976	0.05216	0.05216	0.05951	0.05951	0.11167	0.11167	–

Specific Utility Damage Results - Pullouts & Rotations

Stage Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Sub-utility	Iteration	Distance from start of utility	x	y	z	Pullout: Check: Left Seg.: Rotation: Ax.: Limit	Pullout: Check: Vertical Left Seg.: Sagging vs Hogging Ax.: Unfactored	Pullout: Left Seg.: Flex.: Unfactored	Pullout: Left Seg.: Flex.: Factored	Pullout: Right Seg.: Ax.: Unfactored	Pullout: Right Seg.: Ax.: Factored	Pullout: Right Seg.: Flex.: Unfactored	Pullout: Right Seg.: Flex.: Factored	Pullout: Total: Ax.: Unfactored	Pullout: Total: Ax.: Factored	Pullout: Total: Flex.: Unfactored	Pullout: Total: Flex.: Factored
						[m]	[m]	[m]	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[Deg]	[Deg]
0	Base Model	1	TW Main-1	1	1	3.00850	74.28068	112.00301	-0.90000	1.27170	1.27170	0.00508	0.00508	1.36707	1.36707	0.00508	0.00508	0.09537	0.09537	0.01015	0.01015	0.10552	–
						6.01699	71.81116	110.28471	-0.90000	1.37967	1.37967	0.00529	0.00529	1.42120	1.42120	0.00529	0.00529	0.04153	0.04153	0.01059	0.01059	0.05212	0.05212	–
						9.02549	69.34164	108.56642	-0.90000	1.42137	1.42137	0.00423	0.00423	1.36601	1.36601	0.00423	0.00423	-0.05537	0.05537	0.00847	0.00847	0.00847	0.00847	–
						12.03399	66.87213	106.84812	-0.90000	1.35169	1.35169	0.00660	0.00660	1.17979	1.17979	0.00660	0.00660	-0.17190	0.17190	0.01319	0.01319	0.01319	0.01319	–
						15.04249	64.40261	105.12983	-0.90000	1.15029	1.15029	0.00405	0.00405	0.86726	0.86726	0.00405	0.00405	-0.28303	0.28303	0.00809	0.00809	0.00809	0.00809	–
						18.05098	61.93309	103.41154	-0.90000	0.82468	0.82468	0.04096	0.04096	0.73390	0.73390	0.04096	0.04096	-0.09078	0.09078	0.08192	0.08192	0.08192	0.08192	–
						21.05948	59.46357	101.69324	-0.90000	0.76430	0.76430	0.05842	0.05842	0.88861	0.88861	0.05842	0.05842	0.12431	0.12431	0.11684	0.11684	0.24114	0.24114	–
						24.06798	56.99405	99.97495	-0.90000	0.89071	0.89071	0.00631	0.00631	0.91460	0.91460	0.00631	0.00631	0.02389	0.02389	0.01262	0.01262	0.03651	0.03651	–
						27.07648	54.52453	98.25666	-0.90000	0.91661	0.91661	0.00125	0.00125	0.93250	0.93250	0.00125	0.00125	0.01589	0.01589	0.00250	0.00250	0.01838	0.01838	–
						30.08497	52.05501	96.53836	-0.90000	0.93454	0.93454	0.00453	0.00453	0.94455	0.94455	0.00453	0.00453	0.01001	0.01001	0.00906	0.00906	0.01907	0.01907	–
						33.09347	49.58549	94.82007	-0.90000	0.94651	0.94651	0.08269	0.08269	0.80294	0.80294	0.08269	0.08269	-0.14357	0.14357	0.16539	0.16539	0.16539	0.16539	–
						36.10197	47.11598	93.10178	-0.90000	0.76876	0.76876	0.05230	0.05230	0.31514	0.31514	0.05230	0.05230	-0.45362	0.45362	0.10459	0.10459	0.10459	0.10459	–
						39.11047	44.64646	91.38348	-0.90000	0.23628	0.23628	0.01385	0.01385	-0.35660	-0.35660	0.01385	0.01385	-0.59288	0.59288	0.02771	0.02771	0.02771	0.02771	–
						42.11896	42.17694	89.66519	-0.90000	-0.42870	-0.42870	0.01049	0.01049	-0.92223	-0.92223	0.01049	0.01049	-0.49354	0.49354	0.02098	0.02098	0.02098	0.02098	–
						45.12746	39.70742	87.94689	-0.90000	-0.97589	-0.97589	0.00745	0.00745	-1.32049	-1.32049	0.00745	0.00745	-0.34460	0.34460	0.01491	0.01491	0.01491	0.01491	–
					2	4.01133	73.45751	111.43024	-0.90000	1.31123	1.31123	0.00654	0.00654	1.39110	1.39110	0.00654	0.00654	0.07987	0.07987	0.01308	0.01308	0.09295	0.09295	–
						7.01983	70.98799	109.71195	-0.90000	1.39986	1.39986	0.00439	0.00439	1.41679	1.41679	0.00439	0.00439	0.01693	0.01693	0.00877	0.00877	0.02570	0.02570	–
						10.02832	68.51847	107.99365	-0.90000	1.41234	1.41234	0.00416	0.00416	1.31872	1.31872	0.00416	0.00416	-0.09361	0.09361	0.00832	0.00832	0.00832	0.00832	–
						13.03682	66.04895	106.27536	-0.90000	1.29934	1.29934	0.00682	0.00682	1.08864	1.08864	0.00682	0.00682	-0.21070	0.21070	0.01364	0.01364	0.01364	0.01364	–
						16.04532	63.57943	104.55707	-0.90000	1.05437	1.05437	0.00977	0.00977	0.79622	0.79622	0.00977	0.00977	-0.25815	0.25815	0.01954	0.01954	0.01954	0.01954	–
						19.05382	61.10991	102.83877	-0.90000	0.75087	0.75087	0.01954	0.01954	0.78356	0.78356	0.01954	0.01954	0.03269	0.03269	0.03908	0.03908	0.07177	0.07177	–
						22.06231	58.64040	101.12048	-0.90000	0.81434	0.81434	0.05299	0.05299	0.90266	0.90266	0.05299	0.05299	0.08832	0.08832	0.10598	0.10598	0.19430	0.19430	–
						25.07081	56.17088	99.40219	-0.90000	0.90467	0.90467	0.00104	0.00104	0.92056	0.92056	0.00104	0.00104	0.01589	0.01589	0.00208	0.00208	0.01797	0.01797	–
						28.07931	53.70136	97.68389	-0.90000	0.92260	0.92260	0.00131	0.00131	0.93848	0.93848	0.00131	0.00131	0.01589	0.01589	0.00263	0.00263	0.01852	0.01852	–
						31.08781	51.23184	95.96560	-0.90000	0.94050	0.94050	0.03437	0.03437	0.91567	0.91567	0.03437	0.03437	-0.02483	0.02483	0.06873	0.06873	0.06873	0.06873	–
						34.09630	48.76232	94.24730	-0.90000	0.91148	0.91148	0.03344	0.03344	0.66020	0.66020	0.03344	0.03344	-0.25128	0.25128	0.06689	0.06689	0.06689	0.06689	–
						37.10480	46.29280	92.52901	-0.90000	0.61901	0.61901	0.02943	0.02943	0.08646	0.08646	0.02943	0.02943	-0.53254	0.53254	0.05887	0.05887	0.05887	0.05887	–
						40.11330	43.82328	90.81072	-0.90000	0.00814	0.00814	0.01281	0.01281	-0.56187	-0.56187	0.01281	0.01281	-0.57000	0.57000	0.02562	0.02562	0.02562	0.02562	–
						43.12180	41.35376	89.09242	-0.90000	-0.62870	-0.62870	0.00674	0.00674	-1.07285	-1.07285	0.00674	0.00674	-0.44415	0.44415	0.01348	0.01348	0.01348	0.01348	–
					3	5.01416	72.63434	110.85748	-0.90000	1.34712	1.34712	0.00604	0.00604	1.41239	1.41239	0.00604	0.00604	0.06528	0.06528	0.01207	0.01207	0.07735	0.07735	–
						8.02266	70.16482	109.13918	-0.90000	1.41699	1.41699	0.00433	0.00433	1.39855	1.39855	0.00433	0.00433	-0.01844	0.01844	0.00865	0.00865	0.00865	0.00865	–
						11.03116	67.69530	107.42089	-0.90000	1.38925	1.38925	0.00513	0.00513	1.25661	1.25661	0.00513	0.00513	-0.13264	0.13264	0.01027	0.01027	0.01027	0.01027	–
						14.03965	65.22578	105.70260	-0.90000	1.23210	1.23210	0.00254	0.00254	0.98408	0.98408	0.00254	0.00254	-0.24802	0.24802	0.00509	0.00509	0.00509	0.00509	–
						17.04815	62.75626	103.98430	-0.90000	0.94537	0.94537	0.02400	0.02400	0.73916	0.73916	0.02400	0.02400	-0.20621	0.20621	0.04801	0.04801	0.04801	0.04801	–
						20.05665	60.28674	102.26601	-0.90000	0.74841	0.74841	0.01964	0.01964	0.84614	0.84614	0.01964	0.01964	0.09773	0.09773	0.03929	0.03929	0.13702	0.13702	–
						23.06515	57.81722	100.54771	-0.90000	0.85646	0.85646	0.02976	0.02976	0.90862	0.90862	0.02976	0.02976	0.05216	0.05216	0.05951	0.05951	0.11167	0.11167	–

Stage: Ref.	Stage: Name	Specific Pullout: Utility:	Specific Pullout: Utility:	Sub-utility Pullout: Name	Iteration Check:	Distance Check: from	x Rotation:	y Rotation:	z Check:	Pullout: Check: Vertical	Pullout: Left Seg.: Left	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
Total:	Total:	Total:	Total:	Total:	Pullout:	Pullout:	Unfactored	Factored	Rotation:	Rotation:	Sagging							
						26.07364	55.34770	98.82942	-0.90000	0.91066	0.91066	0.00116	0.00116	0.92654	0.92654	0.00116	0.00116	0.01589
0.01589	0.00231	0.00231	0.01820	0.01820	-	-	0.00070	0.00070	-	-	Hogging							
						29.08214	52.87819	97.11113	-0.90000	0.92855	0.92855	0.00136	0.00136	0.94444	0.94444	0.00136	0.00136	0.01589
0.01589	0.00272	0.00272	0.01860	0.01860	-	-	0.00082	0.00082	-	-	Hogging							
						32.09064	50.40867	95.39283	-0.90000	0.94648	0.94648	0.06502	0.06502	0.88017	0.88017	0.06502	0.06502	-0.06631
0.06631	0.13003	0.13003	0.13003	0.13003	-	-	0.03921	0.03921	-	-	Sagging							
						35.09914	47.93915	93.67454	-0.90000	0.84675	0.84675	0.01583	0.01583	0.50883	0.50883	0.01583	0.01583	-0.33792
0.33792	0.03166	0.03166	0.03166	0.03166	-	-	0.00955	0.00955	-	-	Hogging							
						38.10763	45.46963	91.95625	-0.90000	0.43145	0.43145	0.01123	0.01123	-0.13908	-0.13908	0.01123	0.01123	-0.57053
0.57053	0.02245	0.02245	0.02245	0.02245	-	-	0.00677	0.00677	-	-	Sagging							
						41.11613	43.00011	90.23795	-0.90000	-0.21504	-0.21504	0.01186	0.01186	-0.75132	-0.75132	0.01186	0.01186	-0.53628
0.53628	0.02372	0.02372	0.02372	0.02372	-	-	0.00715	0.00715	-	-	Sagging							
						44.12463	40.53059	88.51966	-0.90000	-0.81192	-0.81192	0.00443	0.00443	-1.20207	-1.20207	0.00443	0.00443	-0.39015
0.39015	0.00887	0.00887	0.00887	0.00887	-	-	0.00267	0.00267	-	-	Sagging							
	2	TW Main-2	1		1	3.00892	38.64104	83.56688	-0.90000	1.49176	1.49176	0.00795	0.00795	1.27541	1.27541	0.00795	0.00795	-0.21635
0.21635	0.01590	0.01590	0.01590	0.01590	-	-	0.00480	0.00480	-	-	Hogging							
						6.01784	40.04419	80.90515	-0.90000	1.23735	1.23735	0.01326	0.01326	0.86349	0.86349	0.01326	0.01326	-0.37385
0.37385	0.02652	0.02652	0.02652	0.02652	-	-	0.00800	0.00800	-	-	Sagging							
						9.02675	41.44733	78.24343	-0.90000	0.80698	0.80698	0.01174	0.01174	0.34466	0.34466	0.01174	0.01174	-0.46232
0.46232	0.02349	0.02349	0.02349	0.02349	-	-	0.00708	0.00708	-	-	Sagging							
						12.03567	42.85048	75.58171	-0.90000	0.27092	0.27092	0.02673	0.02673	0.08656	0.08656	0.02673	0.02673	-0.18436
0.18436	0.05347	0.05347	0.05347	0.05347	-	-	0.01612	0.01612	-	-	Hogging							
						15.04459	44.25362	72.91998	-0.90000	0.09021	0.09021	0.07826	0.07826	0.10042	0.10042	0.07826	0.07826	0.01021
0.01021	0.15652	0.15652	0.16673	0.16673	-	-	0.04720	0.04720	-	-	Sagging							
						18.05351	45.65676	70.25826	-0.90000	0.10048	0.10048	0.00095	0.00095	0.10073	0.10073	0.00095	0.00095	0.00024
0.00024	0.00189	0.00189	0.00214	0.00214	-	-	0.00057	0.00057	-	-	Hogging							
						21.06242	47.05991	67.59654	-0.90000	0.10078	0.10078	0.00118	0.00118	0.10104	0.10104	0.00118	0.00118	0.00026
0.00026	0.00236	0.00236	0.00262	0.00262	-	-	0.00071	0.00071	-	-	Hogging							
						24.07134	48.46305	64.93481	-0.90000	0.10108	0.10108	0.00108	0.00108	0.10137	0.10137	0.00108	0.00108	0.00029
0.00029	0.00216	0.00216	0.00244	0.00244	-	-	0.00065	0.00065	-	-	Hogging							
						27.08026	49.86620	62.27309	-0.90000	0.10139	0.10139	0.00076	0.00076	0.10169	0.10169	0.00076	0.00076	0.00030
0.00030	0.00152	0.00152	0.00182	0.00182	-	-	0.00046	0.00046	-	-	Hogging							
						30.08918	51.26934	59.61136	-0.90000	0.10171	0.10171	0.00043	0.00043	0.10202	0.10202	0.00043	0.00043	0.00030
0.00030	0.00086	0.00086	0.00116	0.00116	-	-	0.00026	0.00026	-	-	Hogging							
					2	4.01189	39.10876	82.67964	-0.90000	1.42731	1.42731	0.00645	0.00645	1.15640	1.15640	0.00645	0.00645	-0.27091
0.27091	0.01291	0.01291	0.01291	0.01291	-	-	0.00389	0.00389	-	-	Sagging							
						7.02081	40.51190	80.01791	-0.90000	1.11114	1.11114	0.01472	0.01472	0.68894	0.68894	0.01472	0.01472	-0.42220
0.42220	0.02945	0.02945	0.02945	0.02945	-	-	0.00888	0.00888	-	-	Sagging							
						10.02973	41.91505	77.35619	-0.90000	0.62810	0.62810	0.02385	0.02385	0.20735	0.20735	0.02385	0.02385	-0.42075
0.42075	0.04771	0.04771	0.04771	0.04771	-	-	0.01439	0.01439	-	-	Hogging							
						13.03864	43.31819	74.69446	-0.90000	0.17844	0.17844	0.02487	0.02487	0.09379	0.09379	0.02487	0.02487	-0.08465
0.08465	0.04975	0.04975	0.04975	0.04975	-	-	0.01500	0.01500	-	-	Sagging							
						16.04756	44.72134	72.03274	-0.90000	0.09529	0.09529	0.04535	0.04535	0.10053	0.10053	0.04535	0.04535	0.00525
0.00525	0.09070	0.09070	0.09594	0.09594	-	-	0.02735	0.02735	-	-	Sagging							
						19.05648	46.12448	69.37102	-0.90000	0.10055	0.10055	0.00106	0.00106	0.10084	0.10084	0.00106	0.00106	0.00029
0.00029	0.00211	0.00211	0.00240	0.00240	-	-	0.00064	0.00064	-	-	Hogging							
						22.06540	47.52762	66.70929	-0.90000	0.10086	0.10086	0.00118	0.00118	0.10116	0.10116	0.00118	0.00118	0.00030
0.00030	0.00237	0.00237	0.00267	0.00267	-	-	0.00071	0.00071	-	-	Hogging							
						25.07431	48.93977	64.04757	-0.90000	0.10120	0.10120	0.00098	0.00098	0.10148	0.10148	0.00098	0.00098	0.00029
0.00029	0.00197	0.00197	0.00225	0.00225	-	-	0.00059	0.00059	-	-	Hogging							
						28.08323	50.33391	61.38585	-0.90000	0.10152	0.10152	0.00064	0.00064	0.10178	0.10178	0.00064	0.00064	0.00026
0.00026	0.00129	0.00129	0.00154	0.00154	-	-	0.00039	0.00039	-	-	Hogging							
						31.09215	51.73706	58.72412	-0.90000	0.10184	0.10184	0.00034	0.00034	0.10208	0.10208	0.00034	0.00034	0.00024
0.00024	0.00068	0.00068	0.00093	0.00093	-	-	0.00021	0.00021	-	-	Hogging							
					3	5.01486	39.57647	81.79239	-0.90000	1.34270	1.34270	0.00906	0.00906	1.01904	1.01904	0.00906	0.00906	-0.32367
0.32367	0.01813	0.01813	0.01813	0.01813	-	-	0.00547	0.00547	-	-	Sagging							
						8.02378	40.97962	79.13067	-0.90000	0.96679	0.96679	0.01458	0.01458	0.50083	0.50083	0.01458	0.01458	-0.46596
0.46596	0.02917	0.02917	0.02917	0.02917	-	-	0.00880	0.00880	-	-	Sagging							
						11.03270	42.38276	76.46895	-0.90000	0.43191	0.43191	0.04528	0.04528	0.10977	0.10977	0.04528	0.04528	-0.32214
0.32214	0.09056	0.09056	0.09056	0.09056	-	-	0.02731	0.02731	-	-	Hogging							
						14.04162	43.78591	73.80722	-0.90000	0.11315	0.11315	0.07660	0.07660	0.09892	0.09892	0.07660	0.07660	-0.01423
0.01423	0.15319	0.15319	0.15319	0.15319	-	-	0.04620	0.04620	-	-	Sagging							
						17.05053	45.18905	71.14550	-0.90000	0.09895	0.09895	0.01259	0.01259	0.10066	0.10066	0.01259	0.01259	0.00171
0.00171	0.02518	0.02518	0.02689	0.02689	-	-	0.00759	0.00759	-	-	Sagging							
						20.05945	46.59219	68.48378	-0.90000	0.10069	0.10069	0.00113	0.00113	0.10095	0.10095	0.00113	0.00113	0.00026
0.00026	0.00227	0.00227	0.00253	0.00253	-	-	0.00068	0.00068	-	-	Hogging							
						23.06837	47.99534	65.82205	-0.90000	0.10099	0.10099	0.00115	0.00115	0.10126	0.10126	0.00115	0.00115	0.00027
0.00027	0.00230	0.00230	0.00257	0.00257	-	-	0.00069	0.00069	-	-	Hogging							
						26.07729	49.39848	63.16033	-0.90000	0.10131	0.10131	0.00088	0.00088	0.10155	0.10155	0.00088	0.00088	0.00024
0.00024	0.00175	0.00175	0.00200	0.00200	-	-	0.00053	0.00053	-	-	Hogging							
						29.08620	50.80163	60.49861	-0.90000	0.10160	0.10160	0.00053	0.00053	0.10189	0.10189	0.00053	0.00053	0.00029
0.00029	0.00105	0.00105	0.00134	0.00134	-	-	0.00032	0.00032	-	-	Hogging							
	3	TW Main-3	1		1	3.98757	55.23844	52.67152	-0.90000	0.70328	0.70328	0.00053	0.00053	0.71750	0.71750	0.00053	0.00053	0.01422
0.01422	0.00105	0.00105	0.01527	0.01527	-	-	0.00032	0.00032	-	-	Hogging							
					2	4.98446	55.76300	51.82380	-0.90000	0.70802	0.70802	0.00042	0.00042	0.72246	0.72246	0.00042	0.00042	0.01445
0.01445	0.00085	0.00085	0.01529	0.01529	-	-	0.00026	0.00026	-	-	Hogging							
	4	TW Main-4	1		1	3.98331	60.26896	44.07515	-0.90000	0.17744	0.17744	0.00082	0.00082	0.17843	0.17843	0.00082	0.00082	0.00099
0.00099	0.00164	0.00164	0.00263	0.00263	-	-	0.00049	0.00049	-	-	Hogging							
						7.96662	62.15213	40.56510	-0.90000	0.17876	0.17876	0.00048	0.00048	0.17977	0.17977	0.00048	0.00048	0.00101
0.00101	0.00097	0.00097	0.00197	0.00197	-	-	0.00029	0.00029	-	-	Hogging							
						11.94993	64.03529	37.05504	-0.90000	0.18011	0.18011	0.00049	0.00049	0.18114	0.18114	0.00049	0.00049	0.00103
0.00103	0.00097	0.00097	0.00200	0.00200	-	-	0.00029	0.00029	-	-	Hogging							
						15.93324	65.91845	33.54499	-0.90000	0.18146	0.18146	0.00040	0.00040	0.18243	0.18243	0.00040	0.00040	0.00098
0.00098	0.00080	0.00080	0.00178	0.00178	-	-	0.00024	0.00024	-	-	Hogging							
						19.91656	67.80161	30.03494	-0.90000	0.18278	0.18278	0.00016	0.00016	0.18380	0.18380	0.00016	0.00016	0.00101
0.00101	0.00032	0.00032	0.00133	0.00133	-	-	0.00010	0.00010	-	-	Hogging							
						23.89987	69.68478	26.52489	-0.90000	0.18413	0.18413	0.05346	0.05346	0.17600	0.17600	0.05346	0.05346	-0.00812
0.00812	0.10692	0.10692	0.10692	0.10692	-	-	0.03224	0.03224	-	-	Sagging							
						27.88318	71.56794	23.01484	-0.90000	0.16490	0.16490	0.02576	0.02576	-0.22219	-0.22219	0.02576	0.02576	-0.38709
0.38709	0.05152	0.05152	0.05152	0.05152	-	-	0.01553	0.01553	-	-	Hogging							
						31.86649	73.45110	19.50479	-0.90000	-0.48496	-0.48496	0.01380	0.01380	-1.20059	-1.20059	0.01380	0.01380	-0.71563
0.71563	0.02760	0.02760	0.02760	0.02760	-	-	0.00832	0.00832	-	-	Sagging							
						35.84980	75.33427	15.99473	-0.90000	-1.34984	-1.34984	0.02215	0.02215	-1.66303	-1.66303	0.02215	0.02215	-0.31318
0.31318	0.04429	0.04429	0.04429	0.04429	-	-	0.01336	0.01336	-	-	Sagging							
						39.83311	77.21743	12.48468	-0.90000	-1.75686	-1.75686	0.01860	0.01860	-1.97902	-1.97902	0.01860	0.01860	-0.22216
0.22216	0.03720	0.03720	0.03720	0.03720	-	-	0.01122	0.01122	-	-	Hogging							
						43.81642	79.10059	8.97463	-0.90000	-2.01296	-2.01296	0.00697	0.00697	-1.97701	-1.97701	0.00697	0.00697	0.03595
0.03595	0.01394	0.01394	0.04989	0.04989	-	-	0.00420	0.00420	-	-	Hogging							
						47.79973	80.98376	5.46458	-0.90000	-1.92682	-1.92682	0.00323	0.00323	-1.68522	-1.68522	0.00323	0.00323	0.24160
0.24160	0.00645	0.00645	0.24805	0.24805	-	-	0.00195	0.00195	-	-	Hogging							
					2	4.97914	60.73975	43.19764	-0.90000	0.17777	0.17777	0.00077	0.00077	0.17876	0.17876	0.00077	0.00077	0.00100
0.00100	0.00154	0.00154	0.00253	0.00253	-	-	0.00046	0.00046	-	-	Hogging							
						8.96245	62.62292	39.68758	-0.90000	0.17909	0.17909	0.00049	0.00049	0.18011	0.18011	0.00049	0.00049	0.00102
0.00102	0.00098	0.00098	0.00200	0.00200	-	-	0.00030	0.00030	-	-	Hogging							
						12.94576	64.50608	36.17753	-0.90000	0.18045	0.18045	0.00048	0.00048	0.18146	0.18146	0.00048	0.00048	0.00101
0.00101	0.00095	0.00095	0.00196	0.00196	-	-	0.00029	0.00029	-	-	Hogging							
						16.92907	66.38924	32.66748	-0.90000	0.18178	0.18178	0.00036	0.00036	0.18279	0.18279	0.00036	0.00036	0.00101
0.00101	0.00072	0.00072	0.00173	0.00173	-	-	0.00022	0.00022	-	-	Hogging							
						20.91238	68.27241	29.15743	-0.90000	0.18312	0.18312	0.00007	0.00007	0.18413	0.18413	0.00007	0.00007	0.00101
0.00101	0.00013	0.00013	0.00115	0.00115	-	-	0.00004	0.00004	-	-	-							
						24.89569	70.15557	25.64738	-0.90000	0.18446	0.18446	0.08917	0.08917	0.16438	0.16438	0.08917	0.08917	-0.02008
0.02008	0.17834	0.17834	0.17834	0.17834	-	-	0.05378	0.05378	-	-	Sagging							
						28.87900	72.03873	22.13732	-0.90000	0.11260	0.11260	0.03911	0.03911	-0.48616	-0.48616	0.03911	0.03911	-0.59876
0.59876	0.07821	0.07821	0.07821	0.07821	-	-	0.02359	0.02359	-	-	Hogging							
						32.86232	73.92189	18.62727	-0.90000	-0.76175	-0.76175	0.01472	0.01472	-1.35088	-1.35088	0.01472	0.01472	-0.58912
0.58912	0.02945	0.02945	0.02945	0.02945	-	-	0.00888	0.00888	-	-	Sagging							
						36.84563	75.80506	15.11722	-0.90000	-1.47392	-1.47392	0.01919	0.01919	-1.75745	-1.75745	0.01919	0.01919	-0.28352
0.28352	0.03838	0.03838	0.03838	0.03838	-	-	0.01157	0.01157	-	-	Sagging							
						40.82894	77.68822	11.60717	-0.90000	-1.84205	-1.84205	0.01731	0.01731	-2.01312	-2.01312	0.01731	0.01731	-0.17106
0.17106	0.03461	0.03461	0.03461	0.03461	-	-	0.01044	0.01044	-	-	Hogging							
						44.81225	79.57138	8.09712	-0.90000	-2.02250	-2.02250	0.00272	0.00272	-1.92646	-1.92646	0.00272	0.00272	0.09603
0.09603	0.00545	0.00545	0.10148	0.10148	-	-	0.00164	0.00164	-	-	Hogging							
						48.79556	81.45455	4.58706	-0.90000	-1.86038	-1.86038	0.00349	0.00349	-1.57979	-1.57979	0.00349	0.00349	0.28058
0.28058	0.00697	0.00697	0.28755	0.28755	-	-	0.00210	0.00210	-	-	Hogging							
					3	5.97497	61.21054	42.32012	-0.90000	0.17810	0.17810	0.00046	0.00046	0.17909	0.17909	0.00046	0.00046	0.00099
0.00099	0.00092	0.00092	0.00192	0.00192	-	-	0.00028	0.00028	-	-	Hogging							
						9.95828	63.09371	38.81007	-0.90000	0.17942	0.17942	0.00049	0.00049	0.18045	0.18045	0.00049	0.00049	0.00103
0.00103	0.00098	0.00098	0.00201	0.00201	-	-	0.00030	0.00030	-	-	Hogging							
						13.94159	64.97687	35.30002	-0.90000	0.18079	0.18079	0.00046	0.00046	0.18178	0.18178	0.00046	0.00046	0.00099
0.00099	0.00092	0.00092	0.00191	0.00191	-	-	0.00028	0.00028	-	-	Hogging							
						17.92490	66.86003	31.78997	-0.90000	0.18211	0.18211	0.00031	0.00031	0.18312	0.18312	0.00031	0.00031	0.00101
0.00101	0.00061	0.00061	0.00162	0.00162	-	-	0.00019	0.00019	-	-	Hogging							
						21.90821	68.74320	28.27991	-0.90000	0.18345	0.18345	0.00024	0.00024	0.18443	0.18443	0.00024	0.00024	0.00098
0.00098	0.00048	0.00048	0.00147	0.00147	-	-	0.00015	0.00015	-	-	Sagging							
						25.89152	70.62636	24.76986	-0.90000	0.18258	0.18258	0.08136	0.08136	0.11156	0.11156	0.08136	0.08136	-0.07102
0.07102	0.16271	0.16271	0.16271	0.16271	-	-	0.04907	0.04907	-	-	Sagging							
						29.87483	72.50952	21.25981	-0.90000	-0.01878	-0.01878	0.01666	0.01666	-0.76334	-0.76334	0.01666	0.01666	-0.74456
0.74456	0.03332	0.03332	0.03332	0.03332	-	-	0.01005	0.01005	-	-	Hogging							
						33.85814	74.39269	17.74976	-0.90000	-1.00255	-1.00255	0.01739	0.01739	-1.47476	-1.47476	0.01739	0.01739	-0.47221
0.47221	0.03478	0.03478	0.03478	0.03478	-	-	0.01049	0.01049	-	-	Sagging							
						37.84145	76.27585	14.23971	-0.90000	-1.57487	-1.57487	0.01792	0.01792	-1.84247	-1.84247	0.01792	0.01792	-0.26759

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Sagging	Pullout: Left	Pullout: Left Seg.:	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.26759	0.03585	0.03585	0.03585	0.03585	–	–	0.01081	0.01081	–	–	Hogging							
						41.82477	78.15901	10.72966	-0.90000	-1.91717	-1.91717	0.01768	0.01768	-2.02250	-2.02250	0.01768	0.01768	-0.10533 -
0.10533	0.03536	0.03536	0.03536	0.03536	–	–	0.01066	0.01066	–	–	Hogging							
						45.80808	80.04217	7.21960	-0.90000	-2.00983	-2.00983	0.00266	0.00266	-1.85992	-1.85992	0.00266	0.00266	0.14991
0.14991	0.00532	0.00532	0.15523	0.15523	–	–	0.00161	0.00161	–	–	Hogging							
						49.79139	81.92534	3.70955	-0.90000	-1.77956	-1.77956	0.00365	0.00365	-1.46386	-1.46386	0.00365	0.00365	0.31571
0.31571	0.00730	0.00730	0.32301	0.32301	–	–	0.00220	0.00220	–	–	Hogging							
					4	6.97079	61.68134	41.44261	-0.90000	0.17843	0.17843	0.00047	0.00047	0.17942	0.17942	0.00047	0.00047	0.00100
0.00100	0.00095	0.00095	0.00194	0.00194	–	–	0.00029	0.00029	–	–	Hogging							
						10.95411	63.56450	37.93256	-0.90000	0.17976	0.17976	0.00049	0.00049	0.18079	0.18079	0.00049	0.00049	0.00103
0.00103	0.00097	0.00097	0.00200	0.00200	–	–	0.00029	0.00029	–	–	Hogging							
						14.93742	65.44766	34.42251	-0.90000	0.18114	0.18114	0.00043	0.00043	0.18211	0.18211	0.00043	0.00043	0.00098
0.00098	0.00086	0.00086	0.00184	0.00184	–	–	0.00026	0.00026	–	–	Hogging							
						18.92073	67.33082	30.91245	-0.90000	0.18243	0.18243	0.00024	0.00024	0.18345	0.18345	0.00024	0.00024	0.00102
0.00102	0.00049	0.00049	0.00151	0.00151	–	–	0.00015	0.00015	–	–	Hogging							
						22.90404	69.21399	27.40240	-0.90000	0.18379	0.18379	0.01769	0.01769	0.18252	0.18252	0.01769	0.01769	-0.00127 -
0.00127	0.03538	0.03538	0.03538	0.03538	–	–	0.01067	0.01067	–	–	Sagging							
						26.88735	71.09715	23.89235	-0.90000	0.17606	0.17606	0.02874	0.02874	-0.01979	-0.01979	0.02874	0.02874	-0.19585 -
0.19585	0.05749	0.05749	0.05749	0.05749	–	–	0.01734	0.01734	–	–	Sagging							
						30.87066	72.98031	20.38230	-0.90000	-0.22130	-0.22130	0.00772	0.00772	-1.00390	-1.00390	0.00772	0.00772	-0.78260 -
0.78260	0.01544	0.01544	0.01544	0.01544	–	–	0.00466	0.00466	–	–	Sagging							
						34.85397	74.86348	16.87225	-0.90000	-1.19951	-1.19951	0.01999	0.01999	-1.57550	-1.57550	0.01999	0.01999	-0.37599 -
0.37599	0.03998	0.03998	0.03998	0.03998	–	–	0.01206	0.01206	–	–	Sagging							
						38.83728	76.74664	13.36219	-0.90000	-1.66245	-1.66245	0.01843	0.01843	-1.91746	-1.91746	0.01843	0.01843	-0.25502 -
0.25502	0.03686	0.03686	0.03686	0.03686	–	–	0.01111	0.01111	–	–	Hogging							
						42.82059	78.62980	9.85214	-0.90000	-1.97870	-1.97870	0.01180	0.01180	-2.00971	-2.00971	0.01180	0.01180	-0.03101 -
0.03101	0.02359	0.02359	0.02359	0.02359	–	–	0.00711	0.00711	–	–	Hogging							
						46.80390	80.51296	6.34209	-0.90000	-1.97725	-1.97725	0.00292	0.00292	-1.77903	-1.77903	0.00292	0.00292	0.19823
0.19823	0.00585	0.00585	0.20407	0.20407	–	–	0.00176	0.00176	–	–	Hogging							
		5	TW Foul-1	1		1	1.00444	75.64700	113.52870	-6.00000	1.13523	1.13523	0.00880	0.00880	1.25381	1.25381	0.00880	0.00880	0.11858
0.11858	0.01760	0.01760	0.13618	0.13618	–	–	0.00057	0.00057	–	–	Hogging							
						2.00887	74.83600	112.93610	-6.00000	1.20136	1.20136	0.03451	0.03451	1.29251	1.29251	0.03451	0.03451	0.09114
0.09114	0.06902	0.06902	0.16016	0.16016	–	–	0.00223	0.00223	–	–	Sagging							
						3.01331	74.02501	112.34351	-6.00000	1.25422	1.25422	0.05068	0.05068	1.33245	1.33245	0.05068	0.05068	0.07824
0.07824	0.10136	0.10136	0.17960	0.17960	–	–	0.00328	0.00328	–	–	Hogging							
						4.01774	73.21401	111.75091	-6.00000	1.29285	1.29285	0.02499	0.02499	1.37528	1.37528	0.02499	0.02499	0.08243
0.08243	0.04998	0.04998	0.13241	0.13241	–	–	0.00162	0.00162	–	–	Hogging							
						5.02218	72.40301	111.15831	-6.00000	1.33282	1.33282	0.01398	0.01398	1.40728	1.40728	0.01398	0.01398	0.07446
0.07446	0.02796	0.02796	0.10242	0.10242	–	–	0.00090	0.00090	–	–	Hogging							
						6.02661	71.59201	110.56571	-6.00000	1.37561	1.37561	0.01394	0.01394	1.42762	1.42762	0.01394	0.01394	0.05201
0.05201	0.02788	0.02788	0.07989	0.07989	–	–	0.00090	0.00090	–	–	Hogging							
						7.03105	70.78101	109.97311	-6.00000	1.40751	1.40751	0.01387	0.01387	1.43558	1.43558	0.01387	0.01387	0.02807
0.02807	0.02774	0.02774	0.05581	0.05581	–	–	0.00090	0.00090	–	–	Hogging							
						8.03548	69.97002	109.38052	-6.00000	1.42774	1.42774	0.01374	0.01374	1.43047	1.43047	0.01374	0.01374	0.00273
0.00273	0.02748	0.02748	0.03021	0.03021	–	–	0.00089	0.00089	–	–	Hogging							
						9.03992	69.15902	108.78792	-6.00000	1.43559	1.43559	0.01350	0.01350	1.41165	1.41165	0.01350	0.01350	-0.02394 -
0.02394	0.02700	0.02700	0.02700	0.02700	–	–	0.00087	0.00087	–	–	Hogging							
						10.04435	68.34802	108.19532	-6.00000	1.43037	1.43037	0.01321	0.01321	1.37863	1.37863	0.01321	0.01321	-0.05174 -
0.05174	0.02642	0.02642	0.02642	0.02642	–	–	0.00085	0.00085	–	–	Hogging							
						11.04879	67.53702	107.60272	-6.00000	1.41142	1.41142	0.01288	0.01288	1.33113	1.33113	0.01288	0.01288	-0.08029 -
0.08029	0.02577	0.02577	0.02577	0.02577	–	–	0.00083	0.00083	–	–	Sagging							
						12.05322	66.72603	107.01013	-6.00000	1.37827	1.37827	0.01216	0.01216	1.26893	1.26893	0.01216	0.01216	-0.10935 -
0.10935	0.02432	0.02432	0.02432	0.02432	–	–	0.00079	0.00079	–	–	Sagging							
						13.05766	65.91503	106.41753	-6.00000	1.33065	1.33065	0.07012	0.07012	1.19228	1.19228	0.07012	0.07012	-0.13837 -
0.13837	0.14025	0.14025	0.14025	0.14025	–	–	0.00453	0.00453	–	–	Hogging							
						14.06209	65.10403	105.82493	-6.00000	1.26831	1.26831	0.02873	0.02873	1.15910	1.15910	0.02873	0.02873	-0.10921 -
0.10921	0.05745	0.05745	0.05745	0.05745	–	–	0.00186	0.00186	–	–	Hogging							
						15.06653	64.29303	105.23233	-6.00000	1.19180	1.19180	0.04081	0.04081	1.06801	1.06801	0.04081	0.04081	-0.12379 -
0.12379	0.08162	0.08162	0.08162	0.08162	–	–	0.00264	0.00264	–	–	Sagging							
						16.07096	63.48203	104.63973	-6.00000	1.15855	1.15855	0.07007	0.07007	1.02476	1.02476	0.07007	0.07007	-0.13379 -
0.13379	0.14013	0.14013	0.14013	0.14013	–	–	0.00453	0.00453	–	–	Hogging							
						17.07540	62.67104	104.04714	-6.00000	1.06741	1.06741	0.04571	0.04571	0.90089	0.90089	0.04571	0.04571	-0.16652 -
0.16652	0.09141	0.09141	0.09141	0.09141	–	–	0.00296	0.00296	–	–	Hogging							
						18.07983	61.86004	103.45454	-6.00000	1.02402	1.02402	0.11642	0.11642	0.93433	0.93433	0.11642	0.11642	-0.08969 -
0.08969	0.23284	0.23284	0.23284	0.23284	–	–	0.00753	0.00753	–	–	Sagging							
						19.08427	61.04904	102.86194	-6.00000	0.90049	0.90049	0.07122	0.07122	1.02721	1.02721	0.07122	0.07122	0.12671
0.12671	0.14244	0.14244	0.26915	0.26915	–	–	0.00461	0.00461	–	–	Hogging							
						20.08870	60.23804	102.26934	-6.00000	0.93489	0.93489	0.09724	0.09724	1.10180	1.10180	0.09724	0.09724	0.16690
0.16690	0.19448	0.19448	0.36139	0.36139	–	–	0.00629	0.00629	–	–	Hogging							
						21.09314	59.42704	101.67674	-6.00000	1.02795	1.02795	0.10677	0.10677	1.15776	1.15776	0.10677	0.10677	0.12982
0.12982	0.21354	0.21354	0.34336	0.34336	–	–	0.00690	0.00690	–	–	Sagging							
						22.09757	58.61605	101.08415	-6.00000	1.10237	1.10237	0.07469	0.07469	1.15491	1.15491	0.07469	0.07469	0.05253
0.05253	0.14939	0.14939	0.20192	0.20192	–	–	0.00483	0.00483	–	–	Sagging							
						23.10201	57.80505	100.49155	-6.00000	1.15799	1.15799	0.12420	0.12420	1.13324	1.13324	0.12420	0.12420	-0.02475 -
0.02475	0.24841	0.24841	0.24841	0.24841	–	–	0.00803	0.00803	–	–	Sagging							
						24.10644	56.99405	99.89895	-6.00000	1.15480	1.15480	0.03462	0.03462	1.13999	1.13999	0.03462	0.03462	-0.01481 -
0.01481	0.06925	0.06925	0.06925	0.06925	–	–	0.00224	0.00224	–	–	Hogging							
						25.11088	56.18305	99.30635	-6.00000	1.13318	1.13318	0.07043	0.07043	1.08883	1.08883	0.07043	0.07043	-0.04435 -
0.04435	0.14086	0.14086	0.14086	0.14086	–	–	0.00455	0.00455	–	–	Hogging							
						26.11531	55.37206	98.71376	-6.00000	1.13979	1.13979	0.04076	0.04076	1.10033	1.10033	0.04076	0.04076	-0.03947 -
0.03947	0.08153	0.08153	0.08153	0.08153	–	–	0.00264	0.00264	–	–	Hogging							
						27.11975	54.56106	98.12116	-6.00000	1.10865	1.10865	0.06760	0.06760	1.05128	1.05128	0.06760	0.06760	-0.03737 -
0.03737	0.13519	0.13519	0.13519	0.13519	–	–	0.00437	0.00437	–	–	Hogging							
						28.12418	53.75006	97.52856	-6.00000	1.10016	1.10016	0.00455	0.00455	1.00080	1.00080	0.00455	0.00455	-0.09936 -
0.09936	0.00910	0.00910	0.00910	0.00910	–	–	0.00029	0.00029	–	–	Hogging							
						29.12862	52.93906	96.93596	-6.00000	1.05084	1.05084	0.09931	0.09931	0.92094	0.92094	0.09931	0.09931	-0.12991 -
0.12991	0.19862	0.19862	0.19862	0.19862	–	–	0.00642	0.00642	–	–	Sagging							
						30.13305	52.12806	96.34336	-6.00000	1.00022	1.00022	0.08764	0.08764	0.87251	0.87251	0.08764	0.08764	-0.12771 -
0.12771	0.17529	0.17529	0.17529	0.17529	–	–	0.00567	0.00567	–	–	Sagging							
						31.13749	51.31707	95.75077	-6.00000	0.92037	0.92037	0.05675	0.05675	0.79501	0.79501	0.05675	0.05675	-0.12536 -
0.12536	0.11350	0.11350	0.11350	0.11350	–	–	0.00367	0.00367	–	–	Sagging							
						32.14192	50.50607	95.15817	-6.00000	0.87195	0.87195	0.02602	0.02602	0.75758	0.75758	0.02602	0.02602	-0.11437 -
0.11437	0.05204	0.05204	0.05204	0.05204	–	–	0.00168	0.00168	–	–	Hogging							
						33.14636	49.69507	94.56557	-6.00000	0.79451	0.79451	0.07122	0.07122	0.66159	0.66159	0.07122	0.07122	-0.13292 -
0.13292	0.14244	0.14244	0.14244	0.14244	–	–	0.00461	0.00461	–	–	Hogging							
						34.15079	48.88407	93.97297	-6.00000	0.75699	0.75699	0.07122	0.07122	0.50660	0.50660	0.07122	0.07122	-0.25039 -
0.25039	0.14244	0.14244	0.14244	0.14244	–	–	0.00461	0.00461	–	–	Hogging							
						35.15523	48.07307	93.38037	-6.00000	0.66048	0.66048	0.00001	0.00001	0.35135	0.35135	0.00001	0.00001	-0.30913 -
0.30913	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						36.15966	47.26208	92.78778	-6.00000	0.50523	0.50523	0.00000	0.00000	0.19610	0.19610	0.00000	0.00000	-0.30913 -
0.30913	0.00001	0.00001	0.00001	0.00001	–	–	0.00000	0.00000	–	–	–							
						37.16410	46.45108	92.19518	-6.00000	0.34997	0.34997	0.00691	0.00691	0.03515	0.03515	0.00691	0.00691	-0.31483 -
0.31483	0.01382	0.01382	0.01382	0.01382	–	–	0.00045	0.00045	–	–	Sagging							
						38.16853	45.64008	91.60258	-6.00000	0.19470	0.19470	0.00734	0.00734	-0.13188	-0.13188	0.00734	0.00734	-0.32657 -
0.32657	0.01467	0.01467	0.01467	0.01467	–	–	0.00047	0.00047	–	–	Hogging							
						39.17297	44.82908	91.00998	-6.00000	0.03370	0.03370	0.00989	0.00989	-0.29076	-0.29076	0.00989	0.00989	-0.32446 -
0.32446	0.01979	0.01979	0.01979	0.01979	–	–	0.00064	0.00064	–	–	Sagging							
						40.17740	44.01809	90.41739	-6.00000	-0.13331	-0.13331	0.03354	0.03354	-0.47587	-0.47587	0.03354	0.03354	-0.34255 -
0.34255	0.06707	0.06707	0.06707	0.06707	–	–	0.00217	0.00217	–	–	Hogging							
						41.18184	43.20709	89.82479	-6.00000	-0.29228	-0.29228	0.13649	0.13649	-0.69201	-0.69201	0.13649	0.13649	-0.39972 -
0.39972	0.27298	0.27298	0.27298	0.27298	–	–	0.00883	0.00883	–	–	Sagging							
						42.18627	42.39609	89.23219	-6.00000	-0.47764	-0.47764	0.03454	0.03454	-0.88864	-0.88864	0.03454	0.03454	-0.41100 -
0.41100	0.06908	0.06908	0.06908	0.06908	–	–	0.00223	0.00223	–	–	Sagging							
						43.19071	41.58509	88.63959	-6.00000	-0.69383	-0.69383	0.03232	0.03232	-1.06311	-1.06311	0.03232	0.03232	-0.36928 -
0.36928	0.06464	0.06464	0.06464	0.06464	–	–	0.00209	0.00209	–	–	Sagging							
						44.19514	40.77409	88.04699	-6.00000	-0.89027	-0.89027	0.03014	0.03014	-1.21410	-1.21410	0.03014	0.03014	-0.32382 -
0.32382	0.06028	0.06028	0.06028	0.06028	–	–	0.00195	0.00195	–	–	Sagging							
						45.19958	39.96310	87.45440	-6.00000	-1.06454	-1.06454	0.01818	0.01818	-1.34101	-1.34101	0.01818	0.01818	-0.27647 -
0.27647	0.03636	0.03636	0.03636	0.03636	–	–	0.00118	0.00118	–	–	Hogging							
		6	TW Foul-2	1		1	1.00474	38.81931	85.38557	-6.00000	1.73206	1.73206	0.14965	0.14965	1.64205	1.64205	0.14965	0.14965	-0.09001 -
0.09001	0.29930	0.29930	0.29930	0.29930	–	–	0.00677	0.00677	–	–	Hogging							
						2.00947	39.29752	84.50193	-6.00000	1.69714	1.69714	0.03832	0.03832	1.56399	1.56399	0.03832	0.03832	-0.13315 -
0.13315	0.07663	0.07663	0.07663	0.07663	–	–	0.00173	0.00173	–	–	Sagging							
						3.01421	39.77574	83.61830	-6.00000	1.64142	1.64142	0.06560	0.06560	1.46195	1.46195	0.06560	0.06560	-0.17947 -
0.17947	0.13121	0.13121	0.13121	0.13121	–	–	0.00297	0.00297	–	–	Sagging							
						4.01894	40.25395	82.73467	-6.00000	1.56314	1.56314	0.09084	0.09084	1.34581	1.34581	0.09084	0.09084	-0.21733 -
0.21733	0.18168	0.18168	0.18168	0.18168	–	–	0.00411	0.00411	–	–	Sagging							
						5.02368	40.73216	81.85104	-6.00000	1.46092	1.46092	0.16480	0.16480	1.23869	1.23869	0.16480	0.16480	-0.22223 -
0.22223	0.32959	0.32959	0.32959	0.32959	–	–	0.00745	0.00745	–	–	Sagging							
						6.02842	41.21037	80.96740	-6.00000	1.34476	1.34476	0.05310	0.05310	1.15503	1.15503	0.05310	0.05310	-0.18973 -
0.18973	0.10619	0.10619	0.10619	0.10619	–	–	0.00240	0.00240	–	–	Sagging							
						7.03315	41.68859	80.08377	-6.00000	1.23779	1.23779	0.07257	0.07257	0.98745	0.98745	0.07257	0.07257	-0.25034 -
0.25034	0.14513	0.14513	0.14513	0.14513	–	–	0.00328	0.00328	–	–	Sagging							
						8.03789	42.16680	79.20014	-6.00000	1.15384	1.15384	0.06347	0.06347	0.81522	0.81522	0.06347	0.06347	-0.33862 -
0.33862	0.12693	0.12693	0.12693	0.12693	–	–	0.00287	0.00287	–	–	Sagging							
						9.04262	42.64501	78.31650	-6.00000	0.98585	0.98585	0.07111	0.07111	0.72733	0.72733	0.07111	0.07111	-0.25852 -
0.25852	0.14223	0.14223	0.14223	0.14223	–	–	0.00322	0.00322	–	–	Hogging							
						10.04736	43.12322	77.43287	-6.00000	0.81400	0.81400	0.04275	0.04275	0.65741	0.65741	0.04275	0.04275	-0.15659 -
0.15659	0.08549	0.08549	0.08549	0.08549	–	–	0.00193	0.00193	–	–	Sagging							
						11.05210	43.60144	76.54924	-6.00000	0.72659	0.72659	0.06983	0.06983	0.54381	0.54381	0.06983	0.06983	-0.18278 -
0.18278	0.13966	0.13966	0.13966	0.13966	–	–	0.00316	0.00316	–	–	Sagging							

Stage: Pullout: Ref.	Stage: Name Pullout: Total:	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Rotation:	Pullout: Vertical Seg.: Left Sagging	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
-						12.05683	44.07965	75.66560	-6.00000	0.65654	0.65654	0.11090	0.11090	0.38263	0.38263	0.11090	0.11090	-0.27391 -
0.27391	0.22179	0.22179	0.22179	0.22179	-	-	0.00501	0.00501	-	-	Hogging							
-						13.06157	44.55786	74.78197	-6.00000	0.54251	0.54251	0.06983	0.06983	0.26499	0.26499	0.06983	0.06983	-0.27752 -
0.27752	0.13966	0.13966	0.13966	0.13966	-	-	0.00316	0.00316	-	-	Sagging							
-						14.06630	45.03607	73.89834	-6.00000	0.38131	0.38131	0.17093	0.17093	0.18772	0.18772	0.17093	0.17093	-0.19359 -
0.19359	0.34185	0.34185	0.34185	0.34185	-	-	0.00773	0.00773	-	-	Sagging							
-						15.07104	45.51429	73.01471	-6.00000	0.26407	0.26407	0.03001	0.03001	0.15441	0.15441	0.03001	0.03001	-0.10967 -
0.10967	0.06002	0.06002	0.06002	0.06002	-	-	0.00136	0.00136	-	-	Sagging							
-						16.07578	45.99250	72.13107	-6.00000	0.18720	0.18720	0.22637	0.22637	0.13778	0.13778	0.22637	0.22637	-0.04942 -
0.04942	0.45274	0.45274	0.45274	0.45274	-	-	0.01024	0.01024	-	-	Hogging							
-						17.08051	46.47071	71.24744	-6.00000	0.15417	0.15417	0.07664	0.07664	0.12844	0.12844	0.07664	0.07664	-0.02574 -
0.02574	0.15328	0.15328	0.15328	0.15328	-	-	0.00347	0.00347	-	-	Hogging							
-						18.08525	46.94892	70.36381	-6.00000	0.13766	0.13766	0.07123	0.07123	0.16745	0.16745	0.07123	0.07123	0.02979
0.02979	0.14246	0.14246	0.17225	0.17225	-	-	0.00322	0.00322	-	-	Sagging							
-						19.08998	47.42714	69.48017	-6.00000	0.12858	0.12858	0.05545	0.05545	0.18300	0.18300	0.05545	0.05545	0.05443
0.05443	0.11090	0.11090	0.16533	0.16533	-	-	0.00251	0.00251	-	-	Hogging							
-						20.09472	47.90535	68.59654	-6.00000	0.16771	0.16771	0.00006	0.00006	0.19853	0.19853	0.00006	0.00006	0.03083
0.03083	0.00012	0.00012	0.03095	0.03095	-	-	0.00000	0.00000	-	-	-							
-						21.09945	48.38356	67.71291	-6.00000	0.18315	0.18315	0.00164	0.00164	0.21398	0.21398	0.00164	0.00164	0.03083
0.03083	0.00328	0.00328	0.03411	0.03411	-	-	0.00007	0.00007	-	-	Sagging							
-						22.10419	48.86177	66.82927	-6.00000	0.19868	0.19868	0.08459	0.08459	0.21644	0.21644	0.08459	0.08459	0.01776
0.01776	0.16917	0.16917	0.18693	0.18693	-	-	0.00383	0.00383	-	-	Sagging							
-						23.10893	49.33998	65.94564	-6.00000	0.21406	0.21406	0.00993	0.00993	0.21690	0.21690	0.00993	0.00993	0.00284
0.00284	0.01986	0.01986	0.02270	0.02270	-	-	0.00045	0.00045	-	-	Hogging							
-						24.11366	49.81820	65.06201	-6.00000	0.21645	0.21645	0.00832	0.00832	0.21740	0.21740	0.00832	0.00832	0.00094
0.00094	0.01665	0.01665	0.01759	0.01759	-	-	0.00038	0.00038	-	-	Hogging							
-						25.11840	50.29641	64.17838	-6.00000	0.21691	0.21691	0.00769	0.00769	0.21790	0.21790	0.00769	0.00769	0.00099
0.00099	0.01538	0.01538	0.01638	0.01638	-	-	0.00035	0.00035	-	-	Hogging							
-						26.12313	50.77462	63.29474	-6.00000	0.21740	0.21740	0.00694	0.00694	0.21835	0.21835	0.00694	0.00694	0.00094
0.00094	0.01387	0.01387	0.01482	0.01482	-	-	0.00031	0.00031	-	-	Hogging							
-						27.12787	51.25283	62.41111	-6.00000	0.21790	0.21790	0.00593	0.00593	0.21884	0.21884	0.00593	0.00593	0.00094
0.00094	0.01186	0.01186	0.01280	0.01280	-	-	0.00027	0.00027	-	-	Hogging							
-						28.13261	51.73105	61.52748	-6.00000	0.21835	0.21835	0.00504	0.00504	0.21934	0.21934	0.00504	0.00504	0.00099
0.00099	0.01009	0.01009	0.01108	0.01108	-	-	0.00023	0.00023	-	-	Hogging							
-						29.13734	52.20926	60.64384	-6.00000	0.21885	0.21885	0.00416	0.00416	0.21971	0.21971	0.00416	0.00416	0.00086
0.00086	0.00832	0.00832	0.00918	0.00918	-	-	0.00019	0.00019	-	-	Hogging							
-						30.14208	52.68747	59.76021	-6.00000	0.21935	0.21935	0.00303	0.00303	0.22020	0.22020	0.00303	0.00303	0.00086
0.00086	0.00605	0.00605	0.00691	0.00691	-	-	0.00014	0.00014	-	-	Hogging							
-						31.14681	53.16568	58.87658	-6.00000	0.21971	0.21971	0.00252	0.00252	0.22070	0.22070	0.00252	0.00252	0.00099
0.00099	0.00504	0.00504	0.00603	0.00603	-	-	0.00011	0.00011	-	-	Hogging							
-						32.15155	53.64390	57.99294	-6.00000	0.22021	0.22021	0.00164	0.00164	0.22120	0.22120	0.00164	0.00164	0.00099
0.00099	0.00328	0.00328	0.00427	0.00427	-	-	0.00007	0.00007	-	-	Hogging							
-						33.15629	54.12211	57.10931	-6.00000	0.22071	0.22071	0.00113	0.00113	0.22170	0.22170	0.00113	0.00113	0.00099
0.00099	0.00227	0.00227	0.00326	0.00326	-	-	0.00005	0.00005	-	-	-							
-						34.16102	54.60032	56.22568	-6.00000	0.22120	0.22120	0.00090	0.00090	0.22215	0.22215	0.00090	0.00090	0.00095
0.00095	0.00180	0.00180	0.00275	0.00275	-	-	0.00004	0.00004	-	-	-							
-						35.16576	55.07853	55.34205	-6.00000	0.22170	0.22170	0.00041	0.00041	0.22265	0.22265	0.00041	0.00041	0.00095
0.00095	0.00083	0.00083	0.00178	0.00178	-	-	0.00002	0.00002	-	-	-							
-						36.17049	55.55675	54.45841	-6.00000	0.22216	0.22216	0.00038	0.00038	0.22315	0.22315	0.00038	0.00038	0.00099
0.00099	0.00076	0.00076	0.00175	0.00175	-	-	0.00002	0.00002	-	-	-							
-						37.17523	56.03496	53.57478	-6.00000	0.22266	0.22266	0.00042	0.00042	0.22361	0.22361	0.00042	0.00042	0.00095
0.00095	0.00083	0.00083	0.00178	0.00178	-	-	0.00002	0.00002	-	-	-							
-						38.17997	56.51317	52.69115	-6.00000	0.22315	0.22315	0.00030	0.00030	0.22410	0.22410	0.00030	0.00030	0.00095
0.00095	0.00061	0.00061	0.00156	0.00156	-	-	0.00001	0.00001	-	-	-							
-						39.18470	56.99138	51.80751	-6.00000	0.22361	0.22361	0.00053	0.00053	0.22456	0.22456	0.00053	0.00053	0.00095
0.00095	0.00107	0.00107	0.00202	0.00202	-	-	0.00002	0.00002	-	-	-							
-						40.18944	57.46959	50.92388	-6.00000	0.22411	0.22411	0.00065	0.00065	0.22506	0.22506	0.00065	0.00065	0.00095
0.00095	0.00131	0.00131	0.00226	0.00226	-	-	0.00003	0.00003	-	-	-							
-						41.19417	57.94781	50.04025	-6.00000	0.22457	0.22457	0.00078	0.00078	0.22552	0.22552	0.00078	0.00078	0.00095
0.00095	0.00155	0.00155	0.00250	0.00250	-	-	0.00004	0.00004	-	-	-							
-						42.19891	58.42602	49.15661	-6.00000	0.22506	0.22506	0.00088	0.00088	0.22598	0.22598	0.00088	0.00088	0.00091
0.00091	0.00177	0.00177	0.00268	0.00268	-	-	0.00004	0.00004	-	-	-							
-						43.20365	58.90423	48.27298	-6.00000	0.22552	0.22552	0.00139	0.00139	0.22652	0.22652	0.00139	0.00139	0.00100
0.00100	0.00278	0.00278	0.00378	0.00378	-	-	0.00006	0.00006	-	-	Hogging							
-						44.20838	59.38244	47.38935	-6.00000	0.22598	0.22598	0.00126	0.00126	0.22698	0.22698	0.00126	0.00126	0.00100
0.00100	0.00252	0.00252	0.00352	0.00352	-	-	0.00006	0.00006	-	-	-							
-						45.21312	59.86066	46.50572	-6.00000	0.22653	0.22653	0.00164	0.00164	0.22744	0.22744	0.00164	0.00164	0.00091
0.00091	0.00328	0.00328	0.00419	0.00419	-	-	0.00007	0.00007	-	-	Hogging							
-						46.21785	60.33887	45.62208	-6.00000	0.22698	0.22698	0.00177	0.00177	0.22789	0.22789	0.00177	0.00177	0.00091
0.00091	0.00353	0.00353	0.00444	0.00444	-	-	0.00008	0.00008	-	-	Hogging							
-						47.22259	60.81708	44.73845	-6.00000	0.22744	0.22744	0.00189	0.00189	0.22835	0.22835	0.00189	0.00189	0.00091
0.00091	0.00378	0.00378	0.00469	0.00469	-	-	0.00009	0.00009	-	-	Hogging							
-						48.22733	61.29529	43.85482	-6.00000	0.22790	0.22790	0.00202	0.00202	0.22890	0.22890	0.00202	0.00202	0.00100
0.00100	0.00404	0.00404	0.00503	0.00503	-	-	0.00009	0.00009	-	-	Hogging							
-						49.23206	61.77351	42.97118	-6.00000	0.22836	0.22836	0.00215	0.00215	0.22940	0.22940	0.00215	0.00215	0.00105
0.00105	0.00430	0.00430	0.00535	0.00535	-	-	0.00010	0.00010	-	-	Hogging							
-						50.23680	62.25172	42.08755	-6.00000	0.22890	0.22890	0.00227	0.00227	0.22986	0.22986	0.00227	0.00227	0.00096
0.00096	0.00455	0.00455	0.00550	0.00550	-	-	0.00010	0.00010	-	-	Hogging							
-						51.24153	62.72993	41.20392	-6.00000	0.22941	0.22941	0.00215	0.00215	0.23036	0.23036	0.00215	0.00215	0.00096
0.00096	0.00429	0.00429	0.00525	0.00525	-	-	0.00010	0.00010	-	-	Hogging							
-						52.24627	63.20814	40.32028	-6.00000	0.22986	0.22986	0.00240	0.00240	0.23078	0.23078	0.00240	0.00240	0.00092
0.00092	0.00479	0.00479	0.00571	0.00571	-	-	0.00011	0.00011	-	-	Hogging							
-						53.25101	63.68696	39.43665	-6.00000	0.23037	0.23037	0.00227	0.00227	0.23129	0.23129	0.00227	0.00227	0.00092
0.00092	0.00454	0.00454	0.00546	0.00546	-	-	0.00010	0.00010	-	-	Hogging							
-						54.25574	64.16457	38.55302	-6.00000	0.23079	0.23079	0.00227	0.00227	0.23174	0.23174	0.00227	0.00227	0.00096
0.00096	0.00455	0.00455	0.00550	0.00550	-	-	0.00010	0.00010	-	-	Hogging							
-						55.26048	64.64278	37.66939	-6.00000	0.23129	0.23129	0.00215	0.00215	0.23225	0.23225	0.00215	0.00215	0.00096
0.00096	0.00429	0.00429	0.00525	0.00525	-	-	0.00010	0.00010	-	-	Hogging							
-						56.26521	65.12099	36.78575	-6.00000	0.23175	0.23175	0.00227	0.00227	0.23280	0.23280	0.00227	0.00227	0.00105
0.00105	0.00455	0.00455	0.00560	0.00560	-	-	0.00010	0.00010	-	-	Hogging							
-						57.26995	65.59921	35.90212	-6.00000	0.23225	0.23225	0.00214	0.00214	0.23322	0.23322	0.00214	0.00214	0.00097
0.00097	0.00429	0.00429	0.00525	0.00525	-	-	0.00010	0.00010	-	-	Hogging							
-						58.27469	66.07742	35.01849	-6.00000	0.23281	0.23281	0.04989	0.04989	0.21245	0.21245	0.04989	0.04989	-0.02035 -
0.02035	0.09978	0.09978	0.09978	0.09978	-	-	0.00226	0.00226	-	-	Hogging							
-						59.27942	66.55563	34.13485	-6.00000	0.23312	0.23312	0.02650	0.02650	0.18018	0.18018	0.02650	0.02650	-0.05294 -
0.05294	0.05301	0.05301	0.05301	0.05301	-	-	0.00120	0.00120	-	-	Hogging							
-						60.28416	67.03384	33.25122	-6.00000	0.21220	0.21220	0.05553	0.05553	0.12425	0.12425	0.05553	0.05553	-0.08795 -
0.08795	0.11107	0.11107	0.11107	0.11107	-	-	0.00251	0.00251	-	-	Hogging							
-						61.28889	67.51205	32.36759	-6.00000	0.17976	0.17976	0.10366	0.10366	0.06813	0.06813	0.10366	0.10366	-0.11164 -
0.11164	0.20731	0.20731	0.20731	0.20731	-	-	0.00469	0.00469	-	-	Sagging							
-						62.29363	67.99027	31.48395	-6.00000	0.12372	0.12372	0.03733	0.03733	0.01200	0.01200	0.03733	0.03733	-0.11172 -
0.11172	0.07465	0.07465	0.07465	0.07465	-	-	0.00169	0.00169	-	-	Sagging							
-						63.29836	68.46848	30.60032	-6.00000	0.06760	0.06760	0.03283	0.03283	0.00375	0.00375	0.03283	0.03283	-0.06384 -
0.06384	0.06566	0.06566	0.06566	0.06566	-	-	0.00148	0.00148	-	-	Sagging							
-						64.30310	68.94669	29.71669	-6.00000	0.01170	0.01170	0.06312	0.06312	0.00011	0.00011	0.06312	0.06312	-0.01159 -
0.01159	0.12625	0.12625	0.12625	0.12625	-	-	0.00285	0.00285	-	-	Sagging							
-						65.30784	69.42490	28.83306	-6.00000	0.00370	0.00370	0.00000	0.00000	-0.00351	-0.00351	0.00000	0.00000	-0.00721 -
0.00721	0.00001	0.00001	0.00001	0.00001	-	-	0.00000	0.00000	-	-	-							
-						66.31257	69.90312	27.94942	-6.00000	0.00008	0.00008	0.00000	0.00000	-0.00713	-0.00713	0.00000	0.00000	-0.00721 -
0.00721	0.00001	0.00001	0.00001	0.00001	-	-	0.00000	0.00000	-	-	-							
-						67.31731	70.38133	27.06579	-6.00000	-0.00355	-0.00355	0.18910	0.18910	-0.01436	-0.01436	0.18910	0.18910	-0.01082 -
0.01082	0.37820	0.37820	0.37820	0.37820	-	-	0.00855	0.00855	-	-	Sagging							
-						68.32204	70.85954	26.18216	-6.00000	-0.00719	-0.00719	0.08397	0.08397	-0.04529	-0.04529	0.08397	0.08397	-0.03811 -
0.03811	0.16793	0.16793	0.16793	0.16793	-	-	0.00380	0.00380	-	-	Hogging							
-						69.32678	71.33775	25.29852	-6.00000	-0.01454	-0.01454	0.14091	0.14091	-0.07994	-0.07994	0.14091	0.14091	-0.06540 -
0.06540	0.28183	0.28183	0.28183	0.28183	-	-	0.00637	0.00637	-	-	Sagging							
-						70.33152	71.81597	24.41489	-6.00000	-0.04560	-0.04560	0.16636	0.16636	-0.18566	-0.18566	0.16636	0.16636	-0.14006 -
0.14006	0.33272	0.33272	0.33272	0.33272	-	-	0.00752	0.00752	-	-	Sagging							
-						71.33625	72.29418	23.53126	-6.00000	-0.08060	-0.08060	0.10047	0.10047	-0.33464	-0.33464	0.10047	0.10047	-0.25404 -
0.25404	0.20095	0.20095	0.20095	0.20095	-	-	0.00454	0.00454	-	-	Hogging							
-						72.34099	72.77239	22.64762	-6.00000	-0.18687	-0.18687	0.18668	0.18668	-0.56241	-0.56241	0.18668	0.18668	-0.37554 -
0.37554	0.37335	0.37335	0.37335	0.37335	-	-	0.00844	0.00844	-	-	Sagging							
-						73.34572	73.25060	21.76399	-6.00000	-0.33642	-0.33642	0.04416	0.04416	-0.80429	-0.80429	0.04416	0.04416	-0.46787 -
0.46787	0.08832	0.08832	0.08832	0.08832	-	-	0.00200	0.00200	-	-	Sagging							
-						74.35046	73.72882	20.88036	-6.00000	-0.56463	-0.56463	0.08064	0.08064	-1.08608	-1.08608	0.08064	0.08064	-0.52145 -
0.52145	0.16128	0.16128	0.16128	0.16128	-	-	0.00365	0.00365	-	-	Sagging							
-						75.35520	74.20703	19.99673	-6.00000	-0.80676	-0.80676	0.07760	0.07760	-1.35565	-1.35565	0.07760	0.07760	-0.54889 -
0.54889	0.15520	0.15520	0.15520	0.15520	-	-	0.00351	0.00351	-	-	Sagging							
-						76.35993	74.68524	19.11309	-6.00000	-1.08868	-1.08868	0.06511	0.06511	-1.55426	-1.55426	0.06511	0.06511	-0.46558 -
0.46558	0.13021	0.13021	0.13021	0.13021	-	-	0.00294	0.00294	-	-	Sagging							
-						77.36467	75.16345	18.22946	-6.00000	-1.35785	-1.35785	0.08677	0.08677	-1.68734	-1.68734	0.08677	0.08677	-0.32949 -
0.32949	0.17354	0.17354	0.17354	0.17354	-	-	0.00392	0.00392	-	-	Sagging							
-						78.36940	75.64166	17.34583	-6.00000	-1.55582	-1.55582	0.11791	0.11791	-1.77803	-1.77803	0.11791	0.11791	-0.22221 -
0.22221	0.23582	0.23582	0.23582	0.23582	-	-	0.00533	0.00533	-	-	Sagging							
-						79.37414	76.11988	16.46219	-6.00000	-1.68840	-1.68840	0.06670	0.06670	-1.80875	-1.80875	0.06670	0.06670	-0.12035 -
0.12035	0.13339	0.13339	0.13339	0.13339	-	-	0.00302	0.00302	-	-	Sagging							
-						80.37888	76.59809	15.57856	-6.00000	-1.77860	-1.77860	0.19070	0.19070	-1.88345	-1.88345	0.19070	0.19070	-0.10485 -
0.10485	0.38140	0.38140	0.38140	0.38140	-	-	0.00862	0.00862	-	-	Sagging							
-						81.38361	77.07630	14.69493	-6.00000	-1.80924	-1.80924	0.19431	0.19431	-2.02594	-2.02594	0.19431	0.19431	-0.21670 -
0.21670	0.38861	0.38861	0.38861	0.38861	-	-	0.00879	0.00879	-	-	Hogging							
-						82.38835	77.55451	13.81129	-6.00000	-1.88448	-1.88448	0.04898	0.04898	-2.13003	-2.13003	0.04898	0.04898	-0.24556 -

Stage: Ref.	Stage: Name	Specific Pullout: Utility: Total:	Specific Pullout: Utility: Total:	Sub-utility Pullout: Name Total:	Iteration Check: Pullout:	Distance Check: from Pullout:	x Rotation: Unfactored	y Rotation: Factored	z Check: Rotation:	Pullout: Check: Left Seg.: Rotation:	Pullout: Vertical Left Sagging	Pullout: Left Seg.:	Pullout: Left	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Right	Pullout: Total:
0.24556	0.09796	0.09796	0.09796	0.09796	-	-	0.00222	0.00222	-	-	Sagging							
0.17215	0.21020	0.21020	0.21020	0.21020	-	83.39308	78.03273	12.92766	-6.00000	-2.02711	-2.02711	0.10510	0.10510	-2.19925	-2.19925	0.10510	0.10510	-0.17215 -
						-	0.00475	0.00475	-	-	Hogging							
0.10673	0.07534	0.07534	0.07534	0.07534	-	84.39782	78.51094	12.04403	-6.00000	-2.13085	-2.13085	0.03767	0.03767	-2.23758	-2.23758	0.03767	0.03767	-0.10673 -
						-	0.00170	0.00170	-	-	Hogging							
0.04859	0.10980	0.10980	0.10980	0.10980	-	85.40256	78.98915	11.16040	-6.00000	-2.19976	-2.19976	0.05490	0.05490	-2.24835	-2.24835	0.05490	0.05490	-0.04859 -
						-	0.00248	0.00248	-	-	Hogging							
0.00312	0.37018	0.37018	0.37330	0.37330	-	86.40729	79.46736	10.27676	-6.00000	-2.23781	-2.23781	0.18509	0.18509	-2.23469	-2.23469	0.18509	0.18509	0.00312
						-	0.00837	0.00837	-	-	Hogging							
0.04883	0.02509	0.02509	0.07392	0.07392	-	87.41203	79.94558	9.39313	-6.00000	-2.24833	-2.24833	0.01254	0.01254	-2.19950	-2.19950	0.01254	0.01254	0.04883
						-	0.00057	0.00057	-	-	Sagging							
0.08926	0.02323	0.02323	0.11250	0.11250	-	88.41676	80.42379	8.50950	-6.00000	-2.23446	-2.23446	0.01162	0.01162	-2.14519	-2.14519	0.01162	0.01162	0.08926
						-	0.00053	0.00053	-	-	Hogging							
0.12518	0.02437	0.02437	0.14955	0.14955	-	89.42150	80.90200	7.62586	-6.00000	-2.19908	-2.19908	0.01218	0.01218	-2.07389	-2.07389	0.01218	0.01218	0.12518
						-	0.00055	0.00055	-	-	Hogging							
0.15707	0.02726	0.02726	0.18434	0.18434	-	90.42624	81.38021	6.74223	-6.00000	-2.14460	-2.14460	0.01363	0.01363	-1.98753	-1.98753	0.01363	0.01363	0.15707
						-	0.00062	0.00062	-	-	Hogging							
0.18549	0.03053	0.03053	0.21603	0.21603	-	91.43097	81.85843	5.85860	-6.00000	-2.07315	-2.07315	0.01527	0.01527	-1.88766	-1.88766	0.01527	0.01527	0.18549
						-	0.00069	0.00069	-	-	Hogging							
0.21098	0.03327	0.03327	0.24425	0.24425	-	92.43571	82.33664	4.97496	-6.00000	-1.98665	-1.98665	0.01663	0.01663	-1.77567	-1.77567	0.01663	0.01663	0.21098
						-	0.00075	0.00075	-	-	Hogging							
0.23360	0.03530	0.03530	0.26890	0.26890	-	93.44044	82.81485	4.09133	-6.00000	-1.88666	-1.88666	0.01765	0.01765	-1.65306	-1.65306	0.01765	0.01765	0.23360
						-	0.00080	0.00080	-	-	Hogging							
0.25393	0.03589	0.03589	0.28982	0.28982	-	94.44518	83.29306	3.20770	-6.00000	-1.77456	-1.77456	0.01794	0.01794	-1.52063	-1.52063	0.01794	0.01794	0.25393
						-	0.00081	0.00081	-	-	Hogging							
0.27226	0.03532	0.03532	0.30758	0.30758	-	95.44992	83.77128	2.32407	-6.00000	-1.65185	-1.65185	0.01766	0.01766	-1.37959	-1.37959	0.01766	0.01766	0.27226
						-	0.00080	0.00080	-	-	Hogging							

Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility Damage Results - Strains

Stage: Ref.	Stage: Name	Specific Rad. of Utility: Curv. Total:	Specific Check: Utility: Rad. of Curv.:	Sub-utility Check: Name Rad. of Curv.:	Distance Peak Flex. from start of Orientn. Angle	x	y	z	Ax. Strain: Unfactored	Ax. Strain: Factored	Flexural: Tension: Unfactored	Flexural: Tension: Factored	Flexural: Compn.: Unfactored	Flexural: Compn.: Factored	Tension: Total: Unfactored	Tension: Total: Factored	Check: Tension	Compn.: Total: Unfactored
Compn.: Ref.	Check: Compn.	Utility: Curv. Ref.			utility													
Threshold	Limit	(w.r.t. Global Axis)				[m]	[m]	[m]	[m]	[με]	[με]	[με]	[με]	[με]	[με]	[με]	[με]	[με]
0	Base Model	1	TW Main-1	1	[Deg]	1.00283	75.92703	113.14854	-0.90000	56.132	11.226	0.89489	0.89489	-0.89489	-0.89489	57.02672	12.12126	OK	-0.89489
-0.89489	OK	1.0616E+5	OK	OK	-38.85599														
						2.00566	75.10385	112.57577	-0.90000	41.844	8.3688	0.84693	0.84693	-0.84693	-0.84693	42.69089	9.21572	OK	-0.84693
-0.84693	OK	1.1217E+5	OK	OK	-44.84568														
						3.00850	74.28068	112.00301	-0.90000	27.695	5.5391	1.0201	1.0201	-1.0201	-1.0201	28.71551	6.55922	OK	-1.02015
-1.02015	OK	9.3124E+4	OK	OK	-55.66793														
						4.01133	73.45751	111.43024	-0.90000	29.132	5.8264	4.0940	4.0940	-4.0940	-4.0940	33.22618	9.92043	OK	-4.09399
-4.09399	OK	2.3205E+4	OK	OK	-61.75416														
						5.01416	72.63434	110.85748	-0.90000	31.552	6.3104	1.4864	1.4864	-1.4864	-1.4864	33.03853	7.79685	OK	-1.48643
-1.48643	OK	6.3911E+4	OK	OK	-59.19345														
						6.01699	71.81116	110.28471	-0.90000	19.679	3.9358	1.4867	1.4867	-1.4867	-1.4867	21.16582	5.42254	OK	-1.48672
-1.48672	OK	6.3899E+4	OK	OK	-63.99189														
						7.01983	70.98799	109.71195	-0.90000	7.0580	1.4116	1.4707	1.4707	-1.4707	-1.4707	8.52862	2.88226	OK	-1.47067
-1.47067	OK	6.4596E+4	OK	OK	-69.27502														
						8.02266	70.16482	109.13918	-0.90000	-6.2555	-1.2511	1.4640	1.4640	-1.4640	-1.4640	1.46398	1.46398	OK	-7.71948
-2.71508	OK	6.4892E+4	OK	OK	-75.23483														
						9.02549	69.34164	108.56642	-0.90000	-20.198	-4.0397	1.4281	1.4281	-1.4281	-1.4281	1.42810	1.42810	OK	-21.62647
-5.46777	OK	6.6522E+4	OK	OK	-81.55479														
						10.02832	68.51847	107.99365	-0.90000	-34.704	-6.9408	1.3869	1.3869	-1.3869	-1.3869	1.38686	1.38686	OK	-36.09065
-8.32762	OK	6.8500E+4	OK	OK	-88.51428														
						11.03116	67.69530	107.42089	-0.90000	-49.531	-9.9062	1.3478	1.3478	-1.3478	-1.3478	1.34779	1.34779	OK	-50.87903 -
11.25404	OK	7.0486E+4	OK	OK	263.76064														
						12.03399	66.87213	106.84812	-0.90000	-64.518	-12.904	1.9195	1.9195	-1.9195	-1.9195	1.91954	1.91954	OK	-66.43797 -
14.82323	OK	4.9491E+4	OK	OK	-39.14391														
						13.03682	66.04895	106.27536	-0.90000	-79.390	-15.878	7.2854	7.2854	-7.2854	-7.2854	7.28539	7.28539	OK	-86.67553 -
23.16342	OK	1.3040E+4	Fails	Fails	-8.37334														
						14.03965	65.22578	105.70260	-0.90000	-93.735	-18.747	2.1465	2.1465	-2.1465	-2.1465	2.14654	2.14654	OK	-95.88168 -
20.89357	OK	4.4257E+4	OK	OK	202.45086														
						15.04249	64.40261	105.12983	-0.90000	-107.30	-21.459	2.3008	2.3008	-2.3008	-2.3008	2.30081	2.30081	OK	-109.59811 -
23.76027	OK	4.1290E+4	OK	OK	193.32813														
						16.04532	63.57943	104.55707	-0.90000	-119.54	-23.907	2.5187	2.5187	-2.5187	-2.5187	2.51868	2.51868	OK	-122.05452 -
26.42585	OK	3.7718E+4	OK	OK	183.94944														
						17.04815	62.75626	103.98430	-0.90000	-130.00	-26.001	2.7785	2.7785	-2.7785	-2.7785	2.77846	2.77846	OK	-132.78231 -
28.77923	OK	3.4192E+4	OK	OK	174.96507														
						18.05098	61.93309	103.41154	-0.90000	-53.278	-10.656	32.941	32.941	-32.941	-32.941	32.94059	32.94059	OK	-86.21826 -
43.59612	OK	2.8840E+3	Fails	Fails	-56.39522														
						19.05382	61.10991	102.83877	-0.90000	59.257	11.851	13.557	13.557	-13.557	-13.557	72.81356	25.40821	OK	-13.55687 -
13.55687	OK	7.0075E+3	Fails	Fails	-52.98256														
						20.05665	60.28674	102.26601	-0.90000	90.834	18.167	1.3681	1.3681	-1.3681	-1.3681	92.20250	19.53495	OK	-1.36806
-1.36806	OK	6.9442E+4	OK	OK	-39.35442														
						21.05948	59.46357	101.69324	-0.90000	60.721	12.144	50.229	50.229	-50.229	-50.229	110.94977	62.37284	OK	-50.22860 -
50.22860	OK	1.8914E+3	Fails	Fails	115.22413														
						22.06231	58.64040	101.12048	-0.90000	18.043	3.6085	19.930	19.930	-19.930	-19.930	37.97295	23.53893	OK	-19.93042 -
19.93042	OK	4.7666E+3	Fails	Fails	115.34099														
						23.06515	57.81722	100.54771	-0.90000	5.9578	1.1916	0.25525	0.25525	-0.25525	-0.25525	6.21309	1.44682	OK	-0.25525
-0.25525	OK	3.7219E+5	OK	OK	-1.24072														
						24.06798	56.99405	99.97495	-0.90000	5.9582	1.1916	0.31178	0.31178	-0.31178	-0.31178	6.26995	1.50341	OK	-0.31178
-0.31178	OK	3.0470E+5	OK	OK	0.99154														
						25.07081	56.17088	99.40219	-0.90000	5.9584	1.1917	0.34000	0.34000	-0.34000	-0.34000	6.29842	1.53168	OK	-0.34000
-0.34000	OK	2.7941E+5	OK	OK	-0.89885														
						26.07364	55.34770	98.82942	-0.90000	5.9588	1.1918	0.39690	0.39690	-0.39690	-0.39690	6.35565	1.58865	OK	-0.39690
-0.39690	OK	2.3936E+5	OK	OK	0.76998														
						27.07648	54.52453	98.25666	-0.90000	5.9592	1.1918	0.42507	0.42507	-0.42507	-0.42507	6.38425	1.61691	OK	-0.42507
-0.42507	OK	2.2349E+5	OK	OK	-0.72384														
						28.07933	53.70136	97.68389	-0.90000	5.9596	1.1919	0.43462	0.43462	-0.43462	-0.43462	6.39423	1.62654	OK	-0.43462
-0.43462	OK	2.1858E+5	OK	OK	0.70794														
						29.08214	52.87819	97.11113	-0.90000	5.9601	1.1920	0.46277	0.46277	-0.46277	-0.46277	6.42283	1.65478	OK	-0.46277
-0.46277	OK	2.0529E+5	OK	OK	-0.66038														
						30.08497	52.05501	96.53836	-0.90000	5.9606	1.1921	0.46304	0.46304	-0.46304	-0.46304	6.42361	1.65516	OK	-0.46304
-0.46304	OK	2.0517E+5	OK	OK	0.65999														
						31.08781	51.23184	95.96560	-0.90000	5.9611	1.1922	0.46285	0.46285	-0.46285	-0.46285	6.42398	1.65507	OK	-0.46285
-0.46285	OK	2.0525E+5	OK	OK	-0.66476														
						32.09064	50.40867	95.39283	-0.90000	-2.9139	-0.58277	14.969	14.969	-14.969	-14.969	14.96860	14.96860	OK	-17.88247 -
15.55138	OK	6.3466E+3	Fails	Fails	117.96256														
						33.09347	49.58549	94.82007	-0.90000	-55.282	-11.056	74.663	74.663	-74.663	-74.663	74.66325	74.66325	OK	-129.94550 -
85.71970	OK	1.2724E+3	Fails	Fails	119.42299														
						34.09630	48.76232	94.24730	-0.90000	-99.330	-19.866	1.1711	1.1711	-1.1711	-1.1711	1.17105	1.17105	OK	-100.50128 -
21.03710	OK	8.1124E+4	OK	OK	124.95702														
						35.09914	47.93915	93.67454	-0.90000	-110.07	-22.014	8.7186	8.7186	-8.7186	-8.7186	8.71855	8.71855	OK	-118.78785 -
30.73241	OK	1.0896E+4	Fails	Fails	-53.49902														
						36.10197	47.11598	93.10178	-0.90000	-174.35	-34.870	50.909	50.909	-50.909	-50.909	50.90930	50.90930	OK	-225.25757 -
85.77895	OK	1.8661E+3	Fails	Fails	-55.32546														
						37.10480	46.29280	92.52901	-0.90000	-230.23	-46.047	5.3882	5.3882	-5.3882	-5.3882	5.38822	5.38822	OK	-235.62314 -
51.43520	OK	1.7631E+4	OK	OK	158.58601														
						38.10763	45.46963	91.95625	-0.90000	-231.20	-46.239	5.0326	5.0326	-5.0326	-5.0326	5.03261	5.03261	OK	-236.22872 -
51.27183	OK	1.8877E+4	OK	OK	164.75228														
						39.11047	44.64646	91.38348	-0.90000	-226.92	-45.383	4.6423	4.6423	-4.6423	-4.6423	4.64235	4.64235	OK	-231.55968 -
50.02581	OK	2.0464E+4	OK	OK	171.46313														
						40.11330	43.82328	90.81072	-0.90000	-217.75	-43.550	4.2891	4.2891	-4.2891	-4.2891	4.28908	4.28908	OK	-222.03779 -
47.83882	OK	2.2149E+4	OK	OK	179.22289														
						41.11613	43.00011	90.23795	-0.90000	-204.31	-40.862	3.9864	3.9864	-3.9864	-3.9864	3.98641	3.98641	OK	-208.29630 -
44.84839	OK	2.3831E+4	OK	OK	186.82488														
						42.11896	42.17694	89.66519	-0.90000	-187.38	-37.476	3.6752	3.6752	-3.6752	-3.6752	3.67522	3.67522	OK	-191.05513 -
41.15120	OK	2.5849E+4	OK	OK	194.32302														
						43.12180	41.35376	89.09242	-0.90000	-167.98	-33.595	3.4253	3.4253	-3.4253	-3.4253	3.42530	3.42530	OK	-171.40097 -
37.02043	OK	2.7735E+4	OK	OK	201.64445														
						44.12463	40.53059	88.51966	-0.90000	-146.92	-29.384	1.9507	1.9507	-1.9507	-1.9507	1.95070	1.95070	OK	-148.87282 -
31.33512	OK	4.8700E+4	OK	OK	230.63178														
						45.12746	39.70742	87.94689	-0.90000	-125.15	-25.030	6.2607	6.2607	-6.2607	-6.2607	6.26070	6.26070	OK	-131.40976 -
31.29051	OK	1.5174E+4	OK	OK	-15.39306														
						46.13029	38.88425	87.37413	-0.90000	-103.25	-20.651	2.0836	2.0836	-2.0836	-2.0836	2.08362	2.08362	OK	-105.33662 -
22.73422	OK	4.5594E+4	OK	OK	235.80526														
14.68727	2	3.5726E+4	TW Main-2	1	-56.59686	2.00595	38.17333	84.45412	-0.90000	-60.141	-12.028	2.6591	2.6591	-2.6591	-2.6591	2.65914	2.65914	OK	-62.79980 -
	OK		OK	OK															
						3.00892	38.64104	83.56688	-0.90000	-80.254	-16.051	7.1787	7.1787	-7.1787	-7.1787	7.17873	7.17873	OK	-87.43288 -
23.22956	OK	1.3234E+4	Fails	Fails	-18.23315														

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility:	Specific Check: Utility:	Sub-utility Check: Name	Distance from	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
Total:	Compn.	Curv.	Rad. of	Rad. of	Tens. Strain													
					4.01189	39.10876	82.67964	-0.90000	-101.15	-20.229	3.3613	3.3613	-3.3613	-3.3613	3.36126	3.36126	OK	-104.50761 -
23.59053	OK	2.8263E+4	OK	OK	220.90174													
					5.01486	39.57647	81.79239	-0.90000	-122.34	-24.468	3.6018	3.6018	-3.6018	-3.6018	3.60179	3.60179	OK	-125.94127 -
28.06969	OK	2.6376E+4	OK	OK	215.11387													
					6.01784	40.04419	80.90515	-0.90000	-143.22	-28.645	3.8451	3.8451	-3.8451	-3.8451	3.84507	3.84507	OK	-147.06817 -
32.48969	OK	2.4707E+4	OK	OK	207.85283													
					7.02081	40.51190	80.01791	-0.90000	-159.75	-31.950	5.6093	5.6093	-5.6093	-5.6093	5.60930	5.60930	OK	-165.35971 -
37.55938	OK	1.6936E+4	OK	OK	227.00942													
					8.02378	40.97962	79.13067	-0.90000	-172.28	-34.455	6.9573	6.9573	-6.9573	-6.9573	6.95731	6.95731	OK	-179.23438 -
41.41272	OK	1.3655E+4	Fails	Fails	232.05659													
					9.02675	41.44733	78.24343	-0.90000	-190.53	-38.106	4.8800	4.8800	-4.8800	-4.8800	4.88003	4.88003	OK	-195.41133 -
42.98629	OK	1.9467E+4	OK	OK	163.32270													
					10.02973	41.91505	77.35619	-0.90000	-210.21	-42.042	5.7385	5.7385	-5.7385	-5.7385	5.73852	5.73852	OK	-215.94837 -
47.78049	OK	1.6555E+4	OK	OK	152.29668													
					11.03270	42.38276	76.46895	-0.90000	-151.14	-30.229	32.798	32.798	-32.798	-32.798	32.79820	32.79820	OK	-183.94274 -
63.02711	OK	2.8965E+3	Fails	Fails	-51.73134													
					12.03567	42.85048	75.58171	-0.90000	-36.538	-7.3076	25.655	25.655	-25.655	-25.655	25.65493	25.65493	OK	-62.19273 -
32.96249	OK	3.7030E+3	Fails	Fails	-49.70261													
					13.03864	43.31819	74.69446	-0.90000	11.287	2.2574	0.19009	0.19009	-0.19009	-0.19009	11.47697	2.44747	OK	-0.19009
-0.19009	OK	4.9976E+5	OK	OK	-26.48195													
					14.04162	43.78591	73.80722	-0.90000	7.8311	1.5662	58.927	58.927	-58.927	-58.927	66.75834	60.49349	OK	-58.92728 -
58.92728	OK	1.6122E+3	Fails	Fails	120.47903													
					15.04459	44.25362	72.91998	-0.90000	2.2362	0.44723	38.976	38.976	-38.976	-38.976	41.21248	39.42355	OK	-38.97632 -
38.97632	OK	2.4374E+3	Fails	Fails	120.37610													
					16.04756	44.72134	72.03274	-0.90000	0.12028	0.024056	0.21719	0.21719	-0.21719	-0.21719	0.33747	0.24124	OK	-0.21719
-0.21719	OK	4.3741E+5	OK	OK	-1.02716													
					17.05053	45.18905	71.14550	-0.90000	0.12018	0.024035	0.27390	0.27390	-0.27390	-0.27390	0.39408	0.29793	OK	-0.27390
-0.27390	OK	3.4684E+5	OK	OK	0.82635													
					18.05351	45.65676	70.25826	-0.90000	0.075968	0.015194	0.32121	0.32121	-0.32121	-0.32121	0.39718	0.33641	OK	-0.32121
-0.32121	OK	2.9575E+5	OK	OK	-1.48963													
					19.05648	46.12448	69.37102	-0.90000	0.11995	0.023991	0.35908	0.35908	-0.35908	-0.35908	0.47903	0.38307	OK	-0.35908
-0.35908	OK	2.6457E+5	OK	OK	2.03554													
					20.05945	46.59219	68.48378	-0.90000	0.096597	0.019319	0.38723	0.38723	-0.38723	-0.38723	0.48383	0.40655	OK	-0.38723
-0.38723	OK	2.4533E+5	OK	OK	-0.65107													
					21.06242	47.05991	67.59654	-0.90000	0.075647	0.015129	0.39673	0.39673	-0.39673	-0.39673	0.47238	0.41186	OK	-0.39673
-0.39673	OK	2.3946E+5	OK	OK	-1.20608													
					22.06540	47.52762	66.70929	-0.90000	0.11966	0.023933	0.40627	0.40627	-0.40627	-0.40627	0.52594	0.43020	OK	-0.40627
-0.40627	OK	2.3383E+5	OK	OK	1.79904													
					23.06837	47.99534	65.82205	-0.90000	0.11960	0.023920	0.39684	0.39684	-0.39684	-0.39684	0.51644	0.42076	OK	-0.39684
-0.39684	OK	2.3939E+5	OK	OK	-1.84287													
					24.07134	48.46305	64.93481	-0.90000	0.11955	0.023911	0.35910	0.35910	-0.35910	-0.35910	0.47865	0.38301	OK	-0.35910
-0.35910	OK	2.6455E+5	OK	OK	2.03664													
					25.07431	48.93077	64.04757	-0.90000	0.096280	0.019256	0.33056	0.33056	-0.33056	-0.33056	0.42684	0.34981	OK	-0.33056
-0.33056	OK	2.8739E+5	OK	OK	-0.76401													
					26.07729	49.39848	63.16033	-0.90000	0.075416	0.015083	0.29288	0.29288	-0.29288	-0.29288	0.36829	0.30796	OK	-0.29288
-0.29288	OK	3.2437E+5	OK	OK	-1.63378													
					27.08026	49.86620	62.27309	-0.90000	0.11951	0.023903	0.25530	0.25530	-0.25530	-0.25530	0.37481	0.27920	OK	-0.25530
-0.25530	OK	3.7211E+5	OK	OK	2.86354													
					28.08322	50.33391	61.38585	-0.90000	0.096270	0.019254	0.21725	0.21725	-0.21725	-0.21725	0.31352	0.23650	OK	-0.21725
-0.21725	OK	4.3728E+5	OK	OK	-1.16053													
					29.08620	50.80163	60.49861	-0.90000	0.11953	0.023905	0.16059	0.16059	-0.16059	-0.16059	0.28011	0.18449	OK	-0.16059
-0.16059	OK	5.9157E+5	OK	OK	-1.40827													
					30.08918	51.26934	59.61136	-0.90000	0.11954	0.023907	0.15115	0.15115	-0.15115	-0.15115	0.27069	0.17506	OK	-0.15115
-0.15115	OK	6.2850E+5	OK	OK	1.49621													
					31.09215	51.73706	58.72412	-0.90000	0.075447	0.015089	0.10422	0.10422	-0.10422	-0.10422	0.17967	0.11931	OK	-0.10422
-0.10422	OK	9.1153E+5	OK	OK	-4.59970													
					32.09512	52.20477	57.83688	-0.90000	0.11955	0.023911	0.085943	0.085943	-0.085943	-0.085943	0.20550	0.10985	OK	-0.08594
-0.08594	OK	1.1054E+6	OK	OK	8.53945													
	3		TW Main-3	1	0.99689	53.66476	55.21468	-0.90000	4.7607	0.95213	1.2236	1.2236	-1.2236	-1.2236	5.98426	2.17573	OK	-1.22360
-1.22360	OK	7.7640E+4	OK	OK	180.00000													
					1.99378	54.18932	54.36696	-0.90000	4.7180	0.94359	1.0515	1.0515	-1.0515	-1.0515	5.76951	1.99513	OK	-1.05154
-1.05154	OK	9.0344E+4	OK	OK	-0.27408													
					2.99067	54.71388	53.51924	-0.90000	4.7183	0.94366	0.076640	0.076640	-0.076640	-0.076640	4.79496	1.02030	OK	-0.07664
-0.07664	OK	1.2396E+6	OK	OK	3.76318													
					3.98757	55.23844	52.67152	-0.90000	4.7874	0.95748	0.057929	0.057929	-0.057929	-0.057929	4.84534	1.01541	OK	-0.05793
-0.05793	OK	1.6399E+6	OK	OK	-8.06665													
					4.98446	55.76300	51.82380	-0.90000	4.7448	0.94896	0.066987	0.066987	-0.066987	-0.066987	4.81179	1.01595	OK	-0.06699
-0.06699	OK	1.4182E+6	OK	OK	2.65145													
					5.98135	56.28756	50.97608	-0.90000	4.7448	0.94897	0.076537	0.076537	-0.076537	-0.076537	4.82139	1.02551	OK	-0.07654
-0.07654	OK	1.2412E+6	OK	OK	-2.32041													
					6.97824	56.81212	50.12836	-0.90000	5.2194	1.0439	1.0903	1.0903	-1.0903	-1.0903	6.30968	2.13418	OK	-1.09030
-1.09030	OK	8.7132E+4	OK	OK	-85.97791													
					7.97513	57.33668	49.28064	-0.90000	5.7994	1.1599	0.28501	0.28501	-0.28501	-0.28501	6.08439	1.44488	OK	-0.28501
-0.28501	OK	3.3332E+5	OK	OK	-72.43033													
	4		TW Main-4	1	1.99166	59.32738	45.83017	-0.90000	0.32086	0.064173	0.65140	0.65140	-0.65140	-0.65140	0.97227	0.71558	OK	-0.65140
-0.65140	OK	1.4584E+5	OK	OK	180.00129													
					2.98748	59.79817	44.95266	-0.90000	0.32092	0.064184	1.1113	1.1113	-1.1113	-1.1113	1.43217	1.17544	OK	-1.11125
-1.11125	OK	8.5489E+4	OK	OK	-0.00000													
					3.98331	60.26896	44.07515	-0.90000	0.34483	0.068967	0.15351	0.15351	-0.15351	-0.15351	0.49834	0.22248	OK	-0.15351
-0.15351	OK	6.1885E+5	OK	OK	-3.15234													
					4.97914	60.73975	43.19764	-0.90000	0.34488	0.068976	0.14392	0.14392	-0.14392	-0.14392	0.48880	0.21289	OK	-0.14392
-0.14392	OK	6.6009E+5	OK	OK	3.36852													
					5.97497	61.21054	42.32012	-0.90000	0.32119	0.064238	0.14371	0.14371	-0.14371	-0.14371	0.46490	0.20795	OK	-0.14371
-0.14371	OK	6.6106E+5	OK	OK	-0.00273													
					6.97079	61.68134	41.44261	-0.90000	0.32125	0.064250	0.17245	0.17245	-0.17245	-0.17245	0.49370	0.23670	OK	-0.17245
-0.17245	OK	5.5088E+5	OK	OK	-0.00261													
					7.96662	62.15213	40.56510	-0.90000	0.34505	0.069009	0.15348	0.15348	-0.15348	-0.15348	0.49852	0.22249	OK	-0.15348
-0.15348	OK	6.1898E+5	OK	OK	-3.14749													
					8.96245	62.62292	39.68758	-0.90000	0.34511	0.069022	0.16310	0.16310	-0.16310	-0.16310	0.50821	0.23213	OK	-0.16310
-0.16310	OK	5.8245E+5	OK	OK	2.96152													
					9.95828	63.09371	38.81007	-0.90000	0.34518	0.069036	0.17264	0.17264	-0.17264	-0.17264	0.51782	0.24168	OK	-0.17264
-0.17264	OK	5.5027E+5	OK	OK	-2.80265													
					10.95411	63.56450	37.93256	-0.90000	0.34525	0.069049	0.15347	0.15347	-0.15347	-0.15347	0.49872	0.22252	OK	-0.15347
-0.15347	OK	6.1899E+5	OK	OK	3.15853													
					11.94993	64.03529	37.05504	-0.90000	0.34532	0.069063	0.16311	0.16311	-0.16311	-0.16311	0.50843	0.23217	OK	-0.16311
-0.16311	OK	5.8243E+5	OK	OK	-2.97176													
					12.94576	64.50608	36.17753	-0.90000	0.34539	0.069079	0.16308	0.16308	-0.16308	-0.16308	0.50847	0.23215	OK	-0.16308
-0.16308	OK	5.8255E+5	OK	OK	2.96723													
					13.94159	64.97687	35.30002	-0.90000	0.34547	0.069094	0.16308	0.16308	-0.16308	-0.16308	0.50855	0.23217	OK	-0.16308
-0.16308	OK	5.8255E+5	OK	OK	-2.96724													
					14.93742	65.44766	34.42251	-0.90000	0.30130	0.060260	0.13413	0.13413	-0.13413	-0.13413	0.43543	0.19439	OK	-0.13413
-0.13413	OK	7.0825E+5	OK	OK	1.67784													
					15.93324	65.91845	33.54499	-0.90000	0.30137	0.060274	0.13422	0.13422	-0.13422	-0.13422	0.43558	0.19449	OK	-0.13422
-0.13422	OK	7.0782E+5	OK	OK	-1.67681													
					16.92907	66.38924	32.66748	-0.90000	0.36942	0.073885	0.13412	0.13412	-0.13412	-0.13412	0.50354	0.20800	OK	-0.13412
-0.13412	OK	7.0833E+5	OK	OK	-0.00000													
					17.92490	66.86003	31.78997	-0.90000	0.34575	0.069149	0.096126	0.096126	-0.096126	-0.096126	0.44187	0.16528	OK	-0.09613
-0.09613	OK	9.8828E+5	OK	OK	5.04689													
					18.92073	67.33082	30.91245	-0.90000	0.34580	0.069159	0.086676	0.086676	-0.086676	-0.086676	0.43247	0.15583	OK	-0.08668
-0.08668	OK	1.0960E+6	OK	OK	-5.59884													
					19.91656	67.80161	30.03494	-0.90000	0.32533	0.065066	0.057632	0.057632	-0.057632	-0.057632	0.38296	0.12270	OK	-0.05763
-0.05763	OK	1.6484E+6	OK	OK	-4.49931													
					20.91238	68.27241	29.15743	-0.90000	0.32535	0.065071	0.029074	0.029074	-0.029074	-0.029074	0.35443	0.09414	OK	-0.02907
-0.02907	OK	3.2675E+6	OK	OK	8.97536													
					21.90821	68.74320	28.27991	-0.90000	0.36960	0.073920	0.019113	0.019113	-0.019113	-0.019113	0.38871	0.09303	OK	-0.01911
-0.01911	OK	4.9703E+6	OK	OK	180.04420													
					22.90404	69.21399	27.40240	-0.90000	0.34585	0.069169	0.048637	0.048637	-0.048637	-0.048637	0.39448	0.11781	OK	-0.04864
-0.04864	OK	1.9532E+6	OK	OK	170.00497													
					23.89987	69.68478	26.52489	-0.90000	0.30156	0.060313	0.087189	0.087189	-0.087189	-0.087189	0.38875	0.14750	OK	-0.08719
-0.08719	OK	1.0896E+6	OK	OK	188.55534													
					24.89569	70.15557	25.64738	-0.90000	-4.0991	-0.81981	51.988	51.988	-51.988	-51.988	51.98756	51.98756	OK	-56.08663 -
52.80737	OK	1.8274E+3	Fails	Fails	121.67969													
					25.89152	70.62636	24.76986	-0.90000	-13.070	-2.6140	56.211	56.211	-56.211	-56.211	56.21091	56.21091	OK	-69.28108 -
58.82494	OK	1.6901E+3	Fails	Fails	121.69678													
					26.88735	71.09715	23.89235	-0.90000	-17.690	-3.5381	0.30986	0.30986	-0.30986	-0.30986	0.30986	0.30986	OK	-18.00014
-3.84792	OK	3.0659E+5	OK	OK	153.74817													
					27.88318	71.56794	23.01484	-0.90000	-91.243	-18.249	28.715	28.715	-28.715	-28.715	28.71549	28.71549	OK	-119.95807 -
46.96401	OK	3.3083E+3	Fails	Fails	-44.06019													
					28.87900	72.03873	22.13732	-0.90000	-245.41	-49.082	26.677	26.677	-26.677	-26.677	26.67659	26.67659	OK	-272.08734 -
75.75874	OK	3.5612E+3	Fails	Fails	-43.64835													
					29.87483	72.50952	21.25981	-0.90000	-314.86	-62.972	6.9506	6.9506	-6.9506	-6.9506	6.95060	6.95060	OK	-321.81232 -
69.92294	OK	1.3668E+4	Fails	Fails	143.60076													
					30.87066	72.98031	20.38230	-0.90000	-284.60	-56.921	5.4153	5.4153	-5.4153	-5.4153	5.41531	5.41531	OK	-290.02014 -
62.33628	OK	1.7543E+4	OK	OK	159.64964													
					31.86649	73.45110	19.50479	-0.90000	-241.67	-48.335	4.5930	4.5930	-4.5930	-4.5930	4.59304	4.59304	OK	-246.26648 -
52.92773	OK	2.0683E+4	OK	OK	189.42683													
					32.86232	73.92189	18.62727	-0.90000	-198.44	-39.689	6.8787	6.8787	-6.8787	-6.8787	6.87873	6.87873	OK	-205.32268 -
46.56752	OK	1.3811E+4	Fails	Fails	234.59444													
					33.85814	74.39269	17.74976	-0.90000	-153.25	-30.649	4.3764	4.3764	-4.3764	-4.3764	4.37639	4.37639	OK	-157.62246 -
35.02560	OK	2.1707E+4	OK	OK	217.58576													
					34.85397	74.86348	16.87225	-0.90000	-102.78	-20.555	4.7507	4.7507	-4.7507	-4.7507	4.75069	4.75069	OK	-107.52616 -

Stage: Compn.: Ref. Total:	Stage: Name Check: Compn.	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
25.30579	OK	1.9997E+4	OK	OK	231.75693													
					35.84980	75.33427	15.99473	-0.90000	-95.349	-19.070	14.496	14.496	-14.496	-14.496	14.49607	14.49607	OK	-109.84535 -
33.56592	OK	6.5535E+3	Fails	Fails	260.10493													
					36.84563	75.80506	15.11722	-0.90000	-99.304	-19.861	3.6090	3.6090	-3.6090	-3.6090	3.60898	3.60898	OK	-102.91330 -
23.46985	OK	2.6323E+4	OK	OK	235.75437													
					37.84145	76.27585	14.23971	-0.90000	-79.922	-15.984	4.0716	4.0716	-4.0716	-4.0716	4.07158	4.07158	OK	-83.99339 -
20.05594	OK	2.3332E+4	OK	OK	264.60496													
					38.83728	76.74664	13.36219	-0.90000	-90.297	-18.059	14.244	14.244	-14.244	-14.244	14.24443	14.24443	OK	-104.54159 -
32.30386	OK	6.6693E+3	Fails	Fails	-34.93686													
					39.83311	77.21743	12.48468	-0.90000	-90.810	-18.162	4.2524	4.2524	-4.2524	-4.2524	4.25237	4.25237	OK	-95.06275 -
22.41445	OK	2.2340E+4	OK	OK	-18.06638													
					40.82894	77.68822	11.60717	-0.90000	-60.340	-12.068	2.0321	2.0321	-2.0321	-2.0321	2.03209	2.03209	OK	-62.37192 -
14.10005	OK	4.6750E+4	OK	OK	216.59809													
					41.82477	78.15901	10.72966	-0.90000	-32.885	-6.5769	16.584	16.584	-16.584	-16.584	16.58409	16.58409	OK	-49.46876 -
23.16103	OK	5.7284E+3	Fails	Fails	-3.81350													
					42.82059	78.62980	9.85214	-0.90000	-8.1931	-1.6386	1.3198	1.3198	-1.3198	-1.3198	1.31985	1.31985	OK	-9.51298
-2.95848	OK	7.1978E+4	OK	OK	-49.05891													
					43.81642	79.10059	8.97463	-0.90000	13.957	2.7913	0.90365	0.90365	-0.90365	-0.90365	14.86034	3.69499	OK	-0.90365
-0.90365	OK	1.0513E+5	OK	OK	267.69131													
					44.81225	79.57138	8.09712	-0.90000	33.816	6.7633	0.85015	0.85015	-0.85015	-0.85015	34.66657	7.61344	OK	-0.85015
-0.85015	OK	1.1174E+5	OK	OK	-72.48361													
					45.80808	80.04217	7.21960	-0.90000	51.649	10.330	0.89275	0.89275	-0.89275	-0.89275	52.54169	11.22254	OK	-0.89275
-0.89275	OK	1.0641E+5	OK	OK	-54.74627													
					46.80390	80.51296	6.34209	-0.90000	67.628	13.526	0.98998	0.98998	-0.98998	-0.98998	68.61767	14.51552	OK	-0.98998
-0.98998	OK	9.5961E+4	OK	OK	-41.66082													
					47.79973	80.98376	5.46458	-0.90000	81.927	16.385	1.0995	1.0995	-1.0995	-1.0995	83.02657	17.48491	OK	-1.09949
-1.09949	OK	8.6404E+4	OK	OK	-32.95645													
					48.79556	81.45455	4.58706	-0.90000	94.795	18.959	1.1859	1.1859	-1.1859	-1.1859	95.98121	20.14496	OK	-1.18590
-1.18590	OK	8.0108E+4	OK	OK	-26.75180													
					49.79139	81.92534	3.70955	-0.90000	106.43	21.286	1.2464	1.2464	-1.2464	-1.2464	107.67536	22.53215	OK	-1.24635
-1.24635	OK	7.6223E+4	OK	OK	-22.80890													
					50.78722	82.39613	2.83204	-0.90000	116.89	23.378	1.2650	1.2650	-1.2650	-1.2650	118.15672	24.64333	OK	-1.26498
-1.26498	OK	7.5100E+4	OK	OK	-20.43818													
					51.78304	82.86692	1.95453	-0.90000	126.37	25.273	1.2333	1.2333	-1.2333	-1.2333	127.59919	26.50649	OK	-1.23331
-1.23331	OK	7.7028E+4	OK	OK	-18.68949													
	5		TW Foul-1	1	2.00887	74.83600	112.93610	-6.00000	45.579	45.579	34.357	68.715	-34.357	-34.357	79.93601	114.29339	OK	-34.35738 -
34.35738	OK	2.5788E+4	OK	OK	189.53139													
					3.01331	74.02501	112.34351	-6.00000	39.127	39.127	50.457	100.91	-50.457	-50.457	89.58371	140.04029	OK	-50.45658 -
50.45658	OK	1.7560E+4	OK	OK	-22.18471													
					4.01774	73.21401	111.75091	-6.00000	41.230	41.230	24.880	49.761	-24.880	-24.880	66.11000	90.99042	OK	-24.88042 -
24.88042	OK	3.5610E+4	OK	OK	-59.43083													
					5.02218	72.40301	111.15831	-6.00000	37.249	37.249	13.919	27.838	-13.919	-13.919	51.16747	65.08643	OK	-13.91895 -
13.91895	OK	6.3654E+4	OK	OK	-58.63313													
					6.02661	71.59201	110.56571	-6.00000	26.024	26.024	13.879	27.757	-13.879	-13.879	39.90302	53.78162	OK	-13.87859 -
13.87859	OK	6.3839E+4	OK	OK	-63.10053													
					7.03105	70.78101	109.97311	-6.00000	14.059	14.059	13.810	27.620	-13.810	-13.810	27.86935	41.67920	OK	-13.80986 -
13.80986	OK	6.4157E+4	OK	OK	-68.42924													
					8.03548	69.97002	109.38052	-6.00000	1.3932	1.3932	13.681	27.362	-13.681	-13.681	15.07436	28.75551	OK	-13.68115 -
13.68115	OK	6.4761E+4	OK	OK	-74.28858													
					9.03992	69.15902	108.78792	-6.00000	-11.937	-11.937	13.442	26.883	-13.442	-13.442	13.44167	26.88333	OK	-25.37876 -
25.37876	OK	6.5914E+4	OK	OK	-80.59961													
					10.04435	68.34802	108.19532	-6.00000	-25.834	-25.834	13.152	26.304	-13.152	-13.152	13.15182	26.30363	OK	-38.98555 -
38.98555	OK	6.7367E+4	OK	OK	-87.70390													
					11.04879	67.53702	107.60272	-6.00000	-40.106	-40.106	12.827	25.655	-12.827	-12.827	12.82734	25.65468	OK	-52.93335 -
52.93335	OK	6.9071E+4	OK	OK	264.54534													
					12.05322	66.72603	107.01013	-6.00000	-54.631	-54.631	12.105	24.210	-12.105	-12.105	12.10500	24.21001	OK	-66.73613 -
66.73613	OK	7.3193E+4	OK	OK	255.58455													
					13.05766	65.91503	106.41753	-6.00000	-69.133	-69.133	69.814	139.63	-69.814	-69.814	69.81380	139.62761	OK	-138.94665 -
138.94665	OK	1.2691E+4	Fails	Fails	-8.61553													
					14.06209	65.10403	105.82493	-6.00000	-54.552	-54.552	28.600	57.201	-28.600	-28.600	28.60044	57.20088	OK	-83.15246 -
83.15246	OK	3.0979E+4	OK	OK	89.12077													
					15.06653	64.29303	105.23233	-6.00000	-61.842	-61.842	40.631	81.263	-40.631	-40.631	40.63129	81.26258	OK	-102.47355 -
102.47355	OK	2.1806E+4	OK	OK	239.33079													
					16.07096	63.48203	104.63973	-6.00000	-66.823	-66.823	69.758	139.52	-69.758	-69.758	69.75784	139.51569	OK	-136.58110 -
136.58110	OK	1.2701E+4	Fails	Fails	-56.36132													
					17.07540	62.67104	104.04714	-6.00000	-83.174	-83.174	45.504	91.007	-45.504	-45.504	45.50350	91.00700	OK	-128.67770 -
128.67770	OK	1.9471E+4	OK	OK	30.60387													
					18.07983	61.86004	103.45454	-6.00000	-44.734	-44.734	115.91	231.82	-115.91	-115.91	115.90777	231.81554	OK	-160.64199 -
160.64199	OK	7.6440E+3	Fails	Fails	269.99990													
					19.08427	61.04904	102.86194	-6.00000	63.517	63.517	70.906	141.81	-70.906	-70.906	134.42289	205.32916	OK	-70.90627 -
70.90627	OK	1.2495E+4	Fails	Fails	270.00000													
					20.08073	60.23804	102.26934	-6.00000	83.605	83.605	96.812	193.62	-96.812	-96.812	180.41733	277.22933	OK	-96.81199 -
96.81199	OK	9.1518E+3	Fails	Fails	90.00000													
					21.09314	59.42704	101.67674	-6.00000	65.007	65.007	106.30	212.60	-106.30	-106.30	171.30637	277.60597	OK	-106.29960 -
106.29960	OK	8.3349E+3	Fails	Fails	114.39642													
					22.09757	58.61605	101.08415	-6.00000	26.326	26.326	74.364	148.73	-74.364	-74.364	100.69007	175.05446	OK	-74.36439 -
74.36439	OK	1.1914E+4	Fails	Fails	107.52818													
					23.10201	57.80505	100.49155	-6.00000	-12.348	-12.348	123.66	247.31	-123.66	-123.66	123.65578	247.31155	OK	-136.00364 -
136.00364	OK	7.1651E+3	Fails	Fails	128.47157													
					24.10644	56.99405	99.89895	-6.00000	-7.3873	-7.3873	34.471	68.943	-34.471	-34.471	34.47144	68.94288	OK	-41.85870 -
41.85870	OK	2.5702E+4	OK	OK	-86.05562													
					25.11088	56.18305	99.30635	-6.00000	-22.163	-22.163	70.118	140.24	-70.118	-70.118	70.11778	140.23556	OK	-92.28045 -
92.28045	OK	1.2636E+4	Fails	Fails	87.55850													
					26.11531	55.37206	98.71376	-6.00000	-19.725	-19.725	40.585	81.170	-40.585	-40.585	40.58488	81.16977	OK	-60.31012 -
60.31012	OK	2.1831E+4	OK	OK	85.28504													
					27.11975	54.56106	98.12116	-6.00000	-18.678	-18.678	67.297	134.59	-67.297	-67.297	67.29722	134.59444	OK	-85.97551 -
85.97551	OK	1.3165E+4	Fails	Fails	86.48372													
					28.12418	53.75006	97.52856	-6.00000	-49.676	-49.676	4.5307	9.0614	-4.5307	-4.5307	4.53070	9.06141	OK	-54.20660 -
54.20660	OK	1.9555E+5	OK	OK	18.23724													
					29.12862	52.93906	96.93596	-6.00000	-64.951	-64.951	98.873	197.75	-98.873	-98.873	98.87253	197.74506	OK	-163.82321 -
163.82321	OK	8.9610E+3	Fails	Fails	158.98730													
					30.13305	52.12806	96.34336	-6.00000	-63.850	-63.850	87.258	174.52	-87.258	-87.258	87.25787	174.51573	OK	-151.10818 -
151.10818	OK	1.0154E+4	Fails	Fails	121.08479													
					31.13749	51.31707	95.75077	-6.00000	-62.662	-62.662	56.500	113.00	-56.500	-56.500	56.49992	112.99985	OK	-119.16164 -
119.16164	OK	1.5681E+4	OK	OK	141.00115													
					32.14192	50.50607	95.15817	-6.00000	-57.160	-57.160	25.906	51.811	-25.906	-25.906	25.90566	51.81133	OK	-83.06595 -
83.06595	OK	3.4201E+4	OK	OK	89.99945													
					33.14636	49.69507	94.56557	-6.00000	-66.420	-66.420	70.906	141.81	-70.906	-70.906	70.90649	141.81299	OK	-137.32643 -
137.32643	OK	1.2495E+4	Fails	Fails	90.00000													
					34.15079	48.88407	93.97297	-6.00000	-125.13	-125.13	70.906	141.81	-70.906	-70.906	70.90637	141.81275	OK	-196.03960 -
196.03960	OK	1.2495E+4	Fails	Fails	90.00000													
					35.15523	48.07307	93.38037	-6.00000	-154.49	-154.49	0.0050477	0.010095	-0.0050477	-0.0050477	0.00505	0.01010	OK	-154.49360 -
154.49360	OK	1.7553E+8	OK	OK	104.00725													
					36.15966	47.26208	92.78778	-6.00000	-154.49	-154.49	0.0048240	0.0096481	-0.0048240	-0.0048240	0.00482	0.00965	OK	-154.49348 -
154.49348	OK	1.8366E+8	OK	OK	-75.32901													
					37.16410	46.45108	92.19518	-6.00000	-157.33	-157.33	6.8780	13.756	-6.8780	-6.8780	6.87795	13.75590	OK	-164.21281 -
164.21281	OK	1.2882E+5	OK	OK	90.00000													
					38.16853	45.64008	91.60258	-6.00000	-163.21	-163.21	7.3034	14.607	-7.3034	-7.3034	7.30336	14.60671	OK	-170.50884 -
170.50884	OK	1.2131E+5	OK	OK	90.00000													
					39.17297	44.82908	91.00998	-6.00000	-162.15	-162.15	9.8512	19.702	-9.8512	-9.8512	9.85124	19.70248	OK	-172.00112 -
172.00112	OK	8.9938E+4	OK	OK	269.99289													
					40.17740	44.01809	90.41739	-6.00000	-171.20	-171.20	33.388	66.776	-33.388	-33.388	33.38800	66.77601	OK	-204.59178 -
204.59178	OK	2.6536E+4	OK	OK	-44.10202													
					41.18184	43.20709	89.82479	-6.00000	-199.79	-199.79	135.89	271.78	-135.89	-135.89	135.88838	271.77676	OK	-335.68234 -
335.68234	OK	6.5201E+3	Fails	Fails	194.80348													
					42.18627	42.39609	89.23219	-6.00000	-205.42	-205.42	34.389	68.777	-34.389	-34.389	34.38857	68.77713	OK	-239.80804 -
239.80804	OK	2.5764E+4	OK	OK	195.13894													
					43.19071	41.58509	88.63959	-6.00000	-184.56	-184.56	32.175	64.350	-32.175	-32.175	32.17511	64.35021	OK	-216.73034 -
216.73034	OK	2.7537E+4	OK	OK	202.29134													
					44.19514	40.77409	88.04699	-6.00000	-161.82	-161.82	30.008	60.017	-30.008	-30.008	30.00831	60.01662	OK	-191.83095 -
191.83095	OK	2.9525E+4	OK	OK	209.62292													
					45.19958	39.96310	87.45440	-6.00000	-138.15	-138.15	18.102	36.203	-18.102	-18.102	18.10160	36.20319	OK	-156.24889 -
156.24889	OK	4.8946E+4	OK	OK	-64.09727													
	6		TW Foul-2	1	1.00474	38.81931	85.38557	-6.00000	-44.892	-44.892	148.95	297.89	-148.95	-148.95	148.94597	297.89194	OK	-193.83749 -
193.83749	OK	8.5064E+3	Fails	Fails	-13.28800													
					2.00947	39.29752	84.50193	-6.00000	-66.432	-66.432	38.135	76.270	-38.135	-38.135	38.13522	76.27044	OK	-104.56751 -
104.56751	OK	3.3224E+4	OK	OK	250.18766													
					3.01421	39.77574	83.61830	-6.00000	-89.597	-89.597	65.295	130.59	-65.295	-65.295	65.29538	130.59076	OK	-154.89205 -
154.89205	OK	1.9404E+4	OK	OK	214.64938													
					4.01894	40.25395	82.73467	-6.00000	-108.53	-108.53	90.411	180.82	-90.411	-90.411	90.41088	180.82177	OK	-198.94037 -
198.94037	OK	1.4014E+4	Fails	Fails	226.15445													
					5.02368	40.73216	81.85104	-6.00000	-110.96	-110.96	164.02	328.04	-164.02	-164.02	164.01985	328.03970	OK	-274.97909 -
274.97909	OK	7.7247E+3	Fails	Fails	254.87313													
					6.02842	41.21037	80.96740	-6.00000	-94.695	-94.695	52.845	105.69	-52.845	-52.845	52.84547	105.69093	OK	-147.54068 -
147.54068	OK	2.3976E+4	OK	OK	158.96199													
					7.03315	41.68859	80.08377	-6.00000	-125.01	-125.01	72.224	144.45	-72.224	-72.224	72.22405	144.44811	OK	-197.23163 -
197.23163	OK	1.7543E+4	OK	OK	219.19298													
					8.03789	42.16680	79.20014	-6.00000	-169.15	-169.15	63.167	126.33	-63.167	-63.167	63.16716	126.33432	OK	-232.31984 -
232.31984	OK	2.0058E+4	OK	OK	170.94627													
					9.04262	42.64501	78.31650	-6.00000	-129.09	-129.09	70.777	141.55	-70.777	-70.777	70.77745	141.55491	OK	-199.87120 -
199.87120	OK	1.7901E+4	OK	OK	-66.15019													

Stage: Compn.: Ref.	Stage: Name Check:	Specific Rad. of Utility: Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens.	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
120.64505	OK	2.9780E+4	OK	OK	10.04736	43.12322	77.43287	-6.00000	-78.100	-78.100	42.545	85.090	-42.545	-42.545	42.54515	85.09031	OK	-120.64505
160.68266	OK	1.8230E+4	OK	OK	254.25072 11.05210	43.60144	76.54924	-6.00000	-91.184	-91.184	69.499	139.00	-69.499	-69.499	69.49895	138.99790	OK	-160.68266
247.14952	OK	1.1479E+4	Fails	Fails	205.44982 12.05683	44.07965	75.66560	-6.00000	-136.78	-136.78	110.37	220.75	-110.37	-110.37	110.37362	220.74724	OK	-247.14952
208.11351	OK	1.8230E+4	OK	OK	89.99912 13.06157	44.55786	74.78197	-6.00000	-138.61	-138.61	69.500	139.00	-69.500	-69.500	69.50012	139.00025	OK	-208.11351
266.81195	OK	7.4476E+3	Fails	Fails	154.54714 14.06630	45.03607	73.89834	-6.00000	-96.691	-96.691	170.12	340.24	-170.12	-170.12	170.12080	340.24161	OK	-266.81195
84.62946	OK	4.2418E+4	OK	OK	90.00021 15.07104	45.51429	73.01471	-6.00000	-54.760	-54.760	29.870	59.739	-29.870	-29.870	29.86969	59.73937	OK	-84.62946
249.97541	OK	5.6235E+3	Fails	Fails	90.00097 16.07578	45.99250	72.13107	-6.00000	-24.672	-24.672	225.30	450.61	-225.30	-225.30	225.30382	450.60764	OK	-249.97541
89.13092	OK	1.6610E+4	OK	OK	89.99972 17.08051	46.47071	71.24744	-6.00000	-12.853	-12.853	76.278	152.56	-76.278	-76.278	76.27837	152.55673	OK	-89.13092
70.89222	OK	1.7872E+4	OK	OK	90.00000 18.08525	46.94892	70.36381	-6.00000	14.905	14.905	70.892	141.78	-70.892	-70.892	85.79746	156.68968	OK	-70.89222
55.18850	OK	2.2958E+4	OK	OK	152.27921 19.08998	47.42714	69.48017	-6.00000	27.217	27.217	55.188	110.38	-55.188	-55.188	82.40525	137.59375	OK	-55.18850
-0.06002	OK	2.1109E+7	OK	OK	89.99882 20.09472	47.90535	68.59654	-6.00000	15.416	15.416	0.060021	0.12004	-0.060021	-0.060021	15.47648	15.53650	OK	-0.06002
-1.63323	OK	7.7576E+5	OK	OK	89.99999 21.09945	48.38356	67.71291	-6.00000	15.416	15.416	1.6332	3.2665	-1.6332	-1.6332	17.04953	18.68276	OK	-1.63323
84.18779	OK	1.5050E+4	OK	OK	182.07742 22.10419	48.86177	66.82927	-6.00000	8.8811	8.8811	84.188	168.38	-84.188	-84.188	93.06887	177.25666	OK	-84.18779
-9.88268	OK	1.2820E+5	OK	OK	158.94635 23.10893	49.33998	65.94564	-6.00000	1.4196	1.4196	9.8827	19.765	-9.8827	-9.8827	11.30229	21.18497	OK	-9.88268
-8.28427	OK	1.5294E+5	OK	OK	27.25526 24.11366	49.81820	65.06201	-6.00000	0.47207	0.47207	8.2843	16.569	-8.2843	-8.2843	8.75634	17.04061	OK	-8.28427
-7.65600	OK	1.6549E+5	OK	OK	-0.76433 25.11840	50.29641	64.17838	-6.00000	0.49575	0.49575	7.6560	15.312	-7.6560	-7.6560	8.15176	15.80776	OK	-7.65600
-6.90389	OK	1.8352E+5	OK	OK	0.00172 26.12313	50.77462	63.29474	-6.00000	0.47210	0.47210	6.9039	13.808	-6.9039	-6.9039	7.37599	14.27988	OK	-6.90389
-5.89987	OK	2.1475E+5	OK	OK	0.91419 27.12787	51.25283	62.41111	-6.00000	0.47215	0.47215	5.8999	11.800	-5.8999	-5.8999	6.37203	12.27190	OK	-5.89987
-5.02022	OK	2.5238E+5	OK	OK	-1.07081 28.13261	51.73105	61.52748	-6.00000	0.49591	0.49591	5.0202	10.040	-5.0202	-5.0202	5.51613	10.53635	OK	-5.02022
-4.14230	OK	3.0587E+5	OK	OK	0.00120 29.13734	52.20926	60.64384	-6.00000	0.42853	0.42853	4.1423	8.2846	-4.1423	-4.1423	4.57082	8.71312	OK	-4.14230
-3.01265	OK	4.2056E+5	OK	OK	0.69734 30.14208	52.68747	59.76021	-6.00000	0.42859	0.42859	3.0127	6.0253	-3.0127	-3.0127	3.44125	6.45390	OK	-3.01265
-2.50972	OK	5.0484E+5	OK	OK	-0.96321 31.14681	53.16568	58.87658	-6.00000	0.49610	0.49610	2.5097	5.0194	-2.5097	-2.5097	3.00582	5.51553	OK	-2.50972
-1.63206	OK	7.7632E+5	OK	OK	0.00807 32.15155	53.64390	57.99294	-6.00000	0.49614	0.49614	1.6321	3.2641	-1.6321	-1.6321	2.12821	3.76027	OK	-1.63206
-1.12959	OK	1.1216E+6	OK	OK	-0.01241 33.15629	54.12211	57.10931	-6.00000	0.49618	0.49618	1.1296	2.2592	-1.1296	-1.1296	1.62577	2.75535	OK	-1.12959
-0.89488	OK	1.4158E+6	OK	OK	-0.00000 34.16102	54.60032	56.22568	-6.00000	0.47612	0.47612	0.89488	1.7898	-0.89488	-0.89488	1.37101	2.26589	OK	-0.89488
-0.41284	OK	3.0690E+6	OK	OK	-10.95867 35.16576	55.07853	55.34205	-6.00000	0.47614	0.47614	0.41284	0.82569	-0.41284	-0.41284	0.88898	1.30182	OK	-0.41284
-0.37705	OK	3.3603E+6	OK	OK	24.38860 36.17049	55.55675	54.45841	-6.00000	0.49622	0.49622	0.37705	0.75409	-0.37705	-0.37705	0.87327	1.25032	OK	-0.37705
-0.41317	OK	3.0665E+6	OK	OK	-0.05386 37.17523	56.03496	53.57478	-6.00000	0.47616	0.47616	0.41317	0.82635	-0.41317	-0.41317	0.88933	1.30251	OK	-0.41317
-0.30307	OK	4.1805E+6	OK	OK	-24.31378 38.17997	56.51317	52.69115	-6.00000	0.47616	0.47616	0.30307	0.60615	-0.30307	-0.30307	0.77924	1.08231	OK	-0.30307
-0.53048	OK	2.3884E+6	OK	OK	34.19880 39.18470	56.99138	51.80751	-6.00000	0.47617	0.47617	0.53048	1.0610	-0.53048	-0.53048	1.00665	1.53713	OK	-0.53048
-0.65004	OK	1.9491E+6	OK	OK	-18.73076 40.18944	57.46959	50.92388	-6.00000	0.47619	0.47619	0.65004	1.3001	-0.65004	-0.65004	1.12623	1.77627	OK	-0.65004
-0.77184	OK	1.6415E+6	OK	OK	15.18250 41.19417	57.94781	50.04025	-6.00000	0.47620	0.47620	0.77184	1.5437	-0.77184	-0.77184	1.24804	2.01988	OK	-0.77184
-0.87892	OK	1.4415E+6	OK	OK	-12.72480 42.19891	58.42602	49.15661	-6.00000	0.45615	0.45615	0.87892	1.7578	-0.87892	-0.87892	1.33507	2.21399	OK	-0.87892
-1.38189	OK	9.1686E+5	OK	OK	-0.01504 43.20365	58.90423	48.27298	-6.00000	0.49995	0.49995	1.3819	2.7638	-1.3819	-1.3819	1.88184	3.26373	OK	-1.38189
-1.25629	OK	1.0085E+6	OK	OK	2.47758 44.20838	59.38244	47.38935	-6.00000	0.49998	0.49998	1.2563	2.5126	-1.2563	-1.2563	1.75627	3.01257	OK	-1.25629
-1.63142	OK	7.7662E+5	OK	OK	-2.71975 45.21312	59.86066	46.50572	-6.00000	0.45625	0.45625	1.6314	3.2628	-1.6314	-1.6314	2.08767	3.71909	OK	-1.63142
-1.75753	OK	7.2090E+5	OK	OK	0.00037 46.21785	60.33887	45.62208	-6.00000	0.45630	0.45630	1.7575	3.5151	-1.7575	-1.7575	2.21383	3.97136	OK	-1.75753
-1.88264	OK	6.7299E+5	OK	OK	-0.00753 47.22259	60.81708	44.73845	-6.00000	0.45636	0.45636	1.8826	3.7653	-1.8826	-1.8826	2.33900	4.22164	OK	-1.88264
-2.00834	OK	6.3087E+5	OK	OK	-0.00000 48.22733	61.29529	43.85482	-6.00000	0.50019	0.50019	2.0083	4.0167	-2.0083	-2.0083	2.50853	4.51687	OK	-2.00834
-2.14114	OK	5.9174E+5	OK	OK	1.71462 49.23206	61.77351	42.97118	-6.00000	0.52394	0.52394	2.1411	4.2823	-2.1411	-2.1411	2.66508	4.80621	OK	-2.14114
-2.26186	OK	5.6016E+5	OK	OK	-4.56660 50.23680	62.25172	42.08755	-6.00000	0.48025	0.48025	2.2619	4.5237	-2.2619	-2.2619	2.74212	5.00398	OK	-2.26186
-2.13598	OK	5.9317E+5	OK	OK	2.79717 51.24153	62.72993	41.20392	-6.00000	0.48033	0.48033	2.1360	4.2720	-2.1360	-2.1360	2.61632	4.75230	OK	-2.13598
-2.38563	OK	5.3110E+5	OK	OK	-2.95596 52.24627	63.20814	40.32028	-6.00000	0.46034	0.46034	2.3856	4.7713	-2.3856	-2.3856	2.84597	5.23160	OK	-2.38563
-2.26023	OK	5.6056E+5	OK	OK	-1.43739 53.25101	63.68636	39.43665	-6.00000	0.46043	0.46043	2.2602	4.5205	-2.2602	-2.2602	2.72066	4.98090	OK	-2.26023
-2.26186	OK	5.6016E+5	OK	OK	1.51128 54.25574	64.16457	38.55302	-6.00000	0.48060	0.48060	2.2619	4.5237	-2.2619	-2.2619	2.74246	5.00432	OK	-2.26186
-2.13591	OK	5.9319E+5	OK	OK	2.79720 55.26048	64.64278	37.66939	-6.00000	0.48069	0.48069	2.1359	4.2718	-2.1359	-2.1359	2.61659	4.75250	OK	-2.13591
-2.26211	OK	5.6010E+5	OK	OK	-2.95608 56.26521	65.12099	36.78575	-6.00000	0.52815	0.52815	2.2621	4.5242	-2.2621	-2.2621	2.79026	5.05237	OK	-2.26211
-2.13458	OK	5.9356E+5	OK	OK	-2.79956 57.26995	65.59921	35.90212	-6.00000	0.48449	0.48449	2.1346	4.2692	-2.1346	-2.1346	2.61906	4.75364	OK	-2.13458
59.83056	OK	2.5515E+4	OK	OK	1.35611 58.27469	66.07742	35.01849	-6.00000	-10.174	-10.174	49.656	99.313	-49.656	-49.656	49.65637	99.31274	OK	-59.83056
52.84950	OK	4.8029E+4	OK	OK	87.82795 59.27942	66.55563	34.13485	-6.00000	-26.470	-26.470	26.380	52.760	-26.380	-26.380	26.37998	52.75996	OK	-52.84950
99.24278	OK	2.2923E+4	OK	OK	86.17941 60.28416	67.03384	33.25122	-6.00000	-43.972	-43.972	55.271	110.54	-55.271	-55.271	55.27088	110.54175	OK	-99.24278
158.98291	OK	1.2281E+4	Fails	Fails	88.43852 61.28889	67.51205	32.36759	-6.00000	-55.815	-55.815	103.17	206.34	-103.17	-103.17	103.16839	206.33678	OK	-158.98291
93.00820	OK	3.4105E+4	OK	OK	180.03398 62.29363	67.99027	31.48395	-6.00000	-55.858	-55.858	37.150	74.301	-37.150	-37.150	37.15032	74.30064	OK	-93.00820
64.59243	OK	3.8775E+4	OK	OK	179.99782 63.29836	68.46848	30.60032	-6.00000	-31.916	-31.916	32.676	65.352	-32.676	-32.676	32.67607	65.35214	OK	-64.59243
68.61048	OK	2.0167E+4	OK	OK	90.00036 64.30310	68.94669	29.71669	-6.00000	-5.7849	-5.7849	62.826	125.65	-62.826	-62.826	62.82559	125.65119	OK	-68.61048
-3.59683	OK	4.8197E+8	OK	OK	177.27496 65.30784	69.42490	28.83306	-6.00000	-3.5942	-3.5942	0.0026288	0.0052576	-0.0026288	-0.0026288	0.00263	0.00526	OK	-3.59683
-3.59675	OK	4.9902E+8	OK	OK	-46.21949 66.31257	69.90312	27.94942	-6.00000	-3.5942	-3.5942	0.0025390	0.0050780	-0.0025390	-0.0025390	0.00254	0.00508	OK	-3.59675
193.59132	OK	6.7319E+3	Fails	Fails	131.82526 67.31731	70.38133	27.06579	-6.00000	-5.3830	-5.3830	188.21	376.42	-188.21	-188.21	188.20832	376.41664	OK	-193.59132
102.57912	OK	1.5161E+4	OK	OK	131.82527 68.32204	70.85954	26.18216	-6.00000	-19.009	-19.009	83.571	167.14	-83.571	-83.571	83.57057	167.14114	OK	-102.57912
172.88591	OK	9.0339E+3	Fails	Fails	41.32837 69.32678	71.33775	25.29852	-6.00000	-32.636	-32.636	140.25	280.50	-140.25	-140.25	140.24976	280.49953	OK	-172.88591
235.49475	OK	7.6522E+3	Fails	Fails	90.00040 70.33152	71.81597	24.41489	-6.00000	-69.921	-69.921	165.57	331.15	-165.57	-165.57	165.57355	331.14711	OK	-235.49475
226.85578	OK	1.2670E+4	Fails	Fails	90.00031 71.33625	72.29418	23.53126	-6.00000	-126.86	-126.86	99.999	200.00	-99.999	-99.999	99.99924	199.99848	OK	-226.85578
373.33747	OK	6.8193E+3	Fails	Fails	89.99906 72.34099	72.77239	22.64762	-6.00000	-187.54	-187.54	185.80	371.59	-185.80	-185.80	185.79666	371.59333	OK	-373.33747
277.59144	OK	2.8827E+4	OK	OK	99.72314 73.34572	73.25060	21.76399	-6.00000	-233.64	-233.64	43.951	87.902	-43.951	-43.951	43.95116	87.90231	OK	-277.59144
340.68167	OK	1.5787E+4	OK	OK	133.26159 74.35046	73.72882	20.88036	-6.00000	-260.42	-260.42	80.258	160.52	-80.258	-80.258	80.25777	160.51553	OK	-340.68167
351.38530	OK	1.6405E+4	OK	OK	208.86565 75.35520	74.20703	19.99673	-6.00000	-274.15	-274.15	77.233	154.47	-77.233	-77.233	77.23317	154.46634	OK	-351.38530
297.31037	OK	1.9552E+4	OK	OK	216.60730 76.35993	74.68524	19.11309	-6.00000	-232.51	-232.51	64.800	129.60	-64.800	-64.800	64.79991	129.59982	OK	-297.31037
250.83989	OK	1.4671E+4	Fails	Fails	214.00114 77.36467	75.16345	18.22946	-6.00000	-164.48	-164.48	86.361	172.72	-86.361	-86.361	86.36063	172.72127	OK	-250.83989
228.22309	OK	1.0796E+4	Fails	Fails	237.47094 78.36940	75.64166	17.34583	-6.00000	-110.87	-110.87	117.35	234.71	-117.35	-117.35	117.35393	234.70787	OK	-228.22309
126.34502	OK	1.9086E+4	OK	OK	250.64118 79.37414	76.11988	16.46219	-6.00000	-59.962	-59.962	66.383	132.77	-66.383	-66.383	66.38306	132.76613	OK	-126.34502
					240.54918 80.37888	76.59809	15.57856	-6.00000	-52.244	-52.244	189.80	379.60	-189.80	-189.80	189.80113	379.60226	OK	-242.04499

Stage: Compn.: Total:	Stage: Name Check: Compn.	Specific Rad. of Curv.	Specific Check: Utility: Rad. of	Sub-utility Check: Name Rad. of	Distance from Tens. Strain	x	y	z	Ax. Strain:	Ax. Strain:	Flexural: Tension:	Flexural: Tension:	Flexural: Compn.:	Flexural: Compn.:	Tension: Total:	Tension: Total:	Check: Tension	Compn.: Total:
242.04499	OK	6.6754E+3	Fails	Fails	263.24028													
					81.38361	77.07630	14.69493	-6.00000	-108.23	-108.23	193.39	386.78	-193.39	-193.39	193.38973	386.77946	OK	-301.61849 -
301.61849	OK	6.5515E+3	Fails	Fails	-62.72812													
					82.38835	77.55451	13.81129	-6.00000	-122.68	-122.68	48.751	97.501	-48.751	-48.751	48.75051	97.50102	OK	-171.43257 -
171.43257	OK	2.5989E+4	OK	OK	206.03260													
					83.39308	78.03273	12.92766	-6.00000	-85.989	-85.989	104.60	209.20	-104.60	-104.60	104.60229	209.20458	OK	-190.59079 -
190.59079	OK	1.2113E+4	Fails	Fails	-10.68445													
					84.39782	78.51094	12.04403	-6.00000	-53.299	-53.299	37.494	74.988	-37.494	-37.494	37.49402	74.98804	OK	-90.79297 -
90.79297	OK	3.3792E+4	OK	OK	-27.90408													
					85.40256	78.98915	11.16040	-6.00000	-24.242	-24.242	54.642	109.28	-54.642	-54.642	54.64189	109.28379	OK	-78.88412 -
78.88412	OK	2.3187E+4	OK	OK	-16.59654													
					86.40729	79.46736	10.27676	-6.00000	1.5871	1.5871	184.22	368.44	-184.22	-184.22	185.80464	370.02214	OK	-184.21750 -
184.21750	OK	6.8777E+3	Fails	Fails	-4.32811													
					87.41203	79.94558	9.39313	-6.00000	24.431	24.431	12.486	24.972	-12.486	-12.486	36.91656	49.40240	OK	-12.48584 -
12.48584	OK	1.0147E+5	OK	OK	265.61567													
					88.41676	80.42379	8.50950	-6.00000	44.644	44.644	11.562	23.125	-11.562	-11.562	56.20638	67.76874	OK	-11.56236 -
11.56236	OK	1.0958E+5	OK	OK	-73.46990													
					89.42150	80.90200	7.62586	-6.00000	62.603	62.603	12.125	24.250	-12.125	-12.125	74.72821	86.85343	OK	-12.12521 -
12.12521	OK	1.0449E+5	OK	OK	-54.36290													
					90.42624	81.38021	6.74223	-6.00000	78.546	78.546	13.568	27.136	-13.568	-13.568	92.11447	105.68251	OK	-13.56804 -
13.56804	OK	9.3381E+4	OK	OK	-40.49808													
					91.43097	81.85843	5.85860	-6.00000	92.756	92.756	15.195	30.390	-15.195	-15.195	107.95069	123.14584	OK	-15.19514 -
15.19514	OK	8.3382E+4	OK	OK	-31.06639													
					92.43571	82.33664	4.97496	-6.00000	105.50	105.50	16.556	33.112	-16.556	-16.556	122.05505	138.61118	OK	-16.55613 -
16.55613	OK	7.6528E+4	OK	OK	-24.96128													
					93.44044	82.81485	4.09133	-6.00000	116.81	116.81	17.568	35.136	-17.568	-17.568	134.37408	151.94220	OK	-17.56812 -
17.56812	OK	7.2119E+4	OK	OK	-21.43280													
					94.44518	83.29306	3.20770	-6.00000	126.97	126.97	17.859	35.719	-17.859	-17.859	144.82979	162.68917	OK	-17.85938 -
17.85938	OK	7.0943E+4	OK	OK	-18.34588													
					95.44992	83.77128	2.32407	-6.00000	136.13	136.13	17.576	35.151	-17.576	-17.576	153.71028	171.28586	OK	-17.57558 -
17.57558	OK	7.2089E+4	OK	OK	-17.16655													

Summary: There is failure at one(or many) location(s). e.g. Stage 0, Specific Utility 6, location (79.467364|10.276763|-6.000000)
Note: Tensile strains are +ve, compressive strains are -ve.
Note: The peak flexural tensile strain orientation angle is measured with respect to the global z-axis by looking at the end point of the utility from the start point. Anti-clockwise is positive.

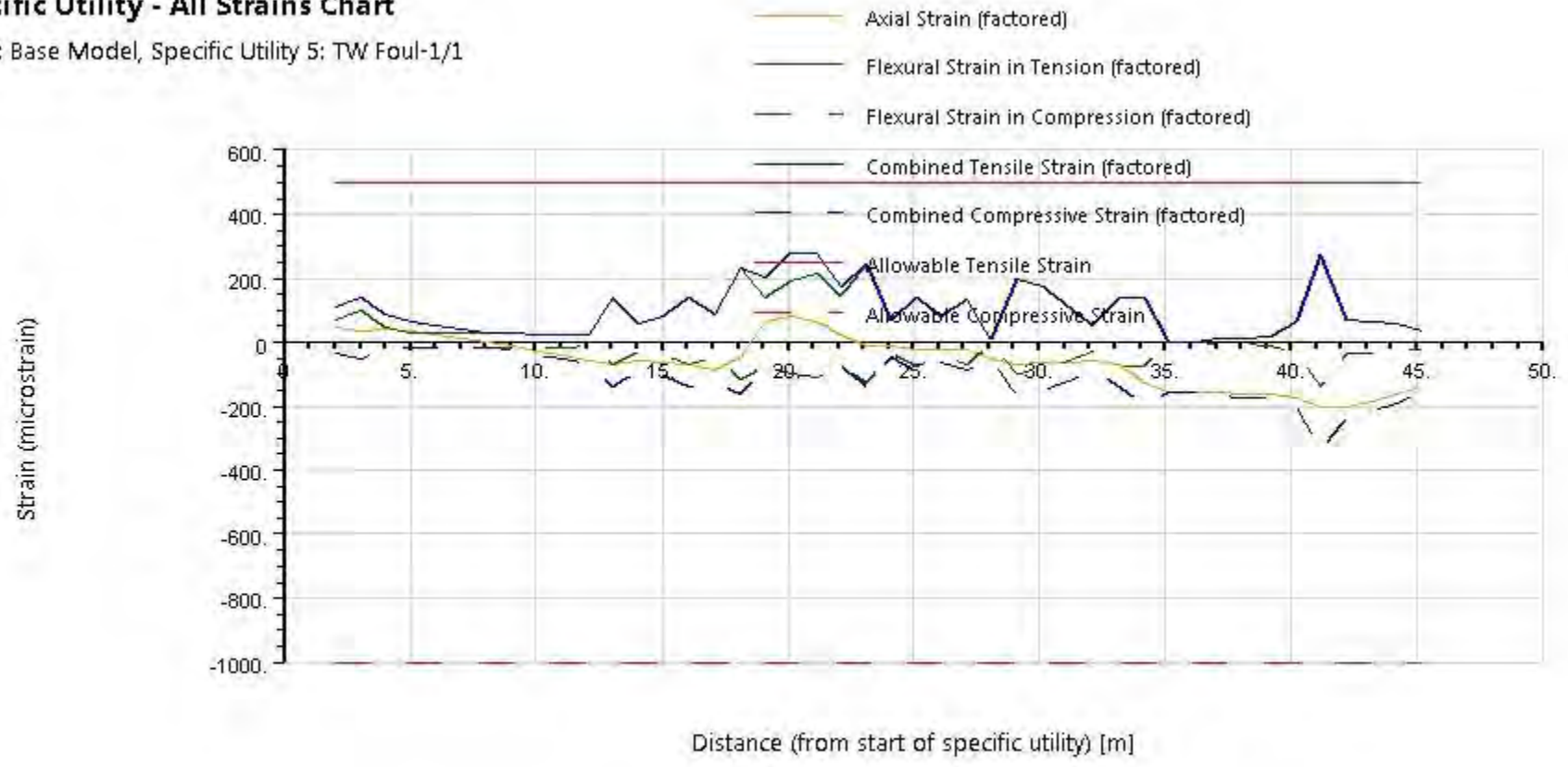
Specific Utility Damage Results - Maximum Values

Stage: Ref.	Stage: Name	Specific Utility: Ref.	Specific Utility: Name	Jointed	Max. Pullout: Factored: Location [m]	Max. Pullout: Factored: Value [mm]	Max. Rotation: Factored: Location [m]	Max. Rotation: Factored: Value [Deg]	Max. Strain: Tension: Factored: Location [m]	Max. Strain: Tension: Factored: Value [με]	Max. Compn.: Factored: Location [m]	Max. Strain: Compn.: Factored: Value [με]	Min. Rad. of Curv.: Location [m]	Min. Rad. of Curv.: Value [m]	Max. Disp.: Vert.: Location [m]	Max. Disp.: Vert. : Value [mm]	Max. Disp: Horiz. x: Location [m]	Max. Disp: Horiz. x: Value [mm]	Max. Disp: Horiz. y: Location [m]	Max. Disp: Horiz. y: Value [mm]
0	Base Model	1	TW Main-1	Yes	21.059	0.24114	33.093	0.04987	33.09347	74.66325	36.10197	-85.77895	33.093	1.2724E+3*	33.093	4.2123	48.135	-1.4901	32.091	7.5133
		2	TW Main-2	Yes	15.045	0.16673	15.045	0.04720	14.04162	60.49349	11.03270	-63.02711	14.042	1.6122E+3*	15.045	5.2091	0.0	1.5703	34.101	8.5518
		3	TW Main-3	Yes	4.9845	0.015295	3.9876	0.00032	0.99689	2.17573	0.99689	-1.22360	0.99689	7.7640E+4	9.9680	5.6359	9.9680	0.74202	9.9680	9.1469
		4	TW Main-4	Yes	49.791	0.32301	24.896	0.05378	25.89152	56.21091	28.87900	-75.75874	25.892	1.6901E+3*	24.896	6.6823	42.821	-2.0354	24.896	9.6091
		5	TW Foul-1	Yes	20.089	0.36139	41.182	0.00883	21.09314	277.60597	41.18184	-335.68234	41.182	6.5201E+3*	30.133	3.7500	47.208	-1.4513	27.120	7.3058
		6	TW Foul-2	Yes	16.076	0.45274	16.076	0.01024	16.07578	450.60764	72.34099	-373.33747	16.076	5.6235E+3*	61.289	6.8204	86.407	-2.2484	58.275	10.194

Note: * symbol indicates that the value has exceeded one of (or both) the limiting criteria

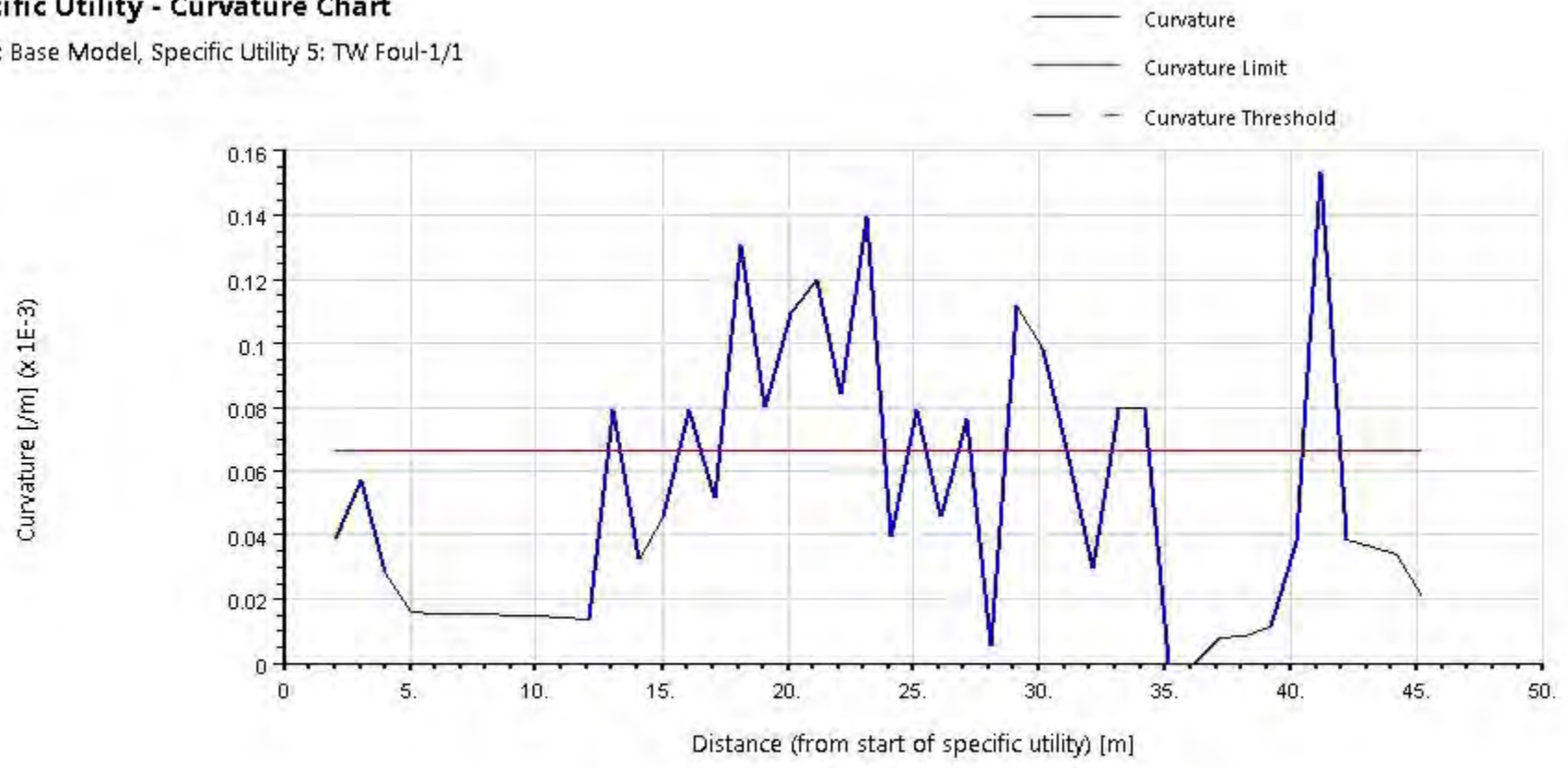
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



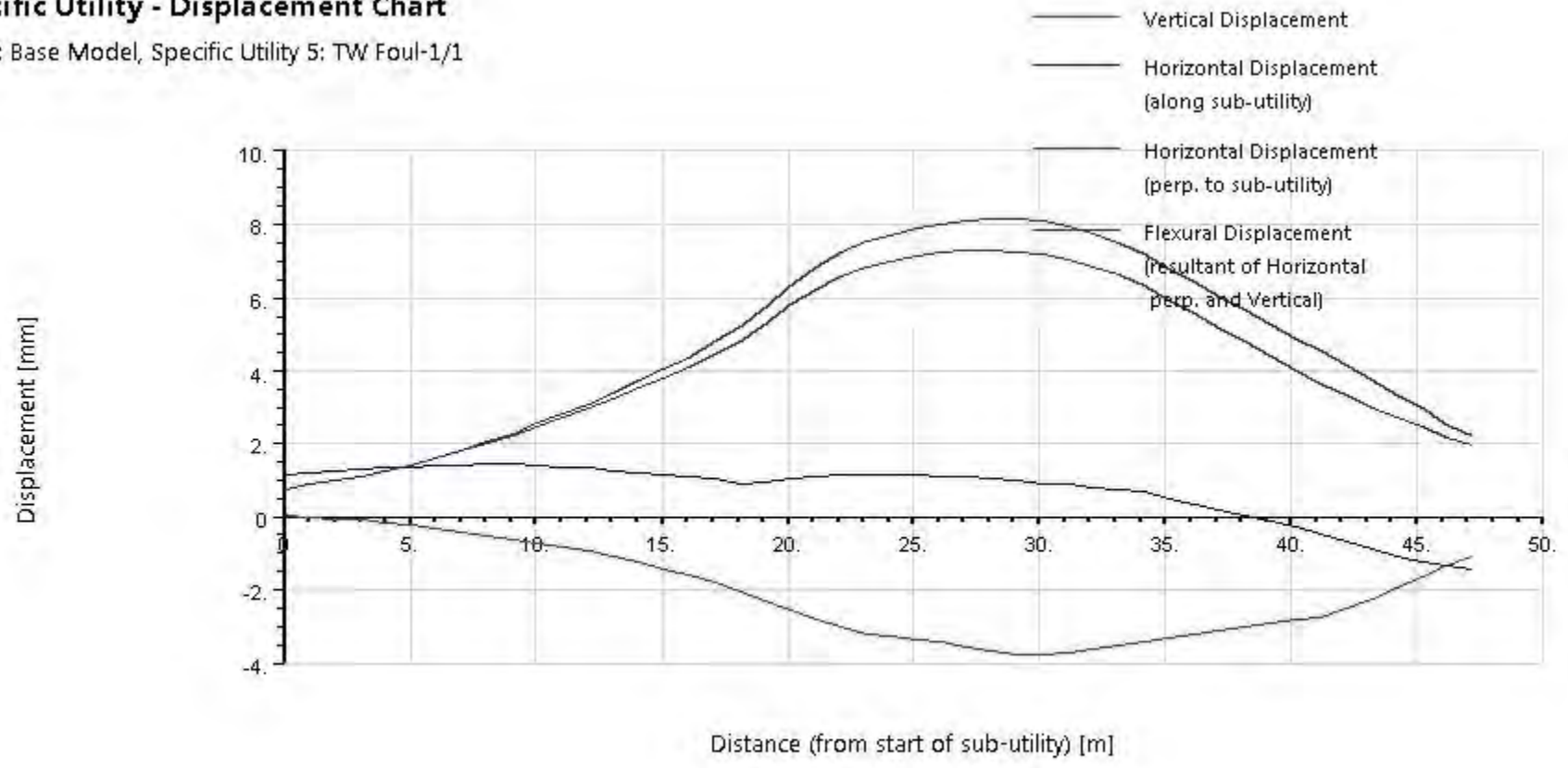
Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



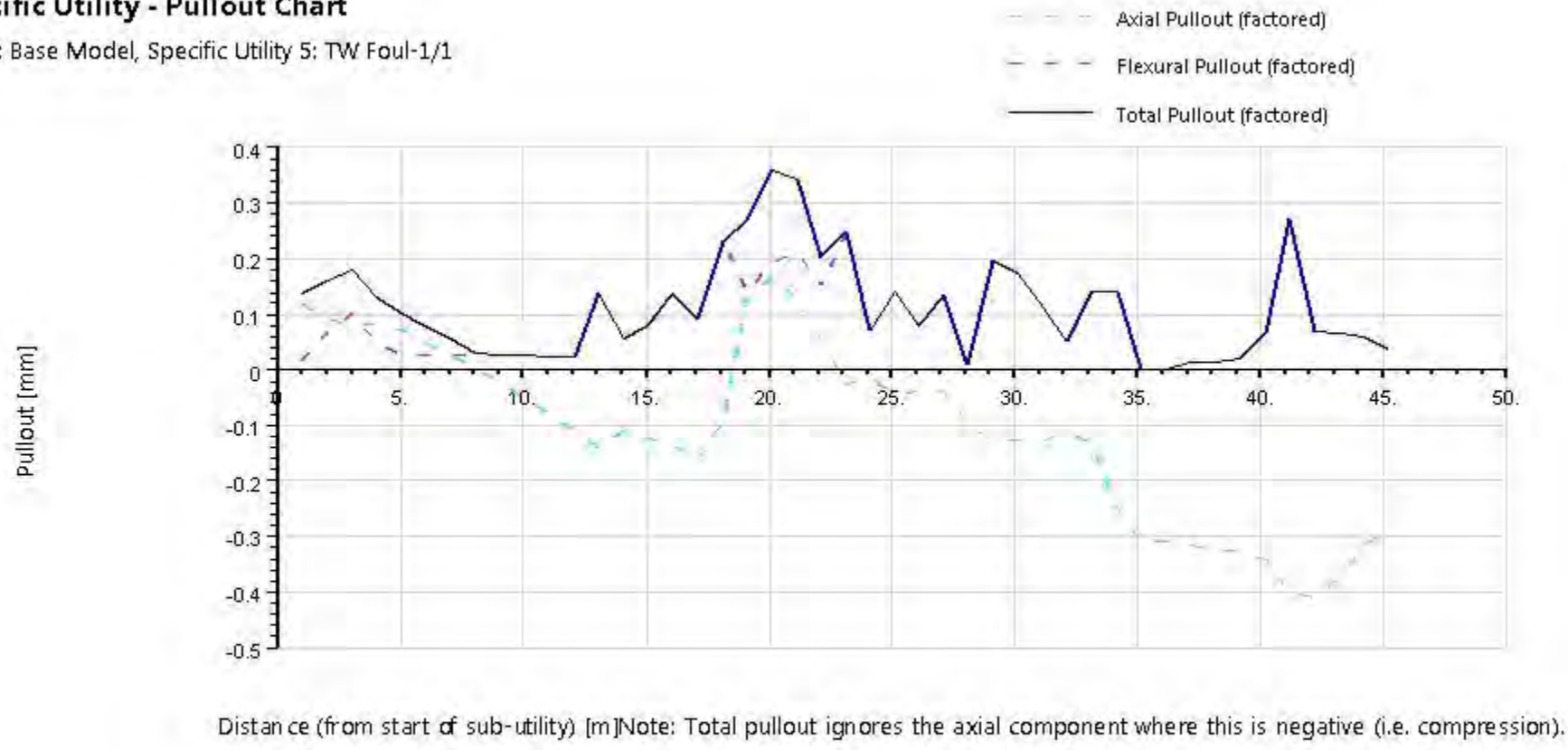
Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



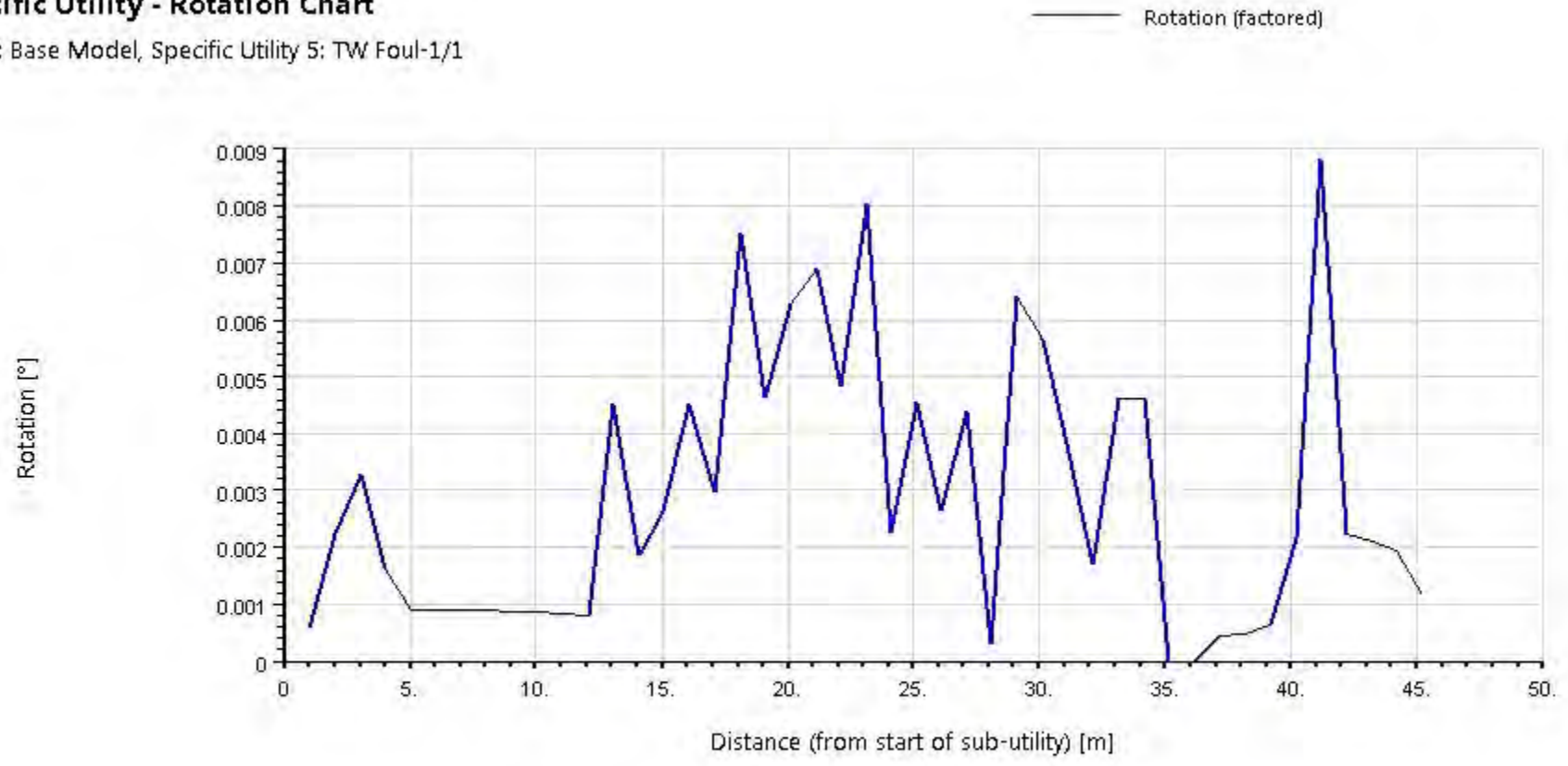
Specific Utility - Pullout Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



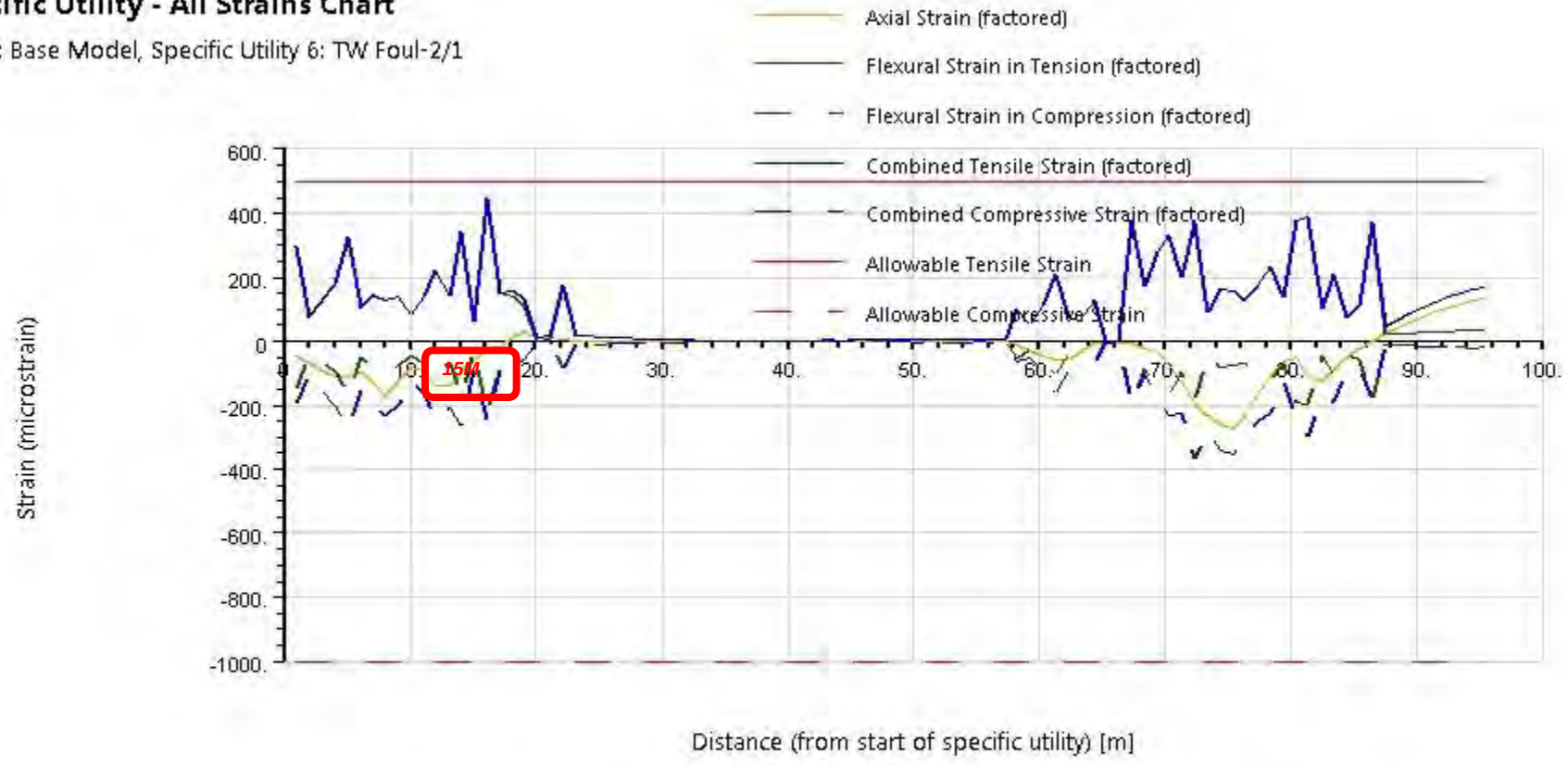
Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 5: TW Foul-1/1



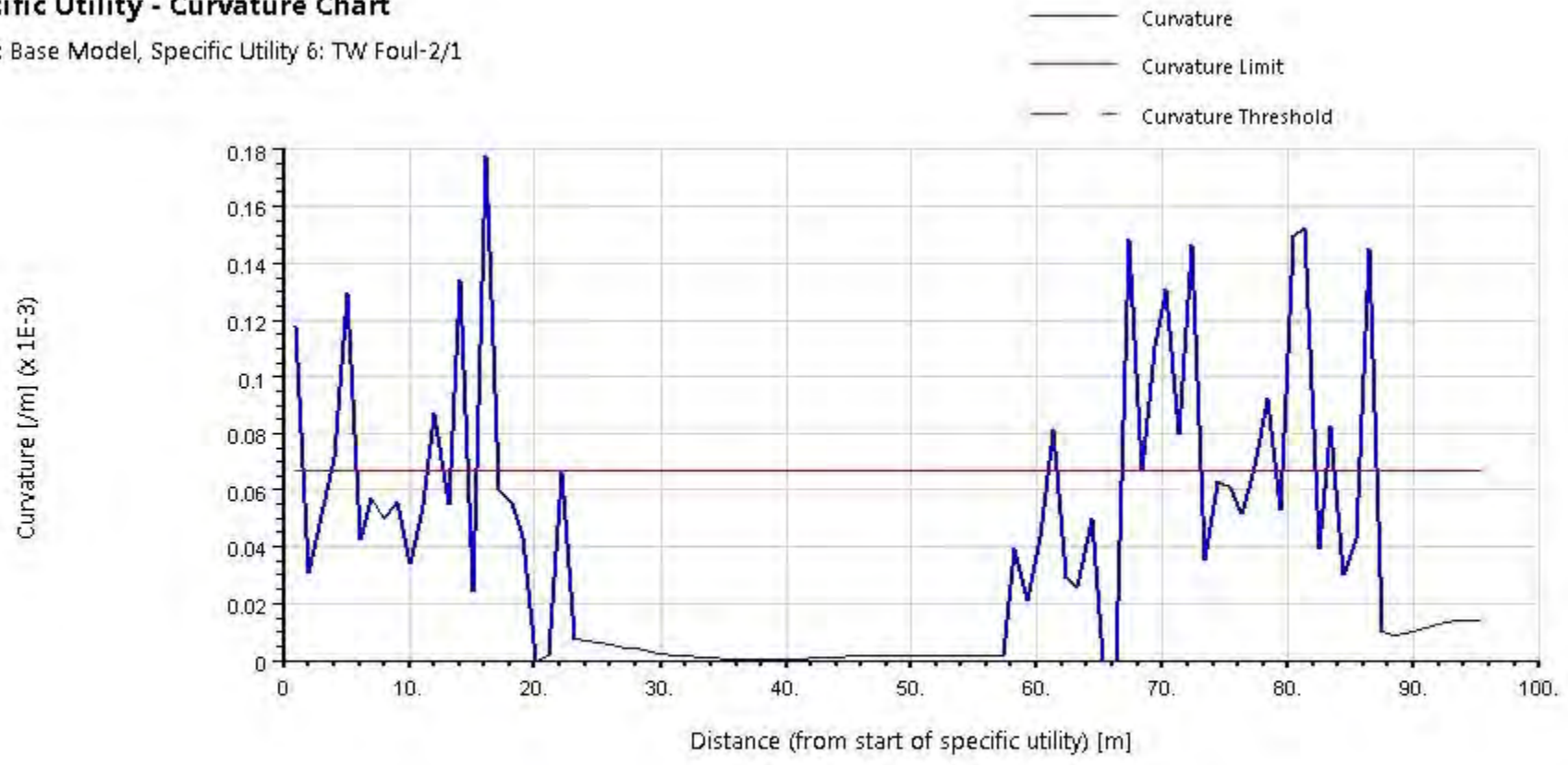
Specific Utility - All Strains Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



Specific Utility - Curvature Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

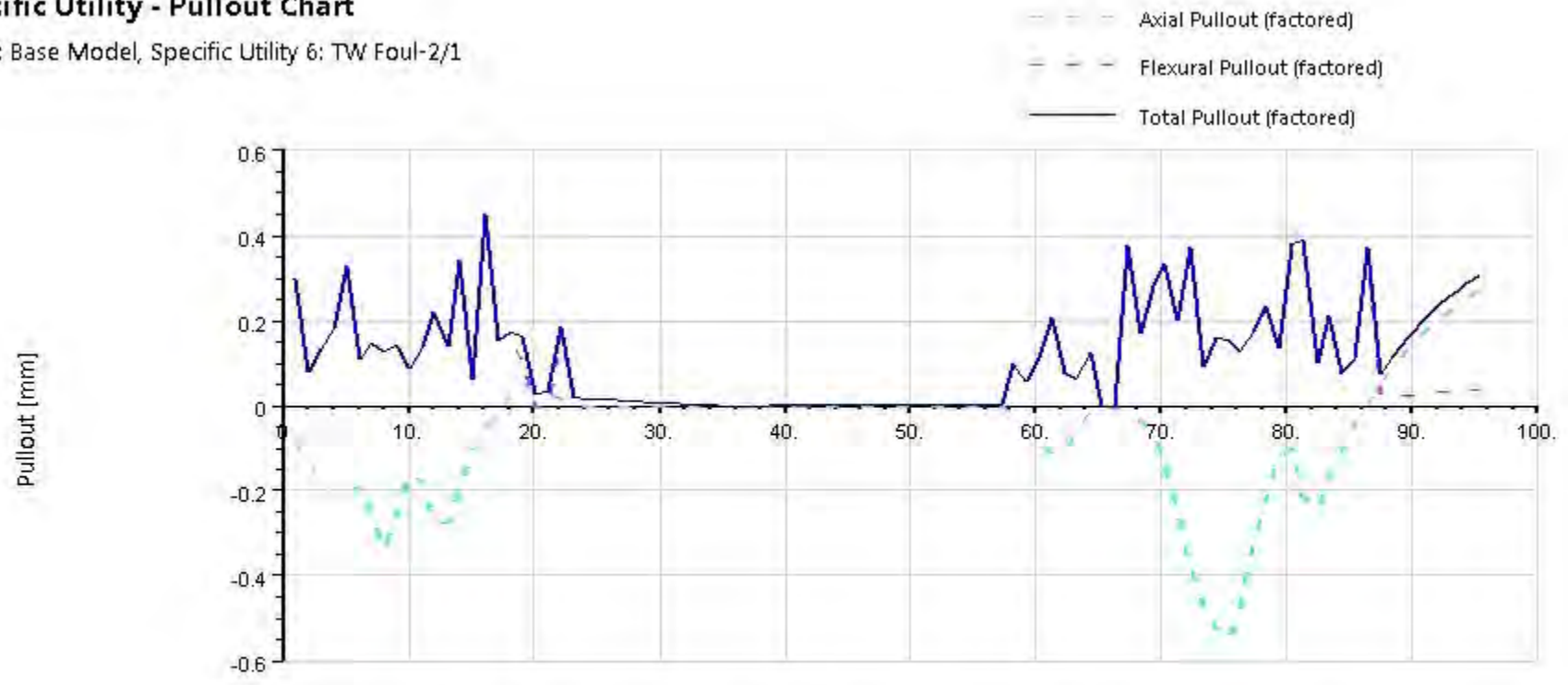


Specific Utility - Displacement Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1

Specific Utility - Pullout Chart

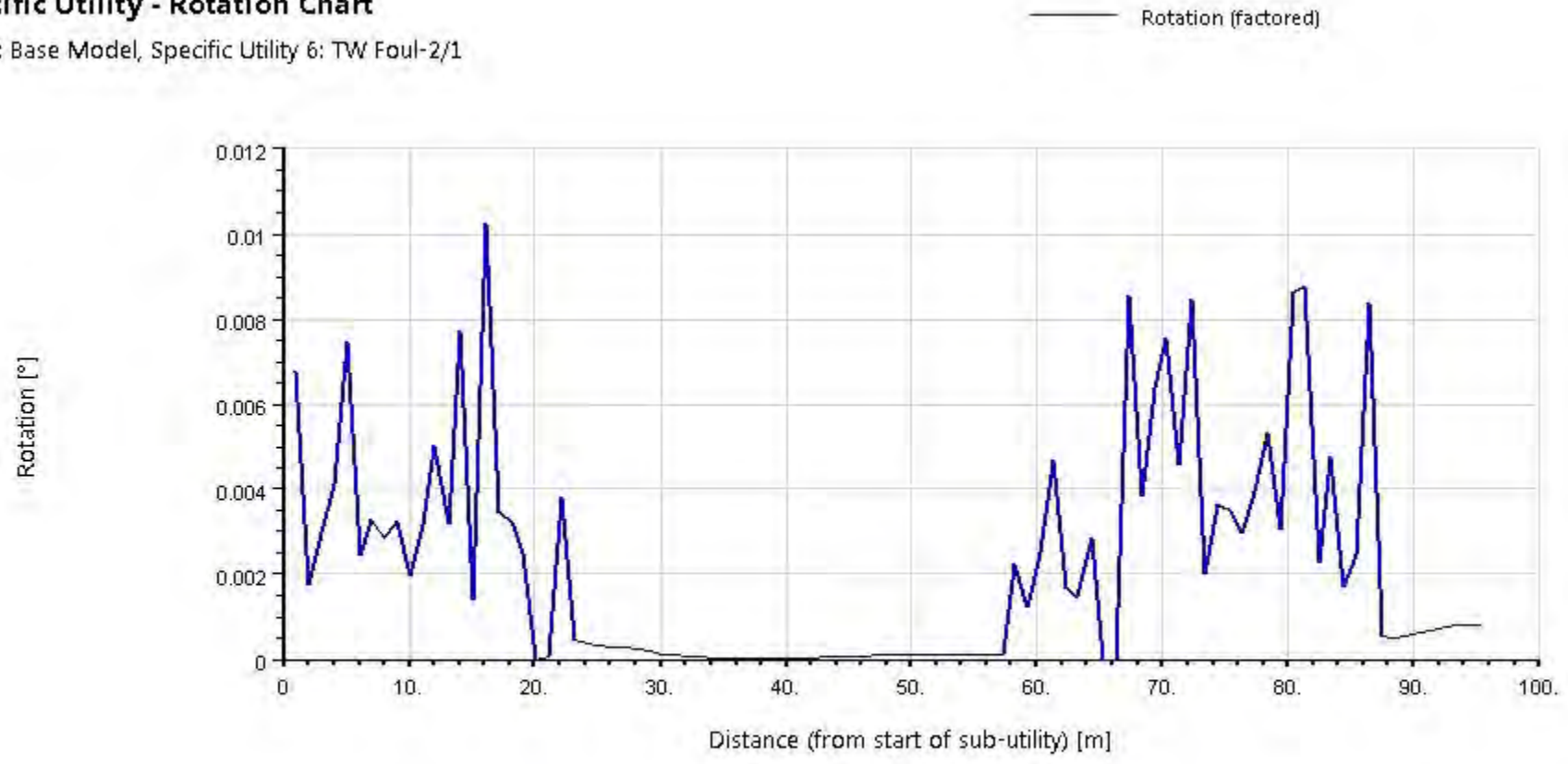
Stage: Base Model, Specific Utility 6: TW Foul-2/1



Note: Total pullout ignores the axial component where this is negative (i.e. compression).

Specific Utility - Rotation Chart

Stage: Base Model, Specific Utility 6: TW Foul-2/1



APPENDIX E
EXISTING AND PROPOSED STRUCTURES INCLUDING LOADING INFORMATION