

Titles

Job No.: P18-180
 Job Title: 12-13 Eldon Grove
 Sub-title:
 Calculation Heading: Ground Movement Analysis
 Initials: VB
 Checker:
 Date Saved:
 Date Checked:
 Notes:
 File Name: 12 Eldon Grove.pdd
 File Path: C:\Users\JSpyvee\Desktop\J9146 - Park Street Hotel, Cambridge\Eldon Grove

History

Date	Time	By	Notes
02-Feb-2017	21:29	jgudgin	
02-Feb-2017	22:19	jgudgin	
05-Feb-2017	19:42	jgudgin	
06-Feb-2017	11:07	jgudgin	
09-Aug-2017	21:12	jgudgin	
08-Oct-2019	16:24	dru	
31-Oct-2019	16:24	dru	
12-Sep-2022	11:42	JSpyvee	Open

Analysis Options

General

Global Poisson's ratio: 0.20
 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

Consolidation

Consolidation : No

Soil ProfilesSoil Profile 1

Layer ref.	Name	Level at top [mOD]	Number of intermediate displacement levels	Youngs Modulus [kN/m ²]	Youngs Modulus [kN/m ²]	Poissons ratio	Non-linear curve
				Top	Btm.		
1	Layer 1	0.0	5	40000.	40000.	0.20000	None
2	Layer 2	-1.1000	5	40000.	400000.	0.20000	None

Non-linear Curve Coordinates - Non-linear Curve 1

Point	Strain [%]	Factor

Soil Zones

Zone	Name	X min [m]	X max [m]	Y min [m]	Y max [m]	Profile
1	zone 1	-10.000	20.000	-20.000	10.000	Soil Profile 1

Polygonal Load Data

Load ref.	Name	Position : Level	Position : Polygon	Coords. : Polygon Rectangles : Rect. tolerance	No. of Rectangles	Value : Normal (local z)
1	Basement Excavation	-4.00000	(0,0)	(10.7,0) (10.7,-10.6) (10.4,-10.6) (10.4,-11.7) (6.24,-11.7) (6.24,-10.6) (4.12,-10.6) (4.12,-11.7) (0,-11.7) (0,0)	10.0000	3 -76.000

Polygonal Loads' Rectangles

No.	Centre x	Centre y	Angle of local x from global X [Degrees]	Width [m]	Depth [m]
Load 1 : Basement Excavation (Edge 2 optimal)					
1	5.35050	-5.29500	-90.000	10.590	10.701
2	2.05800	-11.14000	-90.000	1.1000	4.1160
3	8.29350	-11.16250	-90.000	1.0550	4.1150

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 Results	Detailed Results
Grid 1	Global X	-10.00000	10.00000	0.00000	-	-20.00000	0.00000	10	30.00000	10	Yes	Yes
Exclusion Zone	Global X	-10.00000	10.00000	-15.00000	-	-20.00000	-15.00000	10	30.00000	10	Yes	Yes
Network Rail Asset	Global X	-10.00000	10.00000	-25.00000	-	-20.00000	-25.00000	10	30.00000	10	Yes	Yes