SOIL AS A FOUNDATION MATERIAL

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By

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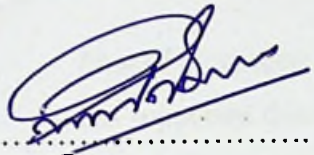
DECLARATION

The research work included in this dissertation, in part or whole has not been previously presented for any other academic qualification at any institution.



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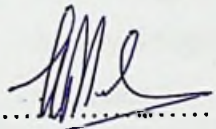
I have supervised and accepted this dissertation for the submission of the degree.



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ABSTRACT

Cement Stabilized Soil Blocks are now considerably popular in the construction industry as an alternative building material to burnt bricks and cement sand blocks. It provides a timely solution for the over exploitation of clay (for bricks) and sand which has resulted in several sever environmental problems. However, as a foundation material there has been little focus on the use of soil. Apart from concrete, rubble stones with cement and sand are widely used as a foundation material even in construction of one or two storied buildings. However, in some parts of the country burnt bricks are also used as a foundation material especially in construction of single story houses. All these materials used for foundation are transported from sources concentrated in particular areas. In this context if compressed soil (stabilized with cement) could be used as a foundation material it will also provide a solution against over exploitation of sources of rock and sand.

This dissertation presents the research work carried out to introduce compressed soil blocks stabilized with cement as a foundation material alternative to random rubble masonry and burnt brick work. These blocks are manufactured using lateritic soils and a locally designed and manufactured manually operated soil compressing machine.

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CHAPTER 1
INTRODUCTION

1.1 GENERAL INTRODUCTION

In the present building construction industry there is very limited focus on the use of soil as a foundation material. Apart from concrete, rubble stones with cement and sand is used as a foundation material even in the construction of one or two storied building units. However, in some areas burnt bricks are still used as a foundation material especially for single storey houses. But all these materials used for construction of foundations are transported from sources concentrated in particular areas. Not only use of these materials but also the systems adopted to produce or extract them are adverse to the harmony of nature and its dynamic balance.

With the increase in the requirement of houses the residual capacity of available sources which could be used to produce conventional building materials has been diminishing considerably. Accordingly, apart from environmental problems the scarcity of the sources will directly affect the cost of building material. In this research work, attention is focused in finding whether compressed soil blocks, which, used as an alternative material to the burnt brick or cement sand block wall panels, could be an alternative material to rubble masonry or burnt brick work foundations.

In this research the performance of compressed soil blocks as foundation material was tested with respect to its capability to withstand the load of a two storied house under dry and wet conditions.

1.2 OBJECTIVES

The main objectives of this research are

a. to use on-site material (soil) which is to be excavated and removed to level the site and to form trenches of foundations and/or which could be easily found

close to the site, as a foundation material both environmentally friendly and cost effectively.

b. to minimise using of metal, rubble stones, sand and cement
c. to contribute to maintain cyclic balance of nature

1.3 METHODOLOGY

The methodology adopted in this research work is limited to establishing material strengths and the methods of achieving such material strengths required and its behaviour when they are loaded under various conditions.

The methodology adopted could be described as follows.

a. A literature review
b. A comprehensive experimental programme carried out to determine the strengths of individual compressed soil blocks stabilized with cement and to identify material properties of same from core samples extracted from the compressed soil blocks manufactured with different cement contents.
c. Detailed cost study to determine its cost effectiveness.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

Compressed Soil Blocks provide a timely solution for the existing severe problem faced in the construction industry due to scarcity of sand. Apart from the sand problem, created by an almost cyclic process, these blocks provide a fascinating solution to the environmental problems in general related to the modern construction industry. (Peiris and Wijesinghe, 2004)

Being an unburnt block except for a few chemical reactions involved with the small percentage (2%-8%) of added Portland cement as stabilizer there is hardly any irreversible chemical reaction in the manufacturing process of the blocks. Therefore, the process virtually does not affect the cyclicity of the eco system. Also due to the fact that these blocks could be made by soils within a wide range of textures the raw material could be easily found near the construction sites (Peiris and Wijesinghe, 2004)

It would be essential to explore ways and means of optimizing the use of resources available locally while paying sufficient attention to the safety and protection of the environment. This is particularly true for Sri Lanka where the shortage of conventional building materials has made good housing too expensive for a majority of low to medium income earners. (Jayasinghe, 1999)

Over exploitation of these resources in the past two or three decades has resulted in considerable environmental degradation such as those associated with clay mining, sand mining and deforestation. Concrete is expensive due to high cement content. Steel is locally manufactured using imported raw materials. (Jayasinghe, 1999)

In this research compressed soil blocks are introduced as an alternative to rubble foundations or burnt brickwork foundations and checked whether it could withstand

the load of a typical two storied house transferred through load bearing masonry walls (constructed with compressed soil blocks/ bricks).

2.2 COMPRESSED SOIL BLOCKS

In order to use cement stabilized soil as a load bearing material, strong blocks made with a suitable machine should be used (Jayasinghe, 1999)

The most popular stabilizing agent has been cement due to its wide availability and its suitability to stabilize lateritic soils found in tropical and sub-tropical countries. Lime and rice/ husk ash also have been used in certain areas. Lime is particularly suitable for stabilizing soils with high clay contents. In Sri Lanka lateritic soil can be found a few centimeters below the ground level, beneath the organic top soil (Jayasinghe C, 1999)

A large number of types of machines are available for manufacturing cement stabilized soil blocks. The properties of blocks vary with the compaction ratios that are achieved in these machines. Since highly sophisticated hydraulic or motor operated machines can be prohibitively expensive for developing countries like Sri Lanka, a simple economical manually operated machine giving sufficient compaction ratio should be selected. (Jayasinghe, 1999)

2.3 METHODS OF STABILIZATION OF SOIL BLOCKS

In cement stabilized lateritic soil blocks, the stabilization is achieved by three different means. These are mechanical stabilization, physical stabilization and chemical stabilization.

Mechanical stabilization, in the form of compaction, is used to change the structure of the soil, thus improving density and mechanical strength. It will also reduce the porosity and permeability. Physical stabilization is used to change the composition and texture. For example, large particles are removed by sieving. When the fines content is too high, sand is added. Chemical stabilization is used by adding products like cement, lime etc. to modify the soil properties. (Jayasinghe, 1999)

2.3.1 COMPRESSIVE STRENGTH OF COMPRESSED SOIL BLOCKS STABILIZED WITH CEMENT

Strength of Blocks is affected by number of factors such as fines percentage, liquid limit and plastic index (PI), cement content and compaction ratio.

The characteristics of soil types and compressed soil blocks made with the locally manufactured compressing machine "Mihisura" for set compaction ratio of 1.85 are given in tables 2.1 and 2.2.

Table 2.1: Characteristics of soil Types S-01, S-02 & S-03 (Peiris & Wijesinghe, 2004)

Soil Type	Fine Percentage (%)	Clay Percentage (%)	Liquid Limit (%)	Plasticity Index (%)
S-01	52	24	73.5	36.91
S-02	43	20	58.0	25.62
S-03	39	18	48.8	17.61

Table: 2.2: Characteristics of cement stabilized soil blocks made with the machine 'Mihisura' for soil types S-01, S-02 & S-03.(Peiris & Wijesinghe, 2004)

Soil Type	Block Identification No.	Mix Proportion Cement (%)(By Weight)	Average Compressive Strength (N/mm2) 28 Day	Average Wet compressive Strength (N/mm2)				Water Absorption % (24 hrs immersion in cold water)
				24 hrs Soaked 29 Day	*48 hrs Soaked 30 Day*	*72 hrs Soaked 31 Day*	*96 hrs Soaked 32 Day*	
S-01	A	4.00	2.87	1.35	1.75	1.35	1.30	16.80
	B	5.00	3.43	1.80	1.90	2.10	2.00	16.00
	C	6.25	3.97	2.70	2.85	2.40	2.45	13.50
S-02	D	4.00	3.00	1.25	1.50	1.40	1.10	13.40
	E	5.00	3.63	1.95	2.20	1.80	2.25	13.10
	F	6.25	4.43	2.45	2.50	2.55	2.55	12.90
S-03	G	4.00	3.07	1.35	1.25	1.15	1.35	16.30
	H	5.00	3.57	2.05	2.20	2.10	2.40	13.00
	I	6.25	4.47	2.70	2.20	2.35	2.85	14.60

Blocks made out of soil types S-02 and S-03 which are with relatively lower fines percentage, (43% & 39%) gave higher values for their compressive strength. However soil type S-01 with fine percentage greater than 50% also gave considerable value for compressive strength. In general when fines percentage

increases, it is essential to have higher compressive force to stabilize the blocks mechanically. Water absorption ratios were between 13% and 16.8%, and wet compressive strengths were 58% of their dry compressive strength for mix proportion of cement 5% and 6.25% after four days soak period. Even the 4% cement proportion blocks gave a wet compressive strength which was 37% of its dry compressive strength.

Based on these factors it is clear that even blocks made out of higher fines percentage soil types are stabilized successfully mechanically when using the machine "Mihisura". The set compaction ratio of 1.85 is well enough to stabilize higher fines percentage soils. An increase of cement percentage will give a higher value of compressive strength and compaction characteristics for the same soil types. When comparing the three types of soil, soil type S-03 with fines percentage of 39% and liquid limit and plasticity index of 31.19% and 17.61% respectively indicated the highest values of wet compressive strength and compaction values. (Peiris & Wijesinghe, 2004)

2.4 LOCALLY MANUFACTURED SOIL COMPRESSING MACHINES

A number of machines available in various parts of the world are being used for manufacturing compressed Soil Blocks. Of these the Cinva ram machine and Auram Press 3000 have been used in Sri Lanka for a considerable time.

However in 2003/2004 the prototype machine named 'Mihisura' was designed and developed locally to produce compressed soil blocks by a joint collaboration between the Central Engineering Consultancy Bureau (CECB) and the National Engineering Research and Development Center (NERDC). This machine can be easily operated manually and its compaction ratio and height of the block are adjustable. Due to variation (increasing) of mechanical advantage in the process of compression, the load that could be applied to the block is increased with the increase of the soil compression (strain). (Peiris & Wijesinghe, 2004)

CHAPTER 3

EXPERIMENT ON CEMENT STABILIZED SOIL BLOCK S AND RESULTS

3.1 INTRODUCTION

Cement stabilized soil blocks are already being used as an alternative building material to brick or cement sand block wall panels. In order to use same with sufficient strength as a foundation material it should be manufactured using a suitable soil and a suitable machine.

In this research for the experimental programme, a locally designed and manufactured manually operated machine was used. This machine named as 'Mihisura' was introduced in 2004. This was designed and developed locally to produce compressed soil blocks by a joint collaboration between the Central Engineering Consultancy Bureau (CECB) and National Engineering and Research and Development Centre (NERDC) This machine can be easily operated manually and its compaction ratio and height of the block are adjustable. For the experimental program compaction ratio was set to 1.80 and the height of a block was set to 100 mm. One soil type was selected to manufacture the blocks but with different cement percentage based on previous experience. The experimental programme was carried out to determine:

1. Variation of compressive strength of compressed soil blocks with cement percentage and with the time of total immersion in the water.
2. The elastic behaviour of the compressed soil blocks.
3. Variation of cohesion (C) and friction angle (ϕ) with cement percentage and with the time of total immersion in the water.

Details of the experimental programme are given in table 3.1.

Table 3.1: Details of Experimental Programme

Objective	Methodology	Intention of Testing
1. To establish the effects of cement percentage on strength of blocks	Blocks were manufactured with cement contents of 4% and 6.25%	To determine the minimum cement percentage that could be used to minimize the cost of the blocks.
2. To establish the effects of the time of total immersion in water on the strength of blocks	Blocks were totally immersed in the water for 4 days, 7 days and 38 days.	The amount of water absorption and the time of total immersion in the water can affect the compressive strength of the blocks. Accordingly it is necessary to determine whether blocks will give adequate strength under such conditions.
3. To establish the elastic behavior of the blocks in general and the effects of cement percentage on its stress - strain relationship.	Core samples taken from the blocks manufactured with cement content 4% and 6.25% were tested to determine the stress-strain relationship.	To determine whether these blocks behave as soil in general and its variation with cement content.
4. To establish the elastic behavior of the compressed blocks and effect of the time of total immersion in water on its stress-strain relationship.	Core samples taken from the blocks immersed in the water for 4 days were tested to determine the stress-strain relationship.	To determine whether these blocks behave as soil against the time of total immersion in water.

Objective	Methodology	Intension of Testing
5. To establish whether the blocks follow Mohr Coulomb behaviour and the effect of cement content on cohesion (c) and friction angle (ϕ) of the Blocks and its failure pattern.	Core samples taken from the Blocks manufactured with cement content 4 % and 6.25 % were tested in tri axial compression	To determine whether these blocks follow the Mohr – Coulomb behaviour in general and to determine the effects of cement content on its cohesion and friction angles.
6. To establish whether the blocks follow Mohr – Coulomb behaviour and the effects of the time of total immersion in the water on cohesion (C) and friction angles (ϕ) of the Blocks and its failure pattern.	Core samples taken from the Blocks totally immersed in the water for 4 days were tested in tri axial compression	To determine whether these blocks follow the Mohr – Coulomb behavior against the time of total immersion in the water and variation of its cohesion and friction angles.

3.2 MANUFACTURING OF COMPRESSED SOIL BLOCKS

In this research only one soil type was used in the manufacturing process. Characteristics of the soil type selected for manufacturing of compressed blocks are given in table 3.2. Its fines percentage is 44% which is a relatively high value. However it was reported by Peiris and Wijesinghe (2004) that blocks made out of soil types having a higher value of fines percentage can be stabilized successfully, mechanically, with the machine "Mihisura" which is locally designed and manufactured.

The cement contents selected for manufacturing the compressed soil blocks were 4% and 6.25%.

Mix proportions and corresponding cement percentages are given in table 3.3.

The manufacture of compressed soil blocks was carried out as discussed in Chapter 2. Compaction ratio was set to 1.85. Size of the blocks manufactured were 300 mm x 150 mm x 100 mm. The blocks were cured with water for 7 days except two sets of blocks.. These two sets, each consisted of 3 numbers of blocks made with 4% and 6.25% cement content respectively and were totally immersed in water, one day after it was manufacture for a period of 38 days.

Table 3.2 Characteristics of the Soil Type used for manufacturing of compressed soil blocks.

Fines (<0.075 nn) Percentage	Clay (<0.002 mm) Percentage	Liquid Limit %	Plastic Limit %	Plastic Index %
44	12	49	29.02	19.98

Table 3.3 Mix Proportions and corresponding cement percentages

Block Identification No.	Mix Proportion (Cement : Soil) by Volume	Cement Percentage
A	25:1	4%
B	16:1	6.25%

3.3 TESTING CARRIED OUT ON COMPRESSED SOIL BLOCKS STABILIZED WITH CEMENT

3.3.1 COMPRESSION TESTING

The compressed soil blocks manufactured with different cement contents with the machine "Mihisura" with a compaction ratio 1.80 were tested with a compression testing machine. The testing machine used was one of capacity 200 Tonnes available at the CECB Laboratory and its loading rate was 1 N/mm^2 per minute.

One set of Compressed Soil Blocks were tested 28 days after casting for complete dry condition, 4 days total immersion in water and 7 days total immersion in water. Another set of Blocks, which were totally immersed in water a day after casting for a period of 38 days, were tested for its compressive strength.

The results of the testing programme are given in Table 3.4.

Table 3.4 : Average compressive strength of compressed soil blocks.

Block Identification No.	Cement %	Average Compressive strength in Complete dry condition (N/mm^3) at 28days after casting	Average wet compressive Strength (N/mm^2)		
			After 4 days immersion period in water	After 7 days immersion period in water	After 38 days immersion period in water
A	4	3.2	1.83	1.73	1.5
B	6.25	4.03	3.25	2.87	3.5

Water absorption ratio of the tested blocks is given in Table 3.5.

Table 3.5 : Water Absorption Ratio.

Block Identification No.	Water Absorption Ratio %		
	After 4 days immersion in the water	After 7 days immersion in the water	After 38 days immersion in the water
A	24.2	26.4	30.27
B	21.4	25.5	27.10

3.3.2 :TESTING OF CORE SAMPLES TAKEN FROM COMPRESSED SOIL BLOCKS

3.3.2.1 UNCONFINED COMPRESSION TESTING OF THE BLOCKS

A Tri axial testing machine with a capacity of 7 KN proving ring available at the Soil Laboratory of the Department of Civil Engineering, University of Moratuwa

was used for this testing without cell pressure. Traveling speed of lead screw was set to 0.24 mm/min. Readings of proving ring were recorded against the vertical displacement.

Core samples were taken with a diamond core cutter of 50 mm internal diameter. It was difficult to get core samples with an exact diameter of 50 mm as a small amount of soil was washed away due to water pressure. One set of samples was tested in complete dry condition and the other set of samples was tested 4 days after total immersion in water.

Characteristics of core samples extracted from the compressed soil blocks are given in Table 3.6.

Table 3.6: Characteristics of core samples used in Unconfined Compression Test (UCT)

Sample Identification	Height (mm)	Diameter (mm)	Weight in Dry Condition (Kg)	Weight in Wet Condition (Kg)	Cross Sectional Area (mm)	Volume (mm3)	Density (Kg/m3) in Dry Condition	Density (Kg/m3) in Wet Condition	Condition of Samples used for Test
A5	107.4	47.17	0.287	NA	1747.27	187656.90	1529.39	NA *	Dry
B6	108.5	49.07	0.291	NA	1890.88	205160.02	1418.41	NA *	
A4	107.2	47.37	0.305	0.371	1762.12	188899.28	1614.62	1964.01	4 Days Immersion in Water
B4	112.4	48.93	0.331	0.401	1880.61	204986.84	1565.89	1897.05	

* NA - Not Applicable.

Results of testing programme are given in Tables 3.7, 3.8, 3.9 and 3.10.

Table 3.7 : Test results of Unconfined Compression Test for samples in complete dry condition, with cement content 4%.

Sample Identification No. A5						
Strain Dial	Deviator Load		Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
	Dial	N				
0.00	0.0	0.00	0.00	107.4	17.48	0.00
0.25	9.0	40.00	0.23	107.2	17.52	22.84
0.51	28.0	150.00	0.47	106.9	17.56	85.43
0.76	57.0	300.00	0.71	106.6	17.60	170.46
1.02	112.0	550.00	0.95	106.4	17.64	311.74
1.27	165.0	850.00	1.18	106.1	17.68	480.65
1.52	225.0	1100.00	1.42	105.9	17.73	620.55
1.78	280.0	1400.00	1.66	105.6	17.77	787.86
2.03	337.0	1650.00	1.89	105.4	17.81	926.35
2.29	386.0	1900.00	2.13	105.1	17.86	1064.07
2.54	434.0	2150.00	2.36	104.9	17.90	1201.22
2.79	466.0	2300.00	2.60	104.6	17.94	1281.96
2.92	474.0	2350.00	2.72	104.5	17.96	1308.20
3.05	463.0	2300.00	2.84	104.4	17.99	1278.77
3.18	420.0	2100.00	2.96	104.2	18.01	1166.12
3.30	374.0	1850.00	3.07	104.1	18.03	1026.11
3.43	356.0	1750.00	3.19	104.0	18.05	969.44

Table 3.8 : Test results of Unconfined Compression Test for samples in complete dry condition with cement content 6.25%.

Sample Identification No. B6						
Strain Dial	Deviator Load		Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
	Dial	N				
0.00	0.0	0.00	0.00	108.5	18.65	0.00
0.25	2.0	10.00	0.23	108.3	18.69	5.35
0.51	11.0	50.00	0.47	108.0	18.74	26.68
0.76	28.0	150.00	0.70	107.7	18.78	79.86
1.02	58.0	300.00	0.94	107.5	18.83	159.34
1.27	108.0	550.00	1.17	107.2	18.87	291.45
1.52	163.0	800.00	1.40	107.0	18.92	422.94
1.78	238.0	1200.00	1.64	106.7	18.96	632.87
2.03	315.0	1550.00	1.87	106.5	19.01	815.54
2.29	403.0	2000.00	2.11	106.2	19.05	1049.74
2.54	478.0	2350.00	2.34	106.0	19.10	1230.54
2.79	560.0	2750.00	2.57	105.7	19.14	1436.60

Sample Identification No. B 6						
Strain Dial	Deviator Load		Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
	Dial	N				
2.92	603.0	3000.00	2.69	105.6	19.17	1565.27
3.05	640.0	3150.00	2.81	105.5	19.19	1641.51
3.18	688.0	3400.00	2.93	105.3	19.21	1769.60
3.30	730.0	3600.00	3.04	105.2	19.24	1871.56
3.43	778.0	3800.00	3.16	105.1	19.26	1973.10
3.56	815.0	4000.00	3.28	104.9	19.28	2074.38
3.68	865.0	4250.00	3.39	104.8	19.30	2201.50
3.81	895.0	4400.00	3.51	104.7	19.33	2276.38
3.94	930.0	4500.00	3.63	104.6	19.35	2325.22
4.06	965.0	4750.00	3.74	104.4	19.38	2451.59
4.19	1010.0	4950.00	3.86	104.3	19.40	2551.63
4.32	1037.0	5100.00	3.98	104.2	19.42	2625.68
4.45	1073.0	5250.00	4.10	104.1	19.45	2699.53
4.57	1095.0	5350.00	4.21	103.9	19.47	2747.78
4.70	1127.0	5500.00	4.33	103.8	19.49	2821.28
4.83	1137.0	5550.00	4.45	103.7	19.52	2843.37
4.95	1090.0	5300.00	4.56	103.6	19.54	2712.14

Table 3.9 : Test results of Unconfined Compression Test for samples of 4 days after immersion in water, with cement content 4%.

Sample Identification No. A4						
Strain Dial	Deviator Load		Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
	Dial	N				
0.00	0.0	0.00	0.00	107.2	17.62	0.00
0.13	1.0	0.00	0.12	107.1	17.65	0.00
0.25	1.5	10.00	0.23	107.0	17.66	5.66
0.51	2.0	10.00	0.48	106.7	17.71	5.65
0.76	3.5	20.00	0.71	106.4	17.75	11.27
1.02	6.0	30.00	0.95	106.2	17.79	16.86
1.27	11.5	60.00	1.18	105.9	17.84	33.64
1.52	29.5	150.00	1.42	105.7	17.88	83.91
1.78	65.0	300.00	1.66	105.4	17.92	167.40
2.03	110.0	550.00	1.89	105.2	17.96	306.17
2.29	160.0	800.00	2.14	104.9	18.01	444.24
2.54	210.0	1000.00	2.37	104.7	18.05	553.97
2.79	258.0	1250.00	2.60	104.4	18.09	690.81
3.05	302.0	1500.00	2.85	104.2	18.14	826.91
3.30	342.0	1700.00	3.08	103.9	18.18	934.91

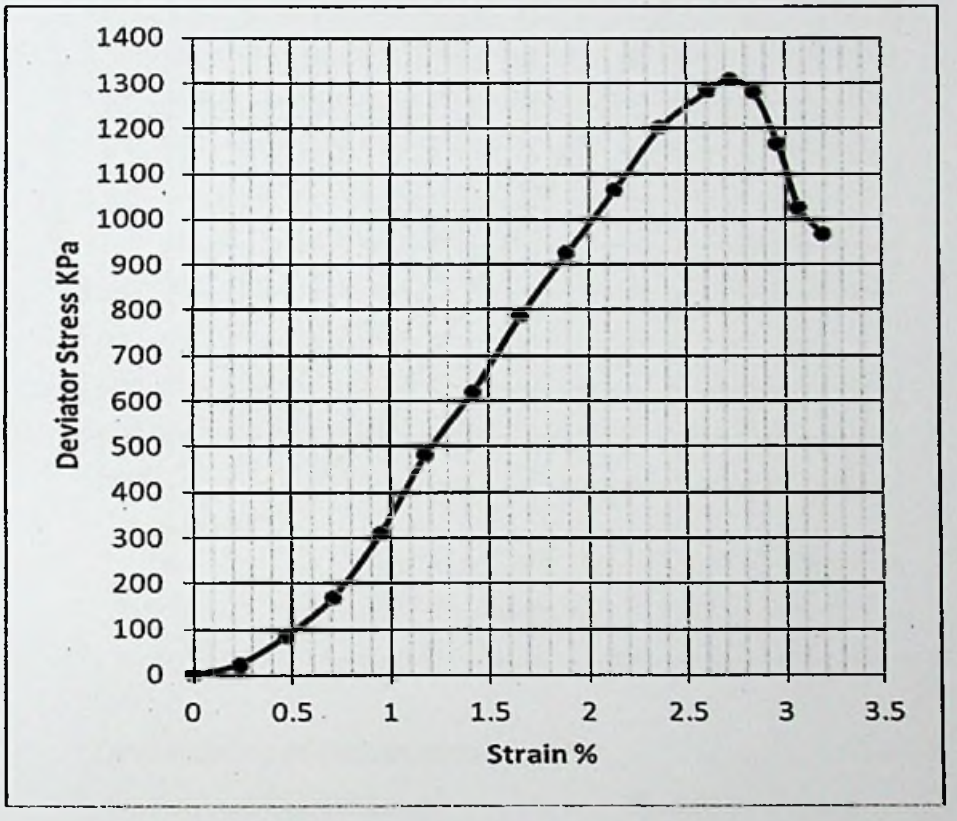
Sample Identification No. A4						
Strain Dial	Deviator Load Dial	Deviator Load %	Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
3.56	362.0	1800.00	3.32	103.6	18.23	987.43
3.68	365.0	1800.00	3.43	103.5	18.25	986.29
3.81	355.0	1750.00	3.55	103.4	18.27	957.69
3.94	328.0	1600.00	3.68	103.3	18.30	874.50
4.06	290.0	1400.00	3.79	103.1	18.32	764.30
4.32	210.0	1000.00	4.03	102.9	18.36	544.55

Table 3.10 : Test results of Unconfined Compression Test for samples of 4 days after immersion in water with cement content 6.25%.

Sample Identification No: B4						
Strain Dial	Deviator Load Dial	Deviator Load N	Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa
0.00	0.0	0.00	0.00	112.4	18.80	0.00
0.13	3.5	10.00	0.12	112.3	18.83	5.31
0.25	9.0	50.00	0.22	112.2	18.85	26.53
0.51	30.0	150.00	0.45	111.9	18.89	79.41
0.76	83.0	350.00	0.68	111.6	18.93	184.88
1.02	155.0	650.00	0.91	111.4	18.98	342.54
1.27	230.0	950.00	1.13	111.1	19.02	499.51
1.52	298.0	1250.00	1.35	110.9	19.06	655.78
1.78	368.0	1500.00	1.58	110.6	19.11	785.09
1.91	405.0	1700.00	1.70	110.5	19.13	888.72
2.03	440.0	1850.00	1.81	110.4	19.15	966.08
2.16	470.0	1950.00	1.92	110.2	19.17	1017.11
2.29	503.0	2100.00	2.04	110.1	19.19	1094.05
2.54	566.0	2350.00	2.26	109.9	19.24	1221.52
2.67	595.0	2500.00	2.38	109.7	19.26	1297.95
2.79	625.0	2600.00	2.48	109.6	19.28	1348.39
2.92	646.0	2700.00	2.60	109.5	19.31	1398.59
3.05	666.0	2800.00	2.71	109.4	19.33	1448.67
3.18	680.0	2850.00	2.83	109.2	19.35	1472.79
3.30	670.0	2800.00	2.94	109.1	19.37	1445.36
3.43	660.0	2750.00	3.05	109.0	19.40	1417.86
3.51	560.0	2300.00	3.12	108.9	19.41	1184.97

Deviator Stress Vs Strain is presented in graphical form for each above case in Charts 3.1, 3.2, 3.3 and 3.4. Deformation modulus is determined for each case and values are presented in Table 3.11.

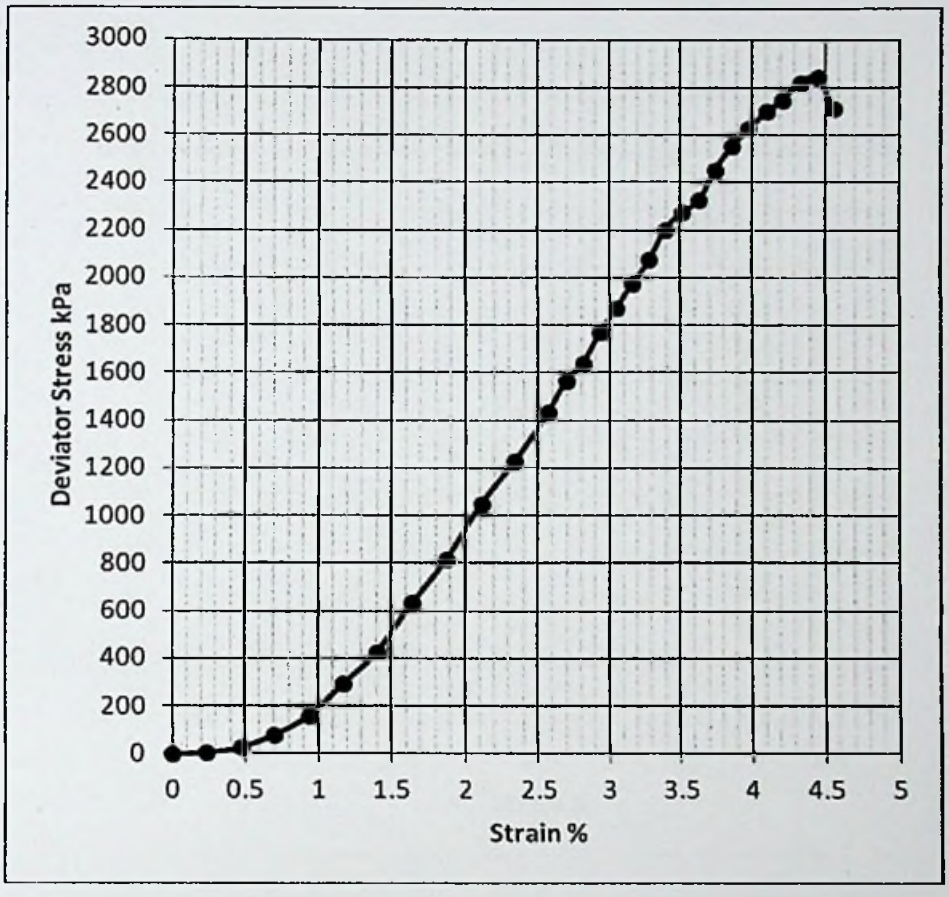
Chart 3.1 : Variation of Deviator Stress with Strain for the sample in complete dry condition, with cement content 4%.



Determination of Deformation Modulus

Unconfined Compressive Streanth		=	1310.00	KPa
Breaking Strain		=	2.7	%
Compression Deformation at $q_u/2$, ($\varepsilon_{50}/100$)		=	1.45	%
Deformation Modulus	E_{50}	=	$q_u/2$, ($\varepsilon_{50}/100$)	
		=	45,171.00	KPa

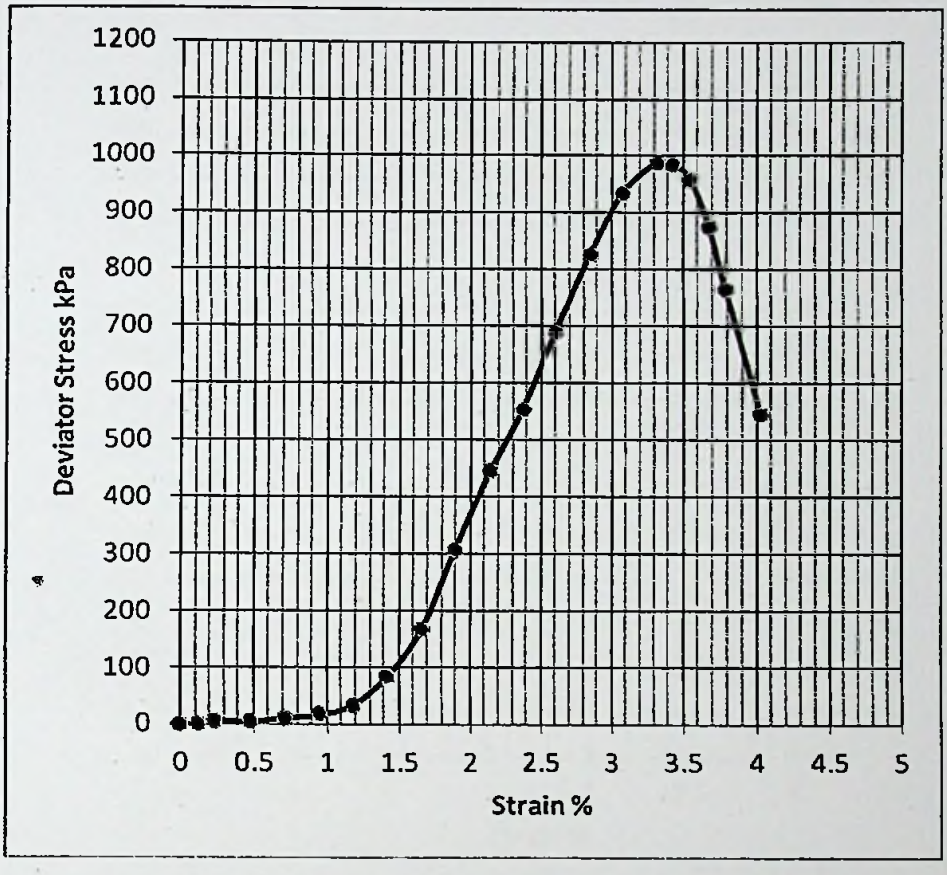
Chart 3.2 : Variation of Deviator Stress with Strain for the sample in complete dry condition, with cement content 6.25%.



Determination of Deformation Modulus

Unconfined Compressive Streanth		=	2850.00	KPa
Breaking Strain		=	4.42	%
Compression Deformation at $q_u/2$, (ε_{50}/100)		=	2.55	%
Deformation Modulus	E_{50}	=	$q_u/2$, (ε_{50}/100)	
		=	55882.35	KPa

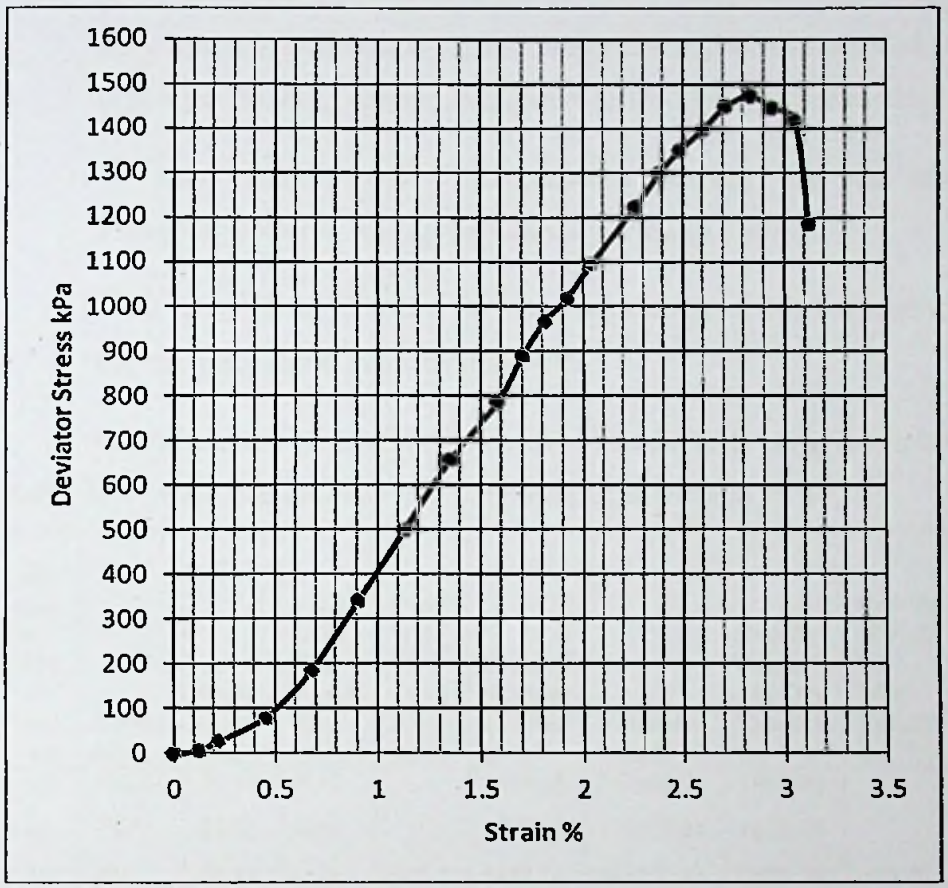
Chart 3.3 : Variation of Deviator Stress with Strain for the sample of 4 days total immersion in water, with cement content 4%.



Determination of Deformation Modulus

Unconfined Compressive Streanth		=	990.00	KPa
Breaking Strain		=	3.40	%
Compression Deformation at $q_u/2$, ($\varepsilon_{50}/100$)		=	2.20	%
Deformation Modulus	E_{50}	=	$q_u/2$, ($\varepsilon_{50}/100$)	
		=	22,500.00	KPa

Chart 3.4 : Variation of Deviator Stress with Strain for the sample of 4 days total immersion in water, with cement content 6.25%.



Determination of Deformation Modulus

Unconfined Compressive Streanth		=	1480.00	KPa
Breaking Strain		=	2.80	%
Compression Deformation at $q_u/2$, (ε_{50}/100)		=	1.50	%
Deformation Modulus	E_{50}	=	$q_u/2$, (ε_{50}/100)	
		=	49,333.33	KPa

Table 3.11 Values of deformation modulus

Block Identification No.	Deformation Modulus E_{50} (KPa)	
	In complete dry conditions	4 days after immersion in water
A	45,172.41	22,500.00
B	55,882.35	49,333.33

3.3.2.2 UNCONSOLIDATED UNDRAINED TRIAXIAL TESTING OF COMPRESSED SOIL BLOCKS

Core samples extracted from the compressed soil blocks were capped with sulfur cappings. The core samples taken were tested 21 days after casting.

Tri axial machine with 7 KN capacity proving ring was used for testing. Travelling speed of lead screw was set to 1.2 mm / min.

Core samples were tested for its complete dry condition and for the samples having 4 days total immersion in water.

Characteristics of core samples used in tri axial tests are given in table 3.12.

Table 3.12 : Characteristics of core samples used in tri axial tests

Sample Identification	Height (mm)	Diameter (mm)	Weight in Dry Condition (Kg)	Weight in Wet Condition (Kg)	Cross Sectional Area (mm)	Volume (mm3)	Density (Kg/m3) in Dry Condition	Density (Kg/m3) in Wet Condition	Condition of Samples used for Test
A2	100.6	46.33	0.31		1686.08	169669.76	1809.40		
A3	100.7	47.33	0.32		1759.64	177107.86	1823.75		
A6	99.4	45.87	0.28	NA *	1652.28	164236.86	1686.59	NA *	
B5	101.10	47.93	0.29		1804.53	182438.42	1578.61		Dry
B7	108.70	48.33	0.314		1834.78	199440.30	1574.41		
B8	111.50	48.83	0.33		1872.93	204524.46	1608.61		
A2	106.8	47.07	0.268	0.340	1739.87	185818.10	1443.85	1827.92	
A3	107.5	47.40	0.271	0.356	1764.60	189694.63	1429.20	1875.12	
A1	107	46.80	0.296	0.371	1720.21	184062.52	1607.46	2014.15	4 Days Immersion in Water
B1	109.50	48.73	0.310	0.390	1865.27	204247.26	1518.47	1908.72	
B2	109.20	49.40	0.309	0.395	1916.65	209298.65	1477.14	1887.78	
B3	109.70	47.50	0.286	0.371	1772.05	194394.39	1469.14	1906.95	

* NA : - Not Applicable

Deviator stress and Axial Strain information received for all the cell pressures used for each case are given in Tables 3.13 to 3.16.

Table 3.13: Deviator Stress and Axial Strain information received for the cell pressures 50 kPa, 100 kPa and 150 kPa for the samples in complete dry condition, with cement content 4.0%.

Sample Identification No.			**A 6**					
Applied Cell Pressure			**50**	kPa				
Strain	Deviator Load		Strain	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
Dial	Dial	N	%					
0.00	0.0	0.00	0.00	99.4	16.53	0.00	50.0	50.0
0.25	2.0	10.00	0.25	99.2	16.57	6.04	50.0	56.0
0.64	18.0	90.00	0.64	98.8	16.63	54.11	50.0	104.1
1.27	145.0	710.00	1.28	98.1	16.74	424.16	50.0	474.2
1.91	310.0	1520.0	1.92	97.5	16.85	902.13	50.0	952.1
2.54	480.0	2350.0	2.56	96.9	16.96	1385.73	50.0	1435.7
3.81	760.0	3730.0	3.83	95.6	17.18	2170.63	50.0	2220.6
4.06	785.0	3850.0	4.08	95.3	17.23	2234.61	50.0	2284.6
Sample Identification No.			**A 2**					
Applied Cell Pressure			**100**	kPa				
Strain	Deviator Load		Strain	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
Dial	Dial	N	%					
0.00	0.0	0.0	0.00	100.6	16.86	0.00	100.0	100.0
0.25		0.0	0.25	100.4	16.90	0.00	100.0	100.0
0.64	5.0	20.0	0.64	100.0	16.97	11.79	100.0	111.8
1.27	20.0	100.0	1.26	99.4	17.07	58.57	100.0	158.6
1.91	165.0	800.0	1.90	98.7	17.18	465.53	100.0	565.5
2.54	330.0	1650.0	2.52	98.1	17.29	954.04	100.0	1054.0
3.81	595.0	2950.0	3.79	96.8	17.52	1683.62	100.0	1783.6
5.08	790.0	3900.0	5.05	95.6	17.75	2196.61	100.0	2296.6
Sample Identification No.			A 3					
Applied Cell Pressure			**150**	kPa				
Strain	Deviator Load		Strain	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
Dial	Dial	N	%					
0.00	0.0	0.0	0.00	100.7	17.59	0.00	150.0	150.0
0.25			0.25	100.4	17.64	0.00	150.0	150.0
0.64	120.0	600.0	0.64	100.0	17.71	338.86	150.0	488.9
1.27	290.0	1450.0	1.26	99.4	17.82	813.75	150.0	963.7
1.91	440.0	2150.0	1.90	98.7	17.93	1198.82	150.0	1348.8
2.54	590.0	2900.0	2.52	98.1	18.05	1606.70	150.0	1756.7
3.81	845.0	4150.0	3.78	96.8	18.29	2269.47	150.0	2419.5
4.83	940.0	4650.0	4.80	95.8	18.48	2516.12	150.0	2666.1

Table 3.14 : Deviator Stress and Axial Strain information received for cell pressures 50 kPa, 100 kPa and 150 kPa for samples in complete dry condition, with cement content 6.25%.

Sample Identification No.			B 7					
Applied Cell Pressure			50	kPa				
Strain Dial	Deviator Load Dial	N	Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
0.00	0.0	0.0	0.00	108.7	18.35	0.00	50.0	50.0
0.25	2.0	10.0	0.23	108.5	18.39	5.44	50.0	55.4
0.64	3.0	10.0	0.59	108.1	18.45	5.42	50.0	55.4
1.27	15.0	70.0	1.17	107.4	18.56	37.71	50.0	87.7
1.91	140.0	690.0	1.76	106.8	18.67	369.51	50.0	419.5
2.54	320.0	1570.0	2.34	106.2	18.78	835.81	50.0	885.8
3.81	640.0	3140.0	3.51	104.9	19.01	1651.62	50.0	1701.6
5.08	875.0	4290.0	4.67	103.6	19.24	2229.19	50.0	2279.2
5.46	897.0	4400.0	5.02	103.2	19.32	2277.96	50.0	2328.0
Sample Identification No.			B8					
Applied Cell Pressure			100	kPa				
Strain Dial	Deviator Load Dial	N	Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
0.00	0.0	0.0	0.00	111.5	18.73	0.00	100.0	100.0
0.25	2.0	10.0	0.22	111.3	18.77	5.33	100.0	105.3
0.64	9.0	40.0	0.57	110.9	18.83	21.24	100.0	121.2
1.27	95.0	470.0	1.14	110.2	18.94	248.12	100.0	348.1
1.91	280.0	1370.0	1.71	109.6	19.05	719.05	100.0	819.1
2.54	480.0	2350.0	2.28	109.0	19.16	1226.32	100.0	1326.3
3.81	895.0	4390.0	3.42	107.7	19.39	2264.17	100.0	2364.2
5.08	1220.0	5920.0	4.56	106.4	19.62	3017.27	100.0	3117.3
5.84	1320.0	6410.0	5.24	105.7	19.76	3243.68	100.0	3343.7
Sample Identification No.			B5					
Applied Cell Pressure			150	kPa				
Strain Dial	Deviator Load Dial	N	Strain %	Height of Specimen mm	Mean Area cm^2	Deviator Stress kPa	Minor Principal Effect. Stress kPa	Major Principal Effect. Stress kPa
0.00	0.0	0.0	0.00	101.1	18.04	0.00	150.0	150.0
0.25	3.0	10.0	0.25	100.9	18.09	5.53	150.0	155.5
0.64	28.0	140.0	0.63	100.5	18.16	77.10	150.0	227.1
1.27	153.0	750.0	1.26	99.8	18.27	410.46	150.0	560.5
1.91	352.0	1730.0	1.89	99.2	18.39	940.73	150.0	1090.7
2.54	547.0	2680.0	2.51	98.6	18.51	1448.06	150.0	1598.1
3.81	945.0	4630.0	3.77	97.3	18.75	2469.45	150.0	2619.5
5.08	1252.0	6080.0	5.02	96.0	19.00	3200.49	150.0	3350.5
5.33	1280.0	6210.0	5.27	95.8	19.05	3260.41	150.0	3410.4

Table 3.15 : Deviator Stress and Axial Strain information received for cell pressures 50 kPa, 100 kPa and 150 kPa for samples after 4 days total immersion in water, with cement content 4%.

Sample Identification No. A1								
Applied Cell Pressure			50 kPa					
Strain Dial	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major Principal Effect. Stress
	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.00	0.00	107.0	17.20	0.00	50.0	50.0
0.25	6.0	30.00	0.23	106.8	17.24	17.40	50.0	67.4
0.64	28.0	150.00	0.60	106.4	17.31	86.68	50.0	136.7
1.27	130.0	650.00	1.19	105.7	17.41	373.37	50.0	423.4
1.91	290.0	1400.00	1.79	105.1	17.51	799.32	50.0	849.3
2.54	415.0	2000.00	2.37	104.5	17.62	1135.05	50.0	1185.0
2.92	425.0	2100.00	2.73	104.1	17.68	1187.46	50.0	1237.5
Sample Identification No. A3								
Applied Cell Pressure			100 kPa					
Strain Dial	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major Principal Effect. Stress
	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.00	0.00	107.5	17.65	0.00	100.0	100.0
0.25	5.0	20.00	0.23	107.3	17.69	11.31	100.0	111.3
0.64			0.60	106.9	17.75	0.00	100.0	100.0
1.27	10.0	50.00	1.18	106.2	17.86	28.00	100.0	128.0
1.91	85.0	450.00	1.78	105.6	17.97	250.48	100.0	350.5
2.54	280.0	1400.00	2.36	105.0	18.07	774.61	100.0	874.6
3.56	445.0	2250.00	3.31	103.9	18.25	1232.81	100.0	1332.8
Sample Identification No. A2								
Applied Cell Pressure			150 kPa					
Strain Dial	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major Principal Effect. Stress
	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.00	0.00	106.8	17.40	0.00	150.0	150.0
0.25	8.0	40.00	0.23	106.6	17.44	22.93	150.0	172.9
0.64	12.0	60.00	0.60	106.2	17.51	34.27	150.0	184.3
1.27	16.0	80.00	1.19	105.5	17.61	45.43	150.0	195.4
1.91	30.0	150.00	1.79	104.9	17.72	84.66	150.0	234.7
2.54	40.0	200.00	2.38	104.3	17.82	112.20	150.0	262.2
3.81	350.0	1750.00	3.57	103.0	18.04	969.83	150.0	1119.8
4.45	450.0	2250.00	4.17	102.4	18.16	1239.17	150.0	1389.2

Table 3.16 : Deviator Stress and Axial Strain information received for cell pressures 50 kPa, 100 kPa and 150 kPa for samples after 4 days total immersion in water, with cement content 6.25%.

Sample Identification No.			**B1**					
Applied Cell Pressure			**50**	kPa				
Strain	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major Principal Effect. Stress
Dial	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.0	0.00	109.5	18.65	0.00	50.0	50.0
0.25	14.0	70.0	0.23	109.3	18.69	37.45	50.0	87.4
0.64	100.0	500.0	0.58	108.9	18.76	266.53	50.0	316.5
1.27	300.0	1500.0	1.16	108.2	18.87	794.95	50.0	845.0
1.91	500.0	2450.0	1.74	107.6	18.98	1290.74	50.0	1340.7
2.54	660.0	3250.0	2.32	107.0	19.09	1702.19	50.0	1752.2
3.05	720.0	3555.0	2.79	106.5	19.18	1853.05	50.0	1903.1
Sample Identification No.			**B2**					
Applied Cell Pressure			**100**	kPa				
Strain	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major Principal Effect. Stress
Dial	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.0	0.00	109.2	19.17	0.00	100.0	100.0
0.25		0.0	0.23	109.0	19.21	0.00	100.0	100.0
0.64		0.0	0.59	108.6	19.28	0.00	100.0	100.0
1.27	10.0	50.0	1.16	107.9	19.39	25.78	100.0	125.8
1.91	72.0	350.0	1.75	107.3	19.51	179.41	100.0	279.4
2.54	340.0	1700.0	2.32	106.7	19.62	866.33	100.0	966.3
3.81	790.0	3900.0	3.49	105.4	19.86	1963.79	100.0	2063.8
4.32	885.0	4350.0	3.96	104.9	19.96	2179.78	100.0	2279.8
Sample Identification No.			**B3**					
Applied Cell Pressure			**150**	kPa				
Strain	Deviator Load		Strain	Height of Specimen	Mean Area	Deviator Stress	Minor Principal Effect. Stress	Major r Principal Effect. Stress
Dial	Dial	N	%	mm	cm^2	kPa	kPa	kPa
0.00	0.0	0.0	0.00	109.7	17.72	0.00	150.0	150.0
0.25	5.0	20.0	0.23	109.5	17.76	11.26	150.0	161.3
0.64			0.58	109.1	17.82	0.00	150.0	150.0
1.27	40.0	200.0	1.16	108.4	17.93	111.56	150.0	261.6
1.91	220.0	1100.0	1.74	107.8	18.03	609.95	150.0	760.0
2.54	415.0	2050.0	2.32	107.2	18.14	1130.09	150.0	1280.1
3.81	630.0	3100.0	3.47	105.9	18.36	1688.66	150.0	1838.7

Deviator Stress Vs Strain curves for each case are given in Charts 3.5 to 3.8.

Chart 3.5: Deviator Stress Vs Strain curves for cell pressures 50 kPa, 100 kPa and 150 kPa for samples in complete dry condition, with cement content 4%

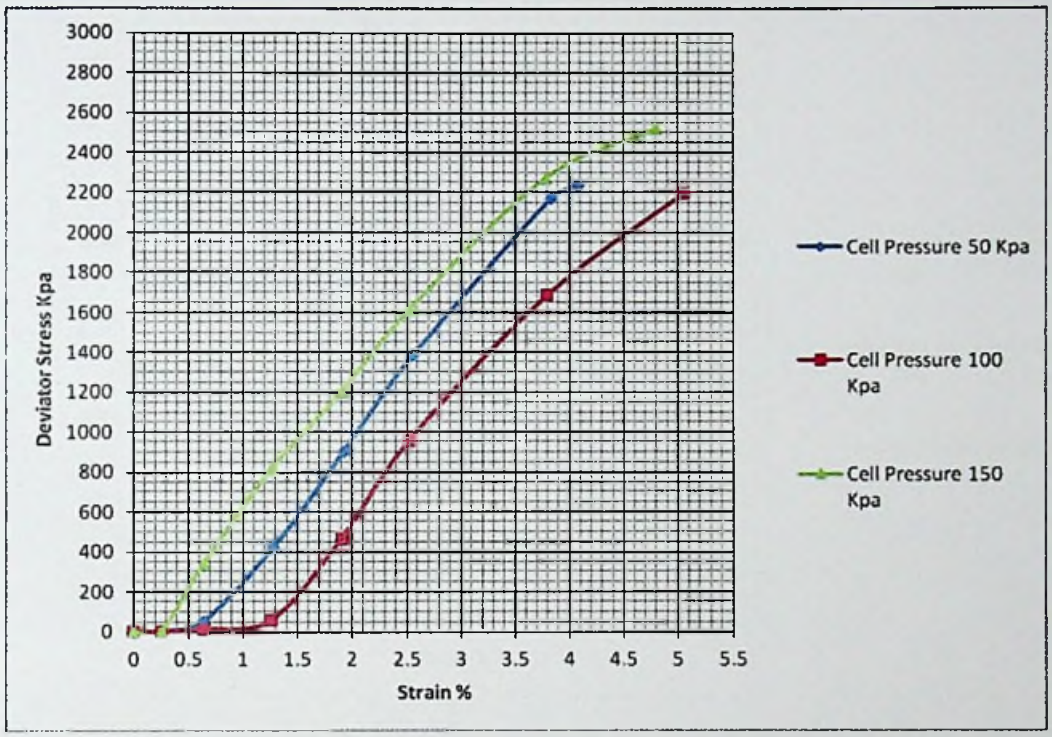


Chart 3.6: Deviator Stress Vs Strain curves for cell pressures 50 kPa, 100 kPa and 150 kPa for samples at complete dry condition with cement content 6.25 %

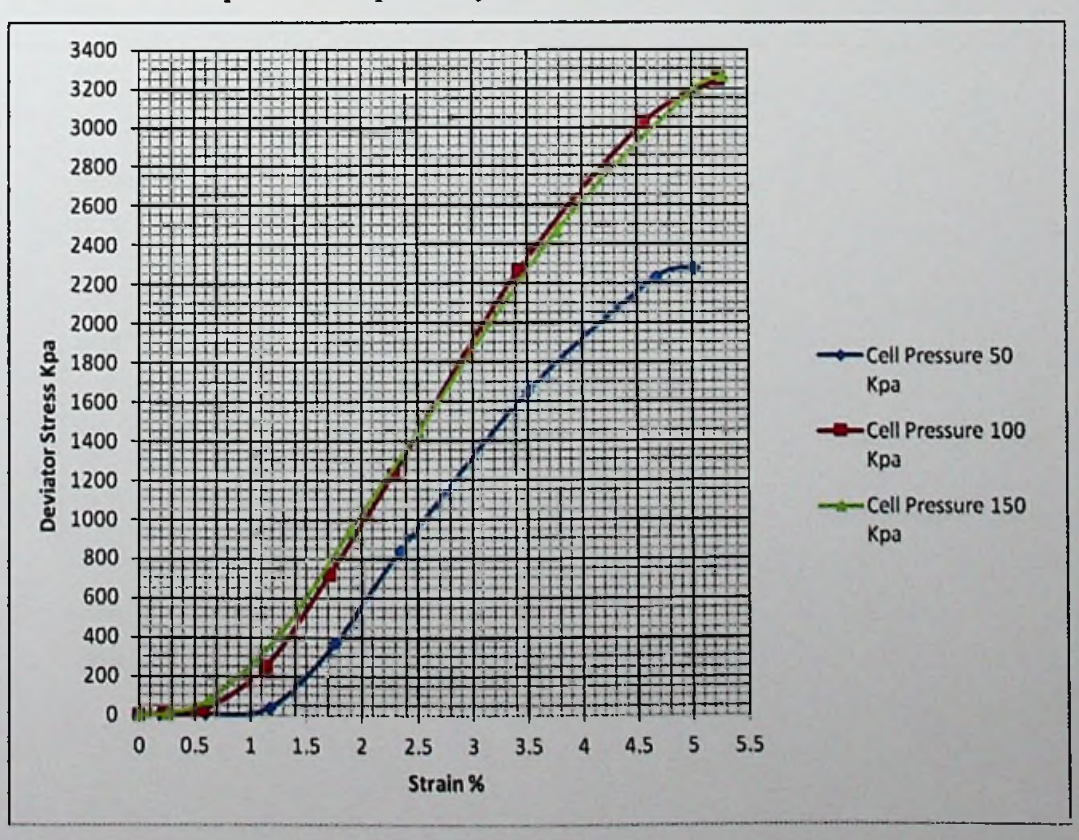


Chart 3.7: Deviator Stress Vs Strain curves for cell pressures 50 kPa, 100 kPa and 150 kPa for samples after 4 days total immersion in water, with cement content 4%

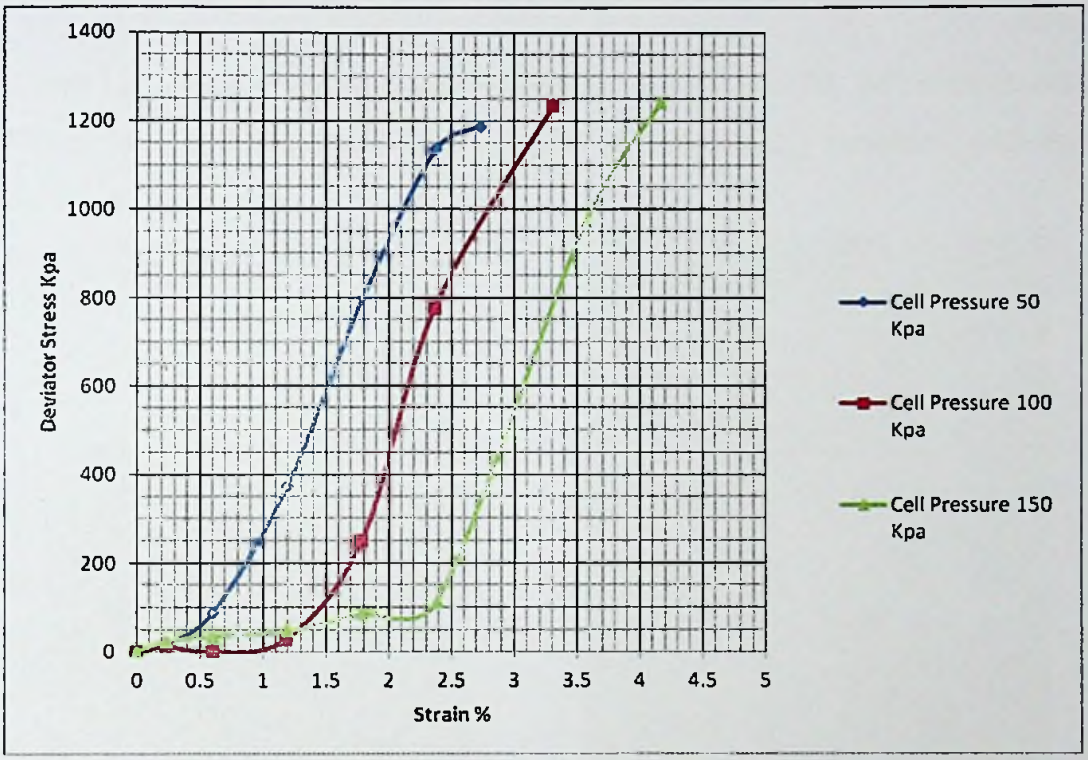
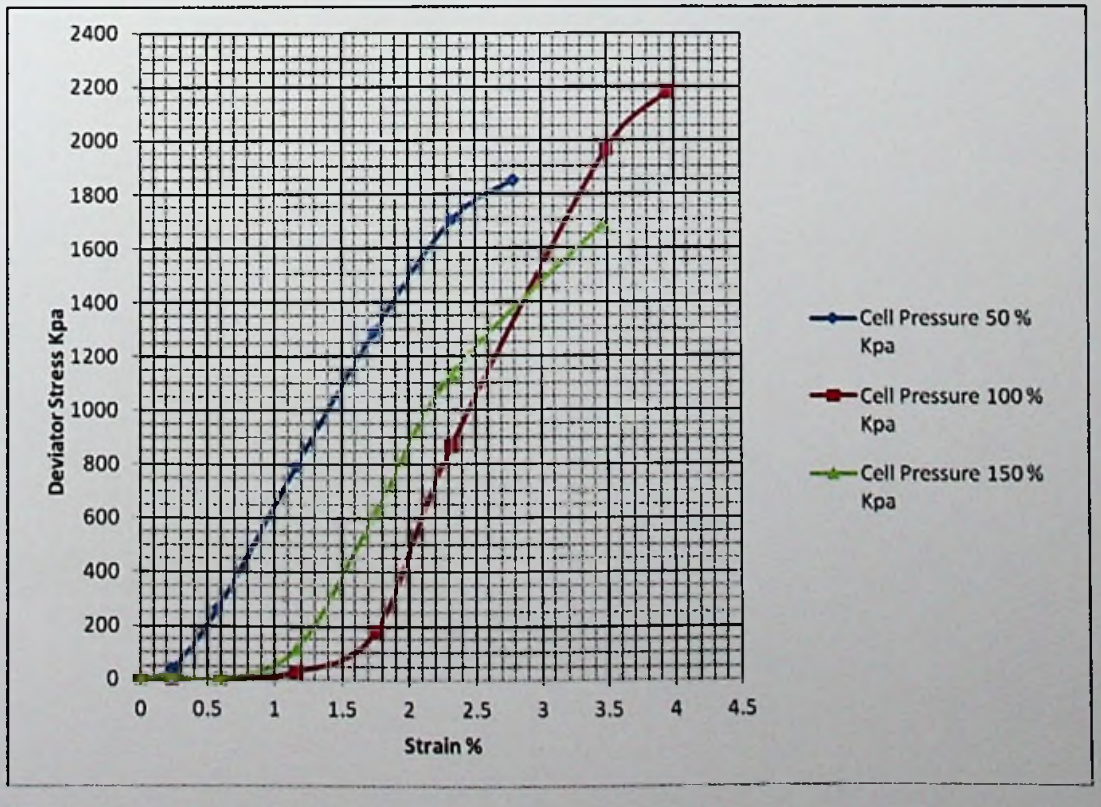
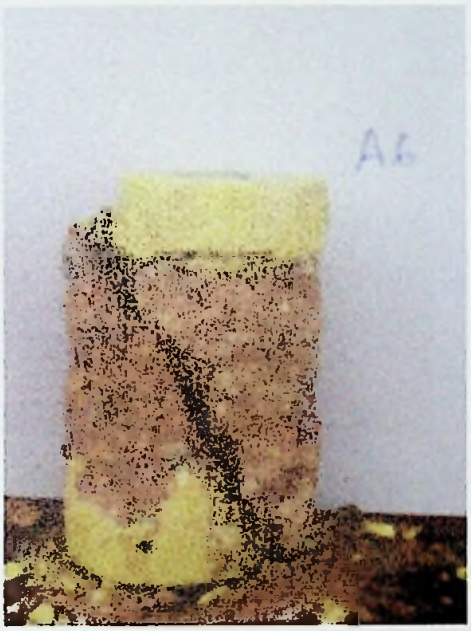


Chart 3.8: Deviator Stress Vs Strain curves for cell pressures 50 kPa, 100 kPa and 150 kPa for samples after 4 days total immersion in water, with cement content 6.25%



Shear failure patterns of the core samples in Undrained Unconsolidated Triaxial Test are presented in figure 3.1 to 3.14.

Figure 3.1: Failure pattern of the Compressed Soil Blocks for cell pressure 50 kPa, 100 kPa and 150 kPa for the core samples in complete dry condition, with cement content 4.0%

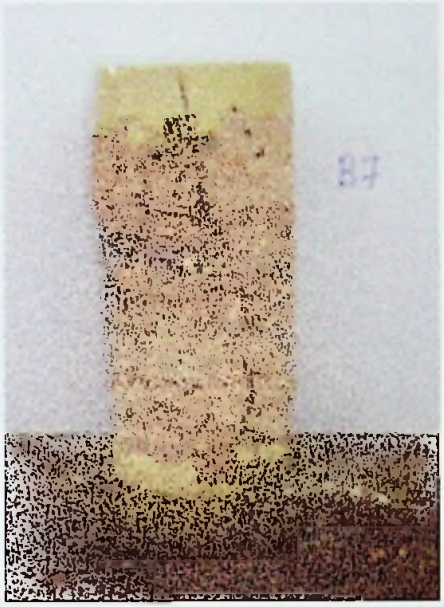


Cell Pressure 50 KPa (Sample A6)

Cell Pressure 100 KPa (Sample A2)

Cell Pressure 150 KPa (Sample A3)

Figure 3.2 : Failure pattern of the Compressed Soil Blocks for cell pressures 50 kPa, 100 kPa and 150 kPa for the core samples in complete dry condition, with cement content 6.25%.

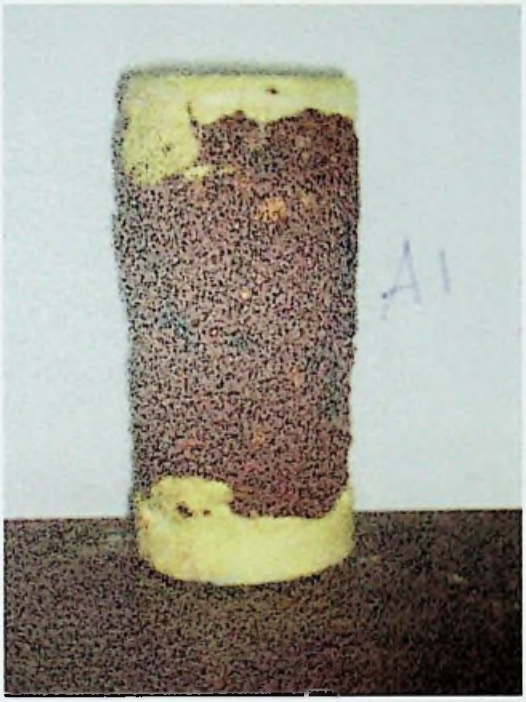


Cell Pressure 50 KPa (Sample B7)

Cell Pressure 100 KPa (Sample B8)

Cell Pressure 150 KPa (Sample B5)

Figure 3.3 : Failure pattern of the Compressed Soil Blocks for cell pressures 50 kPa, 100 kPa and 150 kPa for the core samples 4 days after total immersion in water, with cement content 4%.



Cell Pressure 50 KPa (Sample A1)

Cell Pressure 100 KPa (Sample A3)

Cell Pressure 150 KPa (Sample A2)

Figure 3.4 : Failure pattern of the Compressed Soil Blocks for cell pressures 50 kPa, 100 kPa and 150 kPa for the core samples 4 days after total immersion in water, with cement content 6.25%.

Cell Pressure 50 KPa (Sample B1)

Cell Pressure 150 KPa (Sample B2)

Cell Pressure 100 KPa (Sample B3)

Mohr - Circle Plots drawn for each case are shown in chart 3.9 ; 3.10; 3.11 and 3.12.

Chart 3.9: Mohr Circles of Stress at Failure for the Cell Pressure 50KPa, 100KPa and 150 KPa for Block Type A at Complete Dry Condition

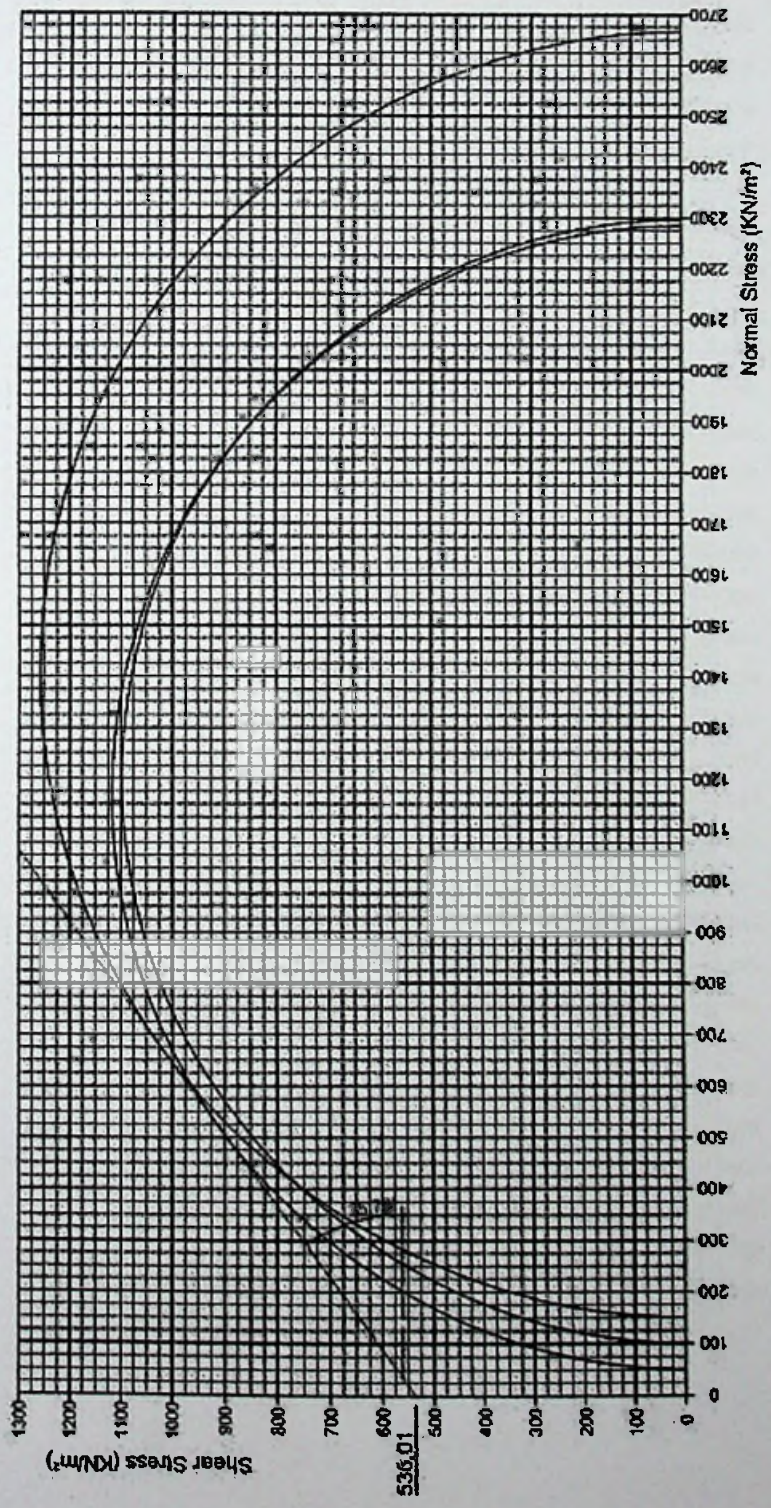


Chart 3.10: Mohr Circles of Stress at Failure for the Cell Pressure 50KPa, 100KPa and 150 KPa for Block Type B at Complete Dry Condition

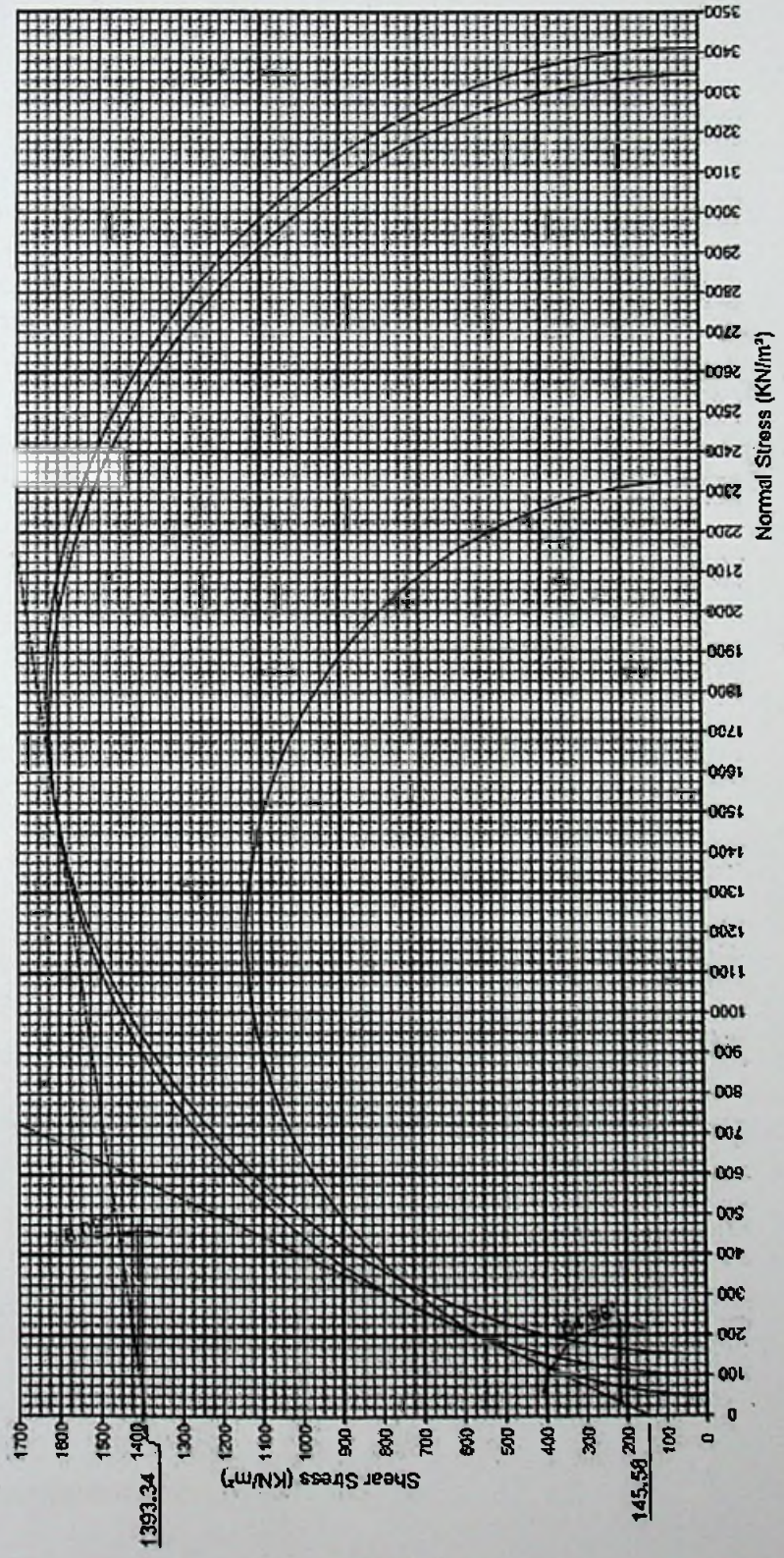


Chart 3.11: Mohr Circles of Stress at Failure for the Cell Pressure 50KPa, 100KPa and 150 KPa for Block Type A After 4 Days Total Immersion in the Water

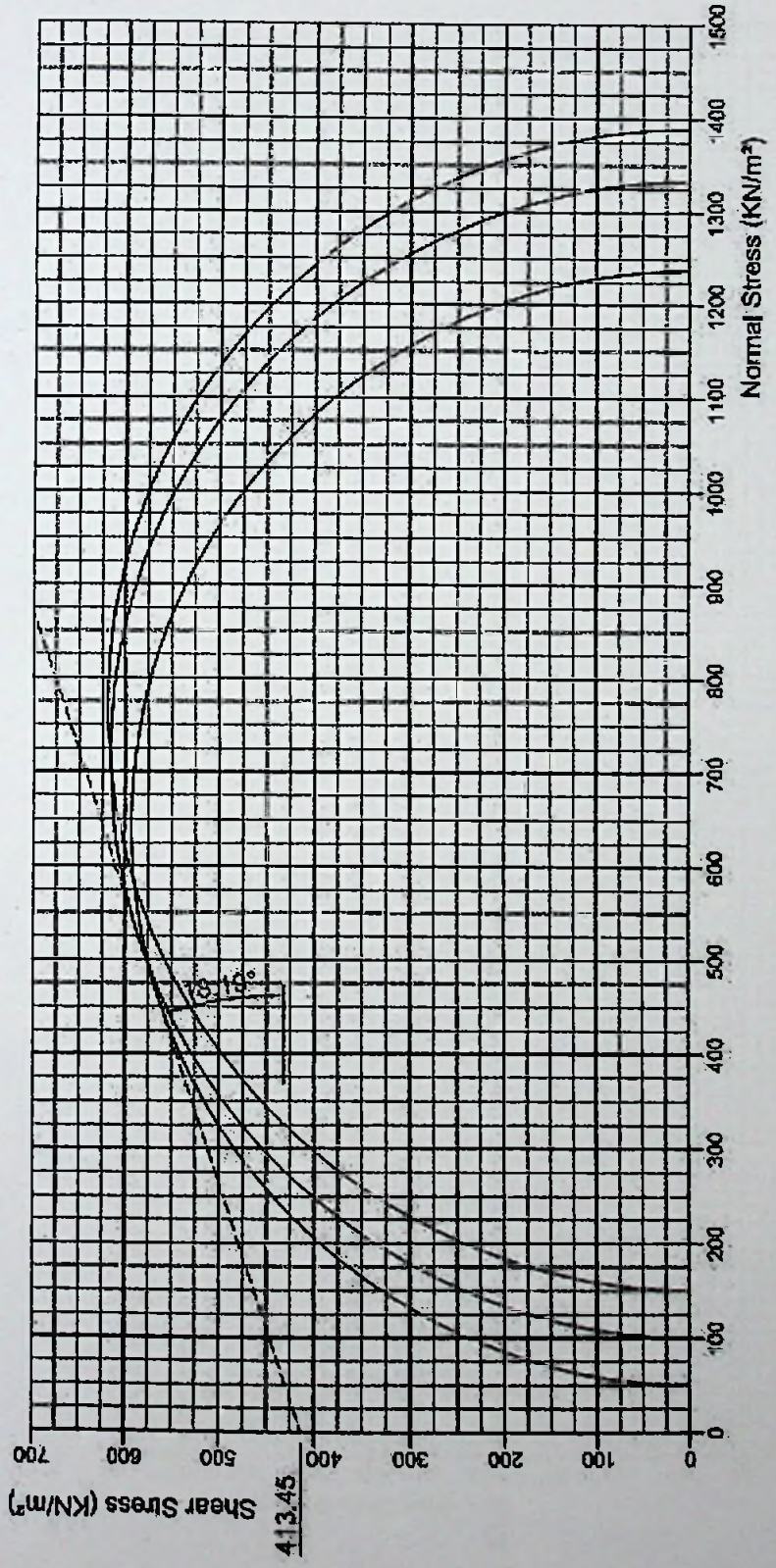
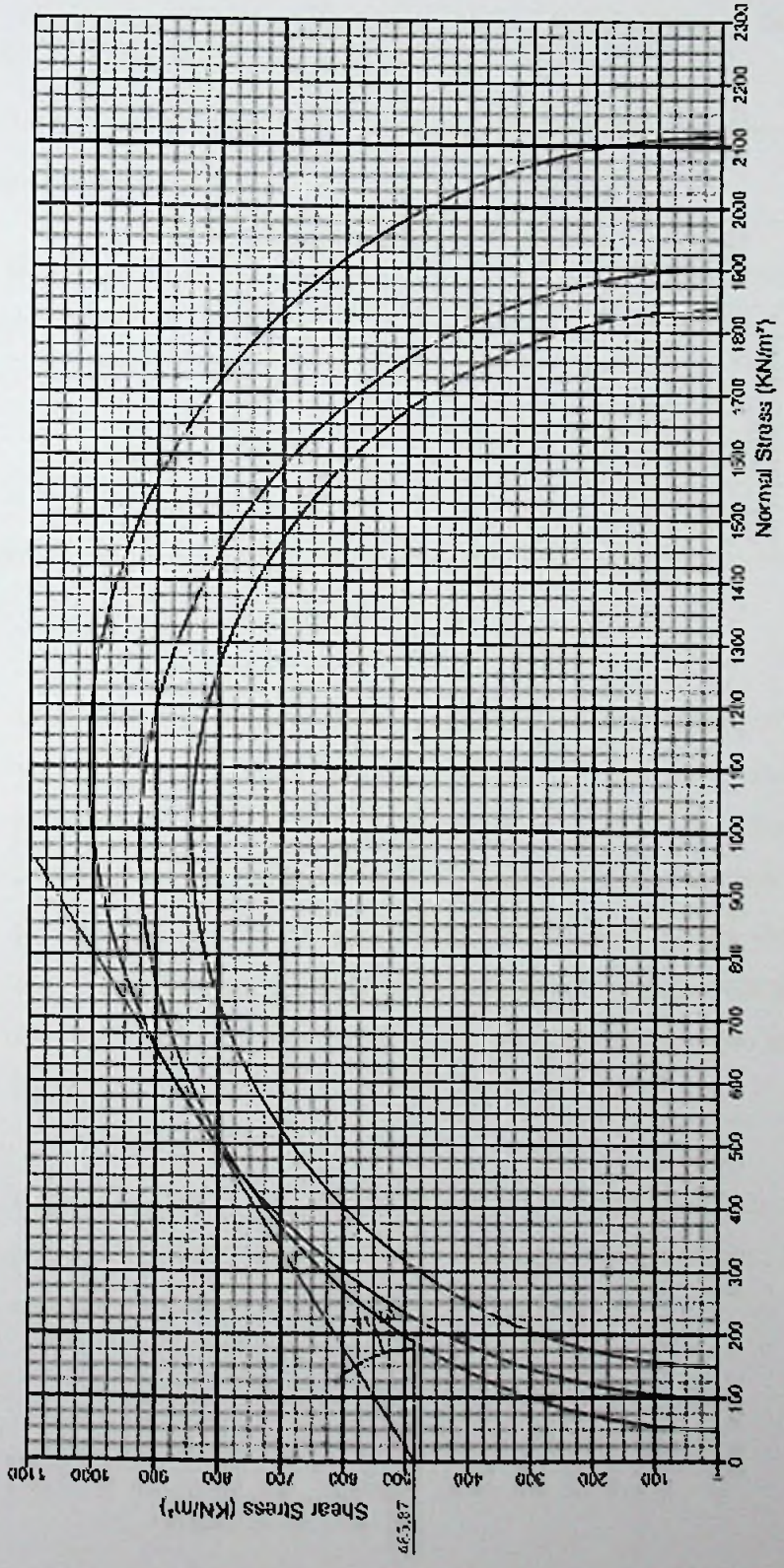


Chart 3.12: Mohr Circles of Stress at Failure for the Cell Pressure 50KPa, 100KPa and 150 KPa for Block Type B After 4 Days Total Immersion in the Water



C and ϕ values, determined from unconsolidated undrained tri axial tests of the compressed soil blocks with cement content of 4% and 6.25% in complete dry conditions and 4 days total immersion in water are given in Table 3.17.

Table 3.17: C and ϕ values of the compressed soil blocks determined in Unconsolidated Undrained Tri axial Test.

Block Identification	In Complete dry conditions		After 4 days total immersion in water	
	C_u (kPA)	ϕ_u (deg.)	C_u (kPA)	ϕ_u (deg.)
A	536.01	35.78	413.45	18.19
B	650.00	40.00	485.87	31.70

In determination of C_u and ϕ_u for Block Type B (i.e cement content 6.25%) from Mohr Circles.

(a) In its complete dry condition, it is difficult to draw a tangent line touching each circle. Therefore two tangents were drawn selecting circles drawn for cell pressures of 50 KPa and 100 KPa and 1100 KPa, 50 KPa respectively. One tangent gives very high valve for C_u and other gives very low valve for same. For ϕ_u values it is vice versa. Therefore considering values determined for Block Types A and B in wet condition it is reasonable to place it at the value of 650 KPa for C_u which is less then the average value given by the two tangent lines, and 40^0 for ϕ_u.

(b) In its condition of 4 days total immersion in water, the Mohr circle drawn for cell pressure 150 kPA falls much below the other circles drawn. Therefore that circle was not considered in drawing the tangent line.

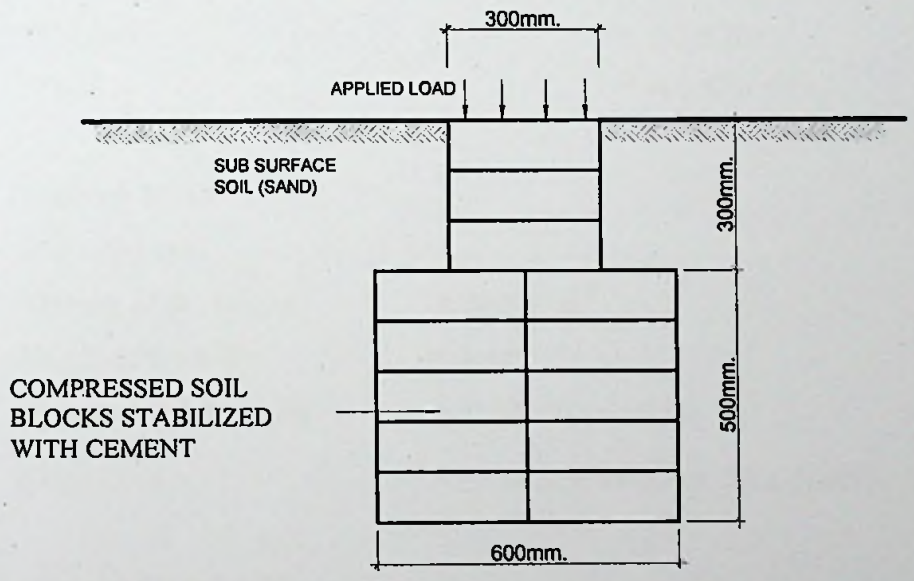
CHAPTER 4
NUMERICAL ANALYSIS

3.1 INTRODUCTION

Using results obtained from the experimental programme a numerical analysis was carried out for a selected foundation section formed with compressed soil blocks in complete dry condition, also and having 4 days total immersion in water, with different cement contents. 'PLAXIS', a computer package developed based on finite element method was used to analyse the foundation. It was assumed that mortar thickness is negligible.

The foundation section selected is shown in Figure 4.1

Figure 4.1 : The Foundation Section used for numerical analysis



Load applied was distributed on the complete width of the foundation in line. It is assumed that the load is transferred onto the foundation through load bearing walls and through a plinth beam having the same width as that of the foundation.

4.2 LOAD CALCULATION

A two storied house with a one way spanning flood slab having a centre to centre dimension of 4.0m, asbestos roofing and 225 mm thick load bearing masonry walls (compressed soil blocks / brick work) structure was considered for calculation of load transferred to the foundation.

4.2.1 DEAD LOADS :

Roof

Characteristic load, G_k with asbestos roof and ceiling on plan area = 0.5 KN/m^2

1st Floor Slab

For 125mm thick concrete slab	= 3.0 KN/ m^2
Partitions	= 0.5 KN/ m^2
Finishes	= 0.5 KN/ m^2
Total	= 4.0 KN/ m^2

Masonry Walls :

1st Floor Level

Density of the blocks	= 20 KN/ m^3
Height of the walls	= 3.4 m
Thickness of the walls	= 0.225m
Dead Load	= 15.64 KN/ m^2 (20 x 3.4 x 0.225)

Ground Floor Level

(Only height of the walls is changed to 3.0m)

Dead Load = 13.80 KN/ m^2 (20 x 3.0 x 0.225)

4.2.2 IMPOSED LOADS :

On roof = 0.25 KN/ m^2

On floor = 2.0 KN/ m^2

4.2.3 LOADS FROM ROOF AND FLOORS :

	Characteristic Dead Loads (KN/ m)	Characteristic Imposed Load (KN/ m)
Roof	0.5x4.0 = 2.0	0.25x4.0 = 1.0
1st Floor Slab	4.00x4.0 = 16.0	2.0x4.0 = 8.0

Total Service Load :

At First Floor level :

Dead Load of Roof = 2.0 KN/m
Imposed Load on Roof = 1.0 KN/m
Dead Load of Masonry walls = 15.64 KN/m
Total 18.64 KN/m

At Ground Floor Level :

Dead load of roof and 1st Floor = 18.0 KN/m
Imposed load on Roof and 1st Floor = 9.0 KN/m
Dead Load of Masonry = 29.44 KN/m
56.44 KN/m

Design load = 1.5x56.44 = 84.66 KN/m

Accordingly a load of 84.66 KN/m is applied along the 0.3m wide foundation.

That is a pressure of 282.2 KN/m^2 (84.66/0.3) is applied on the foundation.

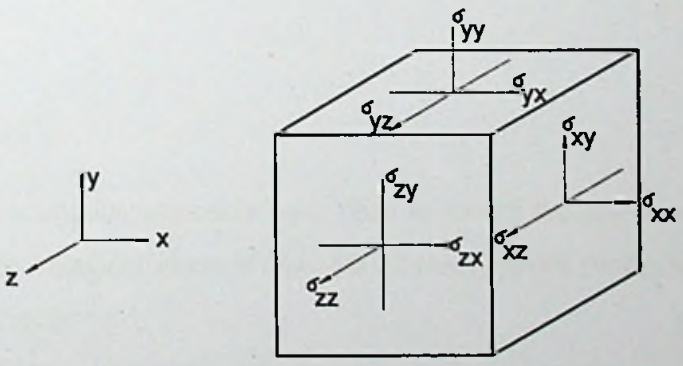
4.3 USE OF PLAXIS VERSION 8.0 COMPUTER PROGRAMME

4.3.1 INTRODUCTION

PLAXIS Version 8 is a two – dimensional finite element computer programme used to perform deformation and stability anlaysis for various types of geotechnical applications.

Two – dimensional finite element model in PLAXIS is generated based on a geometrical model which is created in the X-Y plane of the global coordinate system as shown in Figure 4.2. Although PLAXIS Version 8 is a 2D program, stresses are based on the 3D Cartesian Coordinate System. In a plane stain analysis σ_{zz} is the out-of-plane stress.

Fig.4.2 Coordinate system and indication of positive stress components.



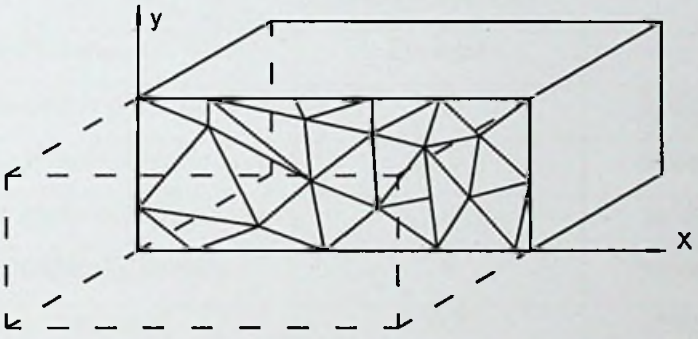
4.3.2 SIGN CONVENTION

In the output data, compressive stresses and forces are taken to be negative, whereas tensile stresses and forces are taken to be positive.

4.3.3 MODEL

Plane strain model is used as shown in Figure 4.3 to model the foundation as its geometry is of uniform cross section and so the corresponding stress state and loading scheme over a certain length perpendicular to the cross section. (PLAXIS Version 8 Reference Manual)

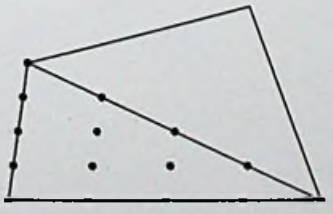
Figure 4.3 : A Plane Strain Model



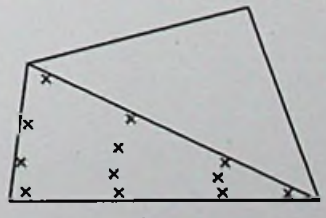
4.3.4 ELEMENTS

15 – node triangular elements were used to model the soil layers and foundation. A 15 - node triangular element contains 12 stress points. Nodes and stress points are shown in Figure 4.4

Fig 4.4 : Nodes and Stress points



Nodes



Stress Points

4.3.5 LOADS

Distributed load is applied on the top of the foundation and the distribution is always uniform along the length.

4.3.6 BOUNDARY CONDITIONS

The base of the geometry was fully fixed and the vertical sides were subjected to roller conditions (Ux = 0 and Uy – free)

4.3.7 MATERIAL PROPERTIES

In this analysis, sub surface soil was selected as sand and properties of sand and blocks used are given in Tables 4.1 and 4.2.

Table 4.1: Material Properties of the Sub Surface Soil (Sand)

Parameter	Value	Unit
Material model	Mohr-Coulomb	-
Type of material behaviour	Drained	-
Soil unit weight above phreatic level	17.0	kN/m^3
Soil unit weight below phreatic level	20.0	kN/m^3
Permeability in horizontal direction	1.0	m/day
Permeability in vertical direction	1.0	m/day
Young's modulus (constant)	13000	kN/m^2
Poisson's ratio	0.3	-
Cohesion (Constant)	1.0	kN/m^2
Friction angle	31.0	^{0}
Dilatancy angle	0.0	^{0}

Table 4.2: Material Properties of compressed soil blocks used in Finite Element Analysis.

Parameter	At Complete dry conditions		After 4 days total immersion in water		Unit
	Block Type 'A' (Cement content 4%)	Block Type 'B' (Cement content 6.25%)	Block Type 'A' (Cement content 4%)	Block Type 'B' (Cement content 6.25%)	
Material model	Mohr - Coulomb	Mohr - Coulomb	Mohr - Coulomb	Mohr - Coulomb	-
Type of material behaviour	Drained	Drained	Drained	Drained	-
Soil unit weight above phreatic level	16.5	16.5	16.5	16.5	kN/m^3
Soil unit weight below phreatic level	20.0	20.0	20.0	20.0	kN/m^3
Permeability in horizontal direction	0.1	0.1	0.1	0.1	m/day
Permeability in vertical direction	0.1	0.1	0.1	0.1	m/day
Young's modulus (constant)	45,000.00	55,000.00	22,500.00	49,330.00	kN/m^2
Poisson's ratio	0.2	0.2	0.2	0.2	-
Cohesion (Constant)	536.00	650.00	413.00	485.00	kN/m^2
Friction angle	35.78	40.00	18.10	31.70	^{0}
Dilatancy angle	0.00	0.00	0.00	0.00	^{0}

4.3.8 MODELING OF MATERIAL BEHAVIOUR

Mohr – Coulomb model is used as a first approximation of material behaviour in general. It involves five parameters which are, Young's modulus, E ; Poisson's ratio, ν ; cohesion, C ; friction angle, ϕ ; and the Dilatancy angle, ψ.

Drained behaviour was applied to the sub-surface soil (sand) due to high permeability of sand. Accordingly no excess pore pressures are generated.

It was assumed that pore pressure does not affect the compressed soil blocks as its skeleton is very rigid.

4.3.9 FINITE ELEMENT MESH

When the geometric model was fully defined and material properties assigned to all clusters and structural objects, the geometry was divided into finite elements in order to perform finite element calculations. A composition of finite elements is called a mesh. (Plaxis Version 8 Reference Manual page 3-62)

Finite Elements generated with nodes and stress points are shown with identification numbers in Figures 4.4, 4.5 and 4.6 respectively.

Figure 4.4: Finite Elements generated, with identification numbers

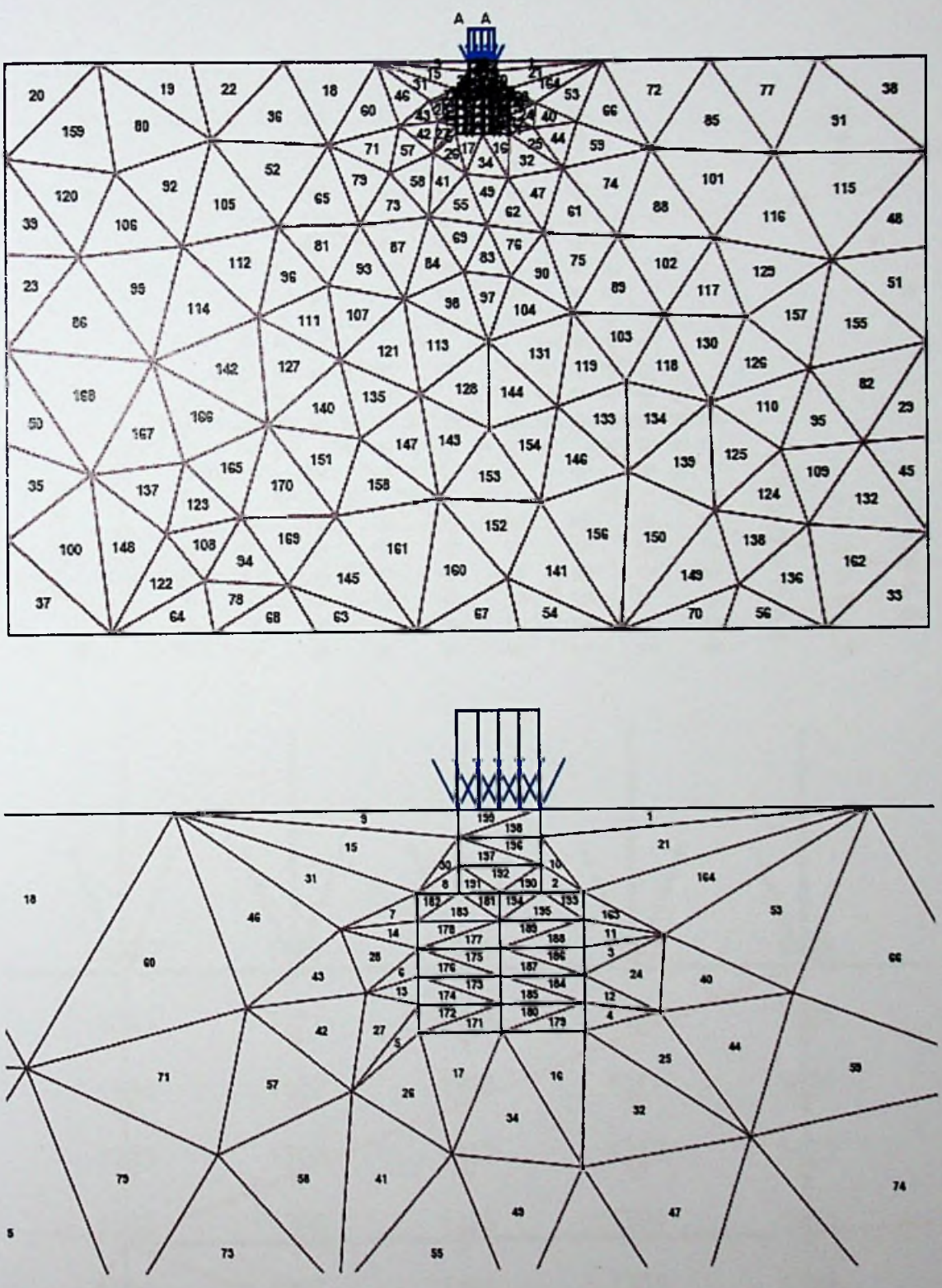


Figure 4.5: Nodes in Finite Elements generated, with identification numbers

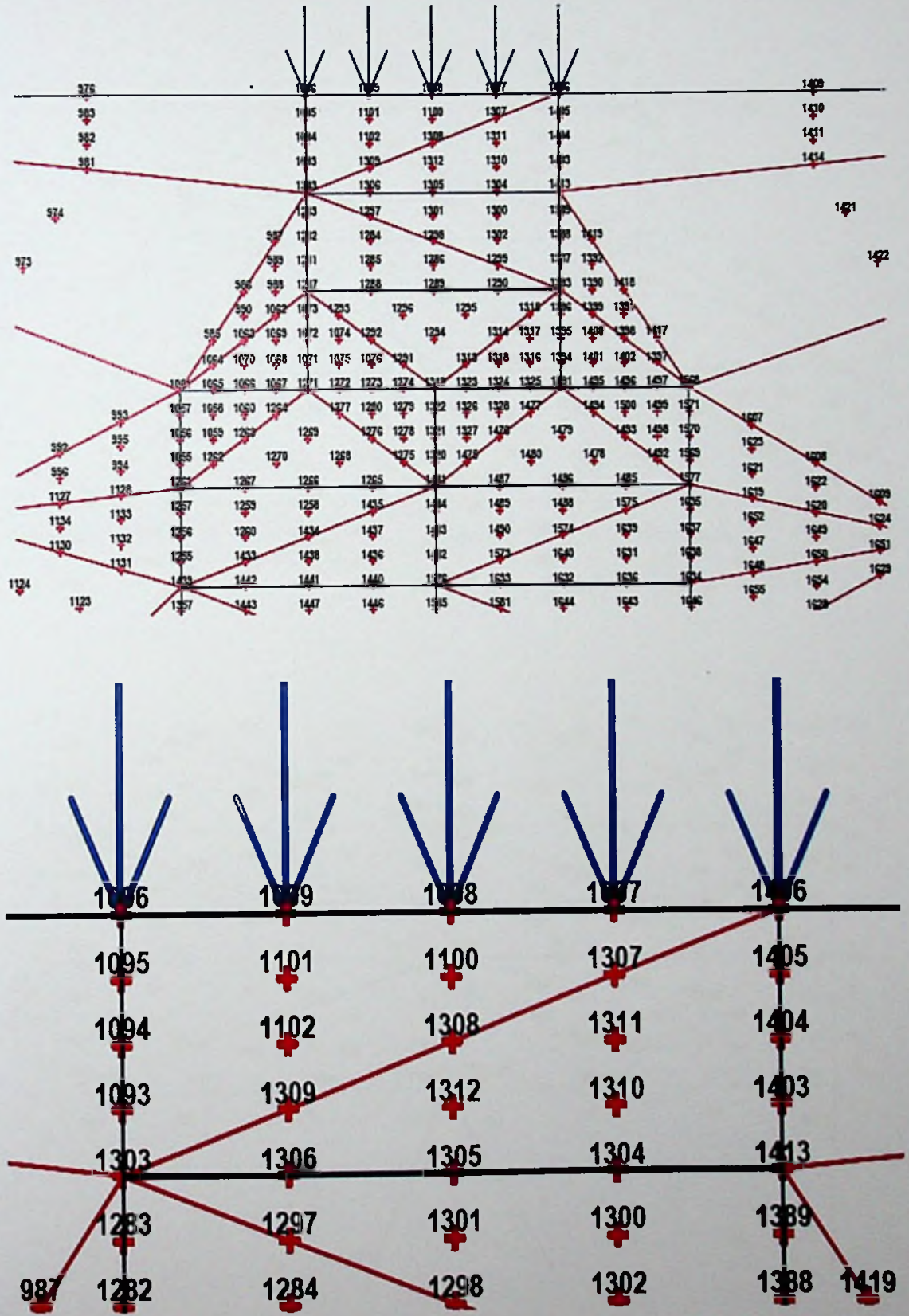
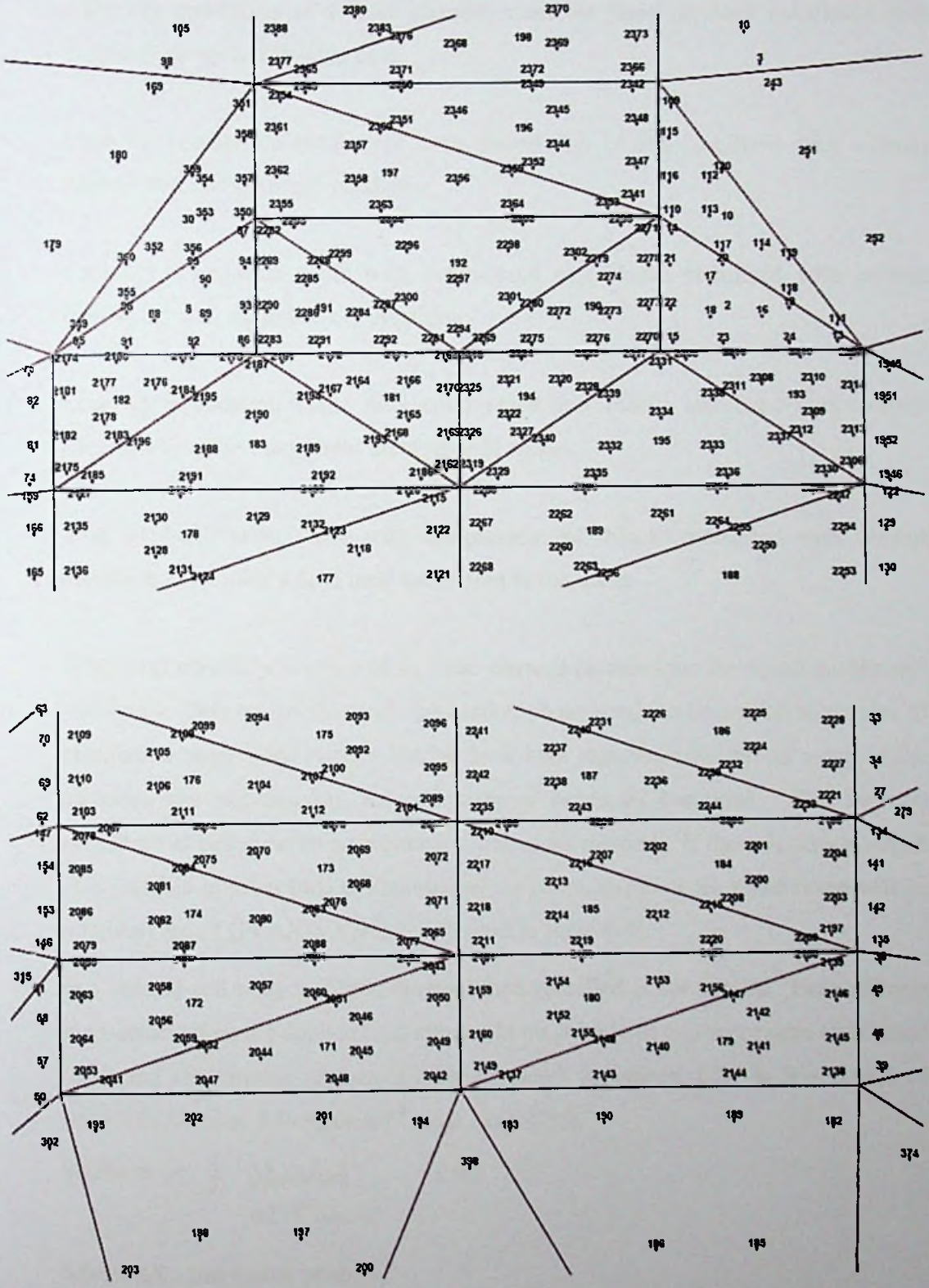


Figure 4.6: Stress points in Finite Elements generated, with identification numbers.



4.3.10 CALCULATIONS

After the generation of a finite element mesh the finite element calculation was executed for each following case.

Case 01: Foundation made with compressed soil blocks stabilized with cement content 4%, complete dry condition

Case 02: Foundation made with compressed soil blocks stabilized with cement content 6.25 %, complete dry condition.

Case 03: Foundation made with compressed soil blocks stabilized with cement content 4%, after 4 days total immersion in water.

Case 04: Foundation made with compressed soil blocks stabilized with cement content 6.25%, after 4 days total immersion in the water.

When soil plasticity is involved in finite element calculations the equations become non-linear. This means that each calculation phase needs to be solved in a series of calculation steps (load steps). During each load step, the equilibrium errors in the solutions are successively reduced using a series of iterations. The iteration procedure is based on an accelerated initial stress method. If the calculation step is of a suitable interval then the number of iterations required for equilibrium will be relatively small (PLAXIS Version 8 Reference Page 4-9).

In a case of soil body collapse, the total load specified is not applied. Here collapse is assumed when the applied load reduces in magnitude in two successive calculation steps and the current stiffness (defined below) parameter, CSP is less than 0.02 (PLAXIS Version 8 Reference Manual Page 4-56)

$$\text{Stiffness} = \int \frac{\Delta\Sigma . \Delta\phi}{\Delta\Sigma D^{e} \Delta\Sigma} \qquad 0.02$$

Where $\Delta\Sigma$ - increment of strain

$\Delta\sigma$. D^e $\Delta\Sigma$ – increment of stress

D^e - elastic material stiffness matrix (PLAXIS Version 8 Material Models Manual Page 2 – 6)

When the solution is fully elastic, the stiffness is equal to unity whereas at failure the stiffness approaches zero (PLAXIS version 8 Reference Manual Page 4-56).

4.4 OUTPUT

Output results for deformations and stresses given could be described as follows:

4.4.1 DEFORMATIONS

4.4.1.1 Deformed Mesh

The deformed mesh is a plot of the finite element mesh in the deformed shape. Deformed mesh for each case is given in Figures 4.7 to 4.10.

Figure 4.7 : Deformation Mesh for Case 01

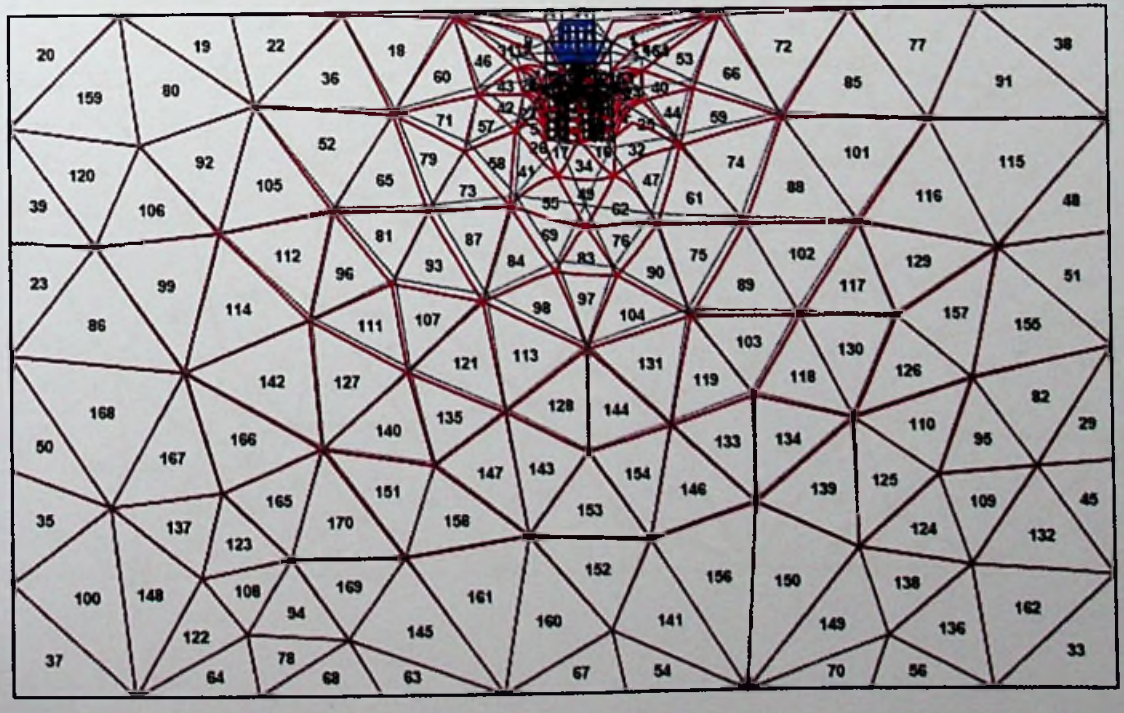


Figure 4.8 : Deformation Mesh for Case 02

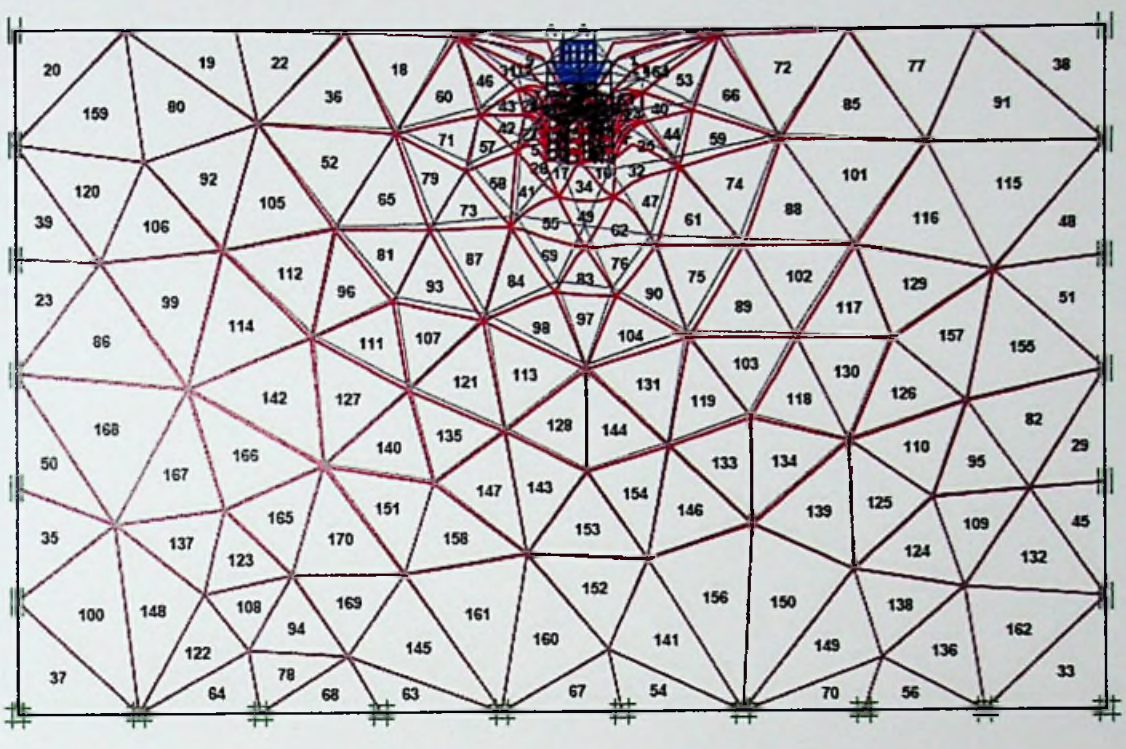


Figure 4.9 : Deformation Mesh for Case 03

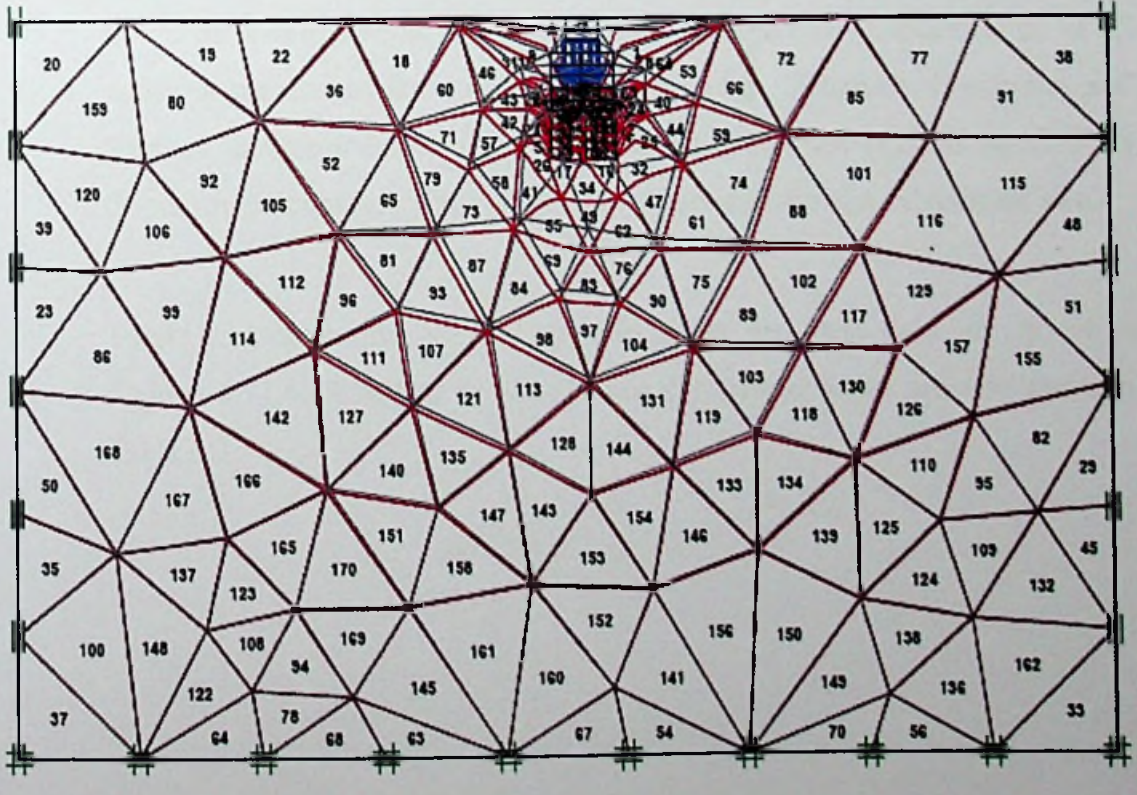
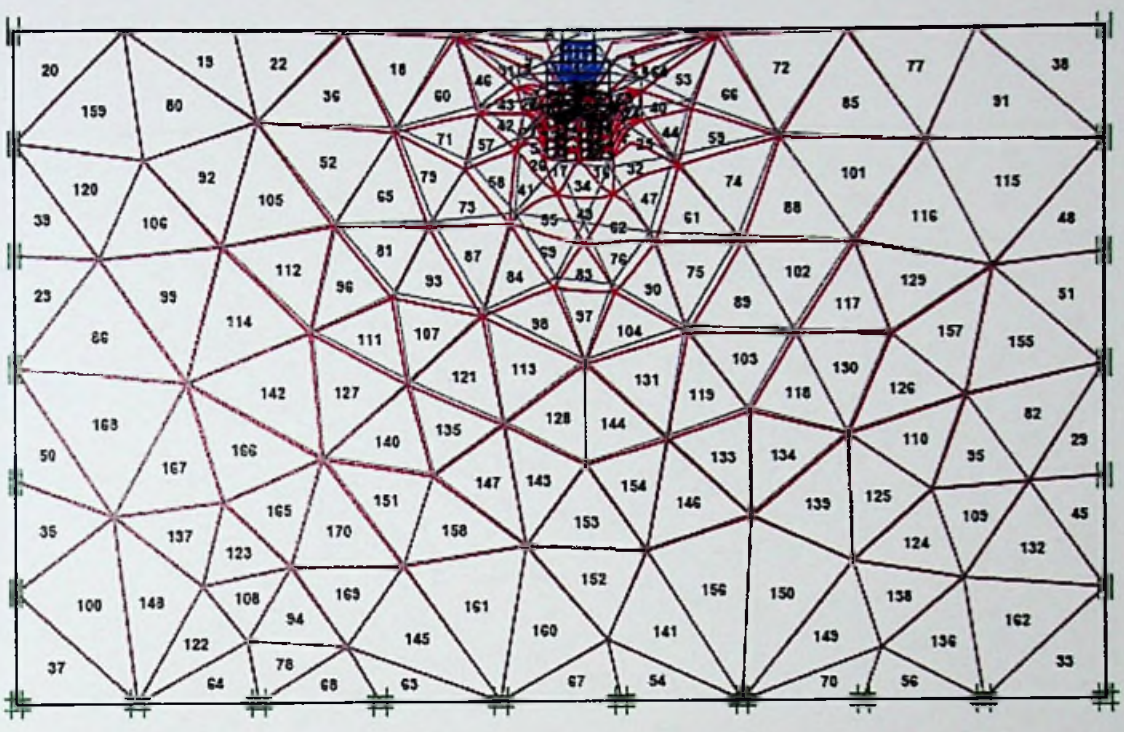


Figure 4.10 : Deformation Mesh for Case 04



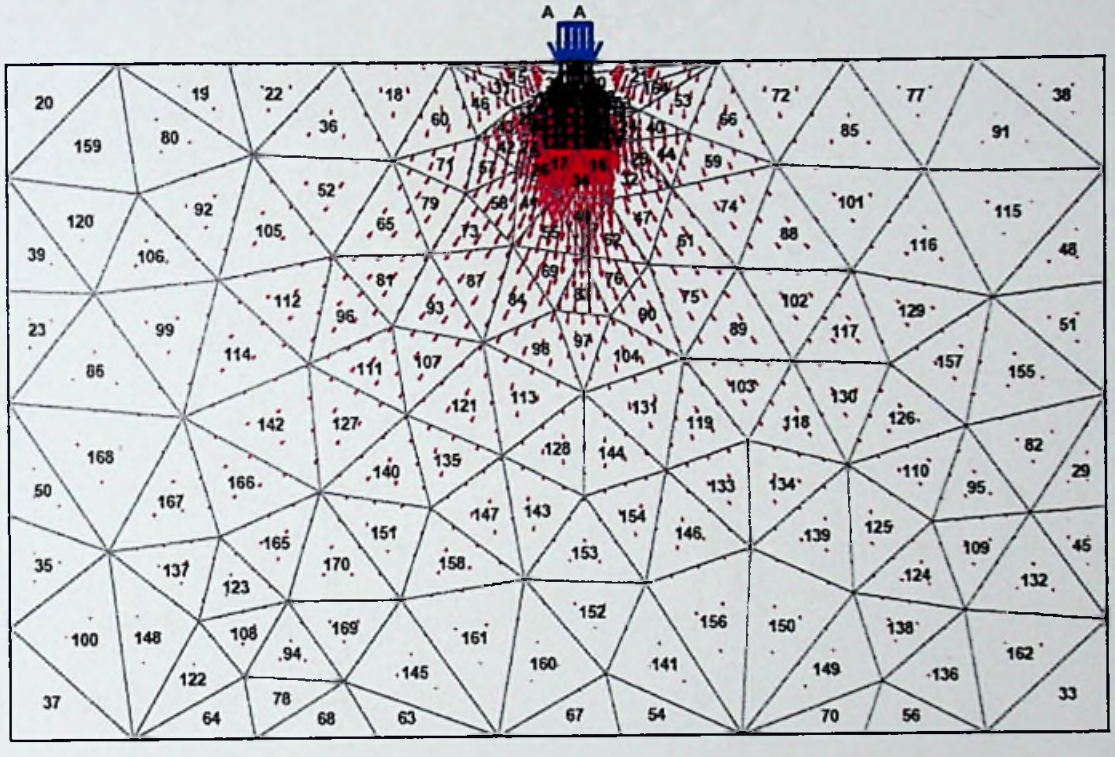
4.4.1.2 Total, Horizontal and Vertical Displacements

The total displacements are the absolute accumulated displacements at all nodes at the end of the current calculation step. Similarly Horizontal and Vertical displacements are the accumulated horizontal (x) and vertical (y) displacement components at all nodes at the end of current calculation step.

Total Horizontal and Vertical displacements for each case are given in Figures 4.11 to 4.14 and values of same for critical nodes are also given in Table 4.3.

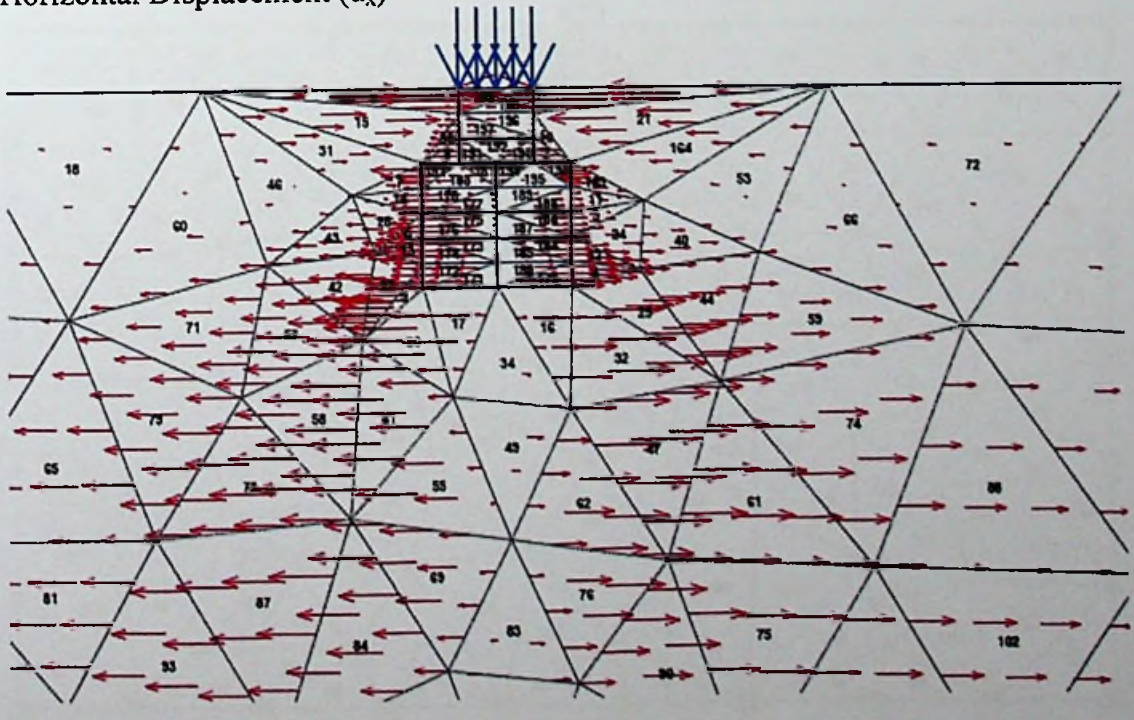
Figure 4.11 : Total, Horizontal & Vertical Displacements for Case 01.

Total Displacement



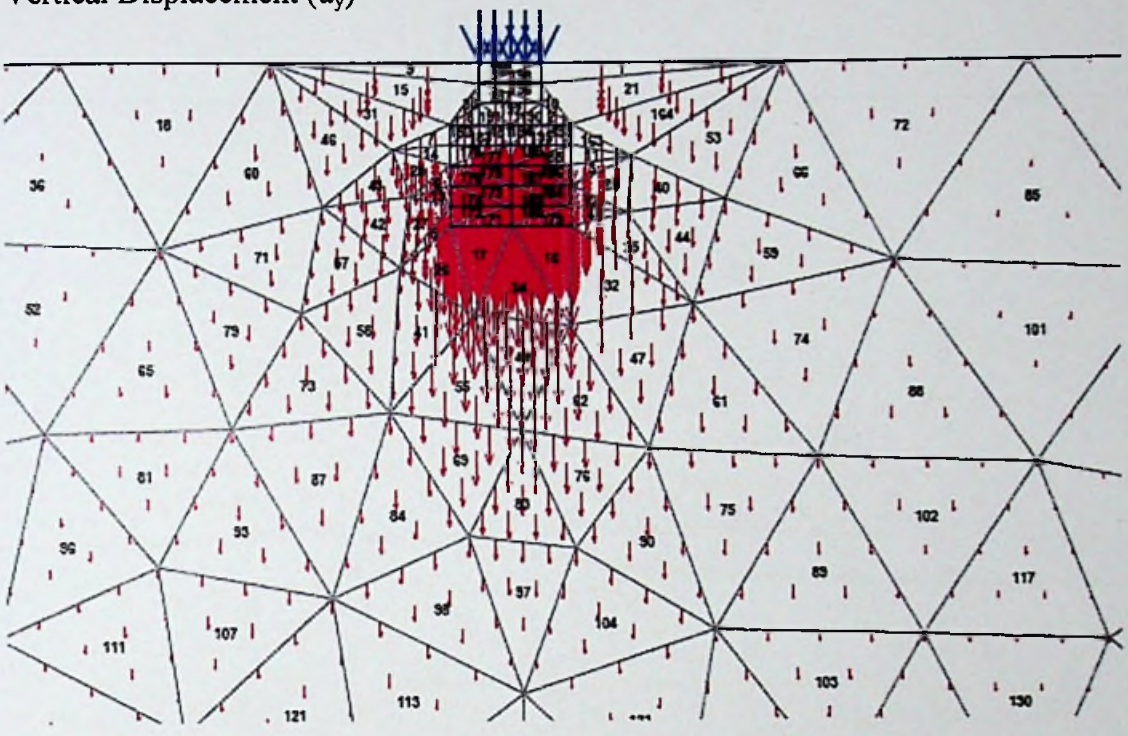
Extreme Total Displacement 24.52 * 10^{-3} m

Horizontal Displacement (u_x)



Extreme Ux 6.06 * 10^{-3} m

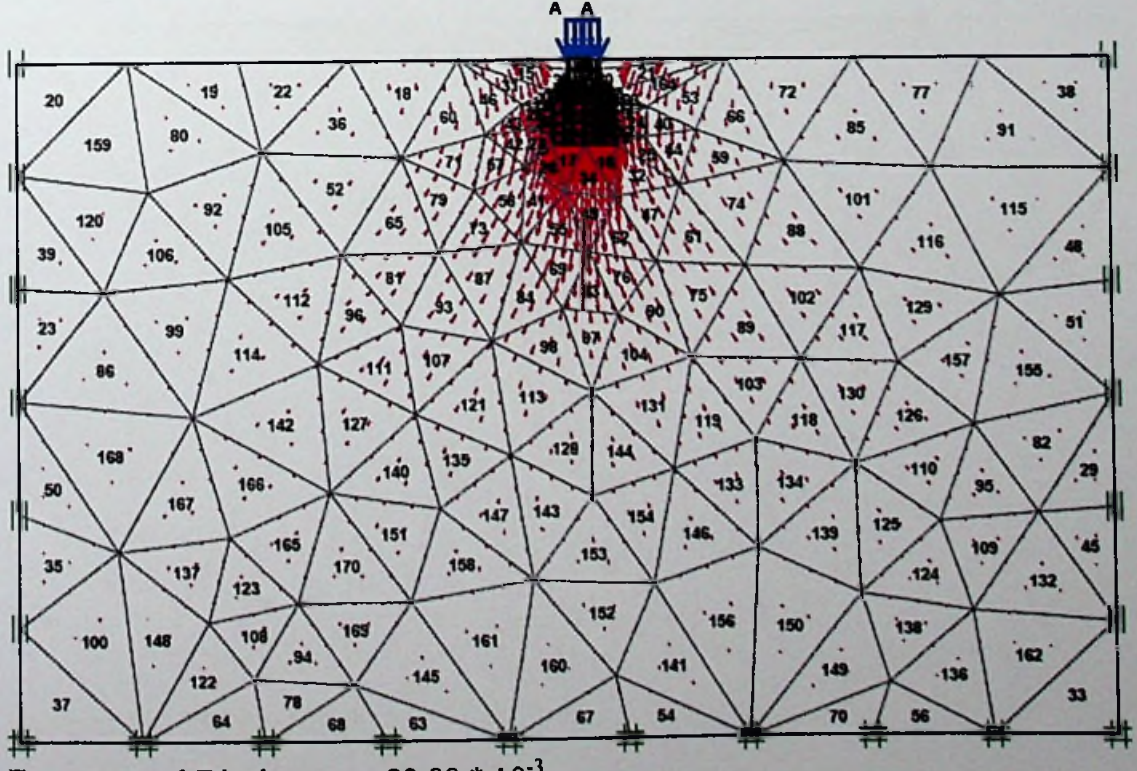
Vertical Displacement (u_y)



Extreme Uy 24.51 * 10^{-3} m

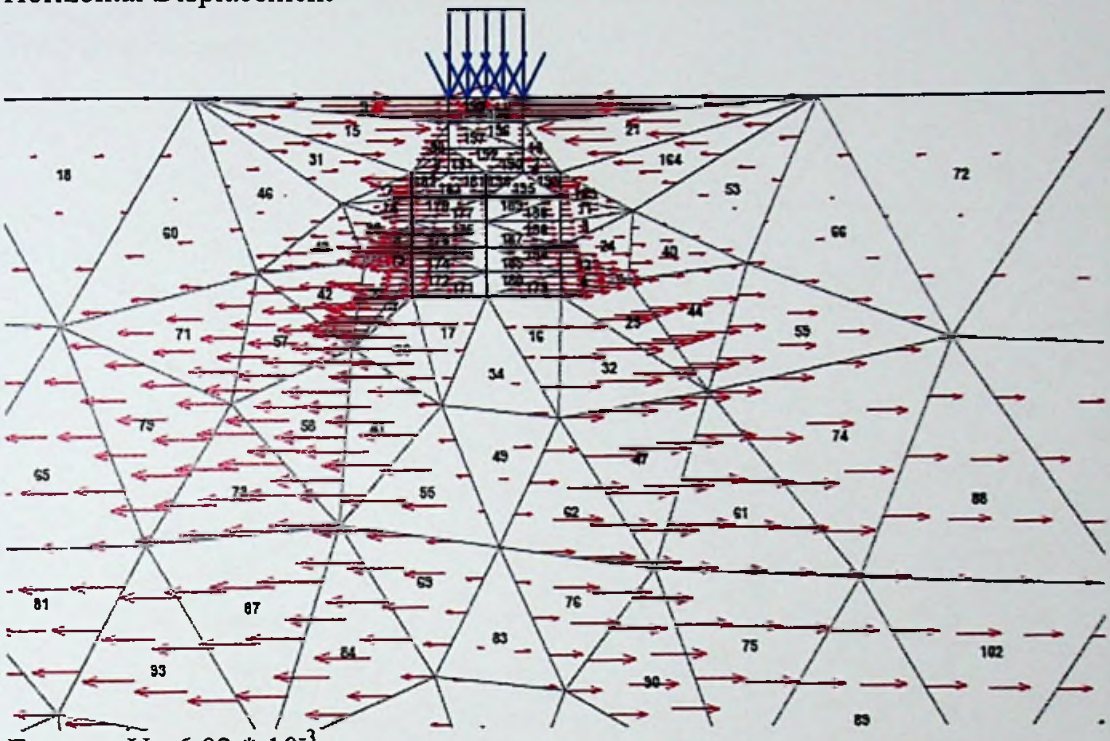
Figure 4.12 : Total, Horizontal & Vertical Displacements for Case 02.

Total Displacement



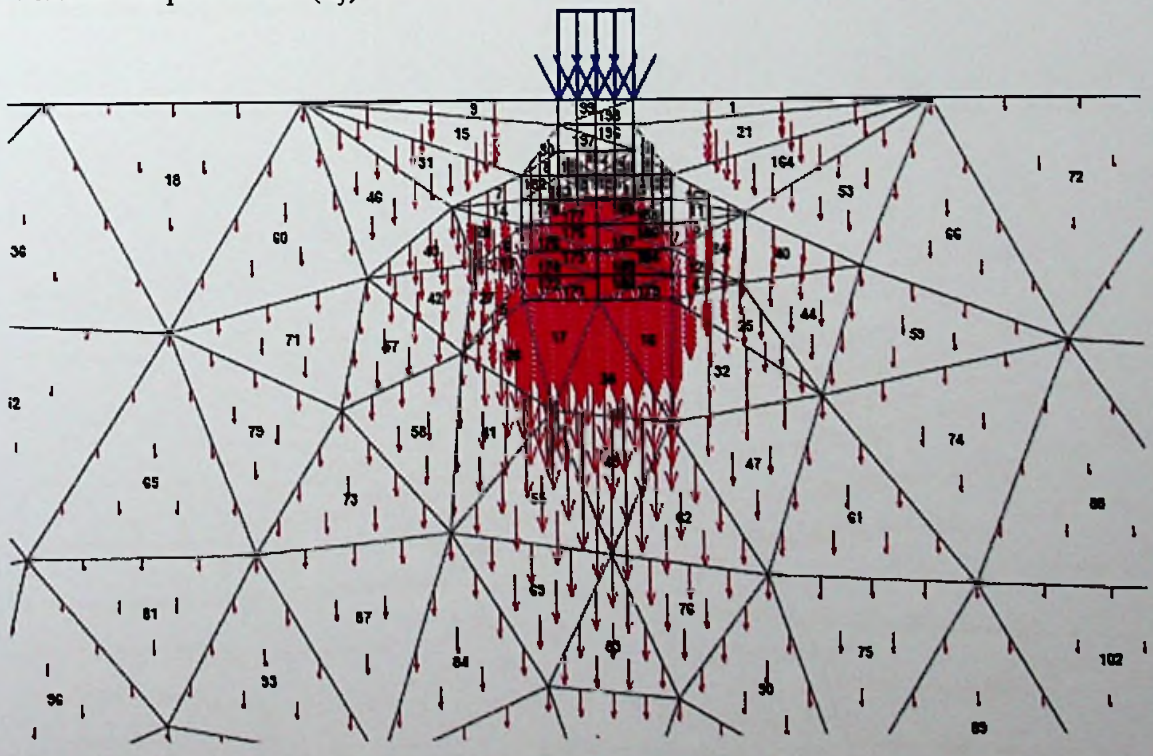
Extreme total Displacement 23.89 * 10^{-3} m

Horizontal Displacement



Extreme Ux 6.02 * 10^{-3} m

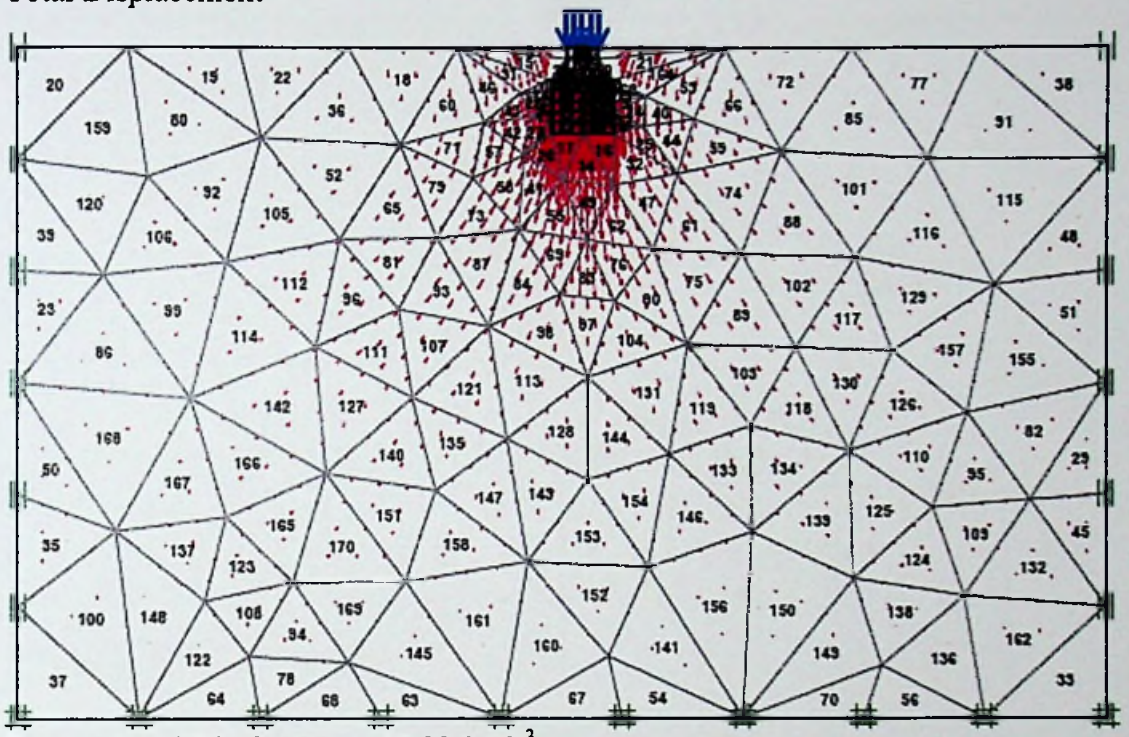
Vertical Displacement (u_y)



Extreme Uy 23.89 * 10^{-3} m

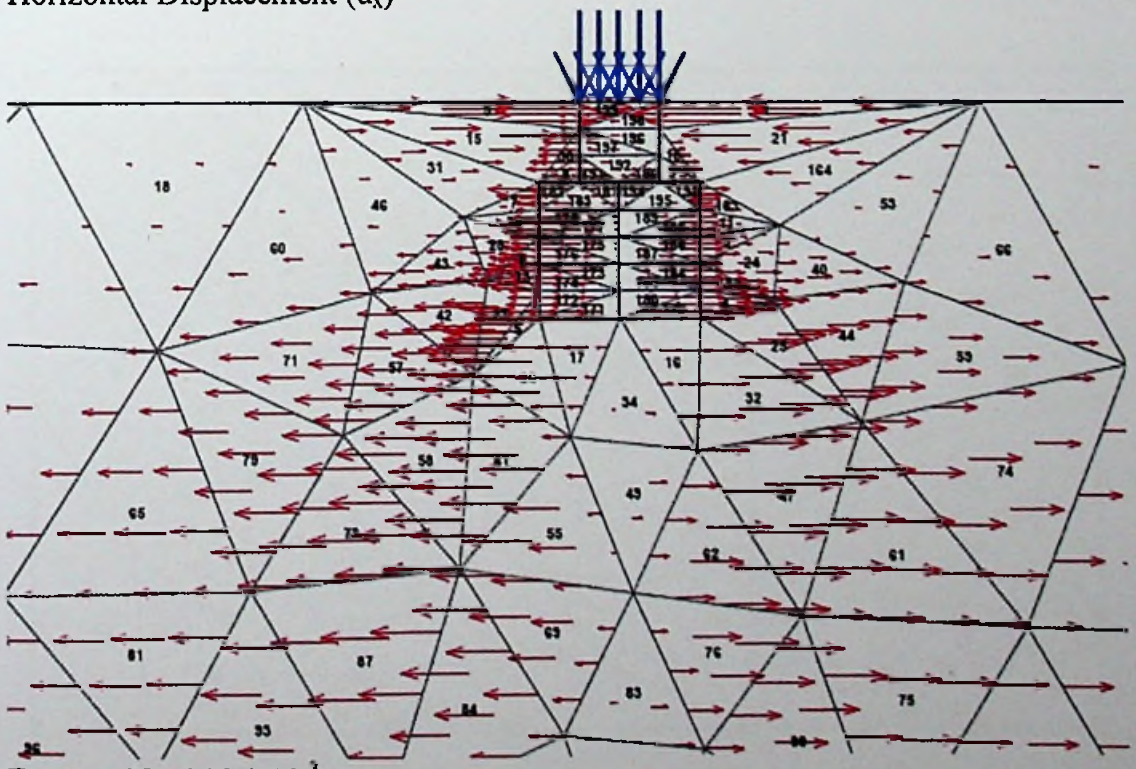
Figure 4.13 : Total, Horizontal & Vertical Displacements for Case 03.

Total Displacement



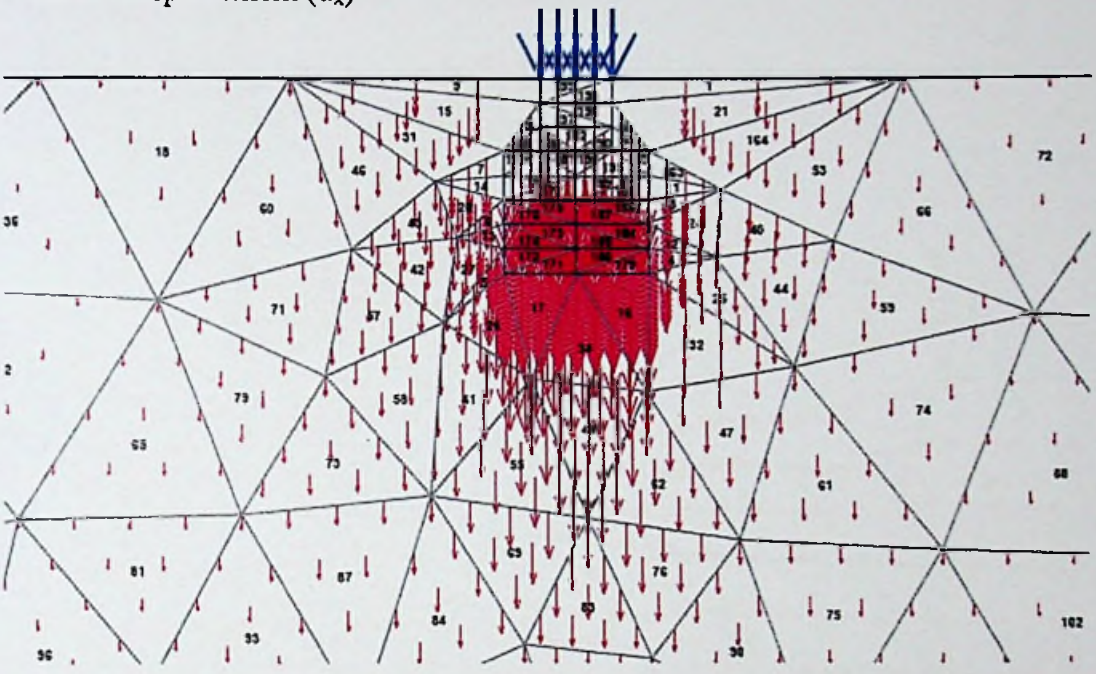
Extreme total Displacement 27.99 * 10^{-3} m

Horizontal Displacement (u_x)



Extreme Ux 6.28 * 10^{-3} m

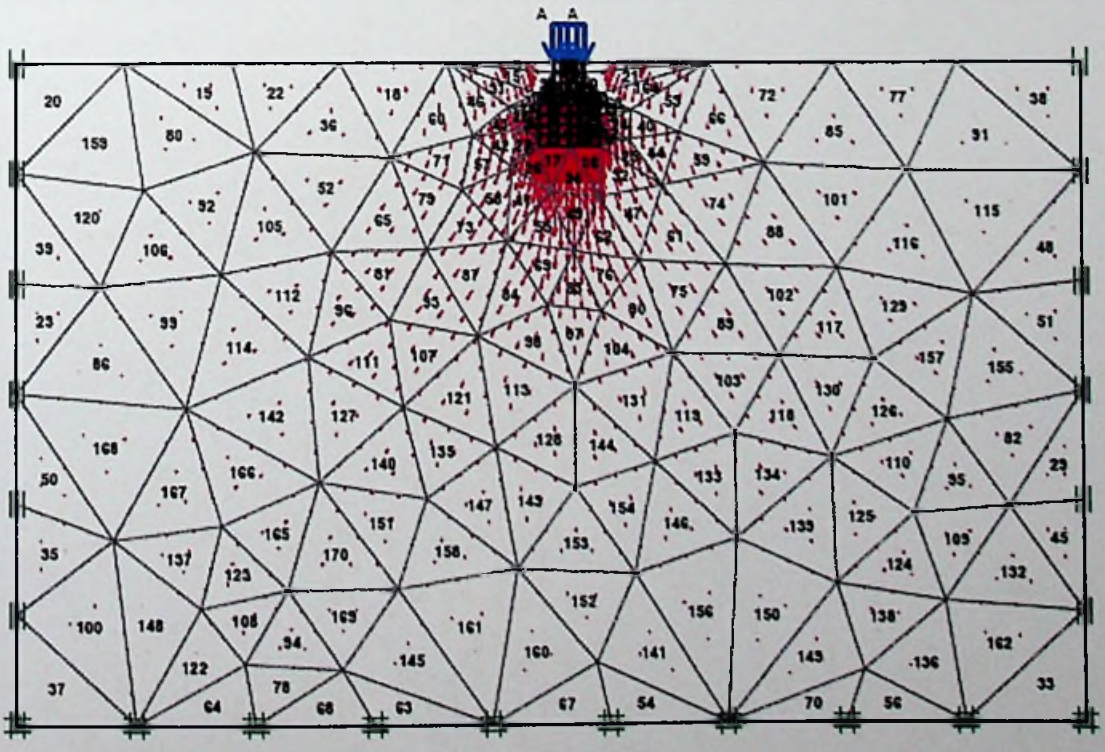
Vertical Displacement (u_x)



Extreme Uy 27.98 * 10^{-3} m

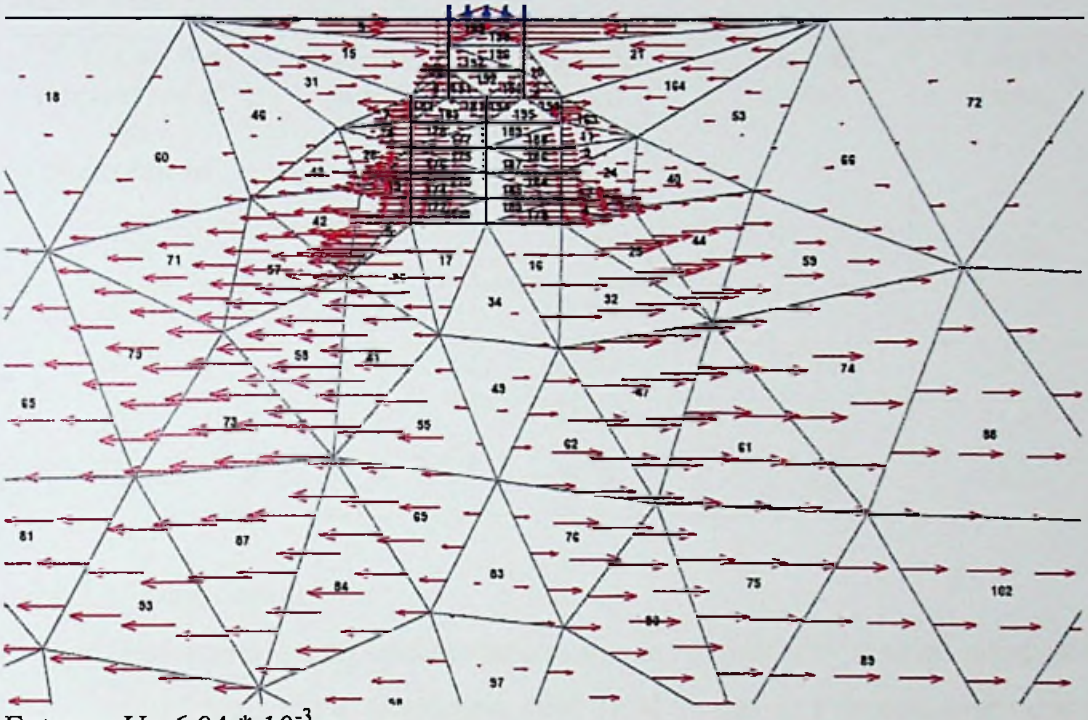
Figure 4.14 : Total, Horizontal & Vertical Displacements for Case 04.

Total Displacement



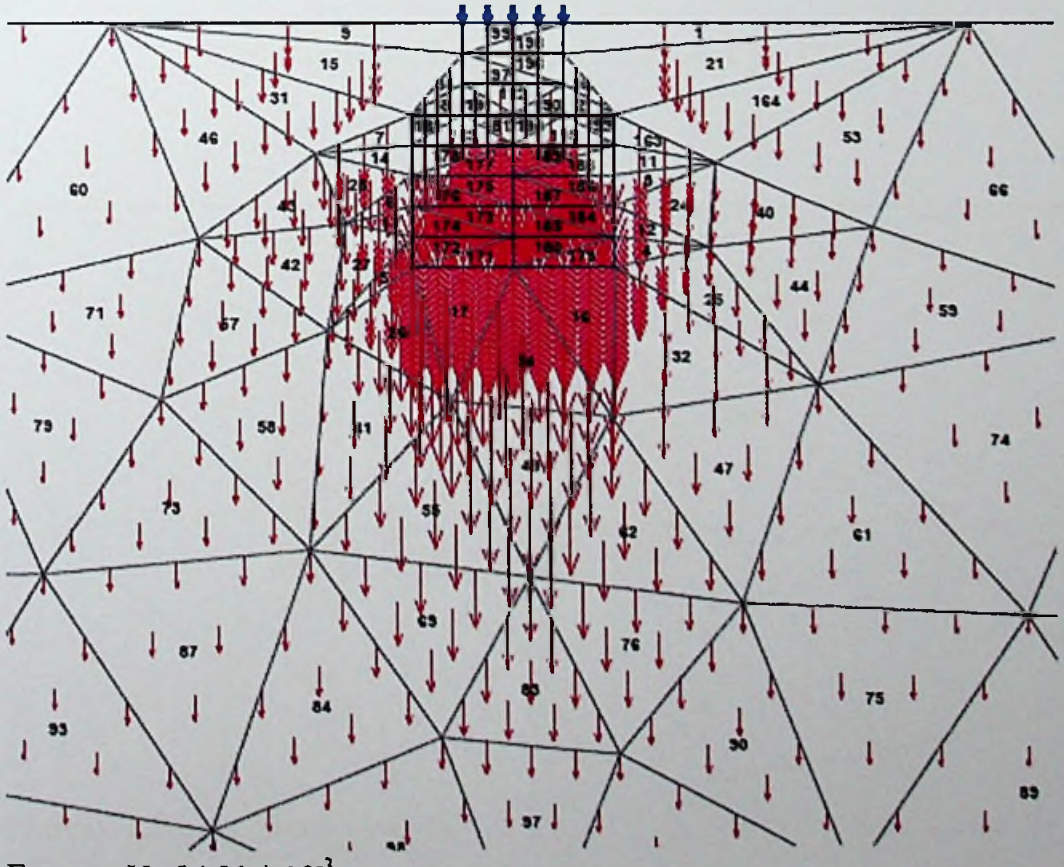
Extreme total Displacement 24.22* 10^{-3} m

Horizontal Displacement (u_x)



Extreme Ux 6.04 * 10^{-3} m

Vertical Displacement (u_y)



Extreme Uy 24.21 * 10^{-3} m

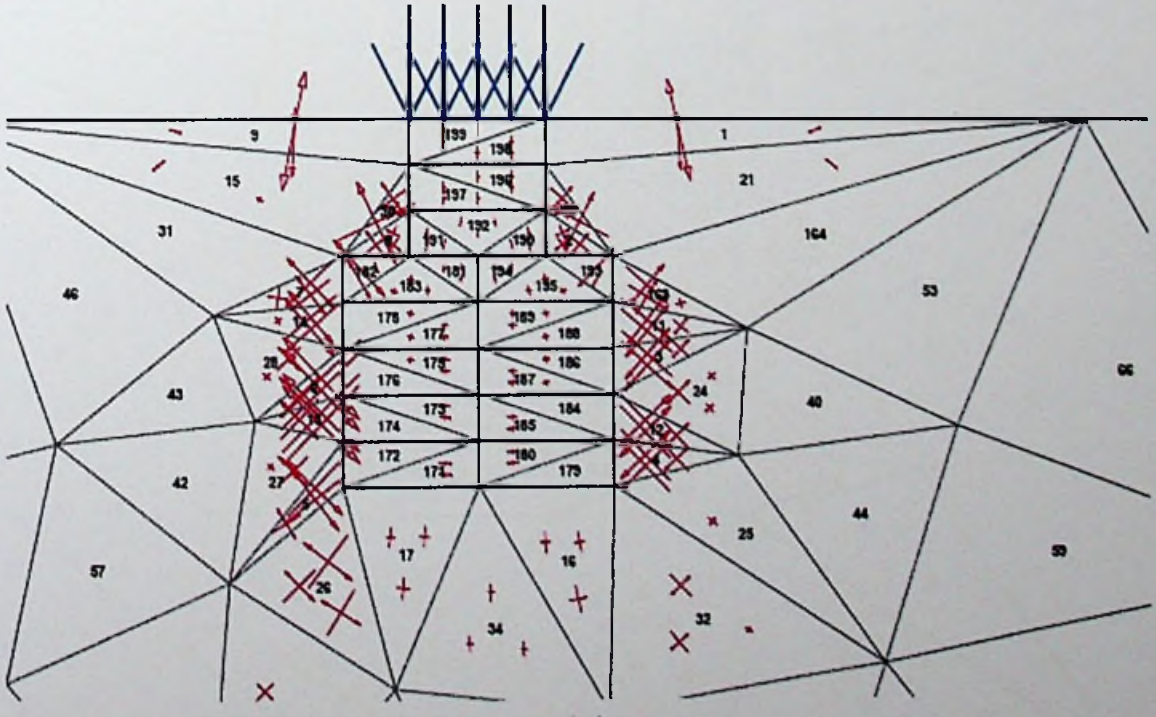
Table 4.3 : Values of Vertical Displacements (Uy) at Critical Nodes for Cases 01 ; 02 ; 03 and 04.

Nodes on the top surface of the Foundation	Case 01 (mm)	Case 02 (mm)	Case 03 (mm)	Case 04 (mm)
1096	24.51	23.89	27.97	24.21
1099	24.50	23.88	27.98	24.20
1098	24.48	23.85	27.96	24.17
1097	24.44	23.88	27.93	21.42
1406	24.39	23.76	27.84	24.09

4.4.1.3 Total Strains

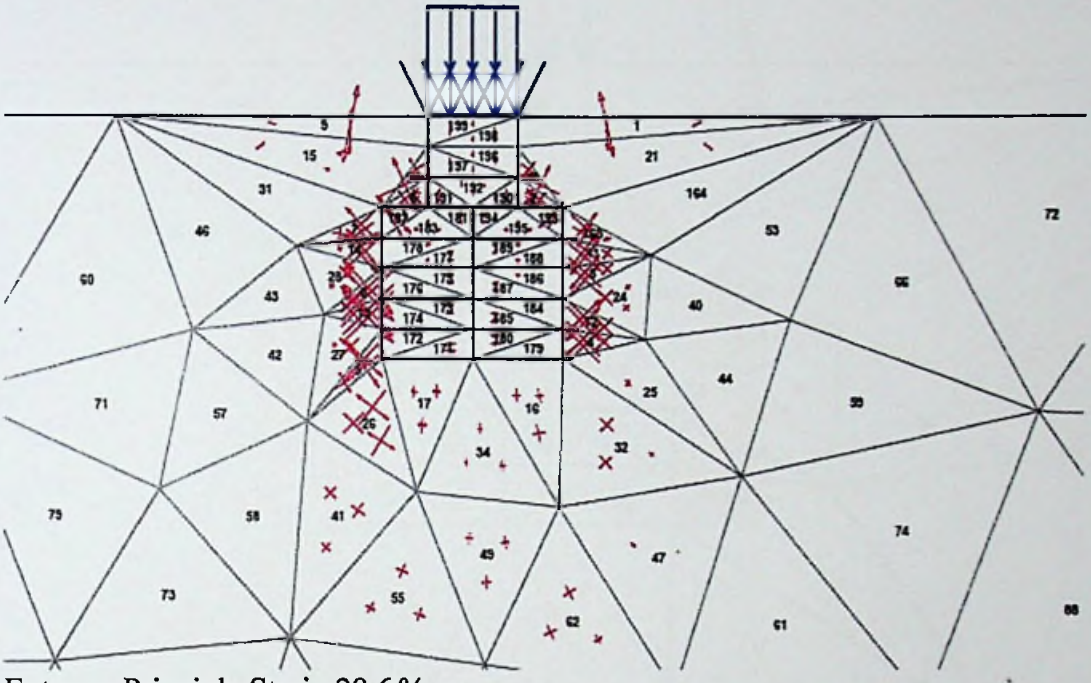
Total strains are the accumulated strains in the geometry at stress points at the end of the current calculation step. Total strains in Principal directions for each case are given in Figures 4.15 to 4.18.

Figure 4.15 : Total Strains in Principal Directions for Case 01



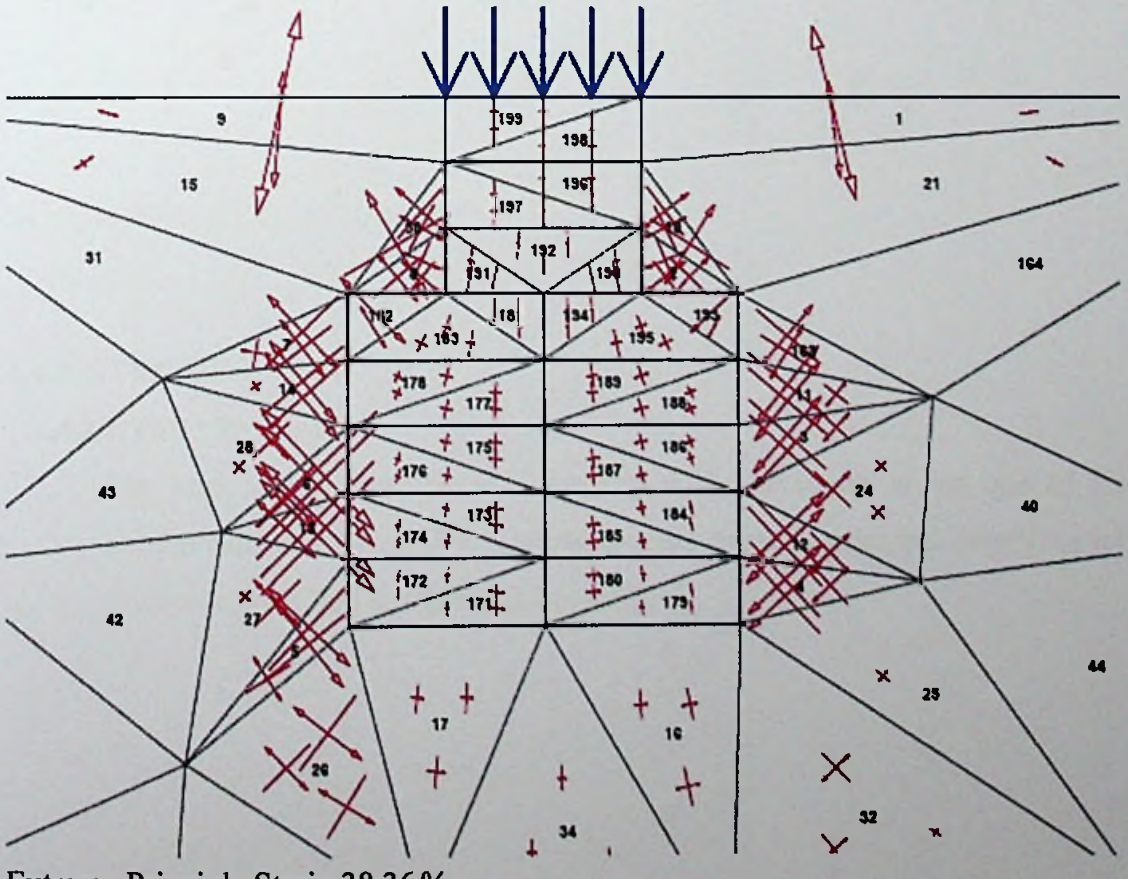
Extreme Principle Strain 31.44 %

Figure 4.16 : Total Strains in Principal Directions for Case 02



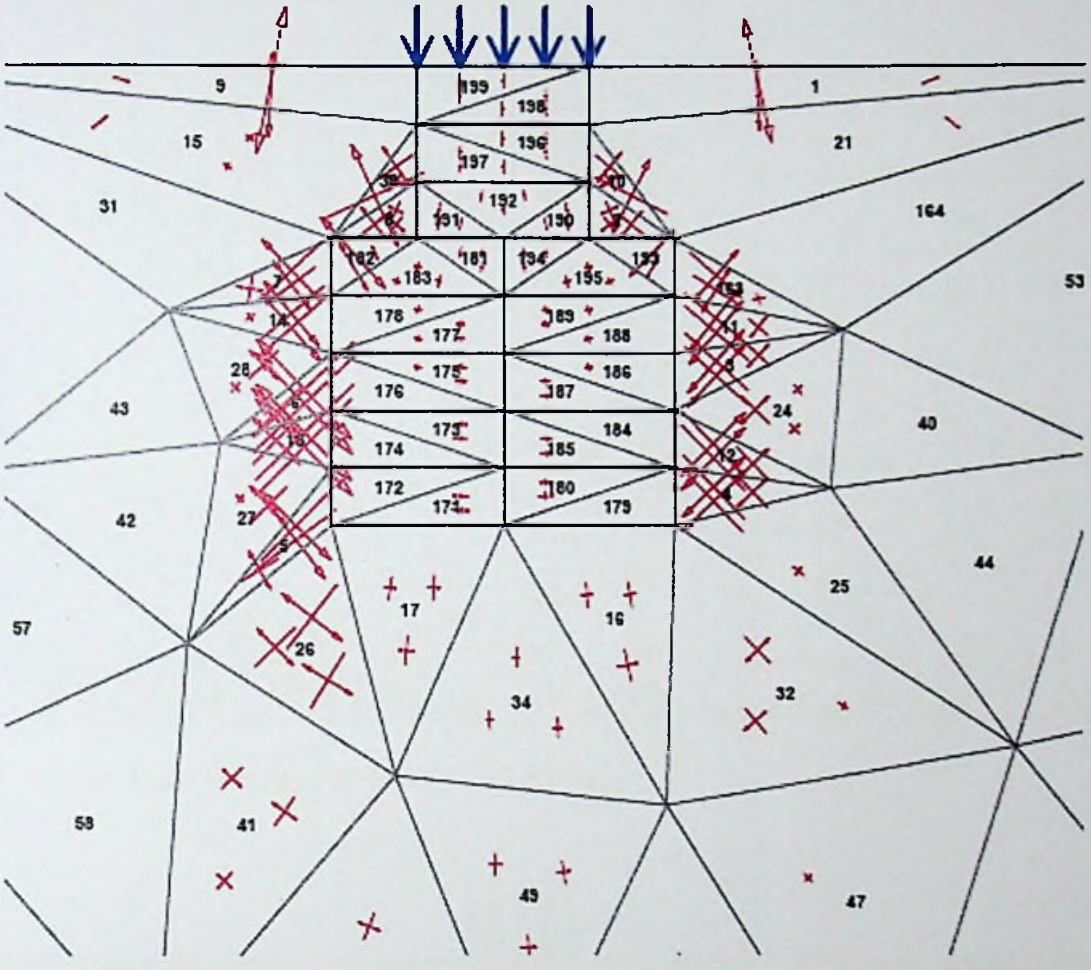
Extreme Principle Strain 29.6 %

Figure 4.17: Total Strains in Principal Directions for Case 03



Extreme Principle Strain 38.36 %

Figure 4.18 : Total Strains in Principal Directions for Case 04



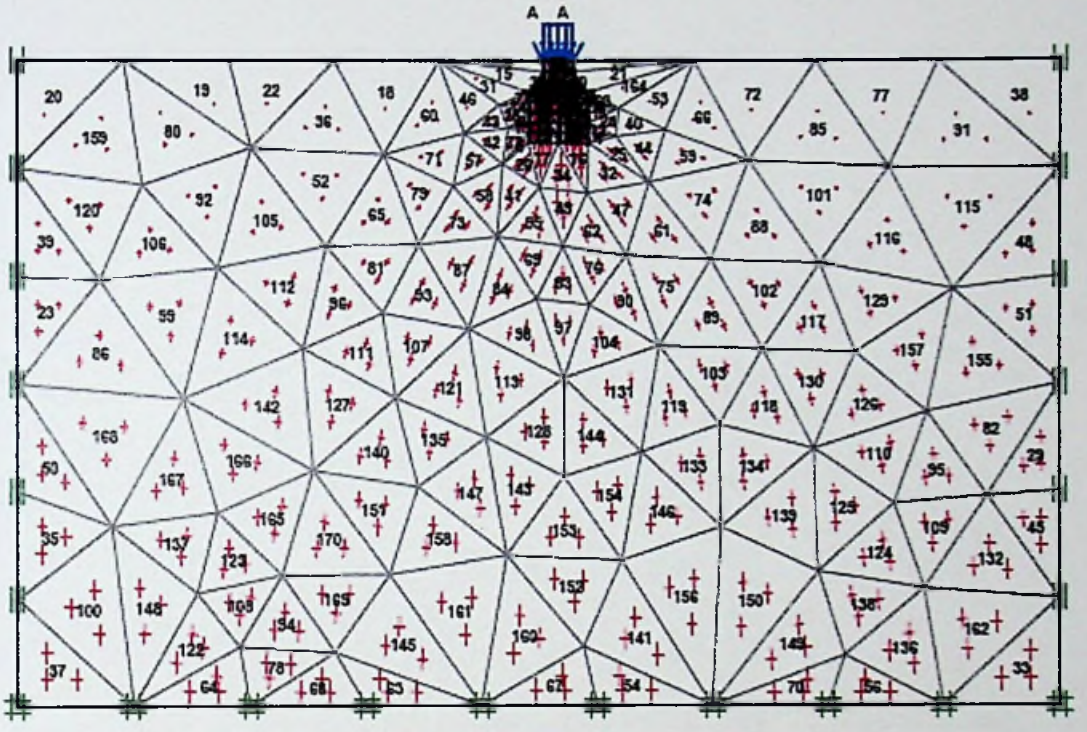
Extreme Principle Strain 30.41 %

4.4.2 STRESSES

4.4.2.1 Total Stresses

The total stresses are the total stresses in the geometry at the end of the current calculation step. The total stress represented in principal directions for each case are given in figure 4.19 to 4.22.

Figure 4.19 : Total Stress in Principal Directions for Case 01



Extreme Total Principal Stress -574.41 KN/m^2

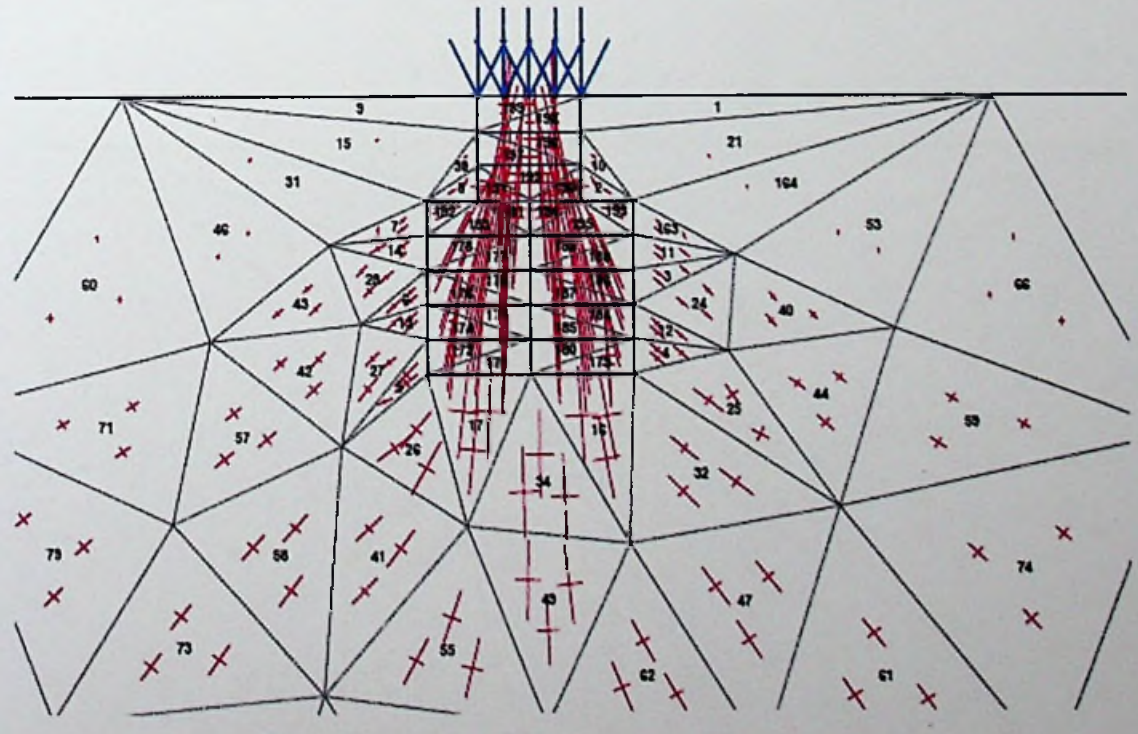
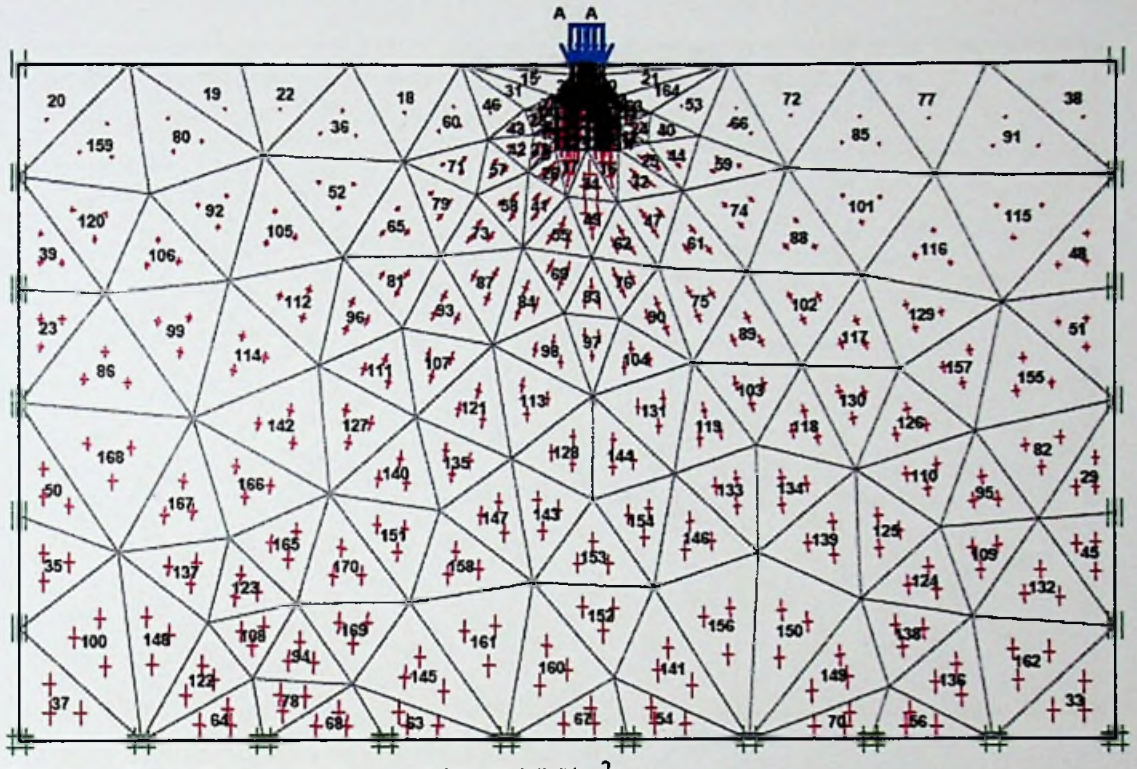


Figure 4.20 : Total Stress in Principal Directions for Case 02



Extreme Total Principal Stress -595.47 KN/m^2

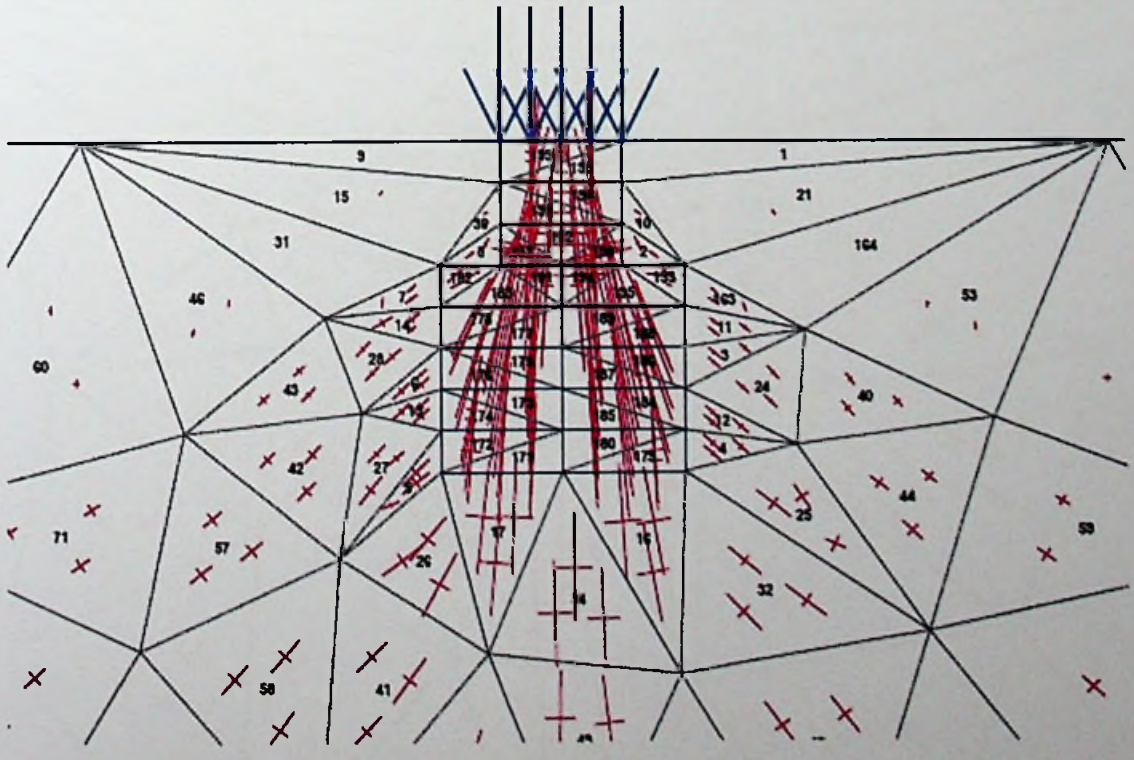
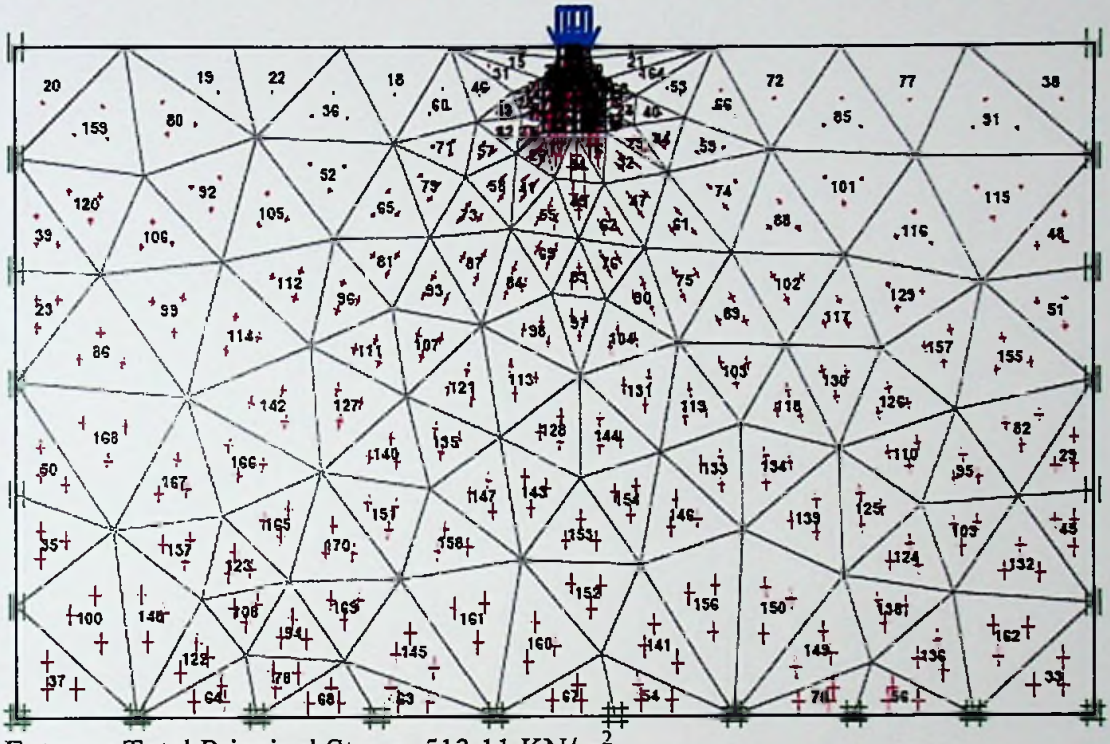


Figure 4.21 : Total Stress in Principal Directions for Case 03



Extreme Total Principal Stress -513.11 KN/m^2

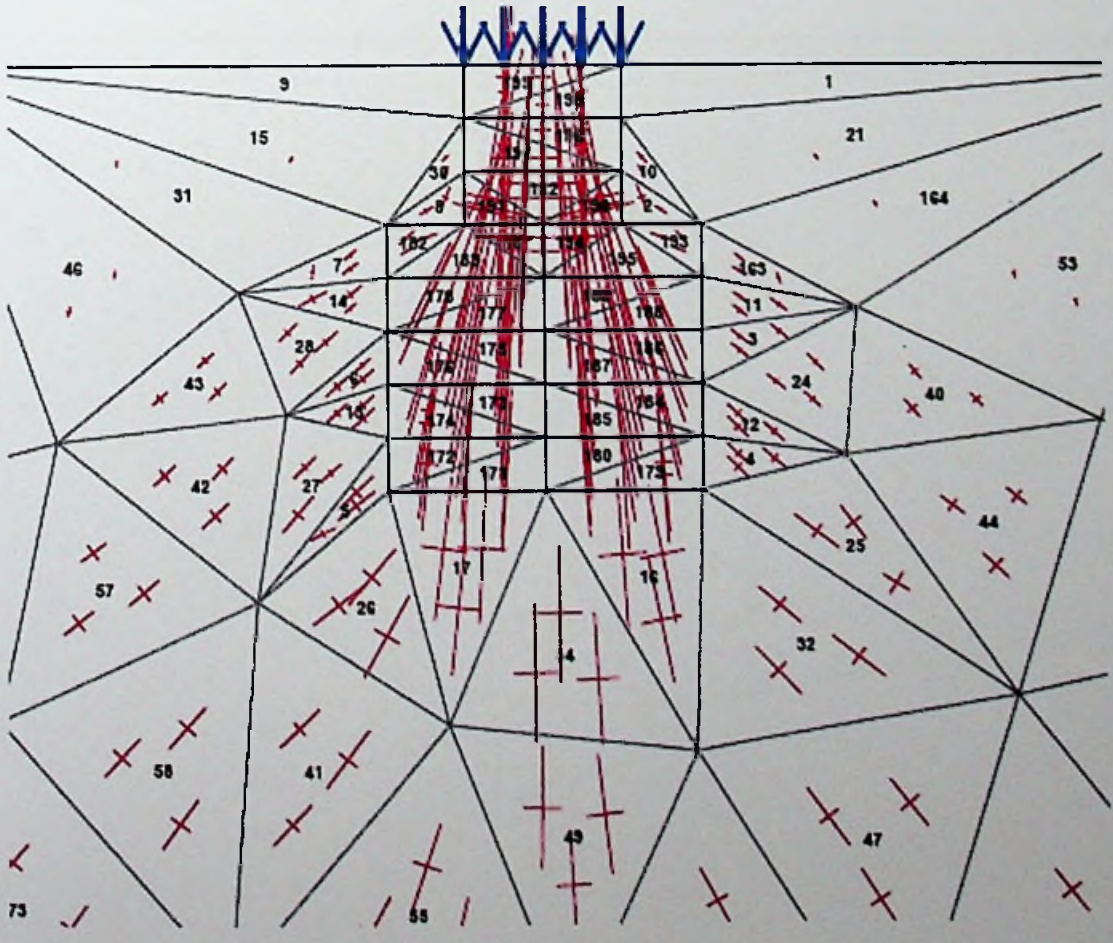
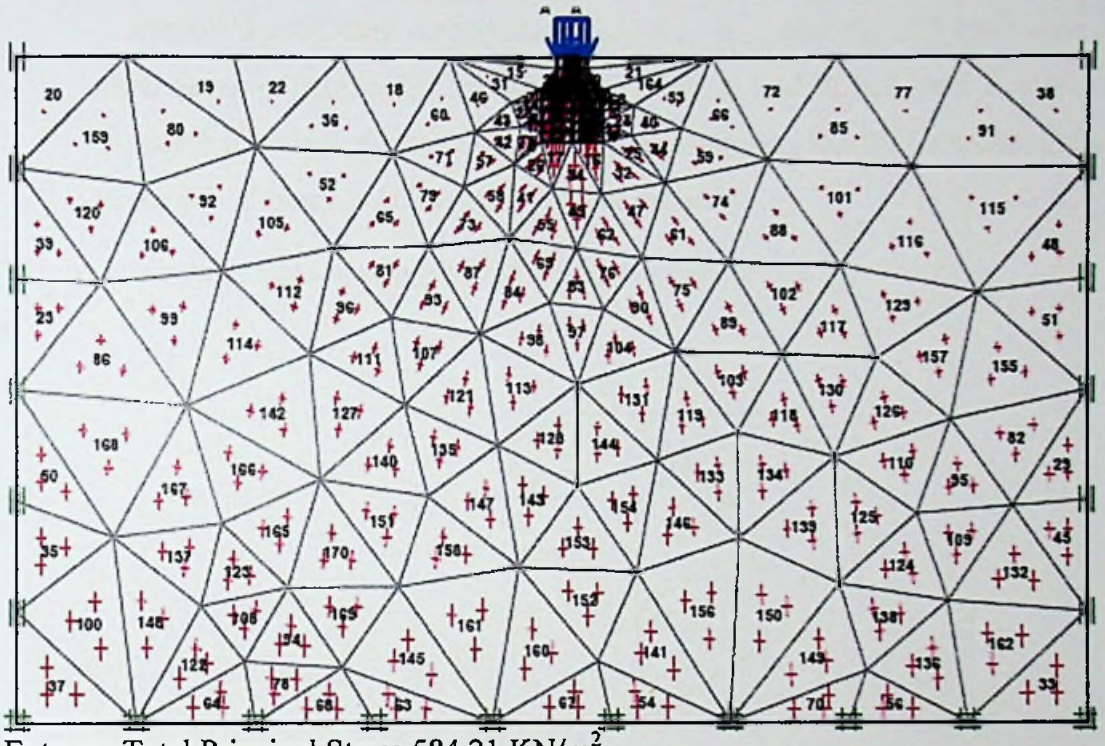
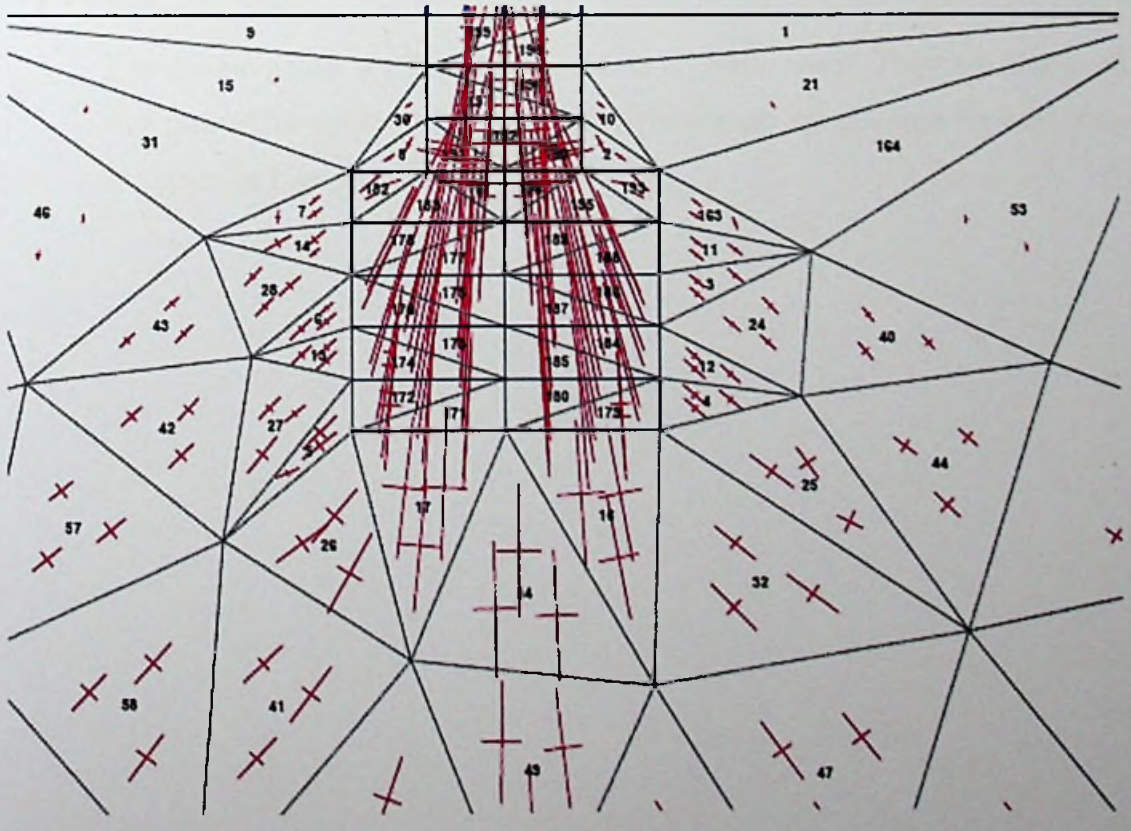


Figure 4.22 : Total Stress in Principal Directions for Case 04



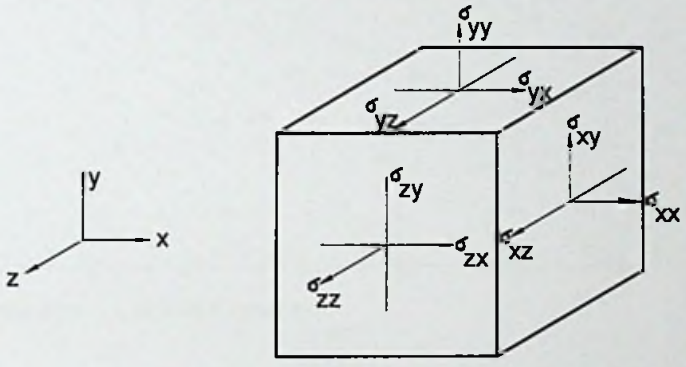
Extreme Total Principal Stress 584.21 KN/m^2



4.4.2.2 Cartesian Total Stress

Cartesian Total Stress components σ_{xx} , σ_{yy} σ_{zz} and σ_{xy} for each case in their some critical points are given in Table A.1, A.2, A.3, and A.4 in the Appendix A Fig 4.19 shows the sign convention adopted for Cartesian stress. Note that pressure is considered to be negative.

Figure 4.23 : Sign Convention adopted for Cartesian Stresses.



4.4.2.3 Plastic Points

The plastic points are the stress points in a plastic state. They are displayed in a plot of the un-deformed geometry. The plastic points given for each case are given in Figures 4.20 to 4.23.

Figure 4.24 : Plastic Points for Case 01

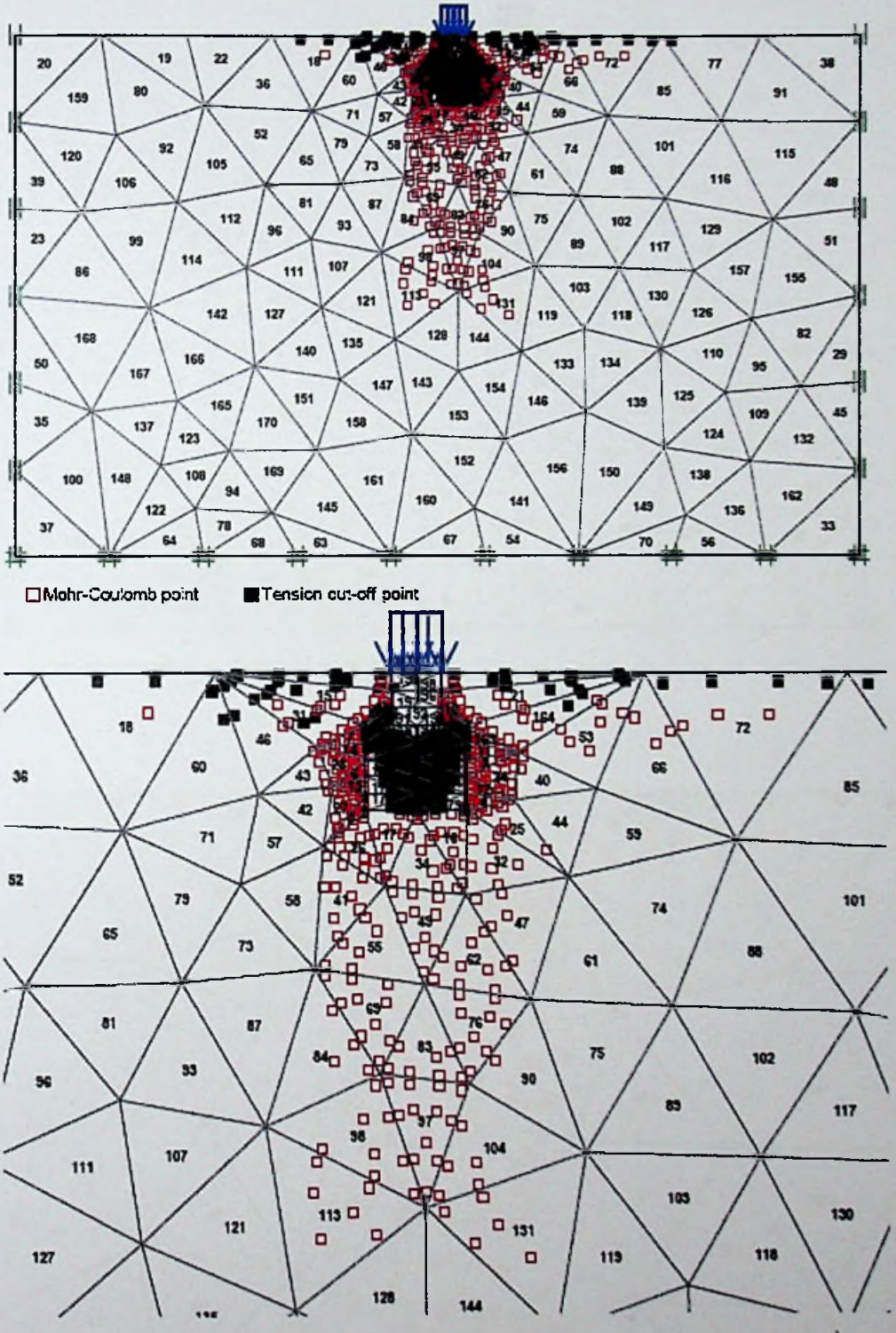


Figure 4.25 : Plastic Points for Case 02

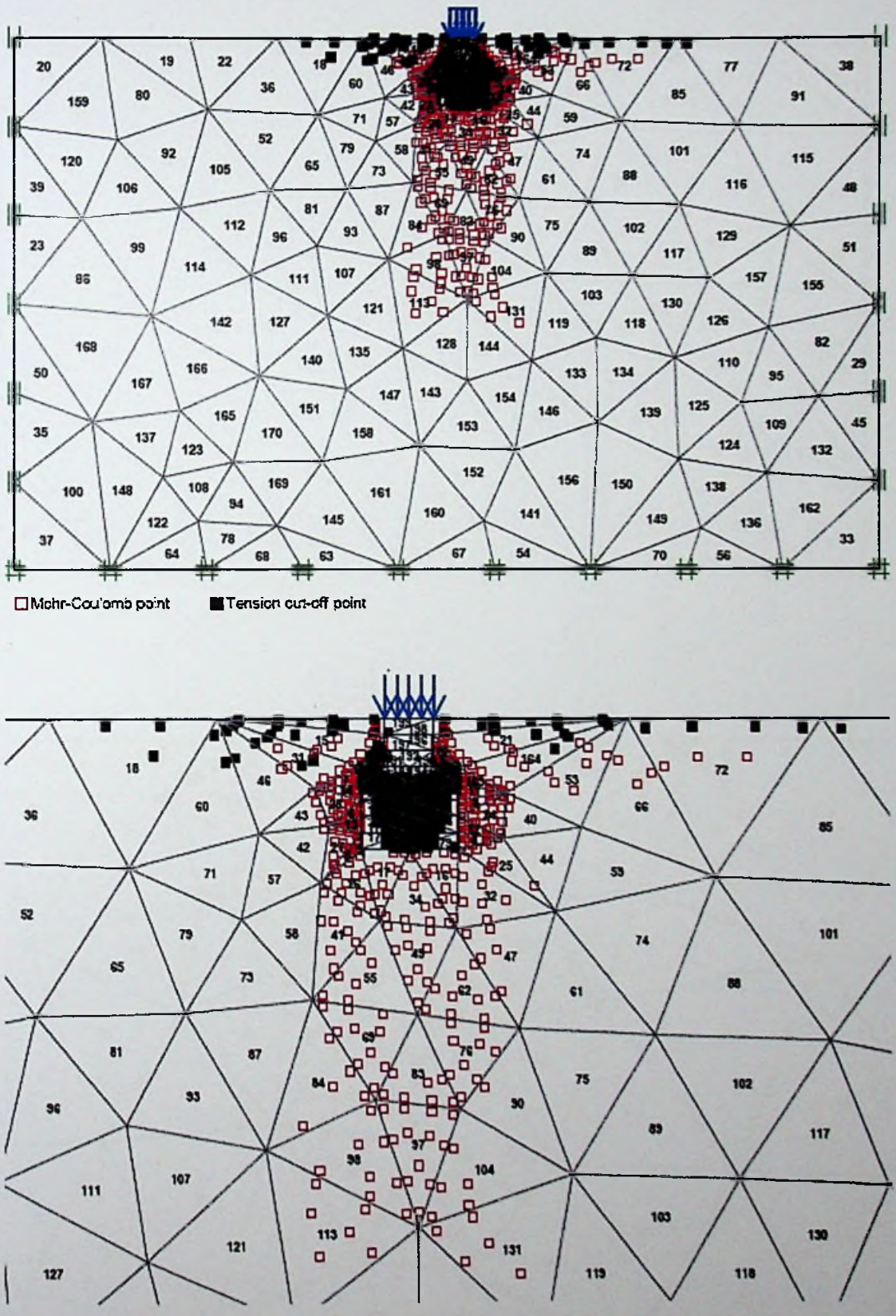
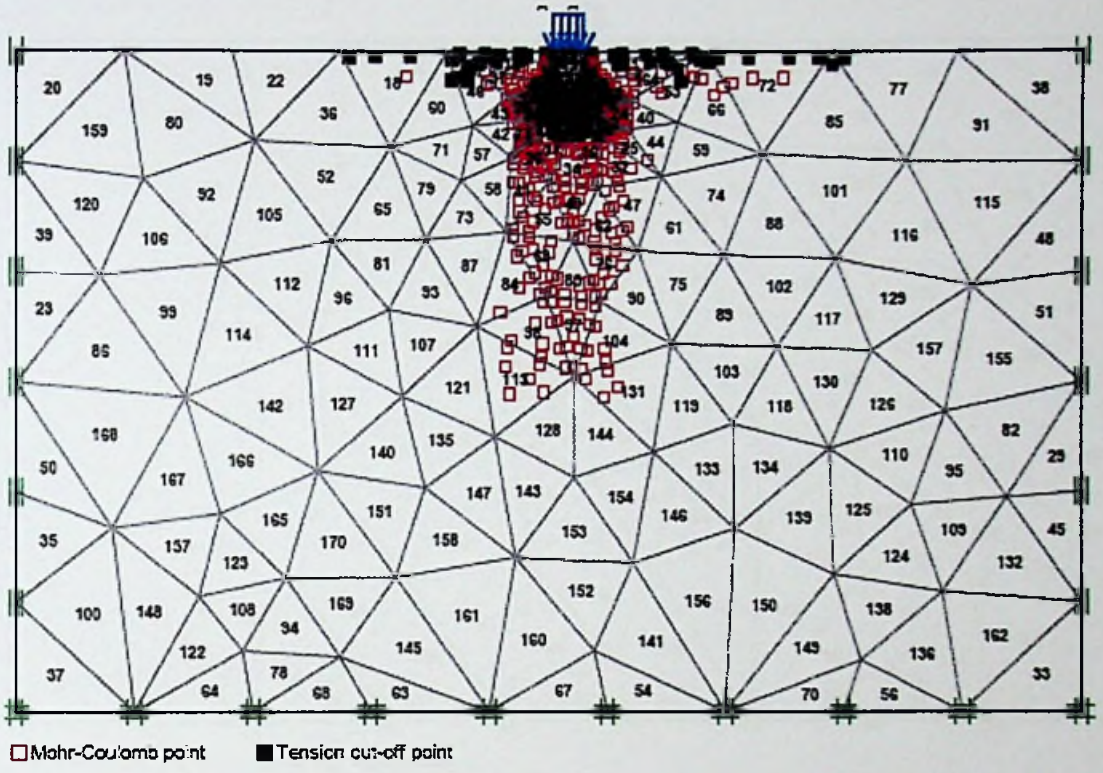


Figure 4.26 : Plastic Points for Case 03



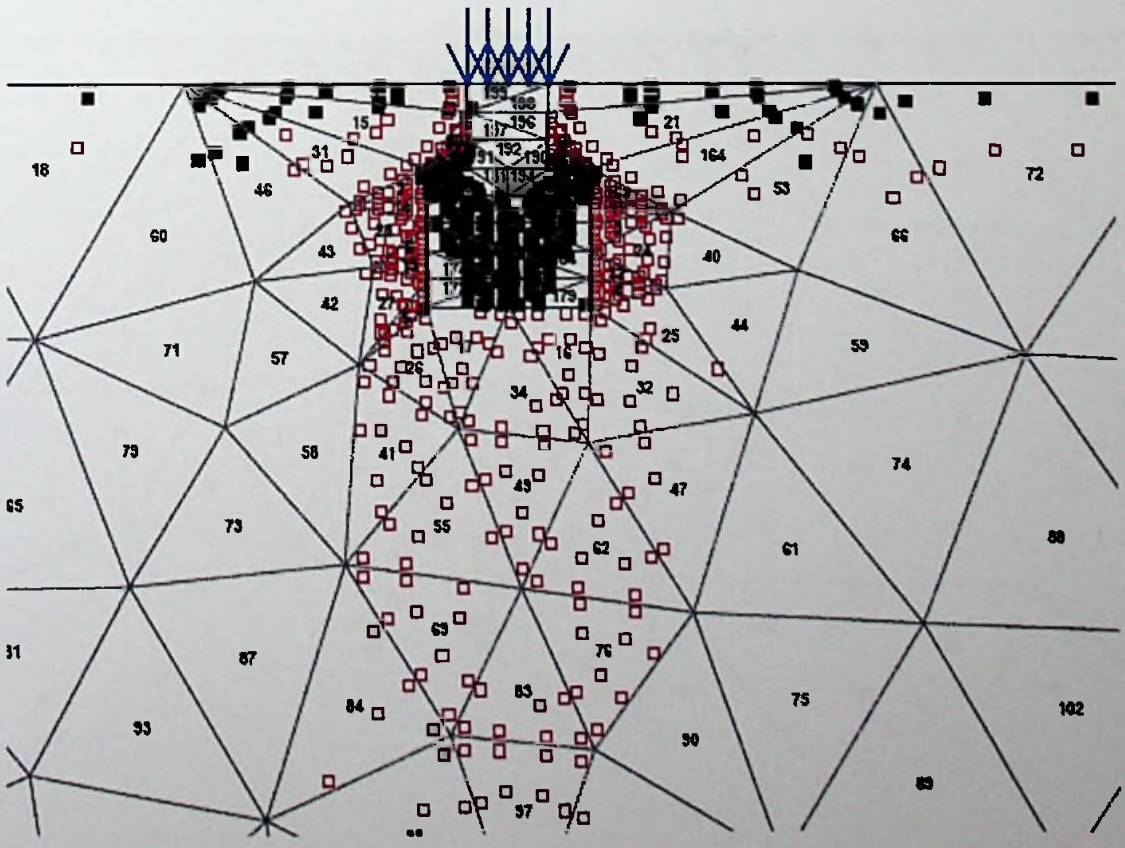
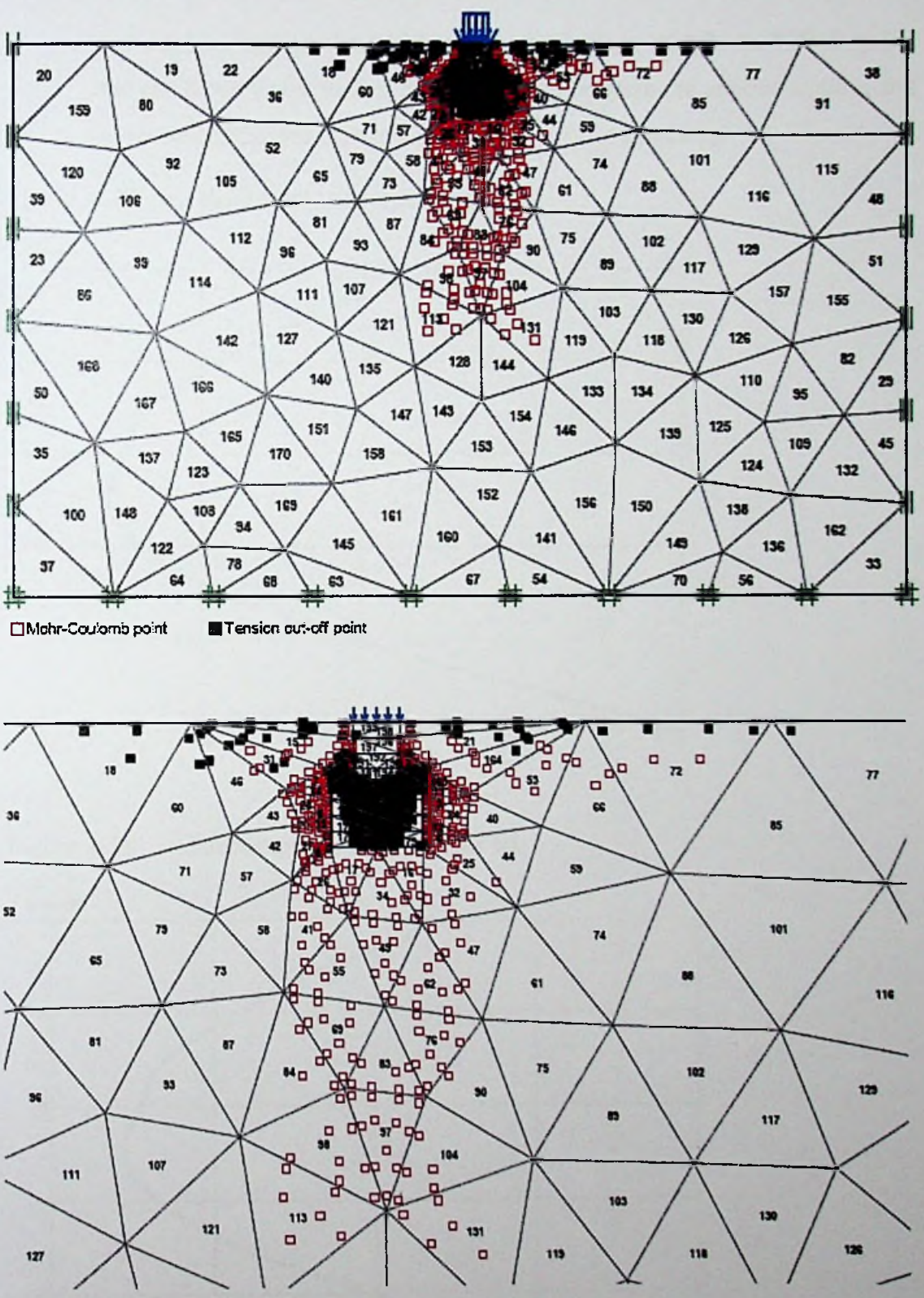


Figure 4.27 : Plastic Points for Case 04



4.4.2.4 Load - displacement curves

load displacement curves which are shown in Figures 4.24 to 4.27 for each case can be used to visualize the relationship between the applied loading and the resulting displacement of a certain point in the geometry

Figure 4.28 : Displacment Curve for Case 01

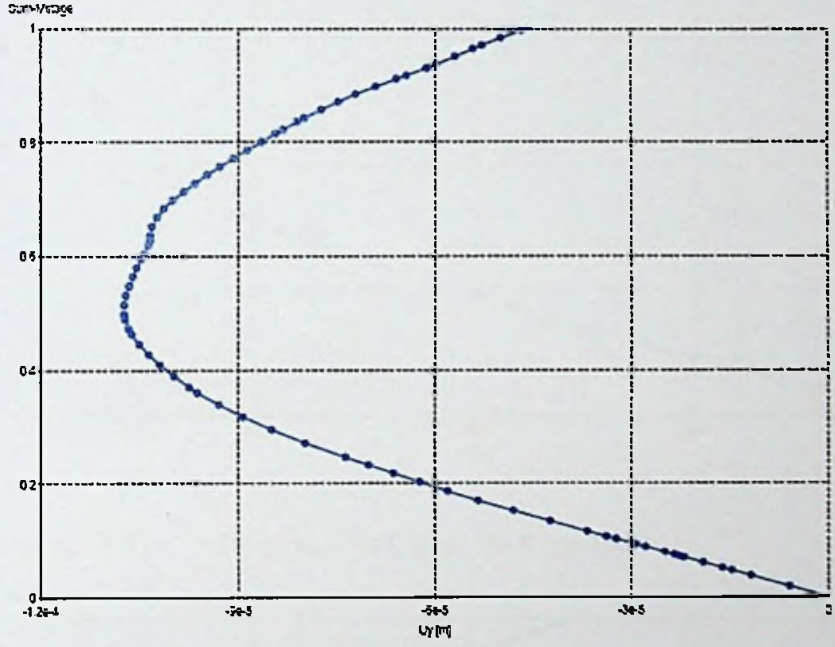


Figure 4.29 : Displacment Curve for Case 02

Figure 4.30 : Displacment Curve for Case 03

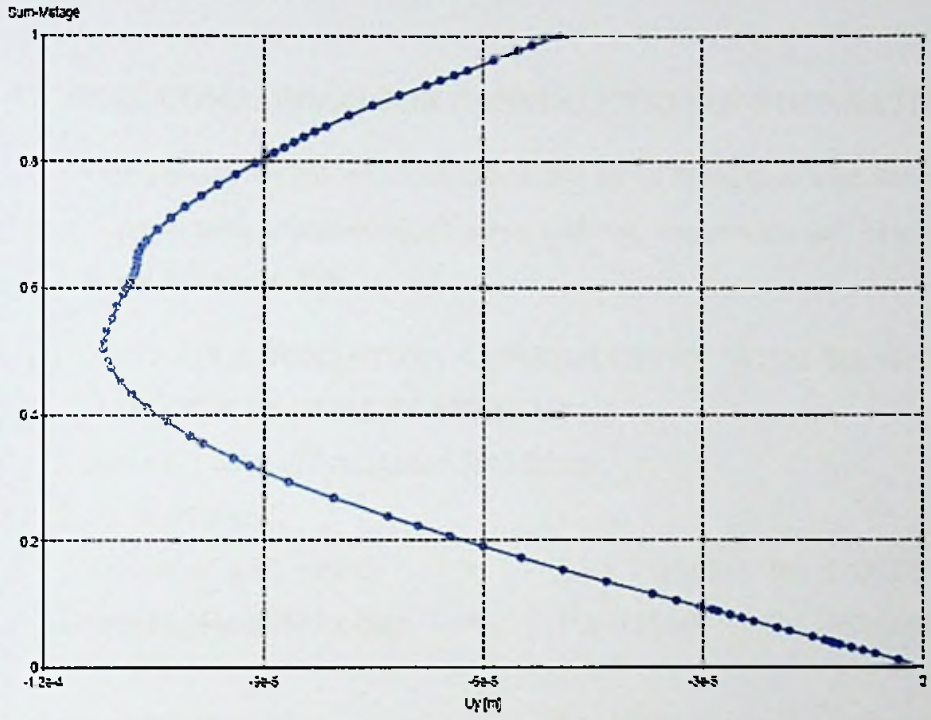
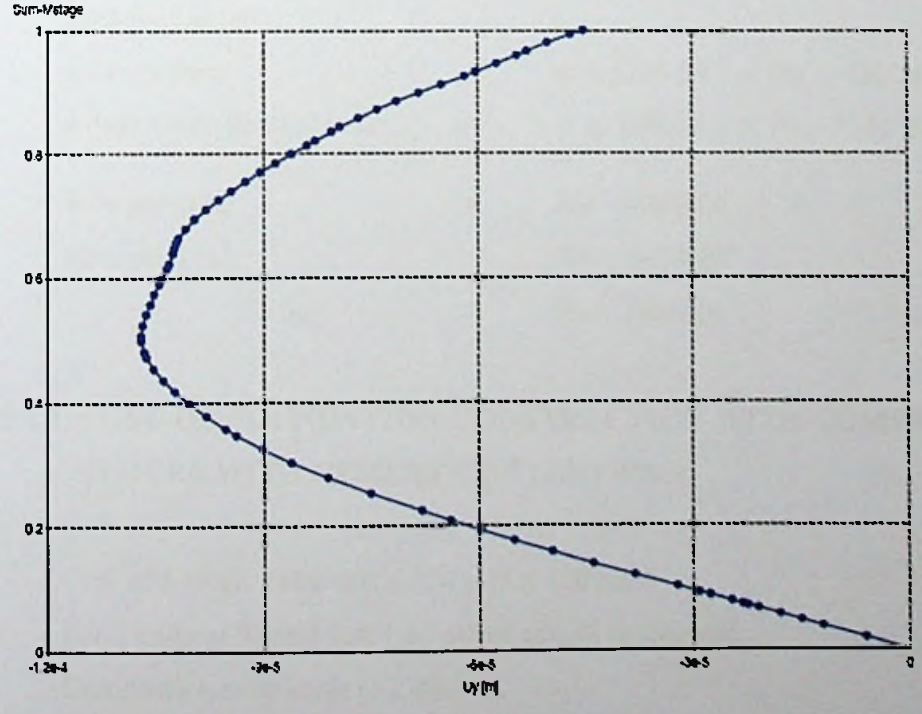


Figure 4.31 : Displacment Curve for Case 04



CHAPTER 5

COST COMPARISON

5.1 COST COMPARISON FOR CONSTRUCTION OF FOUNDATION

In this section the cost of construction of 1 m^3 of foundation with the rubble stones is compared with construction of same with the compressed soil blocks with cement content 4% and 6.25%.

5.1.1 COST OF FOUNDATION CONSTRUCTION WITH RANDOM RUBBLE MASONRY IN CEMENT MORTAR 1:5

Consider 1 cube of Foundation (14" thick)

Cost for Materials

1.3 Cubes 6" x 9" rubble	=	1.3 x 3000.00	= Rs: 3900.00
Cement 5 Nos of 50 kg bags	=	5 x 735.00	= Rs: 3675.00
0.3 Cubes of sand	=	0.3 x 6500.00	= Rs: 1950.00
Water 450 liters =	450 x 0.1	= Rs: 45.00	

Cost for Labour

4 days mason	=	4 x 1200.00	= Rs : 4800.00
6 days Unskilled Labourer	=	6 x 850.00	= Rs: 5100.00
Rate per cube	=	Rs: 19470.00	
Rate per 1 m^3	=	Rs: 6879.85	
Say	=	Rs: 6880.00	

5.1.2 COST OF FOUNDATION CONSTRUCTION WITH COMPRESSED SOIL BLOCKS WITH CEMENT CONTENT 4%.

Cost of a block (300 mm x 150 mm x 100 mm)

For 1 cube of Sieved soil 1.25 cubes of soil is required.

Compaction ratio is set to 1.85.

Volume of a block = 0.3 x 0.15 m x 0.1 m

= 4.5×10^{-3} m^3

= $4.5 \times 10^{-3} \times (3.28)^3$ ft^3

= 0.159 ft^3

Soil Volume required for manufacturing of a block = 0.159 x 1.85

= 0.294 ft^3

Volume of cement required = $0.294 \times \frac{4.0}{100}$

= 0.0118 ft^3

Material Cost (Per block)

0.294 ft^3 soil = $0.294 \times \frac{1600.00}{100} \times 1.25$

= Rs: 5.88

0.0118 ft^3 cement = $0.0118 \times \frac{735.00}{1.25}$

= Rs: 6.94

4 liter water for mixing and curing = 4 x 0.1

= Rs: 0.40

Machine Cost

Cost of a machine "Mihisura" would be Rs: 80,000.00

Assumed that 500,000 blocks could be manufactured without major repairing works.

Cost per block = $\frac{80,000.00}{500,000.00}$

= Rs: 0.16

Add 10% to cover minor repair works = 0.16 x 1.10

= Rs: 0.18

Labour Cost

1 Semi - Skilled Labour and 4 unskilled labour could manufacture 600 nos of blocks in 8 hours

Therefore labour cost per block = $\frac{1 \times 1000 + 4 \times 850}{600}$

= Rs: 7.33

Cost of a block = Rs: 20.73

Consider 4.5 m^3 Volume of foundation

Labour Cost

3 days mason = 3 x 1200.00 = Rs: 3600.00

4 days Unskilled Labourer = 4 x 850.00 = Rs: 3400.00

Material Cost

1000 blocks = 20.73 x 1000 = Rs: 20,730.00

Cost for Mortar Paste (Cement, sand and soil proportion is 1:2:10)

Required Volume is 4 ft^3

3.3 ft^3 soil = 3.33 x 20

= Rs: 66.60

0.67 ft^3 sand = 0.67 x 65.00

= Rs: 43.55

0.333 ft^3 cement = $\frac{735}{1.25}$ x 0.333

= Rs: 195.80

Total Cost = Rs:28,035.15

Per 1 m^3 = Rs: 6,230.03

Say = Rs: 6,230.00

If soil is available at site cost would be= Rs: 5,315.00

5.1.3 COST OF FOUNDATION CONSTRUCTION WITH COMPRESSED SOIL BLOCKS WITH CEMENT CONTENT 6.25%.

Cost of a block (300 mm x 150 mm x 100 mm)

Volume of a block = 0.159 ft^3

Volume of soil required for

manufacturing of a block = 0.294 ft^3

Volume of cement required = $0.294 \times \frac{6.25}{100}$

= 0.0184 ft^3

Material Cost (Per block)

0.294 ft^3 soil = Rs: 5.88

0.0184 ft^3 cement = $0.0184 \times \frac{735.00}{1.25}$

= Rs: 10.82

4 liter water for mixing and curing = Rs: 0.40

Machine Cost

Per block = Rs: 0.18

Labour cost

Per block = Rs: 7.33

Total cost per block = Rs: 24.613

Consider 4.5 m^3 of foundation

Labour cost = Rs: 7000.00

Material Cost

1000 blocks = 24.61 x 1000 = Rs: 24,610.00

Cost for Mortar Paste (Cement, sand and soil proportion is 1:2:10)

Required volume is 4 ft^3

3.3 ft^3 soil = Rs: 66.60

0.67 ft^3 sand = Rs: 43.55

0.333 ft^3 cement = Rs: 195.80

Total Cost = Rs: 31,915.15

Cost Per 1 m^3 = Rs: 7,092.25

Say = Rs: 7,092.00

If soil is available at site cost would be = Rs: 6,177.00

On the basis of the costs calculated above when the compressed soil blocks with cement context 4% the cost for $1m^3$ of foundation is Rs: 6,230.00 if soil is not available at site. If soil is available at site the cost would be Rs: 5,315.00.

When the compressed soil blocks with cement content 6.25% the cost for $1m^3$ of foundation is Rs: 7,092.00 if soil is not available at site. If soil is available at site the cost would be Rs: 6,177.00.

Cost savings are given in Table 5.1.

Table 5.1 : Cost Savings

	If Soil is not available at site	**If Soil is available at site**
Cost of $1m^3$ foundation made with compressed soil blocks with cement content 4% (Rs.)	6230.00	5315.00
Cost Saving per m^3 (Rs)	650.00	1565.00
Cost of $1m^3$ foundation made with compressed soil blocks with cement content 6.25% (Rs.)	7092.00	6177.00
Cost Saving per m^3 (Rs)	- 212.00	703.00

However a proper calculation for cost saving could be done only after selecting of a foundation section based on proper design calculation.

CHAPTER 6.0

DISCUSSION AND FUTURE WORK

6.1 DISCUSSIONS

In this dissertation compressed soil blocks stabilized with cement have been introduced as an alternative foundation material to rubble stones and burnt clay bricks.

For this purpose a detailed experimental programme was carried out for same, manufactured with the manually operated locally designed and developed machine named "Mihisura" with cement contents of 4% and 6.25%. Based on previous experience one soil type which has 44% fines (i.e particle diameter <0.075mm) percentage was selected.

Blocks manufactured using above soil type were tested for their compressive strength both in dry condition and wet condition. In the wet condition they were tested for 4 days and 7 days total immersion in water 28 days after casting, and for 38 days total immersion in water one day after casting.

The blocks were also tested to determine the stress-strain relationship, C and ϕ values in unconsolidated undrained condition and its shear failure patterns for dry condition and 4 days total immersion in water 28 days after casting of them.

Using the results gained from the above experimental programme a numerical analysis was carried out for a model of a selected foundation section formed with above blocks in both dry and wet conditions. The objective of this numerical analysis was to identify its stresses and deformations when loaded with the weight of a typical 2 storied house. PLAXIS Version 8 2D computer programme was used for this analysis.

6.1.1 DISCUSSION ON THE RESULTS FROM EXPERIMENTAL PROGRAMME

In the detailed experimental programme attention was focused on variation of compressive strength, its stress-strain relationship, shear failure pattern and C_u and ϕ_u values of blocks in both dry and wet conditions.

Rate of water absorption ratio of the blocks for both cement contents 4% and 6.25% gradually decreased with time and it seemed that the water absorption ratio reached a constant value.

Wet compression strengths were 57%, 54% and 47% of its dry strength for the block type 'A' (ie cement content 4%) after 4 days and 7 days total immersion in water 28 days after casting (with 7 days curing period) and 38 days total immersion in water a day after casting respectively.

And same were 81% 71% and 87% of its dry strength for the blocks of type B (ie cement content 6.25%) after 4 days and 7 days total immersion in water 28 days after casting of them (with 7 days curing period) and 38 days total immersion in water a day after casting of them respectively.

When comparing wet compressive strength of block type 'B' between the blocks subjected to 7 days and 38 days total immersion periods in water, latter gave higher value. This may be due to variation of curing period. The blocks subjected to 7 days total immersion period were cured only for 7days but the blocks subjected to 38 days total immersion period were cured continuously until tested.

Accordingly curing period of blocks is extremely important during the manufacturing stage. Longer curing period will provide more opportunity for chemical reaction of cement and/or cement with clay/soil particles.

Apart from that, there were no signs on the blocks where soil particles were washed away due to subjection to 38 days total immersion in water.

When comparing wet compressive strength of Block type 'A' there is no significant strength reduction in the blocks subjected to 38 days total immersion period when compared with blocks subjected to 7 days total immersion period in water.

Accordingly based on the above factors it is clear that the blocks made out of the soil type which has a fines percentage of 44% were successfully stabilized both chemically and mechanically when using 4% and 6.25% cement contents and the machine used ('Mihisura') with a set compaction ratio of 1.80.

When observing the graphs drawn for variation of Deviator stress with Strain based on the results of Unconfined Compression Test for both dry condition and after 4 days total immersion in water it is clear that the blocks receive (decreasing) stresses after its elastic limit state until it collapses for a certain amount of its strain.

However when comparing the block type 'A' (ie. cement content 4%) and block type 'B (ie. Cement content 6.25%) it is clear that the block type A receives more stresses than the block type B in both dry and wet conditions before it collapses.

And when comparing the blocks in dry condition and wet condition, in wet condition both blocks type 'A' and 'B' receive more stresses before they collapse.

Based on these facts it is clear that the blocks in the wet condition behave more as soil than the blocks in the dry condition and the blocks manufactured with cement content 4% behave more as soil than the blocks manufactured with cement content 6.25%.

However, according to the above graphs it could be observed that the initial readings taken at the initial stages of loading had deviated from its usual pattern may be due to the samples not being seated properly (seating problem) at the start. After correcting

this problem and if 'E' values were determined directly from the gradients of the relevant graphs, values would be as follows.

	Deformation Modulus E (KPa)	
Block Identification No.	In complete dry conditions	4 days after immersion in water
A	61,408.42	54,243.80
B	88,102.31	65,109.63

Accordingly if the above values were used as 'E' values of the blocks for the numerical analysis, results would be on a much safer side.

When observing the figures of shear failure pattern of the blocks the angles of failure lines are more than 45° for both block type 'A' & 'B' in both dry and wet conditions. When comparing block type 'A' in dry and wet conditions it is clear that the angle of shear failure line is more clear in its dry condition than in wet condition. When comparing block type 'A' and 'B' in wet condition the angle of shear failure line of the block B is greater than the same of block type A. However block type B in dry condition gives irregular patterns for its shear failure lines. This may be due to its high friction angle, and the height to diameter ratio of the core samples not being enough for the test. On the other hand as discussed earlier based on the UCT results the behaviour of block type B in dry condition deviates from the behavior of soil to some extent.

C_u and ϕ_u values determined from the Mohr circles of stress at failure in Unconsolidated Undrained Triaxial Test give higher values for block type 'A' and 'B' in dry condition. According to the graphs, it does not exactly follow the Mohr-Coloumb theory. However before making any conclusion a considerable number of tests need to be carried out.

6.1.2 DISCUSSION ON THE NUMERCIAL ANALYSIS

In the numerical analysis only one type of sub soil condition, ie sand was considered. The model of the selected typical foundation section formed with block type 'A' and 'B' were subjected to the total specified load both in dry and wet conditions. According to the PLAXIS Version 8 2D computer programme the calculation phase was successfully completed. Neither soil body nor foundation collapsed under dry or wet conditions.

In dry condition extreme vertical displacements (Uy) are 24.51 mm and 23.89mm for case 01(foundation made with blocks with cement content 4%) and case 02(foundation made with blocks with cement content 6.25%) respectively. In wet condition, ie after 4 days total immersion in water, values for same are 27.98mm and 24.21mm for case 03 (foundation made with blocks with cement content 4%)and case 04 (foundation made with blocks with cement content 6.25%) respectively.

In dry condition extreme principle strains are 31.44% and 29.6% for case 01 and case 02 respectively. In the wet condition values for same are 38.36% and 30.41% for case 03 and case 04 respectively.

According to the results obtained for extreme total principle stresses none of the blocks has reached to half (if Factor of Safety is considered as 2) of the compressive strength obtained from the compression test. In dry condition extreme total principle stresses are 574.4 KN/m^2 (or 0.57 N/mm) and 595.47 KN/m^2 (or 0.6 N/mm^2) for case 01 and case 02. In wet condition values for same are 513.11 KN/m^2 (or 0.5 N/mm^2) for the case 03 and case 04.

There are some plastic points indicated both in the foundation section and the soil body closer to the foundation. As described in Section 4 plastic points are the stress points in a plastic state.

There are also some tension cut off points indicated both in the foundation section and the soil body closer to the upper part of the foundation as well as closer to the

ground surface. For the Mohr – Coulomb model the tension cut off is by default, selected with a tensile strength of zero. However it can be shown by using the Cartesian total stress components σ_{xxl}, σ_{yy} and σ_{xy} in the tension cut off points indicated that at least one principle stresses has reached to the zero point.

6.1.3 FUTURE WORKS

In this research attention was focused on compressed soil blocks stabilized with cement as an alternative material that can be used for construction of foundations of single storied and two storied houses or building units and a design procedure was suggested to verify its capabilities as a foundation material.

Only one sub surface soil condition was considered in the numerical analysis. However it is essential to analyze the foundation sections for different sub surface soil conditions to determine the stresses and deformations that could be induced when specified loads are applied.

Further testing could be done to check if there is any change in dimensions after immersion in water for a longer period of time. Effects shall also be tested when such foundations constructed with this type of blocks are subjected to dry and wet conditions repeatedly for a longer period of time.

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APPENDIX A: CARTESIAN TOTTAL STRESSES

Table A.1 Cartesian Total Stresses for Case 1

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
1	1 Soil	1	6.488	6.294	-0.737	-0.012	-0.093	-0.230	Tension
		2	5.525	6.294	-3.194	-0.270	0.929	-1.045	Tension
		3	5.525	6.213	-2.590	-0.874	1.504	-1.114	Tension
		4	6.045	6.275	-0.147	-0.729	0.328	-0.284	Tension
		5	5.746	6.275	-2.180	-0.127	-0.527	-0.714	Tension
		6	5.746	6.250	0.000	0.000	0.000	-0.043	Tension
		7	6.206	6.295	-0.433	-0.061	0.182	-0.153	Tension
		8	5.819	6.295	-0.319	-0.049	-0.125	-0.115	Tension
		9	5.513	6.269	-4.868	-1.545	1.827	-1.950	PLASTIC
		10	5.513	6.236	-10.757	-5.459	4.146	-4.919	PLASTIC
		11	5.819	6.236	-0.501	-1.742	0.934	-0.727	Tension
		12	6.206	6.269	-0.137	-0.346	-0.218	-0.171	Tension
	2 Soil	13	5.581	6.006	-2.971	-0.493	1.211	-1.289	Tension
		14	5.459	6.087	-3.532	-5.852	2.995	-2.998	PLASTIC
		15	5.459	6.006	-50.136	-51.176	27.593	-32.443	PLASTIC
		16	5.525	6.025	-9.852	-8.519	4.670	-5.145	PLASTIC
		17	5.487	6.050	-8.016	-17.026	5.522	-7.725	PLASTIC
		18	5.487	6.025	-2.045	-1.419	1.704	-1.273	Tension
		19	5.545	6.031	-2.461	-1.003	1.571	-1.268	Tension
		20	5.497	6.064	-0.453	-3.070	1.157	-1.259	PLASTIC
		21	5.458	6.064	-5.772	-6.992	4.009	-4.027	PLASTIC
		22	5.458	6.031	-3.943	-4.311	2.924	-2.705	PLASTIC
		23	5.497	6.005	-4.585	-4.841	3.215	-3.072	PLASTIC
		24	5.545	6.005	-12.287	-6.389	4.634	-5.853	PLASTIC
	3 Soil	25	5.858	5.830	-6.952	-14.945	4.922	-6.988	PLASTIC
		26	5.619	5.796	-13.950	-13.121	7.622	-8.549	PLASTIC
		27	5.619	5.715	-16.187	-15.593	8.801	-10.025	PLASTIC
		28	5.748	5.796	-13.125	-11.156	6.866	-7.713	PLASTIC
		29	5.674	5.786	-13.527	-11.112	6.921	-7.829	PLASTIC
		30	5.674	5.760	-13.302	-11.099	6.879	-7.779	PLASTIC
		31	5.788	5.821	-10.949	-12.664	6.752	-7.551	PLASTIC
		32	5.682	5.809	-11.720	-9.264	5.998	-6.714	PLASTIC
		33	5.616	5.771	-15.868	-15.135	8.609	-9.750	PLASTIC
		34	5.616	5.739	-14.305	-13.740	7.872	-8.891	PLASTIC
		35	5.682	5.749	-14.012	-11.689	7.198	-8.178	PLASTIC
		36	5.788	5.796	-11.776	-12.744	6.979	-7.786	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	4	37	5.839	5.562	-15.236	-14.857	8.397	-9.555	PLASTIC
	Soil	38	5.617	5.591	-18.470	-19.108	10.256	-11.876	PLASTIC
		39	5.617	5.510	-33.071	-32.884	17.355	-20.458	PLASTIC
		40	5.737	5.557	-19.584	-18.686	9.885	-11.566	PLASTIC
		41	5.668	5.566	-20.758	-18.473	10.613	-12.393	PLASTIC
		42	5.668	5.541	-19.318	-18.735	9.794	-11.481	PLASTIC
		43	5.774	5.572	-14.934	-14.925	8.331	-9.576	PLASTIC
		44	5.685	5.594	-16.378	-15.860	8.922	-10.280	PLASTIC
		45	5.615	5.567	-21.571	-21.691	11.691	-13.602	PLASTIC
		46	5.615	5.534	-20.756	-21.627	11.499	-13.426	PLASTIC
		47	5.685	5.525	-19.888	-18.702	9.836	-11.536	PLASTIC
		48	5.774	5.546	-18.865	-18.528	9.648	-11.265	PLASTIC
	5	49	4.782	5.326	-15.962	-36.464	-4.275	-16.555	Elastic
	Soil	50	4.984	5.493	-1.636	-1.828	-1.729	-1.725	Tension
		51	4.984	5.574	-1.322	-2.142	-1.663	-1.656	Tension
		52	4.875	5.422	-21.135	-9.103	-5.899	-9.818	PLASTIC
		53	4.938	5.474	-31.535	-24.157	-14.322	-17.410	PLASTIC
		54	4.938	5.499	-31.101	-29.714	-16.055	-18.925	PLASTIC
		55	4.841	5.374	-23.713	-20.555	-11.828	-14.067	PLASTIC
		56	4.923	5.441	-48.347	-26.579	-18.298	-23.208	PLASTIC
		57	4.997	5.520	-5.937	-6.159	-3.838	-4.292	PLASTIC
		58	4.987	5.553	-27.102	-29.525	-14.974	-17.823	PLASTIC
		59	4.923	5.500	-24.282	-18.421	-11.183	-13.491	PLASTIC
		60	4.841	5.400	-26.948	-8.812	-3.733	-11.493	PLASTIC
	6	61	4.831	5.657	-16.921	-13.426	-7.394	-9.651	Elastic
	Soil	62	4.988	5.703	-18.173	-16.804	-9.586	-11.001	PLASTIC
		63	4.988	5.784	-30.755	-28.475	-15.632	-18.208	PLASTIC
		64	4.903	5.697	-19.351	-18.376	-10.286	-11.831	PLASTIC
		65	4.952	5.711	-17.829	-14.958	-8.948	-10.337	PLASTIC
		66	4.952	5.736	-12.152	-10.211	-6.383	-7.188	PLASTIC
		67	4.877	5.669	-16.868	-18.929	-9.761	-11.275	PLASTIC
		68	4.940	5.689	-16.378	-13.127	-8.080	-9.372	PLASTIC
		69	4.990	5.728	-17.447	-16.481	-9.336	-10.665	PLASTIC
		70	4.990	5.761	-13.035	-12.402	-7.218	-8.089	PLASTIC
		71	4.940	5.746	-12.661	-10.133	-6.442	-7.309	PLASTIC
		72	4.877	5.695	-16.206	-20.323	-9.816	-11.500	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	7	73	4.752	5.883	-22.824	-9.967	-6.390	-10.192	PLASTIC
	Soil	74	4.982	5.905	-15.469	-11.462	-7.332	-8.421	PLASTIC
		75	4.982	5.986	-3.455	-0.009	0.174	-1.306	Tension
		76	4.858	5.911	-3.410	-13.184	-1.126	-5.308	PLASTIC
		77	4.929	5.918	-13.066	-9.123	-6.103	-6.981	PLASTIC
		78	4.929	5.943	-9.321	-8.695	-5.361	-5.708	PLASTIC
		79	4.820	5.888	-7.914	-16.447	-5.494	-7.559	PLASTIC
		80	4.912	5.897	-21.778	-8.643	-5.548	-9.529	PLASTIC
		81	4.985	5.930	-11.237	-6.517	-4.751	-5.641	PLASTIC
		82	4.985	5.962	-3.050	-0.737	-1.396	-1.423	PLASTIC
		83	4.912	5.955	-7.949	-12.052	-5.496	-8.293	PLASTIC
		84	4.820	5.914	-3.985	-12.873	-2.462	-5.385	PLASTIC
	8	85	5.019	6.006	-2.975	-0.489	-1.206	-1.289	Tension
	Soil	86	5.141	6.006	-53.885	-44.028	-24.860	-29.624	PLASTIC
		87	5.141	6.087	-3.826	-5.596	-3.098	-3.007	PLASTIC
		88	5.075	6.025	-9.688	-8.159	-4.494	-4.987	PLASTIC
		89	5.113	6.025	-1.993	-1.471	-1.712	-1.273	Tension
		90	5.113	6.050	-6.518	-13.333	-4.729	-8.167	PLASTIC
		91	5.055	6.005	-8.685	-5.445	-4.089	-4.489	PLASTIC
		92	5.103	6.005	-3.739	-3.375	-2.638	-2.385	PLASTIC
		93	5.142	6.031	-1.730	-1.728	-1.732	-1.268	Tension
		94	5.142	6.064	-6.016	-6.803	-4.051	-4.045	PLASTIC
		95	5.103	6.064	-0.959	-2.679	-1.553	-1.292	PLASTIC
		96	5.055	6.031	-2.643	-0.821	-1.473	-1.268	Tension
	9	97	4.250	6.294	-1.878	-0.043	0.284	-0.582	Tension
	Soil	98	5.085	6.213	-2.483	-0.981	-1.561	-1.114	Tension
		99	5.085	6.294	-2.954	-0.510	-1.228	-1.045	Tension
		100	4.634	6.275	-0.036	-0.654	-0.153	-0.228	Tension
		101	4.893	6.250	-0.112	0.000	0.006	-0.078	Tension
		102	4.893	6.275	-2.668	-0.116	0.559	-0.882	Tension
		103	4.494	6.269	-0.015	-0.372	0.075	-0.142	Tension
		104	4.830	6.236	-0.615	-1.756	-1.039	-0.765	Tension
		105	5.095	6.236	-11.948	-6.577	-4.797	-5.612	PLASTIC
		106	5.095	6.269	-4.140	-1.498	-1.853	-1.718	PLASTIC
		107	4.830	6.295	-0.764	-0.110	0.290	-0.267	Tension
		109	4.494	6.295	-1.196	-0.122	-0.391	-0.400	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	10 Soil	109	5.459	6.181	-5.863	-7.732	4.161	-4.180	PLASTIC
		110	5.459	6.100	-2.460	-4.647	2.406	-2.302	PLASTIC
		111	5.581	6.019	-5.014	-2.601	2.493	-2.523	PLASTIC
		112	5.487	6.125	-5.986	-4.749	3.495	-3.369	PLASTIC
		113	5.497	6.100	-5.003	-8.476	3.864	-4.214	PLASTIC
		114	5.525	6.075	-3.091	-0.953	1.543	-1.404	PLASTIC
		115	5.458	6.158	-5.806	-8.745	4.257	-4.466	PLASTIC
		116	5.458	6.126	-6.205	-9.989	4.536	-5.006	PLASTIC
		117	5.497	6.074	-4.355	-7.398	3.497	-3.719	PLASTIC
		118	5.545	6.042	-3.312	-1.449	1.833	-1.648	PLASTIC
		119	5.545	6.067	-3.235	-0.787	1.416	-1.404	PLASTIC
		120	5.497	6.133	-5.548	-2.941	2.689	-2.689	PLASTIC
	11 Soil	121	5.858	5.843	-4.045	-12.639	2.628	-5.394	PLASTIC
		122	5.619	5.690	-13.636	-12.508	7.391	-8.192	PLASTIC
		123	5.619	5.809	-12.709	-11.915	7.011	-7.905	PLASTIC
		124	5.748	5.846	-13.050	-10.253	6.544	-7.377	PLASTIC
		125	5.674	5.861	-10.996	-9.335	5.541	-6.172	PLASTIC
		126	5.674	5.835	-11.861	-9.292	6.019	-6.741	PLASTIC
		127	5.798	5.859	-9.030	-13.499	6.102	-7.135	PLASTIC
		128	5.692	5.877	-9.272	-8.857	4.689	-5.139	PLASTIC
		129	5.616	5.566	-13.393	-12.407	7.299	-8.109	PLASTIC
		130	5.616	5.833	-12.632	-11.882	6.985	-7.751	PLASTIC
		131	5.692	5.818	-12.121	-9.478	6.125	-6.989	PLASTIC
		132	5.788	5.832	-10.708	-13.208	6.730	-7.573	PLASTIC
	12 Soil	133	5.839	5.575	-20.205	-14.956	9.231	-11.165	Elastic
		134	5.617	5.685	-20.939	-20.673	11.268	-13.006	PLASTIC
		135	5.617	5.604	-18.394	-18.718	10.143	-11.725	PLASTIC
		136	5.737	5.607	-17.304	-15.312	8.965	-10.374	PLASTIC
		137	5.669	5.641	-15.184	-14.084	8.165	-9.340	PLASTIC
		138	5.668	5.616	-18.548	-16.673	9.626	-11.149	PLASTIC
		139	5.774	5.609	-16.224	-14.712	8.346	-9.569	PLASTIC
		140	5.695	5.653	-15.338	-13.943	8.156	-9.334	PLASTIC
		141	5.615	5.662	-15.245	-15.420	8.532	-9.742	PLASTIC
		142	5.615	5.629	-19.070	-19.015	10.397	-11.998	PLASTIC
		143	5.695	5.594	-18.825	-15.691	9.365	-10.955	PLASTIC
		144	5.774	5.583	-20.159	-15.019	9.312	-11.163	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	13	145	4.831	5.645	-13.767	-17.217	-8.437	-9.852	PLASTIC
	Soil	146	4.988	5.609	-17.775	-16.736	-9.480	-10.941	PLASTIC
		147	4.998	5.600	-17.057	-15.897	-9.093	-10.402	PLASTIC
		148	4.903	5.647	-18.664	-16.519	-9.602	-11.110	PLASTIC
		149	4.952	5.636	-18.983	-16.521	-9.660	-11.210	PLASTIC
		150	4.952	5.661	-18.142	-15.317	-9.122	-10.581	PLASTIC
		151	4.877	5.633	-19.090	-18.418	-10.237	-11.819	PLASTIC
		152	4.940	5.619	-19.391	-17.087	-9.919	-11.522	PLASTIC
		153	4.990	5.633	-20.249	-19.268	-10.734	-12.421	PLASTIC
		154	4.990	5.666	-19.222	-18.160	-10.198	-11.754	PLASTIC
		155	4.940	5.677	-18.218	-14.848	-8.976	-10.449	PLASTIC
		156	4.877	5.659	-16.809	-18.739	-9.705	-11.210	PLASTIC
	14	157	4.752	5.870	-1.425	-6.578	-1.256	-2.766	PLASTIC
	Soil	158	4.982	5.811	-37.117	-35.141	-18.905	-22.093	PLASTIC
		159	4.982	5.892	-14.522	-12.579	-7.579	-8.477	PLASTIC
		160	4.858	5.862	-24.013	-13.734	-8.929	-11.697	PLASTIC
		161	4.929	5.843	-8.252	-6.823	-4.579	-4.911	PLASTIC
		162	4.929	5.868	-19.269	-15.981	-9.538	-10.942	PLASTIC
		163	4.820	5.852	-11.016	-19.998	-7.357	-9.685	PLASTIC
		164	4.912	5.828	-12.567	-9.774	-6.298	-7.103	PLASTIC
		165	4.985	5.835	-6.125	-5.919	-3.875	-4.009	PLASTIC
		166	4.985	5.869	-26.536	-24.691	-13.642	-15.736	PLASTIC
		167	4.912	5.888	-5.160	-3.593	-3.061	-3.064	PLASTIC
		168	4.820	5.878	-7.773	-19.298	-5.007	-8.480	PLASTIC
	15	169	5.076	6.194	-3.192	-1.559	-1.884	-1.516	PLASTIC
	Soil	170	4.241	6.275	-0.176	-1.270	-0.472	-0.455	Tension
		171	4.954	6.032	-4.801	-6.332	-3.494	-3.508	PLASTIC
		172	4.856	6.175	-2.724	-3.595	-2.451	-2.089	PLASTIC
		173	4.596	6.200	-1.681	-1.783	1.731	-1.124	Tension
		174	4.818	6.125	-1.474	-4.277	-1.829	-1.974	PLASTIC
		175	4.822	6.220	-0.309	-2.068	-0.800	-0.781	Tension
		176	4.498	6.253	0.000	0.000	0.000	-0.040	Tension
		177	4.448	6.202	-0.095	-0.567	-0.232	-0.282	Tension
		178	4.735	6.104	-0.880	-5.155	-1.035	-1.977	PLASTIC
		179	5.000	6.078	-4.676	-4.733	-3.218	-3.011	PLASTIC
		180	5.049	6.143	-3.175	-2.083	-2.111	-1.711	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	16	181	5.569	5.073	-36.907	-98.130	16.033	-41.512	PLASTIC
	Soil	182	5.580	5.469	-44.336	-130.135	11.766	-53.035	PLASTIC
		183	5.337	5.469	-39.480	-121.612	2.447	-49.014	PLASTIC
		184	5.518	5.255	-41.401	-116.562	14.709	-48.264	PLASTIC
		185	5.522	5.378	-45.838	-128.668	16.140	-53.183	PLASTIC
		186	5.446	5.378	-46.156	-140.405	6.012	-56.732	PLASTIC
		187	5.575	5.189	-38.431	-93.590	19.663	-40.538	PLASTIC
		188	5.580	5.348	-43.125	-108.311	20.912	-46.227	PLASTIC
		189	5.506	5.474	-44.281	-132.669	9.013	-53.775	PLASTIC
		190	5.408	5.474	-47.029	-140.286	10.027	-56.977	PLASTIC
		191	5.405	5.348	-40.430	-124.699	-1.091	-50.328	PLASTIC
		192	5.498	5.189	-34.796	-105.221	6.836	-42.037	PLASTIC
	17	193	5.117	5.118	-36.398	-100.933	-14.063	-42.191	PLASTIC
	Soil	194	5.269	5.472	-38.159	-117.939	0.271	-47.513	PLASTIC
		195	5.026	5.472	-39.858	-118.418	-8.002	-48.174	Elastic
		196	5.131	5.281	-41.670	-125.139	-8.385	-50.996	PLASTIC
		197	5.178	5.391	-45.218	-138.289	-4.431	-55.798	PLASTIC
		198	5.103	5.391	-45.425	-134.166	-11.207	-54.637	PLASTIC
		199	5.165	5.222	-38.830	-119.922	-0.359	-48.522	Elastic
		200	5.226	5.364	-39.458	-120.575	5.069	-48.785	PLASTIC
		201	5.197	5.477	-48.165	-145.017	-8.473	-58.834	PLASTIC
		202	5.099	5.477	-43.791	-130.045	-7.670	-52.838	Elastic
		203	5.051	5.364	-44.440	-127.020	-14.405	-52.221	PLASTIC
		204	5.098	5.222	-38.238	-107.571	-13.817	-44.647	PLASTIC
	18	205	3.592	5.503	-13.491	-13.585	-0.354	-8.500	Elastic
	Soil	206	4.021	6.242	-0.020	-1.480	-0.037	-0.499	Elastic
		207	3.186	6.242	-0.003	-0.645	0.042	-0.303	Elastic
		208	3.592	5.843	-3.991	-8.945	0.280	-4.239	Elastic
		209	3.728	6.073	-0.001	-3.468	-0.001	-1.234	PLASTIC
		210	3.469	6.073	-0.057	-3.554	-0.046	-1.277	Elastic
		211	3.721	5.719	-7.247	-9.933	0.368	-5.849	Elastic
		212	3.897	6.017	-0.253	-4.159	0.159	-1.584	Elastic
		213	3.772	6.252	0.000	-0.838	-0.004	-0.293	Tension
		214	3.436	6.252	-0.002	-1.081	0.043	-0.366	Tension
		215	3.296	6.017	-0.901	-5.134	0.231	-2.051	Elastic
		216	3.456	5.719	-7.361	-9.559	0.517	-5.569	Elastic

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	21 Soil	241	5.656	6.032	-4.948	-5.837	3.495	-3.404	PLASTIC
		242	6.497	6.275	-0.158	-1.253	0.444	-0.445	Tension
		243	5.534	6.194	-3.091	-1.300	1.748	-1.409	PLASTIC
		244	5.821	6.125	-2.298	-5.124	2.328	-2.376	PLASTIC
		245	6.083	6.200	-1.475	-1.680	-1.665	-1.091	Tension
		246	5.783	6.175	-1.401	-2.668	1.773	-1.327	PLASTIC
		247	5.914	6.104	-0.530	-4.713	0.603	-1.740	PLASTIC
		248	6.252	6.202	-0.063	-0.606	0.196	-0.284	Tension
		249	6.214	6.253	0.000	0.000	0.000	-0.040	Tension
		250	5.827	6.220	-0.346	-2.491	0.928	-0.919	Tension
		251	5.560	6.143	-4.112	-2.408	2.346	-2.089	PLASTIC
		252	5.609	6.078	-4.169	-3.419	2.737	-2.465	PLASTIC
	24 Soil	277	5.858	5.590	-16.101	-19.743	9.657	-11.356	PLASTIC
		278	5.875	5.815	-7.554	-15.211	5.323	-7.241	PLASTIC
		279	5.636	5.700	-15.107	-14.220	8.196	-9.308	PLASTIC
		280	5.811	5.667	-14.445	-13.547	7.851	-8.935	PLASTIC
		281	5.816	5.737	-13.227	-14.841	7.842	-8.899	PLASTIC
		282	5.742	5.702	-14.465	-12.252	7.464	-8.524	PLASTIC
		283	5.888	5.659	-14.851	-20.691	9.238	-11.206	PLASTIC
		284	5.873	5.749	-12.368	-20.444	9.119	-10.312	PLASTIC
		285	5.802	5.783	-12.269	-13.800	7.344	-8.260	PLASTIC
		286	5.706	5.737	-13.788	-11.595	7.128	-8.094	PLASTIC
		287	5.701	5.665	-16.902	-14.629	9.575	-9.999	PLASTIC
		288	5.790	5.621	-15.369	-13.187	7.930	-9.144	PLASTIC
	25 Soil	289	6.138	5.166	-43.493	-37.649	14.916	-25.306	Elastic
		290	5.877	5.532	-17.171	-28.250	9.341	-14.279	Elastic
		291	5.655	5.480	-19.723	-17.344	10.063	-11.818	PLASTIC
		292	5.966	5.322	-26.894	-23.523	2.269	-15.956	Elastic
		293	5.885	5.436	-25.219	-30.642	8.114	-17.493	Elastic
		294	5.816	5.420	-39.680	-29.673	17.503	-21.554	PLASTIC
		295	6.063	5.274	-28.035	-14.949	9.593	-13.767	PLASTIC
		296	5.959	5.421	-27.632	-23.069	3.025	-15.958	Elastic
		297	5.808	5.520	-17.994	-15.299	9.070	-10.618	PLASTIC
		298	5.717	5.499	-18.125	-15.220	9.087	-10.684	PLASTIC
		299	5.799	5.384	-49.206	-32.685	19.676	-25.348	PLASTIC
		300	5.993	5.258	-24.664	-25.399	9.419	-15.905	Elastic

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	26	301	5.083	5.105	-37.839	-108.749	-12.254	-44.979	PLASTIC
	Soil	302	4.991	5.459	-46.204	-75.278	-27.648	-37.159	PLASTIC
		303	4.789	5.292	-49.127	-38.161	-21.220	-26.443	PLASTIC
		304	4.994	5.230	-41.989	-71.966	-25.240	-35.096	PLASTIC
		305	4.966	5.340	-41.508	-48.181	-23.048	-27.723	PLASTIC
		306	4.903	5.288	-46.752	-33.733	-19.952	-25.006	PLASTIC
		307	5.058	5.211	-38.538	-106.236	-15.089	-44.345	PLASTIC
		308	5.022	5.353	-39.686	-84.036	-22.788	-37.909	PLASTIC
		309	4.929	5.413	-26.199	-24.415	-13.490	-15.938	PLASTIC
		310	4.847	5.346	-35.567	-22.106	-13.723	-18.113	PLASTIC
		311	4.876	5.233	-38.997	-32.661	-18.579	-22.464	PLASTIC
		312	4.994	5.158	-34.573	-63.092	-20.877	-30.270	PLASTIC
	27	313	4.815	5.619	-19.303	-19.704	-10.616	-12.281	PLASTIC
	Soil	314	4.770	5.335	-22.963	-25.116	-7.098	-15.250	Elastic
		315	4.972	5.583	-24.938	-22.054	-12.531	-14.707	PLASTIC
		316	4.841	5.546	-19.016	-18.884	-10.336	-12.005	PLASTIC
		317	4.827	5.457	-26.119	-31.895	-15.096	-18.120	PLASTIC
		318	4.890	5.535	-18.323	-14.427	-8.842	-10.476	PLASTIC
		319	4.799	5.533	-17.964	-21.754	-9.534	-12.567	Elastic
		320	4.781	5.419	-30.586	-24.826	-10.030	-17.373	Elastic
		321	4.831	5.408	-38.583	-33.264	-18.639	-22.313	PLASTIC
		322	4.912	5.507	-17.565	-13.152	-8.255	-9.889	PLASTIC
		323	4.927	5.597	-21.700	-18.846	-10.910	-12.761	PLASTIC
		324	4.864	5.612	-20.010	-18.789	-10.548	-12.225	PLASTIC
	28	325	4.740	5.854	-6.384	-12.778	-4.667	-8.129	PLASTIC
	Soil	326	4.813	5.668	-17.552	-20.226	-10.223	-11.970	PLASTIC
		327	4.970	5.795	-11.151	-10.249	-6.200	-6.849	PLASTIC
		328	4.810	5.799	-15.060	-15.551	-8.515	-9.610	PLASTIC
		329	4.832	5.740	-16.065	-16.601	-9.029	-10.276	PLASTIC
		330	4.881	5.779	-19.839	-17.007	-9.977	-11.496	PLASTIC
		331	4.760	5.798	-13.968	-16.452	-7.670	-9.559	Elastic
		332	4.789	5.723	-17.032	-18.116	-9.476	-11.035	Elastic
		333	4.862	5.704	-14.513	-16.285	-8.520	-9.748	PLASTIC
		334	4.925	5.755	-17.985	-16.394	-9.427	-10.777	PLASTIC
		335	4.902	5.814	-16.514	-15.694	-9.312	-10.675	PLASTIC
		336	4.809	5.838	-9.735	-14.589	-6.509	-7.690	PLASTIC

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	30 Soil	349	5.019	6.019	-4.068	-1.253	-1.692	-1.844	PLASTIC
		350	5.141	6.100	-2.293	-3.795	-2.267	-1.996	PLASTIC
		351	5.141	6.181	-6.836	-6.126	-4.091	-3.990	PLASTIC
		352	5.075	6.075	-2.878	-0.586	-1.299	-1.231	Tension
		353	5.113	6.100	-5.121	-6.159	-3.649	-3.554	PLASTIC
		354	5.113	6.125	-5.265	-2.351	-2.356	-2.433	PLASTIC
		355	5.055	6.042	-3.071	-1.350	-1.774	-1.546	PLASTIC
		356	5.103	6.074	-4.393	-5.951	-3.383	-3.295	PLASTIC
		357	5.142	6.126	-6.936	-10.230	-4.887	-5.298	PLASTIC
		358	5.142	6.158	-3.294	-4.391	-2.731	-2.423	PLASTIC
		359	5.103	6.133	-3.560	-0.819	-1.403	-1.456	PLASTIC
		360	5.055	6.087	-3.090	-0.374	-1.075	-1.237	Tension
	31 Soil	361	4.213	6.254	-0.926	-0.024	0.148	-0.324	Tension
		362	4.697	5.908	-9.614	-6.099	-2.497	-5.047	Elastic
		363	4.927	6.011	-7.452	-9.507	-5.001	-5.333	PLASTIC
		364	4.498	6.119	-0.931	-5.928	-0.645	-2.212	PLASTIC
		365	4.638	6.011	-1.147	-2.305	1.628	-1.281	Tension
		366	4.710	6.043	-0.276	-3.188	-0.939	-1.258	Tension
		367	4.352	6.152	-0.140	-1.881	-0.513	-0.732	Tension
		368	4.546	6.012	-1.315	-7.122	0.849	-2.775	PLASTIC
		369	4.773	5.935	-10.506	-10.640	-6.152	-6.654	PLASTIC
		370	4.865	5.977	-7.276	-12.463	-5.199	-6.197	PLASTIC
		371	4.712	6.086	-0.444	-4.164	-0.793	-1.564	PLASTIC
		372	4.425	6.184	-0.114	-1.526	0.417	-0.590	Tension
	32 Soil	373	6.118	5.132	-21.468	-20.968	11.002	-13.724	Elastic
		374	5.637	5.445	-45.638	-53.623	25.435	-30.565	PLASTIC
		375	5.625	5.049	-37.949	-52.626	22.022	-28.236	Elastic
		376	5.894	5.185	-46.634	-35.020	20.472	-25.444	PLASTIC
		377	5.745	5.282	-37.201	-30.589	17.504	-21.302	PLASTIC
		378	5.741	5.159	-40.317	-41.061	21.207	-25.383	PLASTIC
		379	5.977	5.228	-38.368	-40.204	11.790	-24.483	Elastic
		380	5.784	5.354	-27.559	-17.591	11.084	-14.349	PLASTIC
		381	5.627	5.328	-44.063	-61.750	25.848	-32.570	PLASTIC
		382	5.623	5.169	-39.174	-63.652	23.586	-31.809	PLASTIC
		383	5.776	5.069	-35.834	-42.582	20.190	-24.571	PLASTIC
		384	5.974	5.102	-34.405	-41.464	14.374	-23.778	Elastic

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	34	397	5.538	5.046	-34.920	-93.259	15.236	-39.510	PLASTIC
	Soil	398	5.308	5.442	-39.988	-123.425	-0.250	-49.733	PLASTIC
		399	5.154	5.087	-36.480	-107.320	-10.042	-44.151	PLASTIC
		400	5.397	5.148	-40.176	-123.409	3.491	-50.036	PLASTIC
		401	5.325	5.269	-41.371	-127.575	0.262	-51.540	PLASTIC
		402	5.277	5.159	-42.736	-128.419	1.722	-52.296	Elastic
		403	5.472	5.166	-39.578	-117.992	9.153	-48.220	PLASTIC
		404	5.379	5.325	-41.096	-126.715	0.904	-51.152	PLASTIC
		405	5.257	5.338	-41.913	-129.202	0.051	-52.132	PLASTIC
		406	5.196	5.196	-41.573	-127.088	-2.502	-51.518	Elastic
		407	5.269	5.070	-41.350	-127.491	-0.715	-51.678	PLASTIC
		408	5.424	5.054	-39.344	-117.721	8.653	-48.159	PLASTIC
	40	469	6.296	5.639	-12.472	-12.743	2.118	-8.129	Elastic
	Soil	470	5.923	5.811	-8.664	-14.389	5.979	-7.331	PLASTIC
		471	5.906	5.588	-15.222	-23.941	8.312	-12.356	Elastic
		472	6.120	5.666	-12.918	-13.872	3.800	-8.576	Elastic
		473	6.004	5.720	-10.911	-13.763	4.978	-7.995	Elastic
		474	5.999	5.650	-14.918	-17.291	6.192	-10.185	Elastic
		475	6.187	5.692	-10.984	-11.977	2.273	-7.405	Elastic
		476	6.037	5.761	-8.466	-12.173	4.753	-6.650	Elastic
		477	5.913	5.744	-10.394	-15.298	6.864	-8.160	PLASTIC
		478	5.906	5.654	-14.904	-20.666	8.608	-11.220	Elastic
		479	6.024	5.599	-10.410	-17.959	5.259	-10.906	Elastic
		480	6.191	5.621	-14.611	-14.186	3.361	-9.217	Elastic
	41	481	4.726	4.658	-32.683	-57.503	-15.437	-28.452	Elastic
	Soil	482	5.063	5.047	-31.968	-79.794	-13.868	-34.579	Elastic
		483	4.770	5.235	-39.856	-31.272	-18.147	-22.244	PLASTIC
		484	4.814	4.680	-34.182	-35.419	-19.256	-22.068	PLASTIC
		485	4.919	5.001	-37.799	-49.605	-21.937	-27.326	PLASTIC
		486	4.827	5.059	-34.535	-32.380	-17.562	-21.129	PLASTIC
		487	4.829	4.769	-33.100	-37.868	-18.455	-22.591	PLASTIC
		488	4.964	4.926	-35.607	-69.446	-21.282	-32.384	PLASTIC
		489	4.978	5.109	-35.941	-66.074	-21.642	-31.617	PLASTIC
		490	4.860	5.185	-38.113	-33.353	-19.591	-22.389	PLASTIC
		491	4.753	5.061	-35.889	-41.271	-19.978	-24.201	PLASTIC
		492	4.736	4.829	-35.418	-54.160	-19.371	-28.124	Elastic

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	42	493	4.424	5.579	-17.175	-15.891	-4.150	-10.532	Elastic
	Soil	494	4.730	5.335	-30.980	-26.590	-11.175	-18.091	Elastic
		495	4.776	5.619	-17.248	-19.799	-10.047	-11.893	PLASTIC
		496	4.575	5.532	-19.975	-19.386	-6.791	-12.431	Elastic
		497	4.670	5.456	-24.128	-23.402	-8.990	-14.975	Elastic
		498	4.694	5.544	-19.807	-20.976	-8.373	-12.977	Elastic
		499	4.513	5.504	-20.552	-19.146	-6.035	-12.566	Elastic
		500	4.636	5.406	-25.975	-25.441	-9.848	-16.184	Elastic
		501	4.748	5.419	-26.928	-24.184	-10.453	-16.083	Elastic
		502	4.766	5.533	-20.279	-22.974	-9.682	-13.628	Elastic
		503	4.669	5.610	-17.323	-18.106	-8.469	-11.215	Elastic
		504	4.527	5.594	-17.178	-16.865	-5.518	-10.813	Elastic
	43	505	4.422	5.616	-15.304	-14.605	-3.855	-9.554	Elastic
	Soil	506	4.774	5.655	-16.943	-18.722	-9.742	-11.249	PLASTIC
		507	4.701	5.641	-5.731	-8.206	-3.843	-3.971	PLASTIC
		508	4.567	5.677	-14.435	-13.684	-5.498	-8.966	Elastic
		509	4.676	5.689	-15.433	-15.335	-9.236	-9.750	Elastic
		510	4.653	5.747	-13.731	-12.304	-5.838	-8.291	Elastic
		511	4.526	5.625	-16.057	-15.988	-5.315	-10.187	Elastic
		512	4.667	5.641	-16.678	-16.964	-7.991	-10.653	Elastic
		513	4.756	5.712	-16.241	-17.775	-9.339	-10.704	PLASTIC
		514	4.726	5.787	-13.541	-11.950	-7.195	-8.083	PLASTIC
		515	4.615	5.775	-10.693	-11.585	-4.647	-7.127	Elastic
		516	4.503	5.684	-13.266	-13.418	-4.193	-8.529	Elastic
	46	541	4.378	5.657	-13.285	-13.176	-2.593	-8.485	Elastic
	Soil	542	4.657	5.883	-8.076	-8.537	-3.300	-5.339	Elastic
		543	4.174	6.229	-0.004	-0.149	0.025	-0.106	Tension
		544	4.395	5.840	-5.185	-9.289	-1.214	-4.732	Elastic
		545	4.482	5.910	-2.008	-8.399	-1.231	-3.451	Elastic
		546	4.332	6.018	-0.058	-3.426	-0.456	-1.293	Elastic
		547	4.466	5.719	-10.814	-11.581	-3.204	-7.212	Elastic
		548	4.578	5.810	-8.344	-8.817	-3.342	-5.565	Elastic
		549	4.513	5.991	-0.461	-4.542	-0.563	-1.764	PLASTIC
		550	4.319	6.130	-0.167	-3.309	-0.706	-1.187	Elastic
		551	4.230	6.059	-0.001	-3.439	-0.069	-1.237	Tension
		552	4.313	5.829	-4.052	-8.509	-1.316	-4.187	Elastic

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	47	553	5.959	4.484	-36.748	-50.723	13.094	-30.784	Elastic
	Soil	554	6.141	5.062	-37.037	-33.143	12.346	-22.106	Elastic
		555	5.649	4.979	-31.052	-47.035	18.756	-24.549	PLASTIC
		556	5.930	4.731	-35.309	-52.670	19.372	-27.727	Elastic
		557	5.986	4.911	-35.025	-42.223	16.945	-24.355	Elastic
		558	5.833	4.885	-37.708	-51.882	22.137	-28.020	PLASTIC
		559	6.018	4.655	-35.887	-52.177	17.709	-27.818	Elastic
		560	6.092	4.887	-33.761	-40.424	15.253	-23.457	Elastic
		561	5.993	5.044	-31.926	-36.902	16.808	-21.716	Elastic
		562	5.795	5.011	-34.579	-47.617	20.399	-25.755	PLASTIC
		563	5.737	4.827	-39.113	-52.790	22.840	-28.822	PLASTIC
		564	5.862	4.828	-32.732	-58.056	19.872	-28.658	PLASTIC
	49	577	5.342	4.560	-33.327	-103.414	0.750	-42.481	PLASTIC
	Soil	578	5.541	4.982	-35.965	-81.317	19.727	-38.292	Elastic
		579	5.157	5.024	-36.327	-102.975	-12.782	-42.855	PLASTIC
		580	5.345	4.763	-32.604	-100.662	3.238	-41.268	PLASTIC
		581	5.407	4.895	-37.833	-112.921	8.771	-46.401	PLASTIC
		582	5.288	4.908	-37.058	-114.581	-1.063	-48.655	PLASTIC
		583	5.405	4.883	-33.002	-101.416	4.256	-41.680	PLASTIC
		584	5.485	4.853	-37.384	-103.434	14.414	-43.463	Elastic
		585	5.426	5.000	-39.880	-117.913	10.145	-48.423	PLASTIC
		586	5.272	5.017	-39.409	-121.485	-2.157	-49.333	PLASTIC
		587	5.209	4.883	-36.865	-109.223	-9.431	-45.011	PLASTIC
		588	5.283	4.696	-30.906	-95.753	-2.637	-39.341	PLASTIC
	53	625	6.344	5.685	-9.827	-11.240	1.093	-8.943	Elastic
	Soil	626	6.573	6.229	-0.184	-0.477	-0.153	-0.259	Elastic
		627	5.971	5.857	-7.845	-9.436	3.374	-5.560	Elastic
		628	6.311	5.850	-1.639	-8.140	0.628	-3.316	PLASTIC
		629	6.382	6.019	-0.112	-3.422	0.568	-1.299	PLASTIC
		630	6.195	5.903	-1.336	-7.469	-0.056	-2.979	PLASTIC
		631	6.418	5.949	-1.683	-7.446	0.090	-3.122	Elastic
		632	6.510	6.068	-0.180	-3.934	0.256	-1.432	PLASTIC
		633	6.392	6.122	-0.112	-3.452	0.546	-1.220	PLASTIC
		634	6.150	5.973	-0.819	-5.682	-0.544	-2.229	PLASTIC
		635	6.077	5.800	-6.039	-9.694	2.846	-5.145	Elastic
		636	6.227	5.731	-7.667	-10.387	1.837	-5.994	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	55 Soil	649	5.286	4.533	-28.771	-88.864	-2.567	-36.773	Elastic
		650	5.101	4.997	-40.527	-103.517	-16.079	-44.308	Elastic
		651	4.764	4.607	-35.358	-51.449	-21.085	-27.481	PLASTIC
		652	5.124	4.657	-33.110	-84.551	-13.169	-36.683	Elastic
		653	5.066	4.801	-33.309	-77.985	-18.003	-34.650	PLASTIC
		654	4.961	4.680	-35.325	-61.854	-21.381	-30.531	PLASTIC
		655	5.236	4.674	-32.989	-100.780	-5.083	-41.487	Elastic
		656	5.161	4.880	-35.142	-101.451	-11.107	-42.182	Elastic
		657	4.996	4.884	-34.988	-66.488	-20.981	-31.647	PLASTIC
		658	4.860	4.727	-36.325	-53.719	-21.699	-28.351	PLASTIC
		659	4.919	4.580	-31.913	-57.682	-19.371	-28.341	PLASTIC
		660	5.129	4.550	-30.395	-79.990	-13.093	-34.591	Elastic
	60 Soil	709	3.883	5.459	-15.057	-15.414	-0.536	-9.857	Elastic
		710	4.307	5.627	-14.075	-13.811	-2.447	-8.938	Elastic
		711	4.102	6.199	-0.040	-2.674	-0.325	-0.901	Tension
		712	3.912	5.667	-9.594	-10.860	-0.062	-6.674	Elastic
		713	4.112	5.719	-8.490	-10.219	-0.376	-6.108	Elastic
		714	4.048	5.897	-1.808	-8.752	-0.061	-3.511	Elastic
		715	3.854	5.501	-15.045	-14.348	-0.750	-9.497	Elastic
		716	4.113	5.568	-14.671	-13.854	-1.405	-9.179	Elastic
		717	4.252	5.803	-5.162	-9.282	-0.571	-4.456	Elastic
		718	4.170	6.033	-0.006	-3.405	-0.148	-1.251	Tension
		719	3.966	5.979	-0.945	-6.174	-0.243	-2.408	Elastic
		720	3.789	5.692	-8.709	-10.077	0.114	-6.161	Elastic
	62 Soil	733	5.396	4.518	-26.800	-90.809	6.489	-33.777	PLASTIC
		734	5.905	4.445	-30.915	-65.730	17.190	-30.570	Elastic
		735	5.595	4.940	-42.527	-78.357	24.077	-37.408	Elastic
		736	5.559	4.598	-33.078	-71.520	19.984	-32.813	PLASTIC
		737	5.717	4.576	-33.441	-56.153	20.305	-28.344	PLASTIC
		738	5.621	4.730	-33.004	-59.294	20.034	-28.724	PLASTIC
		739	5.549	4.491	-30.844	-70.094	17.208	-31.807	PLASTIC
		740	5.754	4.461	-29.548	-54.191	17.985	-26.684	PLASTIC
		741	5.817	4.595	-36.992	-59.287	22.272	-30.033	PLASTIC
		742	5.692	4.794	-33.636	-49.960	20.105	-26.059	PLASTIC
		743	5.531	4.818	-34.755	-80.235	17.996	-35.744	Elastic
		744	5.451	4.648	-32.415	-89.655	12.877	-38.013	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	66	781	7.088	5.408	-14.948	-16.036	0.376	-10.053	Elastic
	Soil	782	6.653	6.196	-0.034	-2.397	0.118	-0.817	Elastic
		783	6.424	5.653	-10.927	-12.124	0.923	-7.465	Elastic
		784	6.836	5.645	-8.601	-10.912	-0.258	-6.410	Elastic
		785	6.701	5.891	-1.632	-8.360	-0.016	-3.346	PLASTIC
		786	6.629	5.721	-6.443	-9.791	-0.260	-5.362	Elastic
		787	6.964	5.646	-8.571	-10.747	-0.225	-6.352	Elastic
		788	6.789	5.963	-0.972	-6.336	0.247	-2.479	PLASTIC
		789	6.578	6.040	-0.116	-3.783	0.168	-1.391	PLASTIC
		790	6.486	5.822	-2.553	-8.060	-0.190	-3.591	Elastic
		791	6.624	5.572	-12.748	-13.031	0.480	-8.353	Elastic
		792	6.891	5.473	-14.238	-14.364	0.410	-9.283	Elastic
	60	817	5.072	4.044	-23.483	-59.174	-12.046	-28.702	PLASTIC
	Soil	818	5.284	4.464	-29.123	-32.614	-3.629	-35.061	Elastic
		819	4.762	4.538	-33.678	-53.734	-20.386	-27.721	PLASTIC
		820	5.049	4.254	-27.514	-62.790	-15.441	-28.818	PLASTIC
		821	5.115	4.385	-28.535	-74.598	-13.408	-32.555	PLASTIC
		822	4.953	4.408	-30.226	-58.718	-18.187	-28.292	PLASTIC
		823	5.140	4.166	-24.153	-67.693	-9.697	-29.355	PLASTIC
		824	5.226	4.335	-28.406	-60.876	-4.252	-34.434	Elastic
		825	5.127	4.492	-29.140	-60.411	-11.878	-34.390	PLASTIC
		826	4.917	4.522	-31.566	-56.465	-19.201	-27.927	PLASTIC
		827	4.850	4.389	-29.843	-59.812	-17.816	-28.521	PLASTIC
		828	4.975	4.190	-27.626	-60.730	-15.905	-28.300	PLASTIC
	72	853	7.181	5.451	-13.342	-14.432	0.302	-9.054	Elastic
	Soil	854	7.709	6.239	-0.002	-0.872	-0.045	-0.314	Tension
		855	6.748	6.239	-0.003	-1.382	-0.062	-0.468	Tension
		856	7.202	5.813	-4.183	-9.310	-0.356	-4.462	Elastic
		857	7.387	6.059	-0.164	-3.957	-0.021	-1.442	PLASTIC
		858	7.087	6.059	-0.072	-3.679	0.031	-1.331	PLASTIC
		859	7.347	5.681	-7.419	-10.198	-0.430	-5.811	Elastic
		860	7.580	5.998	-1.129	-5.342	-0.177	-2.198	Elastic
		861	7.422	6.248	-0.001	-1.099	-0.039	-0.374	Tension
		862	7.035	6.248	-0.001	-0.922	0.033	-0.321	Tension
		863	6.887	5.998	-0.403	-4.666	-0.079	-1.777	PLASTIC
		864	7.042	5.681	-7.375	-10.554	-0.377	-5.905	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	78 Soil	901	5.611	3.983	-22.588	-61.136	10.179	-27.057	PLASTIC
		902	5.906	4.376	-32.361	-61.073	16.597	-29.665	Elastic
		903	5.398	4.449	-30.558	-59.929	8.354	-37.699	Elastic
		904	5.630	4.180	-26.562	-62.427	14.593	-28.499	PLASTIC
		905	5.722	4.303	-29.848	-62.760	17.494	-29.480	PLASTIC
		906	5.583	4.325	-26.601	-61.132	14.890	-27.088	PLASTIC
		907	5.704	4.097	-26.667	-65.852	13.853	-29.628	PLASTIC
		908	5.823	4.255	-29.467	-64.202	16.972	-29.839	PLASTIC
		909	5.755	4.403	-31.912	-62.859	19.071	-30.044	PLASTIC
		910	5.550	4.433	-27.787	-62.193	15.805	-28.569	PLASTIC
		911	5.458	4.308	-26.764	-69.475	12.299	-30.553	Elastic
		912	5.642	4.120	-24.094	-60.183	12.473	-27.123	PLASTIC
	83 Soil	985	5.555	3.958	-21.705	-59.504	9.402	-26.433	PLASTIC
		986	5.342	4.422	-28.087	-82.792	0.197	-34.940	Elastic
		987	5.129	4.002	-20.954	-59.951	-8.043	-26.212	PLASTIC
		988	5.408	4.074	-21.142	-62.645	6.720	-27.009	PLASTIC
		989	5.342	4.219	-23.855	-71.775	3.280	-30.438	Elastic
		990	5.276	4.088	-21.783	-68.029	-0.524	-28.804	Elastic
		991	5.495	4.097	-22.018	-60.075	9.769	-26.488	PLASTIC
		992	5.409	4.285	-25.351	-74.386	7.364	-31.614	Elastic
		993	5.274	4.300	-26.975	-76.808	-3.482	-32.755	Elastic
		994	5.189	4.131	-23.713	-71.589	-8.054	-30.414	PLASTIC
		995	5.256	3.983	-20.148	-63.855	-0.750	-27.150	PLASTIC
		996	5.428	3.964	-20.912	-61.510	7.000	-26.692	PLASTIC
	84 Soil	997	4.470	3.751	-30.098	-69.156	-12.663	-31.943	Elastic
		998	5.013	3.993	-23.431	-60.210	-11.663	-27.041	PLASTIC
		999	4.703	4.487	-33.169	-61.272	-16.496	-29.974	Elastic
		1000	4.648	3.975	-29.402	-67.422	-13.393	-31.023	Elastic
		1001	4.817	4.051	-28.183	-68.339	-14.899	-30.969	PLASTIC
		1002	4.721	4.204	-30.043	-65.539	-16.010	-30.456	Elastic
		1003	4.633	3.816	-27.005	-68.640	-13.414	-30.905	Elastic
		1004	4.851	3.913	-25.828	-67.716	-12.079	-30.092	Elastic
		1005	4.925	4.146	-27.658	-61.063	-15.879	-28.447	PLASTIC
		1006	4.800	4.345	-30.190	-60.204	-18.038	-28.780	PLASTIC
		1007	4.628	4.268	-31.375	-61.302	-15.587	-29.530	Elastic
		1008	4.535	3.972	-29.125	-63.692	-15.145	-29.884	Elastic

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	90 Soil	1069	6.225	3.594	-29.278	-68.854	11.472	-31.740	Elastic
		1070	5.966	4.314	-30.855	-62.605	16.598	-29.726	Elastic
		1071	5.671	3.921	-24.326	-65.257	10.096	-28.897	Elastic
		1072	6.038	3.835	-29.148	-70.347	13.518	-31.944	Elastic
		1073	5.958	4.059	-29.794	-67.735	15.494	-31.164	Elastic
		1074	5.866	3.936	-27.603	-66.255	13.417	-30.767	Elastic
		1075	6.153	3.810	-29.710	-67.193	13.021	-31.187	Elastic
		1076	6.049	4.099	-30.199	-64.121	15.437	-30.166	Elastic
		1077	5.873	4.203	-29.657	-65.908	16.600	-30.452	Elastic
		1078	5.754	4.045	-26.503	-64.966	13.907	-29.358	PLASTIC
		1079	5.836	3.816	-26.334	-67.654	10.870	-30.307	Elastic
		1080	6.059	3.685	-27.790	-71.750	12.065	-32.085	Elastic
	97 Soil	1153	5.345	3.295	-19.662	-61.657	-2.890	-28.930	PLASTIC
		1154	5.555	3.874	-21.495	-60.802	8.589	-26.738	PLASTIC
		1155	5.129	3.921	-20.041	-59.112	-7.348	-25.456	PLASTIC
		1156	5.344	3.572	-17.211	-55.006	0.931	-23.964	PLASTIC
		1157	5.409	3.752	-18.874	-58.111	4.430	-25.241	PLASTIC
		1158	5.277	3.766	-17.975	-57.388	-0.121	-24.742	PLASTIC
		1159	5.411	3.464	-18.456	-59.783	-0.712	-25.562	PLASTIC
		1160	5.496	3.697	-19.944	-60.993	4.895	-26.481	PLASTIC
		1161	5.428	3.898	-19.874	-59.286	6.207	-25.766	PLASTIC
		1162	5.257	3.914	-19.494	-61.887	-0.792	-26.422	PLASTIC
		1163	5.190	3.731	-17.493	-53.769	-4.476	-23.542	PLASTIC
		1164	5.276	3.479	-16.546	-52.919	-1.287	-23.217	PLASTIC
	98 Soil	1165	5.269	3.280	-19.510	-61.996	0.315	-26.996	PLASTIC
		1166	5.054	3.906	-21.053	-58.622	-8.896	-25.925	PLASTIC
		1167	4.511	3.664	-27.182	-69.017	-12.218	-31.100	Elastic
		1168	5.046	3.512	-19.184	-60.675	-1.882	-26.315	PLASTIC
		1169	4.979	3.706	-20.850	-62.938	-5.740	-27.341	PLASTIC
		1170	4.810	3.631	-24.520	-67.906	-7.798	-29.996	Elastic
		1171	5.213	3.466	-18.220	-58.121	0.175	-25.291	PLASTIC
		1172	5.126	3.718	-18.708	-57.652	-4.387	-25.090	PLASTIC
		1173	4.896	3.640	-24.283	-65.647	-10.338	-29.070	Elastic
		1174	4.667	3.742	-27.409	-71.377	-11.900	-31.810	Elastic
		1175	4.736	3.544	-23.029	-70.398	-7.607	-30.641	PLASTIC
		1176	5.041	3.389	-19.292	-61.267	-0.868	-26.629	PLASTIC

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	104 Soil	1237	5.421	3.266	-18.324	-58.349	-0.938	-25.561	PLASTIC
		1238	6.186	3.518	-28.006	-71.914	10.714	-32.340	Elastic
		1239	5.631	3.845	-23.295	-63.811	7.141	-28.218	Elastic
		1240	5.645	3.457	-20.740	-64.792	3.144	-28.076	PLASTIC
		1241	5.893	3.538	-23.985	-68.589	7.333	-30.116	Elastic
		1242	5.710	3.637	-21.965	-65.166	6.408	-28.403	Elastic
		1243	5.652	3.336	-21.058	-66.124	2.410	-28.674	PLASTIC
		1244	5.959	3.437	-24.296	-71.187	7.103	-31.078	Elastic
		1245	6.026	3.621	-27.120	-72.612	10.947	-32.197	Elastic
		1246	5.803	3.753	-25.300	-66.417	9.594	-29.680	Elastic
		1247	5.560	3.673	-20.902	-64.725	3.995	-27.909	PLASTIC
		1248	5.476	3.440	-19.753	-62.663	0.797	-27.144	PLASTIC
	113 Soil	1345	4.616	2.724	-26.940	-74.807	-0.812	-33.564	Elastic
		1346	5.238	3.195	-19.842	-61.707	0.599	-27.094	Elastic
		1347	4.479	3.579	-28.478	-71.845	-11.374	-32.410	Elastic
		1348	4.728	3.028	-22.449	-70.565	-1.726	-30.885	PLASTIC
		1349	4.921	3.175	-20.861	-65.997	-0.753	-28.714	PLASTIC
		1350	4.685	3.294	-22.948	-70.192	-5.028	-30.497	PLASTIC
		1351	4.808	2.857	-23.445	-70.853	-0.172	-31.216	Elastic
		1352	5.058	3.046	-20.736	-65.646	0.544	-28.669	PLASTIC
		1353	5.014	3.317	-20.021	-63.481	-0.701	-27.573	PLASTIC
		1354	4.709	3.472	-23.417	-69.601	-6.969	-30.309	PLASTIC
		1355	4.512	3.322	-25.381	-73.605	-7.711	-32.227	Elastic
		1356	4.567	2.979	-24.007	-74.478	-2.914	-32.369	Elastic
	131 Soil	1561	6.073	2.587	-29.154	-77.740	1.137	-35.224	Elastic
		1562	6.217	3.428	-27.155	-70.996	9.729	-31.887	Elastic
		1563	5.453	3.175	-20.010	-63.426	-0.862	-27.674	PLASTIC
		1564	5.984	2.915	-23.829	-74.716	1.728	-32.440	PLASTIC
		1565	6.009	3.177	-24.122	-73.831	4.922	-32.041	Elastic
		1566	5.771	3.098	-21.709	-68.468	1.188	-29.774	PLASTIC
		1567	6.125	2.836	-26.252	-76.009	3.072	-33.622	Elastic
		1568	6.193	3.174	-26.065	-73.858	7.082	-32.634	Elastic
		1569	5.986	3.361	-24.682	-72.895	6.936	-31.768	Elastic
		1570	5.678	3.259	-20.745	-65.489	1.529	-28.455	PLASTIC
		1571	5.633	2.993	-21.205	-67.070	-0.329	-29.293	PLASTIC
		1572	5.892	2.756	-26.054	-73.808	0.078	-32.971	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	163	1945	5.619	5.984	-3.892	-0.212	0.441	-1.500	PLASTIC
	Soil	1946	5.619	5.903	-10.325	-8.444	5.478	-5.968	PLASTIC
		1947	5.858	5.856	-22.512	-16.303	10.104	-12.022	PLASTIC
		1948	5.674	5.936	-7.683	-6.428	4.349	-4.543	PLASTIC
		1949	5.674	5.910	-12.319	-6.925	4.996	-6.104	PLASTIC
		1950	5.748	5.896	-3.902	-11.031	2.906	-4.823	PLASTIC
		1951	5.616	5.961	-3.343	-1.132	1.649	-1.631	PLASTIC
		1952	5.616	5.928	-9.941	-6.498	4.664	-5.245	PLASTIC
		1953	5.692	5.887	-12.371	-8.283	5.673	-6.547	PLASTIC
		1954	5.788	5.868	-6.475	-10.750	4.710	-5.534	PLASTIC
		1955	5.788	5.894	-9.304	-9.881	5.655	-6.100	PLASTIC
		1956	5.692	5.946	-6.228	-10.144	4.556	-5.213	PLASTIC
	164	1957	5.694	6.009	-6.955	-7.950	4.585	-4.719	PLASTIC
	Soil	1958	5.923	5.881	-6.311	-10.839	4.629	-5.501	PLASTIC
		1959	6.525	6.252	-0.626	-0.084	0.200	-0.249	Tension
		1960	5.932	6.035	-1.235	-5.354	1.441	-2.202	PLASTIC
		1961	6.007	5.996	-0.623	-4.683	0.839	-1.944	PLASTIC
		1962	6.194	6.111	-0.144	-3.320	-0.691	-1.200	Tension
		1963	5.747	5.987	-6.700	-10.046	4.767	-5.307	PLASTIC
		1964	5.843	5.915	-7.339	-12.324	5.217	-6.226	PLASTIC
		1965	6.110	5.993	-0.726	-4.569	-0.525	-1.850	Elastic
		1966	6.352	6.142	-0.117	-3.650	0.382	-1.284	PLASTIC
		1967	6.276	6.183	-0.003	-1.851	0.073	-0.656	Tension
		1968	5.938	6.095	-0.458	-4.492	0.601	-1.665	PLASTIC
2	171	2041	5.038	5.506	-2.521	-119.763	-10.085	-25.590	Elastic
	Blocks	2042	5.281	5.506	-0.139	-123.913	-4.157	-25.932	Tension
		2043	5.281	5.587	-0.083	-137.562	-2.953	-28.532	Tension
		2044	5.150	5.525	-0.551	-137.570	-8.710	-28.732	Tension
		2045	5.225	5.525	-0.603	-137.653	-9.121	-28.787	Tension
		2046	5.225	5.550	-0.650	-139.399	-9.486	-28.969	Tension
		2047	5.109	5.505	-3.749	-135.407	-2.822	-28.066	Elastic
		2048	5.207	5.505	-0.807	-139.315	-10.601	-29.147	Tension
		2049	5.284	5.531	-0.097	-127.559	-3.515	-26.617	Tension
		2050	5.284	5.564	-0.065	-133.292	-2.941	-27.711	Tension
		2051	5.207	5.564	-0.936	-138.694	-11.696	-28.976	Tension
		2052	5.109	5.531	-4.219	-133.474	-3.451	-28.638	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	172 Blocks	2053	5.019	5.513	-7.026	-170.094	-13.355	-36.549	Elastic
		2054	5.262	5.594	-0.165	-130.910	-4.645	-27.213	Tension
		2055	5.019	5.594	-24.629	-147.533	-8.160	-35.443	Elastic
		2056	5.075	5.550	-23.793	-122.311	-8.325	-30.293	Elastic
		2057	5.150	5.575	-1.290	-136.487	-13.271	-28.579	Tension
		2058	5.075	5.575	-21.050	-123.963	-14.490	-30.045	Elastic
		2059	5.093	5.536	-10.257	-112.506	-8.535	-25.644	Elastic
		2060	5.191	5.569	-0.783	-151.075	-10.875	-31.404	Tension
		2061	5.191	5.595	-1.604	-144.222	-15.208	-30.161	Tension
		2062	5.093	5.595	-13.044	-128.406	-16.221	-29.299	Elastic
		2063	5.016	5.569	-19.001	-145.157	-22.351	-33.877	Elastic
		2064	5.016	5.536	-20.777	-163.314	-16.616	-37.910	Elastic
3	173 Blocks	2065	5.281	5.613	-0.067	-141.882	-3.097	-29.361	Tension
		2066	5.281	5.694	-0.035	-153.672	-2.322	-31.598	Tension
		2067	5.038	5.694	-16.745	-111.836	-21.796	-26.585	Elastic
		2068	5.225	5.650	-0.636	-148.959	-9.734	-30.837	Tension
		2069	5.225	5.675	-0.719	-152.635	-10.471	-31.553	Tension
		2070	5.150	5.675	-4.669	-142.013	-25.750	-30.232	Tension
		2071	5.284	5.636	-0.046	-145.132	-2.582	-29.973	Tension
		2072	5.284	5.669	-0.034	-149.859	-2.263	-30.970	Tension
		2073	5.207	5.695	-1.415	-154.602	-14.790	-32.058	Tension
		2074	5.109	5.695	-8.204	-133.136	-33.050	-29.136	Tension
		2075	5.109	5.669	-7.258	-130.611	-30.790	-28.478	Tension
		2076	5.207	5.636	-1.069	-146.312	-12.509	-30.414	Tension
	174 Blocks	2077	5.262	5.606	-0.046	-141.721	-2.559	-29.333	Tension
		2078	5.019	5.687	-17.886	-116.815	-17.176	-28.218	Elastic
		2079	5.019	5.606	-24.843	-140.761	-17.068	-34.113	Elastic
		2080	5.150	5.625	-3.856	-136.193	-22.917	-28.963	Tension
		2081	5.075	5.650	-16.282	-125.757	-23.394	-29.339	Elastic
		2082	5.075	5.625	-18.636	-127.557	-19.521	-30.205	Elastic
		2083	5.191	5.631	-2.029	-144.071	-17.096	-30.165	Tension
		2084	5.093	5.664	-8.969	-125.446	-28.662	-27.394	Elastic
		2085	5.016	5.664	-18.565	-126.113	-15.100	-29.847	Elastic
		2086	5.016	5.631	-20.047	-134.146	-15.071	-31.796	Elastic
		2087	5.093	5.605	-12.934	-128.153	-19.602	-29.211	Elastic
		2088	5.191	5.605	-1.621	-141.906	-15.166	-29.686	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
4	175 Blocks	2089	5.281	5.713	-0.045	-155.861	-2.640	-32.011	Tension
		2090	5.281	5.794	-0.028	-169.861	-2.184	-34.693	Tension
		2091	5.038	5.794	-13.018	-72.509	-30.682	-17.933	Elastic
		2092	5.225	5.750	-1.019	-166.349	-13.020	-34.251	Tension
		2093	5.225	5.775	-1.183	-171.771	-14.253	-35.332	Tension
		2094	5.150	5.775	-7.024	-158.559	-33.372	-33.871	Tension
		2095	5.284	5.736	-0.036	-159.429	-2.393	-32.689	Tension
		2096	5.284	5.769	-0.029	-164.945	-2.178	-33.745	Tension
		2097	5.207	5.795	-2.382	-175.492	-20.445	-36.268	Tension
		2098	5.109	5.795	-11.905	-140.544	-40.904	-31.216	Tension
		2099	5.109	5.769	-10.822	-138.240	-38.678	-30.575	Tension
		2100	5.207	5.736	-1.735	-163.086	-16.820	-33.760	Tension
	176 Blocks	2101	5.262	5.706	-0.115	-152.977	-4.201	-31.457	Tension
		2102	5.019	5.787	-16.955	-82.380	-22.764	-16.600	Elastic
		2103	5.019	5.706	-17.193	-110.866	-19.085	-26.463	Elastic
		2104	5.150	5.725	-5.835	-149.718	-29.557	-31.923	Tension
		2105	5.075	5.750	-11.513	-113.251	-36.027	-25.742	Elastic
		2106	5.075	5.725	-10.485	-114.640	-34.448	-25.850	Elastic
		2107	5.191	5.731	-2.548	-164.221	-20.456	-34.157	Tension
		2108	5.093	5.764	-12.045	-123.633	-38.590	-27.906	Tension
		2109	5.016	5.764	-17.084	-82.272	-18.198	-20.642	Elastic
		2110	5.016	5.731	-16.224	-99.957	-18.768	-23.853	Elastic
		2111	5.093	5.705	-8.649	-123.941	-32.727	-27.371	Elastic
		2112	5.191	5.705	-2.449	-159.291	-19.752	-33.168	Tension
5	177 Blocks	2113	5.038	5.806	-12.999	-64.624	-28.614	-16.235	Elastic
		2114	5.281	5.806	-0.087	-172.028	-3.861	-35.120	Tension
		2115	5.281	5.887	-0.002	-187.966	0.852	-38.176	Tension
		2116	5.150	5.825	-8.612	-167.881	-38.023	-35.982	Tension
		2117	5.225	5.825	-1.523	-183.361	-16.713	-37.648	Tension
		2118	5.225	5.850	-1.885	-190.947	-18.971	-39.202	Tension
		2119	5.109	5.805	-12.977	-142.561	-43.012	-31.819	Tension
		2120	5.207	5.805	-2.337	-177.777	-20.382	-36.721	Tension
		2121	5.284	5.831	-0.056	-176.879	-3.148	-36.049	Tension
		2122	5.284	5.864	-0.008	-183.191	-1.198	-37.256	Tension
		2123	5.207	5.864	-3.632	-195.225	-26.629	-40.389	Tension
		2124	5.109	5.831	-14.002	-143.471	-44.821	-32.170	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	178	2125	5.019	5.813	-22.845	-34.389	-14.179	-12.148	Elastic
	Blocks	2126	5.262	5.694	-0.248	-190.091	-6.662	-38.642	Tension
		2127	5.019	5.694	-24.741	-13.634	-18.366	-8.262	Tension
		2128	5.075	5.850	-22.238	-103.692	-47.998	-25.935	Elastic
		2129	5.150	5.875	-11.800	-178.294	-45.867	-38.619	Tension
		2130	5.075	5.875	-21.299	-83.250	-42.108	-21.523	Tension
		2131	5.093	5.836	-17.209	-117.948	-45.053	-27.699	Tension
		2132	5.191	5.869	-5.169	-202.655	-32.365	-42.174	Tension
		2133	5.191	5.895	-6.620	-214.645	-37.696	-44.826	Tension
		2134	5.093	5.895	-24.336	-109.428	-51.604	-27.338	Tension
		2135	5.018	5.869	-15.369	-6.098	-9.679	-4.915	Tension
		2136	5.018	5.836	-20.052	-45.574	-24.618	-13.793	Elastic
6	179	2137	5.338	5.506	-0.077	-115.704	2.994	-24.277	Tension
	Blocks	2138	5.581	5.506	-0.839	-182.224	12.382	-37.748	Tension
		2139	5.581	5.587	-23.777	-161.178	21.929	-38.010	Elastic
		2140	5.450	5.525	-0.858	-136.406	10.817	-28.547	Tension
		2141	5.525	5.525	-18.252	-121.609	7.090	-29.080	Elastic
		2142	5.625	5.550	-20.177	-128.457	6.611	-30.399	Elastic
		2143	5.409	5.505	-1.126	-158.851	13.374	-33.118	Tension
		2144	5.507	5.505	-9.751	-108.921	7.079	-24.870	Elastic
		2145	5.594	5.531	-14.066	-169.328	31.400	-41.778	Elastic
		2146	5.594	5.564	-29.979	-173.489	28.260	-41.747	Elastic
		2147	5.507	5.564	-19.033	-132.709	13.145	-31.401	Elastic
		2148	5.409	5.531	-2.018	-143.645	17.025	-30.219	Tension
	180	2149	5.319	5.513	-0.275	-126.022	5.888	-26.372	Tension
	Blocks	2150	5.562	5.594	-23.024	-145.197	15.059	-34.655	Elastic
		2151	5.319	5.594	-0.140	-140.006	4.568	-29.029	Tension
		2152	5.375	5.550	-0.605	-138.099	9.139	-28.600	Tension
		2153	5.450	5.575	-3.058	-134.108	20.251	-28.470	Tension
		2154	5.375	5.575	-0.677	-139.603	9.724	-29.080	Tension
		2155	5.393	5.538	-0.864	-137.397	10.895	-28.731	Tension
		2156	5.491	5.569	-13.865	-133.056	19.080	-30.430	Elastic
		2157	5.491	5.595	-10.108	-134.342	24.147	-29.899	Elastic
		2158	5.393	5.595	-1.216	-140.010	13.048	-29.241	Tension
		2159	5.316	5.569	-0.144	-135.258	4.412	-28.113	Tension
		2160	5.316	5.538	-0.197	-129.435	5.047	-27.005	Tension

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	182 Blocks	2173	5.131	5.994	-143.496	-46.456	-76.584	-38.436	Elastic
		2174	5.009	5.994	-19.273	-1.231	-4.871	-4.546	Tension
		2175	5.009	5.913	-11.168	-2.280	-5.046	-3.249	Tension
		2176	5.075	5.975	-20.120	-2.360	-6.820	-4.968	Tension
		2177	5.037	5.975	-15.043	-10.980	-12.852	-5.676	Tension
		2178	5.037	5.950	-9.534	-2.666	-5.042	-2.947	Tension
		2179	5.095	5.995	-22.566	-9.828	-4.548	-6.923	Elastic
		2180	5.047	5.995	-16.298	-0.001	-0.108	-3.704	Tension
		2181	5.008	5.989	-0.305	-0.226	-0.262	-0.586	Tension
		2182	5.008	5.936	-18.025	-9.066	-12.783	-5.945	Tension
		2183	5.047	5.936	-10.751	-5.956	-8.002	-3.868	Tension
		2184	5.095	5.989	-37.020	-41.478	-39.185	-16.180	Tension
	183 Blocks	2185	5.028	5.906	-29.683	-12.499	-19.261	-9.005	Tension
		2186	5.272	5.906	-0.907	-196.015	-13.335	-39.940	Tension
		2187	5.150	5.987	-79.825	-321.684	-118.290	-50.743	Elastic
		2188	5.112	5.925	-36.299	-138.088	-70.798	-35.420	Tension
		2189	5.188	5.925	-8.941	-247.056	-41.410	-51.329	Tension
		2190	5.150	5.950	-26.371	-203.628	-73.279	-46.494	Tension
		2191	5.101	5.905	-23.999	-116.312	-52.833	-28.632	Tension
		2192	5.199	5.905	-4.785	-206.691	-31.450	-42.853	Tension
		2193	5.238	5.931	-0.550	-195.065	-10.353	-39.644	Tension
		2194	5.189	5.964	-30.559	-282.361	-46.029	-59.059	Elastic
		2195	5.111	5.964	-55.538	-90.750	-70.994	-29.746	Tension
		2196	5.062	5.931	-34.557	-24.517	-29.107	-12.349	Tension
8	184 Blocks	2197	5.581	5.613	-21.260	-157.423	19.090	-36.720	Elastic
		2198	5.581	5.694	-17.800	-118.248	19.719	-28.079	Elastic
		2199	5.338	5.694	-0.216	-147.939	5.651	-30.487	Tension
		2200	5.525	5.650	-15.030	-128.980	30.103	-29.733	Elastic
		2201	5.525	5.675	-9.201	-127.143	34.203	-28.184	Tension
		2202	5.450	5.675	-5.236	-146.883	27.711	-31.262	Tension
		2203	5.584	5.638	-18.106	-149.017	18.333	-34.375	Elastic
		2204	5.584	5.669	-18.486	-136.617	17.671	-31.925	Elastic
		2205	5.507	5.695	-10.063	-131.299	36.350	-29.140	Tension
		2206	5.409	5.695	-2.579	-159.443	20.277	-33.259	Tension
		2207	5.409	5.669	-2.618	-155.171	20.154	-32.449	Tension
		2208	5.507	5.638	-9.322	-129.679	28.892	-28.750	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	185 Blocks	2209	5.562	5.606	-26.622	-138.818	19.435	-34.081	Elastic
		2210	5.319	5.687	-0.101	-151.333	3.903	-31.152	Tension
		2211	5.319	5.606	-0.127	-139.951	4.218	-28.995	Tension
		2212	5.450	5.625	-3.884	-140.057	23.324	-29.754	Tension
		2213	5.375	5.650	-0.956	-147.368	11.867	-30.583	Tension
		2214	5.375	5.625	-0.875	-144.034	11.225	-29.935	Tension
		2215	5.491	5.631	-6.021	-137.260	28.750	-29.620	Tension
		2216	5.393	5.664	-1.542	-148.993	15.155	-31.006	Tension
		2217	5.316	5.664	-0.083	-147.964	3.498	-30.509	Tension
		2218	5.316	5.631	-0.095	-143.383	3.699	-29.640	Tension
		2219	5.393	5.605	-1.266	-141.484	13.393	-29.531	Tension
		2220	5.491	5.605	-7.391	-135.379	25.837	-29.548	Elastic
9	186 Blocks	2221	5.581	5.713	-16.814	-111.472	21.297	-26.500	Elastic
		2222	5.581	5.794	-14.501	-82.824	21.584	-16.193	Elastic
		2223	5.338	5.794	-0.373	-162.876	7.795	-33.365	Tension
		2224	5.525	5.750	-14.280	-120.023	41.400	-27.650	Tension
		2225	5.525	5.775	-15.230	-115.205	41.888	-26.841	Tension
		2226	5.450	5.775	-7.530	-166.581	35.416	-35.564	Tension
		2227	5.584	5.736	-14.863	-98.062	19.793	-23.394	Elastic
		2228	5.584	5.769	-14.429	-74.579	18.275	-18.564	Elastic
		2229	5.507	5.795	-14.946	-129.034	43.914	-29.522	Tension
		2230	5.409	5.795	-4.307	-184.314	28.175	-38.438	Tension
		2231	5.409	5.769	-3.536	-177.062	25.023	-36.870	Tension
		2232	5.507	5.736	-12.341	-130.402	40.117	-29.358	Tension
	187 Blocks	2233	5.562	5.706	-11.631	-109.917	20.566	-24.961	Elastic
		2234	5.319	5.787	-0.114	-167.435	4.371	-34.234	Tension
		2235	5.319	5.706	-0.124	-154.006	4.373	-31.664	Tension
		2236	5.450	5.725	-6.098	-155.441	30.797	-33.133	Tension
		2237	5.375	5.750	-1.445	-165.167	15.451	-34.099	Tension
		2238	5.375	5.725	-1.251	-160.128	14.153	-33.088	Tension
		2239	5.491	5.731	-10.210	-145.642	38.563	-31.987	Tension
		2240	5.393	5.764	-2.424	-168.395	20.203	-34.919	Tension
		2241	5.316	5.764	-0.094	-162.987	3.908	-33.374	Tension
		2242	5.316	5.731	-0.103	-157.667	4.021	-32.358	Tension
		2243	5.393	5.705	-1.822	-156.775	18.903	-32.559	Tension
		2244	5.491	5.705	-9.315	-142.910	36.485	-31.299	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
10	188 Blocks	2245	5.338	5.806	-0.195	-185.461	5.882	-33.829	Tension
		2246	5.581	5.806	-14.321	-55.399	21.673	-14.654	Elastic
		2247	5.581	5.697	-18.009	-8.768	12.566	-5.951	Tension
		2248	5.450	5.825	-9.983	-174.890	41.784	-37.646	Tension
		2249	5.525	5.825	-16.592	-108.295	41.995	-25.261	Tension
		2250	5.525	5.650	-17.574	-101.106	42.152	-24.384	Tension
		2251	5.409	5.805	-4.986	-187.920	30.610	-39.280	Tension
		2252	5.507	5.805	-14.929	-127.778	43.675	-29.253	Tension
		2253	5.584	5.831	-13.076	-35.890	18.229	-10.469	Elastic
		2254	5.694	5.864	-14.971	-14.902	14.936	-6.604	Tension
		2255	5.507	5.884	-18.051	-118.251	46.201	-27.989	Tension
		2256	5.409	5.831	-5.863	-195.755	33.878	-40.986	Tension
	189 Blocks	2257	5.319	5.813	-0.214	-171.211	6.054	-34.973	Tension
		2258	5.662	5.894	-23.816	-18.337	20.898	-9.017	Tension
		2259	5.319	5.894	-0.023	-189.418	2.074	-38.482	Tension
		2260	5.375	5.850	-2.436	-191.795	21.615	-39.482	Tension
		2261	5.450	5.875	-12.238	-183.819	47.430	-39.824	Tension
		2262	5.375	5.875	-2.884	-200.586	24.050	-41.294	Tension
		2263	5.393	5.836	-3.442	-189.983	25.573	-39.340	Tension
		2264	5.491	5.869	-18.634	-147.123	52.359	-33.773	Tension
		2265	5.491	5.895	-20.960	-145.596	55.243	-33.897	Tension
		2266	5.393	5.895	-5.268	-209.428	33.215	-43.512	Tension
		2267	5.316	5.669	-0.070	-183.499	3.582	-37.323	Tension
		2268	5.316	5.636	-0.147	-176.382	5.099	-35.961	Tension
12	193 Blocks	2305	5.469	5.994	-129.015	-49.474	77.433	-36.143	Elastic
		2306	5.591	5.913	-6.484	-0.149	0.983	-1.857	Tension
		2307	5.591	5.994	-17.961	-1.197	4.637	-4.277	Tension
		2308	5.525	5.975	-15.910	-0.295	2.123	-3.691	Tension
		2309	5.563	5.950	-6.435	-1.303	2.996	-2.056	Tension
		2310	5.563	5.975	-11.114	-10.637	10.973	-4.822	Tension
		2311	5.505	5.969	-29.830	-46.175	37.113	-15.681	Tension
		2312	5.553	5.938	-7.827	-2.514	4.436	-2.595	Tension
		2313	5.592	5.938	-13.627	-7.234	9.929	-4.699	Tension
		2314	5.592	5.969	-1.352	-0.977	1.149	-0.946	Tension
		2315	5.553	5.995	-12.342	0.000	-0.051	-2.912	Tension
		2316	5.505	5.995	-11.736	-12.854	4.983	-5.362	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	195 Blocks	2329	5.328	5.906	-1.084	-201.042	14.761	-40.981	Tension
		2330	5.572	5.906	-20.943	-9.291	13.949	-6.616	Tension
		2331	5.450	5.987	-63.678	-316.389	114.543	-76.458	Elastic
		2332	5.412	5.925	-8.503	-244.703	45.616	-51.171	Tension
		2333	5.488	5.925	-31.069	-144.556	67.096	-35.729	Tension
		2334	5.450	5.950	-25.293	-205.835	72.154	-46.733	Tension
		2335	5.401	5.905	-5.951	-208.584	35.233	-43.464	Tension
		2336	5.499	5.905	-22.974	-119.217	52.335	-29.009	Tension
		2337	5.538	5.931	-29.045	-21.996	25.276	-10.742	Tension
		2338	5.469	5.964	-48.421	-92.875	67.060	-25.747	Tension
		2339	5.411	5.964	-20.893	-259.719	51.557	-56.597	Elastic
		2340	5.362	5.931	-1.139	-193.824	14.856	-39.514	Tension
	199 Blocks	2377	5.169	6.213	-0.024	-278.849	-2.589	-55.965	Tension
		2378	5.412	6.204	-15.112	-283.344	0.279	-59.705	Elastic
		2379	5.169	6.294	-14.996	-280.752	0.481	-59.143	Elastic
		2380	5.225	6.250	-9.348	-281.430	1.987	-58.265	Elastic
		2381	5.300	6.275	-11.915	-283.983	-0.068	-59.234	Elastic
		2382	5.225	6.275	-11.561	-285.423	-0.734	-59.451	Elastic
		2383	5.243	6.236	-7.893	-287.474	-1.648	-59.212	Elastic
		2384	5.341	6.269	-11.253	-280.162	-0.394	-58.351	Elastic
		2385	5.341	6.295	-13.264	-281.054	-1.231	-58.975	Elastic
		2386	5.243	6.295	-11.897	-281.210	1.983	-58.633	Elastic
		2387	5.166	6.269	-11.238	-278.622	-4.920	-58.040	Elastic
		2388	5.166	6.236	-3.958	-283.829	3.087	-53.696	Elastic

Table A. 2 Cartesian Total Stresses for Case 2

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
1	1	1	6.488	6.294	-0.421	-0.009	-0.061	-0.134	Tension
	Soil	2	5.525	6.294	-3.214	-0.251	0.897	-1.045	Tension
		3	5.525	6.213	-2.600	-0.864	1.499	-1.114	Tension
		4	6.045	6.275	-0.161	-0.738	0.345	-0.291	Tension
		5	5.746	6.275	-2.184	-0.115	-0.501	-0.711	Tension
		6	5.746	6.250	0.000	0.000	0.000	-0.043	Tension
		7	6.206	6.295	-0.350	-0.059	0.143	-0.127	Tension
		8	5.819	6.295	-0.313	-0.047	-0.121	-0.112	Tension
		9	5.513	6.269	-4.983	-1.542	1.810	-1.984	PLASTIC
		10	5.513	6.238	-10.854	-5.395	4.104	-4.929	PLASTIC
		11	5.819	6.238	-0.544	-1.737	0.972	-0.738	Tension
		12	6.208	6.269	-0.167	-0.345	-0.240	-0.180	Tension
	2	13	5.591	6.006	-2.931	-0.533	1.250	-1.289	Tension
	Soil	14	5.459	6.097	-3.936	-8.228	3.209	-3.230	PLASTIC
		15	5.459	6.006	-49.195	-44.127	24.063	-28.246	PLASTIC
		16	5.525	6.025	-9.881	-6.616	4.716	-5.183	PLASTIC
		17	5.497	6.050	-7.556	-15.872	5.293	-7.241	PLASTIC
		18	5.497	6.025	-1.859	-1.575	1.725	-1.273	Tension
		19	5.545	6.031	-2.507	-0.957	1.549	-1.269	Tension
		20	5.497	6.064	-0.609	-3.140	1.264	-1.325	PLASTIC
		21	5.458	6.064	-5.427	-6.549	3.819	-3.793	PLASTIC
		22	5.458	6.031	-4.457	-4.803	3.176	-3.007	PLASTIC
		23	5.497	6.005	-5.119	-5.736	3.566	-3.507	PLASTIC
		24	5.545	6.005	-10.070	-5.595	4.226	-4.950	PLASTIC
	3	25	5.858	5.830	-6.932	-14.883	4.913	-6.944	PLASTIC
	Soil	26	5.619	5.796	-13.696	-12.910	7.507	-8.410	PLASTIC
		27	5.619	5.715	-16.099	-15.496	8.760	-9.975	PLASTIC
		28	5.748	5.796	-12.934	-11.106	6.796	-7.610	PLASTIC
		29	5.674	5.786	-13.271	-10.942	6.920	-7.701	PLASTIC
		30	5.674	5.760	-13.005	-10.669	6.750	-7.621	PLASTIC
		31	5.788	5.821	-10.642	-12.857	6.649	-7.456	PLASTIC
		32	5.692	5.809	-11.415	-9.083	5.876	-6.568	PLASTIC
		33	5.616	5.771	-15.603	-14.895	9.493	-9.599	PLASTIC
		34	5.616	5.739	-13.986	-13.424	7.713	-8.700	PLASTIC
		35	5.692	5.749	-13.741	-11.481	7.092	-8.035	PLASTIC
		36	5.788	5.796	-11.443	-12.746	6.833	-7.685	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	4	37	5.839	5.562	-15.133	-14.976	8.393	-9.560	PLASTIC
	Soil	38	5.617	5.591	-17.742	-18.407	9.838	-11.447	PLASTIC
		39	5.617	5.510	-32.881	-32.245	17.144	-20.209	PLASTIC
		40	5.737	5.557	-19.076	-16.658	9.725	-11.352	PLASTIC
		41	5.668	5.566	-20.774	-18.445	10.607	-12.390	PLASTIC
		42	5.668	5.541	-19.211	-16.393	9.665	-11.329	PLASTIC
		43	5.774	5.572	-14.185	-14.745	8.094	-9.298	PLASTIC
		44	5.695	5.584	-15.617	-15.533	8.653	-9.954	PLASTIC
		45	5.615	5.567	-21.821	-21.677	11.740	-13.672	PLASTIC
		46	5.615	5.534	-20.237	-20.982	11.160	-13.011	PLASTIC
		47	5.685	5.525	-19.885	-18.670	9.971	-11.619	PLASTIC
		48	5.774	5.546	-18.179	-18.304	9.440	-10.986	PLASTIC
	5	49	4.782	5.326	-15.584	-36.564	-4.135	-16.472	Elastic
	Soil	50	4.984	5.493	-1.647	-1.817	-1.730	-1.725	Tension
		51	4.984	5.574	-1.312	-2.152	-1.680	-1.656	Tension
		52	4.875	5.422	-20.913	-8.997	-5.841	-9.720	PLASTIC
		53	4.938	5.474	-31.029	-23.811	-14.122	-17.155	PLASTIC
		54	4.938	5.499	-31.165	-29.834	-16.102	-18.981	PLASTIC
		55	4.841	5.374	-23.754	-20.505	-11.820	-14.065	PLASTIC
		56	4.923	5.441	-48.369	-26.290	-16.112	-23.127	PLASTIC
		57	4.987	5.520	-4.946	-5.140	-3.386	-3.689	PLASTIC
		58	4.987	5.553	-27.398	-29.840	-15.126	-17.907	PLASTIC
		59	4.923	5.500	-23.763	-17.898	-10.889	-13.175	PLASTIC
		60	4.841	5.400	-27.039	-9.838	-3.729	-11.528	PLASTIC
	6	61	4.831	5.657	-16.494	-13.201	-7.170	-9.455	Elastic
	Soil	62	4.988	5.703	-17.935	-16.579	-9.470	-10.982	PLASTIC
		63	4.988	5.784	-30.448	-28.233	-15.497	-18.043	PLASTIC
		64	4.903	5.697	-19.161	-18.299	-10.219	-11.748	PLASTIC
		65	4.952	5.711	-17.833	-14.822	-9.869	-10.237	PLASTIC
		66	4.952	5.736	-11.993	-10.101	-6.319	-7.108	PLASTIC
		67	4.877	5.669	-16.661	-13.836	-9.679	-11.185	PLASTIC
		68	4.940	5.688	-16.208	-13.022	-9.017	-9.289	PLASTIC
		69	4.990	5.728	-17.265	-16.305	-9.248	-10.557	PLASTIC
		70	4.990	5.761	-12.989	-12.260	-7.148	-8.003	PLASTIC
		71	4.940	5.746	-12.506	-10.062	-6.392	-7.241	PLASTIC
		72	4.877	5.695	-16.164	-20.200	-9.750	-11.423	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	7 Soil	73	4.752	5.883	-23.107	-10.300	-6.630	-10.377	PLASTIC
		74	4.982	5.905	-15.256	-11.260	-7.228	-8.300	PLASTIC
		75	4.982	5.986	-3.449	-0.015	0.230	-1.306	Tension
		76	4.858	5.911	-3.441	-13.211	-1.194	-5.326	PLASTIC
		77	4.929	5.918	-13.050	-9.214	-6.139	-7.004	PLASTIC
		78	4.929	5.943	-9.099	-8.425	-5.236	-5.560	PLASTIC
		79	4.820	5.888	-7.705	-16.217	-5.364	-7.527	PLASTIC
		80	4.912	5.897	-21.524	-8.807	-5.564	-9.442	PLASTIC
		81	4.985	5.930	-11.146	-6.433	-4.703	-5.568	PLASTIC
		82	4.985	5.962	-3.228	-0.817	-1.439	-1.501	PLASTIC
		83	4.912	5.955	-8.182	-12.175	-5.610	-6.400	PLASTIC
		84	4.820	5.914	-3.899	-12.670	-2.418	-5.299	PLASTIC
	8 Soil	85	5.019	6.006	-2.906	-0.558	-1.273	-1.289	Tension
		86	5.141	6.006	-46.773	-37.238	-21.343	-25.453	PLASTIC
		87	5.141	6.087	-3.925	-5.446	-3.118	-2.992	PLASTIC
		88	5.075	6.025	-9.182	-6.186	-4.455	-4.838	PLASTIC
		89	5.113	6.025	-1.817	-1.647	-1.730	-1.273	Tension
		90	5.113	6.050	-6.228	-12.350	-4.582	-5.788	PLASTIC
		91	5.055	6.005	-7.434	-4.849	-3.719	-3.936	PLASTIC
		92	5.103	6.005	-4.420	-4.211	-3.022	-2.840	PLASTIC
		93	5.142	6.031	-2.207	-2.158	-1.957	-1.538	PLASTIC
		94	5.142	6.064	-5.758	-6.410	-3.894	-3.851	PLASTIC
		95	5.103	6.064	-1.546	-2.954	-1.882	-1.551	PLASTIC
		96	5.055	6.031	-2.633	-0.831	-1.479	-1.268	Tension
	9 Soil	97	4.250	6.294	-1.863	-0.045	0.289	-0.578	Tension
		98	5.085	6.213	-2.489	-0.976	-1.558	-1.114	Tension
		99	5.085	6.294	-2.957	-0.507	-1.224	-1.045	Tension
		100	4.634	6.275	-0.032	-0.634	-0.143	-0.221	Tension
		101	4.893	6.250	-0.191	0.000	0.008	-0.100	Tension
		102	4.893	6.275	-2.718	-0.110	0.547	-0.869	Tension
		103	4.494	6.269	-0.013	-0.394	0.071	-0.148	Tension
		104	4.830	6.238	-0.664	-1.743	-1.076	-0.776	Tension
		105	5.095	6.238	-12.278	-6.704	-4.871	-5.749	PLASTIC
		106	5.095	6.269	-4.227	-1.522	-1.864	-1.751	PLASTIC
		107	4.830	6.295	-0.783	-0.115	0.300	-0.274	Tension
		108	4.494	6.295	-1.143	-0.139	-0.307	-0.389	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	States
	10 Soil	109	5.459	6.181	-7.031	-8.828	4.746	-4.859	PLASTIC
		110	5.459	6.100	-1.904	-3.611	2.076	-1.825	PLASTIC
		111	5.581	6.019	-4.486	-1.809	2.039	-2.127	PLASTIC
		112	5.487	6.125	-5.733	-4.005	3.185	-3.070	PLASTIC
		113	5.487	6.100	-5.256	-6.422	3.982	-4.273	PLASTIC
		114	5.525	6.075	-2.997	-0.819	1.459	-1.336	PLASTIC
		115	5.458	6.158	-4.928	-7.283	3.738	-3.784	PLASTIC
		116	5.458	6.126	-6.647	-10.247	4.760	-5.215	PLASTIC
		117	5.497	6.074	-4.077	-7.051	3.331	-3.530	PLASTIC
		118	5.545	6.042	-3.181	-1.409	1.808	-1.597	PLASTIC
		119	5.545	6.087	-3.269	-0.683	1.329	-1.383	PLASTIC
		120	5.497	6.133	-4.954	-2.313	2.335	-2.322	PLASTIC
	11 Soil	121	5.858	5.843	-4.202	-12.683	2.911	-5.454	PLASTIC
		122	5.619	5.890	-13.422	-12.324	7.282	-8.072	PLASTIC
		123	5.619	5.809	-12.407	-11.656	6.871	-7.639	PLASTIC
		124	5.748	5.846	-12.658	-10.220	6.472	-7.249	PLASTIC
		125	5.674	5.861	-10.729	-8.213	5.458	-6.056	PLASTIC
		126	5.674	5.835	-11.544	-9.119	5.909	-6.594	PLASTIC
		127	5.788	5.858	-8.957	-13.465	6.021	-7.072	PLASTIC
		128	5.692	5.877	-9.094	-6.537	4.599	-5.049	PLASTIC
		129	5.616	5.866	-13.100	-12.194	7.175	-7.957	PLASTIC
		130	5.616	5.833	-12.232	-11.530	6.797	-7.525	PLASTIC
		131	5.692	5.818	-11.882	-9.360	6.046	-6.782	PLASTIC
		132	5.788	5.832	-10.348	-13.155	6.593	-7.449	PLASTIC
	12 Soil	133	5.839	5.575	-21.654	-15.173	9.408	-11.664	Elastic
		134	5.617	5.685	-20.722	-20.349	11.132	-12.844	PLASTIC
		135	5.617	5.604	-17.984	-19.092	9.885	-11.414	PLASTIC
		136	5.737	5.607	-16.738	-15.154	8.803	-10.157	PLASTIC
		137	5.668	5.641	-14.588	-13.597	7.898	-9.015	PLASTIC
		138	5.668	5.616	-16.566	-16.555	9.594	-11.118	PLASTIC
		139	5.774	5.608	-14.087	-14.389	7.993	-9.131	PLASTIC
		140	5.695	5.653	-15.475	-13.976	8.195	-9.386	PLASTIC
		141	5.615	5.662	-14.529	-14.713	8.178	-9.315	PLASTIC
		142	5.616	5.629	-19.567	-19.237	10.566	-12.212	PLASTIC
		143	5.695	5.594	-19.533	-15.508	9.414	-11.112	PLASTIC
		144	5.774	5.583	-22.431	-14.902	9.479	-11.810	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	13 Soil	145	4.831	5.645	-13.576	-17.040	-8.342	-9.742	PLASTIC
		146	4.998	5.609	-17.761	-16.674	-9.459	-10.918	PLASTIC
		147	4.998	5.690	-16.867	-15.699	-8.939	-10.258	PLASTIC
		148	4.903	5.647	-18.536	-16.447	-9.555	-11.050	PLASTIC
		149	4.952	5.636	-18.774	-16.320	-9.561	-11.093	PLASTIC
		150	4.952	5.661	-17.984	-15.168	-9.045	-10.489	PLASTIC
		151	4.877	5.633	-18.920	-18.378	-10.157	-11.756	PLASTIC
		152	4.940	5.619	-19.190	-16.888	-9.818	-11.402	PLASTIC
		153	4.990	5.633	-20.040	-19.045	-10.625	-12.292	PLASTIC
		154	4.990	5.666	-19.049	-17.969	-10.106	-11.644	PLASTIC
		155	4.940	5.677	-17.967	-14.702	-8.885	-10.330	PLASTIC
		156	4.877	5.659	-16.580	-18.670	-9.622	-11.120	PLASTIC
	14 Soil	157	4.752	5.870	-1.502	-6.752	-1.300	-2.941	PLASTIC
		158	4.982	5.811	-36.768	-34.914	-18.764	-21.920	PLASTIC
		159	4.982	5.892	-14.163	-12.204	-7.393	-8.257	PLASTIC
		160	4.858	5.862	-23.678	-13.678	-8.896	-11.579	PLASTIC
		161	4.929	5.843	-8.054	-6.700	-4.504	-4.814	PLASTIC
		162	4.929	5.868	-19.087	-15.914	-9.494	-10.987	PLASTIC
		163	4.820	5.852	-10.893	-19.887	-7.282	-9.615	Elastic
		164	4.912	5.828	-12.385	-9.687	-6.240	-7.023	PLASTIC
		165	4.995	5.835	-5.894	-5.698	-3.763	-3.973	PLASTIC
		166	4.995	5.868	-26.255	-24.376	-13.491	-15.557	PLASTIC
		167	4.912	5.888	-5.137	-3.921	-3.071	-3.069	PLASTIC
		168	4.820	5.878	-7.684	-19.131	-4.955	-8.404	PLASTIC
	15 Soil	169	5.076	6.194	-3.134	-1.511	-1.858	-1.484	PLASTIC
		170	4.241	6.275	-0.165	-1.295	-0.484	-0.460	Tension
		171	4.954	6.032	-4.461	-6.294	-3.434	-3.454	PLASTIC
		172	4.856	6.175	-2.956	-4.097	-2.567	-2.222	PLASTIC
		173	4.598	6.200	-1.714	-1.750	1.732	-1.124	Tension
		174	4.818	6.125	-1.348	-4.154	-1.747	-1.799	PLASTIC
		175	4.822	6.220	-0.314	-2.003	-0.793	-0.763	Tension
		176	4.486	6.253	0.000	0.000	0.000	-0.040	Tension
		177	4.448	6.202	-0.117	-0.543	-0.252	-0.282	Tension
		178	4.735	6.104	-0.939	-5.253	-1.084	-2.025	PLASTIC
		179	5.000	6.078	-4.860	-4.780	-3.226	-3.021	PLASTIC
		180	5.049	6.143	-2.942	-1.908	-2.013	-1.588	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	16 Soil	181	5.569	5.073	-36.858	-98.127	16.110	-41.526	PLASTIC
		182	5.580	5.469	-44.491	-131.375	11.080	-53.453	PLASTIC
		183	5.337	5.469	-39.666	-122.149	2.536	-49.231	PLASTIC
		184	5.518	5.255	-41.509	-117.152	14.571	-48.474	PLASTIC
		185	5.522	5.379	-45.848	-129.270	15.920	-53.307	PLASTIC
		186	5.446	5.378	-46.127	-140.390	5.867	-58.719	PLASTIC
		187	5.575	5.189	-38.470	-94.081	19.573	-40.697	PLASTIC
		188	5.590	5.349	-43.264	-109.398	20.737	-46.595	PLASTIC
		189	5.506	5.474	-44.350	-132.680	9.253	-53.799	PLASTIC
		190	5.408	5.474	-46.985	-140.255	9.908	-56.854	PLASTIC
		191	5.405	5.348	-40.460	-124.601	-0.971	-50.367	PLASTIC
		192	5.498	5.189	-35.075	-106.079	6.836	-43.278	PLASTIC
	17 Soil	193	5.117	5.118	-36.424	-100.846	-14.155	-42.173	PLASTIC
		194	5.269	5.472	-38.052	-117.811	0.449	-47.382	PLASTIC
		195	5.026	5.472	-39.694	-118.577	-7.036	-48.172	Elastic
		196	5.131	5.281	-41.677	-125.436	-8.042	-50.958	PLASTIC
		197	5.178	5.391	-45.091	-137.967	-4.236	-55.670	PLASTIC
		198	5.103	5.391	-45.501	-134.635	-10.983	-54.801	PLASTIC
		199	5.165	5.222	-39.121	-120.820	-0.341	-48.978	PLASTIC
		200	5.228	5.384	-39.477	-120.670	4.993	-48.919	PLASTIC
		201	5.197	5.477	-48.082	-144.692	-8.290	-58.572	PLASTIC
		202	5.099	5.477	-44.051	-130.527	-7.942	-53.061	Elastic
		203	5.051	5.384	-44.716	-129.208	-14.206	-52.660	PLASTIC
		204	5.088	5.222	-38.255	-108.156	-13.504	-44.827	PLASTIC
	18 Soil	205	3.582	5.503	-13.386	-13.564	-0.351	-8.763	Elastic
		206	4.021	6.242	-0.010	-1.470	-0.021	-0.493	Elastic
		207	3.186	6.242	-0.003	-0.840	0.040	-0.302	Elastic
		208	3.592	5.843	-3.827	-8.993	0.269	-4.235	Elastic
		209	3.728	6.073	0.000	-3.464	-0.007	-1.233	Tension
		210	3.469	6.073	-0.043	-3.520	-0.049	-1.262	Elastic
		211	3.721	5.719	-7.102	-9.942	0.362	-5.625	Elastic
		212	3.897	6.017	-0.248	-4.143	0.150	-1.559	Elastic
		213	3.772	6.252	0.000	-0.842	-0.005	-0.294	Tension
		214	3.430	6.252	-0.002	-1.094	0.044	-0.370	Tension
		215	3.296	6.017	-0.988	-5.147	0.225	-2.045	Elastic
		216	3.456	5.719	-7.291	-9.536	0.514	-5.542	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	21 Soil	241	6.658	6.032	-4.833	-5.650	3.463	-3.373	PLASTIC
		242	6.497	6.275	-0.161	-1.256	0.449	-0.447	Tension
		243	5.534	6.194	-2.893	-1.148	1.661	-1.303	PLASTIC
		244	5.821	6.125	-2.223	-5.094	2.281	-2.344	PLASTIC
		245	6.093	6.200	-1.461	-1.989	-1.652	-1.094	Tension
		246	5.783	6.175	-1.502	-2.726	1.823	-1.375	PLASTIC
		247	5.914	6.104	-0.541	-4.717	0.629	-1.744	PLASTIC
		248	6.252	6.202	-0.069	-0.615	0.205	-0.289	Tension
		249	6.214	6.253	0.000	0.000	0.000	-0.040	Tension
		250	5.827	6.220	-0.354	-2.501	0.941	-0.924	Tension
		251	5.560	6.143	-4.014	-2.332	2.304	-2.037	PLASTIC
		252	5.609	6.078	-4.104	-3.393	2.717	-2.438	PLASTIC
	24 Soil	277	5.858	5.590	-16.006	-19.976	9.660	-11.398	PLASTIC
		278	5.875	5.815	-7.446	-15.068	5.259	-7.166	PLASTIC
		279	5.636	5.709	-14.909	-14.019	8.085	-9.188	PLASTIC
		280	5.811	5.667	-14.247	-13.639	7.832	-8.904	PLASTIC
		281	5.816	5.737	-12.943	-14.892	7.764	-8.829	PLASTIC
		282	5.742	5.702	-14.279	-12.142	7.394	-8.435	PLASTIC
		283	5.666	5.658	-14.405	-20.994	9.140	-11.166	PLASTIC
		284	5.873	5.748	-12.046	-20.371	7.946	-10.194	PLASTIC
		285	5.802	5.783	-11.940	-13.811	7.244	-8.165	PLASTIC
		286	5.706	5.737	-13.566	-11.419	7.031	-7.974	PLASTIC
		287	5.701	5.665	-16.658	-14.357	8.543	-9.844	PLASTIC
		288	5.790	5.621	-15.178	-13.199	7.898	-9.090	PLASTIC
	25 Soil	289	6.136	5.186	-43.557	-37.822	14.882	-25.377	Elastic
		290	5.877	5.532	-16.800	-28.409	9.193	-14.216	Elastic
		291	5.655	5.480	-19.223	-16.789	9.794	-11.501	PLASTIC
		292	5.966	5.322	-26.814	-23.184	2.171	-15.830	Elastic
		293	5.885	5.436	-24.889	-30.547	7.692	-17.365	Elastic
		294	5.816	5.420	-39.822	-29.809	17.550	-21.577	PLASTIC
		295	6.063	5.274	-27.952	-14.883	9.553	-13.722	PLASTIC
		296	5.959	5.421	-27.538	-22.832	3.010	-15.658	Elastic
		297	5.806	5.520	-17.577	-15.253	9.999	-10.512	PLASTIC
		298	5.717	5.499	-17.991	-15.091	9.003	-10.575	PLASTIC
		299	5.799	5.384	-49.570	-32.915	19.808	-25.524	PLASTIC
		300	5.993	5.259	-24.632	-25.207	9.364	-15.838	Elastic

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	26 Soil	301	5.083	5.105	-37.768	-108.499	-12.257	-44.883	PLASTIC
		302	4.991	5.459	-46.206	-74.733	-27.637	-36.996	PLASTIC
		303	4.789	5.292	-40.223	-36.287	-21.282	-26.510	PLASTIC
		304	4.994	5.230	-41.962	-71.803	-25.225	-35.039	PLASTIC
		305	4.986	5.340	-41.367	-47.978	-22.966	-27.620	PLASTIC
		306	4.903	5.288	-46.707	-33.545	-19.867	-24.936	PLASTIC
		307	5.058	5.211	-38.487	-105.415	-15.409	-44.084	PLASTIC
		308	5.022	5.353	-39.582	-82.924	-22.851	-37.544	PLASTIC
		309	4.929	5.413	-26.165	-24.331	-13.459	-15.903	PLASTIC
		310	4.847	5.346	-35.460	-21.960	-13.643	-18.037	PLASTIC
		311	4.876	5.233	-38.794	-32.694	-18.488	-22.353	PLASTIC
		312	4.994	5.158	-34.642	-62.946	-20.927	-30.247	PLASTIC
	27 Soil	313	4.815	5.619	-19.126	-19.602	-10.545	-12.197	PLASTIC
		314	4.770	5.335	-22.849	-25.032	-8.934	-15.184	Elastic
		315	4.972	5.583	-24.720	-21.788	-12.407	-14.561	PLASTIC
		316	4.841	5.546	-18.892	-18.753	-10.277	-11.935	PLASTIC
		317	4.827	5.457	-25.932	-31.914	-15.033	-18.070	PLASTIC
		318	4.890	5.535	-18.216	-14.327	-8.789	-10.413	PLASTIC
		319	4.799	5.533	-17.813	-21.642	-9.439	-12.489	Elastic
		320	4.781	5.419	-30.447	-24.745	-9.952	-17.306	Elastic
		321	4.831	5.408	-38.448	-33.270	-18.616	-22.274	PLASTIC
		322	4.912	5.507	-17.439	-13.017	-9.187	-9.811	PLASTIC
		323	4.927	5.597	-21.546	-18.739	-10.847	-12.683	PLASTIC
		324	4.864	5.612	-19.824	-18.705	-10.494	-12.144	PLASTIC
	28 Soil	325	4.740	5.854	-6.310	-12.684	-4.622	-6.077	PLASTIC
		326	4.813	5.668	-17.413	-20.115	-10.159	-11.796	PLASTIC
		327	4.970	5.795	-11.035	-10.169	-6.152	-6.791	PLASTIC
		328	4.810	5.798	-14.838	-15.547	-9.455	-9.543	PLASTIC
		329	4.832	5.740	-15.981	-16.453	-9.945	-10.176	PLASTIC
		330	4.831	5.779	-19.587	-16.820	-9.871	-11.365	PLASTIC
		331	4.760	5.799	-13.773	-16.520	-7.695	-9.515	Elastic
		332	4.789	5.723	-16.854	-18.139	-9.384	-10.988	Elastic
		333	4.882	5.704	-14.349	-16.134	-8.440	-9.651	PLASTIC
		334	4.925	5.755	-17.799	-16.310	-9.384	-10.696	PLASTIC
		335	4.902	5.814	-18.267	-15.512	-9.208	-10.546	PLASTIC
		336	4.809	5.838	-9.624	-14.647	-6.463	-7.674	PLASTIC

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	30 Soil	349	5.019	6.019	-3.500	-0.701	-1.309	-1.499	PLASTIC
		350	5.141	6.100	-1.687	-2.732	-1.900	-1.496	PLASTIC
		351	5.141	6.181	-7.764	-6.894	-4.510	-4.498	PLASTIC
		352	5.075	6.075	-2.924	-0.541	-1.257	-1.231	Tension
		353	5.113	6.100	-4.879	-5.444	-3.435	-3.267	PLASTIC
		354	5.113	6.125	-5.404	-2.211	-2.264	-2.433	PLASTIC
		355	5.055	6.042	-2.902	-1.254	-1.718	-1.466	PLASTIC
		356	5.103	6.074	-4.160	-5.973	-3.276	-3.232	PLASTIC
		357	5.142	6.126	-7.900	-11.042	-5.377	-5.831	PLASTIC
		358	5.142	6.158	-1.925	-2.537	-1.958	-1.459	PLASTIC
		359	5.103	6.133	-2.964	-0.501	-1.218	-1.182	Tension
		360	5.055	6.087	-3.125	-0.339	-1.029	-1.237	Tension
	31 Soil	361	4.213	6.254	-0.792	-0.026	0.143	-0.284	Tension
		362	4.697	5.908	-9.535	-6.139	-2.546	-5.035	Elastic
		363	4.927	6.011	-7.365	-9.466	-4.964	-5.295	PLASTIC
		364	4.488	6.119	-0.887	-5.728	-0.700	-2.139	PLASTIC
		365	4.638	6.011	-0.908	-2.331	1.455	-1.217	Tension
		366	4.710	6.043	-0.246	-3.219	-0.890	-1.258	Tension
		367	4.352	6.152	-0.138	-2.037	-0.531	-0.779	Tension
		368	4.548	6.012	-1.240	-6.905	0.532	-2.688	PLASTIC
		369	4.773	5.935	-10.435	-10.869	-6.141	-8.641	PLASTIC
		370	4.865	5.977	-7.234	-12.445	-5.166	-8.179	PLASTIC
		371	4.712	6.096	-0.453	-4.194	-0.783	-1.576	PLASTIC
		372	4.425	6.184	-0.077	-1.541	0.344	-0.584	Tension
	32 Soil	373	6.118	5.132	-21.401	-20.616	10.987	-13.658	Elastic
		374	5.637	5.445	-46.076	-53.654	25.519	-30.646	PLASTIC
		375	5.625	5.049	-37.983	-52.531	22.095	-28.212	Elastic
		376	5.894	5.185	-46.786	-35.022	20.491	-25.491	PLASTIC
		377	5.745	5.282	-37.139	-30.525	17.472	-21.165	PLASTIC
		378	5.741	5.159	-40.321	-41.058	21.208	-25.384	PLASTIC
		379	5.977	5.229	-38.300	-40.173	11.691	-24.453	Elastic
		380	5.784	5.354	-27.447	-17.477	11.022	-14.281	PLASTIC
		381	5.627	5.328	-44.035	-61.380	25.801	-32.451	PLASTIC
		382	5.623	5.169	-39.245	-63.240	23.614	-31.707	PLASTIC
		383	5.776	5.089	-35.816	-42.514	20.172	-24.545	PLASTIC
		384	5.974	5.102	-34.402	-41.478	14.318	-23.782	Elastic

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	34 Soil	397	5.538	5.046	-35.018	-93.637	15.228	-39.650	PLASTIC
		398	5.306	5.442	-40.107	-123.779	-0.356	-49.876	PLASTIC
		399	5.154	5.087	-36.645	-107.819	-10.061	-44.350	PLASTIC
		400	5.397	5.146	-40.209	-123.603	3.195	-50.104	PLASTIC
		401	5.325	5.269	-41.363	-127.550	0.272	-51.530	PLASTIC
		402	5.277	5.159	-42.830	-128.512	1.910	-52.352	Elastic
		403	5.472	5.166	-39.690	-118.423	9.053	-48.385	PLASTIC
		404	5.379	5.325	-41.183	-126.963	1.034	-51.252	PLASTIC
		405	5.257	5.338	-41.940	-129.284	-0.110	-52.165	PLASTIC
		406	5.196	5.196	-41.734	-127.475	-2.367	-51.681	Elastic
		407	5.269	5.070	-41.453	-127.809	-0.555	-51.804	PLASTIC
		408	5.424	5.054	-39.432	-118.109	8.524	-48.302	PLASTIC
	40 Soil	469	6.296	5.639	-12.276	-12.671	2.080	-8.046	Elastic
		470	5.923	5.811	-8.685	-14.696	6.001	-7.430	PLASTIC
		471	5.906	5.586	-16.203	-23.931	9.199	-12.347	Elastic
		472	6.120	5.668	-12.737	-13.825	3.735	-8.507	Elastic
		473	6.004	5.720	-10.645	-13.690	5.003	-7.794	Elastic
		474	5.999	5.650	-14.596	-17.176	6.110	-10.054	Elastic
		475	6.187	5.692	-10.801	-11.935	2.194	-7.338	Elastic
		476	6.037	5.761	-8.309	-12.064	4.784	-6.570	Elastic
		477	5.913	5.744	-10.075	-15.389	6.726	-8.111	PLASTIC
		478	5.908	5.654	-14.595	-20.620	8.525	-11.114	Elastic
		479	6.024	5.599	-16.273	-17.653	5.175	-10.833	Elastic
		480	6.181	5.621	-14.440	-14.154	3.307	-9.156	Elastic
	41 Soil	481	4.726	4.658	-32.693	-57.420	-15.398	-28.430	Elastic
		482	5.083	5.047	-32.063	-79.797	-14.090	-34.610	Elastic
		483	4.770	5.235	-39.716	-31.073	-19.053	-22.142	PLASTIC
		484	4.814	4.880	-34.211	-35.432	-19.266	-22.100	PLASTIC
		485	4.919	5.001	-37.728	-49.480	-21.893	-27.267	PLASTIC
		486	4.827	5.059	-34.529	-32.344	-17.550	-21.116	PLASTIC
		487	4.829	4.769	-33.198	-38.007	-18.512	-22.682	PLASTIC
		488	4.984	4.926	-35.676	-69.367	-21.335	-32.380	PLASTIC
		489	4.978	5.109	-35.892	-65.872	-21.619	-31.541	PLASTIC
		490	4.880	5.185	-38.092	-33.334	-18.571	-22.376	PLASTIC
		491	4.753	5.061	-35.851	-41.220	-19.954	-24.174	PLASTIC
		492	4.736	4.829	-35.442	-54.108	-19.310	-28.115	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	42 Soil	493	4.424	5.579	-17.050	-15.916	-4.122	-10.502	Elastic
		494	4.730	5.335	-30.865	-26.398	-11.100	-17.998	Elastic
		495	4.776	5.619	-17.043	-19.721	-9.967	-11.608	PLASTIC
		496	4.575	5.532	-19.723	-19.354	-6.742	-12.376	Elastic
		497	4.670	5.456	-23.980	-23.347	-8.924	-14.915	Elastic
		498	4.684	5.544	-19.666	-20.928	-8.318	-12.821	Elastic
		499	4.513	5.504	-20.405	-19.133	-5.987	-12.538	Elastic
		500	4.636	5.406	-25.849	-25.401	-8.793	-16.135	Elastic
		501	4.748	5.419	-26.780	-24.072	-10.382	-16.005	Elastic
		502	4.766	5.533	-20.145	-22.910	-9.605	-13.569	Elastic
		503	4.669	5.610	-17.166	-18.071	-8.402	-11.158	Elastic
		504	4.527	5.594	-17.037	-16.862	-5.478	-10.770	Elastic
	43 Soil	505	4.422	5.616	-15.153	-14.626	-3.848	-9.515	Elastic
		506	4.774	5.655	-16.717	-18.694	-9.668	-11.171	PLASTIC
		507	4.701	5.841	-5.570	-6.296	-3.815	-3.950	PLASTIC
		508	4.567	5.677	-14.301	-13.678	-5.448	-8.924	Elastic
		509	4.676	5.689	-16.282	-15.307	-9.220	-9.696	Elastic
		510	4.653	5.747	-13.584	-12.230	-5.811	-8.215	Elastic
		511	4.526	5.625	-15.915	-15.994	-5.266	-10.146	Elastic
		512	4.667	5.841	-16.500	-18.919	-7.945	-10.586	Elastic
		513	4.756	5.712	-18.096	-17.785	-9.298	-10.664	PLASTIC
		514	4.726	5.787	-13.348	-11.973	-7.163	-8.032	PLASTIC
		515	4.615	5.775	-10.526	-11.534	-4.657	-7.065	Elastic
		516	4.603	5.684	-13.141	-13.445	-4.137	-8.499	Elastic
	48 Soil	541	4.378	5.657	-13.149	-13.198	-2.585	-8.451	Elastic
		542	4.657	5.883	-8.099	-8.362	-3.388	-5.293	Elastic
		543	4.174	6.229	-0.006	-0.235	0.038	-0.133	Tension
		544	4.395	5.840	-5.140	-9.356	-1.226	-4.739	Elastic
		545	4.482	5.910	-1.991	-8.447	-1.169	-3.462	Elastic
		546	4.332	6.018	-0.113	-3.450	-0.461	-1.309	Elastic
		547	4.466	5.719	-10.632	-11.809	-3.175	-7.166	Elastic
		548	4.578	5.810	-8.277	-8.814	-3.291	-5.544	Elastic
		549	4.513	5.991	-0.472	-4.615	-0.530	-1.789	PLASTIC
		550	4.319	6.130	-0.194	-3.365	-0.658	-1.212	Elastic
		551	4.230	6.059	-0.001	-3.449	-0.055	-1.240	Tension
		552	4.313	5.829	-3.981	-8.595	-1.287	-4.173	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	47	553	5.959	4.484	-36.886	-60.805	18.190	-30.850	Elastic
	Soil	554	6.141	5.062	-37.043	-33.021	12.286	-22.071	Elastic
		555	5.649	4.979	-31.029	-46.788	18.731	-24.468	PLASTIC
		556	5.930	4.731	-35.428	-52.667	19.315	-27.762	Elastic
		557	5.986	4.911	-35.036	-42.230	16.953	-24.361	Elastic
		558	5.833	4.885	-37.781	-51.790	22.179	-28.074	PLASTIC
		559	6.018	4.655	-35.944	-52.159	17.759	-27.829	Elastic
		560	6.092	4.887	-33.799	-40.330	15.230	-23.440	Elastic
		561	5.993	5.044	-31.845	-36.877	16.767	-21.684	Elastic
		562	5.795	5.011	-34.593	-47.628	20.406	-25.762	PLASTIC
		563	5.737	4.827	-39.228	-52.835	22.892	-28.971	PLASTIC
		564	5.882	4.628	-32.806	-58.156	19.915	-28.709	PLASTIC
	49	577	5.342	4.560	-33.394	-103.622	0.642	-42.564	PLASTIC
	Soil	578	5.541	4.982	-35.832	-81.266	19.765	-36.239	Elastic
		579	5.157	5.024	-36.296	-102.778	-12.840	-42.767	PLASTIC
		580	5.345	4.763	-32.821	-101.323	3.220	-41.529	PLASTIC
		581	5.407	4.895	-38.022	-113.541	8.734	-46.843	PLASTIC
		582	5.288	4.908	-37.228	-115.090	-1.049	-46.959	PLASTIC
		583	5.405	4.683	-33.136	-101.621	4.257	-41.842	PLASTIC
		584	5.485	4.853	-37.608	-103.587	14.450	-43.576	Elastic
		585	5.426	5.000	-39.964	-118.331	10.001	-48.574	PLASTIC
		586	5.272	5.017	-39.564	-121.972	-1.945	-49.531	PLASTIC
		587	5.209	4.883	-36.859	-109.084	-9.542	-44.967	PLASTIC
		588	5.283	4.696	-31.051	-96.127	-2.829	-39.497	PLASTIC
	53	625	6.344	5.685	-9.614	-11.220	1.025	-6.773	Elastic
	Soil	626	6.573	6.229	-0.152	-0.455	-0.159	-0.243	Elastic
		627	5.971	5.857	-7.643	-9.313	3.400	-5.463	Elastic
		628	6.311	5.850	-1.627	-3.098	0.637	-1.301	PLASTIC
		629	6.392	6.019	-0.175	-3.570	0.606	-1.363	PLASTIC
		630	6.195	5.903	-1.317	-7.414	-0.064	-2.957	PLASTIC
		631	6.418	5.849	-1.685	-7.574	0.102	-3.161	Elastic
		632	6.510	6.068	-0.159	-3.874	0.244	-1.407	PLASTIC
		633	6.392	6.122	-0.103	-3.441	0.533	-1.214	PLASTIC
		634	6.150	5.973	-0.809	-5.666	-0.525	-2.221	PLASTIC
		635	6.077	5.800	-5.904	-9.598	2.525	-5.075	Elastic
		636	6.227	5.731	-7.362	-10.342	1.783	-5.795	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	55 Soil	649	5.286	4.533	-28.882	-69.149	-2.720	-36.891	Elastic
		650	5.101	4.997	-40.428	-103.496	-16.190	-44.272	Elastic
		651	4.764	4.607	-35.451	-51.611	-21.140	-27.558	PLASTIC
		652	5.124	4.657	-33.219	-84.565	-13.289	-36.720	Elastic
		653	5.066	4.801	-33.396	-79.007	-18.087	-34.683	PLASTIC
		654	4.961	4.680	-35.403	-61.893	-21.427	-30.566	PLASTIC
		655	5.236	4.674	-33.080	-100.756	-5.237	-41.513	Elastic
		656	5.161	4.880	-35.218	-101.260	-11.195	-42.147	Elastic
		657	4.996	4.884	-35.050	-66.515	-21.023	-31.674	PLASTIC
		658	4.860	4.727	-36.356	-53.671	-21.710	-28.345	PLASTIC
		659	4.919	4.580	-32.018	-57.749	-19.435	-28.392	PLASTIC
		660	5.129	4.550	-30.499	-79.996	-13.221	-34.624	Elastic
	62 Soil	733	5.398	4.518	-26.850	-80.930	6.503	-33.828	PLASTIC
		734	5.905	4.445	-30.965	-65.745	17.200	-30.590	Elastic
		735	5.595	4.940	-42.646	-78.527	24.172	-37.495	Elastic
		736	5.559	4.598	-33.200	-71.506	19.091	-32.945	PLASTIC
		737	5.717	4.576	-33.591	-58.220	20.390	-28.409	PLASTIC
		739	5.621	4.730	-33.103	-58.169	20.096	-28.716	PLASTIC
		739	5.549	4.491	-30.916	-70.076	17.279	-31.823	PLASTIC
		740	5.754	4.461	-29.636	-54.269	19.039	-26.734	PLASTIC
		741	5.817	4.595	-37.134	-58.490	22.353	-30.136	PLASTIC
		742	5.692	4.794	-33.738	-48.834	20.141	-26.051	PLASTIC
		743	5.531	4.618	-34.915	-80.187	18.089	-35.778	Elastic
		744	5.451	4.648	-32.523	-69.813	12.994	-33.093	PLASTIC
	66 Soil	781	7.088	5.408	-14.907	-16.049	0.341	-10.045	Elastic
		782	6.653	6.196	-0.006	-2.408	0.030	-0.812	Elastic
		783	6.424	5.853	-10.754	-12.172	0.793	-7.428	Elastic
		784	6.836	5.645	-8.469	-10.848	-0.260	-6.352	Elastic
		785	6.701	5.891	-1.853	-8.422	-0.014	-3.371	PLASTIC
		786	6.629	5.721	-6.311	-9.792	-0.256	-5.323	Elastic
		787	6.964	5.646	-8.460	-10.706	-0.239	-6.306	Elastic
		788	6.789	5.993	-0.940	-6.243	0.235	-2.442	PLASTIC
		789	6.578	6.040	-0.133	-3.837	0.152	-1.412	PLASTIC
		790	6.486	5.822	-2.525	-8.142	-0.169	-3.607	Elastic
		791	6.624	5.572	-12.623	-13.077	0.470	-8.329	Elastic
		792	6.691	5.473	-14.158	-14.332	0.407	-9.250	Elastic

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	69	817	5.072	4.044	-23.506	-59.203	-12.065	-26.718	PLASTIC
	Soil	818	5.284	4.464	-29.172	-82.650	-3.694	-35.087	Elastic
		819	4.762	4.538	-33.764	-53.787	-20.433	-27.763	PLASTIC
		820	5.049	4.254	-27.597	-62.895	-15.502	-29.871	PLASTIC
		821	5.115	4.385	-28.647	-74.671	-13.531	-32.611	PLASTIC
		822	4.953	4.409	-30.332	-58.822	-16.254	-28.355	PLASTIC
		823	5.140	4.166	-24.191	-67.749	-9.724	-29.383	PLASTIC
		824	5.226	4.335	-28.424	-81.004	-4.344	-34.478	Elastic
		825	5.127	4.492	-29.256	-60.490	-12.033	-34.448	PLASTIC
		826	4.917	4.522	-31.674	-56.568	-19.254	-27.984	PLASTIC
		827	4.850	4.388	-29.961	-59.947	-17.891	-28.597	PLASTIC
		828	4.975	4.190	-27.709	-60.882	-15.954	-28.371	PLASTIC
	72	853	7.181	5.451	-13.258	-14.414	0.291	-9.024	Elastic
	Soil	854	7.709	6.239	-0.002	-0.873	-0.042	-0.315	Tension
		855	6.746	6.239	-0.003	-1.409	-0.064	-0.475	Tension
		856	7.202	5.813	-4.120	-9.342	-0.349	-4.453	Elastic
		857	7.367	6.058	-0.156	-3.932	-0.015	-1.433	PLASTIC
		858	7.067	6.058	-0.077	-3.693	0.036	-1.337	PLASTIC
		859	7.347	5.681	-7.354	-10.179	-0.431	-5.786	Elastic
		860	7.560	5.998	-1.103	-5.347	-0.175	-2.192	Elastic
		861	7.422	6.249	-0.002	-1.109	-0.042	-0.377	Tension
		862	7.035	6.248	-0.001	-0.912	0.032	-0.319	Tension
		863	6.867	5.998	-0.381	-4.599	-0.092	-1.750	PLASTIC
		864	7.042	5.681	-7.286	-10.553	-0.390	-5.877	Elastic
	76	901	5.611	3.983	-22.566	-61.073	10.173	-27.061	PLASTIC
	Soil	902	5.906	4.376	-32.484	-61.227	16.645	-29.749	Elastic
		903	5.398	4.449	-30.557	-90.061	8.373	-37.739	Elastic
		904	5.630	4.180	-26.589	-62.453	14.584	-28.509	PLASTIC
		905	5.722	4.303	-29.969	-62.804	17.522	-29.506	PLASTIC
		906	5.583	4.325	-28.817	-61.093	14.913	-27.979	PLASTIC
		907	5.704	4.097	-28.673	-65.966	13.957	-29.634	PLASTIC
		908	5.823	4.255	-29.519	-64.273	17.007	-29.876	PLASTIC
		909	5.755	4.403	-32.011	-62.930	19.137	-30.095	PLASTIC
		910	5.550	4.433	-27.840	-62.178	15.856	-28.580	PLASTIC
		911	5.456	4.308	-26.758	-69.436	12.315	-30.539	Elastic
		912	5.642	4.120	-24.102	-60.191	12.479	-27.128	PLASTIC

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	77 Soil	913	8.524	5.394	-11.250	-15.295	-0.010	-8.734	Elastic
		914	8.908	6.235	-0.287	-1.143	-0.060	-0.485	Elastic
		915	7.945	6.235	-0.001	-1.123	0.037	-0.393	Tension
		916	8.479	5.780	-5.383	-8.934	-0.230	-4.737	Elastic
		917	8.599	6.042	-1.476	-4.374	-0.120	-1.975	Elastic
		918	8.299	6.042	-1.324	-4.466	-0.124	-1.939	Elastic
		919	8.648	5.640	-7.466	-11.164	-0.191	-6.150	Elastic
		920	8.803	5.978	-2.430	-5.438	-0.136	-2.634	Elastic
		921	8.619	6.245	-0.136	-0.956	-0.039	-0.375	Elastic
		922	8.232	6.245	-0.005	-0.953	0.025	-0.334	Elastic
		923	8.110	5.978	-1.987	-5.460	-0.170	-2.508	Elastic
		924	8.343	5.640	-7.587	-11.201	-0.250	-6.197	Elastic
	83 Soil	985	5.555	3.956	-21.703	-59.834	9.385	-26.441	PLASTIC
		986	5.342	4.422	-28.098	-82.892	0.108	-34.873	Elastic
		987	5.129	4.002	-20.965	-59.981	-8.047	-26.224	PLASTIC
		988	5.408	4.074	-21.128	-62.603	6.719	-26.992	PLASTIC
		989	5.342	4.219	-23.831	-71.776	3.231	-30.431	Elastic
		990	5.276	4.088	-21.796	-68.039	-0.524	-28.911	Elastic
		991	5.495	4.097	-21.989	-60.004	9.754	-26.457	PLASTIC
		992	5.409	4.285	-25.360	-74.424	7.390	-31.628	Elastic
		993	5.274	4.300	-26.971	-78.527	-3.461	-32.729	Elastic
		994	5.189	4.131	-23.724	-71.617	-6.059	-30.426	PLASTIC
		995	5.256	3.983	-20.148	-63.859	-0.733	-27.152	PLASTIC
		996	5.428	3.964	-20.909	-61.481	7.010	-26.682	PLASTIC
	84 Soil	997	4.470	3.751	-30.136	-69.195	-12.704	-31.966	Elastic
		998	5.013	3.993	-23.478	-60.341	-11.680	-27.094	PLASTIC
		999	4.703	4.487	-33.255	-81.250	-10.508	-29.893	Elastic
		1000	4.648	3.975	-29.467	-67.505	-13.483	-31.068	Elastic
		1001	4.817	4.051	-28.253	-68.426	-14.944	-30.916	PLASTIC
		1002	4.721	4.204	-30.163	-65.599	-16.087	-30.510	Elastic
		1003	4.633	3.816	-27.044	-68.710	-13.483	-30.838	PLASTIC
		1004	4.851	3.913	-25.875	-67.789	-12.104	-30.128	Elastic
		1005	4.925	4.146	-27.733	-61.192	-15.925	-28.508	PLASTIC
		1006	4.800	4.345	-30.302	-60.332	-19.109	-28.852	PLASTIC
		1007	4.628	4.268	-31.463	-61.314	-15.640	-29.560	Elastic
		1008	4.535	3.972	-29.204	-63.948	-15.184	-29.924	Elastic

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	90	1069	6.225	3.594	-29.811	-68.893	11.499	-31.761	Elastic
	Soil	1070	5.966	4.314	-30.930	-62.653	16.674	-29.763	Elastic
		1071	5.671	3.921	-24.358	-55.283	10.079	-28.914	Elastic
		1072	6.038	3.835	-29.179	-70.407	13.552	-31.971	Elastic
		1073	5.958	4.059	-29.838	-67.818	15.535	-31.202	Elastic
		1074	5.866	3.936	-27.630	-68.276	13.429	-30.781	Elastic
		1075	6.153	3.810	-29.733	-67.239	13.050	-31.208	Elastic
		1076	6.049	4.099	-30.242	-64.179	15.482	-30.197	Elastic
		1077	5.873	4.203	-29.682	-66.000	16.647	-30.487	Elastic
		1078	5.754	4.045	-28.508	-64.973	13.911	-29.361	PLASTIC
		1079	5.836	3.816	-26.349	-57.643	10.880	-30.308	Elastic
		1080	6.059	3.685	-27.786	-71.604	12.092	-32.100	Elastic
	97	1153	5.345	3.295	-19.684	-61.720	-2.897	-26.955	PLASTIC
	Soil	1154	5.555	3.874	-21.498	-60.868	8.540	-26.759	PLASTIC
		1155	5.129	3.921	-20.044	-58.128	-7.345	-25.461	PLASTIC
		1156	5.344	3.572	-17.213	-55.010	0.938	-23.966	PLASTIC
		1157	5.409	3.752	-18.872	-58.098	4.440	-25.236	PLASTIC
		1158	5.277	3.766	-17.969	-57.370	-0.108	-24.735	PLASTIC
		1159	5.411	3.464	-18.476	-58.839	-0.734	-25.585	PLASTIC
		1160	5.496	3.697	-19.962	-61.071	4.972	-26.510	PLASTIC
		1161	5.428	3.898	-19.874	-59.241	8.226	-25.758	PLASTIC
		1162	5.257	3.914	-19.496	-61.898	-0.783	-26.425	PLASTIC
		1163	5.190	3.731	-17.493	-53.787	-4.454	-23.548	PLASTIC
		1164	5.276	3.479	-16.559	-52.966	-1.263	-23.236	PLASTIC
	98	1165	5.269	3.280	-19.526	-62.032	0.321	-27.015	PLASTIC
	Soil	1166	5.054	3.906	-21.059	-58.678	-9.879	-25.944	PLASTIC
		1167	4.511	3.664	-27.212	-69.097	-12.256	-31.133	Elastic
		1168	5.046	3.512	-19.188	-60.692	-1.969	-26.322	PLASTIC
		1169	4.979	3.706	-20.963	-62.998	-5.735	-27.359	PLASTIC
		1170	4.810	3.631	-24.506	-67.960	-7.817	-30.008	Elastic
		1171	5.213	3.466	-18.221	-58.125	0.193	-25.293	PLASTIC
		1172	5.126	3.719	-18.712	-57.683	-4.346	-25.101	PLASTIC
		1173	4.896	3.840	-24.285	-65.734	-10.348	-29.097	Elastic
		1174	4.667	3.742	-27.444	-71.404	-11.936	-31.829	Elastic
		1175	4.736	3.544	-23.942	-70.421	-7.619	-30.652	PLASTIC
		1176	5.041	3.389	-19.296	-61.283	-0.860	-26.635	PLASTIC

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	104 Soil	1237	5.421	3.266	-18.330	-58.367	-0.931	-25.568	PLASTIC
		1238	6.186	3.518	-27.993	-71.964	10.732	-32.351	Elastic
		1239	5.631	3.845	-23.298	-63.760	7.105	-28.204	Elastic
		1240	5.645	3.457	-20.738	-64.787	3.142	-28.074	PLASTIC
		1241	5.883	3.536	-23.984	-68.557	7.321	-30.106	Elastic
		1242	5.710	3.637	-21.949	-65.155	6.397	-28.304	Elastic
		1243	5.652	3.336	-21.062	-66.133	2.418	-28.678	PLASTIC
		1244	5.959	3.437	-24.277	-71.173	7.096	-31.088	Elastic
		1245	6.026	3.621	-27.128	-72.631	10.956	-32.205	Elastic
		1246	5.803	3.753	-25.285	-66.398	9.580	-29.670	Elastic
		1247	5.560	3.673	-20.906	-64.745	3.985	-27.916	PLASTIC
		1248	5.476	3.440	-19.764	-62.696	0.804	-27.157	PLASTIC
	113 Soil	1345	4.616	2.724	-26.929	-74.817	-0.810	-33.564	Elastic
		1346	5.238	3.195	-19.853	-61.728	0.596	-27.094	Elastic
		1347	4.479	3.579	-28.503	-71.910	-11.409	-32.437	Elastic
		1348	4.728	3.028	-22.450	-70.565	-1.729	-30.665	PLASTIC
		1349	4.921	3.175	-20.884	-66.007	-0.752	-28.718	PLASTIC
		1350	4.685	3.294	-22.957	-70.214	-5.035	-30.506	PLASTIC
		1351	4.808	2.857	-23.420	-70.560	-0.172	-31.211	Elastic
		1352	5.058	3.046	-20.740	-65.658	0.549	-28.673	PLASTIC
		1353	5.014	3.317	-20.026	-63.498	-0.695	-27.550	PLASTIC
		1354	4.709	3.472	-23.429	-69.628	-6.978	-30.321	PLASTIC
		1355	4.512	3.322	-25.396	-73.660	-7.727	-32.248	Elastic
		1356	4.567	2.979	-23.999	-74.512	-2.916	-32.376	Elastic
	131 Soil	1561	6.073	2.587	-29.151	-77.742	1.141	-35.224	Elastic
		1562	6.217	3.428	-27.156	-71.040	9.742	-31.900	Elastic
		1563	5.453	3.175	-20.019	-63.455	-0.847	-27.668	PLASTIC
		1564	5.964	2.915	-23.827	-74.711	1.732	-32.438	PLASTIC
		1565	6.009	3.177	-24.114	-73.824	4.921	-32.036	Elastic
		1566	5.771	3.093	-21.707	-68.463	1.195	-29.773	PLASTIC
		1567	6.125	2.836	-26.248	-76.013	3.072	-33.622	Elastic
		1568	6.193	3.174	-26.057	-73.877	7.091	-32.637	Elastic
		1569	5.986	3.361	-24.675	-72.871	6.930	-31.762	Elastic
		1570	5.678	3.259	-20.745	-65.489	1.536	-28.455	PLASTIC
		1571	5.639	2.993	-21.207	-67.077	-0.317	-29.296	PLASTIC
		1572	5.882	2.756	-26.050	-73.813	0.085	-32.971	Elastic

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	163 Soil	1945	5.619	5.994	-4.269	-0.340	0.463	-1.651	PLASTIC
		1946	5.619	5.903	-10.197	-8.314	5.412	-5.991	PLASTIC
		1947	5.658	5.856	-21.898	-16.265	10.018	-11.827	PLASTIC
		1948	5.674	5.936	-7.378	-6.247	4.235	-4.397	PLASTIC
		1949	5.674	5.910	-12.002	-8.833	4.939	-5.982	PLASTIC
		1950	5.748	5.896	-3.870	-10.979	2.885	-4.798	PLASTIC
		1951	5.616	5.961	-3.422	-1.179	1.675	-1.869	PLASTIC
		1952	5.616	5.928	-9.681	-6.291	4.554	-5.108	PLASTIC
		1953	5.692	5.887	-12.319	-8.146	5.607	-6.490	PLASTIC
		1954	5.788	5.868	-6.457	-10.778	4.702	-5.537	PLASTIC
		1955	5.788	5.894	-9.119	-9.962	5.620	-6.089	PLASTIC
		1956	5.692	5.946	-6.132	-9.936	4.497	-5.122	PLASTIC
	164 Soil	1957	5.694	6.009	-6.885	-7.890	4.532	-4.880	PLASTIC
		1958	5.923	5.881	-6.207	-10.914	4.577	-5.493	PLASTIC
		1959	6.525	6.252	-0.510	-0.084	0.207	-0.219	Tension
		1960	5.932	6.035	-1.210	-5.395	1.389	-2.206	PLASTIC
		1961	6.007	5.998	-0.574	-4.548	0.811	-1.795	PLASTIC
		1962	6.194	6.111	-0.119	-3.345	-0.631	-1.200	Tension
		1963	5.747	5.967	-6.753	-10.025	4.789	-5.317	PLASTIC
		1964	5.843	5.915	-7.321	-12.440	5.211	-6.255	PLASTIC
		1965	6.110	5.993	-0.700	-4.511	-0.487	-1.825	Elastic
		1966	6.352	6.142	-0.121	-3.640	0.409	-1.263	PLASTIC
		1967	6.276	6.183	-0.006	-1.604	0.104	-0.643	Tension
		1968	5.938	6.085	-0.453	-4.491	0.584	-1.666	PLASTIC
2	171 Blocks	2041	5.038	5.506	-2.974	-119.175	-9.492	-25.544	Elastic
		2042	5.281	5.506	-0.109	-123.650	-3.674	-25.973	Tension
		2043	5.281	5.587	-0.057	-138.835	-2.800	-28.385	Tension
		2044	5.150	5.525	-0.568	-138.104	-9.013	-28.848	Tension
		2045	5.225	5.525	-0.582	-137.724	-8.954	-28.758	Tension
		2046	5.225	5.550	-0.613	-139.369	-9.211	-28.855	Tension
		2047	5.109	5.505	-3.516	-135.748	-2.637	-28.988	Elastic
		2048	5.207	5.505	-0.813	-139.230	-10.641	-29.131	Tension
		2049	5.284	5.531	-0.079	-127.180	-3.170	-26.539	Tension
		2050	5.284	5.564	-0.057	-132.722	-2.751	-27.596	Tension
		2051	5.207	5.564	-0.936	-138.926	-11.403	-29.012	Tension
		2052	5.109	5.531	-0.960	-133.373	-2.594	-27.966	Elastic

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	172	2053	5.019	5.513	-5.279	-170.970	-13.019	-36.375	Elastic
	Blocks	2054	5.262	5.594	-0.133	-130.067	-4.164	-27.038	Tension
		2055	5.019	5.594	-24.718	-148.370	-8.077	-35.628	Elastic
		2056	5.075	5.550	-24.639	-122.030	-7.963	-30.406	Elastic
		2057	5.150	5.575	-1.298	-136.523	-13.311	-28.588	Tension
		2058	5.075	5.575	-21.783	-123.585	-14.136	-30.110	Elastic
		2059	5.093	5.536	-8.699	-111.756	-8.122	-25.182	Elastic
		2060	5.191	5.569	-0.714	-151.849	-10.414	-31.545	Tension
		2061	5.191	5.595	-1.569	-144.854	-15.078	-30.281	Tension
		2062	5.093	5.595	-11.260	-128.163	-15.848	-28.894	Elastic
		2063	5.016	5.569	-19.137	-145.857	-22.515	-34.044	Elastic
		2064	5.016	5.536	-20.130	-164.633	-16.560	-38.044	Elastic
3	173	2065	5.281	5.613	-0.061	-141.173	-2.927	-29.218	Tension
	Blocks	2066	5.281	5.694	-0.029	-152.327	-2.109	-31.328	Tension
		2067	5.038	5.694	-16.815	-111.726	-22.007	-26.577	Elastic
		2068	5.225	5.650	-0.571	-148.748	-9.219	-30.782	Tension
		2069	5.225	5.675	-0.641	-152.312	-9.883	-31.473	Tension
		2070	5.150	5.675	-4.398	-142.701	-25.051	-30.315	Tension
		2071	5.284	5.638	-0.040	-144.286	-2.415	-29.803	Tension
		2072	5.284	5.669	-0.029	-148.753	-2.075	-30.648	Tension
		2073	5.207	5.695	-1.269	-154.560	-14.003	-32.021	Tension
		2074	5.109	5.695	-8.066	-133.994	-32.876	-29.260	Tension
		2075	5.109	5.669	-7.117	-131.223	-30.561	-28.572	Tension
		2076	5.207	5.638	-0.958	-146.440	-11.844	-30.417	Tension
	174	2077	5.262	5.606	-0.040	-141.099	-2.372	-29.207	Tension
	Blocks	2078	5.019	5.687	-17.666	-119.139	-17.310	-28.239	Elastic
		2079	5.019	5.606	-24.655	-141.603	-16.952	-34.250	Elastic
		2080	5.150	5.625	-3.702	-136.510	-22.480	-28.996	Tension
		2081	5.075	5.650	-15.948	-125.628	-23.456	-29.246	Elastic
		2082	5.075	5.625	-18.802	-127.531	-19.509	-30.233	Elastic
		2083	5.191	5.631	-1.853	-144.585	-16.369	-30.232	Tension
		2084	5.093	5.664	-6.550	-125.646	-28.687	-27.351	Tension
		2085	5.016	5.664	-18.391	-126.799	-15.148	-29.950	Elastic
		2086	5.016	5.631	-19.749	-134.949	-15.200	-31.997	Elastic
		2087	5.093	5.605	-11.081	-127.644	-18.643	-28.779	Elastic
		2088	5.191	5.605	-1.472	-142.385	-14.476	-29.753	Tension

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4	175 Blocks	2089	5.281	5.713	-0.035	-154.379	-2.336	-31.712	Tension
		2090	5.281	5.794	-0.021	-167.180	-1.861	-34.156	Tension
		2091	5.038	5.794	-12.970	-72.368	-30.634	-17.798	Elastic
		2092	5.225	5.750	-0.901	-165.788	-12.223	-34.115	Tension
		2093	5.225	5.775	-1.045	-171.152	-13.376	-35.181	Tension
		2094	5.150	5.775	-6.729	-159.889	-32.800	-34.078	Tension
		2095	5.284	5.736	-0.028	-157.586	-2.114	-32.319	Tension
		2096	5.284	5.769	-0.022	-162.595	-1.907	-33.273	Tension
		2097	5.207	5.795	-2.158	-175.470	-19.457	-36.239	Tension
		2098	5.109	5.795	-11.746	-142.289	-40.882	-31.533	Tension
		2099	5.109	5.769	-10.651	-139.721	-38.578	-30.837	Tension
		2100	5.207	5.736	-1.569	-163.029	-15.994	-33.715	Tension
	176 Blocks	2101	5.262	5.706	-0.089	-151.510	-3.664	-31.158	Tension
		2102	5.019	5.787	-16.788	-62.025	-22.898	-16.499	Elastic
		2103	5.019	5.706	-16.917	-111.094	-18.140	-26.454	Elastic
		2104	5.150	5.725	-6.589	-150.723	-29.023	-32.075	Tension
		2105	5.075	5.750	-11.412	-113.923	-35.999	-25.856	Elastic
		2106	5.075	5.725	-10.409	-115.132	-34.465	-25.933	Elastic
		2107	5.191	5.731	-2.378	-164.756	-19.794	-34.230	Tension
		2108	5.093	5.764	-11.843	-124.714	-38.432	-28.092	Tension
		2109	5.016	5.764	-16.853	-82.033	-18.353	-20.548	Elastic
		2110	5.016	5.731	-15.873	-99.001	-19.864	-23.791	Elastic
		2111	5.093	5.705	-8.568	-124.471	-32.698	-27.465	Tension
		2112	5.191	5.705	-2.260	-159.843	-19.005	-33.261	Tension
5	177 Blocks	2113	5.038	5.806	-12.907	-84.249	-28.539	-18.141	Elastic
		2114	5.281	5.806	-0.070	-169.088	-3.436	-34.529	Tension
		2115	5.281	5.887	-0.014	-182.883	1.613	-37.182	Tension
		2116	5.150	5.825	-8.254	-169.653	-37.420	-36.285	Tension
		2117	5.225	5.825	-1.354	-182.634	-15.726	-37.489	Tension
		2118	5.225	5.850	-1.689	-190.266	-17.925	-39.026	Tension
		2119	5.109	5.805	-12.821	-144.515	-43.045	-32.179	Tension
		2120	5.207	5.805	-2.112	-177.753	-19.377	-36.672	Tension
		2121	5.284	5.831	-0.044	-173.356	-2.749	-35.342	Tension
		2122	5.284	5.864	-0.002	-178.777	-0.625	-36.372	Tension
		2123	5.207	5.864	-3.348	-195.589	-25.583	-40.403	Tension
		2124	5.109	5.831	-13.831	-145.610	-44.877	-32.563	Tension

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	178	2125	5.019	5.813	-22.775	-34.266	-14.294	-12.109	Elastic
	Blocks	2126	5.262	5.894	-0.170	-186.375	-5.625	-37.883	Tension
		2127	5.019	5.894	-25.182	-12.899	-18.023	-9.203	Tension
		2128	5.075	5.850	-21.923	-105.264	-48.038	-26.096	Tension
		2129	5.150	5.875	-11.359	-180.686	-45.304	-39.009	Tension
		2130	5.075	5.875	-21.507	-83.738	-42.437	-21.682	Tension
		2131	5.093	5.836	-17.035	-119.050	-45.034	-27.885	Tension
		2132	5.191	5.869	-4.896	-204.231	-31.621	-42.434	Tension
		2133	5.191	5.895	-6.285	-216.455	-36.884	-45.120	Tension
		2134	5.093	5.895	-24.099	-111.322	-51.795	-27.670	Tension
		2135	5.018	5.869	-15.341	-5.564	-9.485	-4.883	Tension
		2136	5.018	5.836	-19.816	-44.650	-24.630	-13.581	Elastic
6	179	2137	5.338	5.506	-0.057	-114.975	2.558	-24.127	Tension
	Blocks	2138	5.581	5.506	-0.709	-185.400	11.462	-38.355	Tension
		2139	5.581	5.587	-23.106	-163.628	22.571	-38.368	Elastic
		2140	5.450	5.525	-0.927	-136.297	11.238	-28.539	Tension
		2141	5.525	5.525	-18.488	-120.900	6.509	-28.985	Elastic
		2142	5.525	5.550	-21.037	-125.817	5.191	-30.443	Elastic
		2143	5.409	5.505	-1.057	-160.410	13.019	-33.418	Tension
		2144	5.507	5.505	-8.716	-107.276	7.581	-24.334	Elastic
		2145	5.584	5.531	-11.946	-192.639	31.861	-42.016	Elastic
		2146	5.594	5.564	-29.894	-175.836	28.743	-42.199	Elastic
		2147	5.507	5.564	-18.579	-132.280	12.422	-31.225	Elastic
		2148	5.409	5.531	-2.118	-144.284	17.482	-30.367	Tension
	180	2149	5.319	5.513	-0.261	-126.320	5.737	-26.428	Tension
	Blocks	2150	5.582	5.594	-24.255	-146.261	14.143	-35.114	Elastic
		2151	5.319	5.594	-0.154	-139.728	4.642	-28.974	Tension
		2152	5.375	5.550	-0.570	-138.462	8.886	-28.866	Tension
		2153	5.450	5.575	-3.009	-134.230	20.097	-28.485	Tension
		2154	5.375	5.575	-0.026	-139.962	9.359	-29.141	Tension
		2155	5.393	5.536	-0.839	-137.810	10.753	-28.808	Tension
		2156	5.491	5.569	-11.361	-132.199	19.749	-29.757	Elastic
		2157	5.491	5.595	-7.071	-133.725	24.320	-29.289	Elastic
		2158	5.393	5.595	-1.117	-140.502	12.527	-29.320	Tension
		2159	5.316	5.569	-0.148	-135.085	4.475	-28.079	Tension
		2160	5.316	5.536	-0.193	-129.499	4.999	-27.017	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
7	181 Blocks	2161	5.169	5.994	-113.413	-289.014	-62.282	-80.918	Elastic
		2162	5.291	5.913	-0.007	-188.477	1.136	-38.244	Tension
		2163	5.291	5.994	-54.870	-212.998	-1.544	-54.006	Elastic
		2164	5.225	5.975	-44.656	-229.635	-16.019	-55.317	Elastic
		2165	5.263	5.950	-15.701	-199.431	-13.930	-43.521	Elastic
		2166	5.263	5.975	-37.889	-208.695	-11.630	-49.816	Elastic
		2167	5.205	5.969	-29.574	-246.747	-20.614	-55.732	Elastic
		2168	5.253	5.938	-2.117	-195.682	-20.364	-40.113	Tension
		2169	5.292	5.938	-7.875	-196.605	1.972	-41.410	Elastic
		2170	5.292	5.969	-36.127	-205.405	0.783	-48.774	Elastic
		2171	5.253	5.995	-52.307	-218.101	-16.253	-54.513	Elastic
		2172	5.205	5.995	-89.301	-250.277	-29.630	-68.347	Elastic
	182 Blocks	2173	5.131	5.994	-148.396	-44.893	-76.364	-39.103	Elastic
		2174	5.009	5.994	-19.335	-1.112	-4.637	-4.535	Tension
		2175	5.009	5.913	-11.102	-2.235	-4.981	-3.227	Tension
		2176	5.075	5.975	-20.735	-2.588	-7.326	-5.136	Tension
		2177	5.037	5.975	-14.893	-11.075	-12.843	-5.885	Tension
		2178	5.037	5.950	-10.152	-2.822	-5.353	-3.102	Tension
		2179	5.095	5.995	-20.441	-9.048	-3.092	-6.342	Elastic
		2180	5.047	5.995	-18.585	-0.014	-0.505	-4.184	Tension
		2181	5.008	5.969	0.000	0.000	0.000	-0.460	Tension
		2182	5.008	5.938	-18.184	-8.934	-12.746	-5.950	Tension
		2183	5.047	5.938	-8.136	-5.319	-6.578	-3.217	Tension
		2184	5.095	5.969	-36.018	-39.595	-37.764	-15.503	Tension
	183 Blocks	2185	5.028	5.906	-29.518	-11.632	-18.530	-8.799	Tension
		2186	5.272	5.906	-0.814	-190.482	-12.448	-38.815	Tension
		2187	5.150	5.987	-82.264	-331.570	-123.546	-83.208	Elastic
		2188	5.112	5.925	-37.478	-139.325	-72.261	-35.903	Tension
		2189	5.188	5.925	-6.300	-251.473	-39.802	-52.094	Tension
		2190	5.150	5.950	-25.797	-207.738	-73.206	-47.201	Tension
		2191	5.101	5.905	-23.751	-118.813	-53.122	-29.083	Tension
		2192	5.199	5.905	-4.427	-207.539	-30.312	-42.951	Tension
		2193	5.238	5.931	-0.450	-193.496	-9.334	-39.310	Tension
		2194	5.189	5.964	-25.684	-264.129	-45.601	-58.438	Elastic
		2195	5.111	5.964	-55.569	-92.794	-71.808	-30.160	Tension
		2196	5.062	5.931	-33.375	-24.297	-28.470	-12.066	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
8	184 Blocks	2197	5.591	5.813	-20.734	-159.816	18.964	-37.054	Elastic
		2198	5.591	5.694	-17.543	-118.781	20.022	-28.134	Elastic
		2199	5.338	5.694	-0.191	-146.418	5.286	-30.178	Tension
		2200	5.525	5.650	-15.407	-129.053	30.482	-29.823	Elastic
		2201	5.525	5.675	-9.374	-127.612	34.587	-28.293	Tension
		2202	5.450	5.675	-4.983	-147.223	27.085	-31.324	Tension
		2203	5.594	5.636	-17.485	-150.587	18.726	-34.565	Elastic
		2204	5.584	5.669	-18.279	-138.235	18.178	-32.207	Elastic
		2205	5.607	5.695	-10.008	-131.989	36.346	-29.267	Tension
		2206	5.409	5.695	-2.382	-160.071	19.527	-33.345	Tension
		2207	5.409	5.669	-2.328	-155.747	19.041	-32.506	Tension
		2208	5.607	5.636	-8.305	-129.502	28.884	-28.512	Elastic
	185 Blocks	2209	5.562	5.606	-27.396	-139.517	20.274	-34.375	Elastic
		2210	5.319	5.687	-0.094	-150.213	3.766	-30.927	Tension
		2211	5.319	5.606	-0.127	-139.433	4.202	-28.892	Tension
		2212	5.450	5.625	-3.622	-140.277	22.541	-29.746	Tension
		2213	5.375	5.650	-0.855	-147.256	11.222	-30.540	Tension
		2214	5.375	5.625	-0.794	-144.107	10.694	-29.934	Tension
		2215	5.491	5.631	-5.992	-137.417	29.696	-29.639	Tension
		2216	5.393	5.664	-1.360	-148.989	14.338	-30.973	Tension
		2217	5.316	5.664	-0.082	-147.034	3.463	-30.322	Tension
		2218	5.316	5.631	-0.095	-142.699	3.593	-29.504	Tension
		2219	5.393	5.605	-1.151	-141.921	12.780	-29.595	Tension
		2220	5.491	5.605	-4.990	-135.036	25.589	-28.999	Elastic
9	186 Blocks	2221	5.581	5.713	-16.699	-111.615	21.390	-26.505	Elastic
		2222	5.581	5.794	-14.398	-82.397	21.601	-16.087	Elastic
		2223	5.338	5.794	-0.285	-160.154	6.750	-32.803	Tension
		2224	5.525	5.750	-14.358	-121.017	41.634	-27.665	Tension
		2225	5.525	5.775	-15.223	-116.207	42.059	-27.040	Tension
		2226	5.450	5.775	-7.265	-168.303	34.958	-35.955	Tension
		2227	5.594	5.736	-14.545	-98.210	19.927	-23.360	Elastic
		2228	5.584	5.769	-14.119	-74.286	18.280	-18.444	Elastic
		2229	5.607	5.795	-14.769	-130.565	43.912	-29.793	Tension
		2230	5.409	5.795	-4.140	-185.434	27.708	-38.628	Tension
		2231	5.409	5.769	-3.354	-178.011	24.434	-37.023	Tension
		2232	5.607	5.736	-12.305	-131.570	40.237	-29.584	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	187 Blocks	2233	5.662	5.706	-11.843	-109.070	29.809	-25.034	Elastic
		2234	5.319	5.787	-0.098	-164.737	4.016	-33.691	Tension
		2235	5.319	5.706	-0.113	-152.566	4.146	-31.374	Tension
		2236	5.450	5.725	-5.844	-156.592	30.252	-33.312	Tension
		2237	5.375	5.750	-1.238	-164.450	14.556	-33.034	Tension
		2238	5.375	5.725	-1.112	-159.496	13.318	-32.934	Tension
		2239	5.491	5.731	-10.193	-147.334	38.753	-32.322	Tension
		2240	5.393	5.764	-2.104	-168.229	19.210	-34.842	Tension
		2241	5.316	5.764	-0.082	-160.629	3.630	-32.900	Tension
		2242	5.316	5.731	-0.092	-155.839	3.786	-31.990	Tension
		2243	5.393	5.705	-1.635	-156.633	16.005	-32.494	Tension
		2244	5.491	5.705	-9.268	-144.210	36.559	-31.548	Tension
10	188 Blocks	2245	5.338	5.806	-0.122	-183.002	4.454	-33.322	Tension
		2246	5.591	5.806	-14.215	-55.024	21.565	-14.558	Elastic
		2247	5.591	5.887	-16.078	-8.031	12.049	-5.818	Tension
		2248	5.450	5.825	-9.642	-176.844	41.293	-37.968	Tension
		2249	5.525	5.825	-16.286	-107.674	41.876	-25.476	Tension
		2250	5.525	5.850	-17.370	-102.574	42.210	-24.637	Tension
		2251	5.409	5.805	-4.851	-169.084	30.296	-39.465	Tension
		2252	5.507	5.805	-14.774	-129.219	43.693	-29.510	Tension
		2253	5.594	5.831	-11.909	-35.099	18.848	-10.077	Elastic
		2254	5.594	5.864	-15.726	-13.785	14.724	-6.531	Tension
		2255	5.507	5.864	-17.979	-120.044	46.327	-28.214	Tension
		2256	5.409	5.831	-5.673	-196.951	33.429	-41.187	Tension
	189 Blocks	2257	5.319	5.813	-0.188	-167.782	5.619	-34.253	Tension
		2258	5.562	5.894	-23.592	-18.024	20.621	-8.910	Tension
		2259	5.319	5.894	-0.006	-183.994	1.047	-37.374	Tension
		2260	5.375	5.850	-2.244	-191.233	20.717	-39.331	Tension
		2261	5.450	5.875	-11.699	-188.689	46.755	-40.327	Tension
		2262	5.375	5.875	-2.666	-200.159	23.098	-41.185	Tension
		2263	5.393	5.836	-3.127	-190.718	24.420	-39.424	Tension
		2264	5.491	5.869	-18.735	-149.126	52.858	-34.194	Tension
		2265	5.491	5.895	-21.108	-147.796	55.854	-34.366	Tension
		2266	5.393	5.895	-4.965	-210.733	32.020	-43.692	Tension
		2267	5.316	5.869	-0.045	-178.668	2.830	-36.351	Tension
		2268	5.316	5.836	-0.119	-172.389	4.537	-35.156	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	191 Blocks	2281	5.281	6.006	-65.015	-219.372	-9.447	-57.293	Elastic
		2282	5.159	6.087	-2.723	-308.296	-11.400	-62.505	Elastic
		2283	5.159	6.006	-165.760	-531.172	-166.215	-139.802	Elastic
		2284	5.225	6.025	-83.940	-263.445	-50.420	-69.866	Elastic
		2285	5.187	6.050	-57.432	-320.819	-59.474	-76.004	Elastic
		2286	5.187	6.025	-76.865	-303.136	-54.328	-76.369	Elastic
		2287	5.245	6.031	-59.090	-219.268	-22.738	-56.052	Elastic
		2288	5.197	6.064	-38.718	-313.445	-48.138	-70.767	Elastic
		2289	5.158	6.064	-0.385	-329.435	-11.263	-66.298	Tension
		2290	5.158	6.031	-44.293	-434.170	-72.896	-96.073	Elastic
		2291	5.197	6.005	-91.064	-230.064	-43.849	-64.843	Elastic
		2292	5.245	6.005	-67.710	-229.631	-13.138	-59.885	Elastic
12	193 Blocks	2305	5.469	5.994	-134.592	-48.902	78.063	-37.144	Elastic
		2306	5.591	5.913	-5.793	-0.094	0.737	-1.737	Tension
		2307	5.591	5.994	-18.181	-1.143	4.558	-4.310	Tension
		2308	5.525	5.975	-15.828	-0.352	2.361	-3.708	Tension
		2309	5.563	5.950	-8.427	-1.331	2.925	-2.059	Tension
		2310	5.563	5.975	-12.057	-11.093	11.565	-5.102	Tension
		2311	5.505	5.969	-28.286	-43.671	35.147	-14.972	Tension
		2312	5.553	5.936	-3.935	-1.017	2.001	-1.517	Tension
		2313	5.592	5.936	-14.434	-7.682	10.530	-4.950	Tension
		2314	5.592	5.969	-0.209	-0.151	0.178	-0.552	Tension
		2315	5.553	5.995	-15.076	-0.005	0.272	-3.480	Tension
		2316	5.505	5.995	-9.917	-11.605	3.173	-4.748	Elastic
	194 Blocks	2317	5.431	5.994	-104.023	-287.778	62.160	-78.793	Elastic
		2318	5.309	5.994	-54.124	-214.310	4.050	-54.119	Elastic
		2319	5.309	5.913	-0.045	-193.169	2.961	-39.190	Tension
		2320	5.375	5.975	-41.335	-229.936	16.819	-54.713	Elastic
		2321	5.337	5.975	-30.227	-213.094	13.282	-50.323	Elastic
		2322	5.337	5.950	-16.901	-206.563	15.071	-45.187	Elastic
		2323	5.395	5.995	-84.174	-249.342	29.893	-67.134	Elastic
		2324	5.347	5.995	-49.928	-220.282	17.074	-54.473	Elastic
		2325	5.308	5.969	-35.316	-207.320	3.864	-48.995	Elastic
		2326	5.308	5.936	-7.689	-199.780	3.458	-42.007	Elastic
		2327	5.347	5.936	-4.045	-203.684	20.602	-42.099	Elastic
		2328	5.395	5.969	-25.743	-242.734	23.114	-54.183	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	195 Blocks	2329	5.328	5.906	-0.978	-196.416	13.858	-40.035	Tension
		2330	5.572	5.906	-21.460	-8.032	13.134	-6.471	Tension
		2331	5.450	5.987	-65.058	-325.983	119.460	-78.682	Elastic
		2332	5.412	5.925	-7.848	-249.119	44.217	-51.923	Tension
		2333	5.488	5.925	-32.274	-146.494	68.760	-36.295	Tension
		2334	5.450	5.950	-24.940	-210.285	72.416	-47.548	Tension
		2335	5.401	5.905	-5.801	-209.422	34.250	-43.562	Tension
		2336	5.499	5.905	-22.704	-122.092	52.649	-29.529	Tension
		2337	5.538	5.931	-28.169	-21.647	24.694	-10.497	Tension
		2338	5.489	5.964	-48.322	-95.220	67.832	-22.196	Tension
		2339	5.411	5.964	-16.519	-261.612	51.632	-56.101	Elastic
		2340	5.362	5.931	-0.950	-192.603	13.523	-39.232	Tension
	199 Blocks	2377	5.169	6.213	-0.022	-278.645	-2.448	-55.857	Tension
		2378	5.412	6.294	-14.904	-263.424	0.268	-59.674	Elastic
		2379	5.169	6.294	-15.018	-260.802	0.419	-59.173	Elastic
		2380	5.225	6.250	-9.499	-281.457	1.968	-58.282	Elastic
		2381	5.300	6.275	-12.053	-283.977	-0.029	-59.241	Elastic
		2382	5.225	6.275	-11.762	-285.493	-0.777	-59.456	Elastic
		2383	5.243	6.236	-8.043	-287.897	-1.793	-59.239	Elastic
		2384	5.341	6.269	-11.383	-279.995	-0.255	-58.319	Elastic
		2385	5.341	6.295	-13.291	-281.051	-1.221	-58.976	Elastic
		2386	5.243	6.295	-12.059	-281.144	2.028	-58.648	Elastic
		2387	5.166	6.269	-11.453	-278.578	-4.984	-58.050	Elastic
		2388	5.166	6.236	-3.895	-283.303	3.313	-53.530	Elastic

Table A.3 Cartesian Total Stresses for Case 3

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
1	1 Soil	1	6.488	6.294	-3.190	-0.039	-0.354	-0.974	Tension
		2	5.525	6.294	-3.094	-0.370	1.070	-1.045	Tension
		3	5.525	6.213	-2.518	-0.946	1.543	-1.114	Tension
		4	6.045	6.275	-0.050	-0.626	0.178	-0.224	Tension
		5	5.746	6.275	-2.691	-0.166	-0.669	-0.879	Tension
		6	5.746	6.250	0.000	0.000	0.000	-0.043	Tension
		7	6.206	6.295	-0.915	-0.097	0.298	-0.308	Tension
		8	5.819	6.295	-0.363	-0.046	-0.129	-0.127	Tension
		9	5.513	6.269	-3.739	-1.180	1.660	-1.502	PLASTIC
		10	5.513	6.236	-11.479	-6.243	4.604	-5.370	PLASTIC
		11	5.819	6.236	-0.317	-1.657	0.725	-0.647	Tension
		12	6.206	6.269	-0.001	-0.447	-0.024	-0.161	Tension
	2 Soil	13	5.581	6.006	-3.053	-0.411	1.120	-1.289	Tension
		14	5.459	6.087	-3.310	-5.889	2.891	-2.941	PLASTIC
		15	5.459	6.006	-83.929	-80.728	42.000	-49.647	PLASTIC
		16	5.525	6.025	-9.822	-6.654	4.707	-5.117	PLASTIC
		17	5.487	6.050	-9.041	-21.559	5.775	-9.392	PLASTIC
		18	5.487	6.025	-2.425	-1.039	1.587	-1.273	Tension
		19	5.545	6.031	-2.282	-1.182	1.642	-1.268	Tension
		20	5.497	6.064	-0.313	-3.151	0.993	-1.240	Tension
		21	5.458	6.064	-6.939	-8.651	4.686	-4.878	PLASTIC
		22	5.458	6.031	-1.561	-1.903	1.724	-1.269	Tension
		23	5.497	6.005	-2.130	-1.334	1.686	-1.290	Tension
		24	5.545	6.005	-19.605	-9.240	6.195	-8.904	PLASTIC
	3 Soil	25	5.858	5.830	-7.291	-15.885	5.069	-7.352	PLASTIC
		26	5.619	5.796	-15.225	-14.100	8.178	-9.226	PLASTIC
		27	5.619	5.715	-16.598	-16.350	9.102	-10.381	PLASTIC
		28	5.748	5.796	-14.342	-11.184	7.074	-8.086	PLASTIC
		29	5.674	5.786	-14.746	-11.540	7.263	-8.323	PLASTIC
		30	5.674	5.760	-14.560	-11.745	7.308	-8.350	PLASTIC
		31	5.788	5.821	-12.070	-12.859	7.097	-7.885	PLASTIC
		32	5.692	5.808	-13.077	-9.629	6.311	-7.230	PLASTIC
		33	5.616	5.771	-16.990	-16.069	9.119	-10.367	PLASTIC
		34	5.616	5.739	-16.489	-14.950	8.471	-9.609	PLASTIC
		35	5.692	5.749	-15.092	-12.204	7.553	-8.657	PLASTIC
		36	5.788	5.796	-13.132	-12.666	7.312	-8.168	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	4	37	5.839	5.562	-16.640	-13.964	8.411	-9.808	PLASTIC
	Soil	38	5.617	5.591	-24.783	-23.799	13.002	-15.177	PLASTIC
		39	5.617	5.510	-33.181	-36.601	18.231	-21.606	PLASTIC
		40	5.737	5.557	-21.308	-18.168	10.620	-12.474	PLASTIC
		41	5.668	5.568	-21.257	-18.915	10.846	-12.675	PLASTIC
		42	5.668	5.541	-18.974	-18.294	10.175	-11.923	PLASTIC
		43	5.774	5.572	-22.374	-14.940	9.493	-11.813	PLASTIC
		44	5.695	5.584	-24.620	-17.339	10.756	-13.197	PLASTIC
		45	5.615	5.597	-20.458	-22.039	11.463	-13.372	PLASTIC
		46	5.615	5.534	-22.032	-25.544	12.638	-14.923	PLASTIC
		47	5.695	5.525	-19.565	-17.177	9.980	-11.681	PLASTIC
		48	5.774	5.546	-20.977	-16.779	10.089	-11.987	PLASTIC
	5	49	4.782	5.326	-14.591	-38.144	-3.620	-16.048	Elastic
	Soil	50	4.984	5.493	-1.632	-1.832	-1.729	-1.725	Tension
		51	4.984	5.574	-2.595	-3.571	-2.358	-2.467	PLASTIC
		52	4.875	5.422	-23.032	-11.373	-7.459	-11.068	PLASTIC
		53	4.938	5.474	-32.833	-24.624	-14.667	-17.939	PLASTIC
		54	4.938	5.499	-30.631	-28.695	-15.668	-18.479	PLASTIC
		55	4.841	5.374	-24.392	-20.513	-11.936	-14.259	PLASTIC
		56	4.923	5.441	-47.720	-27.200	-16.695	-23.206	PLASTIC
		57	4.997	5.520	-9.728	-10.010	-5.799	-8.584	PLASTIC
		58	4.997	5.553	-25.668	-27.789	-14.191	-18.672	PLASTIC
		59	4.923	5.500	-25.385	-20.641	-12.143	-14.469	PLASTIC
		60	4.841	5.400	-28.408	-10.087	-5.111	-12.313	PLASTIC
	6	61	4.831	5.657	-18.859	-15.228	-9.869	-10.772	Elastic
	Soil	62	4.988	5.703	-19.370	-18.046	-10.199	-11.732	PLASTIC
		63	4.988	5.784	-30.794	-28.631	-15.685	-18.266	PLASTIC
		64	4.903	5.697	-20.080	-18.323	-10.430	-12.034	PLASTIC
		65	4.952	5.711	-18.886	-15.695	-9.376	-10.975	PLASTIC
		66	4.952	5.736	-13.316	-11.050	-6.865	-7.789	PLASTIC
		67	4.877	5.669	-17.941	-18.613	-9.999	-11.502	PLASTIC
		68	4.940	5.683	-17.287	-13.842	-9.475	-9.959	PLASTIC
		69	4.990	5.729	-18.440	-17.494	-9.836	-11.266	PLASTIC
		70	4.990	5.761	-13.975	-13.218	-7.632	-9.596	PLASTIC
		71	4.940	5.746	-13.621	-10.892	-6.860	-7.825	PLASTIC
		72	4.877	5.695	-17.307	-20.060	-10.115	-11.724	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	7	73	4.752	5.883	-21.770	-8.612	-5.321	-9.469	PLASTIC
	Soil	74	4.982	5.905	-14.987	-11.637	-7.333	-8.323	PLASTIC
		75	4.982	5.986	-3.463	-0.001	-0.055	-1.305	Tension
		76	4.858	5.911	-3.237	-12.591	-1.179	-5.079	PLASTIC
		77	4.929	5.918	-13.572	-9.169	-6.170	-7.147	PLASTIC
		78	4.929	5.943	-9.779	-9.112	-5.579	-5.971	PLASTIC
		79	4.820	5.888	-8.568	-17.194	-5.898	-8.079	PLASTIC
		80	4.912	5.897	-20.594	-8.625	-5.563	-9.109	PLASTIC
		81	4.985	5.930	-11.909	-7.286	-5.171	-8.073	PLASTIC
		82	4.985	5.962	-2.788	-0.676	-1.373	-1.325	Tension
		83	4.912	5.955	-7.338	-11.595	-5.179	-5.973	PLASTIC
		84	4.820	5.914	-4.497	-13.599	-2.858	-5.757	PLASTIC
	8	85	5.019	6.006	-3.028	-0.436	-1.150	-1.289	Tension
	Soil	86	5.141	6.006	-77.535	-70.206	-37.623	-44.572	PLASTIC
		87	5.141	6.087	-2.688	-4.441	-2.499	-2.319	PLASTIC
		88	5.075	6.025	-12.248	-6.763	-4.904	-5.937	PLASTIC
		89	5.113	6.025	-2.465	-0.999	-1.569	-1.273	Tension
		90	5.113	6.050	-7.553	-17.576	-5.097	-7.751	PLASTIC
		91	5.055	6.005	-14.013	-7.664	-5.539	-6.813	PLASTIC
		92	5.103	6.005	-2.201	-1.263	-1.667	-1.290	Tension
		93	5.142	6.031	-1.561	-1.903	-1.724	-1.269	Tension
		94	5.142	6.064	-7.421	-9.701	-4.855	-5.039	PLASTIC
		95	5.103	6.064	-0.405	-3.059	-1.114	-1.240	Tension
		96	5.055	6.031	-2.522	-0.942	-1.541	-1.268	Tension
	9	97	4.250	6.294	-2.939	-0.053	0.395	-0.903	Tension
	Soil	98	5.085	6.213	-2.477	-0.987	-1.564	-1.114	Tension
		99	5.085	6.294	-2.911	-0.553	-1.269	-1.045	Tension
		100	4.634	6.275	-0.017	-0.650	-0.104	-0.221	Tension
		101	4.893	6.250	0.000	0.000	0.000	-0.043	Tension
		102	4.893	6.275	-2.757	-0.149	0.639	-0.893	Tension
		103	4.494	6.269	0.000	-0.371	-0.003	-0.139	Tension
		104	4.830	6.236	-0.433	-1.723	-0.864	-0.701	Tension
		105	5.095	6.236	-11.657	-6.559	-4.783	-5.519	PLASTIC
		106	5.095	6.269	-3.266	-1.070	-1.611	-1.327	PLASTIC
		107	4.830	6.295	-0.654	-0.102	0.258	-0.231	Tension
		109	4.494	6.295	-1.307	-0.117	-0.392	-0.432	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	10 Soil	109	5.459	6.181	-2.581	-3.713	2.373	-1.989	PLASTIC
		110	5.459	6.100	-1.406	-3.375	1.811	-1.604	PLASTIC
		111	5.681	6.019	-6.050	-5.395	3.713	-3.673	PLASTIC
		112	5.487	6.125	-8.148	-8.922	5.119	-5.270	PLASTIC
		113	5.487	6.100	-3.779	-8.462	3.152	-3.842	PLASTIC
		114	5.525	6.075	-2.900	-1.075	1.620	-1.384	PLASTIC
		115	5.458	6.159	-8.391	-13.561	5.804	-6.706	PLASTIC
		116	5.458	6.126	-6.160	-10.763	4.547	-5.225	PLASTIC
		117	5.497	6.074	-4.625	-10.290	3.618	-4.666	PLASTIC
		118	5.545	6.042	-3.143	-1.014	1.580	-1.467	PLASTIC
		119	5.545	6.097	-3.316	-1.378	1.794	-1.606	PLASTIC
		120	5.497	6.133	-7.625	-5.130	3.858	-3.969	PLASTIC
	11 Soil	121	5.858	5.843	-3.765	-12.959	2.083	-5.406	PLASTIC
		122	5.619	5.890	-16.362	-14.705	8.593	-9.669	PLASTIC
		123	5.619	5.809	-14.191	-13.058	7.657	-8.592	PLASTIC
		124	5.748	5.846	-14.962	-10.249	6.770	-7.949	PLASTIC
		125	5.674	5.881	-11.724	-8.171	5.563	-6.342	PLASTIC
		126	5.674	5.835	-13.231	-9.669	6.346	-7.265	PLASTIC
		127	5.788	5.858	-9.982	-14.120	6.573	-7.606	PLASTIC
		128	5.692	5.877	-9.869	-6.177	4.515	-5.174	PLASTIC
		129	5.616	5.686	-14.613	-13.306	7.818	-8.745	PLASTIC
		130	5.616	5.833	-14.402	-13.268	7.763	-8.698	PLASTIC
		131	5.692	5.818	-13.091	-9.482	6.254	-7.181	PLASTIC
		132	5.788	5.832	-11.961	-13.522	7.195	-8.043	PLASTIC
	12 Soil	133	5.839	5.575	-15.370	-14.186	8.234	-9.483	PLASTIC
		134	5.617	5.695	-21.129	-21.999	11.640	-13.461	PLASTIC
		135	5.617	5.604	-21.870	-22.821	12.029	-13.999	PLASTIC
		136	5.737	5.607	-17.923	-16.343	9.399	-10.869	PLASTIC
		137	5.668	5.641	-17.533	-16.059	9.235	-10.638	PLASTIC
		138	5.668	5.616	-17.672	-16.947	9.514	-10.967	PLASTIC
		139	5.774	5.608	-19.524	-14.369	8.977	-10.756	PLASTIC
		140	5.685	5.653	-14.416	-14.220	8.024	-9.141	PLASTIC
		141	5.615	5.662	-17.991	-18.103	9.890	-11.371	PLASTIC
		142	5.615	5.629	-16.079	-17.642	9.263	-10.636	PLASTIC
		143	5.695	5.594	-16.640	-16.646	9.198	-10.586	PLASTIC
		144	5.774	5.583	-12.154	-14.384	7.417	-8.571	PLASTIC

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	13 Soil	145	4.831	5.645	-15.552	-18.137	-9.198	-10.664	PLASTIC
		146	4.998	5.609	-17.568	-16.979	-9.503	-10.958	PLASTIC
		147	4.988	5.690	-18.080	-17.011	-9.624	-11.046	PLASTIC
		148	4.903	5.647	-18.783	-16.632	-9.660	-11.180	PLASTIC
		149	4.952	5.636	-19.774	-17.625	-10.159	-11.784	PLASTIC
		150	4.952	5.661	-18.749	-16.086	-9.482	-10.994	PLASTIC
		151	4.877	5.633	-19.466	-18.079	-10.229	-11.830	PLASTIC
		152	4.940	5.619	-20.186	-18.065	-10.375	-12.054	PLASTIC
		153	4.990	5.633	-20.931	-20.388	-11.193	-12.962	PLASTIC
		154	4.990	5.666	-19.677	-18.939	-10.514	-12.124	PLASTIC
		155	4.940	5.677	-19.349	-15.726	-9.463	-11.052	PLASTIC
		156	4.877	5.659	-17.907	-18.427	-9.948	-11.445	PLASTIC
	14 Soil	157	4.752	5.870	-1.035	-5.699	-0.918	-2.445	PLASTIC
		158	4.982	5.811	-37.895	-35.373	-19.141	-22.396	PLASTIC
		159	4.982	5.892	-13.692	-12.412	-7.384	-8.178	PLASTIC
		160	4.858	5.862	-25.227	-13.315	-8.649	-11.935	PLASTIC
		161	4.929	5.843	-8.911	-6.996	-4.747	-5.160	PLASTIC
		162	4.929	5.869	-20.316	-16.088	-9.740	-11.268	PLASTIC
		163	4.820	5.852	-11.722	-20.234	-7.765	-9.968	PLASTIC
		164	4.912	5.828	-13.344	-10.152	-6.548	-7.450	PLASTIC
		165	4.985	5.835	-7.379	-7.100	-4.494	-4.739	PLASTIC
		166	4.985	5.868	-28.045	-26.917	-14.596	-16.856	PLASTIC
		167	4.912	5.898	-5.270	-3.498	-2.927	-2.982	PLASTIC
		168	4.820	5.878	-8.311	-19.919	-5.395	-8.928	PLASTIC
	15 Soil	169	5.076	6.194	-3.845	-1.903	-2.088	-1.815	PLASTIC
		170	4.241	6.275	-0.193	-1.172	-0.475	-0.431	Tension
		171	4.954	6.032	-5.405	-6.405	-3.786	-3.771	PLASTIC
		172	4.856	6.175	-1.999	-2.754	-2.019	-1.532	PLASTIC
		173	4.596	6.200	-1.499	-1.966	1.716	-1.124	Tension
		174	4.818	6.125	-2.405	-5.001	-2.398	-2.371	PLASTIC
		175	4.822	6.220	-0.317	-2.405	-0.874	-0.884	Tension
		176	4.486	6.253	0.000	0.000	0.000	-0.040	Tension
		177	4.448	6.202	-0.015	-0.696	-0.103	-0.294	Tension
		178	4.735	6.104	-0.708	-4.657	-0.987	-1.778	PLASTIC
		179	5.000	6.078	-4.805	-4.315	-3.136	-2.925	PLASTIC
		180	5.049	6.143	-4.718	-2.976	-2.650	-2.441	PLASTIC

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	16 Soil	181	5.689	5.073	-36.813	-98.161	16.029	-41.522	PLASTIC
		182	5.680	5.469	-43.493	-125.016	13.671	-51.246	PLASTIC
		183	5.337	5.469	-39.336	-121.158	2.541	-48.834	PLASTIC
		184	5.518	5.255	-41.330	-114.945	15.492	-47.758	PLASTIC
		185	5.522	5.378	-45.340	-126.724	16.425	-52.390	PLASTIC
		186	5.446	5.378	-46.214	-140.338	6.467	-56.729	PLASTIC
		187	5.575	5.189	-38.457	-92.664	19.937	-40.268	PLASTIC
		188	5.590	5.348	-42.037	-103.420	21.074	-44.433	PLASTIC
		189	5.506	5.474	-43.650	-132.052	7.247	-53.400	PLASTIC
		190	5.408	5.474	-47.171	-140.514	10.264	-56.987	PLASTIC
		191	5.405	5.348	-40.519	-124.028	-1.397	-50.423	PLASTIC
		192	5.498	5.189	-34.297	-103.101	7.527	-42.151	PLASTIC
	17 Soil	193	5.117	5.118	-36.777	-103.005	-13.636	-42.927	PLASTIC
		194	5.269	5.472	-38.864	-120.048	-0.421	-48.357	PLASTIC
		195	5.026	5.472	-40.607	-118.736	-11.000	-48.404	Elastic
		196	5.131	5.281	-41.671	-124.136	-9.521	-50.596	PLASTIC
		197	5.178	5.391	-45.638	-139.228	-5.195	-56.212	PLASTIC
		198	5.103	5.391	-44.878	-132.152	-11.487	-53.869	PLASTIC
		199	5.185	5.222	-37.984	-117.380	-0.836	-47.506	PLASTIC
		200	5.226	5.384	-39.576	-121.074	4.782	-48.970	PLASTIC
		201	5.197	5.477	-48.166	-144.671	-8.949	-58.531	PLASTIC
		202	5.099	5.477	-42.834	-127.925	-6.463	-51.915	Elastic
		203	5.051	5.384	-43.166	-121.930	-14.994	-50.312	PLASTIC
		204	5.088	5.222	-38.201	-105.380	-14.037	-43.979	PLASTIC
	18 Soil	205	3.582	5.503	-13.887	-13.724	-0.366	-8.961	Elastic
		206	4.021	6.242	-0.013	-1.223	-0.024	-0.420	Elastic
		207	3.186	6.242	-0.004	-0.902	0.057	-0.321	Tension
		208	3.592	5.643	-4.181	-8.827	0.323	-4.231	Elastic
		209	3.728	6.073	-0.003	-3.472	-0.001	-1.236	PLASTIC
		210	3.469	6.073	-0.095	-3.725	-0.008	-1.339	Elastic
		211	3.721	5.719	-7.667	-9.940	0.308	-5.776	Elastic
		212	3.897	6.017	-0.367	-4.554	0.089	-1.717	Elastic
		213	3.772	6.252	0.000	-0.919	-0.004	-0.317	Tension
		214	3.436	6.252	-0.001	-0.958	0.026	-0.329	Tension
		215	3.296	6.017	-1.027	-5.093	0.246	-2.074	Elastic
		216	3.456	5.719	-7.690	-9.732	0.500	-5.720	Elastic

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	21	241	5.656	6.032	-5.473	-5.679	3.653	-3.574	PLASTIC
	Soil	242	6.497	6.275	-0.123	-1.205	0.386	-0.420	Tension
		243	5.534	6.194	-4.280	-2.067	2.188	-1.988	PLASTIC
		244	5.821	6.125	-3.075	-5.186	2.735	-2.627	PLASTIC
		245	6.093	6.200	-1.369	-2.095	-1.694	-1.124	Tension
		246	5.783	6.175	-1.069	-2.165	1.521	-1.077	Tension
		247	5.914	6.104	-0.484	-4.574	0.599	-1.664	PLASTIC
		248	6.252	6.202	-0.027	-0.621	0.130	-0.278	Tension
		249	6.214	6.253	0.000	0.000	0.000	-0.040	Tension
		250	5.827	6.220	-0.351	-2.486	0.934	-0.919	Tension
		251	5.560	6.143	-5.193	-3.060	2.728	-2.609	PLASTIC
		252	5.609	6.079	-4.481	-3.617	2.855	-2.612	PLASTIC
	24	277	5.858	5.690	-17.781	-19.773	10.206	-11.970	PLASTIC
	Soil	278	5.875	5.815	-8.018	-16.274	5.578	-7.699	PLASTIC
		279	5.636	5.700	-16.309	-15.564	8.827	-10.072	PLASTIC
		280	5.811	5.667	-15.185	-13.299	7.931	-9.083	PLASTIC
		281	5.816	5.737	-14.545	-15.038	8.258	-9.353	PLASTIC
		282	5.742	5.702	-15.232	-12.308	7.612	-8.771	PLASTIC
		283	5.866	5.658	-15.471	-20.810	9.571	-11.430	PLASTIC
		284	5.873	5.748	-13.771	-21.053	8.953	-10.916	PLASTIC
		285	5.802	5.783	-13.629	-13.986	7.768	-8.724	PLASTIC
		286	5.706	5.737	-14.660	-11.698	7.307	-8.366	PLASTIC
		287	5.701	5.665	-17.768	-15.099	8.994	-10.400	PLASTIC
		288	5.790	5.621	-16.263	-12.928	7.992	-9.335	PLASTIC
	25	289	6.136	5.166	-42.747	-37.257	14.858	-24.965	Elastic
	Soil	290	5.877	5.532	-18.298	-27.886	10.203	-14.508	Elastic
		291	5.655	5.480	-21.496	-20.231	11.280	-13.215	PLASTIC
		292	5.966	5.322	-26.853	-24.452	2.448	-16.223	Elastic
		293	5.885	5.436	-25.869	-30.453	9.833	-17.637	Elastic
		294	5.816	5.420	-38.032	-28.831	17.076	-21.077	PLASTIC
		295	6.063	5.274	-28.031	-14.954	9.597	-13.768	PLASTIC
		296	5.959	5.421	-27.420	-23.851	3.034	-16.128	Elastic
		297	5.806	5.520	-18.499	-14.940	9.052	-10.694	PLASTIC
		298	5.717	5.499	-18.686	-15.756	9.359	-11.007	PLASTIC
		299	5.799	5.384	-46.688	-31.206	19.909	-24.147	PLASTIC
		300	5.993	5.259	-24.648	-25.792	9.540	-16.017	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	26	301	5.083	5.105	-38.084	-109.823	-12.736	-45.075	PLASTIC
	Soil	302	4.991	5.459	-46.032	-77.566	-27.576	-37.793	PLASTIC
		303	4.789	5.292	-49.392	-36.661	-21.455	-26.872	PLASTIC
		304	4.994	5.230	-42.200	-72.052	-25.363	-35.185	PLASTIC
		305	4.966	5.340	-42.045	-48.430	-23.267	-27.959	PLASTIC
		306	4.903	5.288	-45.568	-34.292	-20.054	-24.818	PLASTIC
		307	5.058	5.211	-38.723	-109.851	-13.536	-45.425	PLASTIC
		308	5.022	5.353	-39.792	-89.316	-22.029	-39.524	PLASTIC
		309	4.929	5.413	-26.543	-24.392	-13.557	-16.035	PLASTIC
		310	4.847	5.346	-35.934	-22.440	-13.909	-18.323	PLASTIC
		311	4.876	5.233	-39.372	-32.935	-18.667	-22.599	PLASTIC
		312	4.994	5.158	-34.509	-63.653	-20.812	-30.419	PLASTIC
	27	313	4.815	5.619	-19.930	-19.782	-10.794	-12.493	PLASTIC
	Soil	314	4.770	5.335	-23.375	-25.155	-7.408	-15.379	Elastic
		315	4.972	5.583	-25.348	-22.869	-12.861	-15.074	PLASTIC
		316	4.841	5.546	-19.165	-18.699	-10.330	-12.001	PLASTIC
		317	4.827	5.457	-27.020	-30.778	-15.200	-18.056	PLASTIC
		318	4.890	5.535	-18.272	-14.940	-9.016	-10.614	PLASTIC
		319	4.799	5.533	-18.438	-22.580	-10.250	-12.957	Elastic
		320	4.781	5.419	-30.831	-25.386	-9.938	-17.614	Elastic
		321	4.831	5.408	-38.979	-33.514	-18.774	-22.477	PLASTIC
		322	4.912	5.507	-18.265	-14.162	-8.735	-10.402	PLASTIC
		323	4.927	5.597	-22.269	-19.555	-11.240	-13.145	PLASTIC
		324	4.884	5.612	-20.528	-18.761	-10.652	-12.372	PLASTIC
	28	325	4.740	5.654	-8.684	-13.594	-4.827	-8.463	PLASTIC
	Soil	326	4.813	5.668	-18.076	-20.540	-10.448	-12.122	PLASTIC
		327	4.970	5.795	-12.057	-10.882	-6.575	-7.311	PLASTIC
		328	4.810	5.798	-15.843	-15.414	-8.678	-9.804	PLASTIC
		329	4.832	5.740	-16.828	-17.093	-9.343	-10.649	PLASTIC
		330	4.881	5.779	-20.659	-17.326	-10.227	-11.839	PLASTIC
		331	4.760	5.799	-14.928	-15.938	-7.462	-9.686	Elastic
		332	4.789	5.723	-17.561	-17.740	-9.691	-11.080	PLASTIC
		333	4.862	5.704	-15.336	-16.858	-8.882	-10.164	PLASTIC
		334	4.925	5.755	-16.394	-16.280	-9.474	-10.962	PLASTIC
		335	4.902	5.814	-19.393	-16.175	-9.624	-11.083	PLASTIC
		336	4.809	5.839	-10.239	-13.971	-6.662	-7.856	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	30	349	5.019	6.019	-6.198	-3.915	-3.196	-3.273	PLASTIC
	Soil	350	5.141	6.100	-2.465	-4.476	-2.399	-2.252	PLASTIC
		351	5.141	6.181	-7.370	-9.769	-5.009	-5.243	PLASTIC
		352	5.075	6.075	-3.822	-1.297	-1.735	-1.727	PLASTIC
		353	5.113	6.100	-5.150	-8.945	-3.959	-4.398	PLASTIC
		354	5.113	6.125	-5.437	-4.876	-3.433	-3.242	PLASTIC
		355	5.055	6.042	-3.069	-1.050	-1.605	-1.455	PLASTIC
		356	5.103	6.074	-4.740	-7.814	-3.698	-3.958	PLASTIC
		357	5.142	6.126	-6.288	-9.644	-4.550	-4.928	PLASTIC
		358	5.142	6.158	-5.764	-8.511	-4.217	-4.403	PLASTIC
		359	5.103	6.133	-5.695	-3.193	-2.823	-2.809	PLASTIC
		360	5.055	6.067	-3.142	-0.767	-1.410	-1.370	PLASTIC
	31	361	4.213	6.254	-1.425	-0.043	0.247	-0.479	Tension
	Soil	362	4.697	5.908	-9.931	-5.995	-2.249	-5.111	Elastic
		363	4.927	6.011	-7.819	-9.770	-5.172	-5.522	PLASTIC
		364	4.488	6.119	-0.899	-6.150	-0.117	-2.269	PLASTIC
		365	4.638	6.011	-2.896	-2.374	2.168	-1.827	PLASTIC
		366	4.710	6.043	-1.020	-4.146	-1.497	-1.768	PLASTIC
		367	4.352	6.152	-0.232	-1.217	-0.532	-0.561	Tension
		368	4.546	6.012	-1.696	-8.373	0.547	-3.265	PLASTIC
		369	4.773	5.935	-10.355	-10.549	-6.091	-6.581	PLASTIC
		370	4.865	5.977	-7.369	-11.599	-5.194	-5.965	PLASTIC
		371	4.712	6.086	-0.369	-3.537	-0.928	-1.359	Elastic
		372	4.425	6.184	-0.195	-1.816	0.595	-0.702	Tension
	32	373	6.118	5.132	-22.223	-21.658	11.352	-14.218	Elastic
	Soil	374	5.637	5.445	-43.805	-52.983	24.636	-29.757	PLASTIC
		375	5.625	5.049	-38.586	-52.380	21.772	-28.353	Elastic
		376	5.894	5.185	-45.847	-34.906	20.331	-25.174	PLASTIC
		377	5.745	5.282	-37.414	-31.068	17.704	-21.410	PLASTIC
		378	5.741	5.159	-40.207	-41.009	21.166	-25.335	PLASTIC
		379	5.977	5.228	-38.283	-39.427	11.792	-24.224	Elastic
		380	5.784	5.354	-27.483	-18.180	11.365	-14.497	PLASTIC
		381	5.627	5.328	-43.806	-61.950	25.754	-32.553	PLASTIC
		382	5.623	5.189	-38.807	-63.149	23.376	-31.548	PLASTIC
		383	5.776	5.069	-36.090	-42.852	20.322	-24.729	PLASTIC
		384	5.974	5.102	-34.435	-40.866	14.338	-23.608	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	34 Soil	397	5.538	5.048	-34.932	-92.460	15.583	-39.271	PLASTIC
		398	5.306	5.442	-39.739	-122.682	0.029	-49.436	PLASTIC
		399	5.154	5.087	-36.073	-106.406	-9.722	-43.754	PLASTIC
		400	5.397	5.146	-39.969	-122.417	4.440	-49.676	PLASTIC
		401	5.325	5.269	-41.657	-127.709	0.285	-51.666	Elastic
		402	5.277	5.159	-42.137	-128.236	0.635	-52.061	Elastic
		403	5.472	5.168	-39.294	-116.629	9.623	-47.728	PLASTIC
		404	5.379	5.325	-41.157	-126.904	0.804	-51.227	PLASTIC
		405	5.257	5.338	-41.865	-129.056	0.291	-52.074	PLASTIC
		406	5.196	5.196	-41.102	-126.163	-3.176	-51.099	Elastic
		407	5.289	5.070	-40.994	-126.364	-1.329	-51.233	PLASTIC
		408	5.424	5.054	-38.930	-118.211	8.896	-47.562	PLASTIC
	40 Soil	469	6.296	5.639	-13.121	-12.851	2.412	-8.353	Elastic
		470	5.923	5.811	-8.569	-12.548	5.815	-6.751	PLASTIC
		471	5.906	5.586	-15.847	-23.884	8.813	-12.520	Elastic
		472	6.120	5.666	-13.640	-13.563	3.979	-8.789	Elastic
		473	6.004	5.720	-12.005	-13.770	5.126	-8.226	Elastic
		474	5.999	5.650	-15.678	-17.238	6.419	-10.428	Elastic
		475	6.187	5.692	-11.718	-12.168	2.566	-7.683	Elastic
		476	6.037	5.761	-9.530	-12.484	4.816	-7.062	Elastic
		477	5.913	5.744	-11.664	-14.592	7.180	-8.355	Elastic
		478	5.906	5.654	-16.067	-20.876	9.041	-11.632	Elastic
		479	6.024	5.599	-17.084	-17.945	5.628	-11.104	Elastic
		480	6.181	5.621	-15.333	-14.489	3.657	-9.524	Elastic
	41 Soil	481	4.726	4.658	-32.661	-57.995	-15.577	-28.593	Elastic
		482	5.063	5.047	-32.089	-80.203	-13.485	-34.734	Elastic
		483	4.770	5.235	-39.644	-31.796	-18.310	-22.338	PLASTIC
		484	4.814	4.880	-34.253	-35.418	-18.274	-22.109	PLASTIC
		485	4.919	5.001	-38.015	-49.792	-22.045	-27.446	PLASTIC
		486	4.827	5.059	-34.921	-32.634	-17.696	-21.291	PLASTIC
		487	4.829	4.769	-32.972	-37.575	-18.359	-22.485	PLASTIC
		488	4.964	4.926	-35.496	-68.518	-21.198	-32.372	PLASTIC
		489	4.978	5.109	-36.229	-66.342	-21.818	-31.784	PLASTIC
		490	4.860	5.185	-38.121	-33.549	-18.644	-22.449	PLASTIC
		491	4.753	5.061	-36.183	-41.726	-20.154	-24.426	PLASTIC
		492	4.736	4.829	-35.429	-54.404	-19.555	-28.201	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	42	493	4.424	5.579	-17.598	-15.830	-4.342	-10.641	Elastic
	Soil	494	4.730	5.335	-31.162	-26.884	-11.392	-18.228	Elastic
		495	4.776	5.619	-18.140	-20.136	-10.387	-12.082	PLASTIC
		496	4.575	5.532	-20.376	-19.510	-8.980	-12.618	Elastic
		497	4.670	5.456	-24.720	-23.596	-9.212	-15.212	Elastic
		498	4.684	5.544	-20.142	-21.082	-8.466	-13.003	Elastic
		499	4.513	5.504	-21.018	-19.232	-8.253	-12.751	Elastic
		500	4.636	5.406	-26.347	-25.551	-9.079	-16.329	Elastic
		501	4.748	5.419	-27.597	-24.649	-10.742	-16.423	Elastic
		502	4.766	5.533	-20.495	-23.269	-9.927	-13.782	Elastic
		503	4.669	5.610	-17.828	-18.213	-8.790	-11.398	Elastic
		504	4.527	5.594	-17.654	-17.029	-5.695	-11.005	Elastic
	43	505	4.422	5.616	-15.914	-14.691	-3.972	-9.760	Elastic
	Soil	506	4.774	5.655	-18.081	-18.553	-9.975	-11.538	Elastic
		507	4.701	5.841	-6.340	-5.411	-3.775	-3.915	PLASTIC
		508	4.567	5.677	-14.868	-13.764	-5.650	-9.119	Elastic
		509	4.676	5.689	-15.931	-15.483	-8.214	-9.944	Elastic
		510	4.653	5.747	-14.320	-12.821	-5.857	-9.813	Elastic
		511	4.526	5.625	-16.495	-16.013	-5.579	-10.328	Elastic
		512	4.667	5.641	-17.430	-17.252	-8.086	-10.965	Elastic
		513	4.756	5.712	-16.622	-17.513	-9.389	-10.740	PLASTIC
		514	4.728	5.787	-14.358	-11.694	-7.326	-8.312	PLASTIC
		515	4.615	5.775	-11.260	-11.992	-4.539	-7.422	Elastic
		516	4.503	5.684	-13.661	-13.416	-4.501	-8.647	Elastic
	48	541	4.378	5.657	-13.784	-13.115	-2.776	-8.616	Elastic
	Soil	542	4.657	5.883	-7.989	-9.666	-3.079	-5.651	Elastic
		543	4.174	6.229	0.000	-0.012	0.002	-0.004	Tension
		544	4.395	5.840	-5.423	-8.833	-1.281	-4.668	Elastic
		545	4.482	5.910	-2.405	-6.015	-1.611	-3.457	Elastic
		546	4.332	6.018	-0.025	-3.439	-0.292	-1.279	Tension
		547	4.466	5.719	-11.612	-11.684	-3.464	-7.493	Elastic
		548	4.578	5.810	-8.619	-9.303	-3.658	-5.793	Elastic
		549	4.513	5.991	-0.554	-4.342	-0.884	-1.732	PLASTIC
		550	4.319	6.130	-0.184	-3.026	-0.747	-1.107	Tension
		551	4.230	6.059	-0.023	-3.430	-0.284	-1.241	Tension
		552	4.313	5.829	-4.453	-8.343	-1.349	-4.239	Elastic

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	47	553	5.959	4.484	-36.069	-60.388	17.814	-30.480	Elastic
	Soil	554	6.141	5.062	-36.977	-33.301	12.433	-22.136	Elastic
		555	5.649	4.979	-31.018	-47.007	18.737	-24.530	PLASTIC
		556	5.930	4.731	-34.978	-52.642	19.564	-27.620	Elastic
		557	5.986	4.911	-35.199	-42.157	16.965	-24.388	Elastic
		558	5.833	4.885	-37.874	-51.528	22.190	-28.024	PLASTIC
		559	6.018	4.855	-35.724	-52.194	17.704	-27.774	Elastic
		560	6.092	4.887	-33.695	-40.399	15.274	-23.429	Elastic
		561	5.993	5.044	-32.243	-38.801	16.705	-21.781	Elastic
		562	5.795	5.011	-34.739	-47.457	20.449	-25.755	PLASTIC
		563	5.737	4.827	-39.120	-52.447	22.804	-28.722	PLASTIC
		564	5.882	4.828	-32.068	-57.381	19.477	-28.256	PLASTIC
	49	577	5.342	4.560	-33.313	-103.338	1.072	-42.454	PLASTIC
	Soil	578	5.541	4.982	-36.408	-81.096	19.631	-36.359	Elastic
		579	5.157	5.024	-36.765	-105.216	-12.279	-43.659	PLASTIC
		580	5.345	4.763	-32.228	-99.455	3.414	-40.791	PLASTIC
		581	5.407	4.595	-37.039	-110.678	8.531	-45.490	PLASTIC
		582	5.288	4.908	-36.517	-112.952	-1.097	-46.004	PLASTIC
		583	5.405	4.693	-32.956	-101.351	4.103	-41.647	PLASTIC
		584	5.495	4.553	-36.875	-102.554	13.732	-43.046	Elastic
		585	5.426	5.000	-39.522	-116.481	10.426	-47.886	PLASTIC
		586	5.272	5.017	-38.877	-119.706	-2.803	-48.648	PLASTIC
		587	5.209	4.883	-37.146	-111.369	-8.144	-45.739	PLASTIC
		588	5.293	4.696	-31.071	-96.587	-1.344	-39.634	PLASTIC
	53	625	6.344	5.695	-10.605	-11.527	1.424	-7.162	Elastic
	Soil	626	6.573	6.229	-0.022	-0.027	0.025	-0.075	Tension
		627	5.971	5.857	-8.948	-9.558	3.517	-5.998	Elastic
		628	6.311	5.850	-2.425	-8.344	0.805	-3.613	Elastic
		629	6.382	6.019	-0.070	-3.394	0.487	-1.278	Tension
		630	6.195	5.903	-1.525	-7.999	0.258	-3.195	PLASTIC
		631	6.418	5.849	-2.083	-7.144	0.472	-3.152	Elastic
		632	6.510	6.068	-0.031	-3.527	0.160	-1.265	PLASTIC
		633	6.392	6.122	-0.096	-3.383	0.558	-1.195	PLASTIC
		634	6.150	5.973	-0.754	-5.669	-0.269	-2.205	PLASTIC
		635	6.077	5.800	-6.990	-9.611	2.898	-5.405	Elastic
		636	6.227	5.731	-8.719	-10.733	2.022	-6.319	Elastic

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	55	649	5.288	4.533	-28.486	-58.343	-2.474	-36.531	Elastic
	Soil	650	5.101	4.997	-40.711	-102.796	-15.916	-44.147	Elastic
		651	4.784	4.807	-35.035	-51.123	-20.912	-27.287	PLASTIC
		652	5.124	4.657	-32.626	-84.375	-12.828	-36.485	Elastic
		653	5.066	4.801	-33.164	-78.134	-17.820	-34.651	PLASTIC
		654	4.961	4.680	-35.152	-61.816	-21.276	-30.468	PLASTIC
		655	5.236	4.674	-32.544	-99.648	-4.944	-41.020	PLASTIC
		656	5.161	4.660	-34.974	-101.094	-11.129	-42.024	PLASTIC
		657	4.996	4.884	-34.948	-66.670	-20.942	-31.690	PLASTIC
		658	4.880	4.727	-36.173	-53.573	-21.618	-28.261	PLASTIC
		659	4.919	4.580	-31.640	-57.566	-19.202	-28.224	PLASTIC
		660	5.129	4.550	-30.200	-79.782	-12.743	-34.470	Elastic
	62	733	5.398	4.519	-26.951	-60.982	8.763	-33.874	PLASTIC
	Soil	734	5.905	4.445	-30.370	-65.054	16.936	-30.204	Elastic
		735	5.595	4.940	-42.833	-78.245	24.080	-37.467	Elastic
		736	5.559	4.598	-32.757	-70.901	19.801	-32.531	PLASTIC
		737	5.717	4.576	-32.845	-55.815	19.963	-28.064	PLASTIC
		738	5.621	4.730	-32.229	-58.012	19.560	-28.407	PLASTIC
		739	5.549	4.491	-30.814	-69.755	17.244	-31.696	PLASTIC
		740	5.754	4.461	-29.243	-53.773	17.905	-26.469	PLASTIC
		741	5.817	4.595	-36.292	-57.500	21.880	-29.587	PLASTIC
		742	5.692	4.794	-33.102	-48.669	19.836	-25.911	PLASTIC
		743	5.531	4.818	-34.068	-79.446	17.495	-35.307	Elastic
		744	5.451	4.648	-32.096	-69.524	12.895	-37.578	PLASTIC
	68	781	7.088	5.408	-15.136	-16.027	0.581	-10.107	Elastic
	Soil	782	6.653	6.196	-0.074	-2.578	0.437	-0.883	Tension
		783	6.424	5.653	-11.675	-12.085	1.177	-7.678	Elastic
		784	6.836	5.845	-9.424	-11.393	-0.181	-8.501	Elastic
		785	6.701	5.891	-1.485	-7.918	-0.045	-3.169	PLASTIC
		786	6.629	5.721	-7.381	-10.003	-0.161	-5.707	Elastic
		787	6.964	5.646	-9.201	-10.918	-0.112	-8.592	Elastic
		788	6.789	5.963	-1.167	-6.909	0.289	-2.709	PLASTIC
		789	6.578	6.040	-0.027	-3.496	0.205	-1.277	PLASTIC
		700	6.486	5.822	-2.999	-7.534	-0.034	-3.567	Elastic
		791	6.624	5.572	-13.348	-12.887	0.622	-8.489	Elastic
		792	6.891	5.473	-14.823	-14.545	0.473	-9.453	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	69	817	5.072	4.044	-23.338	-58.910	-11.950	-26.579	PLASTIC
	Soil	818	5.284	4.484	-29.221	-81.800	-3.519	-34.847	Elastic
		819	4.762	4.538	-33.505	-53.705	-20.294	-27.660	PLASTIC
		820	5.049	4.254	-27.409	-62.601	-15.378	-28.730	PLASTIC
		821	5.115	4.365	-28.429	-74.566	-13.274	-32.514	PLASTIC
		822	4.953	4.408	-29.969	-58.379	-18.090	-28.113	PLASTIC
		823	5.140	4.186	-23.978	-67.379	-9.540	-29.208	PLASTIC
		824	5.226	4.335	-28.306	-80.609	-4.013	-34.325	Elastic
		825	5.127	4.492	-28.969	-60.398	-11.595	-34.334	PLASTIC
		826	4.917	4.522	-31.228	-56.096	-18.988	-27.709	PLASTIC
		827	4.850	4.388	-29.548	-59.481	-17.629	-28.328	PLASTIC
		828	4.975	4.190	-27.503	-60.552	-15.825	-28.210	PLASTIC
	72	853	7.181	5.451	-13.836	-14.544	0.391	-9.236	Elastic
	Soil	854	7.709	6.239	-0.004	-0.667	-0.059	-0.313	Tension
		855	6.746	6.239	-0.001	-1.339	0.028	-0.454	Tension
		856	7.202	5.813	-4.541	-9.160	-0.393	-4.525	Elastic
		857	7.387	6.058	-0.220	-4.122	-0.040	-1.509	PLASTIC
		858	7.067	6.059	-0.013	-3.503	-0.024	-1.261	PLASTIC
		859	7.347	5.681	-7.744	-10.271	-0.445	-5.931	Elastic
		860	7.560	5.998	-1.258	-5.310	-0.120	-2.227	Elastic
		861	7.422	6.248	-0.001	-1.029	-0.027	-0.353	Tension
		862	7.035	6.248	0.000	-1.004	0.020	-0.345	Tension
		863	6.887	5.998	-0.539	-5.081	-0.039	-1.943	PLASTIC
		864	7.042	5.681	-7.822	-10.513	-0.304	-6.026	Elastic
	78	901	5.611	3.983	-22.538	-60.949	10.182	-27.015	PLASTIC
	Soil	902	5.906	4.376	-32.242	-60.483	16.310	-29.453	Elastic
		903	5.398	4.449	-30.714	-89.682	8.636	-37.672	Elastic
		904	5.630	4.160	-26.590	-62.313	14.636	-28.473	PLASTIC
		905	5.722	4.303	-29.904	-62.554	17.566	-29.435	PLASTIC
		906	5.563	4.325	-26.697	-61.016	14.994	-27.977	PLASTIC
		907	5.704	4.097	-26.610	-65.584	13.582	-29.531	PLASTIC
		908	5.823	4.255	-29.489	-63.659	17.043	-29.742	PLASTIC
		909	5.755	4.403	-31.777	-62.465	19.005	-29.885	PLASTIC
		910	5.550	4.433	-27.957	-62.084	15.978	-28.587	PLASTIC
		911	5.456	4.308	-26.614	-69.145	12.284	-30.409	Elastic
		912	5.542	4.120	-24.008	-59.980	12.428	-27.039	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	77	913	8.524	5.394	-11.439	-15.289	0.018	-8.788	Elastic
	Soil	914	8.908	6.235	-0.283	-1.158	-0.056	-0.468	Elastic
		915	7.945	6.235	-0.002	-1.133	0.043	-0.398	Tension
		916	8.479	5.760	-5.612	-8.920	-0.220	-4.601	Elastic
		917	8.599	6.042	-1.632	-4.364	-0.107	-2.019	Elastic
		918	8.299	6.042	-1.482	-4.386	-0.130	-1.983	Elastic
		919	8.648	5.640	-7.677	-11.155	-0.182	-6.219	Elastic
		920	8.803	5.978	-2.609	-5.435	-0.115	-2.666	Elastic
		921	8.619	6.245	-0.134	-0.957	-0.036	-0.374	Elastic
		922	8.232	6.245	-0.009	-0.953	0.020	-0.334	Elastic
		923	8.110	5.978	-2.188	-5.461	-0.178	-2.568	Elastic
		924	8.343	5.640	-7.807	-11.182	-0.229	-6.258	Elastic
	83	985	5.555	3.956	-21.675	-59.697	9.402	-28.392	PLASTIC
	Soil	986	5.342	4.422	-27.959	-82.828	0.079	-34.812	Elastic
		987	5.129	4.002	-20.868	-59.696	-8.030	-28.107	PLASTIC
		988	5.408	4.074	-21.109	-62.496	6.752	-28.954	PLASTIC
		989	5.342	4.219	-23.797	-71.495	3.348	-30.334	Elastic
		990	5.276	4.088	-21.727	-67.910	-0.437	-28.751	Elastic
		991	5.495	4.097	-21.974	-59.900	9.776	-28.422	PLASTIC
		992	5.409	4.285	-25.262	-74.053	7.450	-31.467	Elastic
		993	5.274	4.300	-26.887	-76.337	-3.317	-32.548	Elastic
		994	5.189	4.131	-23.635	-71.436	-5.966	-30.345	PLASTIC
		995	5.256	3.983	-20.086	-63.680	-0.697	-27.079	PLASTIC
		996	5.428	3.984	-20.884	-61.333	7.056	-26.630	PLASTIC
	84	997	4.470	3.751	-29.991	-69.088	-12.595	-31.690	Elastic
	Soil	998	5.013	3.993	-23.330	-60.010	-11.601	-26.951	PLASTIC
		999	4.703	4.487	-32.912	-81.308	-16.419	-29.807	Elastic
		1000	4.648	3.975	-29.272	-67.289	-13.284	-30.944	Elastic
		1001	4.817	4.051	-28.050	-68.130	-14.798	-30.766	PLASTIC
		1002	4.721	4.204	-29.938	-65.398	-15.974	-30.349	Elastic
		1003	4.633	3.816	-26.881	-68.509	-13.324	-30.729	PLASTIC
		1004	4.851	3.913	-25.738	-67.512	-11.999	-30.003	Elastic
		1005	4.925	4.146	-27.507	-60.761	-15.795	-28.311	PLASTIC
		1006	4.800	4.345	-29.949	-59.964	-17.881	-28.635	PLASTIC
		1007	4.628	4.268	-31.157	-61.259	-15.489	-29.452	Elastic
		1008	4.535	3.972	-28.994	-63.810	-15.063	-29.817	Elastic

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	90	1069	6.225	3.594	-29.245	-68.748	11.412	-31.698	Elastic
	Soil	1070	5.966	4.314	-30.654	-62.200	16.398	-29.544	Elastic
		1071	5.671	3.921	-24.311	-65.009	10.029	-28.818	Elastic
		1072	6.038	3.835	-29.116	-70.220	13.431	-31.896	Elastic
		1073	5.958	4.059	-29.833	-67.520	15.453	-31.111	Elastic
		1074	5.866	3.936	-27.593	-63.066	13.337	-30.707	Elastic
		1075	6.153	3.810	-29.684	-67.074	12.954	-31.144	Elastic
		1076	6.049	4.099	-30.177	-63.900	15.311	-30.094	Elastic
		1077	5.873	4.203	-29.710	-65.588	16.557	-30.371	Elastic
		1078	5.754	4.045	-26.475	-64.776	13.917	-29.292	Elastic
		1079	5.836	3.816	-26.300	-67.455	10.320	-30.238	Elastic
		1080	6.059	3.685	-27.743	-71.631	12.004	-32.035	Elastic
	97	1153	5.345	3.295	-19.843	-61.607	-2.879	-26.909	PLASTIC
	Soil	1154	5.555	3.874	-21.474	-60.756	8.555	-26.718	PLASTIC
		1155	5.129	3.921	-19.945	-57.792	-7.348	-25.331	PLASTIC
		1156	5.344	3.572	-17.149	-54.823	0.908	-23.890	PLASTIC
		1157	5.409	3.752	-18.842	-58.000	4.441	-25.198	PLASTIC
		1158	5.277	3.766	-17.913	-57.201	-0.121	-24.867	PLASTIC
		1159	5.411	3.484	-18.383	-58.559	-0.734	-25.473	PLASTIC
		1160	5.498	3.697	-19.929	-60.937	4.905	-26.460	PLASTIC
		1161	5.428	3.696	-19.846	-59.119	5.250	-25.713	PLASTIC
		1162	5.257	3.914	-19.436	-61.720	-0.741	-26.354	PLASTIC
		1163	5.190	3.731	-17.405	-53.474	-4.494	-23.428	PLASTIC
		1164	5.276	3.479	-16.498	-52.774	-1.291	-23.160	PLASTIC
	93	1165	5.269	3.260	-19.456	-61.824	0.308	-26.931	PLASTIC
	Soil	1166	5.054	3.906	-20.957	-58.459	-8.816	-25.848	PLASTIC
		1167	4.511	3.684	-27.060	-68.906	-12.135	-31.031	Elastic
		1168	5.046	3.512	-19.122	-60.497	-1.882	-26.243	PLASTIC
		1169	4.979	3.706	-20.769	-62.732	-5.697	-27.255	PLASTIC
		1170	4.810	3.631	-24.409	-67.754	-7.740	-29.917	Elastic
		1171	5.213	3.466	-18.178	-57.989	0.187	-25.239	PLASTIC
		1172	5.126	3.718	-19.655	-57.536	-4.315	-25.040	PLASTIC
		1173	4.686	3.840	-24.177	-65.427	-10.264	-28.972	Elastic
		1174	4.667	3.742	-27.305	-71.250	-11.815	-31.740	Elastic
		1175	4.736	3.544	-23.855	-70.281	-7.534	-30.578	PLASTIC
		1176	5.041	3.389	-19.245	-61.129	-0.852	-26.574	PLASTIC

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	104 Soil	1237	5.421	3.266	-18.254	-58.135	-0.958	-25.476	PLASTIC
		1238	6.186	3.518	-27.948	-71.827	10.257	-32.297	Elastic
		1239	5.631	3.845	-23.267	-63.576	7.139	-28.139	Elastic
		1240	5.645	3.457	-20.701	-64.679	3.131	-28.031	PLASTIC
		1241	5.883	3.536	-23.933	-68.421	7.288	-30.056	Elastic
		1242	5.710	3.637	-21.901	-65.031	6.401	-28.343	Elastic
		1243	5.852	3.336	-21.027	-66.031	2.412	-28.637	PLASTIC
		1244	5.959	3.437	-24.229	-71.053	7.055	-31.018	Elastic
		1245	6.026	3.621	-27.069	-72.486	10.903	-32.150	Elastic
		1246	5.803	3.753	-25.220	-66.221	9.557	-29.615	Elastic
		1247	5.560	3.673	-20.862	-64.560	4.029	-27.853	PLASTIC
		1248	5.476	3.440	-19.708	-62.530	0.800	-27.090	PLASTIC
	113 Soil	1345	4.616	2.724	-26.947	-74.732	-0.781	-33.544	Elastic
		1346	5.238	3.195	-19.806	-61.561	0.600	-27.030	Elastic
		1347	4.479	3.579	-28.377	-71.756	-11.297	-32.353	Elastic
		1348	4.728	3.028	-22.420	-70.490	-1.682	-30.654	PLASTIC
		1349	4.921	3.175	-20.823	-65.896	-0.723	-28.869	PLASTIC
		1350	4.685	3.294	-22.894	-70.076	-4.969	-30.446	PLASTIC
		1351	4.808	2.857	-23.477	-70.766	-0.138	-31.200	Elastic
		1352	5.058	3.046	-20.700	-65.537	0.581	-28.624	PLASTIC
		1353	5.014	3.317	-19.977	-63.353	-0.631	-27.522	PLASTIC
		1354	4.709	3.472	-23.351	-69.472	-6.902	-30.251	PLASTIC
		1355	4.512	3.322	-25.313	-73.493	-7.641	-32.173	Elastic
		1356	4.587	2.979	-23.993	-74.374	-2.866	-32.333	Elastic
	131 Soil	1561	6.073	2.587	-29.163	-77.669	1.107	-35.205	Elastic
		1562	6.217	3.428	-27.084	-70.860	9.859	-31.825	Elastic
		1563	5.453	3.175	-19.988	-63.298	-0.375	-27.823	PLASTIC
		1564	5.964	2.915	-23.804	-74.647	1.684	-32.412	Elastic
		1565	6.009	3.177	-24.090	-73.748	4.580	-32.006	Elastic
		1566	5.771	3.028	-21.886	-68.349	1.151	-29.726	PLASTIC
		1567	6.125	2.836	-26.251	-75.921	3.037	-33.596	Elastic
		1568	6.183	3.174	-26.040	-73.748	7.033	-32.593	Elastic
		1569	5.956	3.361	-24.653	-72.795	6.909	-31.733	Elastic
		1570	5.678	3.259	-20.698	-65.356	1.507	-28.401	PLASTIC
		1571	5.633	2.993	-21.188	-66.957	-0.350	-29.249	PLASTIC
		1572	5.882	2.756	-26.100	-73.708	0.046	-32.955	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	163	1945	5.619	5.984	-3.433	-0.031	0.325	-1.308	Tension
	Soil	1946	5.619	5.903	-9.949	-8.012	5.253	-5.726	PLASTIC
		1947	5.658	5.856	-25.078	-16.472	10.398	-12.843	PLASTIC
		1948	5.674	5.936	-9.130	-6.838	4.721	-5.100	PLASTIC
		1949	5.674	5.910	-13.092	-8.579	4.760	-8.232	PLASTIC
		1950	5.748	5.896	-3.825	-10.880	2.886	-4.749	PLASTIC
		1951	5.618	5.961	-2.703	-0.761	1.434	-1.328	Tension
		1952	5.618	5.928	-10.813	-7.041	4.965	-5.673	PLASTIC
		1953	5.692	5.887	-13.451	-8.332	5.769	-8.686	PLASTIC
		1954	5.788	5.868	-6.920	-11.372	4.963	-5.854	PLASTIC
		1955	5.788	5.894	-10.926	-10.775	6.291	-6.855	PLASTIC
		1956	5.692	5.946	-6.871	-10.105	4.847	-5.394	PLASTIC
	164	1957	5.884	6.009	-7.431	-8.154	4.748	-4.223	PLASTIC
	Soil	1958	5.923	5.881	-6.809	-10.023	4.813	-5.406	PLASTIC
		1959	6.525	6.252	-1.378	0.000	-0.026	-0.454	Tension
		1960	5.932	6.035	-1.456	-5.222	1.698	-2.229	PLASTIC
		1961	6.007	5.996	-2.077	-4.256	0.404	-2.159	Elastic
		1962	6.194	6.111	-0.426	-4.084	-0.793	-1.514	PLASTIC
		1963	5.747	5.967	-6.988	-10.090	4.896	-5.406	PLASTIC
		1964	5.843	5.915	-7.641	-12.519	5.379	-6.375	PLASTIC
		1965	6.110	5.993	-0.964	-5.303	-0.444	-2.141	Elastic
		1966	6.352	6.142	-0.033	-3.375	0.332	-1.157	Tension
		1967	6.276	6.183	-0.023	-1.907	-0.209	-0.679	Tension
		1968	5.938	6.055	-0.522	-4.284	0.859	-1.625	PLASTIC
2	171	2041	5.038	5.508	-1.887	-122.592	-11.504	-28.030	Elastic
	Blocks	2042	5.281	5.506	-0.255	-125.964	-5.668	-28.365	Tension
		2043	5.251	5.597	-0.073	-140.562	-3.205	-29.133	Tension
		2044	5.150	5.525	-0.443	-134.868	-7.729	-28.170	Tension
		2045	5.225	5.525	-0.869	-138.364	-9.624	-28.901	Tension
		2046	5.225	5.550	-0.782	-138.671	-10.252	-28.948	Tension
		2047	5.109	5.505	-6.479	-133.448	-2.587	-29.121	Elastic
		2048	5.207	5.505	-0.751	-139.215	-10.222	-29.115	Tension
		2049	5.284	5.531	-0.147	-129.980	-4.378	-27.112	Tension
		2050	5.284	5.554	-0.078	-136.066	-3.222	-28.268	Tension
		2051	5.207	5.564	-1.139	-137.926	-12.533	-28.853	Tension
		2052	5.109	5.531	-13.184	-132.604	-5.665	-30.257	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	172 Blocks	2053	5.019	5.513	-12.517	-168.354	-13.747	-37.299	Elastic
		2054	5.262	5.594	-0.308	-134.486	-6.439	-27.957	Tension
		2055	5.019	5.594	-24.068	-145.559	-8.664	-34.042	Elastic
		2056	5.075	5.550	-21.216	-122.989	-9.735	-29.913	Elastic
		2057	5.150	5.575	-1.208	-135.182	-12.781	-28.302	Tension
		2058	5.075	5.575	-19.210	-125.151	-15.708	-29.909	Elastic
		2059	5.093	5.536	-13.252	-114.321	-9.495	-28.606	Elastic
		2060	5.191	5.569	-0.914	-147.830	-11.624	-30.781	Tension
		2061	5.191	5.595	-1.577	-141.662	-14.948	-29.644	Tension
		2062	5.093	5.595	-17.111	-128.660	-17.497	-30.163	Elastic
		2063	5.016	5.569	-18.728	-144.727	-21.525	-33.736	Elastic
		2064	5.016	5.536	-22.374	-160.517	-16.802	-37.670	Elastic
3	173 Blocks	2065	5.281	5.613	-0.077	-144.669	-3.334	-29.920	Tension
		2066	5.281	5.694	-0.059	-157.750	-3.056	-32.419	Tension
		2067	5.038	5.694	-16.575	-113.097	-20.789	-28.904	Elastic
		2068	5.225	5.650	-0.835	-149.083	-11.159	-30.902	Tension
		2069	5.225	5.675	-0.962	-153.091	-12.133	-31.693	Tension
		2070	5.150	5.675	-5.551	-139.371	-27.815	-29.830	Tension
		2071	5.284	5.638	-0.059	-149.127	-2.948	-30.574	Tension
		2072	5.284	5.669	-0.051	-153.374	-2.810	-31.576	Tension
		2073	5.207	5.695	-1.871	-154.120	-16.960	-32.053	Tension
		2074	5.109	5.695	-8.662	-130.513	-33.661	-25.707	Tension
		2075	5.109	5.669	-9.642	-128.977	-30.939	-25.628	Elastic
		2076	5.207	5.638	-1.410	-145.164	-14.305	-30.252	Tension
	174 Blocks	2077	5.262	5.606	-0.094	-143.836	-3.678	-29.766	Tension
		2078	5.019	5.687	-19.019	-118.033	-16.593	-28.289	Elastic
		2079	5.019	5.606	-24.956	-139.437	-17.597	-33.871	Elastic
		2080	5.150	5.625	-4.044	-135.003	-23.387	-28.783	Tension
		2081	5.075	5.650	-18.619	-125.995	-23.859	-29.453	Elastic
		2082	5.075	5.625	-17.991	-127.713	-20.090	-30.107	Elastic
		2083	5.191	5.631	-2.356	-141.930	-18.288	-29.802	Tension
		2084	5.093	5.664	-12.783	-125.698	-27.539	-28.608	Elastic
		2085	5.016	5.664	-19.583	-124.706	-15.323	-29.769	Elastic
		2086	5.016	5.631	-20.681	-132.365	-14.895	-31.567	Elastic
		2087	5.093	5.605	-17.143	-128.604	-18.692	-30.143	Elastic
		2088	5.191	5.605	-1.899	-139.840	-16.298	-29.329	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
4	175 Blocks	2089	5.281	5.713	-0.086	-160.241	-3.707	-32.895	Tension
		2090	5.281	5.794	-0.085	-177.390	-3.395	-36.208	Tension
		2091	5.038	5.794	-13.135	-73.567	-31.085	-18.063	Tension
		2092	5.225	5.750	-1.397	-167.380	-15.291	-34.532	Tension
		2093	5.225	5.775	-1.624	-172.885	-16.758	-35.643	Tension
		2094	5.150	5.775	-7.906	-154.274	-34.925	-33.190	Tension
		2095	5.284	5.736	-0.070	-164.829	-3.402	-33.776	Tension
		2096	5.284	5.769	-0.059	-171.679	-3.187	-35.098	Tension
		2097	5.207	5.795	-3.079	-174.799	-23.200	-36.289	Tension
		2098	5.109	5.795	-12.427	-135.511	-41.036	-30.314	Tension
		2099	5.109	5.769	-11.385	-133.646	-39.036	-29.809	Tension
		2100	5.207	5.736	-2.244	-162.650	-19.104	-33.775	Tension
	176 Blocks	2101	5.282	5.708	-0.209	-157.150	-5.726	-32.310	Tension
		2102	5.019	5.787	-17.730	-65.077	-22.219	-17.298	Elastic
		2103	5.019	5.708	-18.443	-110.857	-17.665	-26.711	Elastic
		2104	5.150	5.725	-6.582	-148.319	-31.034	-31.392	Tension
		2105	5.075	5.750	-11.781	-111.455	-36.237	-25.437	Tension
		2106	5.075	5.725	-10.414	-113.489	-34.379	-25.606	Tension
		2107	5.191	5.731	-3.059	-162.104	-22.270	-33.836	Tension
		2108	5.093	5.784	-12.759	-120.388	-39.159	-27.396	Tension
		2109	5.016	5.764	-18.116	-84.324	-17.879	-21.258	Elastic
		2110	5.016	5.731	-17.707	-99.962	-19.393	-24.350	Elastic
		2111	5.093	5.705	-8.725	-122.613	-32.709	-27.120	Tension
		2112	5.191	5.705	-3.091	-156.907	-22.022	-32.839	Tension
5	177 Blocks	2113	5.038	5.808	-12.741	-66.466	-29.100	-16.551	Tension
		2114	5.281	5.808	-0.139	-180.511	-5.013	-36.827	Tension
		2115	5.281	5.887	-4.331	-202.142	-2.294	-41.877	Elastic
		2116	5.150	5.825	-9.684	-162.273	-39.641	-35.075	Tension
		2117	5.225	5.825	-2.101	-184.690	-19.700	-38.029	Tension
		2118	5.225	5.850	-2.538	-192.212	-22.078	-39.585	Tension
		2119	5.109	5.805	-13.405	-137.009	-42.655	-30.794	Tension
		2120	5.207	5.805	-3.081	-178.998	-23.278	-38.710	Tension
		2121	5.284	5.831	-0.104	-188.970	-4.414	-38.077	Tension
		2122	5.284	5.864	-0.043	-195.410	-2.914	-39.707	Tension
		2123	5.207	5.864	-4.586	-193.414	-29.781	-40.216	Tension
		2124	5.109	5.831	-14.364	-137.231	-44.398	-30.994	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	178 Blocks	2125	5.019	5.813	-23.141	-37.068	-14.321	-12.743	Elastic
		2126	5.262	5.894	-0.457	-200.170	-9.529	-40.639	Tension
		2127	5.019	5.894	-22.955	-17.590	-20.094	-8.856	Tension
		2128	5.075	5.850	-22.621	-100.798	-47.751	-25.332	Tension
		2129	5.150	5.875	-13.111	-171.373	-47.401	-37.497	Tension
		2130	5.075	5.875	-21.290	-81.523	-41.660	-21.176	Tension
		2131	5.093	5.836	-17.915	-114.319	-45.256	-27.114	Tension
		2132	5.191	5.869	-5.928	-197.055	-34.179	-41.205	Tension
		2133	5.191	5.895	-7.513	-208.254	-39.555	-43.726	Tension
		2134	5.093	5.895	-25.173	-105.123	-51.442	-26.645	Tension
		2135	5.016	5.869	-17.010	-7.551	-10.455	-5.534	Elastic
8	179 Blocks	2137	5.338	5.508	-0.230	-118.970	5.111	-24.959	Tension
		2138	5.581	5.506	-1.096	-168.461	13.598	-35.045	Tension
		2139	5.581	5.587	-24.999	-152.482	19.203	-36.516	Elastic
		2140	5.450	5.525	-1.204	-135.712	9.141	-28.479	Elastic
		2141	5.525	5.525	-17.115	-123.422	8.317	-29.215	Elastic
		2142	5.525	5.550	-18.440	-128.062	9.801	-30.372	Elastic
		2143	5.409	5.505	-1.103	-153.153	12.995	-31.974	Tension
		2144	5.507	5.505	-10.762	-114.500	5.525	-26.188	Elastic
		2145	5.584	5.531	-20.181	-176.724	23.943	-40.480	Elastic
		2146	5.584	5.564	-29.591	-165.778	25.705	-40.127	Elastic
		2147	5.507	5.564	-20.103	-132.984	14.767	-31.979	Elastic
		2148	5.409	5.531	-1.409	-141.473	14.556	-29.680	Tension
	180 Blocks	2149	5.319	5.513	-0.333	-125.928	6.471	-26.384	Tension
		2150	5.582	5.594	-22.025	-141.255	17.515	-33.666	Elastic
		2151	5.319	5.594	-0.118	-141.232	4.097	-29.269	Tension
		2152	5.375	5.550	-0.717	-136.713	9.904	-28.546	Tension
		2153	5.450	5.575	-2.883	-133.202	10.529	-28.250	Tension
		2154	5.375	5.575	-0.827	-138.204	10.569	-28.830	Tension
		2155	5.393	5.536	-0.895	-135.912	11.026	-28.440	Tension
		2156	5.491	5.569	-18.420	-134.544	16.677	-31.638	Elastic
		2157	5.491	5.595	-15.962	-135.072	22.591	-31.216	Elastic
		2158	5.393	5.595	-1.455	-139.170	14.177	-28.921	Tension
		2159	5.316	5.569	-0.112	-136.472	3.903	-28.349	Tension
		2160	5.316	5.536	-0.193	-130.147	5.013	-27.147	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	182 Blocks	2173	5.131	5.994	-126.427	-50.619	-75.889	-35.855	Elastic
		2174	5.009	5.994	-19.427	-1.542	-5.331	-4.439	Tension
		2175	5.009	5.913	-18.252	-3.573	-8.075	-4.925	Tension
		2176	5.075	5.975	-20.636	-2.728	-7.503	-5.145	Tension
		2177	5.037	5.975	-10.497	-8.664	-9.537	-4.304	Tension
		2178	5.037	5.950	-9.904	-2.816	-5.281	-3.051	Tension
		2179	5.095	5.995	-29.402	-14.726	-10.364	-9.270	Elastic
		2180	5.047	5.995	-8.805	-0.021	0.434	-2.209	Tension
		2181	5.008	5.969	-5.548	-4.081	-4.758	-2.406	Tension
		2182	5.008	5.936	-11.992	-6.230	-8.643	-4.171	Tension
		2183	5.047	5.936	-19.428	-10.664	-14.393	-6.545	Tension
		2184	5.095	5.969	-39.282	-49.495	-44.094	-18.236	Tension
	183 Blocks	2185	5.028	5.906	-26.237	-16.497	-20.805	-9.116	Tension
		2186	5.272	5.906	-12.039	-210.698	-10.759	-45.103	Elastic
		2187	5.150	5.987	-74.014	-295.585	-104.157	-74.357	Elastic
		2188	5.112	5.925	-33.207	-134.522	-66.853	-34.102	Tension
		2189	5.188	5.925	-8.351	-234.115	-44.217	-49.023	Tension
		2190	5.150	5.950	-27.231	-191.437	-72.202	-44.228	Tension
		2191	5.101	5.905	-24.523	-109.014	-51.704	-27.273	Tension
		2192	5.199	5.905	-8.149	-204.284	-35.443	-42.644	Tension
		2193	5.238	5.931	-8.725	-202.250	-9.509	-42.722	Elastic
		2194	5.189	5.964	-41.542	-258.258	-44.242	-60.435	Elastic
		2195	5.111	5.964	-56.144	-86.102	-69.528	-28.937	Tension
		2196	5.062	5.931	-37.481	-26.681	-31.623	-13.368	Tension
8	184 Blocks	2197	5.581	5.613	-23.181	-150.298	19.907	-35.679	Elastic
		2198	5.581	5.694	-18.443	-117.295	18.502	-28.017	Elastic
		2199	5.338	5.694	-0.275	-152.663	6.485	-31.484	Tension
		2200	5.525	5.650	-15.578	-129.210	28.828	-29.389	Elastic
		2201	5.525	5.675	-9.270	-125.626	32.496	-27.875	Elastic
		2202	5.450	5.675	-5.932	-143.653	29.192	-30.800	Tension
		2203	5.584	5.638	-20.076	-145.706	17.835	-34.107	Elastic
		2204	5.584	5.669	-18.982	-132.043	15.849	-31.109	Elastic
		2205	5.507	5.695	-9.951	-129.298	35.870	-28.719	Tension
		2206	5.409	5.695	-3.208	-156.253	22.358	-32.747	Tension
		2207	5.409	5.669	-3.447	-152.202	22.910	-32.033	Tension
		2208	5.507	5.638	-13.336	-129.633	27.737	-29.544	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	185 Blocks	2209	5.562	5.606	-25.315	-136.959	18.256	-33.447	Elastic
		2210	5.319	5.687	-0.103	-154.950	4.003	-31.876	Tension
		2211	5.319	5.606	-0.104	-142.193	3.849	-29.439	Tension
		2212	5.450	5.625	-4.391	-138.072	24.822	-29.459	Tension
		2213	5.375	5.650	-1.220	-147.339	13.409	-30.630	Tension
		2214	5.375	5.625	-1.084	-143.520	12.471	-29.874	Tension
		2215	5.491	5.631	-8.309	-135.934	28.228	-29.606	Elastic
		2216	5.393	5.664	-2.028	-148.252	17.341	-30.955	Tension
		2217	5.316	5.664	-0.075	-151.117	3.375	-31.137	Tension
		2218	5.316	5.631	-0.081	-145.983	3.439	-30.158	Tension
		2219	5.393	5.605	-1.591	-139.656	14.906	-29.231	Tension
		2220	5.491	5.605	-13.921	-135.260	25.109	-30.830	Elastic
9	186 Blocks	2221	5.581	5.713	-17.423	-112.105	20.746	-28.748	Elastic
		2222	5.581	5.794	-15.223	-85.995	21.629	-18.971	Elastic
		2223	5.338	5.794	-0.873	-171.540	10.741	-35.158	Tension
		2224	5.525	5.750	-13.805	-117.028	40.194	-26.957	Tension
		2225	5.525	5.775	-15.071	-112.228	41.126	-26.214	Tension
		2226	5.450	5.775	-8.324	-160.108	38.506	-34.428	Tension
		2227	5.584	5.738	-16.044	-99.377	19.243	-23.893	Elastic
		2228	5.584	5.769	-15.590	-77.559	18.315	-19.392	Elastic
		2229	5.507	5.795	-15.431	-124.090	43.759	-28.631	Tension
		2230	5.409	5.795	-4.733	-179.729	29.165	-37.606	Tension
		2231	5.409	5.769	-4.066	-172.974	28.519	-36.158	Tension
		2232	5.507	5.738	-12.272	-128.564	39.411	-28.576	Tension
	187 Blocks	2233	5.562	5.706	-12.505	-109.778	28.512	-25.308	Elastic
		2234	5.319	5.787	-0.144	-175.456	5.029	-35.644	Tension
		2235	5.319	5.706	-0.148	-158.495	4.810	-32.567	Tension
		2236	5.450	5.725	-6.832	-150.818	32.099	-32.355	Tension
		2237	5.375	5.750	-1.916	-166.930	17.883	-34.544	Tension
		2238	5.375	5.725	-1.669	-161.558	16.419	-33.457	Tension
		2239	5.491	5.731	-10.230	-139.435	37.767	-30.749	Tension
		2240	5.393	5.764	-3.132	-168.326	22.981	-35.049	Tension
		2241	5.316	5.764	-0.110	-170.069	4.328	-34.793	Tension
		2242	5.316	5.731	-0.117	-163.260	4.373	-33.483	Tension
		2243	5.393	5.705	-2.372	-156.497	19.268	-32.614	Tension
		2244	5.491	5.705	-9.372	-137.983	35.957	-30.320	Tension

10	188 Blocks	2245	5.338	5.809	-0.505	-173.676	9.364	-35.534	Tension
		2246	5.581	5.806	-15.118	-58.609	22.015	-15.456	Elastic
		2247	5.581	5.887	-17.462	-11.056	13.894	-6.299	Tension
		2248	5.450	5.825	-10.842	-167.803	42.853	-36.400	Tension
		2249	5.525	5.825	-17.105	-103.028	41.981	-24.711	Tension
		2250	5.525	5.850	-18.340	-97.567	42.302	-23.830	Tension
		2251	5.409	5.805	-5.350	-182.978	31.297	-38.364	Tension
		2252	5.507	5.605	-15.420	-123.048	43.559	-23.405	Tension
		2253	5.584	5.831	-15.765	-39.685	18.222	-11.761	Elastic
		2254	5.584	5.864	-15.359	-19.676	15.733	-7.636	Elastic
		2255	5.507	5.864	-18.936	-113.601	46.421	-27.177	Tension
		2256	5.409	5.831	-6.255	-190.260	34.499	-39.965	Tension
	189 Blocks	2257	5.319	5.813	-0.241	-181.178	8.613	-36.972	Tension
		2258	5.562	5.894	-24.029	-21.856	22.917	-9.764	Tension
		2259	5.319	5.824	-5.472	-204.919	4.886	-42.652	Elastic
		2260	5.375	5.850	-3.008	-193.042	24.098	-39.846	Tension
		2261	5.450	5.875	-13.850	-174.148	49.112	-38.213	Tension
		2262	5.375	5.875	-3.398	-201.523	28.168	-41.584	Tension
		2263	5.393	5.836	-4.454	-187.455	29.894	-39.037	Tension
		2264	5.491	5.869	-18.185	-139.950	50.449	-32.249	Tension
		2265	5.491	5.895	-20.862	-138.039	53.663	-32.385	Tension
		2266	5.393	5.895	-6.023	-205.253	35.162	-42.934	Tension
		2267	5.316	5.869	-2.245	-197.479	5.774	-40.554	Elastic
		2268	5.316	5.836	-0.202	-187.862	6.155	-38.268	Tension
12	193 Blocks	2305	5.469	5.994	-112.486	-54.750	76.975	-33.693	Elastic
		2306	5.591	5.913	-14.821	-1.157	4.141	-3.756	Tension
		2307	5.591	5.994	-19.869	-1.352	5.157	-4.650	Tension
		2308	5.625	5.975	-20.221	-4.403	5.590	-5.397	Elastic
		2309	5.563	5.950	-8.266	-1.732	3.734	-2.507	Tension
		2310	5.563	5.975	-8.290	-7.942	7.068	-3.319	Tension
		2311	5.505	5.969	-34.226	-50.753	41.678	-17.475	Tension
		2312	5.553	5.938	-15.461	-11.099	12.224	-5.838	Elastic
		2313	5.592	5.938	-8.240	-4.255	5.921	-3.025	Tension
		2314	5.592	5.969	-5.357	-4.092	4.677	-2.369	Tension
		2315	5.553	5.995	-3.844	-0.593	-1.517	-1.333	Tension
		2316	5.505	5.995	-20.700	-15.877	10.874	-7.759	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	195 Blocks	2329	5.328	5.906	-10.537	-214.032	11.030	-45.479	Elastic
		2330	5.572	5.906	-19.425	-15.695	16.815	-7.807	Elastic
		2331	5.450	5.987	-61.285	-290.447	100.850	-70.901	Elastic
		2332	5.412	5.925	-9.547	-231.942	47.057	-48.828	Tension
		2333	5.488	5.925	-29.108	-139.082	63.627	-34.180	Tension
		2334	5.450	5.950	-25.863	-192.805	70.615	-44.241	Tension
		2335	5.401	5.905	-7.195	-205.759	38.476	-43.149	Tension
		2336	5.499	5.905	-23.358	-110.674	50.344	-27.377	Tension
		2337	5.538	5.931	-32.545	-24.953	28.497	-12.034	Tension
		2338	5.489	5.964	-49.642	-87.501	65.907	-27.917	Tension
		2339	5.411	5.964	-32.256	-255.868	47.927	-58.060	Elastic
		2340	5.362	5.931	-11.391	-201.589	12.647	-43.117	Elastic
	199 Blocks	2377	5.169	6.213	-0.054	-280.668	-3.879	-58.649	Tension
		2378	5.412	6.294	-15.593	-282.993	0.395	-59.754	Elastic
		2379	5.169	6.294	-13.742	-280.471	0.930	-58.879	Elastic
		2380	5.225	6.250	-9.679	-280.670	1.832	-58.360	Elastic
		2381	5.300	6.275	-12.430	-283.862	-0.225	-59.402	Elastic
		2382	5.225	6.275	-11.662	-285.439	-1.170	-59.564	Elastic
		2383	5.243	6.236	-8.137	-288.635	-1.561	-59.322	Elastic
		2384	5.341	6.269	-11.679	-280.650	-0.583	-58.845	Elastic
		2385	5.341	6.295	-14.005	-281.199	-1.140	-59.072	Elastic
		2386	5.243	6.295	-12.037	-281.089	1.792	-58.656	Elastic
		2387	5.166	6.269	-10.992	-280.160	-5.498	-58.390	Elastic
		2388	5.166	6.236	-5.103	-285.247	2.274	-54.439	Elastic

Table A.4 Cartesian Total Stresses for Case 4

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
1	1	1	6.488	6.294	-0.505	-0.009	-0.067	-0.160	Tension
	Soil	2	5.525	6.294	-3.202	-0.262	0.916	-1.045	Tension
		3	5.525	6.213	-2.597	-0.867	1.500	-1.114	Tension
		4	6.045	6.275	-0.166	-0.736	0.349	-0.292	Tension
		5	5.746	6.275	-2.203	-0.123	-0.521	-0.719	Tension
		6	5.746	6.250	0.000	0.000	0.000	-0.043	Tension
		7	6.206	6.295	-0.391	-0.055	0.147	-0.138	Tension
		8	5.819	6.295	-0.313	-0.047	-0.122	-0.113	Tension
		9	5.513	6.269	-5.008	-1.596	1.851	-2.007	PLASTIC
		10	5.513	6.238	-10.715	-5.402	4.112	-4.669	PLASTIC
		11	5.819	6.236	-0.524	-1.749	0.957	-0.736	Tension
		12	6.206	6.269	-0.163	-0.341	-0.236	-0.178	Tension
	2	13	5.581	6.006	-2.956	-0.508	1.226	-1.289	Tension
	Soil	14	5.459	6.087	-3.756	-6.095	3.116	-3.136	PLASTIC
		15	5.459	6.006	-52.755	-47.682	25.851	-30.381	PLASTIC
		16	5.525	6.025	-9.917	-6.570	4.699	-5.180	PLASTIC
		17	5.487	6.050	-7.748	-16.413	5.378	-7.461	PLASTIC
		18	5.487	6.025	-1.975	-1.489	1.715	-1.273	Tension
		19	5.545	6.031	-2.487	-0.977	1.559	-1.268	Tension
		20	5.497	6.064	-0.494	-3.070	1.195	-1.270	PLASTIC
		21	5.458	6.064	-5.595	-6.748	3.910	-3.904	PLASTIC
		22	5.458	6.031	-4.209	-4.556	3.053	-2.958	PLASTIC
		23	5.497	6.005	-4.863	-5.274	3.394	-3.292	PLASTIC
		24	5.545	6.005	-11.077	-5.969	4.446	-5.364	PLASTIC
	3	25	5.858	5.830	-6.923	-14.848	4.909	-6.931	PLASTIC
	Soil	26	5.619	5.798	-13.855	-13.031	7.578	-8.494	PLASTIC
		27	5.619	5.715	-16.183	-15.583	9.797	-10.021	PLASTIC
		28	5.748	5.798	-13.029	-11.152	6.847	-7.683	PLASTIC
		29	5.674	5.786	-13.416	-11.029	6.874	-7.770	PLASTIC
		30	5.674	5.760	-13.175	-10.990	6.820	-7.709	PLASTIC
		31	5.798	5.821	-10.838	-12.904	6.723	-7.529	PLASTIC
		32	5.892	5.809	-11.594	-9.179	5.938	-6.650	PLASTIC
		33	5.616	5.771	-15.775	-15.045	8.563	-9.696	PLASTIC
		34	5.616	5.739	-14.194	-13.622	7.815	-8.822	PLASTIC
		35	5.892	5.749	-13.911	-11.589	7.147	-8.119	PLASTIC
		36	5.798	5.796	-11.648	-12.785	6.951	-7.758	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	4	37	5.839	5.582	-15.309	-14.941	3.427	-9.702	PLASTIC
	Soil	38	5.617	5.591	-18.537	-18.972	10.241	-11.555	PLASTIC
		39	5.617	5.510	-33.090	-32.640	17.297	-20.390	PLASTIC
		40	5.737	5.557	-19.554	-16.777	9.851	-11.531	PLASTIC
		41	5.668	5.556	-20.620	-18.303	10.533	-12.300	PLASTIC
		42	5.668	5.541	-19.122	-16.609	9.718	-11.365	PLASTIC
		43	5.774	5.572	-15.176	-14.886	8.380	-9.637	PLASTIC
		44	5.685	5.584	-16.635	-15.770	8.957	-10.330	PLASTIC
		45	5.615	5.567	-21.322	-21.392	11.545	-13.437	PLASTIC
		46	5.615	5.534	-20.713	-21.627	11.442	-13.353	PLASTIC
		47	5.685	5.525	-19.734	-16.540	9.805	-11.541	PLASTIC
		48	5.774	5.548	-18.893	-16.474	9.632	-11.251	PLASTIC
	5	49	4.782	5.326	-15.312	-38.314	-3.876	-16.315	Elastic
	Soil	50	4.984	5.493	-1.645	-1.820	-1.730	-1.725	Tension
		51	4.894	5.574	-1.312	-2.152	-1.680	-1.858	Tension
		52	4.875	5.422	-21.183	-9.211	-5.995	-9.365	PLASTIC
		53	4.938	5.474	-31.149	-23.772	-14.123	-17.179	PLASTIC
		54	4.938	5.499	-31.153	-29.645	-16.048	-18.920	PLASTIC
		55	4.841	5.374	-23.906	-20.537	-11.658	-14.120	PLASTIC
		56	4.923	5.441	-48.262	-28.345	-16.151	-23.112	PLASTIC
		57	4.987	5.520	-5.874	-5.879	-3.753	-4.128	PLASTIC
		58	4.987	5.553	-27.176	-29.562	-15.003	-17.857	PLASTIC
		59	4.923	5.500	-23.995	-18.136	-11.016	-13.320	PLASTIC
		60	4.841	5.400	-27.126	-8.901	-3.799	-11.573	PLASTIC
	6	61	4.831	5.657	-16.642	-13.267	-7.223	-9.519	Elastic
	Soil	62	4.988	5.703	-18.039	-16.658	-9.515	-10.918	PLASTIC
		63	4.988	5.784	-30.615	-29.334	-15.582	-18.124	PLASTIC
		64	4.903	5.697	-19.257	-18.372	-10.264	-11.801	PLASTIC
		65	4.952	5.711	-17.713	-14.881	-9.898	-10.273	PLASTIC
		66	4.952	5.736	-12.072	-10.145	-6.348	-7.144	PLASTIC
		67	4.877	5.669	-18.754	-18.946	-9.730	-11.248	PLASTIC
		68	4.940	5.689	-16.302	-13.061	-9.045	-9.329	PLASTIC
		69	4.990	5.728	-17.335	-16.361	-9.278	-10.595	PLASTIC
		70	4.990	5.761	-12.989	-12.345	-7.192	-8.058	PLASTIC
		71	4.940	5.748	-12.590	-10.087	-6.414	-7.274	PLASTIC
		72	4.877	5.695	-18.235	-20.324	-9.795	-11.482	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	7	73	4.752	5.883	-23.025	-10.153	-8.518	-10.308	PLASTIC
	Soil	74	4.982	5.905	-15.463	-11.431	-7.317	-8.404	PLASTIC
		75	4.982	5.966	-3.453	-0.011	0.194	-1.306	Tension
		76	4.858	5.911	-3.433	-13.241	-1.140	-5.332	PLASTIC
		77	4.929	5.918	-13.067	-9.150	-6.119	-6.993	PLASTIC
		78	4.929	5.943	-9.164	-8.508	-5.274	-6.605	PLASTIC
		79	4.820	5.898	-7.790	-16.340	-5.421	-7.592	PLASTIC
		80	4.912	5.897	-21.701	-8.805	-5.526	-9.494	PLASTIC
		81	4.995	5.930	-11.151	-8.464	-4.720	-5.599	PLASTIC
		82	4.985	5.982	-3.117	-0.767	-1.412	-1.452	PLASTIC
		83	4.912	5.955	-8.009	-12.114	-5.527	-6.330	PLASTIC
		84	4.820	5.914	-3.936	-12.775	-2.430	-5.342	PLASTIC
	8	85	5.019	6.006	-2.943	-0.521	-1.239	-1.259	Tension
	Soil	86	5.141	6.006	-50.569	-40.603	-23.201	-27.661	PLASTIC
		87	5.141	6.087	-3.949	-5.597	-3.145	-3.041	PLASTIC
		88	5.075	6.025	-9.491	-6.212	-4.502	-4.945	PLASTIC
		89	5.113	6.025	-1.916	-1.549	-1.722	-1.273	Tension
		90	5.113	6.050	-6.348	-12.824	-4.640	-5.963	PLASTIC
		91	5.055	6.005	-8.048	-5.157	-3.909	-4.212	PLASTIC
		92	5.103	6.005	-4.049	-3.745	-2.810	-2.589	PLASTIC
		93	5.142	6.031	-1.925	-1.873	-1.815	-1.388	PLASTIC
		94	5.142	6.064	-5.901	-8.591	-3.974	-3.948	PLASTIC
		95	5.103	6.064	-1.195	-2.801	-1.693	-1.400	PLASTIC
		96	5.055	6.031	-2.641	-0.823	-1.474	-1.269	Tension
	9	97	4.250	6.294	-1.838	-0.043	0.290	-0.570	Tension
	Soil	98	5.095	6.213	-2.488	-0.976	-1.558	-1.114	Tension
		99	5.095	6.294	-2.958	-0.506	-1.223	-1.045	Tension
		100	4.634	6.275	-0.033	-0.648	-0.147	-0.226	Tension
		101	4.893	6.250	-0.084	0.000	0.004	-0.068	Tension
		102	4.893	6.275	-2.657	-0.113	0.549	-0.852	Tension
		103	4.494	6.269	-0.017	-0.379	0.079	-0.145	Tension
		104	4.830	6.238	-0.833	-1.747	-1.052	-0.769	Tension
		105	5.095	6.238	-12.072	-6.611	-4.817	-5.859	PLASTIC
		106	5.095	6.269	-4.123	-1.474	-1.838	-1.705	PLASTIC
		107	4.830	6.295	-0.765	-0.112	0.292	-0.267	Tension
		108	4.494	6.295	-1.159	-0.127	-0.394	-0.390	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	10 Soil	109	5.459	6.181	-6.456	-8.200	4.445	-4.498	PLASTIC
		110	5.459	6.100	-2.221	-4.187	2.264	-2.093	PLASTIC
		111	5.581	6.019	-4.751	-2.177	2.257	-2.317	PLASTIC
		112	5.487	6.125	-5.842	-4.317	3.319	-3.196	PLASTIC
		113	5.487	6.100	-5.139	-8.440	3.928	-4.244	PLASTIC
		114	5.525	6.075	-3.029	-0.872	1.493	-1.381	PLASTIC
		115	5.458	6.158	-5.406	-8.050	4.018	-4.157	PLASTIC
		116	5.458	6.126	-6.380	-10.090	4.625	-5.086	PLASTIC
		117	5.497	6.074	-4.280	-7.206	3.439	-3.638	PLASTIC
		118	5.545	6.042	-3.262	-1.437	1.826	-1.630	PLASTIC
		119	5.545	6.067	-3.254	-0.725	1.366	-1.392	PLASTIC
		120	5.497	6.133	-5.234	-2.548	2.481	-2.483	PLASTIC
	11 Soil	121	5.858	5.843	-4.071	-12.574	2.683	-5.382	PLASTIC
		122	5.619	5.890	-13.524	-12.406	7.327	-8.128	PLASTIC
		123	5.619	5.809	-12.577	-11.786	6.948	-7.729	PLASTIC
		124	5.748	5.846	-12.936	-10.259	6.529	-7.344	PLASTIC
		125	5.674	5.861	-10.930	-8.284	5.513	-6.138	PLASTIC
		126	5.674	5.835	-11.755	-9.209	5.973	-6.684	PLASTIC
		127	5.788	5.859	-8.922	-13.527	6.055	-7.111	PLASTIC
		128	5.692	5.877	-9.156	-8.600	4.632	-5.036	PLASTIC
		129	5.616	5.866	-13.327	-12.344	7.287	-8.070	PLASTIC
		130	5.616	5.833	-12.457	-11.726	6.902	-7.651	PLASTIC
		131	5.692	5.818	-12.035	-9.426	6.093	-6.949	PLASTIC
		132	5.798	5.832	-10.565	-13.231	6.693	-7.535	PLASTIC
	12 Soil	133	5.839	5.575	-19.598	-15.004	9.235	-10.997	PLASTIC
		134	5.617	5.685	-20.910	-20.604	11.243	-12.977	PLASTIC
		135	5.617	5.604	-18.304	-18.593	10.097	-11.658	PLASTIC
		136	5.737	5.607	-17.368	-15.222	8.950	-10.386	PLASTIC
		137	5.668	5.641	-15.207	-13.981	8.140	-9.316	PLASTIC
		138	5.668	5.616	-18.426	-16.545	9.563	-11.073	PLASTIC
		139	5.774	5.609	-15.427	-14.754	8.404	-9.642	PLASTIC
		140	5.685	5.653	-15.109	-13.780	8.061	-9.217	PLASTIC
		141	5.615	5.652	-15.241	-15.290	8.499	-9.702	PLASTIC
		142	5.615	5.629	-18.930	-18.824	10.230	-11.866	PLASTIC
		143	5.685	5.594	-18.273	-15.533	9.216	-10.742	PLASTIC
		144	5.774	5.583	-19.224	-14.995	9.180	-10.875	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	13	145	4.831	5.645	-13.622	-17.131	-8.373	-9.783	PLASTIC
	Soil	146	4.988	5.609	-17.772	-16.674	-9.462	-10.921	PLASTIC
		147	4.988	5.690	-16.957	-15.771	-9.029	-10.337	PLASTIC
		148	4.903	5.647	-18.635	-16.506	-9.592	-11.097	PLASTIC
		149	4.952	5.638	-18.873	-18.378	-9.598	-11.140	PLASTIC
		150	4.952	5.661	-18.069	-15.207	-9.073	-10.526	PLASTIC
		151	4.877	5.633	-19.025	-18.461	-10.234	-11.813	PLASTIC
		152	4.940	5.619	-19.291	-18.948	-9.856	-11.451	PLASTIC
		153	4.990	5.633	-20.146	-19.133	-10.674	-12.350	PLASTIC
		154	4.990	5.666	-19.151	-18.053	-10.152	-11.700	PLASTIC
		155	4.940	5.677	-18.071	-14.746	-8.917	-10.375	PLASTIC
		156	4.877	5.659	-16.883	-18.773	-9.674	-11.182	PLASTIC
	14	157	4.752	5.870	-1.465	-6.668	-1.291	-2.805	PLASTIC
	Soil	158	4.992	5.811	-36.867	-34.948	-18.795	-21.960	PLASTIC
		159	4.992	5.892	-14.409	-12.454	-7.519	-8.406	PLASTIC
		160	4.858	5.862	-23.895	-13.693	-8.908	-11.649	PLASTIC
		161	4.929	5.843	-8.201	-6.806	-4.585	-4.890	PLASTIC
		162	4.929	5.868	-19.213	-15.968	-9.524	-10.921	PLASTIC
		163	4.820	5.852	-10.923	-19.958	-7.302	-9.645	PLASTIC
		164	4.912	5.829	-12.525	-9.770	-6.291	-7.090	PLASTIC
		165	4.985	5.835	-6.011	-5.606	-3.819	-3.940	PLASTIC
		166	4.985	5.868	-26.478	-24.588	-13.600	-15.657	PLASTIC
		167	4.912	5.686	-5.109	-3.895	-3.054	-3.050	PLASTIC
		168	4.820	5.878	-7.709	-19.246	-4.955	-8.445	PLASTIC
	15	169	5.076	6.194	-3.166	-1.529	-1.868	-1.499	PLASTIC
	Soil	170	4.241	6.275	-0.174	-1.287	-0.473	-0.460	Tension
		171	4.954	6.032	-4.528	-6.294	-3.461	-3.475	PLASTIC
		172	4.856	6.175	-2.933	-3.996	-2.507	-2.155	PLASTIC
		173	4.596	6.200	-1.665	-1.779	1.731	-1.124	Tension
		174	4.818	6.125	-1.397	-4.207	-1.779	-1.930	PLASTIC
		175	4.822	6.220	-0.308	-2.034	-0.789	-0.770	Tension
		176	4.496	6.253	0.000	0.000	0.000	-0.040	Tension
		177	4.448	6.202	-0.102	-0.541	-0.235	-0.277	Tension
		178	4.735	6.104	-0.912	-5.223	-1.055	-2.007	PLASTIC
		179	5.000	6.078	-4.667	-4.747	-3.219	-3.013	PLASTIC
		180	5.049	6.143	-3.048	-1.979	-2.054	-1.641	PLASTIC

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	16	181	5.569	5.073	-36.738	-98.166	15.989	-41.516	PLASTIC
	Soil	182	5.580	5.469	-44.398	-130.663	11.468	-53.212	PLASTIC
		183	5.337	5.469	-39.589	-121.881	2.448	-49.121	PLASTIC
		184	5.518	5.255	-41.439	-116.776	14.958	-48.340	PLASTIC
		185	5.522	5.378	-45.855	-129.046	16.068	-53.241	PLASTIC
		186	5.446	5.378	-46.152	-140.421	5.956	-56.735	PLASTIC
		187	5.575	5.199	-38.449	-93.601	19.625	-40.606	PLASTIC
		188	5.580	5.348	-43.195	-109.836	20.833	-46.406	PLASTIC
		189	5.506	5.474	-44.304	-132.633	9.139	-53.770	PLASTIC
		190	5.408	5.474	-47.024	-140.334	9.957	-56.690	PLASTIC
		191	5.405	5.348	-40.432	-124.706	-1.072	-50.330	PLASTIC
		192	5.498	5.199	-34.970	-105.491	6.781	-43.040	PLASTIC
	17	193	5.117	5.118	-36.433	-101.448	-13.853	-42.356	PLASTIC
	Soil	194	5.269	5.472	-38.108	-117.780	0.402	-47.450	PLASTIC
		195	5.026	5.472	-39.927	-118.939	-7.609	-48.321	Elastic
		196	5.131	5.281	-41.629	-125.159	-9.205	-50.590	PLASTIC
		197	5.178	5.391	-45.160	-139.135	-4.345	-55.741	PLASTIC
		198	5.103	5.391	-45.482	-134.416	-11.136	-54.729	PLASTIC
		199	5.165	5.222	-38.854	-120.022	-0.271	-48.559	PLASTIC
		200	5.226	5.384	-39.406	-120.418	5.088	-48.722	PLASTIC
		201	5.197	5.477	-48.096	-144.632	-8.436	-58.558	PLASTIC
		202	5.099	5.477	-43.860	-130.216	-7.840	-52.910	Elastic
		203	5.051	5.384	-44.585	-127.578	-14.349	-52.431	PLASTIC
		204	5.098	5.222	-38.201	-107.739	-13.647	-44.689	PLASTIC
	18	205	3.582	5.503	-13.440	-13.574	-0.351	-5.782	Elastic
	Soil	206	4.021	6.242	-0.016	-1.479	-0.028	-0.497	Elastic
		207	3.186	6.242	-0.003	-0.842	0.042	-0.303	Elastic
		208	3.592	5.843	-3.857	-8.959	0.276	-4.236	Elastic
		209	3.728	6.073	0.000	-3.464	-0.004	-1.233	Tension
		210	3.469	6.073	-0.049	-3.541	-0.048	-1.270	Elastic
		211	3.721	5.719	-7.205	-9.939	0.367	-5.637	Elastic
		212	3.897	6.017	-0.245	-4.149	0.156	-1.558	Elastic
		213	3.772	6.252	0.000	-0.839	-0.005	-0.293	Tension
		214	3.436	6.252	-0.002	-1.097	0.043	-0.388	Tension
		215	3.296	6.017	-0.864	-5.139	0.228	-2.048	Elastic
		216	3.456	5.719	-7.328	-9.549	0.516	-5.556	Elastic

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	21 Soil	241	5.656	6.032	-4.900	-5.663	3.457	-3.399	PLASTIC
		242	6.497	6.275	-0.161	-1.250	0.448	-0.445	Tension
		243	5.634	6.194	-2.976	-1.218	1.701	-1.349	PLASTIC
		244	5.821	6.125	-2.269	-5.124	2.308	-2.367	PLASTIC
		245	6.083	6.200	-1.469	-1.868	-1.656	-1.038	Tension
		246	5.783	6.175	-1.430	-2.681	1.787	-1.339	PLASTIC
		247	5.914	6.104	-0.527	-4.696	0.610	-1.734	PLASTIC
		248	6.252	6.202	-0.067	-0.621	0.203	-0.290	Tension
		249	6.214	6.253	0.000	0.000	0.000	-0.040	Tension
		250	5.827	6.220	-0.351	-2.505	0.938	-0.924	Tension
		251	5.560	6.143	-4.065	-2.394	2.337	-2.077	PLASTIC
		252	5.609	6.078	-4.131	-3.410	2.728	-2.451	PLASTIC
	24 Soil	277	5.858	5.590	-15.969	-19.770	9.615	-11.325	PLASTIC
		278	5.875	5.815	-7.516	-15.115	5.303	-7.201	PLASTIC
		279	5.636	5.700	-14.993	-14.060	8.116	-9.226	PLASTIC
		280	5.811	5.667	-14.387	-13.573	7.846	-8.928	PLASTIC
		281	5.816	5.737	-13.100	-14.840	7.903	-8.960	PLASTIC
		282	5.742	5.702	-14.404	-12.231	7.446	-8.499	PLASTIC
		283	5.886	5.658	-14.580	-20.909	9.210	-11.193	PLASTIC
		284	5.873	5.748	-12.244	-20.378	8.053	-10.256	PLASTIC
		285	5.802	5.783	-12.143	-13.799	7.305	-8.222	PLASTIC
		286	5.706	5.737	-13.722	-11.559	7.104	-8.063	PLASTIC
		287	5.701	5.685	-16.815	-14.561	8.637	-9.952	PLASTIC
		288	5.790	5.621	-15.308	-13.192	7.921	-9.127	PLASTIC
	25 Soil	289	6.136	5.166	-43.517	-37.750	14.917	-25.344	Elastic
		290	5.877	5.532	-17.220	-28.293	9.235	-14.307	Elastic
		291	5.655	5.480	-19.473	-17.035	9.918	-11.650	PLASTIC
		292	5.966	5.322	-26.974	-23.331	2.211	-15.993	Elastic
		293	5.885	5.436	-25.024	-30.611	7.892	-17.425	Elastic
		294	5.816	5.420	-39.869	-29.740	17.529	-21.571	PLASTIC
		295	6.063	5.274	-28.011	-14.916	9.573	-13.750	PLASTIC
		296	5.959	5.421	-27.583	-22.909	3.040	-15.895	Elastic
		297	5.806	5.520	-17.765	-15.348	9.064	-10.597	PLASTIC
		298	5.717	5.499	-18.029	-15.135	9.042	-10.630	PLASTIC
		299	5.799	5.384	-49.416	-32.643	19.764	-25.457	PLASTIC
		300	5.993	5.259	-24.670	-25.286	9.402	-15.973	Elastic

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	26	301	5.083	5.105	-37.899	-108.317	-12.238	-44.908	PLASTIC
	Soil	302	4.991	5.459	-46.178	-75.117	-27.631	-37.103	PLASTIC
		303	4.789	5.292	-49.398	-35.333	-21.320	-26.575	PLASTIC
		304	4.994	5.230	-42.077	-71.918	-25.292	-35.108	PLASTIC
		305	4.966	5.340	-41.567	-48.035	-23.041	-27.697	PLASTIC
		306	4.903	5.288	-46.548	-33.641	-19.893	-24.917	PLASTIC
		307	5.058	5.211	-38.525	-106.384	-14.990	-44.386	PLASTIC
		309	5.022	5.353	-39.669	-64.133	-22.777	-37.939	PLASTIC
		308	4.929	5.413	-26.241	-24.312	-13.470	-15.920	PLASTIC
		310	4.847	5.346	-35.636	-21.997	-13.668	-18.101	PLASTIC
		311	4.878	5.233	-38.909	-32.728	-18.519	-22.398	PLASTIC
		312	4.994	5.158	-34.805	-63.101	-20.898	-30.282	PLASTIC
	27	313	4.815	5.619	-19.225	-19.668	-10.587	-12.247	PLASTIC
	Soil	314	4.770	5.335	-22.986	-25.111	-7.054	-15.243	Elastic
		315	4.972	5.583	-24.846	-21.669	-12.456	-14.624	PLASTIC
		316	4.841	5.548	-18.950	-18.572	-10.322	-11.958	PLASTIC
		317	4.827	5.457	-26.026	-32.019	-15.083	-18.130	PLASTIC
		318	4.890	5.535	-18.264	-14.365	-8.610	-10.439	PLASTIC
		319	4.799	5.533	-17.863	-21.690	-9.477	-12.524	Elastic
		320	4.781	5.419	-30.559	-24.785	-10.002	-17.352	Elastic
		321	4.831	5.408	-38.809	-33.342	-18.669	-22.344	PLASTIC
		322	4.912	5.507	-17.481	-13.034	-8.196	-9.822	PLASTIC
		323	4.927	5.597	-21.634	-18.771	-10.873	-12.719	PLASTIC
		324	4.864	5.612	-19.944	-18.607	-10.538	-12.210	PLASTIC
	28	325	4.740	5.854	-8.318	-12.699	-4.627	-8.084	PLASTIC
	Soil	326	4.813	5.668	-17.509	-20.179	-10.201	-11.944	PLASTIC
		327	4.970	5.795	-11.099	-10.203	-6.175	-6.820	PLASTIC
		328	4.810	5.798	-14.956	-15.582	-8.490	-9.582	PLASTIC
		329	4.832	5.740	-15.979	-16.528	-8.999	-10.229	PLASTIC
		330	4.881	5.779	-19.706	-16.935	-9.930	-11.435	PLASTIC
		331	4.760	5.798	-13.978	-13.515	-7.702	-9.545	Elastic
		332	4.789	5.723	-16.956	-19.157	-9.415	-11.024	Elastic
		333	4.862	5.704	-14.445	-16.232	-9.488	-9.709	PLASTIC
		334	4.925	5.755	-17.921	-16.396	-9.415	-10.758	PLASTIC
		335	4.902	5.814	-16.382	-15.620	-9.264	-10.613	PLASTIC
		336	4.809	5.838	-9.688	-14.649	-6.493	-7.694	PLASTIC

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	30 Soil	349	5.019	6.019	-3.805	-0.979	-1.502	-1.674	PLASTIC
		350	5.141	6.100	-1.957	-3.174	-2.061	-1.709	PLASTIC
		351	5.141	6.181	-7.270	-6.552	-4.307	-4.248	PLASTIC
		352	5.075	6.075	-2.894	-0.570	-1.284	-1.231	Tension
		353	5.113	6.100	-4.978	-5.841	-3.545	-3.416	PLASTIC
		354	5.113	6.125	-5.359	-2.321	-2.336	-2.452	PLASTIC
		355	5.055	6.042	-2.978	-1.303	-1.746	-1.504	PLASTIC
		356	5.103	6.074	-4.361	-6.004	-3.358	-3.301	PLASTIC
		357	5.142	6.126	-7.377	-10.551	-5.107	-5.526	PLASTIC
		358	5.142	6.158	-2.640	-3.529	-2.367	-1.971	PLASTIC
		359	5.103	6.133	-3.232	-0.644	-1.301	-1.305	PLASTIC
		360	5.055	6.097	-3.104	-0.360	-1.057	-1.237	Tension
	31 Soil	361	4.213	6.254	-0.865	-0.023	0.141	-0.305	Tension
		362	4.697	5.909	-9.560	-6.133	-2.513	-5.041	Elastic
		363	4.927	6.011	-7.397	-9.474	-4.976	-5.307	PLASTIC
		364	4.498	6.119	-0.996	-5.792	-0.670	-2.160	PLASTIC
		365	4.638	6.011	-1.034	-2.388	1.564	-1.265	Tension
		366	4.710	6.043	-0.262	-3.202	-0.916	-1.259	Tension
		367	4.352	6.152	-0.137	-1.987	-0.519	-0.757	Tension
		368	4.546	6.012	-1.268	-6.982	0.636	-2.719	PLASTIC
		369	4.773	5.935	-10.468	-10.643	-6.143	-8.644	PLASTIC
		370	4.885	5.977	-7.241	-12.475	-5.170	-6.190	PLASTIC
		371	4.712	6.086	-0.447	-4.193	-0.773	-1.574	PLASTIC
		372	4.425	6.184	-0.099	-1.540	0.359	-0.590	Tension
	32 Soil	373	6.119	5.132	-21.427	-20.875	10.991	-13.894	Elastic
		374	5.637	5.445	-45.977	-53.618	25.480	-30.605	PLASTIC
		375	5.625	5.049	-37.888	-52.473	22.053	-28.172	Elastic
		376	5.894	5.185	-46.685	-35.004	20.471	-25.455	PLASTIC
		377	5.745	5.262	-37.158	-30.532	17.477	-21.172	PLASTIC
		378	5.741	5.159	-40.324	-41.068	21.211	-25.388	PLASTIC
		379	5.977	5.228	-38.344	-40.200	11.749	-24.474	Elastic
		380	5.784	5.354	-27.526	-17.541	11.058	-14.324	PLASTIC
		381	5.627	5.328	-44.046	-61.557	25.823	-32.507	PLASTIC
		382	5.623	5.169	-39.213	-63.498	23.604	-31.774	PLASTIC
		383	5.776	5.089	-35.618	-42.563	20.181	-24.560	PLASTIC
		384	5.974	5.102	-34.383	-41.481	14.343	-23.771	Elastic

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	34	397	5.538	5.046	-34.978	-93.485	15.232	-39.593	PLASTIC
	Soil	398	5.306	5.442	-39.980	-123.399	-0.333	-49.723	PLASTIC
		399	5.154	5.087	-36.580	-107.727	-9.964	-44.303	PLASTIC
		400	5.397	5.146	-40.157	-123.393	3.358	-50.025	PLASTIC
		401	5.325	5.269	-41.376	-127.590	0.236	-51.546	PLASTIC
		402	5.277	5.159	-42.678	-128.524	1.894	-52.310	Elastic
		403	5.472	5.166	-39.602	-118.097	9.108	-48.261	PLASTIC
		404	5.379	5.325	-41.121	-126.791	0.867	-51.182	PLASTIC
		405	5.257	5.338	-41.931	-129.258	-0.014	-52.154	PLASTIC
		406	5.196	5.196	-41.591	-127.263	-2.506	-51.575	Elastic
		407	5.289	5.070	-41.402	-127.649	-0.677	-51.740	PLASTIC
		408	5.424	5.054	-39.318	-117.765	8.512	-48.184	PLASTIC
	40	469	6.298	5.639	-12.393	-12.711	2.103	-8.093	Elastic
	Soil	470	5.923	5.811	-8.677	-14.516	5.991	-7.373	PLASTIC
		471	5.908	5.588	-15.189	-23.942	8.271	-12.346	Elastic
		472	6.120	5.666	-12.649	-13.854	3.778	-8.550	Elastic
		473	6.004	5.720	-10.813	-13.722	4.982	-7.854	Elastic
		474	5.999	5.650	-14.733	-17.235	6.185	-10.143	Elastic
		475	6.187	5.692	-10.914	-11.982	2.243	-7.380	Elastic
		476	6.037	5.781	-8.403	-12.117	4.761	-6.614	Elastic
		477	5.913	5.744	-10.275	-15.337	6.814	-9.156	PLASTIC
		478	5.906	5.654	-14.796	-20.640	8.589	-11.180	Elastic
		479	6.024	5.599	-10.341	-17.904	5.230	-10.589	Elastic
		480	6.181	5.621	-14.542	-14.174	3.338	-9.192	Elastic
	41	481	4.726	4.658	-32.677	-57.463	-15.358	-28.440	Elastic
	Soil	482	5.063	5.047	-31.977	-79.773	-13.894	-34.577	Elastic
		483	4.770	5.235	-39.710	-31.143	-18.079	-22.162	PLASTIC
		484	4.814	4.880	-34.173	-35.455	-18.282	-22.096	PLASTIC
		485	4.919	5.001	-37.677	-49.526	-21.879	-27.265	PLASTIC
		486	4.827	5.059	-34.531	-32.383	-17.562	-21.129	PLASTIC
		487	4.829	4.769	-33.201	-38.002	-18.512	-22.682	PLASTIC
		488	4.984	4.928	-35.660	-69.333	-21.326	-32.365	PLASTIC
		489	4.978	5.109	-35.880	-65.925	-21.609	-31.554	PLASTIC
		490	4.980	5.185	-38.154	-33.393	-18.601	-22.412	PLASTIC
		491	4.753	5.061	-35.684	-41.247	-19.963	-24.187	PLASTIC
		492	4.736	4.829	-35.422	-54.132	-19.336	-28.117	Elastic

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	42 Soil	493	4.424	5.579	-17.120	-15.299	-4.132	-10.513	Elastic
		494	4.730	5.335	-30.984	-28.549	-11.143	-18.080	Elastic
		495	4.776	5.619	-17.137	-19.782	-10.005	-11.649	PLASTIC
		496	4.575	5.532	-19.808	-19.379	-6.766	-12.409	Elastic
		497	4.670	5.456	-24.085	-23.320	-8.953	-14.950	Elastic
		498	4.684	5.544	-19.744	-20.987	-8.348	-12.855	Elastic
		499	4.513	5.504	-20.492	-19.139	-8.009	-12.568	Elastic
		500	4.636	5.406	-25.936	-25.429	-8.814	-16.169	Elastic
		501	4.748	5.419	-26.870	-24.128	-10.407	-16.049	Elastic
		502	4.768	5.533	-20.218	-22.947	-9.648	-13.602	Elastic
		503	4.669	5.610	-17.246	-18.095	-8.439	-11.189	Elastic
		504	4.527	5.524	-17.113	-16.860	-5.497	-10.792	Elastic
	43 Soil	505	4.422	5.616	-15.232	-14.609	-3.847	-9.534	Elastic
		506	4.774	5.655	-16.829	-18.726	-9.709	-11.215	PLASTIC
		507	4.701	5.841	-5.819	-8.259	-3.822	-3.953	PLASTIC
		508	4.567	5.677	-14.374	-13.681	-5.470	-8.948	Elastic
		509	4.676	5.689	-15.368	-15.329	-8.234	-9.729	Elastic
		510	4.653	5.747	-13.683	-12.268	-5.821	-8.249	Elastic
		511	4.528	5.625	-15.993	-15.990	-5.269	-10.168	Elastic
		512	4.667	5.641	-16.591	-16.947	-7.975	-10.622	Elastic
		513	4.758	5.712	-16.188	-17.798	-9.328	-10.695	PLASTIC
		514	4.728	5.787	-13.446	-11.955	-7.178	-8.956	PLASTIC
		515	4.615	5.775	-10.603	-11.563	-4.651	-7.096	Elastic
		516	4.503	5.684	-13.203	-13.426	-4.163	-8.513	Elastic
	46 Soil	541	4.378	5.657	-13.224	-13.194	-2.585	-8.488	Elastic
		542	4.657	5.683	-8.083	-8.461	-3.329	-5.318	Elastic
		543	4.174	6.229	-0.005	-0.209	0.032	-0.125	Tension
		544	4.395	5.840	-5.159	-9.309	-1.211	-4.731	Elastic
		545	4.482	5.910	-1.982	-8.405	-1.197	-3.448	Elastic
		546	4.332	6.018	-0.095	-3.436	-0.453	-1.299	Elastic
		547	4.488	5.719	-10.722	-11.592	-3.186	-7.188	Elastic
		548	4.578	5.810	-8.300	-9.811	-3.317	-5.550	Elastic
		549	4.513	5.991	-0.481	-4.585	-0.543	-1.771	PLASTIC
		550	4.319	6.130	-0.176	-3.329	-0.683	-1.196	Elastic
		551	4.230	6.059	-0.001	-3.450	-0.059	-1.240	Tension
		552	4.313	5.829	-4.002	-8.576	-1.295	-4.174	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	47	553	5.959	4.484	-36.753	-60.719	18.109	-30.784	Elastic
	Soil	554	6.141	5.062	-37.019	-33.070	12.324	-22.079	Elastic
		555	5.649	4.979	-31.058	-46.947	19.754	-24.524	PLASTIC
		556	5.930	4.731	-35.320	-52.654	19.361	-27.726	Elastic
		557	5.986	4.911	-35.021	-42.214	16.964	-24.352	Elastic
		558	5.833	4.885	-37.736	-51.719	22.153	-28.039	PLASTIC
		559	6.018	4.655	-35.885	-52.160	17.734	-27.812	Elastic
		560	6.092	4.887	-33.747	-40.352	15.242	-23.431	Elastic
		561	5.993	5.044	-31.874	-36.872	13.786	-21.691	Elastic
		562	5.795	5.011	-34.558	-47.619	20.390	-25.749	PLASTIC
		563	5.737	4.827	-39.140	-52.788	22.851	-33.830	PLASTIC
		564	5.862	4.628	-32.684	-58.009	19.843	-28.629	PLASTIC
	49	577	5.342	4.560	-33.419	-103.683	0.752	-42.591	PLASTIC
	Soil	578	5.541	4.982	-35.868	-81.127	19.699	-36.206	Elastic
		579	5.157	5.024	-36.408	-103.480	-12.638	-43.031	PLASTIC
		580	5.345	4.763	-32.734	-101.041	3.268	-41.419	PLASTIC
		581	5.407	4.895	-37.658	-113.075	8.689	-46.454	PLASTIC
		582	5.289	4.908	-37.137	-114.818	-1.060	-46.750	PLASTIC
		583	5.405	4.683	-33.127	-101.784	4.278	-41.828	PLASTIC
		584	5.485	4.653	-37.424	-103.341	14.424	-43.447	Elastic
		585	5.428	5.000	-39.921	-118.143	10.052	-48.505	PLASTIC
		586	5.272	5.017	-39.449	-121.593	-2.124	-49.384	PLASTIC
		587	5.209	4.883	-38.998	-109.870	-9.215	-45.245	PLASTIC
		588	5.283	4.696	-31.091	-96.360	-2.479	-39.578	PLASTIC
	53	625	6.344	5.685	-9.747	-11.229	1.056	-6.815	Elastic
	Soil	626	6.573	6.229	-0.156	-0.450	-0.178	-0.242	Elastic
		627	5.971	5.857	-7.772	-9.378	3.352	-5.521	Elastic
		628	6.311	5.850	-1.636	-3.125	0.635	-3.311	PLASTIC
		629	6.382	6.019	-0.136	-3.472	0.587	-1.322	PLASTIC
		630	6.195	5.903	-1.330	-7.452	-0.058	-2.972	PLASTIC
		631	6.418	5.849	-1.690	-7.505	0.096	-3.142	Elastic
		632	6.510	6.068	-0.178	-3.919	0.260	-1.426	PLASTIC
		633	6.392	6.122	-0.116	-3.482	0.548	-1.225	PLASTIC
		634	6.150	5.973	-0.815	-5.671	-0.541	-2.224	PLASTIC
		635	6.077	5.800	-5.993	-9.653	2.600	-5.118	Elastic
		636	6.227	5.731	-7.554	-10.350	1.815	-5.854	Elastic

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	55 Soil	649	5.286	4.533	-28.811	-68.993	-2.668	-36.823	Elastic
		650	5.101	4.997	-40.530	-103.358	-16.172	-44.262	Elastic
		651	4.764	4.607	-35.429	-51.619	-21.131	-27.553	PLASTIC
		652	5.124	4.657	-33.145	-84.565	-13.238	-36.697	Elastic
		653	5.066	4.601	-33.361	-77.979	-18.057	-34.664	PLASTIC
		654	4.961	4.680	-35.346	-61.838	-21.393	-30.532	PLASTIC
		655	5.236	4.674	-32.983	-100.675	-5.221	-41.460	Elastic
		656	5.161	4.660	-35.174	-101.244	-11.193	-42.129	Elastic
		657	4.996	4.884	-35.039	-66.509	-21.015	-31.668	PLASTIC
		658	4.860	4.727	-36.338	-53.658	-21.701	-28.336	PLASTIC
		659	4.919	4.580	-31.957	-57.681	-19.399	-28.354	PLASTIC
		660	5.129	4.550	-30.495	-80.006	-13.153	-34.625	Elastic
	60 Soil	709	3.683	5.459	-15.031	-15.424	-0.521	-9.852	Elastic
		710	4.307	5.627	-14.016	-13.819	-2.440	-8.922	Elastic
		711	4.102	6.198	-0.039	-2.646	-0.322	-0.992	Tension
		712	3.912	5.687	-9.511	-10.828	-0.056	-6.640	Elastic
		713	4.112	5.719	-8.405	-10.193	-0.387	-6.073	Elastic
		714	4.048	5.697	-1.806	-8.769	-0.061	-3.515	Elastic
		715	3.854	5.501	-15.006	-14.334	-0.741	-9.481	Elastic
		716	4.113	5.568	-14.619	-13.850	-1.431	-9.183	Elastic
		717	4.252	5.603	-5.113	-8.294	-0.557	-4.445	Elastic
		718	4.170	6.033	-0.006	-3.410	-0.145	-1.252	Tension
		719	3.996	5.979	-0.935	-6.153	-0.244	-2.399	Elastic
		720	3.789	5.682	-8.649	-10.065	0.118	-6.139	Elastic
	62 Soil	733	5.396	4.518	-26.638	-60.961	8.590	-33.949	PLASTIC
		734	5.905	4.445	-30.900	-65.852	17.178	-30.542	Elastic
		735	5.595	4.940	-42.563	-78.368	24.087	-37.422	Elastic
		736	5.559	4.528	-33.159	-71.455	19.064	-32.818	PLASTIC
		737	5.717	4.576	-33.470	-56.188	20.321	-28.357	PLASTIC
		738	5.621	4.730	-32.959	-56.222	20.008	-28.689	PLASTIC
		739	5.549	4.491	-30.956	-70.119	17.309	-31.848	PLASTIC
		740	5.754	4.481	-29.607	-54.216	18.022	-26.710	PLASTIC
		741	5.817	4.595	-36.992	-58.315	22.273	-30.041	PLASTIC
		742	5.692	4.794	-33.610	-48.364	20.085	-26.022	PLASTIC
		743	5.531	4.818	-34.770	-60.112	17.969	-35.712	Elastic
		744	5.451	4.648	-32.493	-89.608	13.016	-38.019	PLASTIC

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	68	781	7.088	5.408	-14.932	-16.045	0.364	-10.051	Elastic
	Soil	782	6.653	6.196	-0.010	-2.401	0.069	-0.811	Elastic
		783	6.424	5.653	-10.855	-12.146	0.807	-7.450	Elastic
		784	6.836	5.645	-8.550	-10.880	-0.254	-6.385	Elastic
		785	6.701	5.891	-1.649	-8.410	-0.014	-3.366	PLASTIC
		786	6.629	5.721	-6.394	-9.797	-0.254	-5.349	Elastic
		787	6.964	5.646	-8.523	-10.718	-0.228	-6.329	Elastic
		788	6.789	5.963	-0.959	-6.299	0.240	-2.464	PLASTIC
		789	6.578	6.040	-0.122	-3.802	0.160	-1.398	PLASTIC
		790	6.496	5.822	-2.556	-8.107	-0.185	-3.606	Elastic
		791	6.624	5.572	-12.695	-13.061	0.481	-8.346	Elastic
		792	6.891	5.473	-14.202	-14.353	0.417	-9.269	Elastic
	69	817	5.072	4.044	-23.482	-59.164	-12.047	-28.599	PLASTIC
	Soil	818	5.284	4.464	-29.172	-82.694	-3.651	-35.100	Elastic
		819	4.762	4.538	-33.712	-53.758	-20.405	-27.739	PLASTIC
		820	5.049	4.254	-27.585	-62.841	-15.480	-28.848	PLASTIC
		821	5.115	4.365	-28.602	-74.615	-13.492	-32.581	PLASTIC
		822	4.953	4.408	-30.287	-58.777	-18.225	-28.328	PLASTIC
		823	5.140	4.166	-24.159	-67.679	-9.704	-29.353	PLASTIC
		824	5.228	4.335	-28.441	-80.945	-4.331	-34.466	Elastic
		825	5.127	4.492	-29.192	-80.414	-11.985	-34.406	PLASTIC
		826	4.917	4.522	-31.630	-56.530	-19.227	-27.960	PLASTIC
		827	4.850	4.388	-29.902	-59.892	-17.854	-28.560	PLASTIC
		828	4.975	4.190	-27.684	-60.848	-15.937	-28.353	PLASTIC
	72	853	7.181	5.451	-13.303	-14.423	0.300	-9.040	Elastic
	Soil	854	7.709	6.239	-0.002	-0.871	-0.044	-0.314	Tension
		855	6.748	6.239	-0.003	-1.406	-0.082	-0.475	Tension
		856	7.202	5.813	-4.152	-9.327	-0.352	-4.458	Elastic
		857	7.387	6.058	-0.161	-3.946	-0.018	-1.439	PLASTIC
		858	7.087	6.058	-0.074	-3.685	0.031	-1.334	PLASTIC
		859	7.347	5.681	-7.388	-10.187	-0.430	-5.798	Elastic
		860	7.560	5.998	-1.116	-5.344	-0.176	-2.194	Elastic
		861	7.422	6.248	-0.001	-1.106	-0.041	-0.376	Tension
		862	7.035	6.249	-0.001	-0.913	0.033	-0.318	Tension
		863	6.867	5.998	-0.333	-4.619	-0.091	-1.753	PLASTIC
		864	7.042	5.681	-7.336	-10.551	-0.394	-5.892	Elastic

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	78	901	5.611	3.983	-22.581	-61.083	10.162	-27.063	PLASTIC
	Soil	902	5.906	4.376	-32.477	-61.089	16.596	-29.705	Elastic
		903	5.398	4.449	-30.644	-60.052	8.452	-37.762	Elastic
		904	5.630	4.180	-26.591	-62.478	14.601	-28.522	PLASTIC
		905	5.722	4.303	-29.946	-62.823	17.566	-29.528	PLASTIC
		906	5.563	4.325	-28.670	-61.144	14.954	-28.010	PLASTIC
		907	5.704	4.097	-26.676	-65.865	13.661	-29.635	PLASTIC
		908	5.823	4.255	-29.563	-64.242	17.049	-29.879	PLASTIC
		909	5.755	4.403	-32.018	-62.904	19.145	-30.039	PLASTIC
		910	5.550	4.433	-27.908	-62.225	15.909	-28.615	PLASTIC
	83	985	5.555	3.956	-21.699	-59.821	9.354	-26.436	PLASTIC
	Soil	986	5.342	4.422	-28.135	-62.739	0.065	-34.538	Elastic
		987	5.129	4.002	-20.944	-59.927	-8.038	-26.202	PLASTIC
		988	5.408	4.074	-21.122	-62.599	6.708	-26.989	PLASTIC
		989	5.342	4.219	-23.825	-71.729	3.267	-30.415	Elastic
		990	5.276	4.068	-21.766	-68.013	-0.513	-28.764	Elastic
		991	5.495	4.097	-21.995	-60.056	9.741	-26.475	PLASTIC
		992	5.409	4.265	-25.316	-74.283	7.396	-31.572	Elastic
		993	5.274	4.300	-26.948	-78.871	-3.452	-32.765	Elastic
		994	5.189	4.131	-23.710	-71.577	-6.055	-30.410	PLASTIC
		995	5.258	3.983	-20.150	-63.866	-0.727	-27.154	PLASTIC
		996	5.428	3.984	-20.904	-61.475	7.005	-26.679	PLASTIC
	84	997	4.470	3.751	-30.122	-69.176	-12.690	-31.956	Elastic
	Soil	998	5.013	3.993	-23.454	-60.299	-11.664	-27.075	PLASTIC
		999	4.703	4.487	-33.202	-61.258	-16.492	-29.879	Elastic
		1000	4.648	3.975	-29.437	-67.475	-13.437	-31.049	Elastic
		1001	4.817	4.051	-28.224	-68.382	-14.923	-30.894	PLASTIC
		1002	4.721	4.204	-30.115	-65.569	-16.040	-30.486	Elastic
		1003	4.633	3.816	-27.033	-68.677	-13.440	-30.825	Elastic
		1004	4.851	3.913	-25.845	-67.755	-12.092	-30.109	Elastic
		1005	4.925	4.146	-27.704	-61.139	-15.908	-28.493	PLASTIC
		1006	4.800	4.345	-30.254	-60.280	-18.078	-28.822	PLASTIC
		1007	4.628	4.268	-31.423	-61.304	-15.621	-29.545	Elastic
		1008	4.535	3.972	-29.171	-63.927	-15.165	-29.808	Elastic

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	90	1069	6.225	3.594	-29.324	-68.892	11.500	-31.765	Elastic
	Soil	1070	5.966	4.314	-30.921	-62.590	16.639	-29.741	Elastic
		1071	5.671	3.921	-24.372	-65.257	10.070	-28.911	Elastic
		1072	6.038	3.835	-29.191	-70.410	13.564	-31.976	Elastic
		1073	5.958	4.059	-29.876	-67.798	15.551	-31.207	Elastic
		1074	5.866	3.936	-27.635	-68.258	13.440	-30.777	Elastic
		1075	6.153	3.810	-29.738	-67.238	13.050	-31.209	Elastic
		1076	6.049	4.099	-30.260	-64.153	15.471	-30.194	Elastic
		1077	5.873	4.203	-29.730	-65.954	16.658	-30.487	Elastic
		1078	5.754	4.045	-26.518	-64.967	13.924	-29.382	PLASTIC
		1079	5.836	3.816	-26.331	-67.595	10.849	-30.289	Elastic
		1080	6.059	3.685	-27.779	-71.810	12.090	-32.100	Elastic
	97	1153	5.345	3.295	-19.871	-61.682	-2.898	-28.940	PLASTIC
	Soil	1154	5.555	3.874	-21.491	-60.883	8.530	-26.756	PLASTIC
		1155	5.129	3.921	-20.032	-58.092	-7.342	-25.447	PLASTIC
		1156	5.344	3.572	-17.215	-55.018	0.924	-23.969	PLASTIC
		1157	5.409	3.752	-18.875	-58.110	4.433	-25.241	PLASTIC
		1158	5.277	3.766	-17.967	-57.365	-0.115	-24.733	PLASTIC
		1159	5.411	3.464	-18.469	-59.818	-0.731	-25.576	PLASTIC
		1160	5.498	3.697	-19.957	-61.050	4.879	-26.502	PLASTIC
		1161	5.428	3.696	-19.876	-59.257	6.220	-25.764	PLASTIC
		1162	5.257	3.914	-19.489	-61.875	-0.790	-26.417	PLASTIC
		1163	5.190	3.731	-17.485	-53.756	-4.460	-23.539	PLASTIC
		1164	5.276	3.479	-16.557	-52.956	-1.290	-23.232	PLASTIC
	98	1165	5.269	3.280	-19.527	-62.036	0.317	-27.016	PLASTIC
	Soil	1166	5.054	3.906	-21.043	-58.644	-8.870	-25.929	PLASTIC
		1167	4.511	3.664	-27.193	-69.060	-12.238	-31.118	Elastic
		1168	5.046	3.512	-19.182	-60.674	-1.870	-26.314	PLASTIC
		1169	4.979	3.708	-20.851	-62.954	-5.730	-27.348	PLASTIC
		1170	4.810	3.631	-24.508	-67.924	-7.798	-29.998	Elastic
		1171	5.213	3.466	-18.224	-58.133	0.185	-25.298	PLASTIC
		1172	5.126	3.718	-18.704	-57.664	-4.344	-25.093	PLASTIC
		1173	4.886	3.640	-24.281	-65.689	-10.340	-29.083	Elastic
		1174	4.887	3.742	-27.423	-71.393	-11.920	-31.819	Elastic
		1175	4.736	3.544	-23.933	-70.404	-7.610	-30.644	PLASTIC
		1176	5.041	3.389	-19.291	-61.267	-0.661	-26.629	PLASTIC

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	104 Soil	1237	5.421	3.266	-18.324	-58.347	-0.939	-25.560	PLASTIC
		1238	6.186	3.518	-27.983	-71.980	10.726	-32.353	Elastic
		1239	5.631	3.845	-23.253	-63.764	7.092	-28.193	Elastic
		1240	5.845	3.457	-20.738	-64.786	3.139	-28.074	PLASTIC
		1241	5.883	3.536	-23.957	-68.533	7.313	-30.097	Elastic
		1242	5.710	3.637	-21.944	-65.146	6.395	-28.390	Elastic
		1243	5.652	3.336	-21.068	-66.143	2.422	-28.682	PLASTIC
		1244	5.959	3.437	-24.276	-71.133	7.082	-31.056	Elastic
		1245	6.026	3.621	-27.128	-72.603	10.950	-32.196	Elastic
		1246	5.803	3.753	-25.273	-68.351	9.563	-29.652	Elastic
		1247	5.560	3.673	-20.912	-64.756	3.965	-27.921	PLASTIC
	113 Soil	1345	4.616	2.724	-26.937	-74.807	-0.812	-33.563	Elastic
		1346	5.238	3.195	-19.849	-61.723	0.588	-27.091	Elastic
		1347	4.479	3.579	-28.491	-71.896	-11.400	-32.429	Elastic
		1348	4.728	3.028	-22.445	-70.560	-1.726	-30.653	PLASTIC
		1349	4.921	3.175	-20.883	-68.002	-0.753	-28.716	PLASTIC
		1350	4.685	3.294	-22.946	-70.187	-5.025	-30.495	PLASTIC
		1351	4.808	2.857	-23.437	-70.857	-0.175	-31.215	Elastic
		1352	5.058	3.046	-20.740	-65.658	0.542	-28.673	PLASTIC
		1353	5.014	3.317	-20.024	-63.490	-0.699	-27.577	PLASTIC
		1354	4.709	3.472	-23.415	-69.600	-6.965	-30.308	PLASTIC
		1355	4.512	3.322	-25.391	-73.823	-7.712	-32.232	Elastic
		1356	4.597	2.979	-24.009	-74.485	-2.911	-32.369	Elastic
	131 Soil	1561	6.073	2.597	-29.152	-77.736	1.140	-35.222	Elastic
		1562	6.217	3.428	-27.159	-71.050	9.739	-31.904	Elastic
		1563	5.453	3.175	-20.016	-63.446	-0.851	-27.692	PLASTIC
		1564	5.964	2.915	-23.824	-74.702	1.731	-32.435	PLASTIC
		1565	6.009	3.177	-24.110	-73.799	4.913	-32.029	Elastic
		1566	5.771	3.098	-21.706	-68.458	1.195	-29.771	PLASTIC
		1567	6.125	2.636	-26.250	-75.999	3.064	-33.619	Elastic
		1568	6.183	3.174	-26.047	-73.870	7.089	-32.632	Elastic
		1569	5.968	3.361	-24.672	-72.844	6.920	-31.753	Elastic
		1570	5.678	3.259	-20.745	-65.490	1.533	-28.455	PLASTIC
		1571	5.633	2.993	-21.208	-67.073	-0.320	-29.295	PLASTIC
		1572	5.892	2.756	-26.053	-73.807	0.083	-32.970	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	183 Soil	1945	5.619	5.984	-4.074	-0.271	0.442	-1.572	PLASTIC
		1946	5.619	5.903	-10.341	-8.425	5.474	-5.968	PLASTIC
		1947	5.558	5.656	-22.182	-16.208	10.028	-11.995	PLASTIC
		1948	5.674	5.936	-7.478	-6.322	4.277	-4.450	PLASTIC
		1949	5.674	5.910	-12.156	-6.884	4.970	-6.043	PLASTIC
		1950	5.748	5.896	-3.873	-11.051	2.872	-4.821	PLASTIC
		1951	5.616	5.961	-3.388	-1.159	1.664	-1.652	PLASTIC
		1952	5.616	5.928	-9.775	-6.351	4.589	-5.154	PLASTIC
		1953	5.692	5.887	-12.437	-8.222	5.651	-6.548	PLASTIC
		1954	5.788	5.868	-8.435	-10.778	4.691	-5.531	PLASTIC
		1955	5.788	5.894	-9.257	-9.941	5.655	-6.104	PLASTIC
		1956	5.692	5.946	-6.195	-10.080	4.538	-5.180	PLASTIC
	184 Soil	1957	5.684	6.009	-6.936	-7.936	4.557	-4.709	PLASTIC
		1958	5.923	5.881	-8.296	-10.857	4.622	-5.502	PLASTIC
		1959	6.525	6.252	-0.579	-0.064	0.192	-0.233	Tension
		1960	5.932	6.035	-1.217	-5.360	1.418	-2.198	PLASTIC
		1961	6.007	5.998	-0.595	-4.600	0.823	-1.817	PLASTIC
		1962	6.104	6.111	-0.131	-3.333	-0.661	-1.200	Tension
		1963	5.747	5.967	-6.741	-10.057	4.786	-5.322	PLASTIC
		1964	5.843	5.915	-7.345	-12.359	5.221	-6.239	PLASTIC
		1965	6.110	5.993	-0.699	-4.543	-0.511	-1.933	Elastic
		1966	6.352	6.142	-0.124	-3.652	0.405	-1.267	PLASTIC
		1967	6.276	6.183	-0.005	-1.841	0.097	-0.654	Tension
		1968	5.938	6.085	-0.449	-4.475	0.598	-1.660	PLASTIC
2	171 Blocks	2041	5.038	5.506	-2.417	-119.709	-9.812	-25.559	Elastic
		2042	5.281	5.506	-0.131	-123.584	-4.021	-25.864	Tension
		2043	5.281	5.587	-0.082	-137.112	-2.909	-28.441	Tension
		2044	5.150	5.525	-0.574	-137.769	-8.693	-28.776	Tension
		2045	5.225	5.525	-0.559	-137.798	-9.010	-28.772	Tension
		2046	5.225	5.550	-0.630	-138.352	-9.338	-28.855	Tension
		2047	5.109	5.505	-3.765	-135.503	-2.735	-28.989	Elastic
		2048	5.207	5.505	-0.803	-139.302	-10.574	-29.143	Tension
		2049	5.284	5.531	-0.092	-127.194	-3.426	-26.543	Tension
		2050	5.294	5.564	-0.083	-132.685	-2.898	-27.830	Tension
		2051	5.207	5.564	-0.960	-138.747	-11.541	-28.981	Tension
		2052	5.109	5.531	-2.545	-133.420	-3.070	-28.292	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	172 Blocks	2053	5.019	5.513	-6.169	-170.857	-13.219	-36.530	Elastic
		2054	5.262	5.594	-0.147	-130.407	-4.385	-27.103	Tension
		2055	5.019	5.594	-24.653	-148.080	-8.111	-35.557	Elastic
		2056	5.075	5.550	-24.204	-122.222	-8.219	-30.358	Elastic
		2057	5.150	5.575	-1.299	-136.502	-13.318	-28.584	Tension
		2058	5.075	5.575	-21.402	-123.879	-14.368	-30.093	Elastic
		2059	5.093	5.536	-9.705	-112.181	-8.440	-25.469	Elastic
		2060	5.191	5.569	-0.755	-151.431	-10.894	-31.470	Tension
		2061	5.191	5.595	-1.597	-144.492	-15.189	-30.214	Tension
		2062	5.093	5.595	-12.357	-128.361	-16.113	-29.153	Elastic
		2063	5.016	5.569	-19.067	-145.797	-22.497	-34.018	Elastic
		2064	5.016	5.536	-20.509	-164.244	-16.887	-38.042	Elastic
3	173 Blocks	2065	5.281	5.613	-0.068	-141.436	-3.048	-29.271	Tension
		2066	5.281	5.694	-0.033	-152.983	-2.243	-31.460	Tension
		2067	5.038	5.694	-16.859	-111.840	-21.923	-26.569	Elastic
		2068	5.225	5.650	-0.605	-148.841	-9.492	-30.807	Tension
		2069	5.225	5.675	-0.682	-152.457	-10.200	-31.510	Tension
		2070	5.150	5.675	-4.560	-142.354	-25.479	-30.278	Tension
		2071	5.284	5.636	-0.045	-144.634	-2.537	-29.873	Tension
		2072	5.264	5.669	-0.033	-149.262	-2.203	-30.750	Tension
		2073	5.207	5.695	-1.350	-154.560	-14.446	-32.037	Tension
		2074	5.109	5.695	-8.157	-133.597	-33.011	-29.219	Tension
		2075	5.109	5.669	-7.215	-130.928	-30.735	-28.533	Tension
		2076	5.207	5.636	-1.018	-146.372	-12.207	-30.415	Tension
	174 Blocks	2077	5.262	5.606	-0.042	-141.386	-2.431	-29.265	Tension
		2078	5.019	5.687	-17.774	-119.097	-17.253	-28.250	Elastic
		2079	5.019	5.606	-24.789	-141.328	-17.028	-34.216	Elastic
		2080	5.150	5.625	-3.815	-136.339	-22.805	-28.994	Tension
		2081	5.075	5.650	-16.084	-125.769	-23.453	-29.301	Elastic
		2082	5.075	5.625	-18.681	-127.620	-19.536	-30.226	Elastic
		2083	5.191	5.631	-1.956	-144.291	-16.799	-30.104	Tension
		2084	5.093	5.664	-6.640	-125.558	-28.787	-27.351	Elastic
		2085	5.016	5.664	-18.484	-126.570	-15.122	-29.922	Elastic
		2086	5.016	5.631	-19.933	-134.694	-15.127	-31.883	Elastic
		2087	5.093	5.605	-12.212	-128.085	-18.859	-29.053	Elastic
		2088	5.191	5.605	-1.564	-142.089	-14.907	-29.712	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
4	175 Blocks	2089	5.281	5.713	-0.041	-156.106	-2.517	-31.859	Tension
		2090	5.281	5.794	-0.025	-168.594	-2.041	-34.439	Tension
		2091	5.038	5.794	-12.999	-72.487	-30.665	-17.825	Elastic
		2092	5.225	5.750	-0.965	-166.067	-12.661	-34.184	Tension
		2093	5.225	5.775	-1.120	-171.465	-13.859	-35.258	Tension
		2094	5.150	5.775	-6.908	-159.201	-33.163	-33.976	Tension
		2095	5.284	5.736	-0.033	-158.521	-2.282	-32.507	Tension
		2096	5.284	5.769	-0.026	-163.821	-2.066	-33.519	Tension
		2097	5.207	5.795	-2.284	-175.472	-20.019	-36.285	Tension
		2098	5.109	5.795	-11.846	-141.411	-40.928	-31.378	Tension
		2099	5.109	5.769	-10.757	-138.979	-36.664	-30.710	Tension
		2100	5.207	5.736	-1.883	-163.049	-16.465	-33.738	Tension
	176 Blocks	2101	5.202	5.706	-0.102	-152.242	-3.950	-31.307	Tension
		2102	5.019	5.787	-16.914	-62.207	-22.831	-16.561	Elastic
		2103	5.019	5.706	-17.060	-111.063	-18.157	-26.476	Elastic
		2104	5.150	5.725	-5.739	-150.216	-29.361	-32.003	Tension
		2105	5.075	5.750	-11.478	-113.638	-36.022	-25.813	Elastic
		2106	5.075	5.725	-10.437	-114.934	-34.469	-25.899	Elastic
		2107	5.191	5.731	-2.477	-164.454	-20.183	-34.180	Tension
		2108	5.093	5.784	-11.981	-124.210	-38.544	-28.005	Tension
		2109	5.016	5.764	-16.982	-82.143	-18.291	-20.595	Elastic
		2110	5.016	5.731	-16.058	-99.023	-15.848	-23.933	Elastic
		2111	5.093	5.705	-8.627	-124.227	-32.737	-27.424	Tension
		2112	5.191	5.705	-2.370	-159.558	-19.444	-33.225	Tension
5	177 Blocks	2113	5.038	5.606	-12.924	-64.446	-28.562	-16.184	Elastic
		2114	5.281	5.606	-0.079	-170.649	-3.675	-34.843	Tension
		2115	5.281	5.687	-0.006	-185.603	1.069	-37.705	Tension
		2116	5.150	5.825	-8.469	-168.744	-37.804	-36.126	Tension
		2117	5.225	5.625	-1.444	-183.008	-16.259	-37.561	Tension
		2118	5.225	5.650	-1.794	-190.617	-18.491	-39.118	Tension
		2119	5.109	5.605	-12.927	-143.536	-43.076	-32.004	Tension
		2120	5.207	5.605	-2.237	-177.754	-19.942	-36.697	Tension
		2121	5.284	5.631	-0.051	-175.239	-2.983	-35.720	Tension
		2122	5.284	5.684	-0.005	-181.143	-0.945	-36.846	Tension
		2123	5.207	5.664	-3.503	-195.391	-26.162	-40.395	Tension
		2124	5.109	5.631	-13.950	-144.540	-44.904	-32.373	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	178 Blocks	2125	5.019	5.813	-22.827	-34.405	-14.289	-12.148	Elastic
		2126	5.262	5.894	-0.208	-188.351	-8.258	-38.288	Tension
		2127	5.019	5.894	-24.934	-13.290	-18.204	-8.232	Tension
		2128	5.075	5.650	-22.084	-104.432	-48.024	-25.952	Tension
		2129	5.150	5.875	-11.816	-179.477	-45.660	-38.819	Tension
		2130	5.075	5.875	-21.418	-83.486	-42.288	-21.594	Tension
		2131	5.093	5.836	-17.126	-118.493	-45.048	-27.792	Tension
		2132	5.191	5.869	-5.081	-203.414	-32.084	-42.304	Tension
		2133	5.191	5.695	-6.483	-215.511	-37.379	-44.971	Tension
		2134	5.093	5.695	-24.238	-110.316	-51.709	-27.466	Tension
		2135	5.016	5.869	-15.388	-5.937	-9.558	-4.987	Tension
		2136	5.016	5.836	-19.943	-45.101	-24.605	-13.678	Elastic
6	179 Blocks	2137	5.338	5.506	-0.085	-115.439	2.748	-24.222	Tension
		2138	5.581	5.506	-0.781	-183.552	11.971	-38.000	Tension
		2139	5.581	5.587	-23.348	-161.965	22.074	-38.082	Elastic
		2140	5.450	5.525	-0.833	-136.377	10.971	-28.547	Tension
		2141	5.525	5.525	-18.304	-121.187	6.795	-29.006	Elastic
		2142	5.525	5.550	-20.508	-126.245	6.025	-30.422	Elastic
		2143	5.409	5.505	-1.101	-159.669	13.258	-33.264	Tension
		2144	5.507	5.505	-9.499	-108.243	7.299	-24.684	Elastic
		2145	5.584	5.531	-13.131	-160.619	31.624	-41.849	Elastic
		2146	5.584	5.564	-29.994	-174.666	28.591	-41.985	Elastic
		2147	5.507	5.564	-18.844	-132.541	12.835	-31.330	Elastic
		2148	5.409	5.531	-2.083	-143.979	17.236	-30.265	Tension
	180 Blocks	2149	5.319	5.513	-0.275	-125.968	5.590	-28.381	Tension
		2150	5.562	5.594	-23.513	-145.641	14.599	-34.841	Elastic
		2151	5.319	5.594	-0.153	-139.784	4.617	-28.985	Tension
		2152	5.375	5.550	-0.586	-138.341	9.001	-28.845	Tension
		2153	5.450	5.575	-3.037	-134.208	20.188	-28.466	Tension
		2154	5.375	5.575	-0.652	-139.813	9.548	-29.117	Tension
		2155	5.393	5.536	-0.846	-137.708	10.792	-28.769	Tension
		2156	5.491	5.569	-12.859	-132.671	19.373	-30.151	Elastic
		2157	5.491	5.595	-9.045	-134.103	24.227	-29.639	Elastic
		2158	5.393	5.595	-1.170	-140.273	12.813	-29.285	Tension
		2159	5.316	5.569	-0.148	-135.049	4.477	-28.072	Tension
		2160	5.316	5.536	-0.200	-129.287	5.064	-28.978	Tension

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	182 Blocks	2173	5.131	5.994	-145.973	-45.919	-76.677	-38.824	Elastic
		2174	5.009	5.994	-19.259	-1.173	-4.753	-4.532	Tension
		2175	5.009	5.913	-10.855	-2.145	-4.825	-3.160	Tension
		2176	5.075	5.975	-20.418	-2.437	-7.054	-5.043	Tension
		2177	5.037	5.975	-15.246	-11.200	-13.068	-5.761	Tension
		2178	5.037	5.950	-9.728	-2.729	-5.152	-2.999	Tension
		2179	5.095	5.995	-21.475	-9.351	-3.801	-6.609	Elastic
		2180	5.047	5.995	-17.243	-0.004	-0.276	-3.894	Tension
		2181	5.008	5.969	0.000	0.000	0.000	-0.480	Tension
		2182	5.008	5.938	-18.299	-9.200	-12.975	-6.026	Tension
		2183	5.047	5.938	-9.333	-5.626	-7.247	-3.518	Tension
		2184	5.095	5.969	-38.544	-40.430	-38.438	-15.875	Tension
	183 Blocks	2185	5.028	5.906	-29.840	-12.120	-19.017	-8.961	Tension
		2186	5.272	5.906	-0.851	-193.507	-12.833	-39.428	Tension
		2187	5.150	5.987	-80.885	-326.194	-120.761	-81.857	Elastic
		2188	5.112	5.925	-36.871	-138.617	-71.491	-35.640	Tension
		2189	5.188	5.925	-6.665	-249.159	-40.750	-51.694	Tension
		2190	5.150	5.950	-26.136	-205.578	-73.301	-46.937	Tension
		2191	5.101	5.905	-23.864	-117.525	-52.959	-26.948	Tension
		2192	5.199	5.905	-4.643	-207.083	-31.008	-42.903	Tension
		2193	5.238	5.931	-0.505	-194.413	-9.913	-39.505	Tension
		2194	5.189	5.964	-28.253	-283.099	-45.956	-58.745	Elastic
		2195	5.111	5.964	-55.531	-91.755	-71.391	-29.945	Tension
		2196	5.062	5.931	-34.064	-24.411	-28.636	-12.229	Tension
8	184 Blocks	2197	5.581	5.613	-20.955	-158.236	19.124	-36.822	Elastic
		2198	5.581	5.694	-17.719	-118.453	19.896	-28.104	Elastic
		2199	5.338	5.694	-0.204	-147.232	5.481	-30.344	Tension
		2200	5.525	5.650	-15.217	-129.074	30.206	-29.789	Elastic
		2201	5.525	5.675	-9.249	-127.274	34.310	-28.200	Tension
		2202	5.450	5.675	-5.131	-146.950	27.460	-31.299	Tension
		2203	5.584	5.638	-17.790	-149.735	19.450	-34.455	Elastic
		2204	5.584	5.669	-18.397	-137.089	17.604	-32.001	Elastic
		2205	5.507	5.695	-10.000	-131.636	36.282	-29.195	Tension
		2206	5.409	5.695	-2.494	-159.732	19.980	-33.300	Tension
		2207	5.409	5.669	-2.493	-155.466	19.656	-32.483	Tension
		2208	5.507	5.638	-8.868	-129.583	28.705	-28.640	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	185 Blocks	2209	5.562	5.606	-26.991	-139.043	19.762	-34.199	Elastic
		2210	5.319	5.687	-0.099	-150.762	3.858	-31.037	Tension
		2211	5.319	5.606	-0.129	-139.601	4.237	-28.926	Tension
		2212	5.450	5.625	-3.764	-140.220	22.974	-29.763	Tension
		2213	5.375	5.650	-0.912	-147.325	11.590	-30.565	Tension
		2214	5.375	5.625	-0.839	-144.081	10.997	-29.937	Tension
		2215	5.491	5.631	-6.001	-137.392	28.714	-29.636	Tension
		2216	5.393	5.664	-1.470	-149.015	14.799	-30.998	Tension
		2217	5.318	5.664	-0.083	-147.458	3.495	-30.407	Tension
		2218	5.318	5.631	-0.066	-142.966	3.703	-29.557	Tension
		2219	5.393	5.605	-1.213	-141.726	13.113	-29.569	Tension
		2220	5.491	5.605	-6.319	-135.269	25.714	-29.311	Elastic
9	186 Blocks	2221	5.581	5.713	-16.790	-111.499	21.301	-26.500	Elastic
		2222	5.581	5.794	-14.491	-62.659	21.591	-16.158	Elastic
		2223	5.338	5.794	-0.332	-161.647	7.331	-33.111	Tension
		2224	5.525	5.750	-14.307	-120.431	41.509	-27.737	Tension
		2225	5.525	5.775	-15.226	-115.616	41.956	-26.923	Tension
		2226	5.450	5.775	-7.400	-167.341	35.190	-35.690	Tension
		2227	5.594	5.738	-14.741	-98.118	19.839	-23.381	Elastic
		2228	5.594	5.769	-14.312	-74.464	18.273	-18.518	Elastic
		2229	5.507	5.795	-14.982	-129.684	43.902	-29.636	Tension
		2230	5.409	5.795	-4.232	-184.810	27.985	-36.522	Tension
		2231	5.409	5.769	-3.456	-177.493	24.766	-36.938	Tension
		2232	5.507	5.738	-12.309	-130.898	40.139	-29.450	Tension
	187 Blocks	2233	5.562	5.706	-11.819	-109.959	29.640	-25.007	Elastic
		2234	5.319	5.787	-0.107	-168.185	4.218	-33.982	Tension
		2235	5.319	5.706	-0.120	-153.299	4.289	-31.522	Tension
		2236	5.450	5.725	-5.976	-155.958	30.529	-33.212	Tension
		2237	5.375	5.750	-1.377	-164.853	15.084	-34.023	Tension
		2238	5.375	5.725	-1.191	-159.856	13.796	-33.022	Tension
		2239	5.491	5.731	-10.196	-146.371	38.631	-32.130	Tension
		2240	5.393	5.764	-2.320	-168.328	19.759	-34.887	Tension
		2241	5.318	5.764	-0.089	-161.882	3.788	-33.152	Tension
		2242	5.318	5.731	-0.098	-156.790	3.924	-32.181	Tension
		2243	5.393	5.705	-1.739	-156.736	18.509	-32.535	Tension
		2244	5.491	5.705	-9.283	-143.470	36.494	-31.403	Tension

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
10	188 Blocks	2245	5.338	5.806	-0.160	-164.333	5.133	-33.596	Tension
		2246	5.591	5.506	-14.304	-55.264	21.622	-14.824	Elastic
		2247	5.591	5.687	-18.068	-8.479	12.377	-5.905	Tension
		2248	5.450	5.825	-9.824	-175.751	41.551	-37.788	Tension
		2249	5.525	5.825	-16.470	-106.865	41.953	-25.351	Tension
		2250	5.525	5.650	-17.490	-101.727	42.181	-24.492	Tension
		2251	5.409	5.605	-4.923	-128.445	30.457	-39.372	Tension
		2252	5.507	5.605	-14.862	-128.383	43.681	-29.381	Tension
		2253	5.584	5.631	-12.557	-35.584	18.398	-10.303	Elastic
		2254	5.584	5.684	-15.306	-14.409	14.851	-6.572	Tension
		2255	5.507	5.684	-17.970	-119.010	46.245	-28.025	Tension
		2256	5.409	5.631	-5.760	-198.294	33.693	-41.077	Tension
	189 Blocks	2257	5.319	5.813	-0.202	-169.837	5.859	-34.656	Tension
		2258	5.562	5.894	-23.712	-18.202	20.775	-8.970	Tension
		2259	5.319	5.894	-0.013	-168.937	1.568	-37.964	Tension
		2260	5.375	5.850	-2.351	-191.543	21.221	-39.415	Tension
		2261	5.450	5.875	-11.987	-185.170	47.113	-40.044	Tension
		2262	5.375	5.875	-2.787	-200.404	23.633	-41.238	Tension
		2263	5.393	5.836	-3.297	-190.314	25.049	-39.377	Tension
		2264	5.491	5.869	-18.893	-147.980	52.595	-33.956	Tension
		2265	5.491	5.895	-21.047	-146.527	55.533	-34.100	Tension
		2266	5.393	5.895	-5.085	-210.041	32.682	-43.599	Tension
		2267	5.316	5.869	-0.057	-181.290	3.211	-36.978	Tension
		2268	5.316	5.836	-0.134	-174.553	4.832	-35.592	Tension
12	193 Blocks	2305	5.489	5.994	-131.745	-49.431	77.868	-36.691	Elastic
		2306	5.591	5.913	-5.822	-0.093	0.724	-1.703	Tension
		2307	5.591	5.994	-18.121	-1.172	4.609	-4.304	Tension
		2308	5.525	5.975	-15.596	-0.290	2.125	-3.649	Tension
		2309	5.583	5.950	-6.305	-1.279	2.838	-2.024	Tension
		2310	5.583	5.975	-11.796	-11.035	11.409	-5.039	Tension
		2311	5.605	5.969	-29.250	-44.884	36.225	-15.303	Tension
		2312	5.553	5.936	-5.992	-1.649	3.142	-2.054	Tension
		2313	5.592	5.936	-14.450	-7.672	10.529	-4.951	Tension
		2314	5.592	5.969	-0.499	-0.363	0.425	-0.653	Tension
		2315	5.553	5.995	-13.768	-0.001	0.121	-3.198	Tension
		2316	5.505	5.995	-10.935	-12.063	3.999	-5.024	Elastic

Cluster	Soil Element	Stress Point	X [m]	Y [m]	σ_{xx} [kN/m^2]	σ_{yy} [kN/m^2]	σ_{xy} [kN/m^2]	σ_{zz} [kN/m^2]	Status
	195 Blocks	2329	5.328	5.908	-1.029	-199.031	14.313	-40.568	Tension
		2330	5.572	5.908	-21.440	-8.663	13.628	-6.589	Tension
		2331	5.450	5.987	-64.348	-320.628	116.811	-77.450	Elastic
		2332	5.412	5.925	-8.207	-248.688	44.965	-51.509	Tension
		2333	5.489	5.925	-31.660	-145.495	67.870	-35.974	Tension
		2334	5.450	5.950	-25.153	-207.800	72.256	-47.097	Tension
		2335	5.401	5.905	-5.797	-208.907	34.201	-43.498	Tension
		2336	5.499	5.905	-22.858	-120.558	52.462	-29.253	Tension
		2337	5.538	5.931	-28.609	-21.882	25.029	-10.632	Tension
		2338	5.489	5.964	-45.447	-93.980	67.476	-26.973	Tension
		2339	5.411	5.964	-18.949	-260.474	51.570	-56.380	Elastic
		2340	5.362	5.931	-1.057	-193.342	14.294	-39.401	Tension
	199 Blocks	2377	5.169	6.213	-0.022	-278.767	-2.490	-56.017	Tension
		2378	5.412	6.294	-15.112	-283.359	0.257	-59.713	Elastic
		2379	5.169	6.294	-14.634	-280.770	0.475	-59.140	Elastic
		2380	5.225	6.250	-9.368	-281.431	1.978	-58.312	Elastic
		2381	5.300	6.275	-11.924	-283.966	-0.067	-59.252	Elastic
		2382	5.225	6.275	-11.578	-285.450	-0.757	-59.479	Elastic
		2383	5.243	6.236	-7.941	-287.578	-1.712	-59.292	Elastic
		2384	5.341	6.269	-11.273	-280.115	-0.369	-58.370	Elastic
		2385	5.341	6.295	-13.266	-281.075	-1.237	-58.884	Elastic
		2386	5.243	6.295	-11.980	-281.169	1.934	-58.622	Elastic
		2387	5.168	6.269	-11.287	-278.714	-4.944	-58.092	Elastic
		2388	5.168	6.236	-3.938	-283.684	3.186	-58.713	Elastic