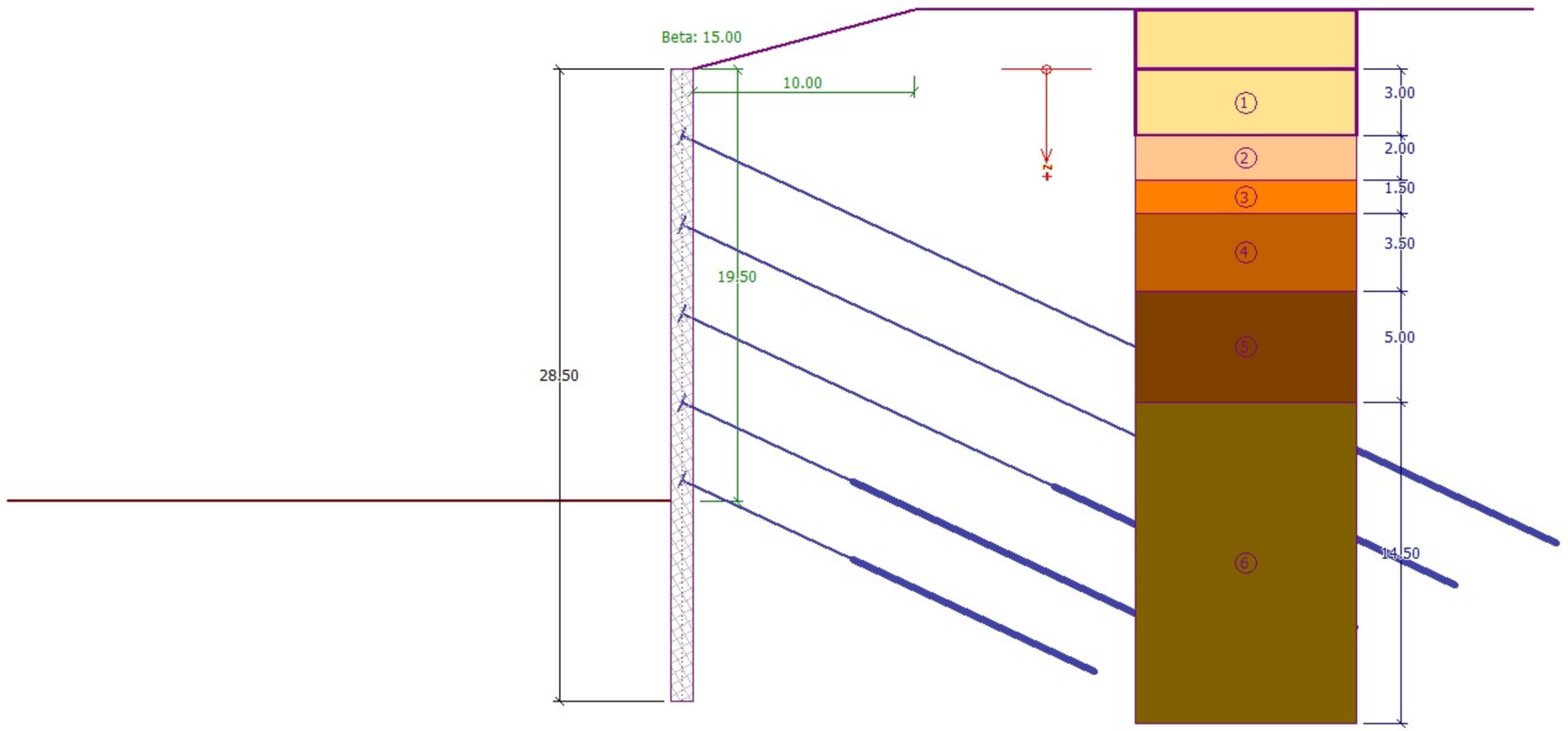
GEO5 2016 - Sheeting Check [C:\Projektet e pilotave dhe diafragmave Dragodan\Diafragmat\ZONA A\Diafragma 4.gp2]

File Edit Input Analysis Outputs Settings Help

File Edit Stage [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]

2D 3D



Frames
- Assign
- Excavation
- Terrain
- Water
- Surcharge
- Applied forces
- Anchors
- Supports
- Props
- Earthquake
- Stage settings
- Analysis
- Internal stability
- Exter. stability
- Dimensioning

Assignment by left-click : 1

Assign

Layer	Thickness [m]	Assigned soil
1	3.00	1
2	2.00	2
3	1.50	3
4	3.50	4
5	5.00	5
6	14.50	6
7		6

Outputs
- Add picture
- Profile and assignment : 0
- Total : 0
- List of pictures
- Copy view

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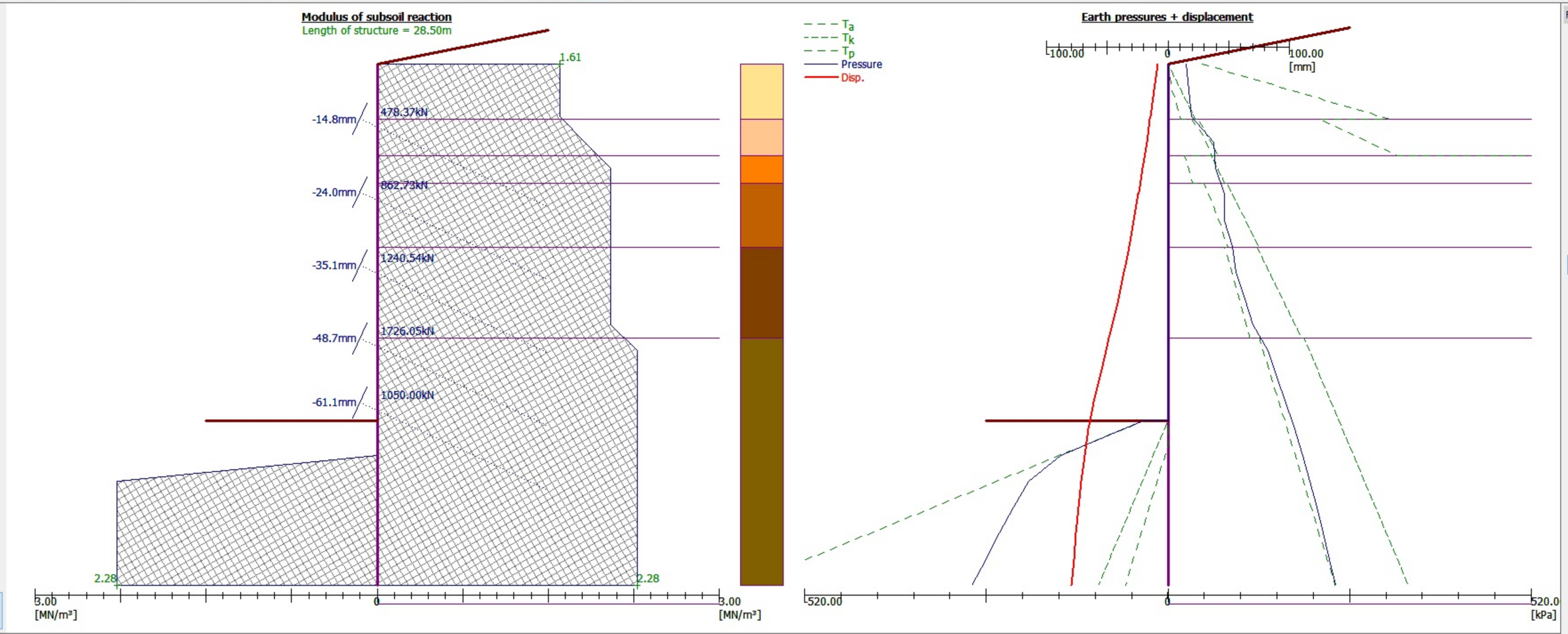
File | Edit | Stage | [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]



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Results

Analysis properly completed.

Maximum values of internal forces acting on the structure
Maximum shear force = 422.23 kN/m
Maximum moment = 563.23 kNm/m
Maximum displacement = 79.4 mm

Anchors forces

No.	Depth [m]	Displacement [mm]	Anchor force [kN]
1	3.00	-14.8	478.37

Visualization
- (•) Kh + Pressures
- ( ) Internal forces
- ( ) Deformations + stresses

Outputs
- Add picture
- Analysis : 0
- Total : 0
- List of pictures
- Copy view

Analysis

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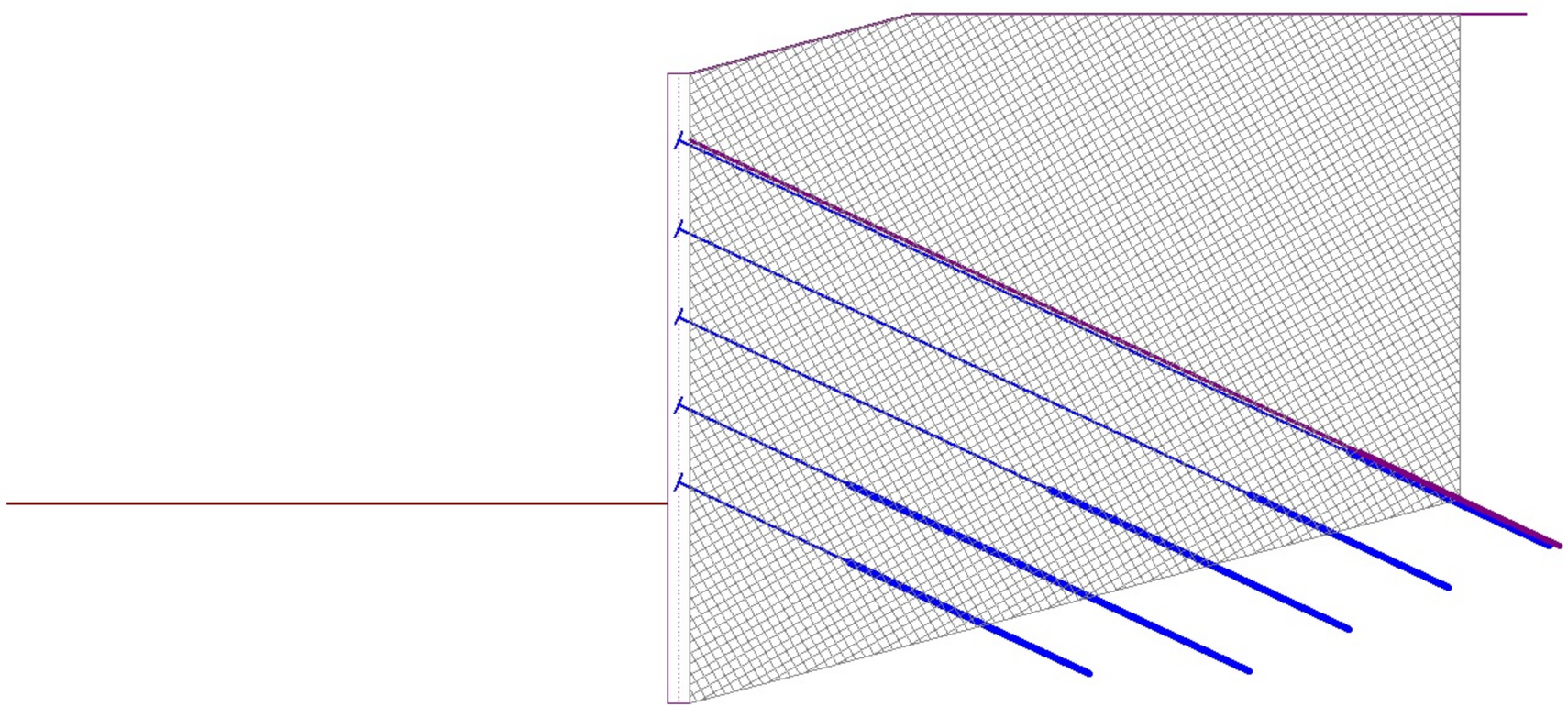

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Internal stability

No.	Anchor force [kN]	Max. allow. force [kN]	Utiliz. [%]	Verification
1	478.37	4756.92	10.06	Is satisfied
2	862.73	5221.86	16.52	Is satisfied
3	1240.54	4112.45	30.17	Is satisfied
4	1726.05	3548.75	48.64	Is satisfied
5	1050.00	4353.55	24.12	Is satisfied

Results

Verification of decisive row of anchors :

Anchor No. : 4

Specified anchor force = 1726.05 kN

Computed max. allowable anchor force = 3548.75 kN

SATISFACTORY

In detail

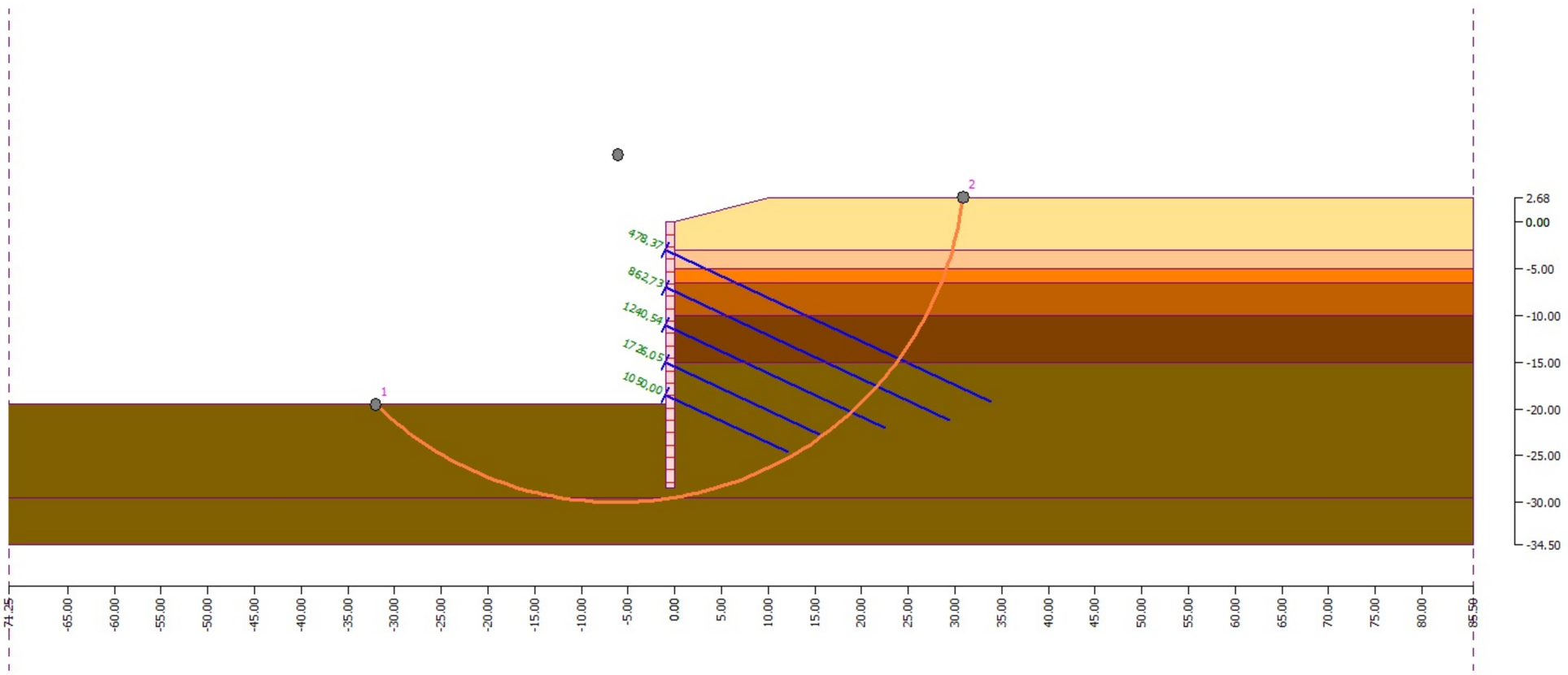
Outputs
- Add picture
- Internal stability : 0
- Total : 0
- List of pictures
- Copy view

Slope Stability - Sheeting Check

File Edit Input Outputs Settings Help

Edit Stage [1]

2D 3D



Frames
- Project
- Settings
- Interface
- Soils
- Rigid bodies
- Assign
- Anchors
- Reinforcements
- Anti-slide piles
- Surcharge
- Water
- Earthquake
- Stage settings
- Analysis

Outputs
- Add picture
- Analysis : 0
- Total : 0
- List of pictures
- Copy view

Manage
- Exit and save
- Exit without saving

Analysis : [1]

Analyze

Slip surface : circular | Replace graphically | Edit textually | Remove | Convert to polygon | Detailed results

Parameters of the analysis
Method : Morgenstern-Price
Analysis type : Standard
Assume anchors as infinite

Circular slip surface
Center : x = -6.10 [m] z = 7.25 [m]
Radius : R = 37.25 [m]
Angles : α_1 = -44.10 [°] α_2 = 82.95 [°]

Slope stability verification (Morgenstern-Price)
Factor of safety = 1.59 > 1.50
Slope stability ACCEPTABLE

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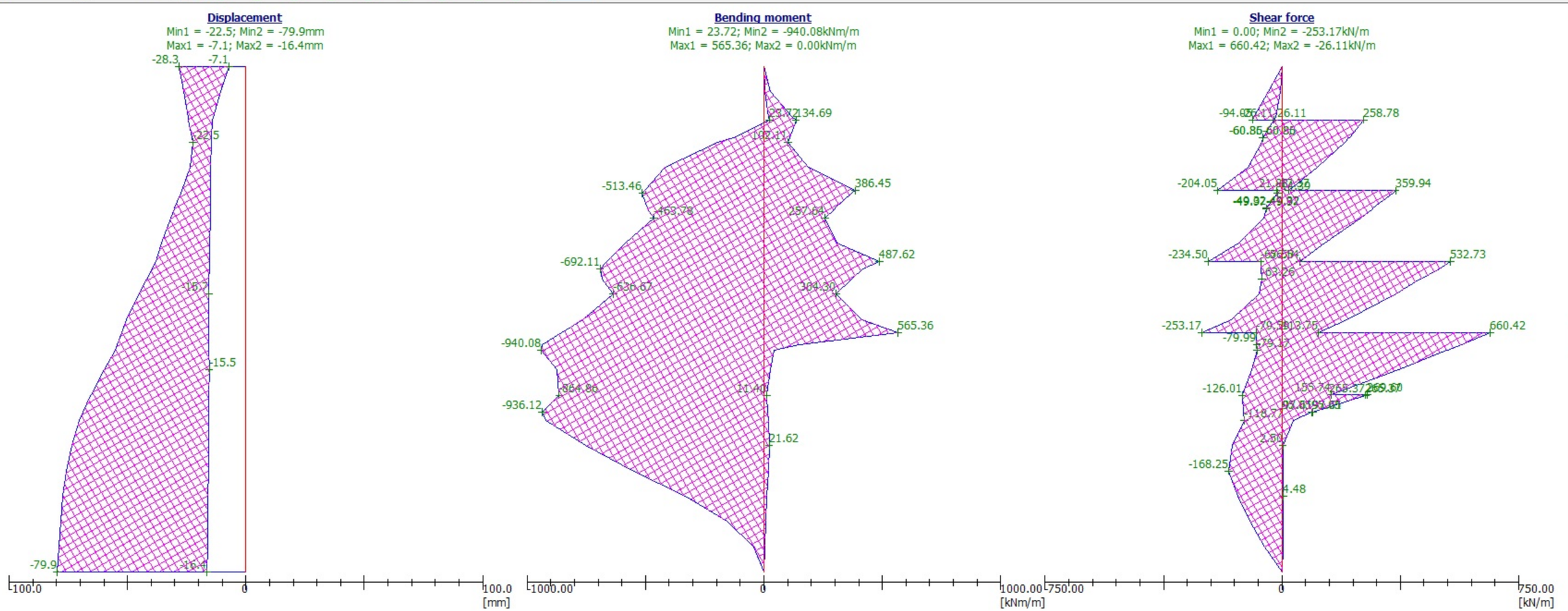

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Outputs
- Add picture
- Dimensioning : 0
- Total : 0
- List of pictures
- Copy view

Dimensioning

Analysis : [1] — In detail

Stage : (envelopes from all stages) — Edit

Geometry : Pile curtain a = 2.50 m; b = 2.50 m; h = 0.60 m

Check cross-section

Reduct. coefficient of bearing capacity: 1.00 [–]

Information

Max. displacement = -79.9 mm
Max. shear force on cross section = 1651.04 kN
Max. moment on cross section = 2350.21 kNm

Reinforcement

Profile : 28.0 [mm]
No. of bars : 18.00 [pcs]
Cover : 40.0 [mm]

Results

SHEAR :	**Required reinf.**	
BENDING + COMPR. :	**SATISFACTORY**	(99.9%)
DESIGN PRINCIPLES :	**SATISFACTORY**	(16.7%)

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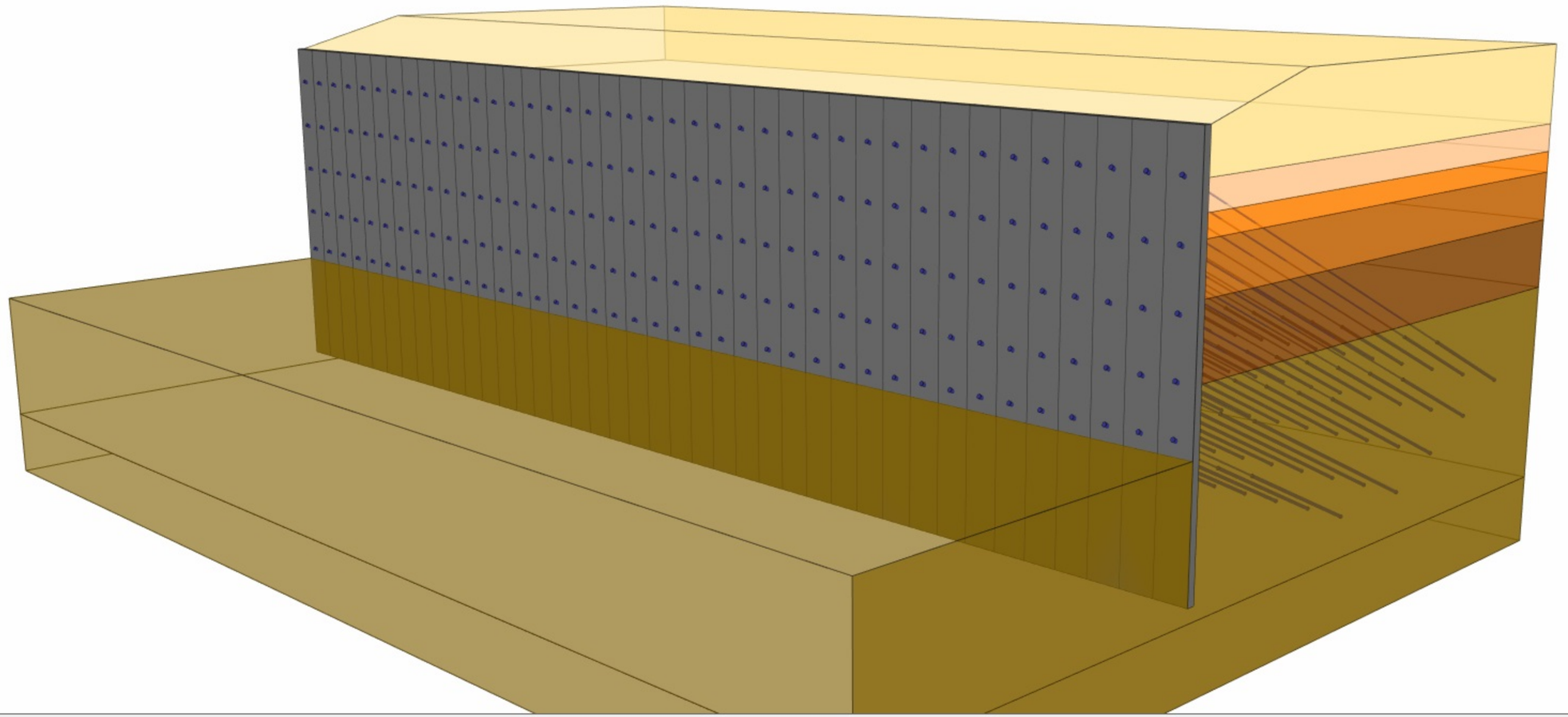

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Drawing settings : Assign

Soils and assignment: full color
- Draw background
- Hatch
- Transparent

Profile: full color
- Profile

Geometry: full color
- Construction

Excavation: full color
- Surcharge

Anchors: partial color
- Anchor

Global
3D width : 100.00 [m]

Default settings
Close

Outputs
Add picture
Profile and assignment : 0
Total : 0
List of pictures
Copy view