

Slide Analysis Information

Odlagalisce Baredi 1

Project Summary

File Name: B1A_41
 Slide Modeler Version: 7.013
 Project Title: Odlagalisce Baredi 1
 Analysis: Analiza stabilnosti v profilu B1A_41
 Author: B.Praznik, u.d.i.geol.
 Company: GECKO d.o.o.

Design Standard

Selected Type: Eurocode 7 - Design Approach 3

| Type | Partial Factor |
|------------------------------------|----------------|
| Permanent Actions: Unfavourable | 1 |
| Permanent Actions: Favourable | 1 |
| Variable Actions: Unfavourable | 1.3 |
| Variable Actions: Favourable | 0 |
| Effective cohesion | 1.25 |
| Coefficient of shearing resistance | 1.25 |
| Undrained strength | 1.4 |
| Weight density | 1 |
| Shear strength (other models) | 1.25 |
| Earth resistance | 1 |
| Tensile and plate strength | 1 |
| Shear strength | 1 |
| Compressive strength | 1 |
| Bond strength | 1 |
| Seismic Coefficient | 1 |

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [kN/m3]: 9.81
 Advanced Groundwater Method: None



Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No

Loading

Seismic Load Coefficient (Horizontal): 0.05
 Seismic Load Coefficient (Vertical): 0.025

Material Properties

| Property | Nasutje | Fliš |
|--|---|---|
| Color |  |  |
| Strength Type | Mohr-Coulomb | Generalized Hoek-Brown |
| Unit Weight [kN/m ³] | 20 | 23 |
| Cohesion [kPa] | 0.5 | |
| Friction Angle [deg] | 35 | |
| Unconfined Compressive Strength (intact) [kPa] | | 3000 |
| nmb | | 0.431795 |
| ns | | 0.000172232 |
| na | | 0.538237 |
| Water Surface | Water Table | Water Table |
| Hu Value | 1 | 1 |

Global Minimums

Method: bishop simplified

| FS | 1.247210 |
|------------------------------|------------------------|
| Center: | 527.474, 337.237 |
| Radius: | 174.784 |
| Left Slip Surface Endpoint: | 452.017, 179.580 |
| Right Slip Surface Endpoint: | 462.319, 175.051 |
| Resisting Moment: | 6975.42 kN-m |
| Driving Moment: | 5592.81 kN-m |
| Total Slice Area: | 3.44958 m ² |
| Surface Horizontal Width: | 10.3018 m |
| Surface Average Height: | 0.334853 m |

Method: janbu simplified

| FS | 1.178780 |
|------------------------------|-----------------------|
| Center: | 534.956, 247.447 |
| Radius: | 117.123 |
| Left Slip Surface Endpoint: | 439.013, 180.269 |
| Right Slip Surface Endpoint: | 596.271, 147.655 |
| Resisting Horizontal Force: | 22690.7 kN |
| Driving Horizontal Force: | 19249.3 kN |
| Total Slice Area: | 3542.3 m ² |
| Surface Horizontal Width: | 157.258 m |
| Surface Average Height: | 22.5254 m |