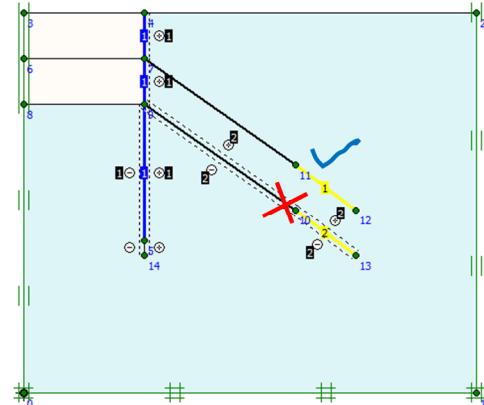
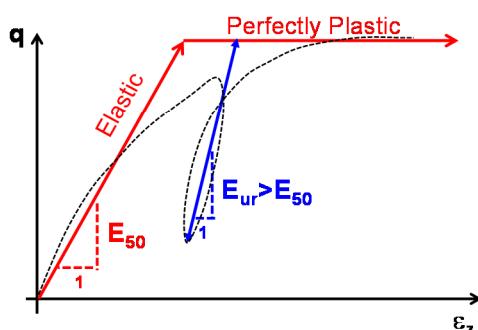
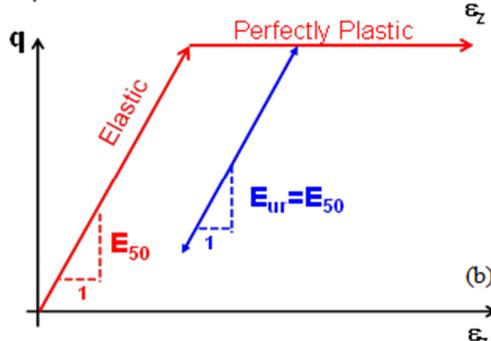
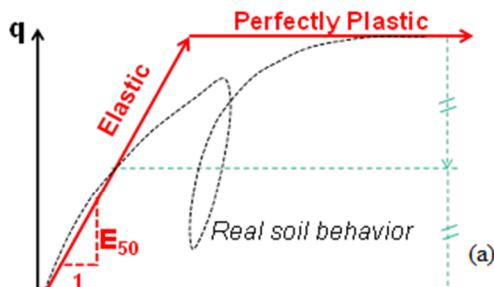


SOME NOTES ON DEEP EXCAVATION DESIGN

PLAXIS

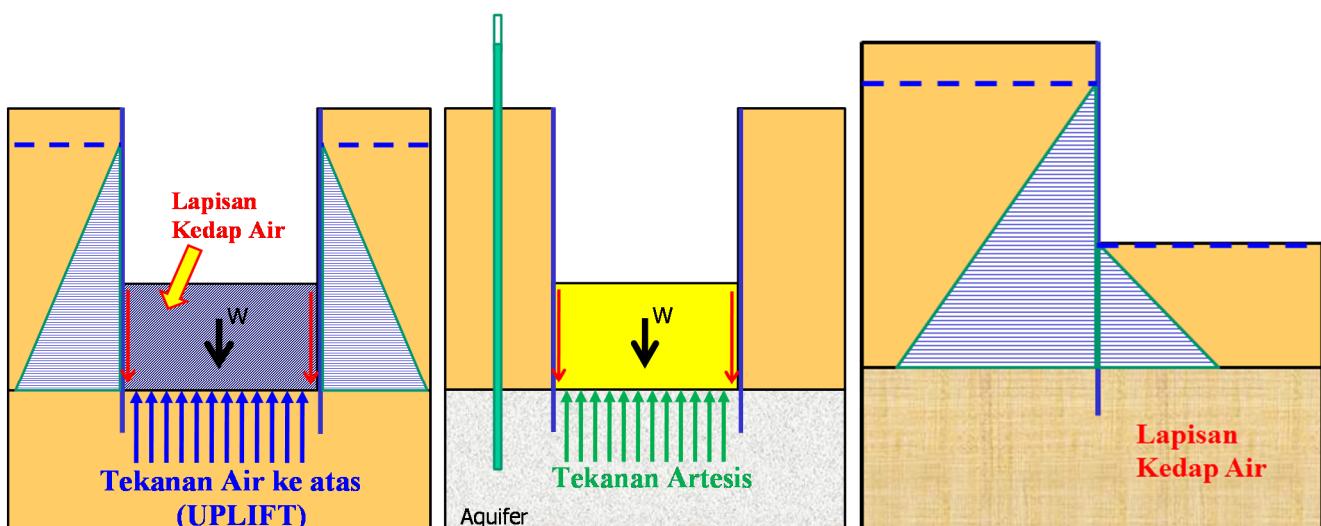


For A
 $\sigma_{vo(A)} = \gamma_{unsat}h_1 + \gamma_{sat}h_2 - \gamma_w h_2$
 $\sigma_{ho(A)} = k_v \sigma_{vo(A)}$
 $\sigma_{ho(A)} > \sigma_{ho(B)}$ → Forces are NOT in equilibrium (not ok!)

For B
 $\sigma_{vo(B)} = \gamma_{sat}h_2 - \gamma_w h_2$
 $\sigma_{ho(B)} = k_v \sigma_{vo(B)}$

For A
 $\sigma_{vo(A)} = \gamma_{unsat}h_1 + \gamma_{sat}h_2 - \gamma_w h_2$
 $\sigma_{ho(A)} = k_v \sigma_{vo(A)}$
 $\sigma_{ho(A)} \neq \sigma_{ho(B)}$ → Forces are NOT in equilibrium (not ok!)

For B
 $\sigma_{vo(B)} = \gamma_{unsat}h_3 - \gamma_{sat}h_4 - \gamma_w h_4$
 $\sigma_{ho(B)} = k_v \sigma_{vo(B)}$



DAFTAR ISI

Some Notes on the Application of Geotechnical Finite Element Method in Analyzing Excavation Problems	1
Introduction	1
Plane Strain vs Axisymmetry Model.....	1
Interface Element.....	2
Material Models.....	2
Undrained Parameters	4
Initial Condition	6
Ground Water Pressures	7
Soil Parameter	10
Other Factors	10
Concluding Remark.....	11
Acknowledgement.....	11
References	11
Deep Excavation Failures, Can They be Prevented?.....	12
Introduction	12
Some Examples of Deep Excavation Failures.....	13
Technical Issues That Can Lead to Failures.....	18
Non Technical Factors.....	25
Preventive Measures.....	28
Clossures	29
References	31
Long Term Performance of Ground Anchors and Their Effect on the Stability of Diaphragm Wall.....	32
Introduction	32
Data and Field Measurement.....	33
Analysis on the Wall Safety	36
Preventive Measures.....	36
Concluding Remarks	40
Reference.....	41