Center for Geotechnical Practice and Research

Short Course

Soil Strength and Slope Stability

December 3rd and 4th, 2008

Course Notebook Contents

Schedule, flash drive contents, reference list

Soil Strength and Slope Stability Lecture Schedule

Wednesday, December 3, 2008

8:00 AM – 8:30 AM –	Self-introductions and review of schedule
8:30 AM – 9:15 AM –	Soil mechanics principles governing slope stability
9:15 AM – 9:30 AM –	Break
9:30 AM – 10:30 AM –	Mechanics of limit equilibrium methods
10:30 AM – 10:45 AM -	Break
10:45 AM – 11:30 AM –	Drained shear strength of cohesionless soils
11:30 AM – 12:00 Noon –	Drained shear strength of cohesive soils
12:00 Noon – 1:00 PM –	Lunch
1:00 PM – 2:00 PM –	Undrained shear strength of cohesive soils – Part 1
2:00 PM – 2:15 PM –	Break
2:15 PM – 3:15 PM –	Undrained shear strength of cohesive soils – Part 2
3:15 PM – 3:30 PM –	Break
3:30 PM – 4:00 PM –	Undrained shear strength of cohesive soils – Part 3
4:00 PM – 4:15 PM –	Break
4:15 PM – 5:00 PM –	Water pressures and unit weights for slope stability analyses

Thursday, December 4, 2008

8:00 AM – 8:45 AM –	Use of back analysis in slope stability studies
8:45 AM – 9:00 AM –	Break
9:00 AM – 9:45 AM –	Commonly encountered problems with computer analyses of slope stability
9:45 AM – 10:00 AM –	Break
10:00 AM – 10:45 AM –	Analyses of stability of reinforced slopes
10:45 AM – 11:00 AM –	Break
11:00 AM – 12:00 Noon –	Computer-based slope stability analysis – Part 1
12:00 Noon – 1:00 PM –	Lunch
1:00 PM – 1:45 PM -	Computer-based slope stability analysis – Part 2
1:45 PM – 2:00 PM –	Break
2:00 PM – 3:00 PM –	Discussion of case histories and questions presented by course attendees

Soil Strength and Slope Stability Flash Drive Contents

- Corps of Engineers Engineering Manual 1110-2-1902, Slope Stability
- Center for Geotechnical Practice and Research Publication # 12, Performance and Use of the Standard Penetration Test in Geotechnical Engineering Practice
- Center for Geotechnical Practice and Research Publication # 45, Densities and Friction Angles of Granular Materials with Standard Gradations 21b and #57
- Center for Geotechnical Practice and Research Publication # 1, Engineering Manual for Slope Stability Studies
- Gregg Drilling Guide to Cone Penetration Testing
- Charles C. Ladd Casagrande Lecture, Recommended Practice for Soft Ground Site Characterization
- J.M. Duncan, Use of back analysis to reduce slope failure risk, from Civil Engineering Practice
- SLIDE Problems