Soil Mechanics, Slope Stabilization, Failures and Repairs

Charleston, WV - Thursday, April 2, 2020

Review soil mechanics and discuss soil characteristics

Use soil investigation techniques such as drilling and boring to classify site soils

Examine causes of slope instability

Professional Engineers
6.5 PDHs
6.5 HSW PDHs

Architects
6.5 Continuing Ed. Hours (HSW)
6.5 AIA LU|HSW
6.5 LA/CES HSW PDHs

Landscape Architects
6.5 HSW PDHs

Floodplain Managers
6.5 ASFPM CECs

Contractors
Non-Credit Continuing Ed.

Learning Objectives

You’ll be able to:

Explain the importance of recognizing soil properties, as well as the need to investigate soil composition before undertaking site development.

Identify types of slopes and use soil investigation techniques, such as drilling, boring and rest pits, to evaluate site soils.

Prevent slope failures, recognize potential problems in the field, and determine causes of slope instability.

Explore strategies to improve or restore slope stability, including vegetation and the use of geosynthetic materials.

Agenda

Presented by Bill Simpson, P.E.

Slope Mechanics and Classification
- Properties of soil
  - Importance of recognizing soil properties
  - Formation of soils
  - Types of soils
Slope investigation
- Site reconnaissance
- Geology and visual observations
- Drilling and boring
- Test pits
- Establishing appropriate investigational methods
- Obtaining and reviewing geotechnical reports

Slope Stability Analysis
- Fundamental soil characteristics and slope instability
- Engineering mechanics underlying slope instability
- Geologic conditions and construction practices
- Field observations to distinguish types of instability
- Construction practices to improve or restore stability

Examining causes of slope instability
- Slope stability analysis
- Use of vegetation
- Surface protection
- Evaluating types of slopes
- Natural slopes
- Engineered slopes

Reinforced Slope Stability Analysis
- Calculations and software
- Geosynthetic materials
- Alternatives
- Exercise
  - Learn to visually identify geosynthetics as to type, method of manufacture, relative strength, relative permeability, and relative cost

Earth Structure Failures and Fixes/ Site Layout and Prevention
- How to prevent a potential problem or failure
- How to recognize a potential problem or failure in the field
- Typical causes of problems or failures with geotechnical structures
- Case studies/examples of failures and repairs

Reinforce slope stability using geosynthetics

Explore earth structure failures and fixes

Continuing Education Credits

Slope Mechanics, Slope Stabilization, Failures and Repairs

Charleston, WV - Thursday, April 2, 2020

Review soil mechanics and discuss soil characteristics

Use soil investigation techniques such as drilling and boring to classify site soils

Examine causes of slope instability

Professional Engineers
6.5 PDHs
6.5 HSW PDHs

Architects
6.5 Continuing Ed. Hours (HSW)
6.5 AIA LU|HSW
6.5 LA/CES HSW PDHs

Landscape Architects
6.5 HSW PDHs

Floodplain Managers
6.5 ASFPM CECs

Contractors
Non-Credit Continuing Ed.

Find us on Facebook
Great seminar.” — Geotechnical Professional

“Excellent program. Appropriate exercises and case studies.” — about the program and presenter Bill Simpson:

Here’s what past attendees had to say:

Mr. Simpson designs and reviews shop drawings for construction and repair of earth structures for site designers, and contractors to provide designs which are not only structurally sufficient but also financially responsible. Mr. Simpson earned his B.S.C.E. and M.S.C.E. degrees from Georgia Institute of Technology.

Continuing Education Credit Information:

This seminar is open to the public and offers 6.5 PDHs to professional engineers, 6.5 HSW PDHs to landscape architects, and 6.5 HSW (Public Protection) continuing education hours to architects and engineers in most states, including West Virginia. Educators and courses are not subject to preapproval in West Virginia.

The American Institute of Architects Continuing Education System has approved this course for 6.5 AIA/CES course information under this seminar listing. Only full attendance is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full attendance is reportable to the LA/CES.

HalfMoon Education is an approved continuing education provider for engineers in Florida, Indiana, Maryland, Michigan, New Jersey, North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects and landscape architects.

The Association of State Floodplain Managers has approved this event for 6.5 CECS.

This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been reviewed by any state contractor licensing entity for continuing education purposes. This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been reviewed by any state contractor licensing entity for continuing education purposes.

Foundation Damage and Repair
• Design & Geo-Environmental Loading, Building Codes, Soil Properties
  Wed., March 4, 2020, 11:00 AM - 12:30 PM CST
• Foundation-Slab-Wall Design and Construction
  Wed., March 4, 2020, 1:00 - 2:30 PM CST
• Evaluation of Foundation-Slab Damage and Repair Alternatives
  Thurs., March 5, 2020, 11:00 AM - 12:30 PM CST
• Evaluation of Foundation Wall Damage and Repair Alternatives
  Thurs., March 5, 2020, 1:00 - 2:30 PM CST

Solar Photovoltaic Project Design and Development
• Solar Photovoltaic Project Design and Development, Part I
  Wed., March 4, 2020, 11:00 AM - 2:30 PM CST
• Solar Photovoltaic Project Design and Development, Part II
  Thurs., March 5, 2020, 11:00 AM - 12:30 PM CST

Solar Photovoltaic Project Design and Development
• Solar Photovoltaic Project Design and Development, Part I
  Wed., March 4, 2020, 11:00 AM - 2:30 PM CST
• Solar Photovoltaic Project Design and Development, Part II
  Thurs., March 5, 2020, 11:00 AM - 12:30 PM CST

International Residential Code
• Development and Enforcement of International Residential Code
  Thurs., March 12, 2020, 11:00 AM - 12:00 PM CST
• IRC Building Planning and Shell Construction, Part I
  Thurs., March 12, 2020, 1:00 - 2:30 PM CST
• IRC Building Planning and Shell Construction, Part II
  Fri., March 13, 2020, 11:00 AM - 12:30 PM CST
• IRC Energy Efficiency and Building Systems
  Fri., March 13, 2020, 1:00 - 3:00 PM CST

For more information and other online learning opportunities visit: www.halfmoonseminars.org/webinars/

Additional Registrants:

Complete the entire form. Attach duplicates if necessary.

Can't Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at $279. Please visit www.halfmoonseminars.org for more information under this seminar listing. Only full attendance is reportable to the AIA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, Michigan, New Jersey, North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects and landscape architects.

The Association of State Floodplain Managers has approved this event for 6.5 CECS.

This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been reviewed by any state contractor licensing entity for continuing education purposes.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Tuition:

( ) I will be attending the live seminar. Single Registrant - $299.00. Three or more registrants from the same company registering at the same time - $279.00 each.

( ) I am not attending. Please send me the self-study package:

CD/Manual Package for $299.00. USB/Manual Package $299.00. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

Credit Card: Mastercard, Visa, American Express, or Discover

Credit Card Number: ___________ ___________ ___________ ___________

Expiration Date: ___________ ___________ CVV2 Code: ___________

Cardholder Name: ___________

Billing Address: ___________

City: _______ State: _______ Zip: _______

Signature: ___________

Email: ___________

© 2020 HEI • 20 WVSSMSFR 4 2 CTON BA