Agenda

Presented by David Harmonos

Learning Objectives

You’ll be able to:

Conduct a thorough building site evaluation prior to undertaking a building project that requires a deep foundation.

Identify different types of deep foundations and learn appropriate applications for each type.

Calculate residual and transient loads on deep foundations, and compute settlement.

Describe different types of soil retention and bracing systems for deep excavations.

Estimate axial capacity in sand, clay and rock soil types.

Conduct load testing on piles and pile groups.

Building Site Evaluation

Soil mechanics overview

Site exploration

Subsurface exploration

Laboratory soil testing

Design soil profile

Basic earth pressure theory

Overview of Deep Foundations

Types of deep foundations

- Driven piles
- Drilled shafts
- Augercast piles
- Others

Grouping piles

Deep Foundation Excavations

Bracing systems

Tieback anchors

Sheet pile and soldier pile walls

Secant pile and diaphragm walls

Top-down excavations

Using cofferdams

Determining Bearing Capacity and Settlement

Determining bearing capacity of soil

Computing settlement

Calculating residual and transient loads

Estimating Axial Capacity and Analyzing Lateral Loads

Determining axial capacity in sand, clay and rock

Lateral load testing on piles and pile groups

Reviewing Sample Design Calculation and Conducting Load Testing

Making calculations for a sample project

Using design software

Learning Objectives

You’ll be able to:

Conduct a thorough building site evaluation prior to undertaking a building project that requires a deep foundation.

Identify different types of deep foundations and learn appropriate applications for each type.

Calculate residual and transient loads on deep foundations, and compute settlement.

Describe different types of soil retention and bracing systems for deep excavations.

Estimate axial capacity in sand, clay and rock soil types.

Conduct load testing on piles and pile groups.

Deep Foundation Design and Construction

Online Webinar - Wednesday, September 9, 2020

Learn about earth pressure theory and how it factors in to deep foundation design

Explore driven piles, drilled shafts and augercast piles.

Discuss soil retention systems for deep excavations

Professional Engineers 6.5 PDHs

Architects 6.5 HSW CE Hours

International Code Council .65 CEUs (Building)

AIA Continuing Education Provider

HalfMoon Education Inc.

WWW.HALFMONESEMINAAR5.ORG

Deep Foundation Design and Construction

Online Webinar - Wednesday, September 9, 2020

Learn about earth pressure theory and how it factors in to deep foundation design

Explore driven piles, drilled shafts and augercast piles.

Discuss soil retention systems for deep excavations

Professional Engineers 6.5 PDHs

Architects 6.5 HSW CE Hours

International Code Council .65 CEUs (Building)

Deep Foundation Design and Construction

Online Webinar - Wednesday, September 9, 2020

Learn about earth pressure theory and how it factors in to deep foundation design

Explore driven piles, drilled shafts and augercast piles.

Discuss soil retention systems for deep excavations

Professional Engineers 6.5 PDHs

Architects 6.5 HSW CE Hours

International Code Council .65 CEUs (Building)

Deep Foundation Design and Construction

Online Webinar - Wednesday, September 9, 2020

Learn about earth pressure theory and how it factors in to deep foundation design

Explore driven piles, drilled shafts and augercast piles.

Discuss soil retention systems for deep excavations

Professional Engineers 6.5 PDHs

Architects 6.5 HSW CE Hours

International Code Council .65 CEUs (Building)
Additional Learning

Webinar Series
Engineering Ethics: Handling Ethical Issues in Professional Engineering Practice
- Mon., August 17, 2020, 11:00 am – 12:00 pm CDT

Maintaining Existing Buildings under the 2018 International Property Maintenance Code
- Mon., August 17, 2020, 10:00 am – 2:30 pm CDT
- Mon., August 24, 2020, 10:00 am – 2:30 pm CDT

Retaining Wall Design and Global Stability Analysis
- Wed., August 19, 2020, 10:00 am – 2:15 pm CDT
- Thur., August 20, 2020, 10:00 am – 2:15 pm CDT

Special Inspections under the International Building Code Chapter 17 (IBC 2015)
- Wed., August 19, 2020, 9:00 am – 1:30 pm CDT
- Thur., August 20, 2020, 9:00 am – 12:15 pm CDT

Introduction to HEC-HMS Modeling
- Thur., August 20, 2020, 8:30 am – 5:00 pm CDT

Air-Source Heat Pumps for Energy Efficiency
- Thur., August 20, 2020, 11:00 am – 2:15 pm CDT
- Fri., August 21, 2020, 11:00 am – 3:15 pm CDT

Introduction to HEC-RAS Modeling
- Mon., August 24, 2020, 11:00 am – 3:15 pm CDT

Practical Use of the FMEA as a Design Tool
- Tues., August 25, 2020, 11:00 am – 3:30 pm CDT

Drones in Construction
- Thurs., August 27, 2020, 10:00 am – 4:50 pm CDT

Energy-Efficient, Sustainable Roofs
- Thurs., August 27, 2020, 11:00 am – 2:30 pm CDT
- Fri., August 28, 2020, 11:00 am – 2:30 pm CDT

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

Can’t Attend?
Order the Webinar as a Self-Study Package!
Recordings of this webinar are available for purchase. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration
Deep Foundation Design and Construction
Online Webinar - Wednesday, September 9, 2020

Tuition
( ) I will be attending the live webinar. Single Registrant - $299.00. Three or more registrants from the same company registering at the same time - $199.00 each.
( ) I am not attending. Please send me the webinar recording.

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 NJDFNDDC 9 9 WEBR BA