

Agenda

Presented by Dimitrios C. Konstantakos

Deep Excavations: Introduction

Defining deep excavations
Types of deep excavations
Methods of stabilization
Common problems and challenges

Soil Mechanics and Sheet Pile Walls

Understanding soil response
Basic earth pressure theory
Cantilever wall analysis
Anchored sheet pile walls

Braced Excavation Design

Braced walls
Apparent earth pressures
Analysis methods

Cofferdams

Applications for cofferdams
Methods of constructing
Design details and methods

ASD and LRFD Design

ASD vs LRFD design framework
LRFD limitations
Design examples

Deep Excavation Case Studies

Solving braced excavations
Case history

Deep Excavations
Allentown, PA - Friday, June 22, 2018



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Learning Objectives

You'll be able to:

Define types of deep excavations and identify common problems and challenges.

Discuss the design and construction of cantilever and anchored sheet pile walls.

Study braced excavation design.

Explore the design, construction, and appropriate applications of cofferdams.

Review ASD and LRFD design examples.

Apply what you have learned to braced excavation problems and case histories.



Deep Excavations

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Learn about different types of deep excavations and explore common problems and challenges

Understand soil's response to pressure using basic earth pressure theory

Receive an overview of sheet pile wall and braced excavation design

Continuing Education Credits

Professional Engineers & Geologists
6.5 PDHs

Architects
6.5 HSW Continuing Ed. Hours
6.5 AIA HSW Learning Units

Analyze ASD vs. LRFD design frameworks using design examples

Apply what you have learned to braced excavation problems and case histories

Contractors
Non-Credit Continuing Ed.



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Dimitrios C. Konstantakos, P.E., is the founder and CEO of Deep Excavation LLC, a developer of user-friendly, robust, high-quality, integrated deep excavation calculation and design software. He is also the current chair of the American Society of Civil Engineers’ Earth Retaining Structures Committee. Mr. Konstantakos holds a master of science degree in Civil/Geotechnical Engineering from the Massachusetts Institute of Technology, and a BS degree in Civil Engineering from the University of Massachusetts Lowell. He has been involved in the design of bridge foundations, tunnels, deep excavations, finite element simulations, piers and bulkheads, and pile foundations, and he has been involved in field inspections. Mr. Konstantakos’s experience includes structural engineering with a leading geotechnical firm in New York, New York. He is a professional engineer in the states of New York and West Virginia, and he is a European Union P.E. in Geotechnical Engineering. Mr. Konstantakos has also taught Support of Excavation Systems as an adjunct professor at New York University.

Here’s what past attendees had to say about the program and speaker Dimitrios Konstantakos:

“Very well done.” – *Engineer*

“Excellent delivery and communication of material.” – *Civil/Structural Engineer*

“Very informed and well versed in subject matter. Lots of great examples.” – *Architect*

Seminar Information

Hilton Garden Inn Airport
1787-B Airport Road
Allentown, PA 18109
(610) 443-1400

Tuition
\$279 for individual registration
\$259 for three or more simultaneous registrations.
Each registration includes a complimentary continental breakfast and printed seminar manual.

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How to Register

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- Mail-in or fax the attached form to 715-835-6066
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Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.



Webinar Series

National Electrical Code: Onsite Power Generation and Distribution

- **National Electric Code: Onsite Power Generation and Distribution Part 1**
Weds., June 6, 2018, 11:00 AM - 2:15 PM CDT
- **National Electric Code: Onsite Power Generation and Distribution Part 2**
Thurs., June 7, 2018, 11:00 AM - 2:15 PM CDT

HVAC Series

- **Heating, Ventilation and Air Conditioning Principles**
Thurs., June 7, 2018, 11:00 AM - 1:00 PM CDT
- **HVAC System Design Considerations**
Thurs., June 7, 2018, 1:30 - 2:30 PM CDT
- **Evaluating HVAC Systems and Equipment**
Fri., June 8, 2018, 11:00 AM - 12:00 PM CDT
- **HVAC System Controls and Techniques**
Fri., June 8, 2018, 12:30 - 2:30 PM CDT

Introduction to Vibrations

- **Introduction to Vibrations**
Thurs., June 14, 2018, 11:00 AM - 1:00 PM CDT
- **Eigenvalues, Eigenvectors and Motion**
Thurs., June 14, 2018, 1:30 - 3:00 PM CDT
- **Analysis and Test Methods**
Fri., June 15, 2018, 11:00 AM - 12:30 PM CDT
- **Designing for Vibration and Failure Analysis**
Fri., June 15, 2018, 1:00 - 2:30 PM CDT

Pedestrians and Bicycle Transport Planning

- **Introduction to Current Conditions and Trends in Biking and Walking**
Thurs., June 21, 2018, 11:00 AM - 12:30 PM CDT
- **Engineering and Infrastructure: Design for Walkability and Bikeability**
Thurs., June 21, 2018, 1:00 - 2:30 PM CDT
- **Developing a Walking and Biking Plan, Part I**
Fri., June 22, 2018, 11:00 AM - 12:30 PM CDT
- **Developing a Walking and Biking Plan, Part II**
Fri., June 22, 2018, 1:00 - 2:30 PM CDT

For more information visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers and geologists and 6.5 HSW continuing education hours to architects in all states, except Florida architects. Educators and courses for Pennsylvania engineers and geologists are not subject to pre-approval.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is deemed an approved architect continuing education sponsor in New York. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota.

This program offers a non-credit continuing education opportunity to construction contractors. It has not been submitted to any state contractor licensing entity for continuing education approval.

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.

Can’t Attend? Order the CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

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How to Register		Registrant Information Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip _____ Occupation: _____ Email: _____ Phone: _____ Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____ Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred. () I need special accommodations. Please contact me.
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Complete the entire form. Attach duplicates if necessary.		

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the CD manual package for **\$289.00**. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

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