

# Credit Information

These webinars are open to the public and are each designed to offer 2.0 - 3.0 PDHs to professional engineers, 2.0 - 3.0 HSW continuing education hours to licensed architects, and 2.0 - 3.0 HSW continuing education hours to landscape architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700) and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved these courses for 2.0 - 3.0 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved these courses for 2.0 - 3.0 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved these events for .2 - .3 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

These webinars have been approved by the Association of State Floodplain Managers for 2.0 - 3.0 CECs for floodplain managers.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

## On-Demand Credits

The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:

- 2.0 - 3.0 LU | HSW (AIA)
- 2.0 - 3.0 HSW PDHs (LA CES)
- 2.0 - 3.0 ASFPM CECs

## Can't Attend? Order the Webinar as an On-Demand Package!

Recordings of these webinars are available for purchase. See details online 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.

# Soil, Slopes and Retaining Walls: Interactive Workshops

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PO Box 278  
Altoona, WI 54720-0278



## Soil, Slopes and Retaining Walls: Interactive Workshops

### Pick and choose which courses apply to you!

Sign up for each course individually or all seven at a discounted rate.

### Each course approved for continuing education credit!

Including AIA Credit, ICC CEUs, and PE PDHs (see inside for credits).

*Submit your specific wall and/or slope issues/problems prior to the start of or during the series and the presenter will address your specific issues, project concerns, etc. as it relates to the topic of the week! Instructions will be sent via email after registration is processed.*



# HalfMoon Education Online Learning Soil, Slopes and Retaining Walls: Interactive Workshops



**Seven live short webinars that teach about soil mechanics, retaining wall design and slope stabilization.**

1. Soil Testing, Properties and Uses  
- Thursday, October 5, 2023
2. Retaining Walls and Lateral Earth Pressure  
- Thursday, October 12, 2023
3. Internal Design of MSE Walls and Geosynthetics  
- Thursday, October 19, 2023
4. Retaining Wall Selection: How to Know What to Specify  
- Thursday, October 26, 2023
5. Unreinforced Slope Stability Analysis  
- Thursday, November 2, 2023
6. How to Design a Reinforced Slope  
- Thursday, November 9, 2023
7. Best (and Worst) Practices for Retaining Wall Success and Interactive Workshop Wrap-Up  
- Thursday, November 16, 2023



Soil Testing, Properties and Uses

Thursday, October 5, 2023 | 10:00 am - 12:00 pm CDT Tuition: \$109

Credits: Professional Engineers: 2.0 PDHs Architects: 2.0 HSW CE Hours  
AIA: 2.0 LU|HSW Landscape Architects: 2.0 HSW CE Hours  
LA CES: 2.0 HSW PDHs International Code Council: .2 CEUs (Sitework)  
Floodplain Managers: 2.0 ASFPM CECs

Agenda:

Soil properties Lab testing of soil  
Field testing of soil Preparing and reading soil and test reports  
The different types of soil  
How to select the proper soil test for your specific project/application

23 USSOILT 10 5 WEBR LH

Retaining Walls and Lateral Earth Pressure

Thursday, October 12, 2023 | 10:00 am - 12:00 pm CDT Tuition: \$109

Credits: Professional Engineers: 2.0 PDHs Architects: 2.0 HSW CE Hours  
AIA: 2.0 LU|HSW Landscape Architects: 2.0 HSW CE Hours  
LA CES: 2.0 HSW PDHs International Code Council: .2 CEUs (Sitework)  
Floodplain Managers: 2.0 ASFPM CECs

Agenda:

Defining “the wall” Identifying forces on a retaining wall  
How to account for and resist soil pressure  
How water pressure impacts a retaining wall  
The properties of the soil that contribute to the wall design  
Equations and examples

23 USRTWLEP 10 12 WEBR LH

Internal Design of MSE Walls and Geosynthetics

Thursday, October 19, 2023 | 10:00 am - 1:15 pm CDT (incl. 15min. break) Tuition: \$159

Credits: Professional Engineers: 3.0 PDHs Architects: 3.0 HSW CE Hours  
AIA: 3.0 LU|HSW Landscape Architects: 3.0 HSW CE Hours  
LA CES: 3.0 HSW PDHs International Code Council: .3 CEUs (Sitework)  
Floodplain Managers: 3.0 ASFPM CECs

Agenda:

Materials used in construction of an MSE wall  
What constitutes “the wall” when discussing an MSE wall  
Properties of common geosynthetics  
How an MSE wall differs from other wall types  
Discussion of different blocks, reinforcement, and their interaction  
Design code requirements for an MSE wall  
How an MSE wall interacts with other site features such as building and utilities  
Equations, calculations, and examples of internal stability of an MSE wall  
Case histories of MSE wall failures highlighting what NOT to do

23 USIDMSEG 10 19 WEBR LH

Register for the entire series and save \$114 by using coupon code SOILSERIES23 at checkout online.

Retaining Wall Selection: How to Know What to Specify

Thursday, October 26, 2023 | 10:00 am - 12:40 pm CDT (incl. 10-min. break) Tuition: \$159

Credits: Professional Engineers: 2.5 PDHs Architects: 2.5 HSW CE Hours  
AIA: 2.5 LU|HSW Landscape Architects: 2.5 HSW CE Hours  
LA CES: 2.5 HSW PDHs International Code Council: .25 CEUs (Sitework)  
Floodplain Managers: 2.5 ASFPM CECs

Agenda:

Common types of retaining walls commonly used in today's construction  
Best applications of a cast-in-place concrete retaining wall  
Alternatives to cast-in-place retaining wall construction  
Advantages to using gravity retaining walls  
Different types of gravity retaining walls  
Basic concepts of MSE systems When to specify an MSE wall or MSE slope  
Site layout concerns to consider when locating a retaining wall

23 USRTWSEL 10 26 WEBR LH

Unreinforced Slope Stability Analysis

Thursday, November 2, 2023 | 10:00 am - 12:00 pm CDT Tuition: \$109

Credits: Professional Engineers: 2.0 PDHs Architects: 2.0 HSW CE Hours  
AIA: 2.0 LU|HSW Landscape Architects: 2.0 HSW CE Hours  
LA CES: 2.0 HSW PDHs International Code Council: .2 CEUs (Sitework)  
Floodplain Managers: 2.0 ASFPM CECs

Agenda:

Fundamentals of slope instability  
Soil and geological mechanics related to slope instability  
How geologic conditions affect slope stability  
Observations of slope instability  
Construction practices to improve or restore slope stability  
Equations, calculations, and example of an unreinforced slope

23 USUSLPSA 11 2 WEBR LH

Submit your specific wall and/or slope issues/problems prior to the start of or during the series and the presenter will address your specific issues, project concerns, etc. as they relate to the topic of the week! Instructions will be sent via email after registration is processed.

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How to Design a Reinforced Slope

Thursday, November 9, 2023 | 10:00 am - 12:00 pm CST Tuition: \$109

Credits: Professional Engineers: 2.0 PDHs Architects: 2.0 HSW CE Hours  
AIA: 2.0 LU|HSW Landscape Architects: 2.0 HSW CE Hours  
LA CES: 2.0 HSW PDHs International Code Council: .2 CEUs (Sitework)  
Floodplain Managers: 2.0 ASFPM CECs

Agenda:

Geosynthetic properties for use in slope stabilization  
Deep seated stability analysis  
Equations, calculations, and example of using geosynthetics to reinforce a slope  
Case histories of deep seated, rotational failures and other slope failures  
Soil properties and conditions that contribute to slope stability  
Material required for the exposed face of the slope to maintain long term stability

23 USH2DRSL 11 9 WEBR LH

Best (and Worst) Practices for Retaining Wall Success and Interactive Workshop Wrap-Up

Thursday, November 16, 2023 | 10:00 am - 1:15 pm CST (incl. 15-min. break) Tuition: \$159

Credits: Professional Engineers: 3.0 PDHs Architects: 3.0 HSW CE Hours  
AIA: 3.0 LU|HSW Landscape Architects: 3.0 HSW CE Hours  
LA CES: 3.0 HSW PDHs International Code Council: .3 CEUs (Sitework)  
Floodplain Managers: 3.0 ASFPM CECs

Agenda:

Preventing problems or wall failures through improved site layout  
Preventing problems or failures through proper wall design techniques  
Commonly overlooked design code requirements related to retaining wall layout and design  
Roles and responsibilities of the design and construction team to ensure structure success  
Typical causes of problems or structure failure  
Recognizing and preventing a problem during construction  
How water (both surface and below ground) affects an earth structure  
What measures to take during construction to ensure long term earth structure success  
Case histories and examples of failed structures

23 USBP4RWS 11 16 WEBR LH



Series presented by Bill Simpson, P.E.  
Geotechnical Structure Design Specialist at Gradelta Engineering

Mr. Simpson founded Gradelta Engineering in 2020 with the intent to help clients better understand the combination of geotechnical and structural engineering that he has worked with for the past 20 years. He earned his B.S.C.E. and M.S.C.E. degrees from Georgia Institute of Technology. He provides engineering services to contractors and fellow engineers for earth structure pricing, along with the plans and calculations needed for construction. He frequently consults with clients regarding the optimal structure type and location on the construction site to minimize risk and maximize useable space. He also works in the education sector providing not just seminars such as this one, but also acting as a subject matter expert creating study guide and test prep content for the NCEES Professional Civil Engineer exam. Mr. Simpson has also worked with lawyers and insurance companies during forensic investigation and lawsuits surrounding retaining walls and slope failures. His hope is that through the instructional services that he provides, slopes will remain stable and retaining wall failures will be eliminated.

Learn More and Register:  
www.halfmoonseminars.org  
Customer Service (715) 835-5900 Ext. 1

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