

Agenda

Presented by David Harmanos, P.E., LEED AP

Karst Geology

- Development of karst
- Typical karst profiles
- Karst hazards

Evaluating Karst Sites

- Site exploration techniques
- Soil sampling and testing
- Data interpretation and subsurface models

Foundation Selection and Design

- Designing to mitigate karst hazards
- Foundation types
- Risk management

Foundation Construction in Karst

- Site grading
- Dewatering and drainage
- Excavations
- Mitigating the effects of karst features

Foundation Repair in Karst

- Repairing sinkholes
- Cap/compaction grouting
- Underpinning

Case Histories in Karst

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.

Foundation Design, Construction and Repair in Karst Terrain

Live, Interactive Webinar - Tuesday, June 22, 2021

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PO Box 278
Altoona, WI 54720-0278



Learning Objectives

You'll be able to:

Identify typical karst profiles and hazards.

Understand special karst site exploration techniques.

Design foundations to mitigate the risks of building in karst terrain.

Study karst site grading, dewatering and excavation methods.

Repair foundation damage from sinkholes and other karst hazards.

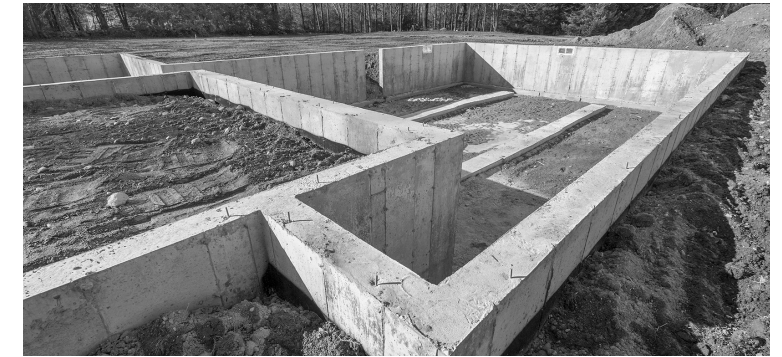
Examine case histories in karst.



HalfMoon Education Online Learning

Foundation Design, Construction and Repair in Karst Terrain

Live, Interactive Webinar - Tuesday, June 22, 2021



Learn about the development of karst geology

Discuss special karst site exploration techniques

Design foundations to mitigate the effects of karst

Get tips on foundation construction in karst

Understand how to repair sinkholes and other damage from karst features

Discuss karst design, construction and repair case histories

Continuing Education Credits

Professional Engineers
6.5 PDHs

Architects
6.5 HSW CE Hours

AIA
6.5 LU | HSW

International Code Council
.65 CEUs (Building)

AIA
Continuing
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Provider



Faculty

David Harmanos, P.E., LEED AP

Branch Manager at Hillis-Carnes Engineering Associates, Inc.

Mr. Harmanos is a professional engineer with extensive experience in subsurface exploration, soil testing, infiltration testing, geosynthetics, and seismic and advanced analysis. His expertise includes commercial, industrial and institutional foundation design; retaining wall and steep slope design; sinkhole remediation; landfill design; site work; forensic engineering; LEED consulting; and construction quality control/assurance (CQA/QC). Mr. Harmanos is a graduate of Drexel University where he received both his BS and MS degrees in Civil Engineering (Geosynthetics and Geotechnical).

Hillis-Carnes performs geotechnical engineering consulting and laboratory testing services. Its construction services include evaluation of bearing materials, inspection of pile driving, slope inclinometer installation and monitoring, and retaining wall construction observation.

Webinar Information

Log into Webinar 8:30 - 9:00 am CDT	Break 12:30 - 1:00 pm CDT
Morning Session 9:00 am - 12:30 pm CDT	Afternoon Session 1:00 - 4:30 pm CDT

Tuition

\$289 for individual registration

\$199 for three or more registrants from the same company at the same time.

Included with your registration: PDF seminar manual.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

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Cancellations: Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar or the self-study package. You may also authorize another person to take your place.

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Additional Learning

Water Conservation and Reuse for Building Professionals

- Thurs, May 13, 2021 | 11:00 am - 3:00 pm CDT
- Fri, May 14, 2021 | 11:00 am - 3:00 pm CDT

Design Principles of the 2018 International Building Code

- Wed, May 19, 2021 | 8:00 am - 3:20 pm CDT

Sustainable Site Design

- Wed, May 19, 2021 | 8:30 am - 3:50 pm CDT

Septic System Design, Construction and Maintenance

- Thurs, May 20, 2021 | 8:30 am - 4:30 pm CDT

Vegetated Green Infrastructure: Plant and Soil Media Design Considerations for Improved Compliance (or Outcomes)

- Thurs, May 20, 2021 | 8:30 am - 4:30 pm CDT

Deep Dive into Water Infiltration in Soil

- Fri, May 21, 2021 | 11:00 am - 1:00 pm CDT

Handling Ethical Issues Associated with Defects and Failures

- Fri, May 21, 2021 | 11:00 am - 12:00 pm CDT

Retaining Wall Design and Slope Stabilization Techniques

- Tues, May 25, 2021 | 8:30 am - 4:30 pm CDT

Drones in Construction

- Tues, May 25, 2021 | 9:30 am - 5:00 pm CDT

Seismic Design and Construction

- Tues, May 25, 2021 | 11:00 am - 3:00 pm CDT
- Wed, May 26, 2021 | 11:00 am - 3:00 pm CDT

Structural Design Loads under the ASCE 7 Standard

- Thurs, May 27, 2021 | 8:30 am - 5:00 pm CDT

2021 International Residential Code: Residential Mechanical Systems

- Thurs, May 27, 2021 | 11:00 am - 3:30 pm CDT

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

Continuing Education Credit Information

This webinar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects licensed in all states.

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 this course for 6.5 LU | HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Registration

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Tuition	
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