

Agenda

Presented by Chris Zamaites, P.E., CFM, CPESC, ENV SP

Accommodating Multiple Purposes of Site Engineering

Site engineering for built elements
Sustainability goals: minimizing disturbance and preserving natural features
Jurisdictional permitting - reviewing state and local regulations
Stormwater management
Slope stabilization
Landscape aesthetics

Watershed, Topography, and Impact of Soils and Landforms

Understanding the watershed
Considering site topography: high points, low points and plane surfaces
Understanding the role of soils
Soil characteristics, classification and engineering properties
Identifying the underlying geological conditions

Site Plans

Site plan contents
Soil investigations and considerations
Surface water and groundwater considerations
Excavation specifications and hauling
Construction grade staking

Site Grading

Grading slope and your site
Drainage systems, siting considerations and their impacts
Grading for retaining walls
Grading for roads, sidewalks and paths
Grading for stairs and ramps

Site Engineering and Stormwater Management and Erosion Control

National Pollutant Discharge Elimination System (NPDES) and
Stormwater Pollution Prevention Plans
Reviewing state and local regulations
Sediment traps and basins
Buffer zones

Earthwork Safety

Weight of soil and excavation hazards Underground installations
Water accumulation

Site Program Management

Initiation, planning, execution and closure Program governance
Quality control

Case Study: Applying Science and Technology to a Site Engineering Problem

Practical Site Engineering: Science and Techniques
Grand Rapids, MI - Wednesday, July 24, 2019

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Learning Objectives

You'll be able to:

Engineer for built elements and landscape aesthetics, while preserving natural features and minimizing disturbance.

Consider erosion control and stormwater management.

Get tips on grading and drainage.

Understand safety considerations during underground installations, as well as earthwork safety.

Utilize case studies to understand past failures and future challenges.



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Practical Site Engineering: Science and Techniques

Grand Rapids, MI - Wednesday, July 24, 2019



Accommodate multiple purposes of site engineering including stormwater management and slope stabilization

Discuss soil characteristics and engineering properties, as well as site topography

Understand National Pollutant Discharge Elimination System (NPDES) and stormwater pollution prevention plans

Explore grading for retaining walls, roads, stairs and ramps

Apply site program management from planning to execution and closure

Continuing Education Credits

Professional Engineers

7.0 Continuing Ed. Hours

Floodplain Managers

7.0 ASFPM CECs

Landscape Architects & Architects

7.0 HSW Continuing Ed. Hours

7.0 LA CES HSW PDHs

7.0 AIA LU|HSW



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Faculty

Chris Zamaïtes, P.E., CFM, CPESC, ENV SP *Burns & McDonnell, Chicago*

Ms. Zamaïtes is a senior civil engineer with Burns & McDonnell in Chicago. She has 28 years of experience with planning and design covering municipal infrastructure, and with commercial, residential, and recreational development, along with planned community design. Ms. Zamaïtes’ experience includes utility design/relocation for water transmission and distribution systems; sewage collection; and stormwater management systems including that for arterial, collector and local street systems. The aforementioned design includes floodplain evaluation and management, utility relocation, hydrology and hydraulics, earthen dam inspections, stream modeling with scour countermeasures, erosion and sediment control, and compliance with regulatory criteria associated with local planning and zoning ordinances, stormwater ordinances, and other applicable regulatory criteria from local to the federal level. Ms. Zamaïtes’ hydrologic and hydraulic modeling experience includes HEC 1, HEC 2, WSP2, WSPRO, WIN TR-20, TR 55, SWMM, HEC-RAS, HydroCAD, SewerCAD, StormCAD, Culvert Master, and Flow Master.

Here’s what past attendees had to say about the program and presenter Chris Zamaïtes:

“Information presented is well thought out & very useful.” — *Architect*

“Instructor was very knowledgeable on topics.” — *Civil Engineer*

“Great content!” — *Construction Manager*

Seminar Information

Courtyard by Marriott Downtown	Registration	Lunch (On your own)
11 Monroe Ave. NW	8:00 - 8:30 am	11:45 am - 12:45 pm
Grand Rapids, MI 49503	Morning Session	Afternoon Session
(616) 242-6000	8:30 - 11:45 am	12:45 - 5:00 pm

Tuition

\$289 for individual registration
\$269 for three or more simultaneous registrations.

Included with your registration:
Complimentary continental breakfast and printed seminar manual.

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

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

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 self-study package. You may also send another person to take your place.

Additional Learning

Webinar Series

Low Impact Development (LID)

- **Introduction to Low Impact Development and Bioretention System Design**
Wed., June 5, 2019, 11:00 AM - 1:00 PM CDT
- **LID Residential Development and Case Studies**
Thurs., June 6, 2019, 11:00 AM - 1:00 PM CDT

Fire Protection and Building Codes

- **Introduction to Fire Protection and Life Safety Design**
Thurs., June 6, 2019, 11:00 AM - 12:30 PM CDT
- **Occupancy Classifications**
Thurs., June 6, 2019, 1:00 - 2:30 PM CDT
- **Means of Egress**
Fri., June 7, 2019, 11:00 AM - 1:00 PM CDT
- **Fire Protection Features and Occupancy Exercises**
Fri., June 7, 2019, 1:30 - 3:30 PM CDT

Distributed Battery Webinar

- **The Distributed Battery Webinar, Part I**
Wed., June 12, 2019, 11:00 AM - 2:15 PM CDT
- **The Distributed Battery Webinar, Part II**
Thurs., June 13, 2019, 11:00 AM - 2:15 PM CDT

Water Conservation

- **Evaluating the Owner’s Commitment to Water Conservation and Applicable Codes and Standards**
Thurs., June 13, 2019, 11:00 AM - 12:30 PM CDT
- **Assessing the Building Site**
Thurs., June 13, 2019, 1:00 - 2:00 PM CDT
- **Conserving and Reducing Water Use**
Fri., June 14, 2019, 11:00 AM - 1:00 PM CDT
- **Onsite Water Recycling and Minimizing Water Use**
Fri., June 14, 2019, 1:30 - 3:30 PM CDT

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

Continuing Education Credit Information

This seminar is open to the public and offers 7.0 continuing education hours/PDHs to professional engineers, 7.0 CECs to certified floodplain managers, and 7.0 HSW continuing education hours to landscape architects and architects in most states, including Michigan architects and engineers. Educators and courses are not subject to pre-approval in Michigan.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education an approved Florida architect continuing education provider.

This course has been approved by the American Institute of Architects for 7.0 HSW Learning Units (Provider No. J885) and the Landscape Architecture Continuing Education System for 7.0 HSW PDHs. Only full attendance can be reported to LA/CES and AIA/CES.

The Association of State Floodplain Managers has approved this activity for 7.0 CECs.

This seminar offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any contractor licensing entity with a continuing education requirement.

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 Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at \$269. 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

Practical Site Engineering: Science and Techniques
Grand Rapids, MI - Wednesday, July 24, 2019

How to Register	
Online: www.halfmoonseminars.org	
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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.	

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$289.00**. Three or more registrants from the same company registering at the same time - **\$269.00** each.

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

- ☐ Downloadable MP3 Audio/PDF Manual for **\$269.00**.
- ☐ CD/Manual Package for **\$289.00**.

(S&H included. Please allow five weeks from seminar date for delivery)

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