

# Agenda

Presented by David W. Ryan,  
Bradly F. Navarro and Diego F. Romero

## Planning for Structured Parking

How many spaces are needed      Shared parking concepts  
Site selection

## Functional Design

Introduction      Types of parking structures  
The level of service approach      Parking geometrics  
Circulation systems

## Building Codes

Life safety issues      Means of egress  
Guards and vehicle barriers

## Accessible Parking Design

Introduction to ADA      Parking design under ADA  
Other considerations

## Passive Security, Lighting and Other Design Elements

## Open Q&A and Case Studies/Examples

### Structural Systems

Cast-in-place, post-tensioned      Precast, prestressed  
Structural design overview

### Designing for Durability

Concrete admixtures      Expansion joint systems  
Joint sealants      Traffic coatings  
Life cycle cost

### Maintenance, Restoration, and Repair

The deterioration curve  
Benefits and challenges for various types of parking structures  
Condition assessments  
Establishing a restoration program  
Repair documents  
Routine repair and maintenance  
Proactive repair and maintenance  
Structural repairs

### Design for Adaptive Use

What is adaptive use      Adaptive reuse concepts and basic costs

## Open Q&A and Case Studies/Examples

Parking Structure Design, Construction and Maintenance  
Brookfield, WI - Tuesday, September 17, 2019

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## Learning Objectives

### You'll be able to:

**Look** at site selection criteria and explore shared parking concepts.

**Understand** parking design under the ADA, and talk about life safety issues.

**Review** different structural systems, including pre-cast, cast-in-place and post-tensioned.

**Design** for durability with concrete admixtures and expansion joint systems.

**Learn** about maintaining and repairing various types of parking structures.



# Parking Structure Design, Construction and Maintenance

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**Understand** functional design, including parking geometrics and circulation systems

**Explore** precast and cast-in-place structural systems

**Examine** passive security and lighting

**Learn** about accessible parking design

**Design** for durability with traffic coatings and joint sealants

**Discuss** maintenance, restoration and repair

### Continuing Education Credits

#### Professional Engineers

6.5 PDHs

#### Architects

6.5 HSW CE Contact Hours

6.5 AIA LU|HSW

#### Contractors

Non-Credit Continuing Ed.



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# Faculty

## David W. Ryan, P.E.

Vice President and Managing Principal of Walker Consultants (Chicago)

Mr. Ryan has more than 20 years of experience in the parking industry including new parking structure design, restoration, functional design consulting, studies, master planning and car park management systems. He has worked to develop effective parking solutions for various client types including developers, municipalities, universities, hospitals, casinos and private corporations. Mr. Ryan received his bachelor of science degree in Civil Engineering from the University of Illinois at Urbana Champaign and is a registered professional engineer in Illinois, Missouri, and Wisconsin.

## Bradly F. Navarro, P.E.

Principal and the Director of Operations of Walker Consultants (Chicago)

Mr. Navarro has 18 years of experience in parking planning, design, and consulting, and he oversees the production and quality assurance process for all design projects handled by Walker's Chicago offices. He has consulted on hundreds of parking-related projects, lending expertise to site selection, engineering, building code analysis, durability design, and facility maintenance and restoration. In addition, he is recognized as a leading parking functionality designer in the industry and serves as engineer-of-record on select Walker projects. Mr. Navarro received his bachelor of science degree in Civil Engineering from the University of Illinois at Urbana-Champaign; is a licensed professional engineer in Illinois, Missouri, and Iowa; and was recently awarded the National Parking Association's 40 Under 40 Award.

## Diego F. Romero, P.E.

Restoration Consultant for Walker Consultants (Chicago)

Mr. Romero specializes in concrete durability and structural engineering, more specifically in the investigation, analysis, and repair of distressed structures, including parking structures and building envelopes. He has worked on a wide variety of structures, from evaluating wooden roof trusses of 19th century churches to assessing the condition of 460-foot tall concrete power plant cooling towers. Mr. Romero also leads the development and implementation of the firm's photogrammetry 3D modeling and unmanned aerial vehicles services for restoration projects and is a member of ACI 364 (Rehabilitation), ACI 440 (Fiber Reinforced Polymer Reinforcement), and ACI 564 (Repair of Concrete). He received his doctorate degree in Structural Engineering from the University of Miami, and he is a registered professional engineer in Illinois and Texas.

# Seminar Information

## Sheraton Milwaukee Brookfield Hotel

375 South Moorland Road  
Brookfield, WI 53005  
(262) 364-1100

Registration  
8:00 - 8:30 am  
Morning Session  
8:30 am - 12:00 pm  
Lunch (On your own)  
12:00 - 1:00 pm  
Afternoon Session  
1:00 - 4:30 pm

## Tuition

**\$289** for individual registration

**\$269** for three or more registrations.

Each registration includes a 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](http://www.halfmoonseminars.org).

## How to Register

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- 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 self-study package. You may also send another person to take your place.

## Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education contact hours to architects in all states. Educators and courses are not subject to preapproval in Wisconsin.

This seminar is approved by the American Institute of Architects for 6.5 LU|HSW (Sponsor No. J885). Only full attendance can be reported to the AIA/CES. Please visit [www.halfmoonseminars.org](http://www.halfmoonseminars.org) for complete AIA information under this course listing.

This course offers a non-credit continuing education opportunity to construction contractors.

Attendance will be monitored and attendance certificates will be available after the seminar for most individuals who complete the entire program. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

# Additional Learning

## Webinar Series

### NFPA 70E

#### • NFPA 70E, Part I

Wed., July 24, 2019, 11:00 AM - 3:30 PM CDT

#### • NFPA 70E, Part II

Thur., July 25, 2019, 11:00 AM - 3:30 PM CDT

### Shallow Foundations

#### • Evaluating Building Sites

Thurs., July 25, 2019, 11:00 AM - 12:30 PM CDT

#### • Shallow Foundation Design

Thurs., July 25, 2019, 1:00 - 2:30 PM CDT

#### • Special Considerations in Foundation Design and Construction

Fri., July 26, 2019, 11:00 AM - 12:30 PM CDT

#### • Soil Improvement and Foundation Diagnosis and Repair

Fri., July 26, 2019, 1:00 - 2:30 PM CDT

For more information visit:  
[www.halfmoonseminars.org/webinars/](http://www.halfmoonseminars.org/webinars/)

## 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

## Parking Structure Design, Construction and Maintenance

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| How to Register   |  |
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| <b>Complete the entire form.</b> Attach duplicates if necessary.  |  |
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## Tuition

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

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CD/Manual Package for **\$289.00**.

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