

**Pile Driving Contractors Association
12th Annual
Design and Installation of Cost-Efficient Piles
The E³ Conference**

**Modern Approaches to Maximize Driven Pile
Efficiency, Effectiveness and Economy - E³**

**Thursday November 3, 2011
Renaissance Orlando Airport, Orlando, FL**

DICEP - E³ PARTNERS

The Pile Driving Contractor Association and the PDCA of Florida Chapter



Supporting Organizations



**Professional Engineers will earn 6 Professional Development Hours
(PDH's) for attending this conference**

The Pile Driving Contractors Association
1857 Wells Road, Suite 6, Orange Park, FL 32073
Phone: 888-311-PDCA (7322) Facsimile: 904-215-2977
www.piledrivers.org

**Pile Driving Contractors Association
12th Annual Design and Installation of Cost-Efficient Piles - E³**

Renaissance Orlando Airport • Orlando, FL • November 3, 2011

Who Should Attend?

The PDCA 12th Annual Design and Installation of Cost-Efficient Piles (DICEP) conference is designed for geotechnical, structural and civil engineers; contractors and other firms or individuals who support, conduct business or are associated with the deep foundations, earth retention and/or the driven pile industry. Licensed P.E.'s needing Professional Development Hours can obtain 6 PDH from this conference.

What Will You Learn and Experience?

The DICEP conference will present modern approaches to maximize Efficiency, Effectiveness and Economy (E³) of driven piles through a series of presentations including, positive aspects of negative skin friction, efficient pile design utilizing setup, rebound, pile constructability, pile driving and DOT practices, software, case histories, and more.

Exhibitors

All presentations and functions will be held in the same area as the exhibit hall to maximize exhibitor traffic. Exhibitor's space will accommodate 6' table tops ONLY. Exhibitor fee is \$400.00. Exhibitor registration includes exhibit space and full conference registration for one person. Electrical available for an additional charge (contact PDCA for info). Fill out the Exhibitor Registration portion of the conference Registration Form to reserve your space. The PDCA will assign spaces on a first-registered and paid-in-full basis.

Exhibitor Visits, Networking and Social Schedule

7:30 AM - 8:30 AM	Registration Opens, Exhibitor Hall Opens, Continental Breakfast
10:30AM - 11:00 AM	Mid-Morning Break - Exhibit Hall
12:00 PM- 1:00 PM	Buffet Luncheon and Exhibitor Visits
2:30 PM - 3:00 PM	PM Break - Exhibit Hall

Hotel Information

Renaissance Orland Airport Hotel
5445 Forbes Place · Orlando, Florida 32812

Located just one mile from the Orlando Airport (MCO) the Renaissance offers complimentary round trip shuttle service to and from MCO to the hotel. This Renaissance hotel has redefining the savvy business traveler experience, offering business travelers conveniences only an award-winning hotel can provide. Amenities include well-appointed guestrooms featuring comfortable beds, large bathrooms & ample work space to meet all of your traveling needs.

Room Rates: \$159.00 for a Suite (Single/ double). Conference participants are responsible for making their own reservations by calling 1-800-545-1985. Identify yourself as part of the *Pile Driving Contractors Association* to receive the discounted room rate. Room reservations must be made prior to *Thursday, October 13, 2011*, to guarantee your accommodations at this special room rate. Please visit pdcaconference/ for reserving your room.



**Don't Miss This Year's
Premier
Engineer and
Contractor Focused
Driven Pile Conference!**

Receive 6 PDH's



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SCHEDULE, PRESENTATION TOPICS and PRESENTERS

7:30 AM - 8:30AM - REGISTRATION AND CONTINENTAL BREAKFAST

8:30 AM - 4:30 PM - CLASSROOM PRESENTATIONS

PRESENTATION SCHEDULE AND SUMMARIES

8:30am - 9:20am

Ohio Department of Transportation: Deep Foundation Practices - Peter Narsavage, State Construction Geotechnical Engineer, Office of Construction Administration, Ohio DOT. The Ohio Dept. of Transportation spends over \$30 million each year on deep foundations to support bridges and retaining walls, and over \$25 million of that on driven piling. Since 2002, ODOT has been using dynamic load testing with signal matching on every structure supported by friction piles to maximize their efficiency. Learn how ODOT uses LRF design methods and how ODOT installs driven piling to get the most cost-effective foundations it can.

9:30am - 9:55am

Pile Length Optimization and Fixity with FB Multiplier - Brian Anderson, Associate Professor of Civil Engineering, Auburn University, Auburn, AL. In foundation designs where lateral displacements control, fixity is evaluated by lengthening the pile until the surface displacements are tolerable or within an acceptable range. With some attention to parameters, this is easily accomplished with FB-Multiplier. This presentation will demonstrate the use of FB-Multiplier to evaluate fixity and compare the results to various definitions of fixity used in the foundation industry.

10:00am - 10:25am

Design of Sheet Piling - David Chapman, P.E., Blakeslee, Arpaia, Chapman, Branford, CT. The presentation will discuss methods to design sheet pile walls. Overview will cover design of both cantilevered and supported walls. Selection of design parameters and effects of applied loads will be discussed. Design methods for the traditional limit states will be shown, as will an introduction to soil structure interaction method. In addition to the computational aspects, the practical aspects of wall design will also be discussed.

11:05am - 11:30pm

Installation Specification for Driven Pile: PDCA Specification 103-07 - Dale Biggers (Chair, PDCA Technical Committee), Boh Bros. Construction Co. LLC, New Orleans, LA. A clearly written specification produced by the PDCA's Technical Committee. This document is fair to both Owner and Contractor, leading to projects that run more smoothly with fewer change orders. The presentation will discuss these specifications from the contractor's perspective.

11:35 am - 12:00 pm

Intentions in Verification - Larry Jones, P.E., FDOT State Geotechnical Engineer. In Design-Build, FDOT attempts to make every reasonable option available for installing piling to meet the needs of the future bridge. In order to leave more installation options open, FDOT verifies the final results by reviewing records and instrumented set-checks. This presentation describes the background, evolution and judgments for this process.

1:05pm - 1:30pm

Noise and Vibration Challenges on a Large Piling Project: A brief case history of the West Toronto Diamond Project in Toronto, Canada- Mike Justason, Bermingham Foundation Solutions, Hamilton, Ontario, Canada. This presentation describes various techniques used to address challenging noise and vibration issues on a pile driving project in Toronto, Canada. These techniques included: hydraulically activated shrouds for the hammers and piles; moveable noise barriers; active control of a vibratory hammer based on measured ground vibrations; a pile 'crowd' system; and ultimately the use of 'press-in' piling technology to meet the most stringent noise and vibration requirements.

1:35pm - 2:25pm

Positive Aspects of Negative Skin Friction - Gary Kuhns, President, Geotechnical and Environmental Consultants, Inc., Orlando, FL - Downdrag is pile settlement in response to settlement of the surrounding soil. The common bearing capacity approach to downdrag leads to erroneous design calculations and the implementation of unnecessary construction mitigation techniques. This presentation addresses downdrag from a settlement perspective, which reveals that downdrag is a very common phenomenon that all pile foundations experience to some degree. In addition, downdrag can have a beneficial impact on pile response to structure loading.

3:05 pm - 3:30pm

Identification of High Pile Rebound Soils: Mysterious Case of the Bouncing Piles - Paul J. Cosentino, Professor, College of Civil Engineering, Florida Institute of Technology, Melbourne, FL. High displacement piles have rebounded significantly, called High Pile Rebound (HPR), while undergoing small permanent displacements per hammer blow. This phenomenon occurred throughout North America. At three sites in Florida HPR elevations matched elevations where silt content increased to over 17 % and N-values increased. These increases also occurred between very soft-to-soft clays (SC) and medium dense to dense or very dense silty sands (SM-SP) or (SM) or (SC).

3:35pm - 4:00pm

Efficient Pile Design Utilizing Pile Setup - Paul Bullock, P.E., LOADTEST, Inc., Gainesville, FL. Driven piles often "set up" after driving, showing a significant increase from the reduced side shear caused by penetration disturbance. Dynamic testing during restrikes accurately measures pile capacity to develop a setup trend. This presentation reviews the use of dynamic test results to minimize construction delay while confirming the desired capacity.

4:05pm - 4:30pm

"What to Expect from a Geotechnical Engineering Report" - Mark Mongeau, P.E., Vice President, Ardaman & Associates, Inc. Did you ever wonder why geotechnical engineering reports all tend to look alike? Have you ever really read one from start to finish, or do you flip to the section you care about and find your information? This presentation will unlock the secrets of a geotechnical engineering report and highlight what is really being said.

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REGISTRATION FORM

Complete & Return to: PDCA, 1857 Wells Road, Suite 6, Orange Park, FL 32073; or fax to 904-215-2977; or scan & email to lori@piledrivers.org. Please type or print clearly. Please fill in all relevant information - PDCA will not process incomplete Registration Forms. If necessary photo copy this form or download additional forms from the PDCA website, www.piledrivers.org.

EARLY BIRD REGISTRATION DEADLINE: THURSDAY, OCTOBER 13TH, 2011

REFUNDS - 50% PRIOR TO OCTOBER 20TH, 2010 NO REFUNDS AFTER OCTOBER 20TH, 2010

Main Conference Registration and Exhibitor Information:

Last Name	First Name		
Additional Individual Same Co. Last Name	First Name		
Additional Individual Same Co. Last Name	First Name		
Company Name	Mailing Address	City	
State	Zip	Phone Number	E-mail Address

Registration and/or Exhibitor Fees:

Total Fee Each Line

Member PDCA or Supporting Organization Member

Early Bird - \$200.00 _____

Early Bird Additional person(s) from the same company - \$150.00 _____

After Early Bird - \$250.00 _____

After Early Bird Additional person(s) from the same company - \$200.00 _____

All Others

Early Bird - \$250.00 _____

Early Bird Additional person(s) from the same company - \$200.00 _____

After Early Bird (No discount for additional person(s) - \$300.00 _____

Federal, State, USACOE and Military (ID present at conference) - 65.00 _____

Students enrolled in Engineering Programs (ID present at conference) - 65.00 _____

Exhibitor Registration

Early Bird - Includes Exhibit Space and (1) one Full Conference Registration - \$400.00 _____

Early Bird Additional person(s) from the same company - \$150.00 _____

After Early Bird - \$500.00 _____

After Early Bird Additional person(s) from the same company - \$250.00 _____

Sponsorships:

Luncheon - \$250.00 _____

Continental Breakfast - \$250.00 _____

Mid-Morning and PM Break - \$200.00 _____

TOTAL PAYMENT DUE PDCA

Payment Information (All information must be completed to process your Registration Form):

Check One: Check Visa MC AMX **Exp. Date:** _____

Name On Card: _____ **Security Code (3 or 4 Digit code)** _____

Card Number: _____

Card Billing Address: _____

Signature: _____