

The meeting was meeting called to order by the chairman, Mohamad Hussein, at 7:04pm

Members and friends introduced themselves

Members in attendance:

Anderson, Brian	jbanders@uncc.edu	M	Sec. - web- email
Basnett, Curt	cbasnett@ch2mhill.com	M	
Brown, Dan	brownd2@auburn.edu	M	
Camp, Billy	bcamp@smeinc.com	M	
Castelli, Ray	castelli@pbworld.com	M	
Cobb, Len	len@christycobb.com	M	
DiMaggio, Jerry	jerry.DiMaggio@fhwa.dot.gov	M	
Diyaljee, Vishnu	diy001@gaeaeng.com	M	
Garcia, Luis	logarcia@geocim.com	M	Awards chair
Gassman, Sarah	gassman@eng.sc.edu	M	
Hall, Stevan	execdir@piledrivers.org	M	
Hussein, Mohamad	mhgrl@pile.com	M	Chair
Kulhawy, Fred	fhk1@cornell.edu	M	
Laefer, Debra	debra.laefer@ucd.ie	M	
Litke, Scot	slitke@adsc-iafd.com	M	
Marinucci, Antonio	marinucci@mail.utexas.edu	M	
McGillivray, Ross	ross@ardaman.com	M	
Mokwa, Bob	rmokwace@ce.montana.edu	M	
Nesmith, Willie	wnesmith@bellsouth.net	M	
Niehoff, Jim	jniehoff@aol.com	M	
Paikowski, Sam	samuel_paikowski@uml.edu	M	
Roberts, Lance	lroberts@terracon.com	M	
Thompson, Robert	rthompson@danbrownandassociates.com	M	
Brettman, Tracy	tbrettman@berkelapg.com		
Cadenhead, Dan	dcadenhead@andersondrilling.com		
Elfass, Sherif	elfass@unr.edu		
Garcia, Fernando	fgarica@comcast.net		
Hertlien, Bernie	hertelin@stsconsultants.com		
Isenhower, Bill	wmi@ensoftinc.com		
Liang, Robert	rliang@uakron.edu		
Massoudi, Nasser	nasser_massoudi@urscorp.com		
Moore, Mike	mmore@adsc-iafd.com		
Nichols, Silas	silas.nichols@fhwa.dot.gov		
Prezzi, Monica	mprezzi@ecn.purdue.edu		
Salgado, Rodrigo	rodrigo@ecn.purdue.edu		
Sarhan, Hazem	hasarhan@bechtel.com		
Stevens, Robert	bstevens@fugro.com		

Approval of Last Meeting's Minutes

Approval of the minutes from the previous meeting (held during the Geo-Frontiers Conference in Austin, Texas, 01/24/2005) was moved by Dan Brown and seconded by Tony Marinucci. The motion was approved by voice vote.

Membership

The chair recognized committee member Fred Kulhawy who is the 2006 recipient of the Karl Terzaghi Award. He is the past recipient of many ASCE awards.

The chair recognized the recent feature of committee member Liz Smith in Geostrata

New members that were accepted in the last year include: **Eric Burke, Sanjeev Malhotra, Muhannad Sulieman, Lance Roberts, Robert Thompson, Vishnu Diyaljee, Curt R. Basnett, and Edwin Strode**

Due to rapidly expanding membership, the chair recommended that two current applications be tabled until the next meeting.

Stevan Hall, the new executive director of PDCA, requests that he be the new representative replacing the former director Tanya Goble. Steve introduced himself and spoke on his behalf.

Professor Frank Townsend requested that he be moved to emeritus status. Professor Frank Townsend was moved to emeritus status with unanimous vote.

Deep Foundations Committee Mission Statement

The GI wants technical committees to have a mission statement to define the charge of the committee. This statement should be used in official committee communication and prominent on the website. The chairman offered the following:

“The mission of the Deep Foundations Committee is to advance the state-of-the-art and the state-of-practice ~~in~~ of deep foundations through technical, professional, and educational activities; and to ~~promote~~ **encourage** the ~~appropriate~~ efficient use of deep foundations systems through sound engineering, innovative technologies, and good construction practice.”

After much discussion and adjustments, Dan Brown moved for acceptance. 3 seconds. Motion passed.

Drilled Shaft Rebar Sub Committee Len Cobb

The following members have volunteered to serve on the drilled shaft rebar subcommittee – Alan McNabb, Ray Castelli, Tony Marinucci, and Mohamad Hussein. The charge of this subcommittee is to produce a statement useful for the industry within 1-2 years that will be published in the ASCE GEO journal as a paper under Deep Foundations Committee.

Len Cobb handed out a report he had put together on the rebar issue. The report illustrated the constructability issues with reinforcing cages. The chairman asked if this was the right committee to solve this problem. Ray Castelli mentioned that the seismic codes are driving the use of more reinforcement. Others iterated that there is a culture of “that’s the way we’ve always done it” that contributes to the problem. Dan Brown asked what this subcommittee wanted to accomplish. He pointed out that changing the controlling code would be virtually impossible. However, this committee can make suggestions. Bill Isenhower pointed out that the 2005 ACI lowered resistance factors. The chairman noted that the subcommittee members bring expertise to the table to approach this problem. Brown will propose changes along these lines to ACI at specialty meeting. Efforts would be articulated with ADSC committee on drilled shafts. Rodrigo Salgado pointed out that there was an ACI committee on footings and drilled piers. Brown explained that the behavior of an over-reinforced drilled shaft is complex and volunteered to be added to the subcommittee.

The committee was charged to develop a statement to raise the issue – and bring it to the next DFC meeting in 2007. Bill Isenhower suggested dividing into three aspects: axial steel, shear steel, and connecting details to superstructure. The chairman appointed Bernie Hertlein, and Bill Isenhower as consultants to the committee.

Jerry DiMaggio and Alan MacNab already working on drilled shafts issues.

Review of Design Methods for Offshore Driven Piles in Siliceous Sands

Report by Schnieder sent to the Deep Foundations committee for review. The report details use of curve fitting methods to model pile load tests. Dan Brown, Billy Camp and Sam Paikowski volunteered to review document and submit comments within 2 months. The chairman asked if offshore technology is within the interest of our committee. Brown suggested that the committee refer to these foundations as large diameter open ended cylindrical piles instead of offshore. The subcommittee will sponsor a session at GeoDenver in 2007. It may be beneficial to coordinate with the deep foundation and bridge committee of TRB.

Action item: Paikowski to head subcommittee on large cylindrical open ended piles.

Bill Isenhower suggested that Richard Jardin from Imperial College be invited. Ray Castelli was added to the subcommittee.

Update on AASHTO LRFD Specifications

Jerry DiMaggio gave an update on AASHTO LRFD specifications. The current specs are workable for highways. The first generation usable by *typical* highway engineers today. AASHTO moved from ASD to LRFD in 1994. Since then three editions released. All new AASHTO designs must be LRFD by October 2007. Jerry noted that the specification passed with 1 negative vote.

What can we do to get the community to use specification correctly? We are concerned about folks who do not have the background to argue about resistance factors and other issues. How do engineers meet mandate by adopting practice to LRFD?

- a. Participate in two 5 day courses other

- b. Perform comparative designs in old ASD and new LRFD to get familiar with new code and facilitate change.
- c. Level of outreach to consultants up to the individual state

Rodrigo Salgado brought up that states have the ability to develop their own resistance factors. Bill Isenhower mentioned redundancy issues with LRFD. Sam Paikowski added that NCHRP 507 has two sets of parameters redundant and non redundant cases

Jerry DiMaggio suggested that committee keep limit states design as a focal area for future sessions. Fred Kulhawy will organize LRFD sessions at GeoDenver 2007.

Committee Leadership Succession Plan

The TCC has requested each committee submit a succession plan. Mohamad Hussein's second term will expire in 2009. He cannot be re-elected. Ross McGillvray nominated Brian Anderson as next chair. The chairman solicited comments. Fred Kulhawy nominated Sam Paikowski. Sam Paikowski accepts nomination. Dan Brown nominated Ray Castelli. Fred Kulhawy suggested that the vote should be by email ballot. Debra Laeffer nominated Liz Smith.

A special page will be established on committee website for candidates to present their mission or platform. Deadline for posting by candidates is April 30th, voting to be closed on May 12, 2006. Sam Paikowski proposed that candidates write a single page discussion their qualifications etc.

Design Build

Ross McGillvray made a presentation on his experience with design-build in Florida. He explained the difference between Design-Bid-Build vs. Design Build. Sam Paikowski added that the US Design-Build system is flawed, because the constructor does not share rewards for work.

Committee will sponsor session on design build issues in foundation engineering at upcoming conference 2007 or 2008. Ray Castelli suggested session on lessons learned or guidelines for Geo partners in db. Jerry

Jerry DiMaggio noted he has FHWA experience with 15 design-build bridges. The chairman suggested someone from this committee go to the Geo Mega Issues conference. DiMaggio suggested that the DFC also coordinate with IBC meeting in Pittsburg to examine design build issues.

ISSMGE Report – Osaka Conference

Fred Kulhawy attended as the unofficial representative of the DFC. He noted that foundation engineering received limited coverage. There were some interesting case histories and papers galore – on CD proceedings.

There was a Landslide near Osaka where movements had been measured in a slope. After 6-8 months, the road was shut down and cameras, lights, etc were moved in to capture failure on

video. The slope failed and a 43 second video of the 200,000 m³ landslide was captured. WOW! The video can be acquired for free courtesy of Japanese highway department.

Kulhawy noted there nothing new at meeting regarding deep foundations. Mohamad Hussein and formerly Mike O'Neill were representatives of DFC on ISSMGE TC18: Deep Foundations. The chairman suggested Kulhawy to be official representative. Nomination passed.

Reuse of Foundations

Debra Laefer began discussion on the reuse of foundations. There is an upcoming conference in London that may involve this theme. Currently there is an NSF grant to prepare UC Davis centrifuge for grouting in flight. Laefer to propose session at GeoDenver concerning issues involved with foundation recycling including insurance, planning permitting, etc.

Jerry Dimaggio mentioned from the FHWA perspective that many older foundations are unknown and have integrity and capacity issues. The issue warrants outreach to structures and hydraulics areas. Discussion resulted in suggestion for an information standard for future projects.

Vishnu Diyaljee presented on the same topic. He referred to work within Eurocode and a small church job where he had dealt with reuse of foundations for an expansion.

Action Items: Vishnu Diyaljee, Debra Laefer and Liz Smith to organize sessions for GeoDenver 2007 or Chicago 2008 on recycled foundations. Debra Laefer to chair subcommittee.

Awards Committee Report

Luis Garcia reported on the efforts of the awards committee in the past year. Fred Kulhawy and Jorg Osterberg received awards after nominations by the committee. Rich Finno is no longer chairman of awards committee. The committee suggests nominations of Jerry DiMaggio for Kapp Award, and Alan McNab or Peck Award.

Due to lack of input from committee no papers were nominated this year. The committee should make suggestions for paper awards by the end of summer. Awards available include Norman Medal, Croes Medal, Middlebrooks Award and Wellington Prize.

Fred Kulhawy extended his thanks to the committee for the Terzaghi award nomination.

Action Item: Entire committee to review journals for papers to nominate for awards.

Crosshole Sonic Logging

Billy Camp led a discussion on the use and limitations of CSL. Issues included:
interpretation of results - how to interpret anomaly as far as acceptance of shaft;
experience – concrete problems at toe of shaft
acceptance criteria - Should we accept shafts?

The chairman pointed out paper by O'Neill and Sarhan in the GSP "Goble Volume" concerned this issue. Sam Paikowski. pointed out that he discussed this with Mike O'Neill before GeoFrontiers.

Action item: Billy Camp and Robert Thompson will sponsor session at GeoDenver and issue a follow up paper.

GSP to Honor John Schmertmann

“From Research to Practice in Geotechnical Engineering” edited by Jim Lehr, David Crapps, and Mohamad Hussein. Nineteen letters sent out to solicit papers. Classic papers by Schmertmann will be included in volume. A general call for papers will be out soon. Book to be released in 2008. The chairman solicited names for future honorary publications.

Proposed Merger with Shallow Foundations Committee

Liz Smith asked about the potential to merge with Shallow Foundations. The chairman noted that there is new leadership with shallow foundations, and they plan to operate as a separate entity.

New Technical Journal Sponsored by DFI

Dan Brown introduced new technical journal to be published by the Deep Foundations Institute Journal 3 issues per year. Papers will be practice oriented, much like papers from DFI conferences with more thorough review. Initially, editors will be Dan Brown and Ali Porbaha from UC Sacramento.

The chairman pointed out that the GI is soliciting for a case histories journal. He also shared statistics from the editorial board of the GTGE Journal. 300 papers are submitted to the journal annually. The acceptance rate for the GTGE Journal is 28%. Practical papers are not being sent from non-academics. Fred Kulhawy suggested that there were too many journals and therefore should be moratorium on any new geotechnical journals.

Website

Brian Anderson said that the website was close to being up to date. However, he is still soliciting for content from the committee. The committee suggested that any material sent to Anderson for publication is “released.” Debra Laefer suggested that Anderson send periodic requests for content. There are two new pages in development: Schmertmann Book and chair nominations page. The chairman requested that Anderson request that organizations we link to provide reciprocal linking to our pages. Also, the main page should be updated to reflect recent awards and recognition of members of our committee or those we have nominated for awards, including Liz Smith, Fred Kulhawy, and Jorj Oseterberg. In addition, the chairman asked that we establish a permanent DFC Awards webpage.

Activities at GeoFrontiers

Brian Anderson gave a brief report on DFC activities at GeoFrontiers in Austin, Texas. There were many committee members involved with the O’Neill sessions, papers, and GSP. There were also separate sessions on reliability and pile supported embankments. Session Chairman requested that an additional webpage listing all DFC sponsored sessions be added to the DFC website.

Self-Consolidating Concrete for Drilled Shafts

The chairman shared correspondence from Degussa admixtures. Their products produce super high workability concrete that requires no vibration. This cuts down on labor costs. Such products are used at prestress plants and are often used by the Swedish and Japanese.

Chairman suggests DFC sponsor a session on new technologies in deep foundations. Action item: Jim Niehoff will propose session at upcoming conference that covers the broader topic of concrete issues with drilled shafts.

Pile Load Testing Issues

Willie Nesmith discussed pile load test issues. There are many test methods and interpretation methods used. Nesmith suggested that the committee issue a statement or series of statements about pile load testing.

Action item: DFC to sponsor session at GeoDenver conference on interpretation of load tests on deep foundations. Nesmith to chair subcommittee on this issue, with Jim Niehoff and Tony Marinucci. Subcommittee will report at next meeting.

2009 International Foundations Congress

The congress will be a true international event. We are soliciting participation of the Japanese, Canadian, Mexican, and EU Societies. PDCA and ADSC combining their 2009 meetings with the Congress. DFI is considering a similar move. The congress could be as big as 3500 attendees. Potential venues include Houston or Orlando – controlled by outdoor exhibit area for ADSC. Steve Hall from PDCA reiterated that PDCA is onboard

The chairman pointed out that this congress will not be an exclusive event. Participating organizations had demands, worries, etc. This will be a GI annual meeting and the conference will be run by the Deep Foundations Committee.

The chairman emphasized that this is a very immense undertaking. It will require 10 -12 people making major time commitments. Must be able to coordinate multiple groups making it appear seamless. Fred Kulhawy noted that it takes a dedicated person the equivalent of 1/3 – 1/2 year time over 2-3 years to put something like this together.

The chairman solicited/assigned the following responsibilities for the 2009 conference:

Chair – Mohamad Hussein

Co-chair – Brian Anderson – Web page 2009 also.

Technical Program Dan Brown, Chair, Sam Paikowski and Billy Camp co-Chairs

Proceedings Editors: Magued Iskander, Debra Laefer, and Mohamad Hussein

Short Courses – Willie Nesmith

Exhibitors – Steve Hall

Student Program - Sarah Gassman

Organizing Committee – Luis Garcia, Tony Marinucci, etc.

Coordination with Outside organizations - Liz Smith and Ross McGillvray

Robert Thompson – reserve

Bob Stevens will serve as liason with the Offshore industry.

A final note about conferences, Don Degroot reported that ASCE provided minimum help for this conference (2006 Geocongress).

Strain Wedge Model of Laterally Loaded Pile Analysis

Sherif Elfass presented software for analysis of single piles and pile groups, including nonlinearity, and liquefied soils. Contact Gary Norris for more information.

New Business

1. Geostrata upcoming issues will highlight geo-greats and geo-inventors
2. Committee should work in the future to issue white papers and consensus statements.
3. Develop web space or some sort of clearinghouse to get practitioners and academics together
4. Brian Anderson suggested that there were funds available from the TCC to sponsor workshops or other activities that support committee activities.
5. GI Teaching of upcoming manual on Auger Cast piles
6. Robert Thompson and James Niehoff interested in site class issues for building code, and strategies to up site class for IBC.

Dan Brown moved to close meeting.

Adjourn 11:55pm.