

“SOIL REINFORCEMENT” TECHNICAL WORKSHOP

Organised by: Centre for Infrastructure Engineering and Management
and School of Engineering
Griffith University Gold Coast campus

Date: 26 – 27 September 2005

Speakers: Mr Larry R. Weppeler / Professor A. S. Balasbramaniam

Venue: Building G23 (Multimedia Building) Room 2.07
Griffith University Gold Coast Campus

One Day Workshop

This workshop aims to provide up-to-date information on “Soil Reinforcement” and “Ground Improvement”.

Who Should Attend?

The course will be beneficial to post-graduate students, engineers and those who are in the design and analysis side of Geotechnical Engineering and Practice.

Contents of the Workshop

1. Session 1

- Introduction
- Geopier construction and results of construction
- Soil conditions: applicability and problems
- Overview of technical subjects

2. Session 2

- Foundation settlement control
- Modulus tests
- Shaft length checks
- Limit equilibrium bearing capacity

3. Session 3

- Floor slab support
- Seismic design:
 - a. Issues
 - b. Lateral load resistance
 - c. Uplift
 - d. Liquefaction
 - e. Seismic site class

4. Session 4

- Tank foundation support
- Embankment settlement
- Embankment stability
- Technical papers
- Research and development
- Discussions
- Review and summary

5. Session 5

- Ground Improvement Techniques
- Vertical Drain
- Deep Mixing

About the Speaker

Mr Larry R. Weppler: President of Geopier Global Corporation

1982-1984 German Military Duty-airborne division

1985-1989 Degree in aerospace engineering-University of Frankfurt, Germany

1995-1997 Degree in Geotechnical Engineering, University of Alaska at Fairbanks

1997-2000 Project Engineer for Shannon & Wilson, St. Louis, Missouri; largest project led: US \$ 500 million-revitalization of downtown St. Louis (Cupples Station) with emphasis on forensic engineering

2000-2004 Technical Director for Geopier Global Corporation, in charge of all countries except for western hemisphere

2004-present President of Geopier Global Corporation overseeing business in all of Europe (East and West), Asia and Africa.

Memberships: ASCE, ACI (American Concrete Institute), VDI (Society of German Engineers), DGGT (German Society of Geotechnical engineers)

Prof. Bala educated in Sri Lanka and Cambridge holds Fellowship in the Institution of Engineers, Australia; the Institution of Civil Engineers, London; the American society of Civil Engineers and the Institution of Engineers, Malaysia. A Past-President of the Southeast Asian Geotechnical Society, and Past-Vice President of the International Society for Soil Mechanics and Foundation Engineering, Prof. Bala is currently teaching at the School of Engineering in Griffith University. He has handled major ground improvement projects in Thailand, Singapore and Malaysia among other countries. He has been associated with the entire site investigation for the Swarnabhumi International Airport project in Bangkok which utilized the largest volume of prefabricated vertical drains compared to any other similar project. These investigations included the appropriate selection of ground improvement scheme, and laboratory and field trials on several full scale tests, including vacuum drainage.. He was also engaged with deep chemical mixing projects and associated pioneering works. Prof. Bala also participated in the comprehensive series of trial test embankments with wide ranging ground improvement schemes on the Muar Soft clay in Malaysia on the the North-South Expressway Project. These contributions and others have merited in receiving the Kevin Nash Gold Medal of the International Society for soil Mechanics and Foundation Engineering in 1997 at Hamburg. Recently in Queensland, Prof. Bala has collaborated with Mr Vasantha Wijekulasooriya of QDMR in making a comprehensive review on the performances of the stone column technique and the use of PVD and surcharge on the Gold Coast Highway project and the Sunshine Coast Motorway and Port of Brisbane Motorways.

TENTATIVE PROGRAMME

<u>Day 1</u>		<u>26 September 2005 (Monday)</u>
08:30	– 08:45 am	Registration
08:45	– 09:00 am	Opening
09:00	– 10:30 am	Introduction/ Geopier construction
10:30	– 10:45 am	Coffee break
10:45	– 12:15 pm	Applicability and problems
12:15	– 01:30 pm	Lunch
01:30	– 03:00 pm	Foundation settlement control/ Modulus tests
03:00	– 03:15 pm	Coffee break
03:15	– 04:45 pm	Shaft length checks/ Limit equilibrium bearing capacity
<u>Day 2</u>		<u>27 September 2005 (Tuesday)</u>
09:00	– 10:30 am	Floor slab support
10:30	– 10:45 am	Coffee break
10:45	– 12:15 pm	Seismic design
12:15	– 01:30 pm	Lunch
01:30	– 03:00 pm	Tank foundation support/ Embankment settlement stability
03:00	– 03:15 pm	Coffee break
03:15	– 04:45 pm	Research and development/ Discussions

Venue: Building G23 (Multimedia Building) Room 2.07, Griffith University Gold Coast Campus

Registration Fee (a minimum nominal charge is adopted to cover only the expenses).

For normal participants, \$550 AUD (includes 10% GST)

For students, \$275 AUD (includes 10% GST)

For additional information please contact

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Registration Form

Workshop on "SOIL REINFORCEMENT"

Given Name:			
Last Name:			
Position:		Title:	
Organisation:			
Department:			
Address:			
State:		Postcode:	
Telephone:		Facsimile:	
Mobile:			
Email:			
<p><i>Please inform us of any special dietary requirements.</i></p> <p><i>The registration fee includes light refreshment, light lunch and handouts during the program.</i></p>			

Enclosed is my registration fee of:

- ☐ For normal participants, **AUD\$550.** (*GST included*).
- ☐ For students, **AUD\$275.** (*GST included*).

Cheque Payments:

Cheques or money order to be made payable in Australian Dollars to "**Griffith University**". In Australia, the ABN, required to be used for GST purposes, is **78106094461**.

Credit Card Payments:

☐ Bankcard ☐ Visa ☐ MasterCard

Card Number: _____

Expiry Date: _____

Name of Card holder: _____

Card Holder's signature: _____

Amount to be charged: _____

Please fax or mail the completed form (by 23 September 2005) to
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 Griffith University Gold Coast Campus, QLD 4215, AUSTRALIA.
 Fax: +61 7 55528065