

International Geosynthetics Society
United Kingdom Chapter



**Reinforced Soils Retaining Wall
Systems Reach New Heights in the
Middle East**

Ian Fraser & Murtaza Khan
Tensor International

6.30pm for 7.00pm
Monday 12th March 2012

Burleigh Court
Loughborough University
LE11 3GR

Reinforced Soil Retaining Wall (RSRW) Systems were first introduced into major civil engineering projects in the United Arab Emirates (UAE) around 2000. The project boosting this trend was the Dibba Idhn Tawaian Road, Dubai. With a total wall face area exceeding 40,000 m², it established RSRW Systems in the UAE proving them well suited to construction through difficult mountainous terrain and under extreme climatic conditions. Since the completion of this project in 2003 more than 40 major projects have been successfully completed in the UAE region for major clients, with the total area of wall face completed to date exceeding 500,000 m². The most impressive one, completed in 2011, is the The Dubai Fujairah Freeway Project for The Ministry of Public Works, which is the focus of this paper. The paper will discuss and illustrate the RSRW system components as well as the design and construction techniques adopted by both designer and contractor for The Dubai Fujairah Freeway Project and highlight why RSRWs are well suited to the logistical problems faced under such difficult conditions.

Ian Fraser

Ian is a Geotechnical Engineer and Chartered Geologist with 25 years experience working in Consultancy and specialist geotechnical contracting & manufacturing. The majority of that experience has been gained in the fields of reinforced soil and geosynthetics working with market leading organisations. Ian joined Tensor in 2007 as UK & International Business Manager and was elevated to Director of Application Technology before recently being promoted to Vice President of Global Technology at the end of 2011. Ian has been an active member of the International Geosynthetics Society (IGS) and is currently Chairman of the IGS UK Chapter. He also sits on the committee of the British Geotechnical Association and represents them on the BSI B/553 Geotextiles & Geomembranes Committee.

Murtaza Khan

Murtaza is a Senior Design Engineer and has been with Tensor for 7+ years. Murtaza was the Lead Design Engineer for the Walls in Fujairah. He was based in Dubai for 3 years and was relocated to the UK in 2008, to carry out his MBA in Construction (part time), which is due to be completed in 2012.

Chairman: Ian Fraser
Tensor International Ltd
Tel: +44 (0)7733 001825
Fax: +44 (0)1254 266841
ifraser@tensor.co.uk

Vice Chairman:
Peter Assinder
Huesker Limited
Tel: +44 (0)1746 769537
Fax: +49 (0)2542 701482
petera@huesker.co.uk

Treasurer: Dr Gary Fowmes
Waste Recycling Group
Tel: 02476 642970
gary.fowmes@wrg.co.uk

Secretary: David Young
ABG Geosynthetics Ltd
Tel: 01484 852096
Fax: 01484 354825
david@abg ltd.com

Activities: Richard Moss
The Environment Agency
Tel: 01925 543386
Fax: 01925 852260
richard.moss@environment-agency.gov.uk

Communications:
Peter Langley
Fiberweb Ltd
Tel: 01621 874221
Fax: 01621 874299
plangley@fiberweb.com

Education:
Andrew Belton
Coffey Geotechnics Ltd
Tel: 0161 499 6800
Andrew_Belton@coffey.com

Membership:
Chaido Doulala-Rigby
Tensor International Limited
Tel: 01254 266809
Fax: 01254 266809
crigby@tensor.co.uk

Corporate Sponsors:
Andy Cracknell
Naue Geosynthetics Ltd
Tel: 01925 810280
Fax: 01925 810284
acracknell@naue.co.uk

Mario Sharley
GEOfabrics Ltd
Tel: 07773 334742
mariosharley@geofabrics.com



The IGS UK Chapter is a member of the Ground Forum