

‘Light-Weight Deflectometers in Practice’

**A One Day Seminar - Wednesday 2nd July, 2008, at
Holywell Park Conference Centre, Loughborough University**

Knowledge of the structural competence of a roadway pavement with time is important to road managers, allowing maintenance and intervention measures to be planned. Today, with the construction of new sections of road network or the reconstruction of sections of an existing network, funding bodies as well as road managers require information on initial structural competence and an assessment of the structural life of a pavement construction; managers require information to plan interventions; overseeing organisations require information on financial projections. The structural integrity of a constructed pavement is measured by a response to dynamic load; in the UK the measurement may be in a semi-continuous manner by a deflectograph, or in a series of discrete measurements by a Falling Weight Deflectometer (FWD). Both machines mobilise the whole pavement structure in terms of deflection through surface applied loading. For practical reasons both methods are mainly applicable to an “in-service” pavements. The recently introduced changes to the design of pavements and their foundations in the Design Manual for Roads and Bridges (HD26/06, and IAN73/06 which supersedes HD25/94), introduces a need for continuous field compliance testing of the constructed pavement foundations. This utilises devices such as the Light-Weight Deflectometer (LWD) to measure the insitu stiffness. Together with the thickness values of construction layers the stiffness provides input data for compliance purposes and for a forward prediction of the structural competence of the pavement, and also provides a check on the structural competence derived from composite (whole pavement) load response data. This change in design and specification creates a number of practical issues for material suppliers, constructors, consultants, designers and end users who are now required to rely on data produced from portable stiffness measuring devices for design and compliance checks in the field. Whilst there is wide experience of the use of such devices issues remain such as: optimisation of test methodology; data interpretation and use; comparison between differing devices; and repeatability and reproducibility.

This one day seminar, focussed on the emerging practise of ‘Light-Weight Deflectometer’ measurements, is aimed at all those in the construction industry who are involved in the design and construction of pavement foundations be they for industrial, residential or trunk road pavements. It includes presentations from a device manufacturer, experienced LWD users, and researchers from the field of pavement foundation engineering and assessment. It will offer an opportunity to discover the latest developments, discuss the issues regarding their use in practise, provides a unique “hands on experience”, and provides an open forum to debate and share experiences and network with a range of practitioners and researchers.

The recent publication of new design advice and standards from the Highways Agency, and the proliferation of the use of stiffness measuring portable field test devices, make this seminar both timely and highly appropriate to the pavement engineering community.

Who should attend? Pavement and earthworks engineers (consultants and contractors), testing organisations and technicians, materials specifiers and suppliers, client organisations, researchers etc.

The seminar is organised jointly by Grontmij | Carl Bro of Denmark and Loughborough University’s Department of Civil and Building Engineering.

Wednesday 2nd July 2008 - Sir Dennis Rooke Building, Holywell Park, Loughborough University

“Light -Weight Deflectometers In Practise”

PROGRAMME

9.00-9.45 Registration, Coffee and Exhibition

**9.45 – 10.00 Introduction/Welcome, Concept of Best Practice Guide
(Jan P Heczko - Grontmij | Carl Bro A/S)**

**10.00 – 10.30- LWD – PRIMA 100 – All Round Benefits
(Poul Erik Jakobsen, Grontmij | Carl Bro)**

**10.30 – 11:00 ‘Research Update and International Experience’
(Paul Fleming/Matthew Frost, Loughborough University)**

11.00 -11.30 coffee

11.30 -12.00 ‘Reporting the Easy Way’ – (Michael Gordon – Mouchel, and Jens Preben Petersen, Grontmij | Carl Bro A/S)

12.00 – 12.30 ‘Practical Experience; A Year On’ – (Martyn Jones, Scott Wilson)

12.30 -1.45 - Lunch - Networking/Exhibition Stands

1.45 – 2.05 – TRL Experience – (Barry Chaddock, TRL)

2.05 – 3.45 Testing Workshop, “hands on experience”, Light Weight Deflectometer measurements on different materials (test beds)

3.45pm – Open Forum/ Discussion – ‘Issues and the Way Forward’.

(This is also an opportunity for delegates to make short presentations of their experiences for open discussion. Please contact the organisers if you would like to present)

4.30pm – Closing discussion/summing up

4.40pm End

Payment/Registration Details

**Wednesday 2nd July 2008, Holywell Park, Loughborough University
Light-Weight Deflectometers In Practice - 9.15am – 4.40pm.**

SURNAME.....Mr, Mrs, Ms, Dr, Prof (Delete as appropriate)

FIRST NAME.....

ORGANISATION.....

ADDRESS (to include house number and full postal code)

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TEL.....FAX.....

E-MAIL.....

Signature.....Date.....

FEE: includes morning/afternoon coffee, and lunch. Please tick appropriate box. Note for bookings made after 1st June, a £10 surcharge will apply.

Standard Fee £150 F/T Students (limited places) £50

Exhibition Stand (including one delegate) £200 (Places are limited)

I enclose cheque for £..... (Payable to Loughborough University)

Please debit £..... to my Switch*/Delta/Visa/MasterCard: (delete as appropriate)

Card Number .

*Switch only – issue number

Card Start date Signed.....

Card Expiry Date

Card Security Code (this is the last 3 digits printed on the card signature strip)

Card Holders name and address if different from delegate details

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Please Note: Fees are payable in advance and places will only be reserved when payment, together with registration forms, have been received. Credit card payments must include a signature, and receipts will be issued only when asked for.

Please send to:

Mrs C.A. Barton, Department of Civil & Building Engineering, Loughborough University, Ashby Road, Loughborough, Leics. LE11 3TU. Tel: 01509 222637, Fax 01509 223981, email: c.a.barton@lboro.ac.uk

For enquiries please contact either Dr Fleming or Dr Frost on 01509 222637, or Jan Heczko on +44 (0)7912171192.

Cancellation bookings made within 14 days of the seminar are non-refundable, although substitutions are permitted. Final details will be sent to delegates after the confirmed booking has been made.

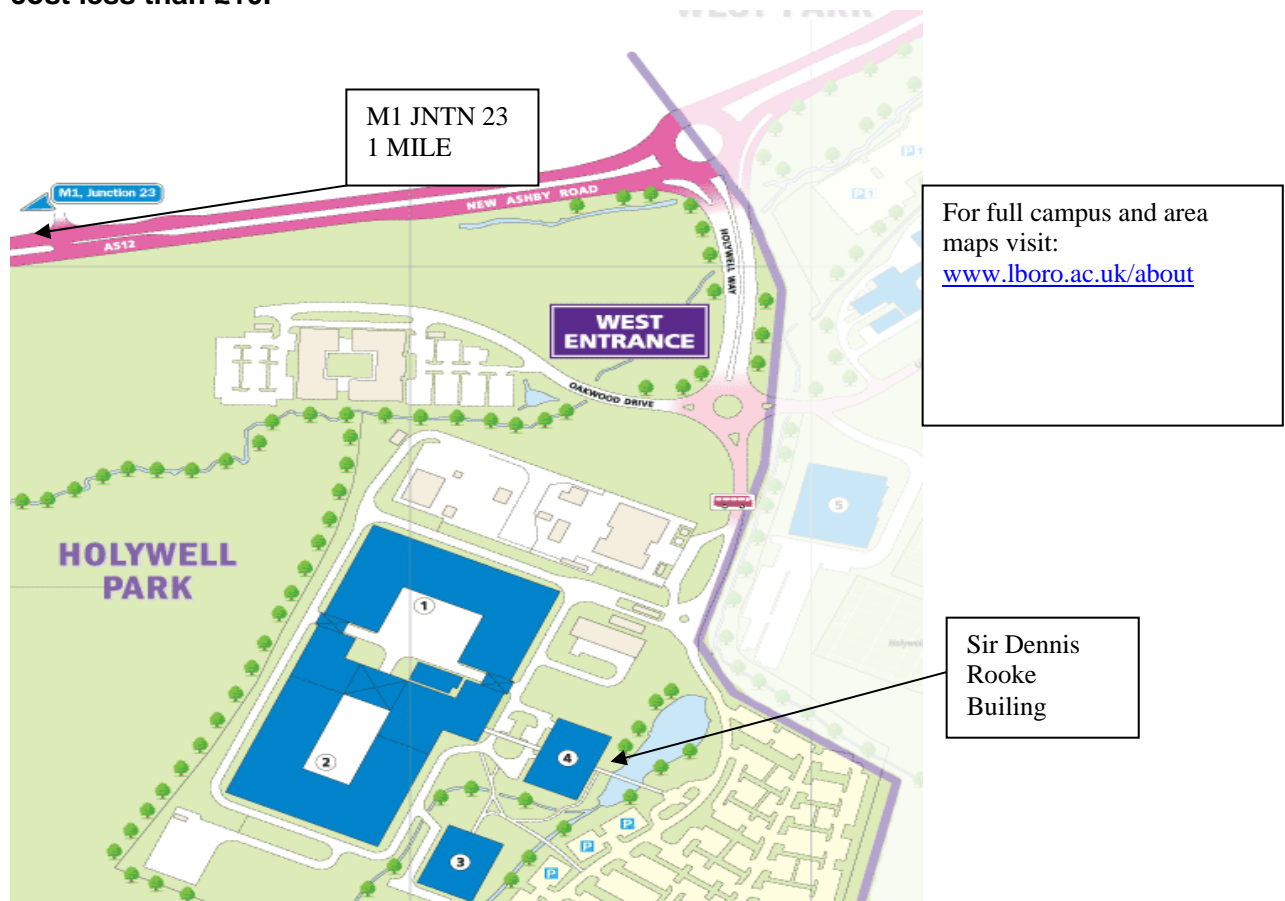
Travel Directions and Accommodation

By Car - From the North/South/West use junction 23 of the M1, head toward Loughborough on the A512 and turn right after 1 mile at the roundabout toward Holywell Science Park, then continue forward over the small roundabout and follow the parking sign for visitors. Enter the Sir Dennis Rooke Building from the walkway across the pond opposite the car parking.

From the East travel around Loughborough on the ring road, following to signs for the M1, and go past the University Campus (on your left) and turn left at the roundabout toward Holywell Science Park and follow the instructions above.

By Rail - Regular Intercity services operate between Loughborough and other main line towns - including over 40 trains daily to and from London St Pancras 90 minutes away.

Once at Loughborough's railway station you are just fifteen minutes away (Kinch No.7) from the campus. From here there is a regular bus service which operates every twenty minutes. Taxis are normally available from the station and the journey should cost less than £10.



Building No.4 is the Sir Dennis Rooke Building, Registration will be immediately inside.

Accommodation

Bed and breakfast is available at the Quality Hotel (01509 211800) or (on campus) Burleigh Court Conference Centre (01509 211515). Please arrange directly with the hotel.