

Curriculum Vitae

Nigel Brooks

Nigel Brooks BSc MSc DIC CEng MICE

Technical Consultant, Card Geotechnics Limited

1976 Bachelor of Science Geology

1983 Master of Science in Engineering Geology

1983 Diploma of Imperial College

1987 Chartered Civil Engineer

1987 Member of the Institution of Civil Engineers

Educated at the University of Exeter and Imperial College, University of London

British Citizen

Born 15 June 1955

Experience Summary Over thirty years experience in geotechnical engineering, having been employed by a major contractor, a local authority and consultants.

Currently Design Manager for Fussey Piling the leading UK Sheet Piling Contractor

Also part time technical consultant for Card Geotechnics.

Nigel has recent experience of project management and of working on London Underground projects.

Nigel has published a number of papers on various geotechnical subjects and has given lectures on foundation design.

Professional Experience Fussey Piling Limited

Experience *Sept 2005 to date – Design Manager*

Also Part time Consultant to Card Geotechnics

For Fussey Piling responsible for the design output for sheet piled retaining walls and support frames.

Work carried out for Card Geotechnics: the analysis of geotechnical problems associated with basement construction, settlement analysis and general geotechnical design.

Card Geotechnics Limited (on secondment from Stent)

April 2005 – Aug 2005 Technical Consultant

Responsible for the assessment of main geotechnical structures and ground improvement schemes, including piled foundations, retaining walls, slopes and embankment construction.

BRS Metro (on secondment from Stent)

Aug 2004 - April 2005 Chief Engineer

As Chief Engineer Nigel's responsibilities included the design of the temporary works associated with major renewals for Metronet carried out by BSR metro. The temporary works included benching on slopes requiring retaining structures, temporary bridge sub-structures, hoardings, loading of slopes and piling platforms.

In addition Nigel was responsible for BSR metro's project planning carried out using Primavera P3e (c), for business improvement and software development.

Trans4m (on secondment from Stent)

Feb 2003 - Aug 2004 Project Manager

Responsible for managing progress of the Subsurface Track Enabling Works (STEW) project, liaising with client and construction affiliates, informing them of developments and seeking comments on formal design submissions. Duties included managing the design affiliate, assessing constructability, agreeing costs with the commercial department, finalising the works package, instructing sub-contractors and managing their work during the project.

Stent Foundations Limited

1999 - Feb 2003 Design Manager

Responsible for the output of the area design office. The design output comprises the assessment of tender information, design of bored pile foundations, retaining wall analysis and design, also commercial and Health and Safety risk assessments. Significant projects included the City of London Guildhall, Diawa House other contracts in vicinity of Gresham Street, City of London and Wembley Stadium.

(2002 designated Geotechnical Adviser for Wembley Stadium)

Stent Foundations Limited

1992 - 1999 Principal Design Engineer

Responsible for the output of the area design office (as above)

Projects of note:

Temple Mead, Bristol; riverside retaining wall consisting of two lines of sheet piling connected by a reinforced concrete slab and stem wall, which Nigel analysed using the finite difference program FLAC.

Basingstoke Transport Museum; bored pile wall, retaining up to 8metres of chalk and supporting a 38 metre span roof. Also analysed using FLAC in order to allow for the interaction between wall ground and foundation piles within active zone.

Numerous city-centre basements requiring propped walls load bearing piles with due consideration of soil-structure interaction.

Stent Foundations Limited

1985 - 1992 Senior Design Engineer

Reporting to the Chief Engineer; responsible for the design of piled foundations and retaining walls for projects in a variety of ground conditions. This involved meetings with clients to agree requirements as well as design and the production of tenders. An example was the deep basement for Wray House, London.

During 1986 Nigel spent six months on site managing piling contracts including Apex Plaza, Reading.

Stent Foundations Limited (Overseas Division)

1983 – 1984 Geotechnical Engineer

Reporting to the Chief Engineer; responsible for the design of piled foundations, retaining walls and ground improvement schemes such as vertical drains, vibro compaction and dynamic compaction. During 1984 Nigel spent two months in Sri Lanka supervising grouting works for the Victoria Dam Tunnel. In November 2004 Nigel won the CIRIA retaining wall challenge organised to promote the launch of CIRIA 104.

AG Weeks and Partners

July 83 – Oct 83 Soils Engineer (Temporary Post)

Management of site investigations for small industrial developments, housing schemes and also investigating the cause of building distress for insurance assessments.

Imperial College of Science and Technology, University of London.

Oct 1982 – June 1983

M.Sc. Engineering Geology

Degree awarded by examination and thesis. Nigel's dissertation subject was 'The settlement of Foundations on Chalk'; output from the dissertation was referred to in the CIRIA report on the engineering properties of chalk.

Kent County Council (Highway Laboratory)

May 78 – Oct 82 Soils Engineer

Supervision of site investigation contracts, including the planning of site work, logging of strata, scheduling of testing and the writing of factual and interpretive reports. Contracts ranged in size from single boreholes for schools to the final stage investigation for the Swanley to Sevenoaks section of the M25; in addition to the above this required bridge reports for shallow and piled foundations, soil slope analysis and slope stability analysis for weak rocks using stereonet.

Sandbergs: Newcastle Metro

March 77 – May 78 Materials Technician

Testing of construction materials to ensure compliance with specification.

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Devon County Council (Engineer's Department)

Oct 76 – March 77 System Technician (Temporary Post)

Involved in the initial trials of CHART, a computerised system for the recording and analysis of road condition surveys.

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Publications and

Papers

Findlay JD, Brooks NJ, Heron W &

Design of Axial Loaded Piles in the United Kingdom

European Conference on Piling – Brussels - 1997

Findlay JD & Brooks NJ (1995)

Requirements for deep foundation excavations in weak rocks.

Proceedings of the eleventh ECSMFE – Copenhagen -1995.

Brooks NJ & Spence JF

Design and recorded performance of a secant piled wall in Croydon.

Proceedings of the Conference on Retaining Structures - Cambridge - 1992

Jardine RJ, Brooks NJ & Smith P (1985)

The use of electrolevel transducers for strain measurements in triaxial tests on weak rock.

International Journal of Mechanics, Science & Geomechanics Vol. 22 No5 1985

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