MARTIN GRIFFIN

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PROFILE

- UK (Kent) based, Ground Engineering Professional (RoGEP) with 20+ years' international experience
- Chartered Mining Geotechnical Engineer and Chartered Geologist working on UK and international projects
- Working on mining projects from cradle to closure, scoping to feasibility studies, surface and underground
- Planning, interpreting and reporting of ground investigations, developing site specific ground models
- Soil and rock mechanics, logging and sampling in accordance with BS, ASTM, RMR89, MRMR, GSI, Q
- Design of shallow foundations, retaining walls and haul roads; slope stability and kinematic analyses
- Specialising in mining geotechnics (open pits, waste rock dumps, tailings dams, heap leach facilities)
- Experience on global projects located in: UK, Europe, Russia, Middle East, West Africa and Canada
- Mentoring of junior staff and guidance through the chartered geologist and chartered engineer process

QUALIFICATIONS

2017 Chartered Geologist with the Geological Society

2014 Chartered Engineer with the Institute of Materials, Minerals and Mines

1992-1995 Exeter University, UK (with one term at the Alès School of Mines, France)

B.Eng. (Hons) Industrial Geology, 2:1 (including Technical French)

1990-1992 Camborne School of Mines (now part of Exeter University)

HND Science (Industrial Geology), 1st Class

1987-1990 Haywards Heath Sixth Form College, West Sussex

3 A Levels: Chemistry, Computing and Geology

1984-1987 Newquay Tretherras, Cornwall

5 GCSEs (including English and Mathematics), 9 CSEs, and 1 O Level

EMPLOYMENT HISTORY

July 2018 – Present

Principal Geotechnical Engineer

• Seconded to Cascade (JV between COWI, Arcadis and Jacobs) for Highways England

COWI

- Working on the Lower Thames Crossing Project (23km earthworks and tunnelling in SE England)
- Leading the reporting and interpretation of the ground investigation and associated GI works
- Managing the geotechnical risks and leading the GIS hazard mapping and project reporting
- Reviewing and checking project reports / technical notes on geotechnics and engineering geology
- Mentoring and advising and supporting staff on the chartership process either CGeol or CEng
- Acting as EDI Champion with emphasis on inclusivity in the construction and engineering

May 2018 – June 2018 Coffey, A Tetra Tech Company

Senior Geotechnical Engineer (Contract)

Temporary contract focussing on geotechnical design aspects of a heap leach project in Kyrgyz Republic

September 2017 – January 2018 Land Science Principal Geotechnical Engineer

- Establishing and leading a new and young multi-disciplinary earth science team in central London
- Managing projects to achieve objectives of scope, cost, time, quality and overall Client satisfaction
- Reviewing and checking geotechnical Phase One & Two geotechnical investigation reports and calcs
- Mentoring and training junior staff on geotechnical aspects from ground investigations to design
- Providing geotechnical and geoenvironmental input to small developers and residential home builders

October 2016 – August 2017 AECOM Senior Geotechnical Engineer

- Reviewing of limit equilibrium slope stability models and spreadsheet design calculations using EC7
- Checking design calculations for slopes, retaining walls, shallow and deep foundations using EC7
- Writing desk studies, memos, ground investigations, geotechnical interpretive and design reports
- Mentoring and training staff in geotechnical engineering, health and safety, sustainability, risk management
- Undertaking numerical modelling for tunnels (both rock masses with reinforcement) and soil slopes
- Managing ground investigations including drilling, earthworks, tunnelling and earthworks operations
- · Preparing draft pre contrafactual documents, earthworks specifications and tunnelling risk register

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January 2012 - July 2016

Amec Foster Wheeler (formerly AMEC)

Senior Mining Geotechnical Engineer

- Conceptual/pre-feasibility/feasibility design studies for tailings and MWFs in tropical, arid and cold climates
- Designing other mine structures, foundations, and haul roads, selection of material design parameters
- Undertaking and reviewing pit slope optimisation assessments, and open pit / underground assessments
- Planning and reviewing progress of site investigations in accordance with EC7 and BS 5930, ASTM
- Writing factual and interpretive site investigation reports, memos; generating profiles / cross-sections
- Managing geotechnical risk by quarterly reporting of tailings storage & mine waste facilities, and open pits,
- Assessing risk and safety of TSFs, MWF using event / fault trees, Swiss Cheese models, bow-tie plots
- Undertaking desk studies and ground investigations for projects, uncertainty assessments parameters
- Analysis of soil, weathered rock and rock slope designs including slope stability, ground deformation,
- Analysis of pore-pressure and seepage/flow/water transport analysis as part of an interdisciplinary team
- Evaluating best available technologies and practices for tailings, surface and underground mining operations
- Developing ground and geomechanical models from logging, in-situ data and laboratory testing results
- Designing appropriate slope stabilisation measures and liaising with clients ensuring best solutions
- Conducting safety and due-diligence reviews of proposed, active and closed tailings and MWFs
- Reporting on fill quality, earthworks, infrastructure, haul roads, waste rock and tailings storage facilities
- Preparing project risk registers and task-based risk assessments, participation in risk workshops
- Evaluating third party peer / independent reviews of technical reports and project data for clients

July 2001 – December 2011 URS / Scott Wilson Mining (p Mining Geotechnical Engineer:

URS / Scott Wilson Mining (previously Knight Piésold, UK)

- Devising schedules and liaising with labs to ensuring testing undertaken within time and cost limits
- Undertaking ground deformation assessment, pore-pressure and seepage/flow/water transport analysis
- · Managing geotechnical data and generating borehole logs for projects using either gINT or Excel
- Characterisation of tailings (slurry, thickened, paste, filtered) for additional geotechnical design calculations
- Reporting sections of reports on site investigations and interpreting laboratory tests and monitoring results
- Analysing stability of slopes (open pits, waste rock dumps, and tailings dams), both static and seismic
- Briefing site teams on risks, health and safety issues, writing "crib sheets" and guidelines for a site manual
- Developing and implementing QA/QC procedures on spreadsheet auditing, archiving, and filing systems
- · Assisting project managers when writing and compiling proposals and expressions of interest documents

June 1999 - June 2001

Freelance Site and Design Geotechnical Engineer:

March 1996 - June 1999

Postgraduate Research Assistant (University of Sunderland)

ADDITIONAL INFORMATION Specialist Software Packages

- Geotechnical: gINT, Slope/W, Seep/W, DIPS, Slide, Swedge, RocFall, RocPlane, Phase2D, UDEC, Plaxis
- Statistics and Risk; REMIS, Crystal Ball, @Risk, Mathcad, Minitab and Tableau (data visualisation).

Association Membership:

- Institute of Materials, Minerals and Mines: CEng, MinSouth Committee Member
- Geological Society of London: Fellow, CGeol, Chartership Scrutineer, QJEGH Peer Reviewer
- British Geotechnical Association: National Committee Member (IOM3 representative), RoGEP
- International Association for Engineering Geology: Member, Journal Peer Reviewer
- International Society of Soil Mechanics and Geotechnical Engineering: Member
- International Society of Rock Mechanics: Member
- Geologists' Association: Member
- Science Technology Engineering Mathematics (STEM): Ambassador in local schools

Recent Presentations:

- Griffin, MS and Keaton, JR (2015) Geotechnical Considerations for Mining in an Era of Uncertainty and Change. Proceedings of the XVI ECSMGE, 13 17 September 2015, Edinburgh, UK.
- Prepared and delivered: "The Use, Abuse and Misuse of Statistics", "Big Data and the Gap Minder World" "Risk Management" as part of the Amec Lunchtime Lectures. 2014 2015.

REFERENCES

Available on request.