

Full Name Dr. Alan Thompson

Qualifications and Membership

B.Sc. (hons) Physical Geography and Geology (Class II(i))
University of Liverpool (1978).

Awarded P.G.H. Boswell Prize, Geology Department 1978

Ph.D. Geomorphology, University of Liverpool (1984).

C. Geol. Chartered Geologist (1991).

F.G.S. Fellow of the Geological Society of London (1991).

Awarded the I.C.E. Telford Prize, for a paper on "The Role of Geomorphology in Flood Risk Assessment", Institution of Civil Engineers, 2003.

M.R.T.P.I. Chartered Member of the Royal Town Planning Institute (2013).



Professional Activity

- (2017 – present): Secretary of the United Kingdom Minerals Forum
- (2004 - present): Organising Committee member of Extractive Industry Geology (EIG) Conferences Limited. (former Chairman, 2006/08 and former Director, 2008/10)
- (1998 - 2002): Committee Member of the Geological Society Environment Group
- (1994 - 1997): Committee Member of the British Geomorphological Research Group

Nationality British

Year of Birth 1956

Present Position **Director**, Cuesta Consulting Limited (established January 2005).

Undertaking independent consultancy work in the fields of minerals planning, environmental geology, geomorphology and the water environment. Clients range from central and local Government Departments and Agencies in the UK and overseas, to major mineral operators and other private developers.

Previous employment **Head of Earth Sciences**, Capita Symonds Limited (previously Symonds Travers Morgan and originally Travers Morgan Limited, which I joined in 1989).

Professional Experience: **Cuesta Consulting Limited:**

Selected minerals projects, listed in reverse chronological order of completion

Secretary, United Kingdom Minerals Forum (CBI Minerals Group, 2017 – 2021)

This ongoing role, which Dr. Thompson has been carrying out since January 2017, is on behalf of the CBI Minerals Group. The Forum provides a national, independent and collaborative voice that seeks to facilitate a resilient and sustainable supply of minerals for the United Kingdom. It draws together a wide range of stakeholders – including Government departments and agencies, NGOs, local authorities, industry, consultancies and academics – who have interests in one or more aspects of mineral development, including the control of associated impacts. The appointment reflects Dr. Thompson's widely-respected and long-standing professional experience across all of these areas.

Mineral Safeguarding Advice, Leigh-on-Mendip (Temple Bright Solicitors, 2021)

Dr. Thompson was engaged to provide expert witness advice regarding mineral safeguarding issues in relation to a proposed housing development adjacent to Halecombe Quarry in Somerset. Halecombe is a major Carboniferous Limestone quarry which has recently been granted permission to deepen, almost to sea-level, but would not be able to be widened because of existing constraints including the village of Leigh-on-Mendip. The resources in question would therefore not be able to be worked – in effect they are already sterilised.

Trefil Quarry Extension – Environmental Statement (*Gryphonn Quarries Limited, 2017-2021*)

Cuesta was re-appointed by this independent quarry operator in South Wales to advise on their plans for future quarry development and to provide three sections of the Environmental Statement - dealing with the description of the development, national need and geological conservation. The geodiversity work involved demonstrating how the proposed extraction, at the edge of a geological SSSI, could greatly enhance the geodiversity value of the site, whilst damaging only a very small proportion of it (1.7%).

West Berkshire Soft Sand Study and Local Plan Examination. (*West Berkshire District Council, 2018-2021*)

Cuesta carried out a detailed assessment of the soft sand resources and reserves within and around West Berkshire. The study provided a robust evidence document to be used by the Council in formulating a policy approach for soft sand in the future. The work included detailed discussions with mineral operators and site visits to assess the nature and quantities of available reserves, the extent of available resources and both the characteristics and spatial extent of the markets being served. Further advice was subsequently provided in preparation for the Examination in Public of the emerging Minerals and Waste Local Plan, including provision of Expert Witness evidence.

Dry Rigg Quarry, Yorkshire Dales National Park: National Context for High PSV Aggregates Supply (*Tarmac, 2021*)

Cuesta was appointed by Tarmac to provide supplementary information regarding National Need, in support of their recent planning application to extend this major high specification aggregates quarry within the Yorkshire Dales National Park. Such aggregates are needed for the construction and maintenance of roads where high levels of skid-resistance are required, to reduce accidents, and can be obtained from only a limited number of sources. Dry Rigg is one of only a small number of units in Great Britain that is capable of supplying such material, and one of only three such locations in the north of England. It is therefore of strategic importance and forms part of a critical national network of high PSV sources.

Cheshire East Silica Sand Study. (*Cheshire East Council, 2019-20*)

Comprehensive investigation of the sand resources of Cheshire, focusing in particular on the silica sand deposits between Sandbach, Congleton, Chelford and Holmes Chapel. The work involved site visits to active silica sand units, the collation of borehole and laboratory testing information and a re-interpretation of the Quaternary geology of the area to enable an improved understanding of the extent of available resources. The study will directly inform the Council's emerging minerals local plan.

Second Review of the Regional Technical Statements for North Wales and South Wales. (*Welsh Government, 2018 - 2020*)

Cuesta was appointed for a second time in 2018 to undertake the statutory review and revision of the Regional Technical Statements for North Wales and South Wales. These documents provide the essential 'top-down' guidance to Local Planning Authorities regarding the levels of future provision required for all types of construction aggregate, from Carboniferous Limestone and numerous sources of High Specification Aggregate to land-based sand & gravel resources.

Prior Mineral Extraction at Hammonds Farm, Chelmsford.
(*Hammonds Farm Estates, 2018 - 19*)

Appointed as a sub-consultant to Terence O'Rourke in February 2018 to undertake a detailed assessment of the opportunities for mineral extraction and the scope for integrating this with the emerging Masterplan for mixed-use development and landscaping of this large estate near Chelmsford, in Essex. The work also involved comparing the mineral prospects on this site with those of several other competing housing proposals within the Chelmsford area.

Mountsorrel Quarry – Statement of Need (*Tarmac, 2018-19*)

Appointed by Tarmac to provide an update to the Statement of Need previously written for Lafarge Tarmac in 2013, to support the latest planning application to extend this strategically important major hard rock quarry in Leicestershire. In the absence of an effective Minerals Safeguarding Policy, the Statement had to demonstrate the unique importance of the remaining resources.

High Specification Aggregates in Great Britain – Review of Competitor Sites
(*Confidential Mineral Operator, 2018*)

Cuesta was appointed by a major quarry operator to carry out a comprehensive assessment of all High Specification Aggregate (PSV 58+) sites throughout Great Britain, which are currently operated by competitor companies. The work entailed researching recent planning applications to derive estimates of current permitted reserves, annual output, output restrictions and expiry dates of permissions, together with updated assessments of the geology of each site, substantially refining the information given in the previous HSA reports (Thompson *et al*, 1993, 2004).

Silica Sand Expert Witness (*South Downs National Park Authority and West Sussex County Council, 2017*)

Dr. Thompson was appointed by the two Authorities as their expert witness on silica sand issues in relation to the Examination in Public of the West Sussex / South Downs National Park Joint Minerals Plan. Evidence, based largely on Cuesta's earlier work for the Authorities, was presented at the Examination in November 2017.

Independent Assessment of Silica Sand Planning Application in Cheshire
(*Cheshire East Council, with Cheshire West & Chester Council, 2017*)

Cuesta provided an independent review of Sibelco's planning application for silica sand extraction at Rudheath Lodge in Cheshire, enabling the two Council's to consider the need for extraction in relation to both National and Local markets and alternative supply sources.

Bedfordshire Silica Sand Study Update (*Central Bedfordshire Council, 2017*)

This work provided an update of Cuesta's earlier (2008) silica sand study for Bedfordshire, reflecting the substantial changes in site ownership, development and prospecting for new sites which had taken place over the intervening period.

Review of Local Development Plan Minerals Policy, Outer Hebrides, Scotland
(*Comhairle nan Eilean Siar, 2016*)

Working through LUC, Cuesta was appointed in June 2016 to carry out a review of the LDP Minerals Policy for the Outer Hebrides. The review focused primarily on the safeguarding of resources and maintaining a 10-year landbank of permitted reserves.

Oxfordshire Local Aggregate Assessment - Examination (*Oxfordshire County Council, 2016*)

Following a joint project with LUC to prepare the Local Aggregate Assessment (LAA) for Oxfordshire County Council in 2014, Cuesta was re-engaged to support the Council at the Examination in Public of the new Minerals and Waste Local Plan.

Hertfordshire Minerals Local Plan – Site Selection Study (*Hertfordshire County Council /LUC, 2015-16*)

Cuesta worked in conjunction with LUC to undertake this comprehensive site selection study for mineral sites in Hertfordshire, in support of the County's emerging Minerals Local Plan. Cuesta's input focused specifically on the definition of suitable geological resources (primarily sand & gravel and brick clay) and on the identification of Mineral Safeguarding Areas and associated policies.

West Sussex Sharp Sand & Gravel Sites (*Confidential mineral operator, 2015/16*)

Cuesta was appointed by a large, independent quarry operator to investigate and advise on the likely prospects for developing a new, land-based sharp sand & gravel operation within West Sussex. The work entailed preparing a report on the geological

resources within the area, identifying historical, current and recently proposed mineral workings, tracking the site selection work being carried out by West Sussex County Council and developments within the emerging West Sussex/South Downs National Park Minerals Local Plan.

Soft Sand & Silica Sand Study (*South Downs National Park Authority and West Sussex County Council, 2015*)

Cuesta was appointed to undertake this independent study of sand resources with and adjacent to the South Downs National Park, in order to determine whether or not any of them qualify for being considered as specialist silica sands rather than soft building sands. Silica sand is regarded as an industrial mineral, rather than a construction aggregate, and different national planning policies therefore need to be applied. The study involved field investigations, sampling, laboratory testing and interpretation.

Safeguarded Mineral Site in Surrey (*Harvest Investments Ltd, 2015*)

An independent assessment was carried out, on behalf of a property developer, regarding the likelihood of significant sand & gravel resources being found with part of a broadly-defined Mineral Safeguarding Area, adjacent to Virginia Water in Surrey. It was concluded that the development itself would not directly sterilise any significant mineral resources and that the 'prior extraction' of any resources that may exist beneath other parts of the site would be unlikely to be commercially feasible, as well as being difficult to justify.

Wisley Airfield Mineral Report (*Wisley Property Investment Ltd, 2015*)

Cuesta carried out a review of available data relating to the likely prospects of sand & gravel mineral extraction taking place within the former airfield site at Wisley in Surrey. It was concluded that the site would be unlikely to attract commercial interest from mineral operators, especially in the context of 'prior working', where there would be a necessity to extract the mineral very quickly.

Comprehensive Planning Framework to Protect Sand Supply Sources for Construction Uses in Kuwait (*Kuwait Municipality, 2015*)

Acting as a specialist sub-consultant, Cuesta provided substantial geological and planning input to this National study of sand resources within the state of Kuwait. Drawing on UK and international best practice, recommendations were made regarding both strategic and site-specific planning policies.

Cwm Nant Lleici Quarry – Assessment of Need and Alternatives (*Aggregate Industries, 2015*)

Cwm Nant Lleici is one of only five active quarries in the UK which consistently supplies PSV68+ aggregate for use in skid-resistant road surfacing applications. Cuesta was appointed to provide an independent assessment of the continued need for this quarry, and to demonstrate the lack of adequate alternatives.

Mountsorrel Quarry Public Inquiry (*Lafarge Tarmac, 2014*)

Dr. Thompson acted as an expert witness regarding the strategic importance of this major, rail-linked granite quarry in Leicestershire, and of the surrounding igneous rock resources. This work related to an objection by Lafarge Tarmac to a proposed housing development which would have sterilised part of the resources and constrained the future expansion of the quarry. Proofs of evidence were presented at a Public Inquiry in October 2014.

First Review of the Regional Technical Statements for North Wales and South Wales. (*Welsh Government, 2013 - 2014*)

15-month review and revision of the Regional Technical Statements for North Wales and South Wales. The work involved close liaison with the Regional Aggregate Working Parties (RAWPs) for each region, comprising key representatives from industry, mineral planning authorities and Natural Resources Wales (NRW), as well as wider (public) consultation and presentations to the elected Members.

Monmouthshire Local Development Plan Examination.

(Monmouthshire County Council, 2013)

Cuesta was asked to provide a supplementary statement regarding the safeguarding of aggregate resources within Monmouthshire, and to present this at the Minerals and Waste session of the LDP Examination, in June 2013.

Torfaen Local Development Plan Examination.

(Torfaen County Borough Council, 2013)

Appointed by Torfaen CBC to prepare for and attend the Minerals and Waste session of the LDP Examination, in May 2013. This was needed to support the Council's reliance on Cuesta's previous (2009) report on aggregate safeguarding across the whole of the 'Former Gwent' area, in preference to the more recent national safeguarding map of Wales, produced by the British Geological Survey in 2012.

Assessing the Impact of Aggregate Extraction on the Historic Environment of Cumbria *(English Heritage/ Cumbria County Council, 2012 - 2014)*

Cuesta provided geological input to this 2-year project for English Heritage and Cumbria County Council, acting as a specialist sub-consultant to Oxford Archaeology North.

Torr Quarry Statement of Need *(Aggregate Industries, 2009 - 2010)*

Cuesta provided an assessment of the need for further mineral extraction and a review of alternatives at this strategically important, rail-linked limestone quarry in the eastern Mendips, as part of the Environmental Statement associated with Aggregate Industry's application to deepen the quarry to just above sea level. The application was successful.

An Ecosystems Approach to Long Term Minerals Planning in the Mendip Hills – *(Defra / Somerset County Council / MIRO, 2008 - 2010)*

The aim of this work was to demonstrate how the Ecosystems Approach could be used to develop an innovative, strategic and holistic framework for planning the long-term future of sustainable aggregate extraction and restoration in the Mendip Hills, and to assess the relative merits of this framework compared to alternative strategies. Work included detailed case studies of long-term quarry designs for ten major hard rock quarries across the Mendips.

ALSF Science Co-ordinator - Land Based Aggregates *(Department of the Environment, Food and Rural Affairs, 2005 - 2007)*

Appointed by Defra to co-ordinate environmental and technical research on land-based aggregates funded by the Aggregates Levy Sustainability Fund (ALSF). The work involved advising on research requirements and reporting on completed research across all areas, including liaison with eleven separate funding bodies.

Professional Experience
(continued):

Capita Symonds Limited / Symonds Travers Morgan / Travers Morgan Limited:

Selected minerals projects, listed in reverse chronological order

Managing Landscape Change resulting from Mineral Extraction in North Yorkshire *(North Yorkshire County Council and English Heritage, 2011 - 2012)*

This study covered the whole of North Yorkshire, excluding the National Parks, and provided an evidence base on the sensitivities to landscape change likely to be associated with future quarrying activity.

Ghyll Scaur Quarry Statement of Need *(Aggregate Industries, 2007)*

Project Director for Capita Symonds' input to this major planning application and Environmental Statement seeking a time extension for this strategically important high specification aggregates quarry in Cumbria. A critical aspect of this work was that relating to the fundamental need argument for the specialist aggregates produced at

this site, which are needed for skid-resistant road surfacing applications in many parts of the UK. The application was successful.

Good Practice Guidance on Controlling the Effects of Surface Mineral Working on the Water Environment (*DCLG and MIRO, 2005 - 2008*)

Project Director and principal author of this major research project, which updated the former DETR's Guide to Good Practice on "*Reducing the Effects of Surface Mineral Workings on the Water Environment*" (Thompson *et al* 1998), bringing it into line with the requirements of new and emerging European legislation.

The Sustainable Use of High Specification Aggregates in England.

(*Office of the Deputy Prime Minister and MIRO, 2003 - 2004*)

This 18-month ALSF-funded research project built on the original "High Specification Aggregates" study undertaken by Travers Morgan Limited (Thompson *et al*, 1993), providing an updated assessment of both supply and demand, taking account of the substantial changes that had taken place since 1993 in asphalt technology.

Planning for the Supply of Natural Building and Roofing Stone in England & Wales (*Office of the Deputy Prime Minister, 2002 - 2003*)

Strategic research project, investigating land use planning issues relating to the supply of indigenous building stone and roofing stone throughout England and Wales. The research directly informed the development, by ODPM and the Welsh Assembly, of annexes to Minerals Planning Statement 1 and technical advice notes, respectively.

Woburn Fuller's Earth Public Inquiry (*Bedfordshire County Council, 2001*)

Successfully argued Bedfordshire County Council's case that there was no over-riding need for fuller's earth extraction at Woburn, at a Public Inquiry following an appeal by Steetley Woburn Bentonite Limited.

Comparative Environmental Assessment of Land and Marine Sand and Gravel.

(*Welsh Assembly Government, 2001 - 2002*)

Project director for this detailed follow-up to our earlier work on land-based sand and gravel resources in S.E. Wales. The aim of this project was to examine the relative sustainability implications of alternative scenarios for aggregates supply focusing, in particular, on the comparison between marine dredging and land-based extraction.

Appraisal of Land-Based Sand & Gravel Resources in SE Wales

(*National Assembly for Wales*)

Project manager for this detailed appraisal of potential sand and gravel resources across the whole of industrial South Wales and the Brecon Beacons.

Quinquennial Review of the Minerals, Land Instability and Waste Planning Research Programme, 1994/95 to 1998/99. (*DETR*)

Project manager for this comprehensive, strategic review of the DETR's Minerals, Land Instability and Waste Planning research programme. The final report included recommendations for a broadening of scope to cover all physical and environmental aspects of land use planning, and greater integration of the disciplines involved.

High Specification Aggregates for Road Surfacing Materials (*DoE, 1992-93*).

Project Manager of this £225,000 research commission for the Department of the Environment, investigating all existing and potential new resources of skid-resistant road aggregates throughout the UK. Work included a detailed review of specification requirements; collation and review of supply and demand statistics; a comprehensive programme of field investigations - logging, sampling and testing outcrops in quarries and road cuttings throughout England and Wales; and geological, planning and economic assessments of prospective resources.

Selected minerals – related publications and reports (excluding proofs of evidence etc.)

- Thompson, A., Greig, J.R., and Shaw, J. (1993): **High Specification Aggregates for Road Surfacing Materials: Technical Report**. Department of the Environment. Travers Morgan Limited, East Grinstead. (270pp).
- Crimes, T.P.; Chester, D.K.; Hunt, N.C.; Lucas, G.R.; Mussett, A.E.; Thomas, G.S.P.; and Thompson, A. (1994): **Aggregate Resource Analysis of Four Areas in the UK: I. Techniques**. Quarterly Journal of Engineering Geology. 27, (2), 165-192.
- Thompson, A., Easton, P., Hine, P., and Huxley, C.L., (1998): **Reducing the Effects of Surface Mineral Workings on the Water Environment: A Guide to Good Practice**. Department of the Environment, Transport & the Regions. Symonds Travers Morgan, East Grinstead. (194pp).
- Thompson, A., Knapman, D. & Pethick, J. (2002): **Comparative Impact Assessment of Land & Marine Sand & Gravel in South East Wales**. Report to the Welsh Assembly Government. Symonds Group Limited, East Grinstead. (68pp)
- Thompson, A., Hine, P., Clayton, J. and Stowe, R. (2004): **Planning for the Supply of Natural Building Stone & Roofing Stone in England & Wales**. Research Report to the Office of the Deputy Prime Minister.
- Thompson, A., Burrows, A, Flavin, D. and Walsh, I., (2005): **The Sustainable Use of High Specification Aggregates in England**: Report to the Office of the Deputy Prime Minister and the Minerals Industry Research Organisation.
- Thompson, A., Poole, J.S., Carroll, L., Cox, P., Foweraker, M. and Harris, K., (2006): **Geodiversity Action Plans for Aggregate Companies: A Guide to Good Practice**: Report to the Minerals Industry Research Organisation, Tarmac, Lafarge Aggregates, Hanson Aggregates, Cemex, Aggregate Industries and Smiths Bletchington (52pp).
- Thompson, A., and Howarth, C.L. (2007): **Managing the Interface between Planning and Abstraction Licensing for Quarry Dewatering**: Research report to the Department of Communities and Local Government, and the Environment Agency. Capita Symonds Limited, East Grinstead. (48pp + appendices).
- Thompson, A., Howarth, C.L., Goodwin, A., Buckley, C. and Harris, K. (2008): **Good Practice Guidance on Controlling the Effects of Surface Mineral Working on the Water Environment**. Research report to the Department of Communities and Local Government, and the Mineral Industry Research Organisation. Capita Symonds Limited, East Grinstead. (207pp)
- Thompson, A. (2008): **Bedfordshire Silica Sand Study 2006 - 2007**. Cuesta Consulting Ltd, Uckfield. (28pp).
- Thompson, A., Harris, K., Knapman, D., Marker, B., Poole, J. & Higgs, J. (2008): **Reasons for the Decline in Aggregate Reserves in England**. Report to the Mineral Industry Research Organisation. Capita Symonds Ltd, East Grinstead. (84pp)
- Thompson, A., Knapman, D., Harris, K., Birch, J. and Jarvis, D. (2010): **An Ecosystems Approach to Long Term Minerals Planning in the Mendip Hills. Phase II Final Report**. Report to Defra and the Minerals Industry Research Organisation. Published by Capita Symonds Ltd., East Grinstead. (40pp + appendices).
- Thompson, A., Jackson, J., Quartermaine, J. and Garbutt, J. (2012): **Managing Landscape Change: A Multi-Disciplinary Approach to Future Mineral Extraction in North Yorkshire**. Final Report to North Yorkshire County Council and English Heritage. Capita Symonds Limited, Carlisle (176pp).
- Thompson, A. & Harris, K. (2012): **South Downs National Park Soft Sand Study**. Report to the South Downs National Park Authority, West Sussex County Council, East Sussex County Council and Hampshire County Council. Capita Symonds Ltd., East Grinstead (44pp + Appendices).
- Miller, B. & Thompson A. (2014): **West Sussex Wharves and Railheads Study**. Report to West Sussex County Council. LUC and Cuesta Consulting Limited (50pp + maps)
- Thompson, A. (2014a): **Regional Technical Statement for the North Wales and South Wales Regional Aggregate Working Parties - First Review**. Report by Cuesta Consulting Ltd. to the Welsh Government (68pp + regional appendices).
- Thompson, A. (2014b): **Precise and Concise on Aggregates**. Mineral Planning. Issue 154, August 2014, p13.
- Thompson, A. & Miller, B. (2015): **A Progress Report on LAAs**. Mineral Planning. Issue 158, April 2015, pp10-11.
- Thompson, A. (2016): Sustainability and Future Aggregates Provision in Wales. *In* Hunger, E. and Brown, T. J. (eds) **Proceedings of the 18th Extractive Industries Geology Conference, and Technical Meeting 2015**. EIG Conferences Limited. 69-75.
- Thompson, A. and Poole, J.S. (2016): **South Downs National Park Soft Sand & Silica Sand Study, 2016**. Report to the South Downs National Park Authority and West Sussex County Council. Cuesta Consulting Limited, East Lambrook (75pp + Appendix)
- Thompson, A. (2017): **Bedfordshire Silica Sand Update, 2017**. Report to Central Bedfordshire Council. Cuesta Consulting Limited, East Lambrook (18pp + Appendix)
- Thompson, A. (2018): **The Potential for Silica Sand Production in the South Downs National Park**. *In* Hunger, E., Brown, T.J., Smith, G. and Anderson, P. (Eds.) Proceedings of the 19th Extractive Industry Geology Conference 2016 and technical meeting 2017, EIG Conferences Ltd. pp90 – 107
- Thompson, A. (2019): **Silica Sand in the South Downs**. Mineral Planning. Issue 181, February 2019, p17.

Thompson, A. (2019): **West Berkshire District Council: Soft Sand Study**. Report to West Berkshire District Council by Cuesta Consulting Limited, East Lambrook, 22pp

Thompson, A. (2020a): **Cheshire East Council: Sand Study 2019-20**. Report to Cheshire East Council by Cuesta Consulting Limited, East Lambrook, 34pp.

Thompson, A. (2020b): **Regional Technical Statement for the North Wales and South Wales Regional Aggregate Working Parties - Second Review**. Report to the Welsh Government by Cuesta Consulting Ltd. (78pp + regional appendices).

Thompson, A. (2020c). **A Question of Balance: an Essay on the Current State of Quarrying and the Environment in England and Wales**. Pp 1-6 *in* Anderson P.E., Hunger, E, Brown, T.J., Wardrop, D. and Horsley, N. (Eds.) Proceedings of the 20th Extractive Industry Geology Conference 2018 and technical meeting 2019, EIG Conferences Ltd 126pp.