

CHRISTCHURCH EARTHQUAKE EXPERT ENGINEERING PANEL BIOS

Our expert engineering panel was established to provide technical and expert advice to help resolve insurance claims resulting from the Canterbury Earthquake Sequence.

Engineering New Zealand will expand the expert panel in 2023 to include expertise in damage resulting from all natural disasters anywhere in New Zealand

PANEL MEMBERS

Andrew Marriott

CPEng, CMEngNZ, IntPE(NZ)

Andrew has more than 30 years' experience in structural and civil engineering, including designing a wide range of structures in New Zealand and the United Kingdom. He is currently a Principal and Director of Batchelar McDougall Consulting.

Andrew has specialised in heritage engineering and temporary works designs as well as maintaining his competency in general structures ranging from residential through to multi-storey commercial developments.

Andrew volunteered for Civil Defence as a Chartered Professional Engineer following the 22 February 2011 Christchurch earthquake and was lead engineer in the heritage area. For the past six year he has advised Christchurch City Council's Heritage team on listed buildings in the Canterbury area. Since joining BMC, Andrew has also undertaken a significant number of residential structural assessments for EQC, Vero, Southern Response and homeowners.

He is also a certified Rapid Building Assessor on the MBIE register.

Chris Burrell-Smith

CMEngNZ, CPEng

Chris has approximately 10 years of structural experience at Richards Consulting Engineers, where he is an associate and technical manager. Born and bred in Canterbury, he has been involved for the full duration of the Canterbury earthquake sequence and has extensive experience in earthquake assessments and repairs.

Chris's primary focus is residential and commercial work, and he has completed numerous inspections, assessments, repair and remediation designs. He has experience working for home owners, insurance companies, EQC, and the local council, including heritage listed buildings. He has experience reviewing other engineers' documentation in both the earthquake-damage arena but also for new building designs. He has also represented clients at joint engineering meetings to settle technical disputes.

Chris is active in the structural engineering community and prides himself on taking an unbiased and pragmatic approach to reviews before making decisions based on current engineering theory and practice.

Dave McGuigan

CMEngNZ, CPEng

Dave has over 20 years' experience as a structural engineer and is currently Manager Structural Performance and Engineering Systems at Concrete NZ. Previously he has held positions in central Government and private practice. Dave has performed design management roles on significant national and overseas projects and has also led seismic assessment programmes for major New Zealand building portfolio operators. Dave has participated in a number of Standards committees and in the development of the new seismic assessment guidelines that support the New Zealand earthquake-prone building regulations.

In the wake of the 2010/2011 Canterbury earthquakes, Dave has been actively involved in working through the many issues generated by the earthquakes for a range of clients. This has included performing damage assessments, developing repair solutions and reviewing the quality of completed repair work.

Donald Bruggers

CPEng, CMEngNZ, IntPE(NZ)

Don joined ENGEO in 1996 and has more than 40 years of diverse geotechnical engineering experience. He relocated from California to Christchurch in 2012 and serves as a Principal Engineer/Director of the ENGEO, working out of the Christchurch office. He has been the lead geotechnical consultant for numerous large-scale, complex projects throughout New Zealand and the western United States. His areas of expertise include the assessment of seismic hazards including liquefaction analysis, slope stability analysis and design mitigation; deep foundations for mid- to high-rise construction; and a variety of public works projects. He has provided geotechnical recommendations for several large residential projects that have collectively included more than 75 million cubic metres of earth work, public infrastructure, commercial and retail centres; and public buildings, including libraries, public schools, community colleges, police and fire stations. Don has provided hundreds of geotechnical investigations and reports for individual homeowners and insurance companies.

Elliot Duke

CPEng, CMEngNZ, IntPE(NZ)

Elliot is the engineering director at Davis Ogilvie, and specialises in geotechnical investigations, residential and commercial development, infrastructure design and contaminated site management. During the past 15 years', Elliot has been involved with a wide range of projects, providing engineering expertise for clients

including Fletchers EQR, insurance providers, University of Canterbury, Waimakariri District, Grey District and Timaru District Councils.

More recently Elliot's work has focused on ground improvement and foundation design for development, residential construction and earthquake-related remedial work. He has considerable experience in geotechnical investigations; including hillside properties, retaining walls and slope stability. His recent structural work includes structural assessments, remedial design work, overseeing consenting aspects of projects and construction monitoring. Elliot has also been involved in all aspects of claims resolution, from mediation and judicial settlement conferences, to joint expert reports and providing evidence for High Court cases as an expert witness.

Geoffrey Farquhar

CPEng, FEngNZ, IntPE(NZ), FICE, CEng(UK)

Geoffrey is a Principal and Technical Director (Dams & Geotechnical) with GHD in Auckland. He has 40 years of experience in consulting engineering in New Zealand and overseas, and is experienced in geotechnical engineering for buildings, land development infrastructure projects and dams.

Geoff Bunn

CMEngNZ, CPEng, IntPE(NZ)

Geoff was born and raised in Christchurch and graduated from the University of Canterbury. Commercial structures were the focus of his engineering work before moving to Europe, where he worked on projects for the London Olympics, temporary stage structures for the Glastonbury Festival, and British waterway projects.

Since returning to Christchurch after the earthquakes, Geoff has specialised in high-end residential design, seismic assessment of residential, commercial and heritage buildings, and strengthening/repair strategy. A significant proportion of his recent experience has been in damage assessment and repair strategies for Canterbury housing stock, for both insurers and homeowners, as well as peer review and acting as expert witness in litigious cases. Geoff takes a pragmatic and balanced approach to all his projects.

Greg Clark

CPEng, CMEngNZ

Greg has approximately 20 years of civil and structural engineering design and contract experience. His expertise includes concept and detailed design, structural assessment and reporting, project management, leadership, contract administration and construction supervision on both structural and civil projects.

Greg has worked on a range of projects from residential, commercial and industrial, through to large civil and structural works for various local government and institutional clients, which includes buildings, bridges, public infrastructure and heavy civil engineering projects.

Since the Canterbury earthquake sequence, Greg has conducted, overseen and reviewed hundreds of structural engineering inspections, assessments, reports and design for property owners and insurers to assist with damage assessment, repair, remediation and expert advice associated with earthquake claims, including being an expert witness in the High Court.

Dr Jan Kupec

CPEng, CMEngNZ, IntPE(NZ)

Jan is geotechnical engineering and earthquake engineering specialist. He is currently Technical Director with the global professional service firm Aurecon. For the past 15 years, Jan has lived with his family in Christchurch. Outside work for Aurecon, he is contracted to the NZ Fire & Emergency Urban Search and

Rescue (USAR) Southern Team. As a geotechnical specialist he was very closely involved with the Canterbury Earthquake Sequence, the response to the 2011 Japan tsunami, the 2015 Nepal earthquake response and the 2016 Kaikoura earthquake response. This included working as a first responder and engineering specialist overseeing various aspects of recovery.

In 2011 Jan was seconded to the New Zealand Central Government as the Chief Geotechnical Engineer for the Canterbury Earthquake Recovery Authority (CERA) and later to Land Information New Zealand (LINZ). Over the past nine years he managed severely earthquake damaged buildings and land. Jan is a leader in the digital innovation and the application of smart technologies spaces.

Jitendra Bothara

CPEng, FEngNZ, IntPE(NZ)

Jitendra Bothara is a Technical Director of Miyamoto International New Zealand. With 25 years' experience in seismic engineering and disaster risk mitigation, he has led teams for pre and post-earthquake assessment, reconstruction in many countries. Jitendra has co-authored and published several publications on earthquake engineering including various building standards, guidelines and manuals. He leads the New Zealand Government's Task Group for updating the standard covering assessment of unreinforced masonry buildings. He has worked extensively on insurance-related assignments in Christchurch after the 2010 Canterbury earthquake series. He is currently an advisor to the Asian Development Bank, the Government of Nepal and the United Nations' Development Programme on earthquake reconstruction in Nepal. He is an ardent believer in identifying strong linkages between social and seismic engineering for seismic safety.

Julius Long

CPEng, CMEngNZ, IntPE(NZ)

Julius has 18 years' experience across a wide range of projects, including residential, commercial and industrial buildings, infrastructure and marine structures. A Cantabrian, he has lived through the earthquakes, and earthquake-related work has made up a significant part of his professional practice since 2010. He looks forward to continuing this contribution to the Canterbury rebuild through involvement in the Greater Christchurch Claims Resolution Service.

Murray Frost

CPEng, CMEngNZ, IntPE(NZ)

Murray brings a broad base of understanding across all aspects of engineering issues. His background includes 43 years of continuous consulting engineering experience for Jacobs Engineering Group, working on significant infrastructure and building projects. Since September 2010, he has worked almost exclusively on earthquake engineering issues acting for both the insured and the insurer. Murray has a reputation for impartial and independent advice and has provided assistance over the full range of services, from residential to commercial buildings, some of which are among the largest ever earthquake claims in New Zealand.

Nick Traylen

CPEng, FEngNZ

Nick is a director of a specialist geotechnical consultancy based in Christchurch, New Zealand. His day-to-day work consists of investigation, design, and review of foundations, ground improvement works, retaining walls and slopes for commercial, industrial, and residential developments, and in particular, liquefaction investigations and assessments for a wide range of projects. Other work both in New Zealand and also in Hong Kong over the last 30 years has included land stability assessment and design; reclamation design and construction; investigation, remedial works design, and construction implementation for landslides and landslide damaged buildings; and post-earthquake investigations, assessments and reviews

for earthquake-damaged buildings, land, and infrastructure. Nick has been involved in advisory and review roles for government departments and local authorities, and has either co-authored, or served on the editorial panel for a number of geotechnically-focused guidelines published by the Government and also the New Zealand Geotechnical Society.

Paul Campbell

CPEng, FEngNZ

Paul Campbell is the National Technical Director – Building Structures for WSP Opus, with over two decades of experience. He understands issues facing homeowners affected by the Canterbury earthquakes and has significant experience through his involvement as a Technical Panel Member of Canterbury Residential Advisory Services. Before that, Paul was seconded to provide technical advice and leadership to Christchurch City Council, Civil Defence and subsequently the Canterbury Earthquake Recovery Authority, in both the emergency and recovery phases.

He is a past president and life member of the Structural Engineering Society of New Zealand, a Fellow of Engineering New Zealand and contributor to updating the seismic provisions of the New Zealand Standard NZS1170.5.

He has experience in facilitation and mediation, and significant experience in seismic assessments. Paul strongly believes in the importance of good, unbiased, engineering advice, provided in a sympathetic way using plain English.

Philip Cook

CMEngNZ, CPEng, IntPE(NZ)

Phil has been a principal of Cook Costello for 22 years. He has been hands-on with earthquake recovery projects since September 2010. Phil and his team have undertaken numerous seismic structural and geotechnical assessments in the South Island and Wellington.

Phil has been a trusted advisor of the Technical Advisory Group for Land Damage. He has championed the implementation of best practice in the assessment of liquefaction. He has significant experience as both a civil engineer and project lead, also being involved in major industrial developments, shopping centre and supermarket developments, and lifestyle and retirement villages.

Phil leads Cook Costello's national team undertaking land development, commercial and residential building assessments and designs, assisting building owners and their stakeholders with the repair and rebuild of their assets and the reinstatement of the community they enjoy.

Phillip Paterson

CMEngNZ, CPEng

Phil is a Chartered Professional Engineer with over 20 years structural engineering experience in both New Zealand and Australia. Phil works in the residential, commercial and industrial fields and has specific expertise in dealing with earthquake remediation and seismic strengthening.

Phil has been a director and owner of Powell Fenwick Consultants since 2011 and works full time in the company as a practising structural engineer. Powell Fenwick is a multidisciplinary engineering consultancy firm that is locally owned and operated, with offices in Christchurch, Queenstown and Tauranga.

Phil is also a practice area assessor for Engineering New Zealand and conducts the technical assessments of other structural engineers when they first apply or are required to renew their Chartered Engineer status.

Robert Kamuhangire

CMEngNZ, CPEng

Robert is a senior geotechnical engineer/team leader within the KGA Geotechnical Group, based in the Christchurch office. He has over 15 years' experience on both small- and large-scale projects in New Zealand and overseas.

Robert has worked as a senior geotechnical engineer in Christchurch since 2012, initially with Aurecon New Zealand, and has been heavily involved in numerous earthquake assessments (buildings and retaining walls), forensic investigations, repairs and rebuilds. He's been involved in ground investigations, foundations and retaining wall designs, ground improvement design, earthworks and slope stability assessments, construction monitoring, peer reviews, and insurance claim assessments for both owners and insurance companies.

Robert has had the opportunity to work closely with senior structural engineers, gaining useful insight into the building stock across the Canterbury region, in addition to geotechnical aspects. Prior to arriving in New Zealand, he worked with Arup on some of the largest infrastructure and regeneration projects across the United Kingdom.

Simon Finn

CPEng, CMEngNZ, AMIStructE, IEng(UK)

Simon has over 20 years' experience managing projects ranging from \$0.5 million to \$60 million. He relocated from the United Kingdom to Christchurch in 2013 to assist with the rebuild. He has brought his experience of leading large teams of engineers to deliver residential and commercial building assessment reports and repairs on earthquake-damaged properties, throughout Canterbury initially and then wider New Zealand. Simon has been involved in the assessment and reporting on thousands of residential and commercial earthquake damaged properties. He has worked with homeowners and body corporates as well as providing structural advice and services to larger clients. He specialises in separating out earthquake-related damage from other issues such as deferred maintenance. Simon has provided expert witness services to the High Court on over 50 litigated cases in the past three years. In 2017, Simon established Finesse Consulting, which provides detailed forensic assessments as well as more traditional structural engineering services.

Steven Knowles

CPEng, FEngNZ

Steven Knowles has more than 30 years' experience in structural, transportation and environmental engineering and has led many major projects through design and planning. Steven is a trained Mediator and a member of the Arbitrator's and Mediator's Institute of New Zealand and a Fellow of Engineering New Zealand.

Following the Nepal earthquake in 2015, Steven co-led the New Zealand Aid Programme-funded initiative that provided training to Nepali structural engineers in assessing and strengthening earthquake-damaged buildings.

Over the past 6 years, Steven has worked in Christchurch and has completed damage assessments, repair strategies and detailed engineering evaluations for more than 400 houses, schools and commercial properties. He has been engaged as an expert witness for Christchurch earthquake claims by homeowners, private insurers and the Earthquake Commission. Steven has also provided technical engineering advice to the Resolution Advisory Service (RAS).