



YONG FANG



yongf@geoassessor.com.au



+61 408 273 743



Brisbane, QLD 4006



www.geoassessor.com.au



<https://www.linkedin.com/in/fang-yong-33810916/>

EDUCATION

Master of Science, Civil, major in Geotechnical Engineering
National University of Singapore,
January 2001

Bachelor of Engineering, Civil
Hohai University, China
January 1990

CAREER SUMMARY & KEY ATTRIBUTES

Accomplished senior geotechnical engineer and project manager with over 30 years of experience in the deep foundations industry, specializing in civil infrastructure and high-rise building projects across Australia and Southeast Asia. Successfully completed more than 50 foundation projects under diverse ground conditions, including notable Australian projects such as the Westgate Tunnel Project, Crown Hotel Resort, and Legacy Way. Expertise includes deep foundations and retaining structures, with a strong focus on large diameter bored piles, secant pile walls, and diaphragm walls. Proven track record of delivering high-quality, profitable projects on time while maintaining exemplary safety records that exceed industry standards.

SKILLS

- **Pile Verification & Certifications**
- **Ground Anchor / Soil Nail Verification & Certification**
- **Earthwork Inspection & Slope Risk Assessment**
- **Retaining Structure Inspection & Assessment**
- **Construction Project Management for Deep Foundations**
- **Highrise Building Basement & Foundation Works**

WORK HISTORY

August 2025 - Current

Geoassessor Pty Ltd - Geotechnical Assessor, Brisbane, QLD

1. Pile Verification and Certifications

- **Geotechnical Certification of Pile Foundations:** We provide on-site inspection and certification of pile foundations by an experienced RPEQ Geotechnical Assessor. This includes verifying that ground conditions align with design assumptions, and the factored geotechnical strength meets or exceeds design loads. The Geotechnical Assessor considers information available, certifies compliance with drawings, and records the as-built information of the pile foundation according to the requirements by the design and specifications.
- **Test Drilling and Supplemental Investigations:** Where borelogs are insufficient or piles have high ultimate loads (e.g., over 5000 kN), we can supervise and assess test drilling of the pile base to confirm strata strength and absence of serious defects. We utilize a range of tools, including review of original geotechnical investigation cores and reports, analysis of samples obtained during the excavation of the socket.
- **Dynamic and Integrity Testing Oversight:** We can oversee and supervise low strain or non-destructive integrity tests on cast-in-place piles to ensure their integrity, conducted by a company independent of the piling contractor. For driven piles, we can verify High Strain Dynamic Testing (HSDT/PDA) and CAPWAP

analyses, noting their use for mobilized axial capacity, load-settlement characteristics, and pile integrity estimates.

- **As-Constructed Documentation Review and submission:** We review and certify as-constructed records for each pile, including the base height of both the liner and pile, socket and base assessment certified by the Geotechnical Assessor (with site records, excavation logs, photos, in-situ testing), tremie pouring records, and concrete test results.

2. Ground Anchor and Soil Nail Verification and Certification

- **Construction Procedure Compliance:** We assess and verify the contractor's detailed construction procedures for soil nailing and rock bolting/dowelling/Anchor, covering drilling, installation, grouting, stressing (for active bolts), and testing methods, ensuring all necessary approvals from the Administrator are obtained prior to commencement.
- **Proof Testing and Acceptance:** We supervise and oversee acceptance testing for soil nails and passive rock dowels. This verifies that project-specific deflection limits are met. For active rock bolts, we can verify similar load testing.
- **Corrosion Protection System Verification:** For permanent anchors (rock bolts), we perform production testing on a sample of installed bolts to inspect the integrity and thickness of cement grout cover, location and spacing of cracks, and degree of grout filling inside and outside the sheath/sleeve, ensuring the anchor is fully encapsulated and free of defects affecting service life. We also verify that proof testing to the serviceability load is carried out on a percentage of rock anchors.
- **Design Assumption Validation:** We review design reports for soil nailed walls and ground anchors, ensuring they include geological and geotechnical models, design strength parameters, pore water pressure conditions, calculations, construction staging, and proposed monitoring programs. We can verify that additional rock anchors are included for long-term durability monitoring/testing.

3. Earthwork Inspection and Slope Risk Assessment

- **Construction Phase Verification:** During earthworks, we undertake visual inspections of slope materials and monitor water/movement to verify design assumptions. We review conditions and data progressively, advising on necessary modifications to cut slope design, subsurface drainage requirements, and construction sequencing.
- **Foundation Excavation Inspection:** For load-bearing footings, we provide inspection and approval of the trimmed, dewatered foundation surface by a Contractor's RPEQ geotechnical engineer prior to covering, confirming groundwater profile, strength, and stiffness comply with design assumptions.
- **Geotechnical Risk Assessment:** We undertake or review geotechnical risk assessments for cut slopes and embankments based on preliminary analyses, identifying potential issues impacting performance standards. This assessment considers long-term stability conditions, which are generally critical for cut slopes and excavations.
- **Remediation Design Assessment:** For remediation works on existing slopes and embankments, we can assess and advise on site conditions, aligning with TMR Geotechnical Section's discretion and using consequence classes defined in relevant guides.

4. Retaining Structure Inspection and Assessment

- **Design Compliance Verification:** We inspect and assess various retaining wall types, including reinforced concrete cantilever walls, embedded walls, soil nailed walls, Reinforced Soil Structure (RSS) walls, gabion walls, and boulder walls, ensuring their design conforms to relevant Australian Standards, and TMR Technical Specifications.

- **Foundation and Material Verification:** We verify that retaining walls are founded on competent material, with appropriate geotechnical investigations informing bearing capacity, global stability, and settlement estimates. We ensure construction procedures for excavations, material replacement, and compaction are followed to achieve designed foundation capacity.
- **Construction Quality Assurance:** We perform regular site inspections during construction to ensure compliance with construction drawings and specifications, including proper placement and compaction of reinforced fill material for RSS walls. This includes verifying material traceability from source to the wall.
- **Certification of Construction:** Upon completion, we provide or review certification from the Contractor's RPEQ Civil Engineer confirming that the retaining structure has been constructed per design specifications and meets all design requirements, including foundation bearing. This certification also covers as-constructed drawings and adherence to structural integrity and serviceability criteria.
- **Durability and Performance Assessment:** We evaluate aspects related to durability, such as minimum shotcrete thickness and concrete strength for soil nail walls and ensure filter and drainage materials conform to MRTS03 requirements to manage hydrostatic pressures.

August 2020 - August 2025

Geoinventions Consulting Services Pty Ltd - Geotechnical Design Site Representative / Geotechnical Assessor

- Pacific Motorway M1 upgrade – Palm Beach to Tugun, QLD
- Indooroopilly Roundabout upgrade, QLD
- Bruce Highway (Brisbane – Gympie), Caboolture – Bribie Island Road to Steve Irwin Way upgrade, QLD
- Coomera Connect – Shipper Drive to Helensvale Road, Coomera, QLD
- Hope Island Station – New Gold Coast Station Beenleigh to Varsity Lakes, Coomera, QLD
- Hexham Straight Widening – Ironbark Creek Crossing, Newcastle, NSW
- Fitzroy to Gladstone Pipeline – Shafts for pipe jacking, Rockhampton, QLD

September 2008 - March 2020

Bauer Foundations Australia - Project Manager /Tender Estimator/ Senior Project Engineer

- Westgate Tunnel Project Northern Tunnel, Melbourne
- Peak Downs Highway Project in Nebo, Mackay, QLD
- Crown Sydney Hotel Resort, NSW
- Pacific Highway Upgrade – Nambucca Heads to Urunga
- Barrams Road Bridge, Ripley, Brisbane, QLD
- Barangaroo Foreshore Piling Works, Sydney
- Brisbane Legacy Way Project
- Newcastle NCIG Coal Terminal Dump Station
- Airport Link, Brisbane, QLD

September 2002 - August 2008

Bauer (M) Singapore Branch - Senior Project Manager

- Managed and completed more than 10 major piling/foundations and retaining wall projects on/ahead and within budget, for main infrastructure work and landmark commercial/residential project. The projects included the foundation of 57-storey Sands Marina Bay Integrated Resort

- 4 underground metro train (MRT) stations and overpass interchange bridge in Singapore
- Multi-basement of high-rise building in KL Malaysia
- A challenging retaining wall at a Carport wharf in Indonesia.

May 1995 - August 2002

Econ Corporation Ltd / Geofoundation Ltd, Singapore - Project Manager/ Engineer

- 26 piling and other foundation projects including major underground metro train (MRT) stations, Tuas viaduct to Malaysia and various buildings and road works.

August 1990 - May 1995

Zhejiang Harbour Construction Company China - Project Manager/ Engineer

- 5 wharf projects in China, from the foundation to completion

PROFESSIONAL QUALIFICATIONS AND MEMBERSHIPS

- MIEAust | 3257506
- CPEng | 26025
- RPEQ | 26025
- NER | 3257506
- RIW | 20-00012889

KEY PROJECT EXPERIENCE

Cairns cyclone reconstruction works - Captain Cook Highway from Buchans Point, Ellis Beach to Yule Point, Mowbray, QLD July 2025 – Present

Description of responsibilities:

- To assess and certify that ground conditions and installation methods are in accordance with design assumptions for soil nail and ground anchor drillings and installation, and provide and approve the verification reports to the Client and stakeholders.
- To perform construction phase inspection of slope excavation, scaling works and foundations for both permanent and temporary works to ensure the various ground treatment works carried out in line with the design drawings and Specifications.
- To provide technical advice and recommendations on general earth works, construction practices and slope stability to mitigate geotechnical risks, and support site team with practical and effective solutions.
- To conduction other geotechnical related field inspections and evaluations such as suitability/acceptance testing, retaining / drainage structures and slope protections to ensure compliance with technical specifications.

Hope Island Station – New Gold Coast Station Beenleigh to Varsity Lakes, Coomera, QLD, Mar 2024 – Jun 2024

Description of responsibilities:

- To supervise and certify bored pile construction (CIP) on land adjacent to existing railway for bridges and other structures, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.

- To log and test the ground conditions, and provide recommendations for any required changes, and ensuring that the contractor implements the recommended changes.
- To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Coomera Connect – Shipper Drive to Helensvale Road, Coomera, QLD, Mar 2023 to Sep 2025

Description of responsibilities:

- To supervise and certify pile construction (CIP) on land and in river for bridges and other structures, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.
- To log and test the ground conditions, and provide recommendations for any required changes, and ensuring that the contractor implements the recommended changes.
- To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Fitzroy to Gladstone Pipeline – Shafts for pipe jacking, Rockhampton, Feb 2023 to Mar 2026

Description of responsibilities:

- To assess and verify the suitability of the ground for the construction of the project, including foundations, retaining walls, and other earth structures.
- To supervise and certify pile construction (sheet piles) for retaining walls, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.
- To provide technical advice and recommendations to contractors, and other stakeholders on the construction project on the best practices for foundation design/construction, slope stability, excavation, and other ground engineering of the project.
- To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Pacific Motorway M1 Upgrade – Palm Beach to Tugun, QLD, Aug 2021 – Aug 2023

Description of responsibilities:

- To assess and verify suitability of the ground for construction, including foundations, retaining walls, and other earth structures.
- To supervise and certify pile construction (CIP and DTS piles) on land and in river for bridges and other structures, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.
- To log and test the ground conditions, and provide recommendations for any required changes, and ensuring that the contractor implements the recommended changes.
- To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Indooroopilly Roundabout Upgrade, QLD, Feb 2024 – Oct 2024

Description of responsibilities:

- To assess and verify the suitability of the ground for the construction of the project, including foundations, and other earth structures.

- To supervise and certify pile construction (CIP piles) for retaining walls, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.
- To log and test the ground conditions, and provide recommendations for any required changes, and ensuring that the contractor implements the recommended changes.
- To provide technical advice and recommendations to contractors, and other stakeholders on the construction project on the best practices for foundation design/construction, slope stability, excavation, and other ground engineering of the project.
- To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Bruce Highway (Brisbane – Gympie), Caboolture – Bribie Island Road to Steve Irwin Way Upgrade, Nov 2020 to early 2024

Description of responsibilities:

- To assess and verify the suitability of the ground for the construction foundations, retaining walls, and other earth structures.
- To supervise and certify pile construction (CIP and DTS piles) on land and in river for bridges and other structures, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and TMR standards and specifications.
- To log and test the ground conditions, and provide recommendations for any required changes, and ensuring that the contractor implements the recommended changes. To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

Hexham Straight Widening – Ironbark Creek Crossing, Newcastle, NSW, Apr 2024 – Jun 2024

Description of responsibilities:

- To assess and verify the suitability of the ground for the construction of the project, including foundations, and other earth structures.
- To supervise and certify working platform for heavy piling works, as well as monitor and inspect the site during construction to ensure compliance with the design requirements and RMS standards and specifications.
- To provide technical advice and recommendations to contractors, and other stakeholders on the construction project on the best practices for platform design/construction, sheet pile wall stability, excavation, and other ground engineering of the project. To ensure that the design and construction processes comply with relevant standards, specifications, guidelines, and best practices, including quality and safety standards.

REFERENCES

Dean Sotiriou - Project Manager | McConnell Dowell BMD Joint Venture

- dean.sotiriou@mbjv.com.au | +61 418 192 204

Luke Weller - Area Manager | Hexham Straight Widening Alliance

- luke.weller@hswalliance.com.au | +61 437 805 015

Bradley Britton - Senior Project Engineer | Acciona Georgiou Joint Venture

- bradley.britton@ag-jv.com.au | +61 448 805 638,

Scott Cardow - Senior Project Engineer | Acciona Georgiou Joint Venture

- scott.cardow@ag-jv.com.au | +61 448 246 586

Darren Andrew - Project Manager, Seymour Whyte, Pacific Motorway M1 Upgrade – Palm Beach To Tugun, QLD

- darren.andrew@seymourwhyte.com.au | +61 428 605 728,

David Austin - Site Engineer | Acciona, Bruce Highway, Caboolture – Bribie Island Rd to Steve Irwin Way Upgrade, QLD

- david.austin@acciona.com | +61 427 989 117,