

ABOUT US

Civil One is an exciting team of highly experienced and professional mining, geotechnical geological and hydrogeological consultants offering excellence in service and commitment to their clients with high level strategic, hands on practical design and implementation.

Our well respected team has extensive industry knowledge and experience in a diverse range of disciplines.

With our engineering knowledge and skills using a variety of software packages we are able to provide safe, cost-effective and problem solving solutions which reduce mine operating costs, increase productivity and maximise economic extraction.

Underground Construction, Tunnelling and Pipe Jacking

Underground Project Feasibility Studies and Tenders

- Conceptual, scoping, prefeasibility and feasibility studies
- Tunnel and shaft risk assessment and mitigation
- Tunnel alignment and route selection
- Tunnel bid assistance
 - Estimation
 - Constructability
 - Selection and practical application of tunnelling methodology, constructability and techniques
- Tender preparation and evaluation
- Evaluation and implementation of tunnel systems and logistics
- Peer review

Project Management

Conceptual, scoping, prefeasibility and feasibility studies

- Contract supervision
- Project supervision
- Site set up, work coordination and scheduling review
- Secondment of specialist project engineers (geotechnical geologists, tunnel engineers)
- Tunnel inspection and reporting
- Geological face mapping
- Risk assessments
- Audits and reviews
 - Technical
 - Contract documentation
 - Project supervision
- Underground operational reviews and studies

Technical

- Shotcrete design, implementation, supervision and review
 - Water stop solutions
 - In-situ grouting
- Technical advice for legal council
- Expert witness testimonies

Geotechnical and Engineering Geology

Geotechnical investigation for:

- Tunnels
- Pipelines
- Shafts
- Horizontal drilling
- Geotechnical design for tunnels and shafts
- Instrumentation installation and monitoring
- Building protection
- Laboratory testing
- Stress modelling
- Stress measurement and analysis
- Geological risk assessments
- Prediction of ground conditions preferred geometries
- Ground support design using FEM/FBM numerical modelling

Relevant Projects

- Adelaide desalination plant tunnel and shafts project management
- Northern link tunnel assist bid team (QLD)
- Pimpama water delivery contract and pipe jack supervision and review (QLD)
- Palmer Street main drain diversion investigation and contract management (VIC)
- Somerton Road pipe jacking tunnel review and construction supervision (VIC)
- Walhalla surface infrastructure investigation and foundation design
- Northern diversion sewer geological investigation and route selection (VIC)
- Victorian desalination plant site geotechnical investigation
- Western corridor pipeline investigation (QLD)
- Blackwood sewer pipeline geotechnical investigation (VIC)
- Tunnel investigations and ground support design (City link, Jindabyne Ski Tube, Sugarloaf Dam)
- Cross London Rail Link (Crossrail) Geotechnical Investigation (UK)
- Hindhead Tunnel Project - Construction Supervision and Crown Support Design (UK)