



Mine Site Investigation

This industry operates and maintains large, heavily loaded and settlement sensitive infrastructure, where any stop in production can mean a financial loss in the millions. WML understands the importance of getting the geotechnical portion of the project correct at the start, as it can save millions of dollars of future downtime.



Whether the project is an expansion, relocation, or greenfields construction, WML's WA based geotechnical engineers have the expertise and capability to provide you with a tailored site investigation followed by detailed factual and interpretive geotechnical reporting, which can typically include:

- Bearing capacity and settlement analysis for the proposed infrastructure
- Geotechnical design parameters, including dynamic soil parameters
- Modulus of subgrade reaction for a range of design requirements
- Assessment of potential fill suitability of site won materials (In-situ or existing borrow pits or waste dumps)

Mine Site Geotechnical Investigations

A desktop review of all available data is always the first step in our process. Many mine sites have existing geotechnical information, and a secondary investigation can sometimes be unnecessary and costly. Once the proposed infrastructure is known, we build a scope of works that suits your project as well as your budget.

Our investigations can include anything from boreholes, test pits, and dynamic cone penetrometers, to MASW geophysical investigations for the calculation of dynamic soil parameters. We send senior geotechnical engineers to site to ensure that any geotechnical risks are identified, and the right information is gathered the first time and if required the expertise is on site to alter the scope of works in real time to suit any identified risks or project developments.

Recent Projects

Pilbara Minerals Pilgangoora Expansion Project, BHP Nickel West Kwinana, KCGM Fimiston Plant Expansion Project, KCGM primary crusher MSE wall failure assessment, Northern Star Thunderbox Gold Mine Expansion Project, Lynas Mt Weld Expansion, Lynas Kalgoorlie Rare Earths Processing Facility,

Geotechnical Emergencies

WML engineers are based in Perth, Kalgoorlie, and the Southwest, and can attend site at a moment's notice to assess any geotechnical emergencies and provide safe, suitable, solutions as quickly as possible.

Electrical and Thermal Resistivity

Our engineers are trained in undertaking in-situ electrical and thermal resistivity testing. We can also take representative soil samples for confirmatory lab testing.

Geophysical Investigations

WML combines geophysical outputs with existing geotechnical data to assist the design of vibrating and oscillating infrastructure and identify geotechnical risks like subsurface voids.