Kontain

COMMERCIAL TECHNICAL CAPABILITY

# GEOTECHNICAL SITE INVESTIGATION CAPABILITY

Commercial, industrial, subdivision and civil investigations planned around the proposed development and the decisions the design team must make.

ADELAIDE + SOUTH AUSTRALIA | ENGINEER-LED

ILLUSTRATIVE FIELD CAPABILITY

Equipment and specialist providers are confirmed for each commissioned investigation.

Capability flyer
August 2026

COMMERCIAL | INDUSTRIAL | SUBDIVISION | CIVIL

# Test the ground for the decision, not a generic report template

Investigation planning and reporting are developed with reference to AS 1726:2017 and relevant Australian field and laboratory test methods. The method combination must suit the structure, geology, access and project risk.

| DESIGN QUESTION | FIELD EVIDENCE | ENGINEERING OUTPUT |
|---|---|---|
| **FOUNDATIONS** | Mechanical boreholes, sampling, SPT and CPT/CPTu where appropriate. | Ground model, founding levels, bearing parameters and settlement considerations. |
| **SOFT + VARIABLE GROUND** | CPTu, push-tube sampling, vane or consolidation testing and groundwater observations as required. | Compressibility, time response, negative skin-friction risk and improvement pathways. |
| **SUBGRADE + EARTHWORKS** | DCP, shallow investigation, test pits, sampling, classification and CBR testing. | Subgrade variability, earthworks controls, platform inputs and construction hold points. |
| **PAVEMENT CONDITION** | Pavement coring, material sampling, DCP, FWD and visual condition data. | Layer condition, deflection response, weak areas and rehabilitation or overlay inputs. |
| **REACTIVE SOILS** | Targeted sampling, classification and soil reactivity testing. | Shrink-swell and heave assessment, moisture sensitivity and foundation considerations. |
| **GROUNDWATER + EXCAVATION** | Drilling observations, monitoring wells and repeat measurements where the question requires them. | Groundwater conditions, excavation risk, temporary works inputs and construction response. |

**THE SCOPING RULE**

**Select the investigation method that closes the design uncertainty. More testing is not automatically better; the evidence must be relevant, traceable and proportionate to consequence.**

# Turn investigation evidence into usable design inputs

A geotechnical report should connect the encountered conditions to the actual structure, foundation options, settlement, earthworks and construction risks.

**ILLUSTRATIVE CPT / CPTU FIELD CAPABILITY**

Specialist plant and provider availability confirmed per project.

**01 PLAN**

Structure, loads, footprint, investigation depths, access, utility information and site controls.

**02 INVESTIGATE**

Drilling, sampling, SPT, CPT/CPTu, DCP, groundwater and laboratory testing selected to suit.

**03 INTERPRET**

Integrate the profile, variability, groundwater and test response into a defensible ground model.

**04 REPORT**

Issue parameters, recommendations, limitations, hold points and supplementary work where needed.

## TYPICAL REPORT OUTPUTS

- Interpreted geological and geotechnical ground model
- Allowable and ultimate bearing parameters where applicable
- Total and differential settlement considerations
- Soil reactivity, shrink-swell and heave assessment
- Shallow and deep foundation design inputs where supported
- Subgrade, earthworks, excavation and groundwater recommendations

## PROJECT FIT

**COMMERCIAL + INDUSTRIAL**

Warehouses, factories, heavy slabs, plant and operating facilities.

**SUBDIVISION + CIVIL**

Roads, platforms, services, earthworks and retaining structures.

**MULTISTOREY + SIGNIFICANT**

Apartments and larger structures scoped to the concept and consequence.

**SOFT-GROUND SITES**

Compressible soils, variable fill, reactive clays and settlement-led decisions.

**CLEAR RESPONSIBILITY**

Kontain provides geotechnical design parameters and recommendations. The structural engineer remains responsible for structural footing and foundation design. Complex or high-consequence scopes may require supplementary specialists and peer review.

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# COMMERCIAL GROUND INVESTIGATION. CLEAR DESIGN INPUTS.

One line of sight from the proposed development to a proportionate field scope, defensible ground model and practical report.

ILLUSTRATIVE DCP + FWD CAPABILITY

**01 BRIEF**

Site plan, proposed structure, loads, levels, basements and programme

**02 SCOPE**

Locations, depths, methods, laboratories, access and site controls

**03 FIELD**

Specialist providers, engineering logging, samples and traceable test data

**04 REPORT**

Ground model, design parameters, recommendations, limits and hold points

## SCOPE BOUNDARIES

- Individual residential site classifications and soil tests are not currently offered.
- Engineering rock coring and rock-mass logging are outside the direct service scope.
- Practical drilling refusal is reported as refusal, not automatically as confirmed bedrock.
- Contaminated-land and environmental assessment are separate specialist scopes.
- CPT/CPTu, FWD and other specialist services are confirmed at quotation.

**START WITH THE SITE PLAN AND PROPOSED STRUCTURE**


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Adelaide | South Australia


Commercial | Industrial | Subdivision | Civil

*Geotechnical investigations are a separately scoped South Australian service from Kontain's core geosynthetic systems business.*