

Consultants & Professional Services Contractors Briefing Document



Below is an example of a typical brief for the undertaking of geotechnical investigations.

Text Highlighted yellow should be changed to suit the individual project requirements.

Text in red should be deleted.

This document is intended as a guide for Internal use, using the latest Briefing template from the Ergon Intranet as a template, Form MP000901F100 should be used.

For external use the content may be used as a guide in conjunction with the Line Design Manual.

It is not intended to cover all the requirements that may be required for a specific project.

The exact nature of the geotechnical requirements shall be determined by the RPEQ who will be certifying the design. Additional guidelines are provided in the Sub- Transmission Line Design Manual.

This material is made available on the basis that it may be necessary for a Registered Professional Engineer of Queensland (RPEQ) to undertake or oversee the engineering services to meet statutory obligations.

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CONTRACT NUMBER:

CONTRACT TITLE: GEOTECHNICAL INVESTIGATION

PREFERRED CONTRACTOR PANEL: 62

Please note the Terms & Conditions contained in the Umbrella Consultancy Agreement for this Preferred Contractor Panel will apply to this contract

Document Summary

Author: FRED BLOGGS

Version: 1

1. REQUIREMENTS

1.1. Nature of the Requirements

An overview of the project, including location and terrain, ect.

Ergon is undertaking the design and construction for the replacement of a 4km section of line forming part of the Ayr Giru 66kV feeder

The line runs along side the Bruce Highway approximately 20km north of Ayr, through the Barratta creeks. The approximate line route is shown on the attached drawing. Results from field tests should be supplemented with results from previous investigations in the area. As the line traverses several creeks and low level cane fields, geotechnical testing is required to enable the design and construction planning of suitable foundations at the along the line route.

1.2. Technical/Functional Requirements

1.2.1 General

The contractor shall make his own arrangements for locating the coordinates and position of bore holes, trial pits and other field tests as per the drawings/sketches supplied to him. The contractor shall be responsible for obtaining Dial before you dig information and utilising suitable detection methods to accurately determine the location of underground services in the area.

The work shall include mobilization of all necessary equipment, providing necessary engineering supervision and technical personnel, skilled and unskilled labours, arranging water for drilling etc as required to carry out the entire field as well as laboratory investigation, analysis and interpretation of test data collected and preparation of a geotechnical report.

All work shall be in accordance with AS1726 Geotechnical Site Investigations; all laboratory testing shall be undertaken by NATA certified laboratories.

1.2.2 Line Structures

Description of the proposed line construction, including pole types foundation loads, foundation types – direct buried, piles ect. anticipated depth.

The proposed line is to be constructed using direct buried concrete poles with groundline bending moments of approximately 1500 kNm with expected foundation depths of 6 m and concrete stay anchors of 2-4m depth.

Part A – Geotechnical Report

The geotechnical report shall include a desktop study of the area. This should include information on previous investigation reports, on site testing and construction experience. Geological maps, survey data, aerial imagery, and local knowledge should also be included. Ideally this should take place before onsite testing as to optimize test locations.

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Geotechnical testing is required to determine:

Soil parameters required to complete design, additional information may be required depending on foundation type, location ect...

- The soil profile to approximately 9 m depth along the line route, it is expected that testing would be required in at least 4 locations.

- Strength characteristics to enable design of the foundations including-
 - o including soil cohesion,
 - o internal angle of friction,
 - o unit weight,
 - o skin friction and
 - o allowable vertical bearing pressure
 - o allowable lateral bearing pressures.
- Anticipated excavation and construction conditions, including water table.

Part B – Additional site supervision as required.

- Verification of insitu soil properties during construction work (hourly rate).

1.3. Safety

The Consultant shall manage the safety of the investigation.

The Consultant including employees and subcontractors shall wear approved Personal Protective Equipment (PPE) to minimise exposure to workplace risks. Minimum PPE includes safety shoes/boots, cotton drill long trouser, long sleeve Hi-Vis (Orange/Yellow preferred) cotton drill shirt, safety glasses and an approved non-metallic safety helmet with shade. The listed equipment is the minimum standard and may not be adequate for the work and further PPE should be selected based on the risk.

A Safety Observer will be provided by Ergon when required.

A Site Specific Workplace risk assessment, control details, and work method shall be provided by the Consultant and a copy shall be kept on site at all times.

An Ergon Energy Excavation Permit shall be obtained for all excavation inside or adjacent to a substation before commencement of the site investigation.

The Consultant shall undertake a 'Dial Before You Dig' investigation in relation to services owned by others before commencement of the site investigation.

The Consultant shall locate all services that may be impacted by the site investigation by hydraulic excavation or other means before commencement of the site investigation. Normally excavation to 1200mm is required by hydraulic excavation.

The Consultant shall supply all necessary plant and equipment for the site investigation. All plant shall be licensed and in a roadworthy condition. All electrical equipment shall be tested and tagged. Plant shall only be used by qualified operators.

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When site investigation inside or adjacent a substation is required, the Consultant including employees and subcontractors shall comply with the following:

1. Ergon Energy Generic Contractor Induction, however if a person will be on site less than two days, then a person can work under the direction of a qualified supervisor (Ergon Energy safety observer) who has this qualification.
2. One person on site (Ergon Energy safety observer) is to hold an Ergon Energy "Safe Entry to High Voltage Enclosure Induction" and "Authorisation Card".
3. Everybody on site shall complete an Ergon Site Induction.
4. Everybody on site shall sign onto a Daily/Task Risk Management Plan before commencing work.

2. SELECTION CRITERIA

Selection of the successful tender will be based on the following criteria:

Essential Criteria	Desirable Criteria
Price	Specific experience of the individuals who will be working on the assignment
Previous experience in relation to the proposed scope document	
Capacity to deliver in the required timeframe	

2.1. Duration

Period of up to 7 weeks from 12th December 2011 to 27th January 2011.

2.2. Reporting Structure

The consultant will report to Fred Bloggs.

2.3. Primary Location

The consultant will be required to undertake duties at a primary location nominated by Ergon Energy.

The primary location for this engagement will be **Townsville** and the line route location, between **Ayr and Townsville**.

Ergon Energy will not be responsible for any incidental expenses related to the primary location of work e.g. taxi fares, mobile phone calls, meals etc. Consideration should be given to this when submitting your tender for work.

2.4. Travel

Ergon may direct the consultant to travel to Ergon Offices other than the nominated primary location. Where this is required, Ergon Energy will make arrangements for travel and accommodation directly with Ergon Energy's travel service provider.

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RESPONSE

Fixed price sum for the geotechnical investigation and report (Part A)
Unit rate for additional bore holes
Hourly Rate for site supervision (Part B)

Unit Rates are to be quoted as hourly, daily or fixed as appropriate and to show GST Exclusive, GST Amount and Total, and to be fully inclusive of all incidental expenses related to the primary location of work (e.g. taxi fares, mobile phones, meals etc).

OR

Unit Rates are to be quoted in accordance with the Schedule of Pricing submitted for PCP 62 and to show GST Exclusive, GST Amount and Total, and to be fully inclusive of all incidental expenses related to the primary location of work (e.g. taxi fares, mobile phones, meals etc).

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Please submit Response to:

Fred Bloggs
Ergon Energy
Email: fred.bloggs@ergon.com.au

Responses, including contract number are to be provided in Microsoft Office or Adobe format by 8/12/2011. Responses should not under any circumstances be copied or blind copied to other Ergon Officers (tenders may be disqualified in these circumstances).

Please direct queries to:

Technical Issues:

Bred Bloggs
PO Box 1090
Townsville Q 4810
Telephone: 07 4789 XXXX
Facsimile: 07 4727 6849
Email: fred.bloggs@ergon.com.au

3. TERMS AND CONDITIONS

Ergon Energy's standard contract terms and conditions will apply, a copy of which is attached.

OR

Ergon Energy's standard contract terms and conditions will apply, which are defined in Ergon Energy's Umbrella Consultancy Agreement for PCP 62.

Insurance Cover required:

Public Liability Insurance: \$20 Million
Professional Indemnity Insurance \$1 Million
Policy Details may be required upon engagement.