

Douglas Partners Pty Ltd ABN 75 053 980 117 www.douglaspartners.com.au 5 Dwayne Street North Geelong VIC 3215 Phone (03) 5221 0711

MT. SHADWELL PTY. LTD. **Red Hill** 19 Steeles Ln Mortlake, VIC 3272

207784.00 5 October 2023 207784.00.P.002.Rev0 AR/GG

Email:

Attention:

Proposal for Geotechnical Assessment Mount Shadwell Scoria Quarry Extension Red Hill, 19 Steeles Ln, Mortlake

1. Introduction

Following receipt of your email dated 18 September 2023, we are pleased to provide our proposal for a geotechnical assessment report in accordance with Earth Resources Regulation "Geotechnical Guideline for Terminal and Rehabilitated Slopes, Extractive Industry Projects", September 2020 for the extension of the Mount Shadwell Scoria Quarry in Mortlake, Victoria.

It is understood that the exiting quarry is to be relicensed with an adjoining green field site of approximately 26 ha. The two sites are located on the northern slopes of Mt Shadwell.

The existing extraction area will be rehabilitated before extraction commences in the western section. A maximum 6 ha will be open for extraction at any one time and rehabilitated as extraction progresses in a westerly direction in successive stages. Earth Resources Regulation (ERR) requires a geotechnical stability report for working faces that will exceed 15 m.

The extension area of approximately 26 ha that adjoins on the western face will have varying terminal faces from 9-10 m on the lower northern faces that will increase to up to 24 m faces as extraction extends to the south on the rising slopes of Mt Shadwell. This site will be worked in parcels of approximately 3-4 ha each and rehabilitated progressively.

It is understood that topsoil ratios are fairly consistent, being on average 0-20 cm in depth. Overburden depth is variable 0-1 m depending on the underlying scoria. Topsoil and overburden will be stockpiled separately for rehabilitation materials to be utilised as required.

Proposed working (terminal) batters are 1V:2H and rehabilitation batters are 1V:3H.

Southern Rural Water bore records indicate groundwater is 40-50 m below surface at this location.

DP previously inspected the existing scoria quarries and provided comment on the proposed extension, reference report 207784.00.R.001.Rev0 dated 11 November 2021. However, it is now understood that ERR requires a more detailed geotechnical assessment to be undertaken in accordance with their September 2020 guideline.





2. Scope of Work & Methodology

In order to achieve the aims of the assessment, we propose the following scope of work:

- Review of published geological and hydrogeological mapping to check for any updates since the 2021 report;
- Review of any available proposed quarry extension plans and documents;
- Slope stability analysis on representative cross sections for Lots 1/2 and Lot 4, based on the proposed quarry documentation;
- Preparation of a geotechnical assessment report in accordance ERR September 2020 guideline for extractive industry projects; and
- Completion of all interpretation and reporting under a quality assurance system.

3. The Douglas Partners Geelong Team

DP has maintained full-time offices in Victoria for more than 50 years. The full range of geotechnical, groundwater and environmental engineering services are available from these offices, which are also supported by NATA registered soils laboratories.

DP employs one of the largest teams of geotechnical and environmental professionals and engineers in Australia. The extensive and varied experience of the DP team means that our clients have access to senior level staff on a day to day basis.

The nominated key personnel in our team have track records in the areas of geotechnical engineering, engineering geology, construction materials assessment, salinity investigation, and soil and water management, including field work and management of previous projects of a similar nature described above. If a nominated staff member is unavailable, an equivalent alternative staff member will be made available for the study. Brief details of the key project team members are provided below.

Arthur Rowling - Principal Geotechnical Engineer

Arthur is a Principal of the company and the Geelong Branch Manager, and he would be responsible for monitoring the progress of the project. Arthur has over 20 years' geotechnical consulting experience with investigations and analysis, and is a chartered engineer.

Gareth Griffiths - Senior Geotechnical Engineer (Project Manager)

Gareth is an Associate with DP. His expertise includes project management, field work supervision, pavement investigations, LSRA's and logistical coordination of similar investigations within country Victoria and interstate. Gareth has over 15 years' experience and would be responsible for coordination and completion of the project.



4. Quality Control and Safety

Douglas Partners operates under a certified quality system meeting the requirements of ISO AS/NZS 9001. Quality assurance is applied on all projects to address the needs and expectations of our clients. All projects are managed on a project specific basis with a responsible Project Manager and Project Reviewer. A copy of our quality assurance certification is also available upon request.

Similarly, all of our projects are conducted employing appropriate OH & S standards with the use of proforma Fieldwork/Safety/Environment Plans and Safe Work Method Statements. Environmental protocols with respect to the proposed works are attended to within these documents, without the need for a specific Environmental Management Plan for the investigation.

Details of Douglas Partners insurances are as follows:

Professional Indemnity Public Liability

Amount of cover: \$3 million Amount of cover: \$10 million

Name of Insurer: Lloyds of London Underwriters

Name of Insurer:

Berkshire Hathaway Specialty Insurance

5. Fees and Conditions

Our estimated costs for the investigation, based on a schedule of rates, are attached.

Based on our current commitments we estimate that we could commence the geotechnical assessment within one week of receiving your written order to proceed. We expect that the final geotechnical assessment report would take one to two weeks to complete.

The following qualifications would form part of the conditions of engagement:

- No site visit or ground investigation works are proposed; and
- This fee proposal is valid for three months from date of issue.

Our proposal should be read in conjunction with our standard conditions of engagement and the other attachments to this letter. Together, these will constitute the terms of our agreement and the basis on which we will provide any Services requested by you. These terms will remain in operation until, and if, we formally execute an alternative written agreement with you (or your organisation) for this work. We reserve the right to consider and negotiate any terms we may be asked to agree to. Payment for services performed by us cannot be withheld on the basis that Douglas Partners must first agree to separate terms.

If you wish us to proceed with the investigation, could you please complete, sign and date the attached Services Order form and return it to us. To avoid any doubt once we have provided this letter to you and if you then request us to provide any services, the terms of this letter and its attachments will bind both you and us in connection with all those services performed by us at your request even if not signed



by you unless we agree otherwise in writing. While we may agree in good faith to review other conditions of engagement, such review and any acceptance may be subject to additional fees.

We thank you for your enquiry and look forward to being of service.

Yours faithfully

Attachments:

Douglas Partners Pty Ltd

Reviewed by

Associate

Principal

Services Order Schedule of Rates

Conditions of Engagement



SERVICES ORDER

То	Douglas Partners Pty Ltd
Attention	
Email	

Please proceed with the work as detailed in DP's proposal listed below for the fee estimate provided.

Project	Geotechnical Assessment, Mount Shadwell Scoria Quarry Extension
Address	Red Hill, 19 Steeles Ln, Mortlake
Proposal	207784.00.P.002.Rev0 dated 5 October 2023

We confirm that we are responsible for payment and all invoices should be sent to the address below.

8	
Company or Name	
ABN	
Address	
Phone	
Email/Fax	
Authorised by	Name: Title: who hereby warrants his/her authority to do so on behalf of
Signature	
Date	



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Proposal for Geotechnical Assessment Mount Shadwell Quarry

Proposal 207784.00.P.002.Rev0 dated 5 October 2023 Geotechnical Investigation Schedule of Rates (excl. GST)

Estimated Quantity	Unit	Rate	Amount
1	item	\$3,500	\$3,500.00
	Fatherate	Total GST 10%	\$3,500.00 \$350.00 \$3,850.00
		Quantity Unit	Quantity Unit Rate 1 item \$3,500

Notes:

Post investigation services for site inspections, attendance to project meetings, site inductions and any additional works not covered within this fee proposal would be charged using the following fee scales (excluding GST).

Project Principal & Principal Consultants	\$415 / hour
Snr. Associate	\$385 / hour
Associate & Snr. Engineer	\$285 / hour
Engineer	\$215 / hour
Typist	\$135 / hour
Third party expenses	at cost +10%

Work outside normal hours (Mon to Fri 7 am to 6 pm) will attract an additional surcharge. Any standby out of DP's control will be charged at \$215/hr for DP engineer and between \$95/hr and \$350/hr for Hired Plant. Cost for the field work (i.e. excavation, sampling, site visits and supervision, etc.) in excess to those quoted on the schedule, would be charged on a schedule of rates basis.



CONDITIONS OF ENGAGEMENT

These conditions of engagement apply to services carried out by the Company and with the Proposal, constitute the terms of an agreement between the Company and the Client. Review and acceptance of other conditions of engagement may be subject to payment of additional fees. Unless agreed in writing, these conditions shall apply to the exclusion of any inconsistent provision which may appear on any order form or other document issued by the Client. The Proposal and these conditions of engagement shall apply to any variations which may be agreed or ordered in the scope of the work and to any supplementary work on the project which may be the subject of verbal agreement.

1. Definitions. In these conditions of engagement:

'Company' means Douglas Partners Pty Limited (ABN 75 053 980 117) and its employees.

'Client' means the person to whom the Company provides services and who is ultimately responsible for payment. The Client may be represented by an Agent (e.g. Consulting Engineer, Architect, Solicitor etc.) who acts with his authority and arranges for or directs the services on his behalf.

'Proposal' means the Company's written offer to provide consulting or other services which accompanies these conditions.

'Services' means the services to be provided by the Company to the Client, as detailed in the Proposal.

Words importing the singular include the plural, and vice versa. Words importing any gender include the other gender.

Any legislation referred to in these conditions is to that legislation as amended, re-enacted or replaced and includes any subordinate legislation issued under it.

2. Role of the Company. The Company will exercise reasonable skill, care and diligence in providing the Services using assumptions and engineering practices that can be reasonably expected of a consultant providing services of a similar nature in the same locality under similar conditions.

The Company may appoint sub-consultants, sub-contractors or agents to perform any part of the Services.

- 3. Role of the Client. The Client (or Agent) must provide to the Company (where relevant):
 - · written acceptance of the Proposal.
 - · approvals for access, name of site contact, and keys.
 - survey plans and data regarding underground services.
 - other information relevant to the brief, e.g. details of proposed construction, loadings, construction levels and cross-section drawings.
 - any relevant information available regarding the presence on site of hazardous substances or any prior site usage which may have led to site contamination.

The Client must promptly inform the Company if any information or document provided to the Company is found to contain any material inaccuracies or is inadequate to enable the Company to properly perform the Services.

The Company is entitled to rely on information supplied by the Client for the purposes of providing the Services except where such information is in the reasonable professional opinion of the Company likely to be unreliable, outdated, inadequate, incomplete or inaccurate. The Company may suspend the provision of the Services if the Company is unable to obtain the information reasonably required to perform the Services provided written notice is given to the Client.

4. Role of Agent. If the Proposal is accepted by an Agent, the Agent warrants to the Company that he has the Client's authority to do so and accepts that he is personally liable for the Client's obligations under these conditions of engagement. If the person who accepts the Proposal does not indicate in writing that he is an Agent at the time of acceptance, he is the Client and liable accordingly.

5. Fees. The Proposal indicates whether the Company will provide the Services for a lump sum or a fee calculated by a schedule of rates. If a schedule of rates, then the Company may give an estimate of the total cost in the Proposal.

The estimate of total cost and the lump sum are based on the Company's understanding of the required scope of work and its expectation of sub-surface conditions as detailed in the Proposal. Any statements regarding an expectation of sub-surface conditions in the Proposal are provided for the purpose of providing a reasonable estimate of cost of Services and are not a professional opinion as to the site generally. The Company will endeavour to provide the Services within the estimate or sum provided.

If undisclosed or unexpected conditions are encountered then additional work not allowed for may be required. Under these circumstances the Company will endeavour to advise the Client and seek its approval before undertaking work which exceeds the estimate of total cost or lump sum.

If any activity is required which is outside the scope of the Proposal, the Company will charge for such additional work at the current standard hourly rates for personnel and equipment. Hire of outside services, if necessary, will be charged at cost plus 10% for procurement.

Unless otherwise stated Goods and Services Tax has not been included in either the rates or lump sum in our proposal and will be charged to the Client, when applicable.

The schedule of rates or lump sum in the Proposal is current for a period of three months from the date of the Proposal.

6. Terms of Payment. At the Company's election, invoices will be rendered monthly or on completion of the work and are due for payment in full within 30 days. The Company will charge interest at the rate of 1.5% per month on any invoices unpaid after 30 days.

If the Client disputes any part of the invoice then payment of the undisputed portion must not be delayed and a written schedule of the items disputed given to the Company within 10 business days of receipt of the invoice.

7. Limitation of Liability. The Company will effect and maintain professional indemnity insurance, public liability insurance and all other insurances which are appropriate for the Services.

Where the Client is a Consumer as defined under the Competition and Consumer Act 2010 (Cth) the Company's liability for a breach of warranty or any condition of this agreement, to the extent permitted by law, will be limited at the Company's option to either providing those Services again, or refunding the price of that part of the Services in respect of which the breach occurred.

The Company's liability to the Client for loss or damage caused by a failure to exercise reasonable care is limited to the greater of either:

- \$500,000; or
- three times the fee actually paid by the Client to the Company for the services concerned (to a maximum of \$3,000,000); or
- any other amount agreed in writing between the Client and the Company, subject to payment of an additional fee contributing to the cost of the extra insurance cover.

In all cases of legal liability (whether under contract, in statute, tort or law), the Company's liability to the Client for any loss, damage, liability, expense or cost suffered arising from or in connection with the Company's provision of Services shall:



- be limited to the extent to which the Company's own negligent or wrongful acts, errors or omissions contributed to the loss, damage, liability, expense or cost suffered; and
- not exceed the amount covered by the Company's relevant insurance policy.

The Company shall have no liability for:

- a claim where the Client acts contrary to the Company's written recommendation or purports to use the Services contrary to this agreement.
- a claim unless such claim is notified in writing to the Company within 12 months of the completion of the provision of the Services
- a claim involving consequential or economic loss or for loss relating to delay of the project.
- **8. Intellectual Property.** The Company retains intellectual property rights in all designs, documents, data, analyses and materials prepared or provided by the Company. The Company grants a royalty-free, non-exclusive licence to the Client to use this material in connection with the project for which it is prepared. The Client is not permitted to assign, transfer or convey this licence without the prior written consent of the Company.

If the Client is in breach of any obligation to make payment to the Company, the Company may revoke this licence and the Client shall cause to be returned to the Company all material in which such copyright subsists which is in its possession or otherwise destroy such material as directed by the Company.

The Client must not alter or amend any material produced by the Company and must acknowledge the Company's work in all material incorporated into other documents or reports or otherwise used in the public domain.

9. Termination, Disputes and Governing Law. This agreement may be terminated by either party if a party commits a material breach of its obligations and this is not remedied within fourteen (14) days of receipt of written notice requiring the breach to be remedied.

In the event of termination, the Company shall be paid for all services performed to the termination date plus reasonable termination expenses.

Any disputes between the Company and the Client shall first be the subject of mediation. This provision shall not prevent the Company from instituting legal action at any time to recover moneys owing and the Client shall pay to the Company the costs and expenses (including mercantile agent's costs and legal costs) incurred by the Company in obtaining payment of any amount not paid by the due date.

The agreement between the Company and Client shall be governed by the laws of the State or Territory where the project site is located or, in the event that there is no specific site, of the office in which the Services are performed.

10. Field Work. The Company's fees allow for the establishment of equipment to carry out drilling, sampling and testing referred to in the Proposal. In providing the fee estimate and agreeing to conduct the Services, it is assumed that access is available for the equipment and that an adequate supply of water is available if required.

Standby rates will be applicable for delays associated with access, providing water, inclement weather, bogging of vehicles and equipment or any other delays not readily avoided.

The Client accepts responsibility for ensuring that the site is reasonably accessible and safe for the Company and its personnel, sub-consultants, sub-contractors and agents to conduct any field work required. The Company and its personnel, sub-consultants, sub-contractors and agents shall comply with any reasonable directions given by Client in respect of safety and access while on site. If reasonable and safe access to the site cannot be obtained, the Company may suspend the provision of Services for the period specified in a written notice given to the Client. Remobilisation and

standby costs incurred as a result of suspension will be borne by the Client.

The unit rates provided are for work within the reasonable capacity of the proposed equipment, using the techniques specified. Unless stated otherwise, no provision has been made for drilling hard filling, concrete, boulders, cobbles or gravels. Equipment, cones, or drilling bits damaged or lost in hard filling, concrete, gravels, cobbles or boulders will be charged at cost plus 10%. Time spent attempting to recover such equipment will be charged at the appropriate rates for the personnel and equipment.

The methods used indicate sub-surface conditions only at specific locations where samples were obtained or testing completed, only at the time the work was carried out, and only to the depths penetrated. Samples and test results cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations.

Samples and cores obtained from the investigation will be retained, unrefrigerated without a charge for a period of three months following the submission of the report. Thereafter, this period of time may be extended at the Client's specific request for an agreed fee.

- **11. Laboratory Testing.** Laboratory testing will be carried out in accordance with Australian or relevant Standards as agreed, or generally accepted industry practice.
- 12. Reports. Reports and documentation are provided for the exclusive use of the Client at a specific time, for a specific purpose and particular project. They should not be used by or relied upon for other projects or purposes on the same site or by a third party without written permission from the Company. This is because project details, statutory requirements and site conditions may change with time affecting report recommendations and conclusions.

The Company does not assume responsibility for interpretations or conclusions from other's review of the report or the test data, which are not otherwise supported by an expressed statement, interpretation, outcome or conclusion stated in the report.

Site Investigations. Written reports will be provided on completion of the work giving a statement of procedures and all field and laboratory results. Interpretation and analysis of results and comments thereon will be provided, where and as indicated in our Proposal. The reports will be based on normally accepted theory and practice and on the limits of information available.

The Company does not assume responsibility for the adequacy of its recommendations when they are used in the field without the Company being retained to observe construction. This is because during construction variations in sub-surface conditions between sampling locations may be exposed which require re-evaluation of previous recommendations.

Earthworks Testing. Written test reports will be provided in accordance with appropriate Standards and with NATA endorsement where appropriate. Unless otherwise agreed, earthworks reports will not contain interpretive comment or advice. Engineering reports providing interpretive comment or an overview of results, can be provided where specifically requested and at an agreed fee.

13. Construction Site Services. The Company does not supervise and is not responsible or liable for the work of construction contractors.

The Company is not responsible or liable for any advice on site which is not confirmed in writing.

Any certification relating to construction or site conditions will be provided in writing and on terms approved by Douglas Partners.