

# Section 1

## Introduction

### Preamble

This section introduces the Sutton Forest Sand Quarry Project to develop a sand extraction and processing operation (“the Proposal”) in the NSW Southern Highlands approximately 1.7km southwest of the Sallys Corner (Sutton Forest) Interchange on the Hume Highway. This section provides:

- an outline of the scope and format of the document;
- an introduction to the Applicant;
- relevant background about the Proposal;
- a summary of the approvals process; and
- the personnel involved in the design of the Proposal, document preparation and specialist consultant investigations.

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## 1.1 SCOPE

Sutton Forest Quarries Pty Ltd (the Applicant) proposes to develop and operate a sand extraction and processing operation (the Proposal) at 13302 Hume Highway, Sutton Forest (the Site) (see **Figure 1.1**). The Site is located west of the Hume Highway, approximately 1.7km southwest of the Sallys Corner Interchange (also known as the Sutton Forest Interchange).

This document has been prepared by R.W. Corkery & Co. Pty Limited in support of an application by the Applicant for Development Consent for the Proposal. For the purposes of this document, the Proposal would involve:

- the development and operation of the sand extraction operations;
- the operation of sand processing plants and management of process residues;
- the despatch of sand products; and
- progressive rehabilitation of the disturbed areas.

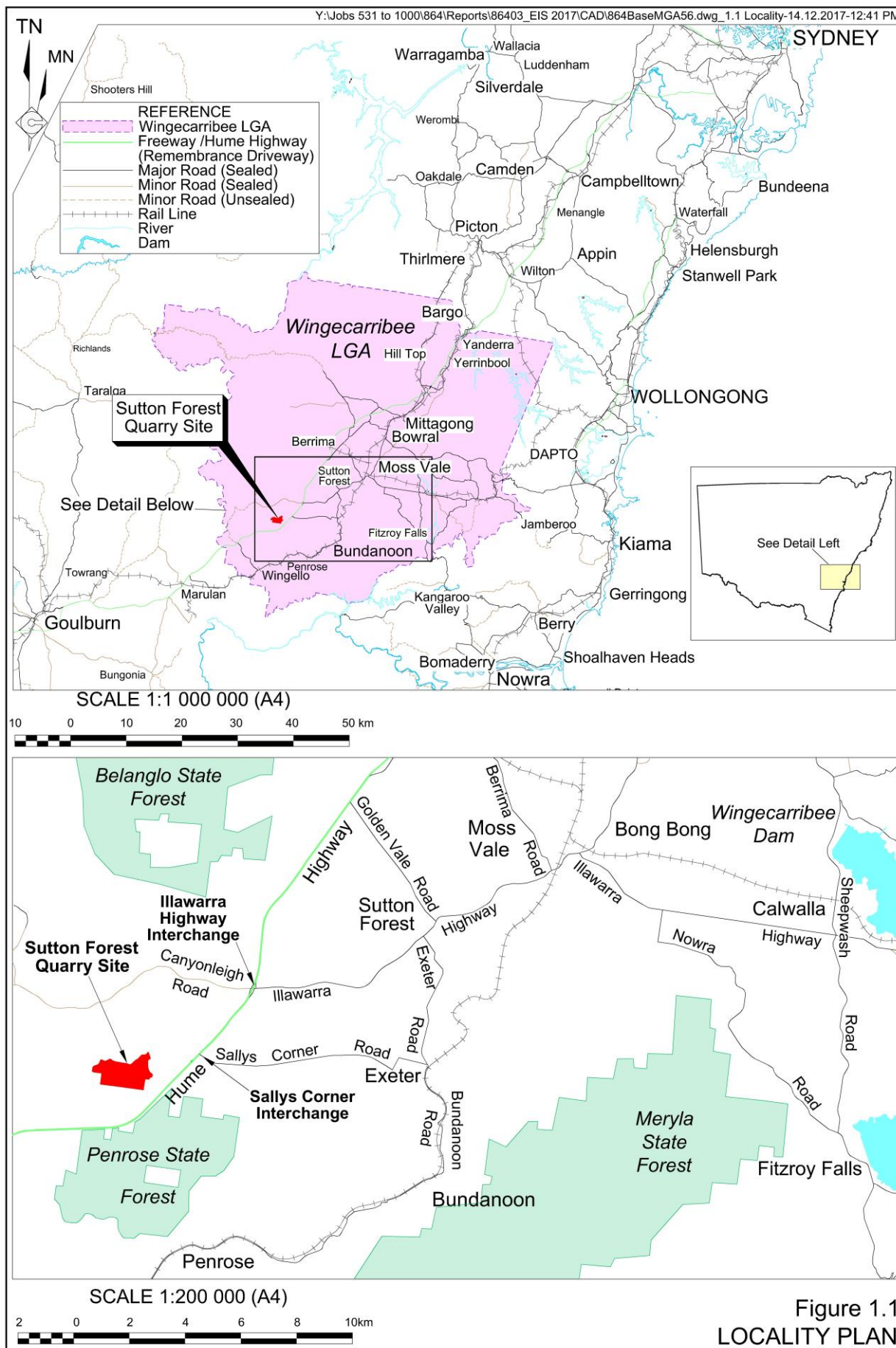
This document defines all of the components of the Proposal and provides information on the key environmental issues addressed in the design and assessment of the Proposal. This *Environmental Impact Statement* (EIS) has been prepared in accordance with the provisions of Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979*.

This EIS describes the proposed vegetation clearing, sand extraction, processing, product transportation and staged rehabilitation activities within the Site, i.e. for the first 30 years of a projected 45 year Quarry Project. Mitigation measures and management controls the Applicant would adopt to avoid or reduce potential impacts within and surrounding the Site are also provided. The residual impact(s) are described and proposed monitoring outlined to assess the ongoing environmental performance of the Proposal.

The information presented in this document covers all aspects of the planning, development, operation, rehabilitation, environmental management and monitoring for the Proposal at a level of detail consistent with industry standards, the scale of the proposed operations and the potential for environmental impacts. These aspects are presented in a manner that addresses the specific Director-General Requirements (DGRs) (**Appendix 1**) issued by the then Department of Planning and Infrastructure (DP&I) (now Department of Planning and Environment (DPE)) and the requirements of other State and local government agencies, together with the issues raised during the community consultation process. The coverage of the DGRs and requirements of all government agencies within this EIS is presented in **Appendix 2**. It is noted that the various assessments presented in this document have been undertaken in accordance with the relevant guidelines nominated at the time when the DGRs were issued.

## 1.2 FORMAT OF THE REPORT

The EIS has been compiled in a single volume which includes seven sections of text, a reference section, glossary, and a set of Appendices. The EIS is supported by a two volume *Specialist Consultant Studies Compendium* incorporating the reports prepared by specialist environmental consultancies engaged to assist the Applicant in its design of the Proposal and to assess specific aspects of the Proposal.



The EIS has been structured as follows.

- Section 1:** introduces the Proposal, the Applicant and provides relevant background information. Information on the approvals process is provided together with information on the management of investigations for the EIS.
- Section 2:** describes the Applicant's objectives and proposed sand extraction, processing, product despatch, hours of operation, infrastructure and services, water and waste management, rehabilitation activities and the biodiversity offset strategy.
- Section 3:** provides a description of the process used to identify and prioritise the key issues for assessment in accordance with the DGRs for the Proposal and with reference to stakeholder consultation through the planning stages of the Proposal, the planning and legislation context and relevant guideline documents.
- Section 4:** presents the environmental setting of the Site, including information on topography, geology, meteorology, land ownership and land use.
- Section 5:** describes the existing environment, proposed management, assessment of potential impact and maintenance/monitoring requirements for the key issues identified in Section 3.
- Section 6:** provides a compilation of the environmental management and monitoring measures for the entire Proposal.
- Section 7:** evaluates the Proposal in terms of biophysical, economic and social considerations, and the goals and guidelines of Ecologically Sustainable Development. A conclusion is provided for the EIS.
- Section 8:** lists the various source documents referred to for information and data used during the preparation of the EIS.
- Section 9:** presents the glossary of the technical terms, acronyms, symbols and units used throughout the EIS.

**Appendices:** present the following additional information.

1. The Director-General's Requirements and submissions of the consulted government agencies.
2. The coverage of issues arising from 1. above.
3. A SEPP 33 risk screening.
4. An environmental risk assessment.
5. Consultation Summary

The EIS has been prepared with the input of specialist consultancies to prepare a total of eleven specialist reports. Their reports have been compiled into the two-volume *Specialist Consultant Studies Compendium* placed on exhibition with the EIS. The contents of these reports are summarised into the appropriate section(s) of the EIS. A full copy of the compendium is included on the USB compiled for the Proposal.

## 1.3 THE APPLICANT AND APPLICATION AREA

### 1.3.1 The Applicant

The Applicant for the proposed Sutton Forest Sand Quarry Proposal is Sutton Forest Quarries Pty Ltd, a private company established as a Joint Venture (JV) partnership between the Tulla Resources Group Pty Limited and Mr Patrick Hallinan with each JV partner holding 50% equity in the Proposal.

Tulla Resources Group Pty Limited is a private equity arm of the Tulla Group Pty Limited. The Tulla Group is an investment group founded by Mr Kevin Maloney and owned by the Maloney family. The Tulla Group is a major investor in resources in Australia and overseas. Mr Maloney has a long history of involvement in the resources industry ranging from project financing, executive management and equity ownership. The Tulla Group has direct management responsibility for several mine developments in both Australia and internationally.

Mr Hallinan and the Hallinan family operate the Hi-Quality Group which has a significant involvement in quarrying, waste management and transport industries. The Hi-Quality Group has extensive experience in the quarrying industry through its operation of several quarries within the Greater Sydney Region, NSW Southern Highlands and Greater Melbourne.

The Applicant has entered into an agreement with the owner of Lot 4 DP253435 that enables it to lease the property, allowing for the extraction and processing of the defined sand resource on the property.

### 1.3.2 The Application Area

The Application area for the proposed Sutton Forest Sand quarry comprises three component areas, namely the Site, Quarry Access Road and the Quarry Interchange.

#### The Site

The proposed Quarry is located west of the Hume Highway, approximately 1.7km southwest of the Sallys Corner Interchange. For the purposes of the Proposal, “the Site” displayed on **Figure 1.2** comprises a “Quarry Operations Area” covering 94ha, a 0.7km section of the “Quarry Access Road” and a 102ha on-site biodiversity offset area. The Quarry Operations Area is located wholly within Lot 4 DP 253435.

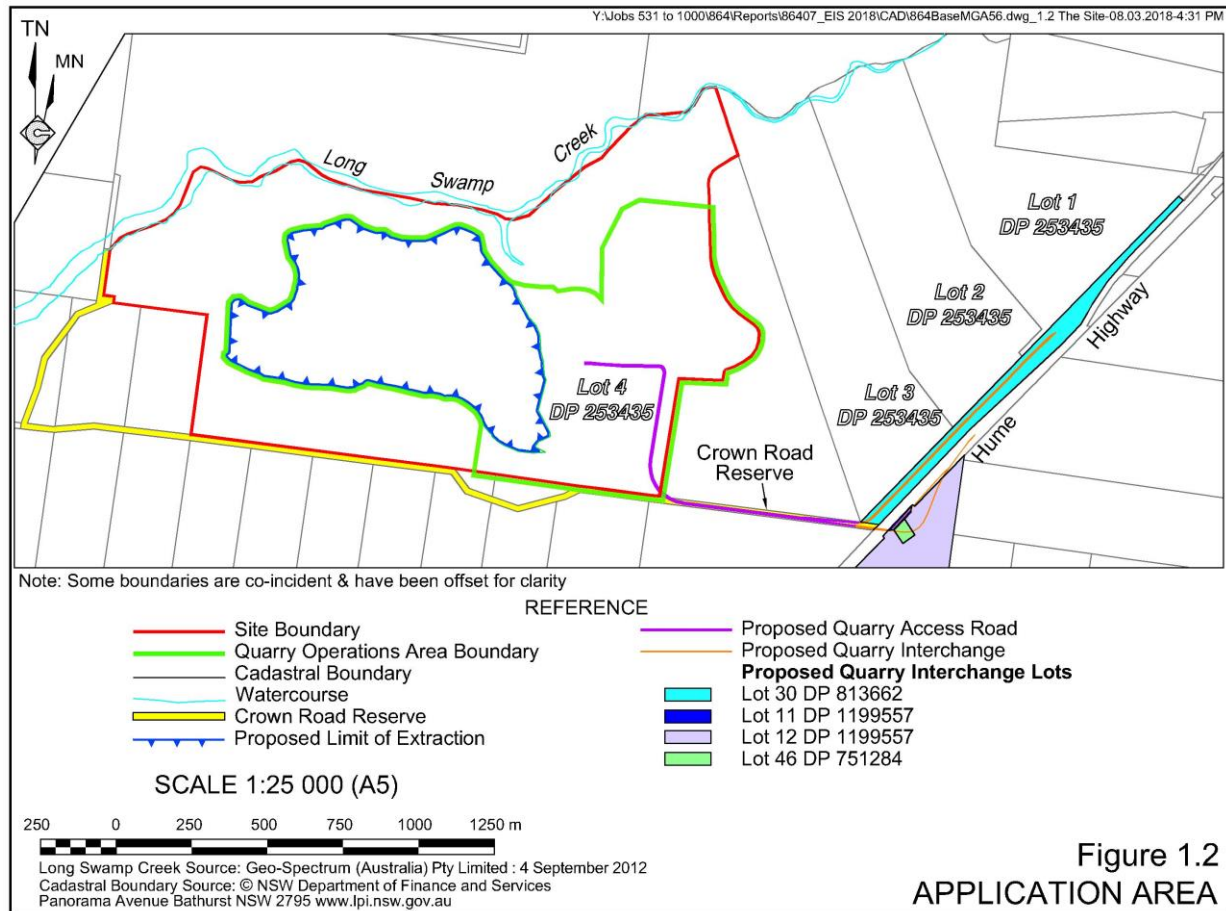
#### Quarry Access Road

The section of the Quarry Access Road between the Site and the Hume Highway is located within Crown Road Reserve between Lot 12 DP241054 and Lot 4 DP253435. The Applicant proposes to seek approval of DPI – Crown Lands to open the 0.7km section of Crown Road Reserve to be used for the Quarry Access Road as a dedicated public road.

#### Quarry Interchange

The roadworks required for the proposed Quarry Interchange would be located on Lots 11 and 12 DP 1199557, Lot 46 DP 751284, Lot 30 DP 813662 and the Hume Highway.





## 1.4 BACKGROUND TO THE PROPOSAL

Sydney consumes an average of approximately 6.5 million tonnes of construction sand annually, approximately two-thirds of which is fine to medium-grained sand. The major uses of fine to medium-grained sand are for concrete manufacture, mortar for bricklaying, roof tile and fibre cement manufacture, plastering and production of concrete products e.g. blocks, culverts, pipes, etc. The price and demand for particular types of sand are determined by their use and distance from the source to the market.

Historically, the bulk of Sydney's fine sand has been supplied from Kurnell Peninsula (up to 1.5Mtpa). Given the supply of coarse sand has ceased from Penrith Lakes, greater reliance is now being placed by the concrete industry upon the use of "manufactured sands", i.e. fine materials <5mm in size produced from hard rock crushing operations. However, for technical as well as economic reasons, natural fine to medium-grained sand is still preferentially used in the manufacture of concrete. The fine to medium-grained sand for the Sydney Market is currently supplied from sources at Maroota, the Somersby Plateau, Newnes Plateau and the Southern Highlands. The supply of fine-grained sand from Kurnell Peninsula is likely to cease before the end of the current decade.

## **1.5 ENVIRONMENTAL MANAGEMENT AND DOCUMENTATION**

### **1.5.1 Environmental Management**

On-going environmental management of the Proposal, including the assessment of the Applicant's performance with respect to the commitments made in this document (see Section 6) and the implementation of development consent or licence conditions, would be the ultimate responsibility of the Applicant's management team. The Quarry Manager would remain responsible for day-to-day on-site supervision including the integrated implementation of all environmental safeguards identified in this document, and all additional documentation as developed throughout the life of the Quarry. Assistance would be provided by specialist consultants, as and when required.

The Applicant is committed to undertaking all extraction, processing, transportation and associated activities in a responsible and pro-active manner which:

- i) enables the co-existence of the various land uses in the area;
- ii) is environmentally and socially responsible; and
- iii) minimises any real or perceived impacts on other members of the surrounding community. Central to this approach would be regular contact with neighbours and members of the local community and a willingness to openly discuss actual or perceived problems and to implement appropriate changes to operational procedures.

### **1.5.2 Environmental Documentation**

Successful environmental management invariably involves regular, organised documentation to ensure that, irrespective of personnel changes, all aspects of planning, environmental control, monitoring and responses to problems are properly recorded. The documentation produced by the Applicant would reflect the conditions included within the development consent, should it be granted. It is anticipated the following documentation would be assembled for the management of the Quarry.

- Environmental Management Strategy.
- Water Management Plan.
- Landscape and Rehabilitation Management Plan.
- Cultural Heritage Management Plan.
- Noise Management Plan.
- Air Quality Management Plan.
- Traffic Management Plan.
- Vegetation and Habitat Management Plan.
- Incident Management Plan.



It is likely that all of the above documents would be incorporated as “Sub-plans” within the overarching Environmental Management Plan for the Quarry.

In addition to the Environmental Management Plan and Sub-plans, the Applicant would prepare an Annual Review recording an overview of the activities in each operational year with an assessment of compliance of the various conditional requirements in the development consent, environment protection licence and any other licences. The document would also report upon any specific requirements nominated in the conditions and summarise and evaluate all monitoring data collected during the preceding year.

The principal chapter headings for the Annual Review would be as follows.

<b>Preamble:</b>	presenting an overview of the report and its contents.
<b>The Past 12 Months:</b>	presenting information of construction activities, extraction operations, processing operations, product despatch, fines management and rehabilitation / final landform revegetation activities.
<b>Environmental Management and Monitoring:</b>	covering groundwater and surface water management, weed management, noise management, air quality management, vegetation and threatened species management, cultural heritage management, together with an assessment of the effectiveness of mitigation measures and compliance issues.
<b>The Next 12 Months:</b>	presenting plans for the following 12 months of operations with respect to extraction and processing operations, silt placement, final landform preparation and revegetation.
<b>Appendices:</b>	present the relevant approvals, compliance tables, annual production data and monitoring data.

## **1.6 MANAGEMENT OF INVESTIGATIONS**

The preparation of this document has involved a study team managed by Mr Rob Corkery, M.Appl.Sc., B.Sc (Hons), Principal of R.W. Corkery & Co Pty. Limited, assisted by Mr Nicholas Warren M.Env.Sc., M.Bus (Marketing), B.Sc. Senior Environmental Consultant and Mr Paul Ryall, B.Sc. (Hydrology) Environmental Consultant, both with RWC.

Strong emphasis has been placed upon a multi-disciplinary team approach to the design of the Proposal, the description of the existing environment, identification of key issues, development of appropriate mitigation measures and management controls and assessment of impacts.

Details of the Proposal have been provided by Mr Ron Bush, B.Sc.(Geol), G.Cert.Eng.(Env), G.Dip.Sc.(GW Hyd), M.Plan., M.Pro.Dev., M.Eng. (Strategic Business Development Manager – Environment and Planning with the Hi-Quality Group).

The following specialist consultancies have been commissioned to undertake an assessment of the existing environment, potential constraints posed by the Proposal, identification of appropriate design and operational safeguards and an assessment of the Proposal's impacts.

- Transport and Urban Planning – Traffic Assessment.
  - Mr Terry Lawrence, M. Urban Planning.
- Larry Cook Consulting Pty Limited – Hydrogeological Assessment.
  - Mr Larry Cook, M.App.Sc, M.Sc.
- Coffey Geotechnics Pty Ltd –Groundwater Modelling Assessment.
  - Ms Corinna De Castro, M.Sc (Groundwater Resources), B. Sc. Env.
  - Mr Ben Rotter, PhD, M.Eng (Hons).
- Kevin Mills & Associates in association with Lesryk Environmental Consultants – Flora and Fauna Assessment.
  - Dr Kevin Mills, PhD, B.Sc (Hons); and
  - Mr Deryk Engel, B.Env.Sc (Hons).
- Niche Environment and Heritage Pty Limited – Biodiversity Offset Assessment.
  - Ms Sian Griffiths, B.Env.Sc. (Hons).
- Biosis Pty Ltd – Quarry Access Road Ecological Study
  - Matthew Misdale, B.Env.Sc
  - Kayla Asplet, B.Env.Sc (Hons)
- SEEC – Surface Water and Soils Assessment.
  - Mr Mark Passfield, B.Sc. (Hons) – Eng. Geol. and Geotech.
- Cardno – Aquatic Ecology Assessment.
  - Dr Marcus Lincoln Smith, MSc, PhD, B.A., BSc. (Hons.).
- Spectrum Acoustics Pty Limited – Noise Assessment.
  - Dr Neil Pennington, PhD, B.Sc. (Physics), B.Math (Hons).
- Landskape Natural and Cultural Heritage – Aboriginal Heritage Assessment.
  - Dr Matt Cupper, BA (Archaeology/Classical History), BSc (Hons) (Botany), PhD (Archaeology/Geology)
- Pacific Environment Pty Ltd – Air Quality Assessment.
  - Ms Judith Cox, B. Eng. (Hons).

The results of the studies from each of the above consultancies have been incorporated into this document.

The Applicant also commissioned

- GHD to prepare a conceptual design of the proposed Quarry Interchange and Quarry Access Road.
- Dr Frans Kalf of Kalf and Associates Pty Ltd, hydrogeological numerical modelling specialists, to peer review the hydrogeological and groundwater modelling assessment for the Proposal.