Environmental Management Strategy

Multiquip Quarries

ABN: 44 101 930 714

Environmental Management Strategy

for the

Ardmore Park Quarry

Via Bungonia, NSW

Prepared in conjunction with:

R.W. CORKERY & CO. PTY. LIMITED

August 2011

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ACRONYMS AND COMMON TERMS USED THROUGHOUT THIS REPORT

AEMR	-	Annual Environmental Management Report
AQMP	-	Air Quality Monitoring Program
CCC	-	Community Consultative Committee
DECCW	-	Department of Environment, Climate Change and Water
DoP	-	Department of Planning
EA	-	Environmental Assessment
EMS	-	Environmental Management Strategy
ISO	-	International Standards Organisation
Quarry	-	The Ardmore Park Quarry
Quarry Site	-	The approved area of PA 07_0155
PA	-	Project Approval

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1.0 INTRODUCTION

The Minister for Planning has conditionally approved (see **Annexure 1**) extractive and processing operations at the Ardmore Park Quarry ("the quarry"), located approximately 4km south of the village of Bungonia and 25km southeast of Goulburn in the southern tablelands of New South Wales (see **Figure 1**). **Figure 1** also presents the proposed transport route for quarry products between the quarry and the Hume Highway. The transport route incorporates approximately 3.7km of Oallen Ford Road, 0.15km of Mountain Ash Road and 14.7km of Jerrara Road along with a 1.8km section of private road to be constructed to allow heavy vehicles travelling to and from the quarry to bypass the village of Bungonia.

This Environmental Management Strategy (EMS), which forms part of the integrated Quarry Management System, describes the overall framework for environmental management for the construction and operation of the quarry and Bungonia Bypass. The EMS also addresses the principal strategies to be adopted by Multiquip Quarries (hereafter "Multiquip"), including compliance management and monitoring, conflict resolution and consultation / information dissemination processes.

Multiquip's principal objective is to develop and operate a combined sand and hard rock quarry to supply the construction industry in Sydney, Canberra, the South Coast and Goulburn, particularly for the sand products. In developing and operating the quarry, Multiquip also has the objectives to:

- meet State and local government agency criteria, accepted industry standards and reasonable community expectations;
- operate the quarry in a safe and environmentally responsible manner;
- ensure the amenity of Bungonia village is not adversely impacted; and
- progressively create a final landform and environment suitable for agricultural activities and/or rural residential style properties.

The requirements with respect to the timing for submission and contents of the EMS are contained within *Condition 5(1)* of PA 07-0155. **Table 1** reproduces Condition 5(1) and identifies where in this document each required element of the EMS is addressed.

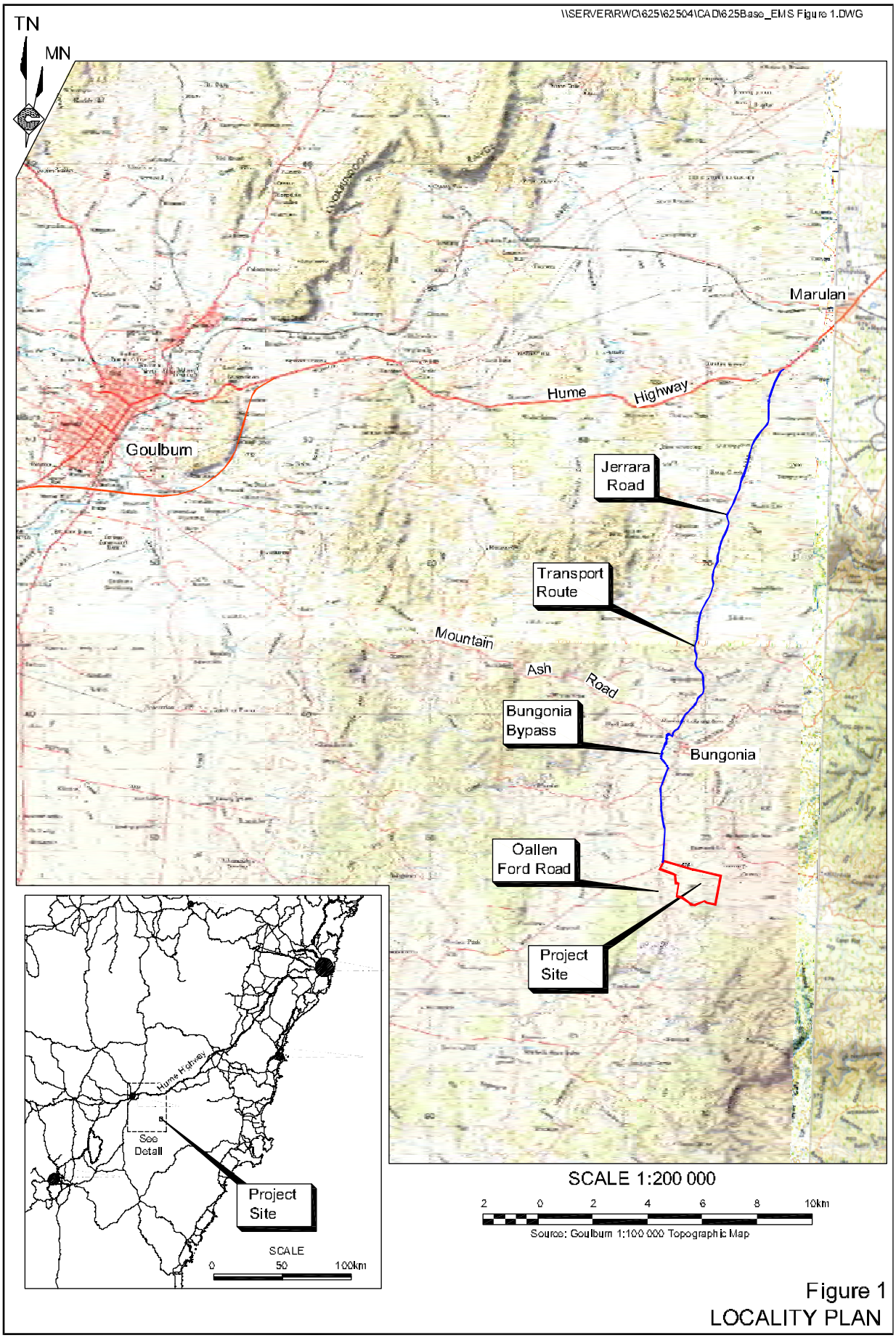

Figure 1
LOCALITY PLAN

Table 1
Coverage of Requirements in Condition 5(1)

Requirement	Coverage
SHEDULE 5: ENVIRONMENTAL MANAGEMENT, MONITORING, REPORTING & AUDITING	
1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy shall be submitted to the Director-General prior to carrying out any development on site, and must:	
(a) provide the strategic context for environmental management of the project;	1.2
(b) identify the statutory requirements that apply to the project;	3.0
(c) describe in general how the environmental performance of the project would be monitored and managed;	5.0
(d) describe the procedures that would be implemented to: • *keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project;*	6.1
• *respond to any non-compliance;*	7.0
• *manage cumulative impacts; and*	
• *respond to environmental incidents and emergencies; and*	8.0
(e) describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the project.	4.0 and Appendix 2

1.1 OBJECTIVES OF THE STRATEGY

The objectives of the EMS are as follows.

- Provide an overall framework for the environmental management at the quarry and for the transport operations.
- Ensure the operations of the quarry are managed in accordance with:
  - The conditions associated with PA 07_0155;
  - Environment Protection Licence (EPL);
  - Other licences and approvals from Government agencies; and
  - Commitments made by Multiquip within the *Environmental Assessment* for the modified Ardmore Park Quarry (RWC, 2009).

1.2 STRATEGIC CONTEXT

The EMS has been prepared to outline Multiquip's commitment to proactive community and environmental management and demonstrate a commitment to reducing environmental and community impacts. The structure of the EMS is based around the ISO 14001 standard for environmental management systems 'Plan-Do-Check-Act" process. **Table 2** provides a summary of this strategic approach to environmental management as described in the EMS.

Table 2
Strategic Context of the Environmental Management Strategy

Feature	Context within EMS	EMS Section
Plan	• Maintain register of legal and other requirements	Section 3
	• Maintain register of environmental aspects and impacts	5.1
	• Set environmental objectives and targets	Annexure 2
	• Develop environmental programs and management plans	5.1
Do	• Identify and allocate responsibilities for environmental management	Annexure 2
	• Develop and maintain operating procedures	Section 5
	• Maintain external communications with regulators, members of the public and other stakeholders	Sections 6 and 7
	• Effectively manage complaints	6.2
	• Effectively manage disputes	6.3
	• Undertake operations in compliance with PA 07_0155	Table 1
	• Manage cumulative impacts of Multiquip and other operations	Not Yet Applicable
	• Implement emergency preparedness and response strategies / plans	Section 8
Check	• Complete an annual review of compliance with environmental statutory requirements during the preparation of the Annual Environmental Management Report	5.1
	• Undertake environmental monitoring	Section 5
	• Undertake environmental inspections	Section 7
	• Review non-compliances and corrective/preventive action plans	Section 7
	• Commission independent audits of operations	Section 7
Act	• Undertake a periodic review and revision of the EMS by senior management	Section 9
	• Implement and review non-compliance and corrective/preventive actions	

2.0 OVERVIEW OF THE ARDMORE PARK QUARRY

The quarry will incorporate an extraction area ultimately covering approximately 47ha, with additional disturbance associated with the construction of processing areas, water management structures and an internal road network increasing the overall area of disturbance to approximately 61ha. The basalt is sufficiently jointed such that no blasting will be required to break / fracture the rock for removal, with the sand and basalt extracted by ripping, excavating and loading. The ripped and removed raw materials will then be transferred to either a crushing and screening plant (basalt), mobile dry screening plant (sand) or washing plant (sand) for processing. The screening, crushing and/or washing will produce various quality sand, aggregate and road building materials for use in the growing construction markets of Sydney, Canberra, the South Coast and Goulburn.

Figure 2 displays the locations of all major components within the Quarry Site.

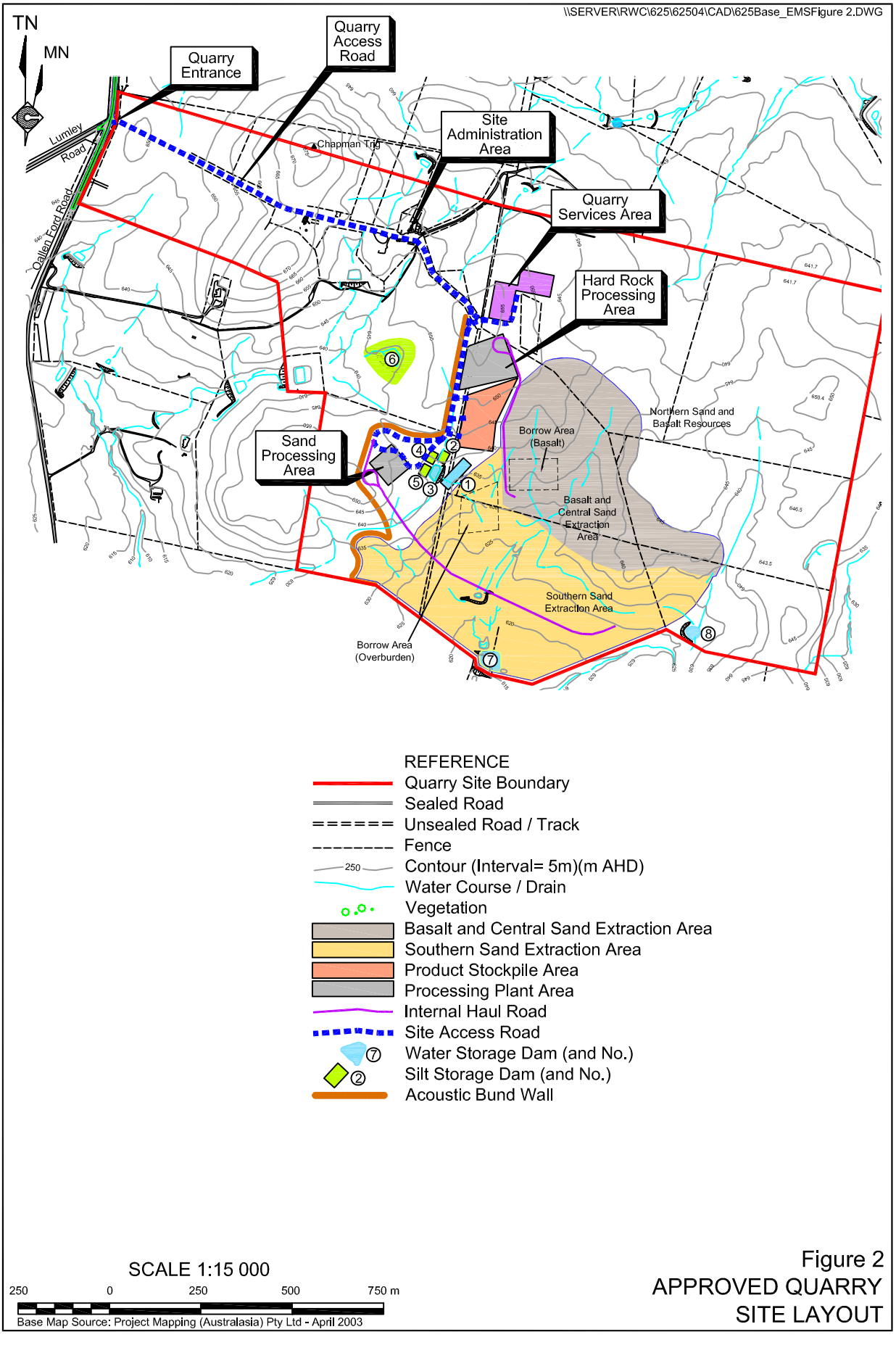

Figure 2
APPROVED QUARRY SITE LAYOUT

Multiquip will produce up to 400 000tpa of sand and hard rock products, the exact proportion of each to be determined based on the extraction sequence and market demand. Multiquip anticipates that sand production will vary between 100 000tpa and 400 000tpa, while the production of hard rock products may vary from 0 to 300 000tpa. All quarry products will be despatched by road and Multiquip will upgrade those public roads (to the Hume Highway) to be used to meet the desired standard of Council (3.5m pavement width with a 0.5m sealed shoulder) and construct a private by-pass road to the west of Bungonia Village.

Multiquip also proposes to import through the backloading of trucks delivering quarry products, Virgin Excavated Natural Material (VENM), typically comprising clay and shale excavated at construction sites, to assist in the rehabilitation of the final landform. It is anticipated that for the initial 4 to 5 years of the project, VENM importation will be limited to 20 000tpa, increasing to up to 130 000tpa throughout the final years of the project life.

Through placement and consolidation of silt removed from the extracted sand by the washing process, importation and placement of VENM and replacement of overburden within the completed sections of the extraction area, Multiquip will create a final landform with moderate to gentle slopes, similar to those of the pre-extraction environment. Through the replacement of soil resources, sowing native grass species and selective planting of native trees and shrub species, the final landform will be returned to agricultural land use, with selected areas of native vegetation management.

3.0 STATUTORY REQUIREMENTS

3.1 APPROVALS, LICENCES, PERMITS AND LEASES

The following approvals will be obtained to enable the quarry to proceed.

(i) **Environment Protection Licence – Department of Environment Climate Change and Water**. An Environment Protection Licence is required under Section 47 of the *Protection of the Environment Operations Act 1997* (POEO Act) for extractive industry and crushing, grinding and separating works. Notably, as VENM is not classified as a waste material under Schedule 1 of the POEO Act, the quarry will not be considered a waste facility and a licence will not be required for this activity.

(ii) **Water Licence – Department of Water and Energy**. A licence is required under Section 116 of the *Water Act 1912* given the quarry will require the extraction of groundwater from a bore on the "Ardmore Park" property.

(iii) **Road Construction Permit – Goulburn Mulwaree Shire Council**. A Section 138 Permit from Goulburn Mulwaree Shire Council is required under the *Roads Act 1993* for roadworks on the three public roads to be used for the transportation of quarry products. Detailed construction plans and Traffic Management Plans of the proposed intersection construction and road upgrading works have already been submitted to Council and assessed to be satisfactory. The required permits are yet to be issued.

3.2 LEGISLATION

The key reference documents include the following Acts and their respective regulations.

- *Contaminated Land Management Act 1997.*
- *Dangerous Goods Act 1975.*
- *Environmental Planning and Assessment Act 1979.*
- *Fisheries Management Act 1994.*
- *Local Government Act 1993.*
- *Mine Health and Safety Act 2004.*
- *National Parks and Wildlife Act 1974.*
- *Native Vegetation Conservation Act 1997.*
- *Occupational Health and Safety Act 2000.*
- *Protection of the Environment Administration Act 1999.*
- *Protection of the Environment Operations Act 1997.*
- *Roads Act 1993.*
- *Soil Conservation Act 1938.*
- *Threatened Species Conservation Act 1995.*
- *Water Act 1912.*
- *Water Management Act 2000.*

3.3 POLICIES AND GUIDELINES FOR QUARRIES

The following policies and guidelines administered by Industry & Investment NSW – Mineral Resources are, or are potentially, of relevance to the integrated Quarry Management System.

- EDP05 Environmental Policy Implementation Principles: Rehabilitation and Mine Closure.
- EDG05 Preparation of Annual Environmental Management Reports.
- EDG07 Environmental Management System: Policies and Guidelines.
- EDG08 Best Practice and Reference Documents.

3.4 MISCELLANEOUS STANDARDS AND GUIDELINES

3.4.1 Standards

The following standards are, or are potentially, of relevance to the integrated Quarry Management System for the quarry. AS refers to an "Australian Standard, NZS refers to "New Zealand Standard" and ISO refers to the "International Standards Organisation".

- AS 2922 – 1987 Ambient Air – Guide for Siting of Sampling Units.
- AS 2923 – 1987 Ambient Air – Guide Horizontal Wind for Air Quality Application.
- AS 2601 – 2001 Demolition of Structures.
- AS 3580.10.1 – 2003 Methods for Sampling and Analysis of Ambient Air – Determination of Particulates – Deposited Matter – Gravimetric Method.
- AS 4282 – 1997 – Control of Obtrusive Effects of Outdoor Lighting.
- AS 1940 – 2004 and Amendment 1 – 2004 The Storage and Handling of Flammable and Combustible Liquids.
- AS 1596 – 2002 The Storage and Handling of LP Gas.
- AS / NZS 3580.9.6 – 2003 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter PM_{10} high volume sampler with size–selective inlet – Gravimetric Method.
- AS / NZS 3580.9.3 – 2003 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – Total Suspended Particulate Matter (TSP) – High volume sampler gravimetric method.
- ISO 14011 – 2004 Environmental Management Systems – Requirements with guidance for use.
- ISO 19011 – 2002 Guidelines for Quality and/or Environmental Systems Auditing.

3.4.2 Guidelines

The following guidelines are, or are potentially, of relevance to the integrated Quarry Management System for the quarry.

- NSW EPA Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA, 1998).
- NSW EPA Approved Methods and Guidance for Modelling in Assessment of Air Pollutants in NSW (EPA, 2001).
- Guidelines for Best Practice Community Consultation in the NSW Mining and Extractive Industries (NSW Minerals Council, 1999).
- Managing Urban Stormwater: Soils and Construction (Department of Housing, 2004).

- NSW EPA Environmental Noise Management – NSW Industrial Noise Policy (EPA, 2000).
- Environmental Noise Control Manual (EPA, 1994).
- NSW EPA Environment Criteria for Road Traffic Noise (EPA, 1999).
- Australian Dangerous Goods Code 6th Edition.

4.0 ENVIRONMENTAL MANAGEMENT RESPONSIBILITY PERSONNEL AND ROLES

Multiquip recognises that the success of the quarry's development and operation from a corporate, neighbour and broader community perspective will be enhanced through the achievement of the following objectives.

(i) The development of a sense of project ownership, community membership and environmental responsibility by all Multiquip and contracted personnel.

(ii) A recognition and acceptance of the physical, biological and social sensitivities of the quarry by all Multiquip and contracted personnel.

(iii) Developing a culture of environmental awareness as an integral part of all planning and day-to-day activities. The awareness will be achieved through workforce and, to a lesser extent, community education.

(iv) Maintaining an honest and open relationship with the community members and ensuring expeditious responses to any issues which may arise.

Ultimate responsibility for the achievement of the above objectives will lie with the General Manager of Multiquip Quarries. Overall site-based responsibility for all activities and all personnel on the quarry site, including their compliance with all applicable laws, regulations, licences, approvals, the conditions of consent and achievement of the desired environmental outcomes, the responsibility of the Quarry Manager.

In addition to his overarching site-based responsibility, the Quarry Manager will be specifically responsible for:

- ensuring all contractors, sub-contractors and service-personnel are appropriately qualified and/or licenced to undertake the required work and have a good environmental performance record;
- ensuring all operations are undertaken in accordance with relevant environmental legislation;
- providing the final sign-off and/or authorizing distribution of, all environmental reports / management plans etc;
- workforce induction / training; and
- communication with statutory authorities and the community.

An Environmental / Compliance Officer will also be appointed by Multiquip on a part-time basis for the quarry. The Environmental / Compliance Officer will assist the Quarry Manager and have the responsibility (and commensurate authority) to ensure all personnel conform with the requirements of the relevant environmental laws and regulations, consents, licences, approvals and environmental management systems and plans.

Specifically, the Environmental / Compliance Officer will be responsible for:

- management / implementation of the various management plans;
- considering and advising on matters identified in the development consent and compliance with those conditions, and other environmental matters;
- receipt and response to complaints;
- co-ordination / management of effective monitoring programs;
- environmental reporting;
- site rehabilitation;
- keeping abreast of applicable new developments in environmental research and technology as it applies to environmental management on quarry sites; and
- post-induction education and contact with all site-based Multiquip and contracted employees on environmental matters.

Though retaining the responsibilities identified above, the Quarry Manager and Environmental / Compliance Officer may, at their discretion, delegate specific tasks to suitably qualified and/or experienced operational personnel and/or consultants.

5.0 ENVIRONMENTAL PERFORMANCE – MANAGEMENT AND MONITORING

5.1 INTRODUCTION

A detailed assessment of the anticipated environmental impacts associated with the quarry was included in the *Environmental Assessment* and supporting *Specialist Consultants Studies Compendium*. Environmental monitoring to determine compliance against the conditions of 07_0155 will be managed by the Environmental / Compliance officer.

The success of Multiquip's environmental performance at the quarry will be assessed by the satisfaction of the Conditions of Consent 07_0155, Conditions within the Environment Protection Licence (EPL) and other approvals or licences. This, in turn, will be measured by way of achievement of key performance outcomes and satisfaction of Multiquip's objectives with respect to the management of:

- Traffic
- Noise
- Air Quality
- Groundwater
- Surface Water
- Ecology
- Heritage
- Geology and Resource Management
- Soils and Land Capability
- Visibility

The assessment of performance, which may be quantitative and/or qualitative, will be reported in each relevant Annual Environmental Management Report (AEMR).

The following sub-sections outline the key performance outcomes with respect to each of the above areas. **Annexure 2** details the program for implementation of Project Approval Conditions and **Annexure 3** provides an implementation table of actions recorded in the Statement of Commitments. These tables provide a means by which Multiquip and others can assess progress towards the achievement of the nominated objectives.

5.2 TRAFFIC

Condition 27 of PA 07_0155 requires the preparation of a Traffic Management Plan for the Project to the satisfaction of the Director-General. This Traffic Management Plan was prepared by Christopher Hallam & Associates Pty Ltd in consultation with Goulburn Mulwaree Council and the Roads & Traffic Authority.

The plan includes details on the approach to the road safety audits, the construction program, Drivers Code of Conduct and Bypass Road Management. If the Road Safety Audits identify any road safety issue of concern relating to the matters covered by the approval conditions e.g. road width, an Action Plan would be prepared, covering each item of concern and detailing any changes required to the plans or ameliorative actions to be taken to address the issues.

The Driver Code of Conduct requires drivers to abide by the following.

- Follow the Ardmore Park Speed Limit of 80km/hr on Jerarra and Oallen Ford Roads.
- Do not exceed 60km/hr when driving on the Bungonia Bypass road.
- Allow adequate space between trucks to permit other traffic to pass, one truck at a time when driving on Jerrara Road or Oallen Ford Road.
- Decelerate when passing a stopped school bus during the school day periods of 7:00-9:30am and 3:00-5:30pm so that the speed of the truck when it passes the stopped bus does not exceed 60km/hr.
- Ensure that all loads are correctly covered and sealed.
- Limit the use of the engine brake and other noisy driving practices in built up areas.
- Use the truck wash or wheel wash when provided.

The complete Code of Conduct is outlined in the Traffic Management Plan. A Complaints Register has been established by Multiquip, and will be advertised in the local telephone directory. Community members can call this number at any time if they have any concerns or complaints about any aspect of quarry operations.

Following the completion of the Stage 3 works, ongoing rehabilitation of the pavement of public roads used by quarry vehicles will be required. This work will be undertaken by Multiquip, with the funds provided by the contribution plan established with Goulburn Mulwaree Council.

5.3 NOISE

The noise impacts of the quarry at all non-project related residences are predicted to be minimal and within the nominated INP criteria although it is recognised that operations, whilst compliance with the INP criteria may still be audible under certain conditions.

Notwithstanding the predicted compliance with the noise criteria, Multiquip will maintain dialogue with the surrounding residences and address, where practicable, reasonable concerns or requests. Opportunity will be provided, via a complaints line and register to be set up, for surrounding residents to register complaints with this register ultimately viewed by DECCW as part of an annual reporting requirement.

Whilst a complaints protocol will be established, Multiquip will endeavour to conduct its operations such that no complaints are received. An important feature of the protocol is that it exists and can provide local residents with a means to draw Multiquip's attention to a problem or potential problem as soon as it occurs with the knowledge that it will be attended to promptly.

The following actions will be undertaken at the appropriate stage(s) throughout the quarry life to ensure noise levels are controlled to those levels predicted by Heggies (2008a).

- Construct an acoustic bund wall to the west of the internal road network and around the sand processing area.
- Locate the mobile crushing plant and hard rock processing plant within a cut section of the Quarry Site, approximately 8m below surface level (to the east).
- Commence extraction from the southern sand resource area at the northern extremity of Stage 1 and move progressively southward toward Stage 2.
- Enclose the hard rock processing plant using Panel-Tech Thermaspan Colorbond panels, leaving openings only for plant conveyors.
- Adhere to the nominated hours of operation, i.e. no extraction, processing and associated activities will take place before 7:00am or after 6:00pm.
- Use equipment with lower sound power levels in preference to more noisy equipment.
- Instruct all truck drivers to avoid the use of engine brakes when approaching the quarry entrance.
- Regularly service all equipment used on site to ensure the power sound levels remain at or below the levels specified in the noise assessment (Heggies, 2008a).
- Grade the internal road network to limit body noise from empty trucks travelling within the Quarry Site.
- Establish a noise monitoring program to initially validate the predictions arising from the modelling and then record noise levels against the noise criteria for the quarry – see separate Noise Monitoring Plan (Heggies, 2010). The noise monitoring program includes a noise monitoring protocol which will include the contingent measures to be followed should non-compliant noise levels be measured.

- Do not commence deliveries of quarry products until construction of the Bungonia By-pass is complete.
- Adhere to the nominated hours of operation, i.e. no vehicles will arrive at the Quarry Site before 7:00am or leave the Quarry Site after 6:00pm.
- Enforce driver adherence to all speed limits.
- Use only vehicles which employ the most up-to-date noise/emission reducing technology as part of transport fleet.
- Regularly service all trucks controlled by Multiquip to ensure the power sound levels remain at or below the levels specified in the noise assessment for the *Environmental Assessment*.
- Ensure noise levels attributable to the construction and operation of the transport route, i.e. product transportation, complies with the nominated noise criteria at residences fronting the transport route, within Bungonia village and within audible range of the Bungonia By-pass.

The predicted peak component vibration levels resultant from the proposed transport operations will be well below the most stringent damage criterion of 5mm/s applicable to residences (dwellings) and imperceptible to these residents (Heggies, 2008a).

5.4 AIR QUALITY

Dust deposition attributable to extraction and processing operations are predicted to be minimal ($<0.5 g/m^2$/month) and effectively imperceptible to local land owners. The concentration of particulate matter which could potentially impact on human health, i.e. PM_{10} and crystalline silica, will also be well below the threshold concentration considered likely to result in adverse affects on the health of residents of the local area.

The following actions will be undertaken to ensure site activities are undertaken without exceeding the DECCW air quality criteria.

- Minimise clearing ahead of construction and operational activities.
- Avoid stripping soil in periods of high wind.
- Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant dust lift-off.
- Use water application to increase soil moisture should stripping occur during periods of high wind or low soil moisture.
- Apply water to the hard rock processing plant feed hopper and crushers.
- Install bund walls and wind breaks, as required.
- Locate the mobile crushing plant within the cut section of the hard rock processing area.

- Enclose the dust generating components of the hard rock processing plant with limited openings to allow entry and exit of conveyors and access by project personnel.
- Use a 10 000 litre water truck to regularly wet the active internal unsealed roads.
- Seed topsoil stockpiles, acoustic bund walls and areas where landform preparation is complete to assist in stabilising the exposed surface.
- Minimise the drop heights between front-end loader buckets and trucks carrying sand/basalt or overburden through operator training and education on the management of dust.
- Cover all trucks carrying quarry products with approved covers and securely fix the tailgates to prevent windblown dust emission or spillages.

In order to demonstrate compliance with air quality goals, monitoring will be conducted throughout the life of the quarry. The Air Quality Monitoring Program (AQMP) has been prepared by R.W. Corkery and Co. Pty. Limited to the program to monitor dust emissions generated at the quarry and a protocol for reviewing, reporting and appropriately responding to the results of monitoring in accordance with Condition 3(9) and Condition 3(10) of PA 07_0155.

5.5 SURFACE AND GROUNDWATER

Strategic Environmental and Engineering Consulting (SEEC) and Larry Cook & Associates Pty Ltd were commissioned by Multiquip to prepare the surface water and groundwater components of the Water Management Plan respectively.

Surface water management for the quarry has been specifically designed to mitigate any adverse affect on downstream land owners. Water will be drawn from storage volumes that form part of the harvestable right at rates that ensure flows downstream are not affected, even in dry weather. The following commitments will be implemented by Multiquip to manage the surface water resources on site.

- Construct diversion banks upstream of the extraction area and other related disturbance to the design specifications of Landcom (2004).
- Construct clean water storage dam (Dam 8) at the discharge points of the main diversion structures.
- Inspect the diversion banks, catch banks and storage dams on a monthly basis, or following rainfall of >25mm/24 hours, and undertake maintenance work, as necessary.
- Construct catch banks downstream of disturbed ground to the design specifications of Landcom (2004).
- Construct sediment basins and clarification ponds nominated in the Water Management Plan in accordance with the design specifications of Landcom (2004).

- Inspect the sediment basins on a monthly basis, or following rainfall of >25mm/24 hours, and clean out the sediment basins of consolidated sediment once the capacity in the sediment basin is reduced by 20%.
- Review general performance of catchment and settlement structures and upgrade the existing structures or install additional structures to ensure all dirty water is captured and settled prior to discharge.
- Construct catchment and settlement structures 'in-line' such that overflow from one structure is directed to another downstream.
- Divert drainage in the final landform to Dams 7 and 8.
- Ensure drainage paths between the catchment and settlement structures are well grassed.
- Ensure any water discharged meets the Environment Protection Licence criteria.
- Securely store all hydrocarbon products.
- Refuel all but the less mobile mining equipment which will be refuelled within the open cut area, within designated areas.
- Direct all water from wash-down areas and workshops to oil/water separators and containment systems.
- Ensure all storage tanks are either self-bunded tanks or bunded with an impermeable surface and have a capacity to contain a minimum 110% of the largest storage tank capacity.
- Implement a remedial action plan in the event of a major hydrocarbon spill.

Multiquip's commitments with the Water Management Plan that relate to groundwater include the following.

- Monitor groundwater levels as nominated in the Water Management Plan to identify any decreasing groundwater level trend. Should a decline in groundwater of greater than 15% that of the baseline value be observed, an investigation into the cause of such a decline will be initiated.
- Baseline groundwater levels will be established for all bores within 1km of the boundary of the Quarry Site, subject to the agreement of the respective land owners.
- If the groundwater drawdown is determined to be resultant (either solely or partially) from extraction, the likely distance of drawdown impacts will be calculated with respect to the observation bores.
- Assess the potential for bores (or springs) on surrounding properties to be affected based on the calculated area of drawdown impact. In the event that the impacted area is considered as having the potential to impact on any of these bores, the quarry operator will notify the relevant land owner and enquire as to the availability of groundwater from the potentially affected bore (or spring).
- Offer to test the relevant bore (or review the flow from the spring) to confirm the magnitude of any reduction in water availability should there be any conjecture over the scale of impact.

- Assess the impacts and advise on the appropriate mitigation or compensatory measures in the event that it is confirmed that the quarry operations have led to a reduction in water availability on properties. Inform the NOW of the observed groundwater drawdown and commencement of investigations to identify the most appropriate mitigation and/or compensatory measures.
- Review the hydroegeological investigation to determine alternative mitigation or compensation in the event that the nominated mitigation or compensatory measures are deemed unsatisfactory by the affected land owner(s) and/or NOW. Should there be no feasible alternative, or the alternative be deemed unsatisfactory again, the quarry operator will initiate the dispute resolution process.

5.6 ECOLOGY

The development and operation of the quarry will not have a significant affect on any species, populations or ecological communities listed under the New South Wales *Threatened Species Conservation Act* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, or their habitat (Kevin Mills & Associates, 2008).

The progressive rehabilitation and revegetation of the Quarry Site and selected areas across the "Ardmore Park" property will, in the medium to long term, more than adequately compensate for the loss of the limited number of native trees, planted trees and native pasture removed. Revegetating the drainage lines, and some of the hills and ridges will also have obvious benefits for general property management, including soil stabilisation and providing shelter for stock and crops.

Multiquip will adopt the following operational safeguards in order to minimise any potential adverse impacts on the local flora and fauna.

- The extent of clearing undertaken will be minimised and remain consistent with operational requirements.
- Vegetation clearing and topsoil stripping will be undertaken in campaigns on an as-needs basis.
- Any felled trees will be retained for later use as fauna microhabitats.
- Prior to the removal of the two trees containing hollows on the Quarry Site in 10 to 20 years time, these will be surveyed for threatened bats that may be utilising the hollows.
- Where practicable, soil material and biomass stripped after the first 18 months of extraction will be transferred directly to completed sections of the final landform for spreading.
- Appropriate water management facilities will be constructed and procedures implemented to prevent water containing high sediment levels from leaving the Quarry Site.
- Noxious weeds will be controlled at all times.

- Extensive landscaping will be undertaken on the Quarry Site to screen the proposed quarry components and associated facilities from view, stabilise the soils and drainage lines and provide habitat for fauna.
- The existing fences around the remnant forest communities associated with the knolls on the property will be maintained. These stands of bushland are the habitat of at least two threatened bird species and provide the most diverse and natural habitat on the property for native plants and animals.

5.7 ABORIGINAL AND EUROPEAN CULTURAL HERITAGE

The Cultural Heritage Management Plan (CHMP) has been prepared by Kayandel Archaeological Services and has located three sites of archaeological significance within the transport route and two sites within the Quarry Site. The CHMP details the procedure for consultation with the Aboriginal community, the process for salvaging established sites within the Quarry Site and transport route, the research design for excavations within the transport route and requirements for staff cultural heritage awareness training.

Outlined below are the six management strategies identified in the CHMP that detail the main obligations of Multiquip in addressing the sites located on the Quarry Site and along the transport route.

- Maintain an open dialogue with the registered Aboriginal stakeholders to ensure that they are kept informed on matters concerning the cultural heritage to be effected by the development.
- Ensure all personnel, visitors and contractors prior to entering the Quarry site and Bungonia Bypass area receive cultural heritage training and are fully aware of their obligations in accordance with tis management plan.
- Maintain the exclusion zones around sites selected for in situ preservation.
- Undertake appropriate archaeological sub-surface assessment of Bungonia PAD 1, Zones 1 Sandy Deposits, and Zone 3 Water Course.
- Ensure that management strategies are current and incorporate new sites should they be located.

Notably, the proposed Bungonia by-pass will ensure that the historic values of Bungonia village will be protected (given there will be no change to the number of type of traffic passing through the village) and the revised entrance location to the Bungonia Bypass will avoid any possible impact on the “Larbert Tree” (identified as being of historic importance by the Bungonia Historic Society).

5.8 SOIL RESOURCES AND LAND CAPABILITY

The soils of the Quarry Site, particularly those formed over the Tertiary basalt, are naturally fertile, with no dispersibility and offer favourable soil properties for use in rehabilitation activities. Whenever soil is stripped, stockpiled, transported and respread it is probable that there will be some decrease in biological activity and affect on the structure of the soils. However, given the favourable nature of the soil resources and features of the Quarry Site and assuming the adoption of the soil management controls, these impacts will be minimal.

The following actions will be undertaken to ensure site activities are undertaken in such a way that soil resources will be protected and used appropriately.

- Strip topsoil and subsoil to the depths nominated in the *Environmental Assessment*. Only those areas required for immediate construction or extraction activities will be stripped.
- Provide mobile equipment operators with clear instructions to keep the topsoil and subsoil separate.
- Transfer and re-spread directly stripped soil materials directly over areas to be rehabilitated following the first 18 to 24 months of extraction operations.
- Stockpile soil away from natural surface drainage lines.
- Seed any stockpile retained for in excess of three months with cereal and pasture species.
- Cover long-term subsoil stockpiles with a cover of topsoil.
- Install erosion protection around soil stockpiles.
- Divert surface water flow away from soil stockpile areas.
- Monitor erosion from soil stockpiles or rehabilitated surfaces throughout the life of the Project with remedial works undertaken should erosion be observed.

The Water Management Plan incorporates a range of controls that will assist to conserve the soil resources on the Quarry Site.

5.9 VISIBILITY

The various components of quarry have been oriented such that the existing topographical features of the existing environment to offer the maximum screening of the activities within the Quarry Site. The orientation of the quarry components utilises the existing topography as follows.

- Extraction will be south of the east-west oriented ridgeline at the northern part of the Quarry Site.
- The extraction areas will also be within a depression of the gently undulating terrain with elevated land to the east and west.
- The processing plants will be located on hardstand areas constructed by cut and fill methods and as such, largely below existing surface level.

Additional controls to be implemented are as follows.

- The progressive construction of a 4m bund wall along the western side of the internal product transport route between the sand washing plant and the site administration area.
- The bund wall will be seeded with native grass, shrub and tree species to limit the visual impact of the bund wall itself.

- The visual bund wall will be continuous with an acoustic bund wall constructed around the sand washing plant and southwestern extremity of the southern sand extraction area. This will also be seeded with native species and therefore assist in visually screening the proposed quarry.
- Active areas of extraction will be minimised and progressively rehabilitated.
- Elevated areas immediately west of the processing plants and internal road network will be planted with native tree and shrub species as part of an ongoing commitment to re-establish area of native vegetation (particularly those of the White Box Yellow Box Blakely's Red Gum Woodland community).

Despite the orientation of the various components of the quarry and the visual controls to be implemented, a number of residences will have varying views of various activities of the project. The views have been minimised to the extent feasible and are not considered to be of a magnitude likely to impact significantly on the amenity of the local area or the affected property.

5.10 SOCIO-ECONOMIC ASPECTS

Sense of Community / Village Life

The local community will benefit directly by the improvement to the local roads between the village of Bungonia and the Hume Highway. Indirectly, the region will benefit through the availability of construction materials within the local area (and the reduced cost associated with these). Multiquip intends to become an active participant in the local community and will consider requests from the local community to improving facilities and infrastructure within Bungonia village.

Land Use and Lifestyle

The quarry is unlikely to have any major influence on existing uses of properties in the local area, nor will it encourage the development of other industries which might adversely impact on the viability of these land uses. That is, the quarry may result in minor changes to the level of noise and traffic received at a small number of locations, however, this is unlikely to have any impact on the lifestyle value of these properties nor impact on the existing land use undertaken.

Local Aesthetics

It is acknowledged that a limited number of people in the local area may be exposed to small changes to local noise levels and will notice the increase in the number of heavy vehicles using roads onto which their properties front. However, the changed noise levels will still remain below the DECCW nominated criteria at all residences surrounding the Quarry Site and adjoining the transport route. Similarly, there will be minimal change to local air quality, no detrimental impact on local water courses, minimal clearing of native flora and notably, the visibility of the quarry operations will be limited to distant or obscured views from five residences (none of which are in Bungonia village). The most noticeable change in the local area attributable to the quarry will be an increase in the number of trucks travelling between the Quarry Site and the Hume Highway, which will be appropriately mitigated through the proposed safeguards and operational controls to be implemented by Multiquip, by-passing of Bungonia and general upgrading of the roads to be used.

5.11 CUMULATIVE IMPACTS

The quarry is located in a rural setting with surrounding land uses characterised by a variety of medium intensity or speciality agricultural activities including:

- grazing sheep and cattle;
- extractive industry (organic soils);
- stud cattle;
- goat farms;
- aquacultural activities, e.g. farming of yabbies; and
- rural residential properties.

With the exception of the organic soil extraction undertaken over a several week campaign once per year, the impacts associated with these land uses will not result in comparable environmental impacts to the quarry. Cumulative impacts therefore only need consider the campaign operation of the organic soil extraction operations, an approved activity (in accordance with DA 001-345) issued by Mulwaree Shire Council to M Collins and Sons in July 2001. The extraction and transport of soil from the property only occurs for a 2 to 3 week campaign.

During the organic soil extraction campaigns, the following accumulation of impacts, and proposed management, is expected.

- Traffic. Trucks additional to those transporting quarry products will enter and exit the quarry site in accordance with the approved cricket pitch soil extraction on the "Ardmore Park" property.

  Importantly, all road and intersection upgrades provided for by Multiquip are designed to accommodate traffic well in excess of that to be generated by the quarry alone and as such the increase in heavy vehicle traffic during this time will not result in any significant change to road conditions.

  Multiquip will maintain records as to truck movements on and off the quarry site to ensure that restrictions imposed on the transport of quarry products are adhered to.

- Noise. The excavation of soil and movement of trucks on and off the "Ardmore Park" property will add an additional noise source. During the period of soil excavation, as during all other times during the year, Multiquip will be required to comply with the approved noise limits. If necessary, Multiquip would reduce the number or modify the location of operating equipment during the soil excavation campaigns to ensure compliance.

- Dust. The excavation of soil and movement of trucks on and off the "Ardmore Park" property will add a additional sources of dust generation. During the period of soil excavation, as during all other times during the year, Multiquip will be required to comply with the approved air quality limits. If necessary, Multiquip would reduce the number or modify the location of operating equipment during the soil excavation campaigns to ensure compliance.

6.0 INFORMATION DISSEMINATION, COMPLAINTS MANAGEMENT AND DISPUTE RESOLUTION

6.1 INFORMATION DISSEMINATION

Multiquip is committed to a policy of community membership and a sense of quarry ownership by employees and local community members, and will undertake a program of regular liaison / contact with local residents, land owners and the broader community to inform them of quarry's progress. Such a program will also provide an opportunity to discuss issues of "concern" which residents are reticent to register as complaints. All such liaison / contacts / comments will be documented.

Dissemination of information to the local community and relevant agencies regarding the quarry construction, operation, and environmental performance, will be achieved by both formal and informal means including the following.

(i) The Community Consultative Committee (CCC). The CCC has already been formed and will include a minimum four representatives of the local community and one representative from Goulburn Mulwaree Shire Council who will act as local focal points for the provision of information to, and receipt of comments from, community members. CCC meetings will be held initially at least four times per year (or at other frequencies as determined by the Director-General) at which Multiquip representatives will provide advice on the status of construction activities, the quarry's progress, environmental performance and monitoring results, complaints etc. The CCC meetings will also act as a forum for discussion of each of the above aspects or any other issue brought up by members of the community through the CCC representatives, or directly with Multiquip.

(ii) The minutes of the CCC meeting will be available on Multiquip's website, at the Goulburn Mulwaree Shire Council office and/or other venue agreed by the CCC within fourteen days of each meeting.

(iii) In addition to their tabling at CCC meetings, relevant environmental monitoring results pertaining to individual landholders will be provided on request, and all results will be available for public examination. Multiquip will seek advice from each relevant land owner as to their desire to received monitoring results.

(iv) Each year, Multiquip will prepare an Annual Environmental Management Report (AEMR) which will:

a) identify the standards and performance measures that apply to the development;

b) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;

c) include a summary of the monitoring results on the development during the past year;

d) include an analysis of the monitoring results against the relevant:

- limits / criteria in this consent;
- monitoring results from previous years; and
- predictions in the *Environmental Assessment*;

e) identify any trends in the monitoring over the life of the development;

f) identify and discuss any non-compliance during the previous year; and

g) describe what actions were, or are being, taken to ensure compliance.

The AEMR will address all matters identified in the Project Approval for inclusion in each AEMR. The AEMR will be provided to the Council, relevant agencies and to the CCC members and also made available for public review at Council's office and/or other venue agreed by the CCC.

(v) Copies of all management plans / strategies or monitoring programs, together with the results of independent audits undertaken in accordance with DA 07_0155 will be provided to the CCC, Goulburn Mulwaree Shire Council, made publicly available at Council's office and posted on Multiquip's website.

(vi) Visits by relevant government agencies, eg. DECCW, I&I NSW to inspect the Quarry Site and Multiquip's performance, will be documented together with the provision of reports or information, as requested.

(vii) Maintaining regular formal and informal contact with relevant agencies.

(viii) Providing reports to relevant authorities in the event of a non-compliance or a potential non-compliance with respect to statutory criteria or guidelines.

6.2 COMPLAINTS RECEIPT AND RESPONSE PROCEDURES

In order to receive, record and respond to any complaints in a timely manner, Multiquip will establish and maintain a telephone complaints line for the purpose of receiving complaints from any member of the public in relation to its activities. The complaints line will be operational 24 hours per day, seven days per week, be publicly advertised and the details supplied to adjacent land owners. All complaints will be registered in a database and responded to within 24 hours of the receipt of a complaint. The following information will be recorded in the database.

- The date / time the complaint was made;
- complainant's name;
- telephone number; and
- nature of complaint.

The nature of the response will depend on the nature and source of complaints but will include one or more of the following actions.

(i) Liaison with the complainant to ascertain all details and to identify the nature and source of the complaint and provide supplementary details for the log. Details recorded in the log will include:

– the date and time of the complaint;

– the method by which the complaint was made;

– personal details;

– the nature of the complaint;

- action taken by Multiquip in relation to the complaint including any follow-up contact; and
- if no action, the reason why.

(ii) As appropriate, the initiation of monitoring or other investigations to verify or otherwise the exceedance or non-compliance with approval or licence condition(s).

(iii) Initiation of appropriate changes in operating practices or procedures.

(iv) Conducting a follow-up interview with the resident to determine their level of satisfaction with the quarry's response and the resultant outcome.

A copy of the report sheet will be supplied to the complainant, if requested.

A summary of the complaints received in each 12 month period will be included in each AEMR, together with a comparison with the number and nature of complaints received in the previous 5 years.

6.3 DISPUTE RESOLUTION

6.3.1 General

In the event that any complainant does not consider Multiquip's response or reactions adequately address their concerns, the following procedure will be adopted.

(i) A meeting will be convened with the Quarry Manager and Environmental / Compliance Officer to seek resolution of the matter. The complainant will be provided with a written response from Multiquip detailing the results of investigations undertaken and the agreed actions to be taken regarding the measures to be implemented.

(ii) On implementation of the nominated measures, a further meeting will be convened to seek advice of satisfaction, or otherwise, regarding the outcomes.

If, after 21 days following Steps 1 and 2, the complainant believes the matter remains unresolved and no further agreement can be reached as to additional measures to be undertaken, the matter will be referred to the Department of Planning (and the relevant authority) and the independent resolution process originating from Appendix 5 of DA 07_0155 (see **Annexure 1**).

6.3.2 Air / Noise Issues

With respect to land owner complaints or issues pertaining to purported exceedances of air quality or noise criteria identified in DA 07_0155 and the land owner requests an independent review of the air quality or noise impacts, the procedures identified in Condition 4(2) will be adopted.

If necessary, variations of any site activities arising from the independent review will be implemented following the receipt of the independent review.

7.0 AUDITING AND RESPONSE TO NON-COMPLIANCES

Compliance with all approvals, plans and procedures will be the responsibility of all personnel (staff, wages and contract) employed on or in association with the quarry. Programs to identify and promote responsibilities will be developed through promotion of project ownership under the direction of the Quarry Manager and Environmental / Compliance Officer.

The Environmental Officer and/or Quarry Manager will undertake regular inspections, internal audits and initiate directions identifying any remediation / rectification work required, and areas of actual or potential non-compliance, with all directions provided to the relevant party in writing and/or diarised.

Any notifiable non-compliances with approvals or licences will be reported to the relevant authority, together with details of the corrective actions taken to avoid future occurrences.

Any non-compliances with the requirements of the quarry's EPL will also be reported on each Annual Licence Return.

A review of Multiquip's compliance with all conditions of Project Approval 07_0155 and all other approvals and licences will be undertaken prior to (and included within) each AEMR submitted to the Director-General. Each AEMR will also be provided to Council, relevant agencies, the Community Consultative Committee (CCC) and for public review. Additionally, an independent environmental audit will be undertaken a minimum of once every three years and the report submitted to the Director-General, Council, all relevant authorities and made available to the public at Council's office. The independent audit will be undertaken by an appropriately certified auditor in accordance with ISO 19011:2002 "Guidelines for Quality and/or Environmental Systems Auditing" and ISO 14011 or equivalent updated versions of these guidelines. A copy of all publicly available documents will be placed on Multiquip's website in accordance with the provisions of *Condition 5(10)(b)*.

8.0 EMERGENCY RESPONSE

As part of routine quarry operations, Multiquip will undertake standard risk assessments to identify the risk probability and consequences of the proposed activities and aspects of the operation, the adequacy of existing controls to contain the hazards and, where identified as deficient, propose additional controls to further manage or eliminate hazards.

The Safety Management Plan for the quarry will incorporate an Emergency Procedures Manual which, though primarily prepared in accordance with OH&S requirements, will extend to environmental emergencies.

Although specific procedures will be developed for individual situations, all will incorporate three basic steps, i.e.:

(i) notification of the emergency (internal and/or external);

(ii) protection of personnel as a first priority; and

(iii) protection of the environment, plant and equipment.

Initially each of steps (ii) and (iii) will use internal resources, with assistance from external resources called upon, as and when necessary.

Any emergency situations or incidents which do or could potentially have caused environmental harm, will be reported to DECCW and other relevant authorities.

All site personnel will be trained in situation recognition and emergency response procedures, with regular updates through tool box talks.

9.0 REVIEW AND IMPROVEMENT

The review and revision of the EMS is to be undertaken by the senior Multiquip management team. The EMS review will reflect:

- the review of any audit findings;
- the results of monitoring programs;
- achievement of objectives and key performance outcomes;
- the relevance of the objectives and key performance outcomes to current and future conditions; and
- any information provided by and/or concerns of stakeholders.

The review will be undertaken every three years and completed within 2 months of the receipt of the independent audit of the quarry. If any significant changes are made to the Strategy as part of one of these reviews, the revised Strategy will be provided to the DoP for approval.

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Annexures

(Total number of pages including blank pages = 108)

Annexure 1 Project Approval 07_0155

Annexure 2 Program for Implementation of Project Approval Conditions

Annexure 3 Implementation Table for Commitments Recorded within the Project Approval

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Annexure 1

Project Approval 07_0155

(No. of Pages including blank pages = 38)

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Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project referred to in Schedule 1, subject to the conditions set out in Schedules 2 to 5.

These conditions are required to:
- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for on-going environmental management of the project.

Hon Kristina Keneally MP
Minister for Planning

Sydney 2009

SCHEDULE 1

Project Application:	07_0155	
Proponent:	CEAL Limited trading as Multiquip Quarries	
Approval Authority:	Minister for Planning	
Land:	Extraction Area	Lot 24, DP 1001312, Oallen Ford Road, Bungonia
	Bypass Road	Lot 2 DP 735523, Lot 82 DP 750022, Lot 7005 DP 1002591 and Lot 7006 DP 1002591
Project:	Ardmore Park Project	

Red type represents October 2010 Modification.

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DEFINITIONS

AEMR	Annual Environmental Management Report
Bypass Road	Private road between Oallen Ford Road and Mountain Ash Road
Council	Goulburn Mulwaree Shire Council
DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
DPI	Department of Primary Industries
DWE	Department of Water and Energy
EA	Environmental Assessment for the project titled *Environmental Assessment for the Modified "Ardmore Park" Quarry Project and, Specialist Consultant Studies Compendium*, dated July 2008, prepared by RW Corkery and Co, including the response to submissions
EA (Mod 1)	Environmental Assessment titled *Ardmore Park Quarry – Supporting Documentation for a Request to Modify Project Approval PA 07_0155,* dated May 2010, prepared by RW Corkery and Co, including the response to submissions dated August 2010 and letter dated 30 August 2010
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under the *Protection of the Environment Operations Act 1997*
Extraction Area	The land described as the extraction area in Appendix 1
Feasible	Feasible relates to engineering considerations and what is practical to build
Land	Land means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Minister	Minister for Planning, or delegate
Privately owned land	Land not owned by a public agency or a quarry company (or its related companies)
Project	The development as described in the EA
Proponent	CEAL Limited trading as Multiquip Quarries, or its successors in title
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Response to Submissions	The Proponent's response to issues raised in submissions, dated December 2008, prepared by RW Corkery and Co, and subsequent submissions to the Department dated 2 February 2009, 30 March 2009 and 15 April 2009
RTA	Roads and Traffic Authority
Site	Land to which the project application applies
Stage 1 road upgrade works	Road upgrades described in items 5.1 to 5.8 of the Statement of Commitments (Table B) in Appendix 2, as amended to provide for a minimum 7.0 metre sealed carriageway along the entire transport route (comprising 2 x 3.0 metre lanes and 2 x 0.5 metre shoulders, plus 2 x 0.5 metre unsealed shoulders), apart from the bypass road and the bridge crossings identified as the Stage 2 and Stage 3 road upgrade works, unless otherwise agreed by Council.
Stage 2 road upgrade works	Road upgrades described in items 5.9 to 5.12 of the Statement of Commitments (Table B) in Appendix 2, as amended to provide for a minimum 8.0 metre sealed carriageway along the entire transport route (comprising 2 x 3.5 metre lanes and 2 x 0.5 metre shoulders, plus 2 x 0.5 metre unsealed shoulders), apart from the bypass road and the bridge crossings identified as the Stage 3 road upgrade works, unless otherwise agreed by Council.
Stage 3 road upgrade works	Road upgrades described in items 5.13 to 5.14 of the Statement of Commitments (Table B) in Appendix 2.
Statement of Commitments	The Proponent's commitments in Appendix 2
VENM	Virgin Excavated Natural Material, as defined in the *Protection of the Environment Operations Act 1997*

SCHEDULE 2
ADMINISTRATIVE

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

Terms of Approval

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (a1) EA (Mod 1);
   (b) statement of commitments; and
   (c) conditions of this approval.

   Notes:
   - *The layout of the project is shown in the figure in Appendix 1; and*
   - *The statement of commitments is included in Appendix 2.*

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   (a) any reports, plans, programs or correspondence that are submitted in accordance with the conditions of this approval; and
   (b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.

Limits on Approval

5. Extraction and processing operations may take place until 30 July 2039.

   Note: Under this approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General. Consequently this approval will continue to apply in all other respects other than the right to conduct extraction and processing operations until the site has been rehabilitated to a satisfactory standard.

6. The Proponent shall not transport more than 400,000 tonnes of product a year from the site by road.

   Note: Truck movements are further restricted under condition 25 of schedule 3.

Management Plans / Monitoring Programs

7. With the approval of the Director-General, the Proponent may submit any management plan, program or strategy required by this approval on a progressive basis.

Structural Adequacy

8. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

   Notes:
   - *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works;*
   - *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*

Demolition

9. The Proponent shall ensure that all demolition work is carried out in accordance with *AS 2601-2001: The Demolition of Structures*, or its latest version.

Protection of Public Infrastructure

10. The Proponent shall:
    (a) repair, or pay all reasonable costs associated with repairing, any public infrastructure that is damaged by the project; and
    (b) relocate, or pay all reasonable costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Operation of Plant and Equipment

11. The Proponent shall ensure that all plant and equipment used at the site is:
    (a) maintained in a proper and efficient condition; and
    (b) operated in a proper and efficient condition.

Crown Land

12. The Proponent shall not commence any development authorised by this approval on Crown land without the prior approval of the Department of Lands.

Section 94 Contributions

13. The Proponent shall pay Council a monthly contribution of 4 cents per kilometre per tonne of material trucked from the site for the upgrade and maintenance of roads in accordance with *Mulwaree Shire – Development Contributions Plan 2003-2008* in force at the date of this approval. The contribution amount shall be adjusted every 3 years from the date of this approval to account for the effects of inflation (Consumer Price Index).

SCHEDULE 3
ENVIRONMENTAL PERFORMANCE

GENERAL EXTRACTION AND PROCESSING PROVISIONS

Identification of Boundaries

1. Within 3 months of the date of this approval, or as otherwise agreed by the Director-General, the Proponent shall:
   (a) engage an independent registered surveyor to survey the boundaries of the approved limit of extraction and the approved ancillary work areas;
   (b) submit a survey plan of these boundaries to the Director-General; and
   (c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

Note: The limit of extraction and ancillary areas is shown conceptually on the layout plans in Appendix 1.

ACQUISITION OF AFFECTED PROPERTIES

Acquisition Upon Request

1A. Prior to the commencement of any extraction the Proponent shall make a firm and binding offer to acquire Lot 23 DP 1001312 ("Residence 7" in Appendix 3) in accordance with the terms of the agreement, dated 14 July 2008, as amended, between the Proponent and the owners of this property, unless otherwise agreed by the Director-General.

NOISE

Operational Noise Assessment Criteria

2. The Proponent shall ensure that the noise generated by the project, including the bypass road, does not exceed the noise impact assessment criteria in Table 1 at any residence or on more than 25 per cent of any privately-owned land.

Table 1: Noise Impact Assessment Criteria

Noise Assessment Location	$L_{Aeq\ (15\ minute)}$
Residence 1	35
Residence 2	35
Residence 3	35
Residence 4	35
Residence 5	35
Residence 6	36
Residence 8	35
Residence 9	36
Residence R1	35
Residence R2	35
Residence R3	36
Residence R4	35
Residence V1	38
Residence V2	36

Notes:

- *To interpret the locations referred to Table 1, see the figures in Appendix 3.*
- *Noise generated by the project is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy.*
- *The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.*

Traffic Noise Impact Assessment Criteria

3. The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the project (after commencement of quarrying operations) does not exceed the traffic noise impact assessment criteria in Table 2.

Table 2: Traffic noise criteria dB(A) $L_{Aeq\ (1\ hour)}$

Roads	Day/Evening
Oallen Ford Road Mountain Ash Road Jerrara Road	55

Note: Traffic noise generated by the project is to be measured in accordance with the relevant procedures in the DECC's Environmental Criteria for Road Traffic Noise.

Operating Hours

4. The Proponent shall comply with the operating hours in Table 3.

Table 3: Operating Hours

Activity	Day	Time
Construction work	Monday - Friday	7.00am to 6.00pm
	Saturday	8.00am to 1.00pm
	Sunday and Public Holidays	None
Quarrying, processing (including overburden removal) and product transportation	Monday – Friday	7.00am to 6.00pm
	Saturday	7.00am to 1.00pm
	Sunday and Public Holidays	None

Notes:

- *Maintenance activities may be conducted outside the hours in Table 3 provided that the activities are not audible at any privately-owned residence beyond the boundary of the site.*
- *This condition does not apply to delivery of material if that delivery is required by police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, notification is to be provided to DECC and the affected residents as soon as possible, or within a reasonable period in the case of emergency.*

Additional Noise Mitigation Measures

5. The Proponent shall construct the western earth mound and acoustic barrier prior to the commencement of any extraction (apart from overburden extraction for the purpose of constructing the mound) or processing activities to the east of the earth mound and acoustic barrier, unless otherwise agreed by the Director-General.

Noise Monitoring

6. The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with DECC, and be submitted to the Director-General for approval prior to carrying out any development on site; and
   (b) include details of how the noise performance of the project would be monitored, and include a noise monitoring protocol for evaluating compliance with the relevant noise limits in this approval.

AIR QUALITY

Impact Assessment Criteria

7. The Proponent shall ensure that dust generated by the project does not cause exceedances of the criteria listed in Tables 4, 5 and 6 at any residence or on more than 25 per cent of any privately owned land.

Table 4: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	30 µg/m^3

Table 5: Short Term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM_{10})	24 hour	50 µg/m^3

Table 6: Long Term impact assessment criterion for particulate matter

Pollutant	*Averaging period*	*Maximum increase in deposited dust level*	*Maximum total deposited dust level*
Deposited dust	Annual	2 g/m^2/month	4 g/m^2/month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Operating Conditions

8. The Proponent shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately owned land.

Air Quality Monitoring

9. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program shall:
   (a) be prepared in consultation with DECC, and be submitted to the Director-General for approval prior to carrying out any development on site;
   (b) include details of how the air quality performance of the project would be monitored, and include a protocol for evaluating compliance with the relevant air quality criteria in this approval.

METEOROLOGICAL MONITORING

10. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

WATER

Water Supply

11. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations to match its water supply.

Note: The Proponent is required to obtain necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.

Discharges

12. The Proponent shall not discharge any water from the quarry or its associated operations except in accordance with an EPL.

Water Management and Monitoring

13. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with DWE, DECC and SCA, and be submitted to the Director-General for approval prior to carrying out any development on site; and
   (b) include a:
      - Site Water Balance;
      - Erosion and Sediment Control Plan;
      - Surface Water Monitoring Program;
      - Groundwater Monitoring Program; and
      - Surface and Groundwater Response Plan.

14. The Site Water Balance must:
   (a) include details of:
      - sources and security of water supply;
      - water use on site;
      - water management on site, including the location and capacity of water storages on site and the means of access;
      - off-site water transfers; and
      - reporting procedures; and
   (b) investigate and describe measures to minimise water use by the project.

15. The Erosion and Sediment Control Plan must:
   (a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction,*

Volume 1, 4th Edition, 2004 (Landcom);

(b) identify activities that could cause soil erosion and generate sediment;
(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
(d) principles for the design and construction of waterway crossings along the transport route, in consultation with DPI;
(e) describe the location, function, and capacity of erosion and sediment control structures;
(f) demonstrate that the design capacity of basins intended to collect storm runoff will not be compromised by storage of operational water; and
(g) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.

16. The Surface Water Monitoring Program must include:
(a) detailed baseline data on surface water flows and quality in downstream watercourses that could be affected by the project;
(b) surface water quality and stream health impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts;
(c) a program to monitor:
- surface water flows, quality, and impacts on water users;
- stream health; and
- channel stability.

17. The Groundwater Monitoring Program must include:
(a) detailed baseline data on groundwater levels, flows and quality in the region, and particularly any groundwater bores, springs and seeps (including spring and seep fed dams) that may be affected by operations on site;
(b) groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; and
(c) a program to monitor:
- groundwater levels and quality in new and existing monitoring bores;
- the impacts of the project on:
  - any groundwater bores, springs and seeps (including spring and seep fed farm dams) on privately-owned land; and
  - any groundwater dependent ecosystems.

18. The Surface and Groundwater Response Plan must include:
(a) a protocol for the investigation, notification and mitigation of any exceedances of the surface and ground water impact assessment criteria;
(b) measures to mitigate and/or compensate potentially affected landowners, including provision of alternative long-term supply of water to the affected landowner that is equivalent to the loss attributed to the project; and
(c) the procedures that would be followed if any unforeseen impacts are detected during the project.

LANDSCAPE MANAGEMENT

Rehabilitation

19. The Proponent shall progressively rehabilitate the site, in a manner that:
(a) is generally consistent with the concept final landform in the EA (as reproduced in Appendix 4); and
(b) provides at least 14.7 hectares of Yellow Box – Red Gum Woodland,
to the satisfaction of the Director-General

Landscape Management Plan

20. The Proponent shall prepare and implement a Landscape Management Plan for the project to the satisfaction of the Director-General. This plan must:
(a) be prepared in consultation with DECC by suitably qualified expert/s whose appointment/s have been approved by the Director-General, and be submitted to the Director-General for approval prior to the commencement of quarrying operations; and
(b) include a:
- Rehabilitation Management Plan; and
- Quarry Closure Plan.

Note: The Department accepts that the initial Landscape Management Plan may not include a detailed Quarry Closure Plan. However, the initial plan must include an outline and a timetable for completion of the detailed Quarry Closure Plan.

Rehabilitation Management Plan

21. The Rehabilitation Management Plan must include:
(a) the rehabilitation objectives for the site;

(b) a description of the short, medium, and long term measures that would be implemented to:
- rehabilitate the site; and
- maintain and enhance existing site vegetation outside the disturbance area;

(c) detailed performance and completion criteria for the site rehabilitation;
(d) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
- progressively rehabilitating disturbed areas;
- protecting vegetation and soil outside the disturbance areas;
- rehabilitating creeks and drainage lines on the site to ensure no net loss of stream length and aquatic habitat;
- undertaking pre-clearance surveys;
- managing impacts on fauna;
- landscaping the site to minimise visual impacts, including a landscape plan for the visual/noise bund and other boundaries of the site;
- conserving and reusing topsoil;
- VENM quality assurance;
- collecting and propagating seed for rehabilitation works;
- salvaging and reusing material from the site for habitat enhancement;
- controlling weeds and feral pests;
- controlling access; and
- bushfire management;

(e) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
(f) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
(g) details of who would be responsible for monitoring, reviewing, and implementing the plan.

Quarry Closure Plan

22. The Quarry Closure Plan must:
(a) include provision for certification from a qualified geotechnical engineer that the final proposed landform is stable;
(b) define the objectives and criteria for closure of the quarry;
(c) investigate options for the future use of the site, including any final void;
(d) describe the measures that would be implemented to minimise or manage the ongoing (post closure) environmental effects of the project; and
(e) describe how the performance of these measures would be monitored over time.

Rehabilitation Bond

23. Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a rehabilitation and offset bond for the project with the Director-General. The sum of the bond shall be calculated at:
- $\$2.50/m^2$ for the area of new disturbance in each 3 year review period;
- $\$1.00/m^2$ for the total area of land previously disturbed by the quarry,

or as otherwise directed by the Director-General.

Notes:
- *If the rehabilitation is completed to the satisfaction of the Director-General, the Director-General will release the bond.*
- *If the rehabilitation is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the bond, and arrange for the satisfactory completion of the relevant works.*

ABORIGINAL HERITAGE

24. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:
(a) be prepared in consultation with the DECC, and be submitted to the Director-General for approval prior to carrying out any development on site; and
(b) include a:
- description of the subsurface test pit investigations that would be implemented in the extraction area to determine if archaeological material is present and the significance of any such material;
- description of the measures that would be implemented if any new Aboriginal objects or relics are discovered during the project; and
- protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

TRAFFIC AND TRANSPORT

Transport Route Upgrades

25. The Proponent shall:
    (a) restrict all product transport from the site until it has completed the Stage 1 road upgrade works, to the satisfaction of Council;
    (b) restrict product transport to a maximum of 20 truck movements (in + out) per day Monday to Friday, and 12 truck movements per day on Saturdays, until it has completed the Stage 2 road upgrade works, to the satisfaction of Council;
    (c) restrict product transport to a maximum of 56 truck movements (in + out) per day Monday to Friday, and 30 truck movements per day on Saturdays, until it has completed the Stage 3 road upgrade works, to the satisfaction of Council;
    (d) restrict truck movements associated with the project to a maximum of 88 truck movements (in + out) per day Monday to Friday, and 42 truck movements per day on Saturdays, upon completion of the Stage 3 road upgrade works.

    Notes:
    - *The road upgrade stages are defined in Schedule 1 of this approval.*
    - *The restrictions on product transport in this condition do not apply to any product transport to and from the road upgrade sites.*

26. The Proponent shall:
    (a) upgrade the acceleration lane for northbound traffic on the Hume Highway at its junction with Jerrara Road, to the satisfaction of the RTA, prior to undertaking any product transport from the site; or
    (b) restrict any product transport from the site until a suitable grade separated interchange is operational at the junction of the Hume Highway and Jerrara Road,

    unless otherwise agreed by the RTA.

    Note: The restrictions on product transport in this condition do not apply to any product transport to and from the road upgrade works required by this approval.

Traffic Management Plan

27. The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with Council and the RTA by suitably qualified independent expert/s whose appointment/s have been approved by the Director-General, and be submitted to the Director-General for approval prior to carrying out any development on site;
    (b) provide for Road Safety Audits prior to the commencement of each stage of road upgrade works in accordance with RTA's *Accident Reduction Guide Part 2 Road Safety Audits (August 2005)*;
    (c) include a program for an action plan and outline the measures to be implemented to address any issues identified by the Road Safety Audit;
    (d) include traffic control plans to describe proposed traffic control measures during construction activities on public roads;
    (e) include a protocol for the management of quarry vehicles on the bypass road, including the prevention of trucks from queuing on Mountain Ash Road to enter the bypass road;
    (f) identify arrangements with school bus drivers including any restrictions on activities during school bus pick up/drop off times and provision of any other measures (e.g. bus bays); and
    (g) include a driver's Code of Conduct.

    Note: The Department accepts that the initial Traffic Management Plan would only include the findings of the first Road Safety Audit. Subsequent revisions of the Traffic Management Plan may be submitted on completion of subsequent Road Safety Audits.

Road Haulage

28. The Proponent shall ensure that:
    (a) all loaded vehicles entering or leaving the site are covered; and
    (b) all loaded vehicles leaving the site are cleaned of materials that may fall on the road, before they leave the site.

29. No project-related heavy vehicles shall use King Street to get to or from the site, except in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

Haulage Records

30. The Proponent shall record and maintain a log of the extraction quantities and traffic movement in and out of the site, available for inspection at the request of the Director-General or Council.

VISUAL

Visual Amenity

31. The Proponent shall minimise the visual impacts of the project to the satisfaction of the Director-General.

Visual Impact Mitigation

32. Within 6 months of this approval, the Proponent shall prepare a report that:
    (a) identifies the privately-owned residences that are likely to experience significant visual impacts during the construction and operation of the project; and
    (b) describes (in general terms) the additional mitigation measures that could be implemented to reduce the visibility of the quarry from these residences,
    to the satisfaction of the Director-General.

33. Within 3 months of the Director-General approving this report, the Proponent shall advise all owners of privately-owned residences identified in the report that they are entitled to additional mitigation measures to reduce the visibility of the quarry from their properties.

34. Upon receiving a written request from an owner of a residence identified in this report, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of the Director-General.

    These mitigation measures must be reasonable and feasible.

    If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

    Note: The additional visual impact mitigation measures must be aimed at reducing the visibility of the quarry from significantly affected residences and do not necessarily require measures to reduce visibility of the quarry from other locations on the affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).

Lighting Emissions

35. The Proponent shall:
    (a) take all practicable measures to mitigate off-site lighting impacts from the project; and
    (b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting,*
    to the satisfaction of the Director-General.

Advertising

36. The Proponent shall not erect or display any advertising structure(s) or signs on the site without the written approval of the Director-General.

    Note: This does not include traffic management and safety or environmental signs.

WASTE MANAGEMENT

Waste Minimisation

37. The Proponent shall:
    (a) only import VENM to the site; and
    (b) minimise the amount of waste generated by the project to the satisfaction of the Director-General.

EMERGENCY AND HAZARDS MANAGEMENT

Dangerous Goods

38. The Proponent shall ensure that the storage, handling, and transport of dangerous goods are conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.

Safety

39. The Proponent shall secure the project to ensure public safety to the satisfaction of the Director-General.

Bushfire Management

40. The Proponent shall:
    (a) ensure that the project is suitably equipped to respond to any fires on-site; and
    (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on site.

PRODUCTION DATA

41. The Proponent shall:
    (a) provide annual production data to the DPI using the standard form for that purpose; and
    (b) include a copy of this data in the AEMR.

SCHEDULE 4
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in Schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.

INDEPENDENT REVIEW

2. If a landowner of privately-owned land considers that the quarrying operations are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the relevant impacts of the project on his/her land.

   If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 3 months of the Director-General advising that an independent review is warranted:
   (a) consult with the landowner to determine his/her concerns;
   (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the project is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and
   (c) give the Director-General and landowner a copy of the independent review.

3. If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

4. If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this non-compliance, then the Proponent shall:
   (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and
   (b) conduct further monitoring to determine whether these measures ensure compliance; or
   (c) secure a written agreement with the landowner to allow exceedances of the relevant criteria in schedule 3,

   to the satisfaction of the Director-General.

   If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

   If the Proponent is unable to finalise an agreement with the landowner, then the Proponent or landowner may refer the matter to the Director-General for resolution.

   If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 5).

5. If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution.

   If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 5).

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy shall be submitted to the Director-General prior to carrying out any development on site, and must;
   (a) provide the strategic context for environmental management of the project;
   (b) identify the statutory requirements that apply to the project;
   (c) describe in general how the environmental performance of the project would be monitored and managed;
   (d) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project;
      - receive, handle, respond to, and record complaints;
      - resolve any disputes that may arise during the life of the project;
      - respond to any non-compliance;
      - manage cumulative impacts; and
      - respond to environmental incidents and emergencies; and
   (e) describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the project.

ENVIRONMENTAL MONITORING PROGRAM

2. The Proponent shall prepare an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General prior to carrying out any development on site, and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document.

REPORTING

Incident Reporting

3. Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.

4. Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that:
   (a) describes the date, time, and nature of the exceedance/incident;
   (b) identifies the cause (or likely cause) of the exceedance/incident;
   (c) describes what action has been taken to date; and
   (d) describes the proposed measures to address the exceedance/incident.

Annual Reporting

5. Within 12 months of the commencement of construction activities, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must:
   (a) identify the standards and performance measures that apply to the project;
   (b) describe the works carried out in the last 12 months, and the works that will be carried out in the next 12 months;
   (c) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
   (d) include a summary of the monitoring results for the project during the past year;
   (e) include an analysis of these monitoring results against the relevant:
      - impact assessment criteria/limits;
      - monitoring results from previous years; and
      - predictions in the EA;
   (f) identify any trends in the monitoring results over the life of the project;
   (g) identify any non-compliance during the previous year; and
   (h) describe what actions were, or are being, taken to ensure compliance.

Revision of Strategies, Plans and Programs

5A. Within 3 months of:
   (a) the submission of an incident report under condition 4 above;
   (b) the submission of an AEMR under condition 5 above;
   (c) the submission of an audit report under condition 7 below; or
   (d) any modification to this approval,

the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 2 years of the date of the commencement of quarrying operations, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
   (a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
   (b) include consultation with the relevant agencies;
   (c) assess the environmental performance of the project, and its effects on the surrounding environment;
   (d) assess whether the project is complying with the relevant standards, performance measures and statutory requirements; and
   (e) review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

   Note: The person(s) conducting the audit should have expertise in the fields of traffic management, hydrogeology and quarry rehabilitation.

7. Within 6 weeks of completion of each Independent Environmental Audit, the Proponent shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations in the audit report.

8. Within 3 months of submitting a copy of the audit report to the Director-General, the Proponent shall review and if necessary revise the sum of the Rehabilitation Bond (see Schedule 3), to consider:
   - the effects of inflation;
   - any changes to the total area of disturbance; and
   - the performance of the revegetation against the completion criteria of the Rehabilitation Management Plan,

   to the satisfaction of the Director-General.

COMMUNITY CONSULTATIVE COMMITTEE

9. The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General, in general accordance with the Department's *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects*. The CCC must be established within 3 months of the date of this approval, unless otherwise agreed by the Director-General.

   Notes:
   - *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
   - *In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council, adjoining landholders, residents of Bungonia village and resident/s along the haulage route.*

ACCESS TO INFORMATION

10. Within 1 month of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMR required under this approval, the Proponent shall:
    (a) provide a copy of the relevant document/s to the relevant agencies and to members of the general public upon request; and
    (b) ensure that a copy of the relevant document/s is made publicly available on its website and at the Proponent's office.

11. During the project, the Proponent shall:
    (a) make a summary of monitoring results required under this approval publicly available on its website and at the site office; and
    (b) update these results on a regular basis (at least every 3 months.

APPENDIX 1
GENERAL LAYOUT OF PROJECT

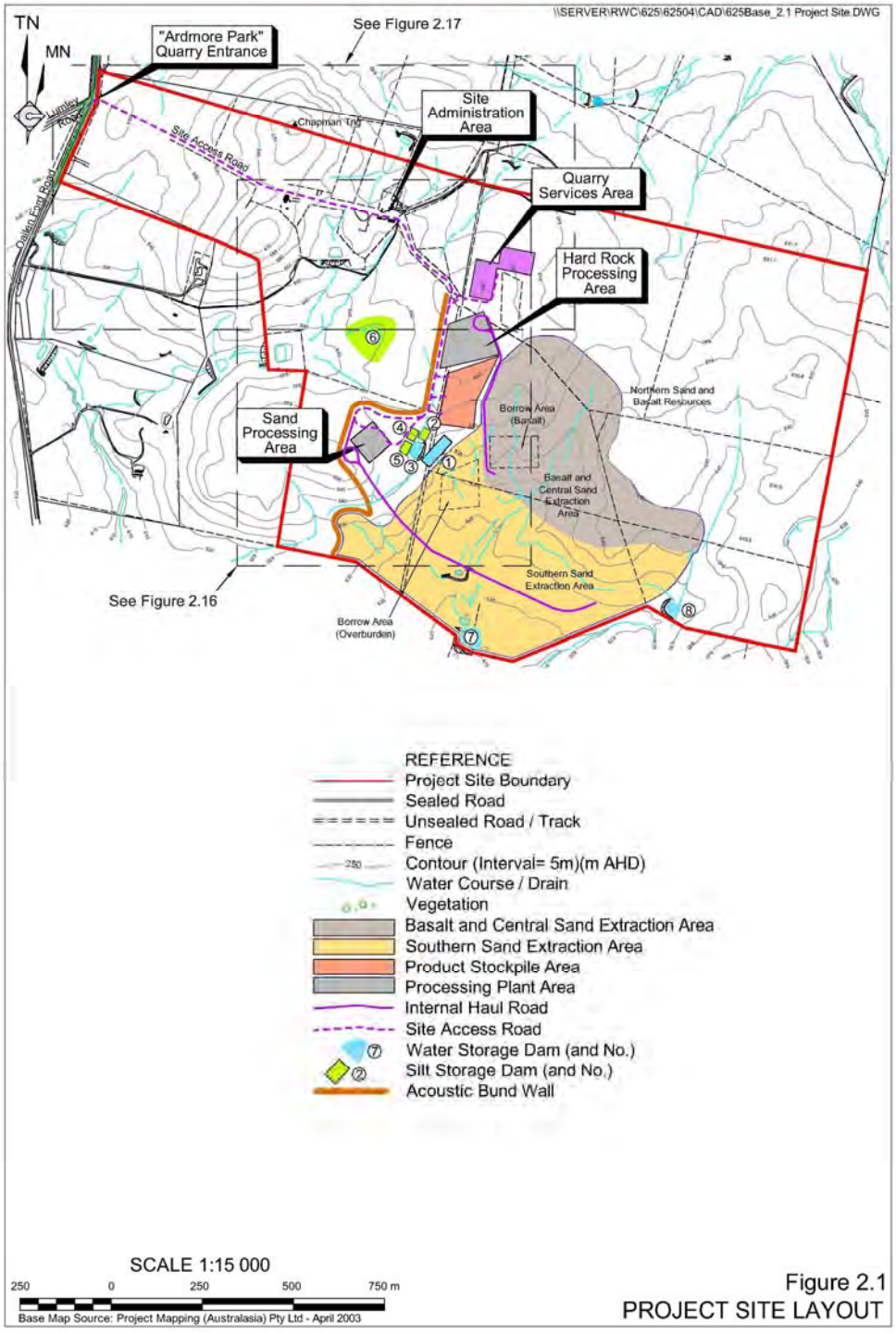

Figure 2.1
PROJECT SITE LAYOUT

APPENDIX 2

STATEMENT OF COMMITMENTS

Table A Statement of Commitments for Project Site Operations and Management

Desired Outcome	Action		Timing
1. Area of Activities			
All approved activities are undertaken in the area(s) nominated on the approved plans and figures (unless moved slightly to avoid individual trees).	1.1	Survey and mark the boundaries of the areas of disturbance on the ground.	Prior to any vegetation clearing.
	1.2	Survey and peg the centre line of the Site Access Road.	Prior to construction of the Site Access Road.
2. Operating Hours			
Management of construction and operational activities in accordance with the approved operating hours.	2.1	Undertake all activities within the hours of: 7.00am to 6.00pm / Monday to Friday and 7.00am to 1.00pm / Saturday.	Ongoing.
3. Waste Management			
Minimisation of general waste creation and maximisation of recycling, wherever possible.	3.1	Place all paper and general wastes originating from the Administration and Quarry Services Area, together with routine maintenance consumables from the daily servicing of equipment in garbage bins located adjacent to the various buildings.	Ongoing.
Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	3.2	Collect general waste bins daily and place contents in large waste skip bins positioned adjacent to the heavy vehicle maintenance building to await removal by licensed contractor.	Daily
	3.3	Organise the regular collection of industrial wastes.	Monthly
	3.4	Store waste oils and grease at the maintenance workshop for collection by a licensed waste recycling contractor.	Monthly
	3.5	Collect all parts and packaging and transfer to the maintenance workshop for disposal or recycling.	As required.
	3.6	Store potentially hydrocarbon-contaminated water in the oil/water separator for regular removal from site by a licensed contractor.	As required.
	3.7	Install adequate toilet and ablution facilities within the Administration and Quarry Services Area for the site workforce and visitors.	During site establishment.
	3.8	Direct sewage to either the existing septic system of the "Ardmore Park" property or a bio-cycle (or equivalent system) within the Administration and Quarry Services Area with effluent irrigation to land.	Ongoing.
4. Rehabilitation			
The creation of a stable final landform, available for the proposed future use(s) of agriculture and/or nature conservation.	4.1	Adopt a progressive approach to rehabilitation to ensure that completed areas are quickly shaped and vegetated to provide a stable landform.	Ongoing during rehabilitation activities.
	4.2	Stabilise earthworks, drainage lines and disturbed areas no longer required for quarry-related activities.	As areas become available.
	4.3	Blend the created landform with the surrounding land fabric.	As areas become available.
	4.4	Maintain a number of water storages to facilitate the subsequent use of the land for agricultural purposes.	Prior to quarry closure.
	4.5	Replant native vegetation along reinstated drainage lines and lower lying areas of the Project Site totalling approximately 14.7ha.	Ongoing during rehabilitation activities.

Desired Outcome	Action		Timing
	4.6	Utilise native tree, shrub and grass species that would promote the re-establishment of the endangered ecological community White Box Yellow Box Blakely's Red Gum Woodland, and link existing areas of native vegetation to the southeast and northwest of the Project Site.	Ongoing during rehabilitation activities.
	4.7	Retain cleared trees and branches for use in stabilising slopes identified for rehabilitation with native woodland communities.	Ongoing during rehabilitation activities.
	4.8	Report each year's rehabilitation within an Annual Environmental Management Report (AEMR).	Annually.
	4.9	Undertake a targeted weed spraying programs, to eliminate or control noxious weeds currently occurring on the Project Site.	Annually.
5. Groundwater			
Prevention of groundwater contamination.	5.1	Securely store all hydrocarbon products within designated and bunded areas.	Ongoing.
	5.2	Refuel all of the project fleet within designated areas of the Project Site.	Ongoing.
	5.3	Undertake all maintenance activities within designated areas of the Project Site facilities area, ie. maintenance workshop.	Ongoing.
	5.4	Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Ongoing.
	5.5	Ensure all storage tanks are either self-bunded tanks or bunded with an ~~impermeable surface and a capacity to~~ contain a minimum 110% of the largest storage tank capacity.	Ongoing.
	5.6	Collect samples of groundwater in all monitoring wells on a 12-month basis and submit to a NATA registered laboratory for the testing of pH, Electrical conductivity (EC), Total Dissolved Solids (TDS) and the determination of major anions, major cations, iron and hydrocarbons.	Annually.
	5.7	Measure water levels on a monthly basis up to and throughout the extraction phase from Bores BHAP1, BHAP5, BHAP7 and BHAP10.	Monthly.
	5.8	Replace the bores that are destroyed during the staged extraction process with strategically positioned and suitably installed new monitoring wells where appropriate.	As required.
	5.9	(In the event that monitoring indicates a decreasing SWL trend attributable to the proposed extraction of groundwater), reduce pumping rates, initially through reducing water provided for ongoing stock watering and if required through a reduced processing rate at the sand washing plant.	In the event that monitoring indicates a decreasing SWL trend attributable to the proposed extraction of groundwater.
Prevention of any reduction in the availability of groundwater flows to local springs.	5.10	Assess the flow rate and water quality of groundwater from the "Inverary Park" and Southern Spring against low flow records.	6 monthly.
	5.11	Establish photo points at representative spring ("Inverary Park", southern and western springs) and other locations to assess any changes in flow regimes and vegetation over time	Prior to the commencement of extraction.

Desired Outcome	Action		Timing
	5.12	(In the event of a deterioration of flow rates and/or water availability to below historic low flows) undertake one of the following options: (i) supply groundwater to the affected water user from Multiquip's proposed production bore (BHAP6) to the measured and documented loss and with a water quality commensurate or better; or (ii) provide monetary compensation to the affected water user; or (iii) install a replacement bore to provide the measured and documented loss of groundwater with a quality commensurate or better.	In the event of a deterioration of flow rates and/or water availability to below historic low flows.
Preparation of a contingency plan in the event that the availability or quality of groundwater is reduced for local groundwater users.	5.13	Undertake remedial action if the available drawdown attributable to the mine for the existing groundwater users is reduced by over 15%. The remedial actions that may be appropriate include the deepening of bores or replacement of bores to accommodate deeper, high lift pumps.	As required.
	5.14	Commission review of all monitoring results on an annual basis by a consulting hydrogeologist or other environmental professional and report in each AEMR.	Annually
6. Surface Water			
Diversion of clean water flows away from areas of project related disturbance.	6.1.	Construct diversion banks upstream of the extraction area and other related disturbance to the design specifications of Landcom (2004).	Prior to disturbance in relevant catchment of the Project Site.
	6.2.	Construct clean water storage dam (Dam 8) at the discharge points of the main diversion structures.	Prior to disturbance in relevant catchment of the Project Site.
	6.3.	Inspect the diversion banks and storage dams on a monthly basis, or following rainfall of >25mm/24 hours, and undertake maintenance work as necessary.	Monthly or following rainfall of >25m/24hours.
Capture of dirty water flows from areas of project related disturbance.	6.4.	Construct catch banks downstream of disturbed ground to the design specifications of Landcom (2004).	Prior to disturbance in relevant catchment of the Project Site.
	6.5.	Inspect the catch banks on a monthly basis, or following rainfall of >25mm/24 hours, and undertake maintenance work as necessary.	Monthly or following rainfall of >25mm/24 hours.
	6.6.	Construct sediment basins and clarification ponds as identified on **Figure 5.15** (in the EA) and to the design specifications of Landcom (2004).	Prior to disturbance in relevant catchment of the Project Site.
	6.7.	Inspect the sediment basins on a monthly basis, or following rainfall of >25mm/24 hours, and clean out the sediment basins of consolidated sediment once capacity reduced by 20%.	Monthly or following rainfall of >25mm/24 hours.
	6.8.	Review general performance of catchment and settlement structures and upgrade the existing structures or install additional structures to ensure all dirty water is captured and settled prior to discharge.	Ongoing.
Discharged water quality to meet nominated criteria.	6.9.	Construct catchment and settlement structures 'in-line' such that overflow from one structure is directed to another downstream.	During construction.
	6.10.	Divert drainage in the final landform to Dams 7 and 8.	Prior to project completion.

Desired Outcome	Action		Timing
	6.11.	Ensure drainage paths between the catchment and settlement structures are well grassed.	Ongoing.
	6.12.	Ensure any water discharged meets the DECC Environment Protection Licence criteria, expected to be as follows. • TSS < 50mg/L. • pH: 5.5 to 8.5. • Oil & grease < 10mg/L. • Electrical conductivity < 350µS/cm	Ongoing.
Prevention of hydrocarbon contamination of water on the Project Site.	6.13.	Securely store all hydrocarbon products.	Ongoing
	6.14.	Refuel all but the less mobile mining equipment which would be refuelled within the open cut area, within designated areas.	Ongoing.
	6.15.	Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Ongoing.
	6.16.	Ensure all storage tanks are either self-bunded tanks or bunded with an impermeable surface and have a capacity to contain a minimum 110% of the largest storage tank capacity.	When imported to site or constructed.
	6.17.	Implement a 3-phase remedial action plan in the event of a major hydrocarbon spill as follows. • **Phase 1 – Initial Recovery:** Recover as much as possible at the source by pumping free hydrocarbon from the surface and excavating hydrocarbon-contaminated materials. • **Phase 2 – Source Control:** Begin hydraulic control of the source to prevent spreading of contamination. • **Phase 3 – Recovery:** If necessary, install boreholes to remove and treat contaminated groundwater.	As required.
7. Noise			
All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	7.1.	Construct an acoustic bund wall to the west of the internal road network and around the sand processing area.	During construction period.
	7.2.	Locate the mobile crushing plant and hard rock processing plant within a cut section of the Project Site, approximately 8m below surface level (to the east).	During construction period.
	7.3.	Commence extraction from the southern sand resource area at the northern extremity of Stage 1 and move progressively southward toward Stage 2.	As part of extraction operations.
	7.4.	Enclose the hard rock processing plant using Panel-Tech Thermaspan Colorbond panels, leaving openings only for plant conveyors.	During construction period.
	7.5.	Adhere to the nominated hours of operation, ie. no extraction, processing and associated activities would take place before 7:00am or after 6:00pm.	Ongoing.
	7.6.	Use equipment with lower sound power levels in preference to more noisy equipment.	Ongoing.
	7.7.	Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance.	Ongoing.

Desired Outcome	Action		Timing
	7.8.	Regularly service all equipment used on site to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Ongoing.
	7.9.	Grade the internal road network to limit body noise from empty trucks travelling on the Project Site.	Ongoing.
	7.10.	Establish a noise monitoring program (NMP) to initially validate the predictions arising from the modelling and then record noise levels against the Project noise criteria. The NMP would include a noise monitoring protocol which would include the contingent measures to be followed should non-compliant noise levels be measured.	Within 6 months of project approval.
8. Air Quality			
Site activities are undertaken without exceeding DECC air quality criteria or goals.	8.1.	Minimise clearing ahead of construction and operational activities.	Ongoing.
	8.2.	Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant lift-off of dust.	Ongoing.
	8.3.	Avoid stripping soil in periods of high wind.	Ongoing.
	8.4.	Use water application to increase soil moisture should stripping occur during periods of high wind or low soil moisture.	Ongoing.
	8.5.	Apply water to the hard rock processing plant feed hopper and crushers.	Ongoing.
	8.6.	Install bund walls and wind breaks as required.	Ongoing.
	8.7.	Locate the mobile crushing plant within the cut section of the hard rock processing area.	During construction and initial production phase.
	8.8.	Enclose the dust generating components of the hard rock processing plant with limited openings to allow entry and exit of conveyors and access by project personnel.	During construction.
	8.9.	Use a 10 000 litre water truck to regularly wet the active internal unsealed roads.	Ongoing.
	8.10.	Seed topsoil stockpiles, acoustic bund walls and areas where landform preparation is complete to assist in stabilising the exposed surface	Ongoing.
	8.11.	Minimise the drop heights between front-end loader buckets and trucks carrying sand/basalt or overburden through operator training and education on the management of dust	Ongoing.
	8.12.	Cover all trucks carrying quarry products with approved covers and securely fix the tailgates to prevent windblown dust emission or spillages.	Ongoing.
	8.13.	Undertake an air quality monitoring program to demonstrate compliance with the nominated goals. • Deposited dust at selected residences and strategic locations surrounding the Project Site. • Continuous wind speed and direction at the Project Site weather station.	Within 6 months of project approval.

Desired Outcome	Action		Timing
9. Flora and Fauna			
Minimisation of long term impact on flora and fauna on and around the Project Site.	9.1.	Construct the Project Site infrastructure to avoid where possible, remnant stands of vegetation.	During Construction.
	9.2.	Minimise clearing and consistent with operational requirements.	During clearing.
	9.3.	Undertake vegetation clearing on a campaign basis to provide for immediate extraction operations.	Ongoing.
	9.4.	Clearly define all areas to be cleared.	Prior to clearing.
	9.5.	Construct any additional internal roads required on the cleared lands well away from stands of native vegetation.	Ongoing.
	9.6.	(Where practicable), directly transfer soil material and biomass stripped to completed sections of the final landform for spreading	Ongoing
	9.7.	Carry out, where possible, tree removal, especially the mature trees in late spring and early autumn to avoid spring nesting birds and over-wintering bats.	Ongoing.
	9.8.	Retain felled trees for use in rehabilitation of the final landform.	Ongoing.
	9.9.	Ensure the quality of water discharged from the Project Site has a neutral or beneficial impact on the downstream catchment.	Ongoing.
	9.10.	Control noxious weeds at all times.	Ongoing.
	9.11.	Commence progressive rehabilitation of the open cut area, including establishment of Vegetation Offset Area as soon as possible.	During Year 1 of project.
	9.12.	Undertake landscape plantings to screen the proposed quarry and associated facilities from view, stabilise the soils and drainage lines and provide habitat for fauna	During first 3 years of the project.
	9.13.	Maintain the existing fences around the remnant forest communities associated with the knolls on the "Ardmore Park" property.	Ongoing.
10. Aboriginal Heritage			
Provide appropriate protection to identified Aboriginal artefacts.	10.1.	Ensure the in-situ protection of the identified artefacts through workforce education.	Ongoing
	10.2.	Apply for the relevant permit to undertake test pitting over the southern sand resource (in accordance with the recommendations of AASC (2008).	Prior to the commencement of extraction.
Minimise potential to impact upon unidentified Aboriginal artefacts.	10.3.	Invite Aboriginal monitors to site to review the results of test pitting activities.	Ongoing.
	10.4.	Cease work at any area if further Aboriginal objects are uncovered during the course of the Project, and contact the DECC (NPWS) for advice.	Ongoing.
Employees who are sensitive and respectful of possible identified Aboriginal sites and artefacts.	10.5.	Conduct a Cultural Heritage Awareness Induction Course for staff, contractors and any heritage monitors working on the Project Site.	Ongoing.
Notification of Aboriginal Sites under Part 6 s91 NPWS Act.	10.6.	Supply formal site cards for all identified Aboriginal artefacts to the DECC Aboriginal Heritage Information Management System (AHIMS) Registrar.	Following identification of an Aboriginal artefact or site.
11. Non-Aboriginal Heritage			
Provide appropriate protection to site of non-Aboriginal heritage significance.	11.1	Locate the Project Site entrance works at least 5.5m from the Larbert Tree and protect the tree from accidental damage during road construction and operation of the quarry.	Ongoing.

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Desired Outcome	Action		Timing
	11.2	Prepare a Cultural Heritage Management Plan (CHMP) for the project which would: • be prepared in consultation with the NSW Heritage Office • include an inventory of all listed heritage items locally; • provide opportunity for further research as to any physical evidence of the Old Argyle Road; • include a protocol for surface disturbing activities in the vicinity of the recorded location of the Old Argyle Road; and • include a protocol to be followed in the event that archaeological material is exposed as a result of surface disturbing activities.	Prior to commencement of the project.
12. Visibility			
Reduce the impact of the project on the visual amenity of private and public vantage points.	12.1	Orient the various components of the Project Site in such a way that the existing topographical features would offer maximum screening of the Project Site.	Complete.
	12.2	Minimise the extent of land disturbance / clearing in advance of extraction.	Ongoing.
	12.3	Construct a 4m bund wall around the sand washing plant, along the internal product transport route and ultimately along the Project Site access road to the west of the "Ardmore Park" residence.	During construction activities.
	12.4	Seed the bund wall with native grass, shrub and tree species to act as an additional visual screen.	Following construction.
	12.5	Plant out the elevated areas immediately west of the processing plants and internal road network as part of an ongoing commitment to re-establish areas of native vegetation (particularly those of the White Box Yellow Box Blakely's Red Gum Woodland community).	Ongoing.
13. Soils, Land Capability and Agricultural Suitability			
Maintenance of soil value for rehabilitation and minimisation of soil loss though erosion.	13.1	Strip topsoil and subsoil to the depths nominated in the EA. Only those areas required for immediate construction or extraction activities would be stripped.	Ongoing.
	13.2	Provide mobile equipment operators with clear instructions to keep the topsoil and subsoil separate	Ongoing
	13.3	Transfer and respread directly stripped soil materials directly over areas to be rehabilitated following the first 18 to 24 months of mine operations.	Ongoing.
	13.4	Stockpile soil away from natural surface drainage lines.	Ongoing
	13.5	Seed any stockpile retained for in excess of three months with cereal and pasture species	As required.
	13.6	Cover long-term subsoil stockpiles with a cover of topsoil.	As required.
	13.7	Install erosion protection around soil stockpiles.	Ongoing.
	13.8	Divert surface water flow away from soil stockpile areas.	
	13.9	Monitor erosion from soil stockpiles or rehabilitated surfaces throughout the life of	Ongoing.

Desired Outcome	Action		Timing
		the Project with remedial works undertaken should erosion be observed.	
14. Bushfire Hazard			
Minimise potential for initiation of fire through combustion of fuel.	14.1	Undertake refuelling within designated fuel bays or within cleared area of the Project Site.	Ongoing.
	14.2	Turn vehicles off during refuelling.	Ongoing.
	14.3	Enforce no smoking policy in designated areas of the Project Site.	Ongoing.
	14.4	Maintain fire extinguishers within site vehicles.	Ongoing.
Manage potential and actual bushfire occurrences in accordance with local bushfire control plans.	14.5	Prepare a Bushfire Management Plan for the Project.	Within 6 months of the Project commencing.
	14.6	Regularly liaise with Goulburn Mulwaree Council personnel in relation to bushfire hazard.	Ongoing.

Table B
Statement of Commitments for Transport Operations and Management

Desired Outcome	Action		Timing
1. Area of Activities			
All approved activities are undertaken in the area(s) nominated on the approved plans and figures (unless moved slightly to avoid individual trees).	1.1	Peg the centre line of the Bungonia By-pass section of the transport route, specifically where a meander is to be created to avoid any mature native trees.	Prior to construction of the transport route.
	1.2	Survey and mark the boundaries of the areas of disturbance on the ground.	Prior to any vegetation clearing.
2. Operating Hours			
Management of transport operations in accordance with the approved operating hours.	2.1	Undertake road upgrade and construction operations within the hours of: 7.00am to 6.00pm / Monday to Friday and 7.00am to 1.00pm / Saturday.	During Construction and upgrading works along the Transport Route.
	2.2	Ensure no truck exits the site before 7.00am Monday to Saturday or enters the site after 6.00pm Monday to Friday and 1.00pm Saturday.	Ongoing
3. Waste Management			
Minimisation of general waste creation and maximisation of recycling, wherever possible.	3.1	Collect all waste materials in temporary skip bin(s) at the construction / upgrade site and transfer to local landfill as required.	During Construction of the Transport Route.
Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	3.2	Undertake all vehicle refuelling within a bunded area of the Project Site or protected area in the vicinity of the construction site.	During Construction of the Transport Route.
	3.3	Install temporary toilet and ablution facilities away from natural drainage lines.	As required.
4. Rehabilitation			
The creation of a stable landform, available for the proposed future use(s) of agriculture and/or nature conservation.	4.1	Stabilise earthworks, drainage lines and disturbed areas no longer required for project related activities.	Ongoing.
	4.2	Maintain aquatic and terrestrial habitat corridors along Bungonia Creek.	During Construction of the Transport Route.
	4.3	Avoid unnecessary disturbance to vegetation along the alignment of the Bungonia By-pass through the Crown land.	During Construction of the Transport Route.
5. Transport Route Construction and Upgrading – see Figures A, B & C below			
Stage 1 Roadworks. The completion of the construction of the Bungonia Bypass and the completion of specified intersection upgrades (see **Figure A** below).	5.1.	Construct the Project Site entrance with Oallen Ford Road (see **Detail A** below).	Throughout Stage 1 Roadworks.
	5.2.	Construct the Bungonia Bypass, including the crossing of Bungonia Creek (see **Detail B** below), as follows. • Two 2.5m lanes with 0.5m shoulder between Oallen Ford Road and the Crown	Throughout Stage 1 Roadworks.

Desired Outcome	Action		Timing
		land (see **Detail E** below). • Single lane bridge spanning Bungonia Creek as described in Section 3.2.4.5 and **Figure 3.6** in the EA. • A singe lane of 3.0m, with 0.5m shoulder on both sides, through the Crown land (see **Detail F** below). A pass-by bay would be included over already cleared land at both the Northern and Southern ends of this section of the by-pass.	
	5.3.	Construct the intersections of the Bungonia Bypass with Oallen Ford Road (see **Detail C** below) and Mountain Ash Road (see **Detail D** below).	
	5.4.	Upgrade the Mountain Ash Road – Jerrara Road intersection.	
	5.5.	Upgrade Water Course Crossing I as part of the Mountain Ash Road – Jerrara Road intersection upgrade (see **Detail D** below).	
	5.6.	Widen the carriageway of Jerrara Road at Water Course Crossings E (5.94km from the Hume Highway to accommodate an 8m sealed pavement).	
	5.7.	Install "Give Way" signs on the southbound approach to Water Course Crossings: - B (3.16km from the Hume highway); - C (3.43km from the Hume Highway); - D (5.12km from the Hume Highway); and - G (9.72km from the Hume highway).	
	5.8.	Install other road signage as required by Goulburn Mulwaree Council.	
Stage 2 Roadworks. The completion of pavement widening and public road upgrades (see **Figure B** below).	5.9.	The widening and minor realignment of the public roads of proposed transport route between the Project Site and the Hume Highway.	Throughout Stage 2 Roadworks.
	5.10.	The upgrade of Water Course Crossings A, F and H.	
	5.11.	Rehabilitate those sections of pavement identified as having a pavement life of less than 10 years.	
	5.12.	Complete centreline and edge marking over the entire length of the transport route.	Throughout Stage 2 Roadworks.
Stage 3 Road Works. Completion of remaining water course crossing upgrades (see **Figure C** below).	5.13.	Upgrade Water Course Crossings: - B (3.16km from the Hume highway); - C (3.43km from the Hume Highway); - D (5.12km from the Hume Highway); and - G (9.72km from the Hume highway); to provide a sealed pavement crossing of 8.0m.	Throughout Stage 3 Roadworks.
	5.14.	Remove "Give Way" signs from the southbound approach to these crossings once the Stage 3 roadworks are completed.	
6. Product Transportation			
Product transportation is undertaken in such a manner as to minimise impacts for motorists travelling on the local road network and surrounding landholders and/or residents.	6.1.	Erect "Trucks Entering" signs on Oallen Ford Road on both the southbound and northbound approaches to the Project Site entrance and on Lumley Road 200m from the Project Site entrance.	Prior to the commencement of transport operations.
	6.2.	Establish a complaints register, advertised in the local telephone directory, to allow concerned residents to report any traffic related incidents, unsafe operation or general	Prior to commencement of transport operations and ongoing.

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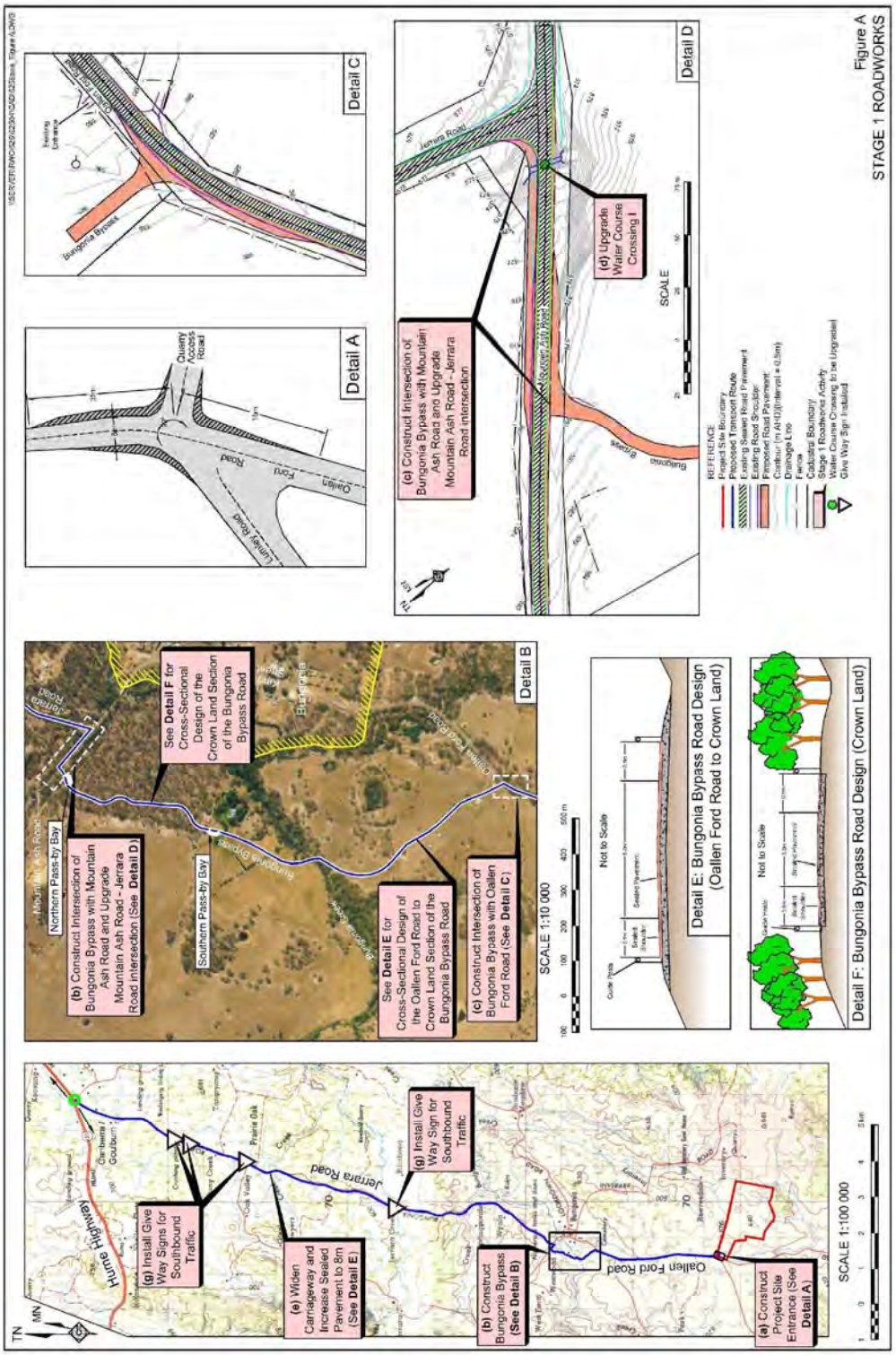
Desired Outcome	Action		Timing
		concern. Multiquip would thoroughly investigate all complaints.	
	6.3.	Restrict the number of truckloads exiting the Project Site to 10 per day until the Stage 2 road upgrade works are complete.	Following the completion of Stage 1 road works.
	6.4.	Restrict the number of truckloads exiting the Project Site to 28 per day until the Stage 3 watercourse crossing upgrades are complete.	Following the completion of the Stage 2 roadworks (see Commitments 5.9 to 5.12).
	6.5.	Following the completion of the Stage 3 roadworks (see Commitments 5.13 and 5.14) restrict the number of truckloads exiting the Project Site to 44 per day.	Ongoing following the completion of Stage 3 roadworks.
	6.6.	Adhere to the nominated hours of operation, ie. no vehicles would arrive at the Project Site before 7:00am or leave the Project Site after 6:00pm.	Ongoing
	6.7.	Enforce driver adherence to all speed limits. • 80km/hr on public roads. • 60km/hr on the Bungonia Bypass.	Ongoing.
	6.8.	Ensure each exiting truck uses an on-site weighbridge to ensure all legal weight restrictions are adhered to.	Ongoing.
	6.9.	Use only vehicles which employ the most up-to-date noise/emission reducing technology.	Ongoing.
	6.10.	Cover all loads to minimise dust and particulate matter and debris emissions	Ongoing.
	6.11.	Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance.	Ongoing.
	6.12.	Regularly service all trucks to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Ongoing.
	6.13.	Prepare and implement a transport Code of Conduct developed for the project. The Code of Conduct would require drivers to obey all traffic signs, speed zones and to operate in a safe and courteous manner at all times.	Ongoing.
7. Surface Water			
Construction of appropriate roadside drainage.	7.1.	Complete specific roadside drainage upgrades as identified in **Table 6.9** (in the EA)	During Stages 2 and 3 roadworks.
	7.2.	Complete standard drainage upgrades on all drainage line crossings including: • extension of the pipes, culverts or bridges to facilitate the wider road; • raising of the pipe headwalls to accommodate higher batters; and/or • steepening batter slopes between the road pavement and the pipe headwall.	During Stages 2 and 3 roadworks.
	7.3.	Implement a standard suite of design measures on all piped and box culvert drainage line crossings, as follows. • All pipes and culverts would be provided with inlet protection (in accordance with Chapter 5.4.3 of Landcom (2004)) made from locally-sourced rock cobbles. • All pipes and culverts would be provided with outlet protection, ie. energy dissipators (in accordance with Standard Drawing 5-8 of Landcom (2004)), made from locally-sourced rock cobbles.	During Stages 2 and 3 roadworks.

Desired Outcome	Action		Timing
		• Excess accumulations of sediment or leaf litter would be removed from pipes and culverts as works progress. • Where table drains discharge into watercourses or drainage depressions, the outlet point will be provided with scour protection in the form of riprap (or equivalent). • Where drainage lines show evidence of gullying deeper than 1.0m within 20m of the road crossing, batters would be graded back to 6H:1V and stabilised using appropriate erosion control measures and native vegetation would be planted in and around energy dissipation structures.	
	7.4.	(Where the general crossing design works would require the construction of, or remedial work to, fill batters), undertake the works as follows. • Prevent stormwater runoff from drain down the fill batters. Where unavoidable, direct the water as sheet flow over sections of the fill batter vegetated using a hydromulch or equivalent erosion control measures. • Direct any concentrated flows via flumes constructed from suitably robust material, including flow arresting measures, and discharging onto an energy dissipater. • Fill batters would not exceed 2H:1V gradients. • Stabilise fill batters by compaction and use a hydromulch (or equivalent) to aid the establishment of grasses. • Install sediment fencing 1m from the toe of any batters.	During Stages 2 and 3 roadworks.
	7.5.	Install table drains to manage stormwater runoff from the road pavement as specified by SEEC Morse McVey (2008).	During Stages 2 and 3 roadworks.
Manage erosion and sediment control during the road upgrading and construction works.	7.6.	Minimise clearing of groundcover in advance of upgrading / construction activities.	During Stages 1 and 2 roadworks.
	7.7.	Install sediment fencing, in accordance with Standard Drawing SD 6-8 of Landcom (2004) down-slope of any construction area until works are complete.	During Stages 1 and 2 roadworks.
	7.8.	Strip and stockpile topsoil, in accordance with Standard Drawing SD 4-1 of Landcom (2004), for later re-use.	During Stages 1 and 2 roadworks..
	7.9.	Maintain upslope catchment length of exposed soil areas below 80m. Any slope length exceeding 80m should have a diversion bank, constructed in accordance with Standard Drawing SD 5-5 of Landcom (2004), to direct overland flows onto well-protected, vegetated lands.	During Stages 1 and 2 roadworks..
	7.10.	Restrict construction traffic access to the minimum required for efficient operation of activities.	During Stages 1 and 2 roadworks.
	7.11.	Construct diversion banks to divert “clean” runoff from upslope of any construction areas. Discharges would be onto a stabilised, well-vegetated area, preferably using a level spreader or sill.	During Stages 1 and 2 roadworks.
	7.12.	Protect areas of concentrated flow, eg. drainage pathways, table drains etc., using	As part of road upgrading and

Desired Outcome	Action		Timing
		appropriate erosion control measures such as a biodegradable Rolled Erosion Control Product (RECP), eg. coconut fibre matting or jute matting.	construction.
	7.13.	Stabilise batters following construction or reshaping with vegetation.	As part of road upgrading and construction.
Maintain a Vegetation Offset Area	7.14.	Progressively establish a Vegetation Offset Area (VOA) as part of Project Site rehabilitation activities. The VOA would: • cover an area of 14.7ha; • be established through a combination of hand seeding and tube stock planting; • focus plantings on the reinstated drainage lines and topographically lower areas of the Project Site; • involve a mix of native *Acacia, Eucalyptus* and *Casuarina* species, specifically targeting the re-establishment of the White Box Yellow Box Blakely's Red Gum woodland community in some areas; • be planted at a density of between 1 000 and 2 000 trees per hectare. • be protected from stock by fencing for at least two years; • be watered regularly to promote survival; and • have signage erected identifying the area as a vegetation offset planting area for the management of water quality within the Sydney Drinking Water Catchment.	Ongoing as part of rehabilitation activities.
8. Noise			
All transport operations are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	8.1.	Prevent product deliveries until construction of the Bungonia By-pass is complete.	During Stage 1 roadworks.
	8.2.	Restrict product delivery truck movements to 20 per day until the road upgrading works are completed.	Following completion of Stage 1 roadworks.
	8.3.	Adhere to the nominated hours of operation, ie. no vehicles would arrive at the Project Site before 7:00am or leave the Project Site after 6:00pm.	Ongoing.
	8.4.	Enforce driver adherence to all speed limits.	Ongoing.
	8.5.	Use only vehicles which employ the most up-to-date noise/emission reducing technology as part of transport fleet.	Ongoing.
	8.6.	Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance.	Ongoing.
	8.7.	Regularly service all trucks to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Ongoing.
	8.8.	Ensure noise levels attributable to the construction and operation of the transport route, ie. product transportation, complies with the nominated noise criteria at residences fronting the transport route, within Bungonia village and within audible range of the Bungonia By-pass.	Ongoing.
9. Air Quality			
Transport Route construction and road upgrading activities are	9.1.	Minimise clearing ahead of construction.	During Stages 1 and 2 roadworks.

Desired Outcome	Action		Timing
undertaken without exceeding DECC air quality criteria or goals.	9.2.	Minimise the number of stockpiles and restrict access to a single working face.	During Stages 1 and 2 roadworks.
	9.3.	Compact stockpiles as material is removed or added to stockpiles.	During Stages 1 and 2 roadworks.
	9.4.	Restrict all vehicles to designated routes within the Bungonia By-pass construction area with a speed limit of 20km/h.	During Stages 1 transport operations.
	9.5.	Clean dirt tracked onto the public road network.	During Stage 1 roadworks.
Site activities are undertaken without exceeding DECC air quality criteria or goals.	9.6.	Stand down vehicles with smoky exhausts (more than 10 seconds) for maintenance.	Ongoing.
	9.7.	(During hot, dry and/or windy conditions) limit topsoil stripping activities to that required for the ensuing days construction.	During Stages 1 and 2 roadworks.
	9.8.	Avoid stripping soil in periods of high wind.	Ongoing.
	9.9.	Apply water using a water cart to exposed surfaces.	During Stages 1 and 2 roadworks.
10. Flora and Fauna			
Minimisation of long term impact on flora and fauna on and around the Project Site.	10.1.	Minimise clearing and consistent with operational requirements.	During clearing.
	10.2.	Inspect trees to be cleared prior to clearing to ensure no native fauna is in residence at the time	Prior to clearing
	10.3.	Undertake vegetation clearing on a campaign basis to provide for construction operations.	Ongoing.
	10.4.	Clearly define all areas to be cleared.	Prior to clearing.
	10.5.	Retain felled trees for use in rehabilitation of the final landform.	Ongoing.
	10.6.	Construct appropriate drainage and erosion and sediment control features and implement procedures to prevent water containing high sediment levels from discharging from the transport route.	During construction.
	10.7.	Control noxious weeds at all times.	Ongoing.
11. Aboriginal Heritage			
Provide appropriate protection to identified Aboriginal artefacts.	11.1.	Ensure the in-situ protection of the identified artefacts through workforce education.	Complete.
	11.2.	Align the Bungonia By-pass to avoid the identified sites containing Aboriginal artefacts.	Prior to commencement of construction activities.
	11.3.	Apply for the relevant permit to undertake test pitting over BPAD1 (in accordance with the recommendations of AASC (2008)).	Prior to commencement of construction activities.
Minimise potential to impact upon unidentified Aboriginal artefacts.	11.4.	Invite Aboriginal monitors to site to review results of test pitting activities.	Ongoing.
	11.5.	Cease work at any area if further Aboriginal objects are uncovered during the course of the project, and contact the DECC (NPWS) for advice.	Ongoing.
Employees who are sensitive and respectful of possible identified Aboriginal sites and artefacts.	11.6.	Conduct a Cultural Heritage Awareness Induction Course for staff, contractors and any heritage monitors working on the Project Site.	Ongoing.
Notification of Aboriginal Sites under Part 6 s91 NPWS Act.	11.7.	Supply formal site cards for all identified Aboriginal artefacts to the DECC Aboriginal Heritage Information Management System (AHIMS) Registrar.	Following identification of an Aboriginal artefact or site.



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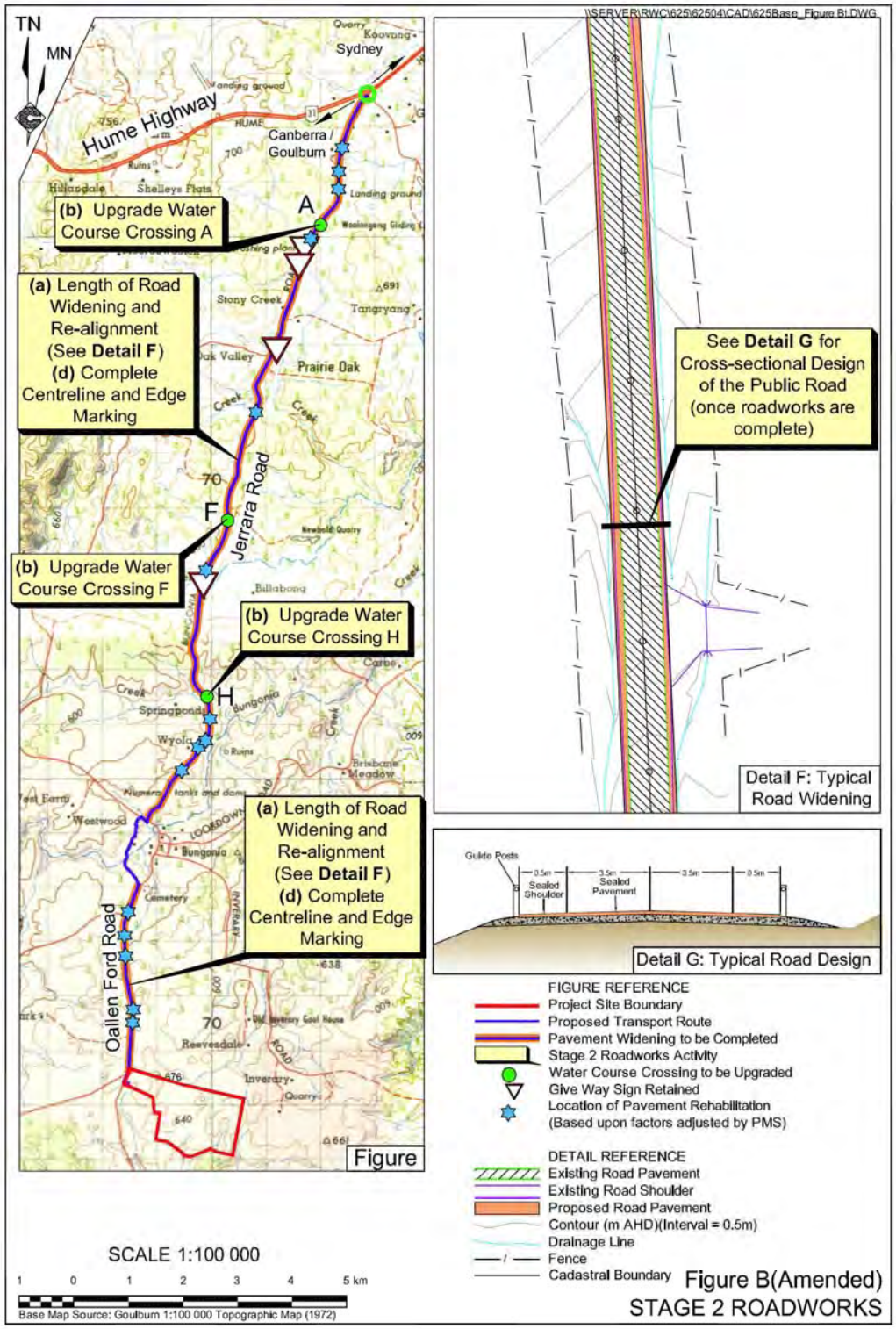
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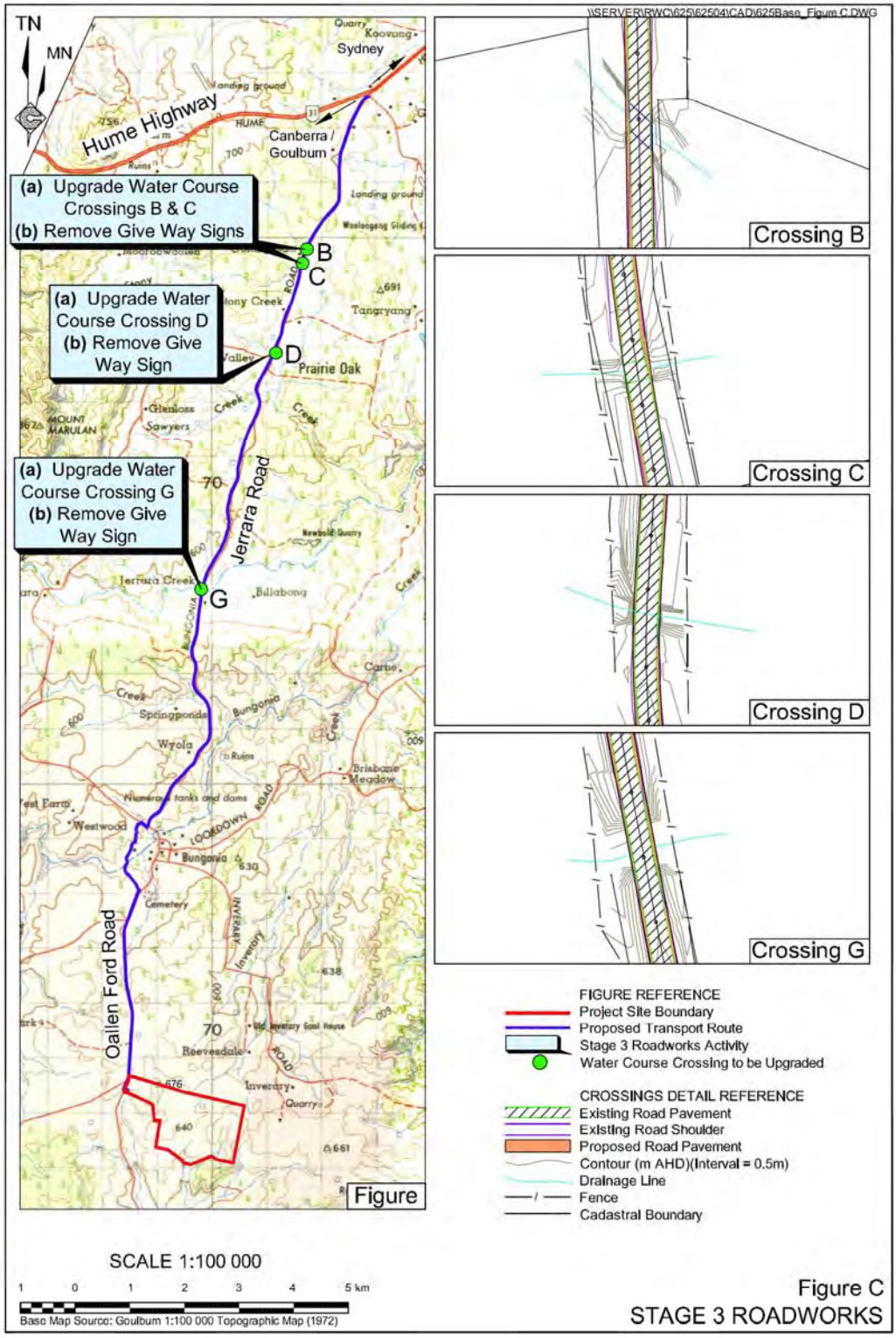
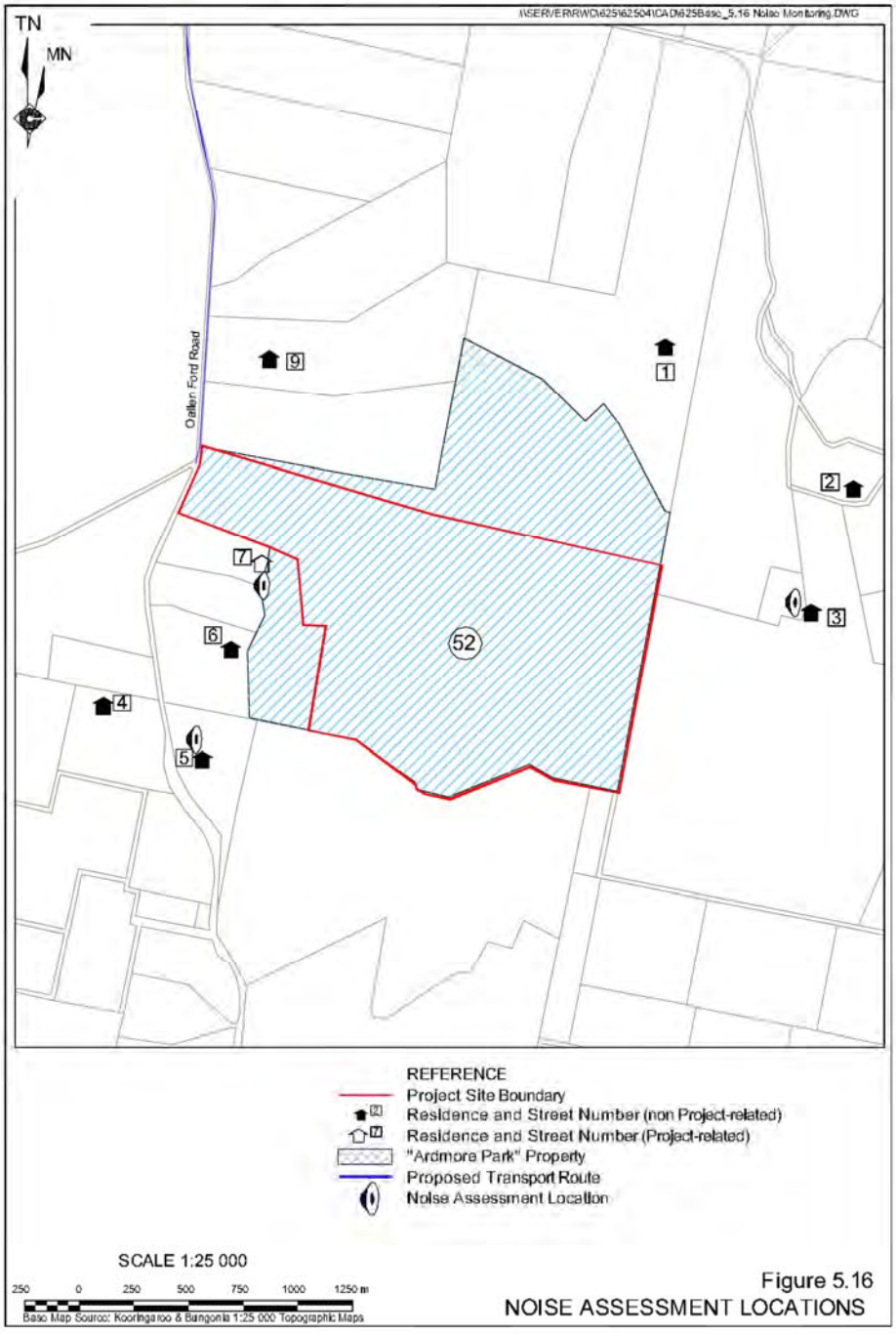
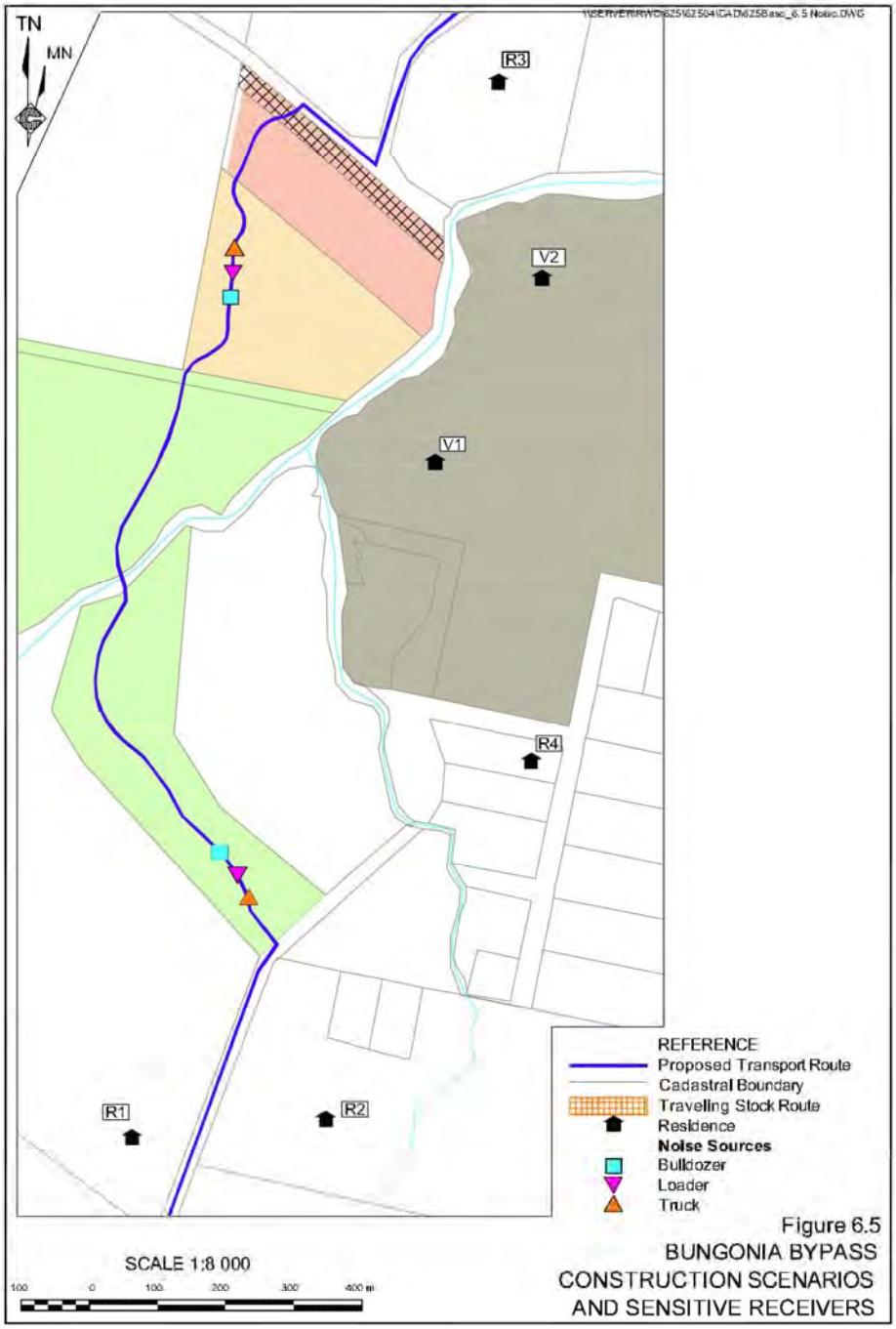
TN
MN
Hume Highway
Sydney
Canberra / Goulburn
Hillsdale
Shelleys Flats
A
(b) Upgrade Water Course Crossing A
(a) Length of Road Widening and Re-alignment (See Detail F) (d) Complete Centreline and Edge Marking
Stony Creek
Tangryang
Oak Valley
Prairie Oak
Jerrara Road
F
(b) Upgrade Water Course Crossing F
Billabong
(b) Upgrade Water Course Crossing H
H
Springponds
Wyola
Westwood
Bungonia
(a) Length of Road Widening and Re-alignment (See Detail F) (d) Complete Centreline and Edge Marking
Oallen Ford Road
Reevesdale
Inverary
Figure
See Detail G for Cross-sectional Design of the Public Road (once roadworks are complete)
Detail F: Typical Road Widening
Guide Posts
0.5m
Sealed Shoulder
3.5m
Sealed Pavement
3.5m
0.5m
Detail G: Typical Road Design
FIGURE REFERENCE
Project Site Boundary
Proposed Transport Route
Pavement Widening to be Completed
Stage 2 Roadworks Activity
Water Course Crossing to be Upgraded
Give Way Sign Retained
Location of Pavement Rehabilitation
(Based upon factors adjusted by PMS)
DETAIL REFERENCE
Existing Road Pavement
Existing Road Shoulder
Proposed Road Pavement
Contour (m AHD)(Interval = 0.5m)
Drainage Line
Fence
Cadastral Boundary
SCALE 1:100 000
1 0 1 2 3 4 5 km
Base Map Source: Goulburn 1:100 000 Topographic Map (1972)
Figure B(Amended)
STAGE 2 ROADWORKS


\\SERVER\RWC\625\62504\CAD\625Base_Figure C.DWG
TN
MN
Hume Highway
Sydney
Canberra / Goulburn
(a) Upgrade Water Course Crossings B & C
(b) Remove Give Way Signs
(a) Upgrade Water Course Crossing D
(b) Remove Give Way Sign
(a) Upgrade Water Course Crossing G
(b) Remove Give Way Sign
B
C
D
G
Jerrara Road
Oallen Ford Road
Prairie Oak
Tangryang
Sawyers
Billabong
Springponds
Wyola
Bungonia
Reevesdale
Inverary
Crossing B
Crossing C
Crossing D
Crossing G
FIGURE REFERENCE
Project Site Boundary
Proposed Transport Route
Stage 3 Roadworks Activity
Water Course Crossing to be Upgraded
CROSSINGS DETAIL REFERENCE
Existing Road Pavement
Existing Road Shoulder
Proposed Road Pavement
Contour (m AHD)(Interval = 0.5m)
Drainage Line
Fence
Cadastral Boundary
Figure
SCALE 1:100 000
1 0 1 2 3 4 5 km
Base Map Source: Goulburn 1:100 000 Topographic Map (1972)
Figure C
STAGE 3 ROADWORKS

APPENDIX 3
NOISE ASSESSMENT LOCATIONS




TN
MN
R3
V2
V1
R4
R1
R2
REFERENCE
Proposed Transport Route
Cadastral Boundary
Travelling Stock Route
Residence
Noise Sources
Bulldozer
Loader
Truck
SCALE 1:8 000
100 0 100 200 300 400 m
Figure 6.5
BUNGONIA BYPASS
CONSTRUCTION SCENARIOS
AND SENSITIVE RECEIVERS

APPENDIX 4
FINAL LANDFORM PLANS

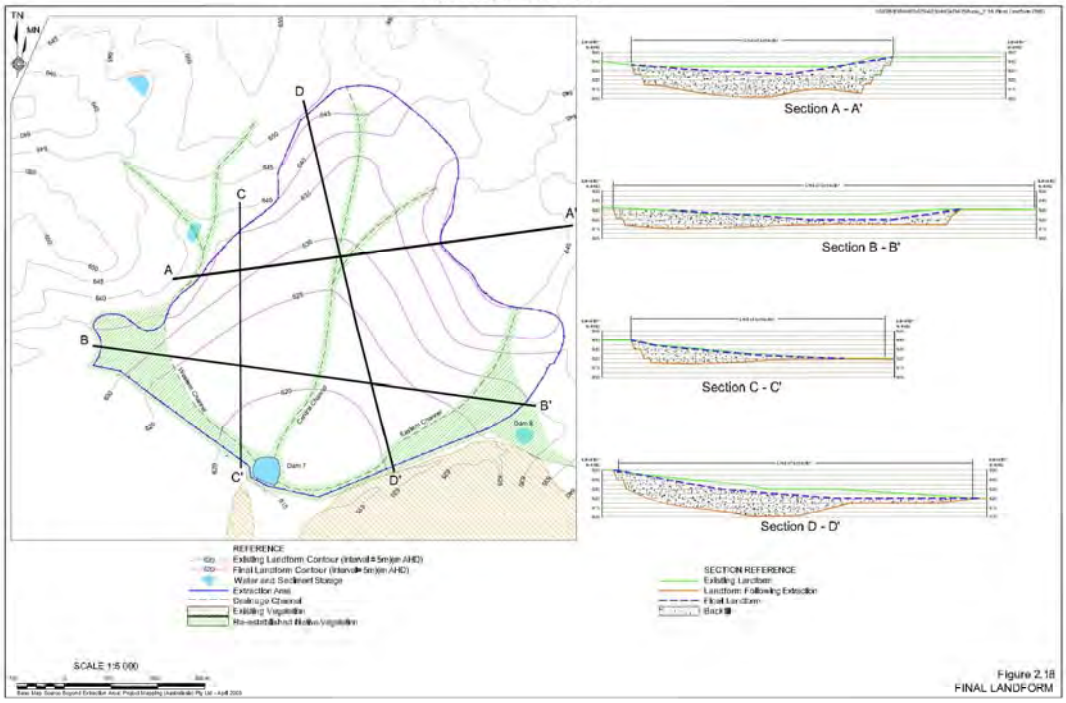


Figure 2.18
FINAL LANDFORM

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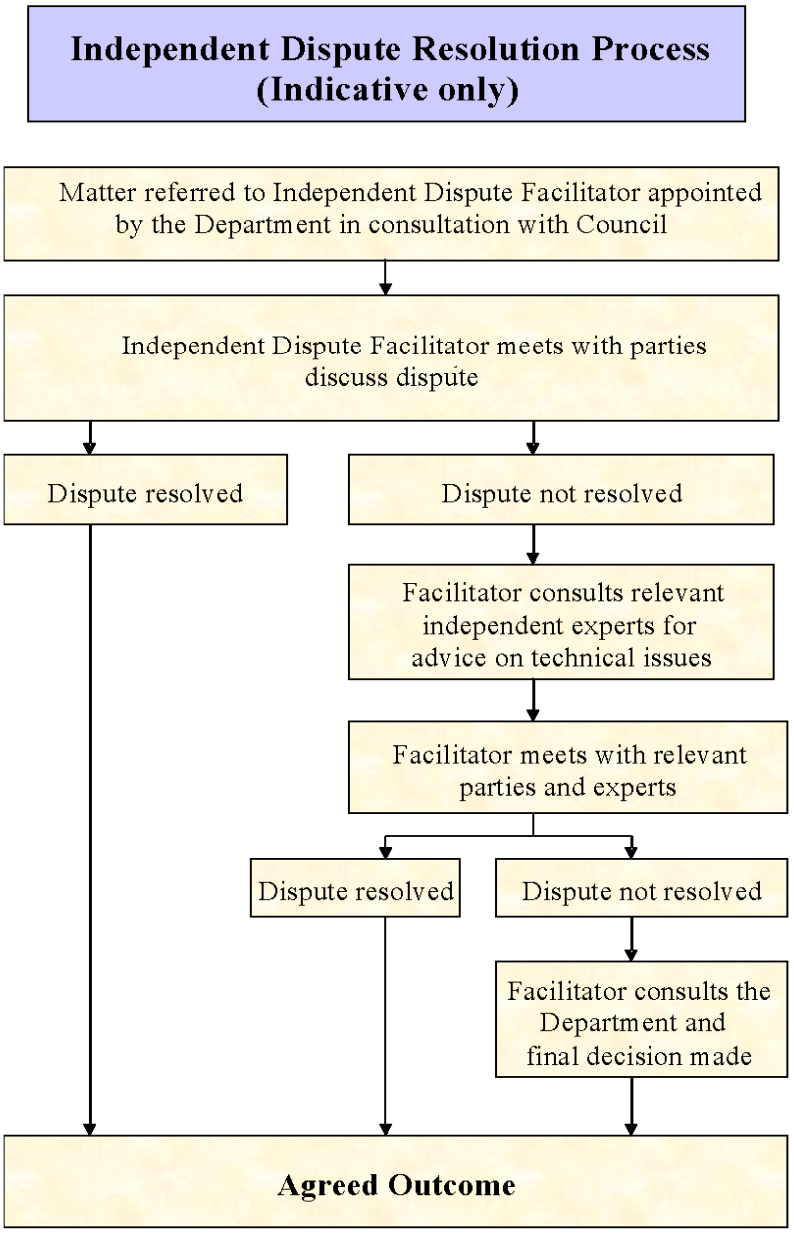
APPENDIX 5
INDEPENDENT DISPUTE RESOLUTION PROCESS



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Annexure 2

Program for Implementation of Project Approval Conditions

(No. of pages including blank pages = 36)

This document has been prepared to assist with the implementation of conditional requirements included in Project Approval 07_0155 issued by the Minister for Planning. The various conditional requirements have been sorted and arranged with respect to time requirements and activities under the following headings.

1. General administrative requirements
2. Within 3 months of the date of approval (by 20 December 2009)
3. Within 6 months of the date of approval (by 20 March 2010)
4. Prior to carrying out any development
5. Prior to commencement of quarrying activities
6. Prior to undertaking any product transport from the site
7. Transport route – operational requirements
8. Monitoring compliance requirements
9. Quarry site – operational requirements
10. Audit requirements
11. Reporting

It is noted that a number of conditions require activities to be undertaken to the satisfaction of the Director-General (of the Department of Planning). It is proposed that information relating to each of these conditions will be included in each Annual Environment Management Report to allow the Director-General to establish his/her satisfaction, ie. the Director-General's acceptance of each Annual Environment Management Report will be considered to be an expression of his/her satisfaction of the respective conditional requests.

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Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
1. GENERAL ADMINISTRATIVE REQUIREMENTS					
2(1)	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Implement measures recorded in all Project Environmental Documentation	All Documentation	Environmental Compliance Officer	
2(2)	The Proponent shall carry out the project generally in accordance with the EA: a) statement of commitments; and b) conditions of this approval. *Notes: The layout of the project is shown in the figure in Appendix 1; and* *The statement of commitments is included in Appendix 2.*	Develop a Environmental Management Strategy that outlines how the Statement of Commitments and conditions of approval will be implemented	Statement of Commitments Approval Document	Quarry Manager	
2(3)	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Noted	All Documents		
2(4)	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of: a) any reports, plans, programs or correspondence that are submitted in accordance with the conditions of this approval; and b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.	Submit Plans as required Implement request(s) from Director-General	Response(s) to request(s) from Director-General	General Manager	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
2(5)	Extraction and processing operations may take place until 30 July 2039. *Note: Under this approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General. Consequently this approval will continue to apply in all other respects other than the right to conduct extraction and processing operations until the site has been rehabilitated to a satisfactory standard.*	Noted	Notification to Director-General that operations have ceased prior to 30/07/39	Quarry Manager	
2(6)	The Proponent shall not transport more than 400,000 tonnes of product a year from the site by road. *Note: Truck movements are further restricted under condition 25 of Schedule 3.*	Maintain and review monthly weighbridge records	Weighbridge register – assemble yearly register	Environmental Compliance Officer	
2(7)	With the approval of the Director-General, the Proponent may submit any management plan, program or strategy required by this approval on a progressive basis.	Noted	–	Quarry Manager	
2(8)	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. *Notes: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works;* • *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*	Obtain construction certificates for all new buildings and building modifications	Applicable Construction Certificates	Quarry Manager	
2(9)	The Proponent shall ensure that all demolition work is carried out in accordance with *AS 2601-2001: The Demolition of Structures,* or its latest version.	Only allow demolition by approved contractors	Approved contractors register approving appropriate contractors with correct licences	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
2(10)	The Proponent shall: a) repair, or pay all reasonable costs associated with repairing, any public infrastructure that is damaged by the project; and b) relocate, or pay all reasonable costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.	Identification of any public infrastructure that may be impacted Relocation of any items that may be adversely impacted	Photographs of all public infrastructure that may be impacted prior to works	General Manager	
2(11)	The Proponent shall ensure that all plant and equipment used at the site is: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient condition.	Input data into service tracker program	Daily check sheets Daily work sheets with hours/km recorded	General Manager	
2(12)	The Proponent shall not commence any development authorised by this approval on Crown land without the prior approval of the Department of Lands.	Finalise sale or enter into lease with Crown Lands allowing works	Appropriate approvals from Crown land	General Manager	
2 (13)	The Proponent shall pay Council a monthly contribution of 4 cents per kilometre per tonne of material trucked from the site for the upgrade and maintenance of roads in accordance with *Mulwaree Shire – Development Contributions Plan 2003-2008* in force at the date of this approval. The contribution amount shall be adjusted every 3 years from the date of this approval to account for the effects of inflation Consumer Price Index).	Submit payment in accordance with the approvals contribution within 30 days of the assembly of monthly records	Monthly Weighbridge register	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
2. WITHIN 3 MONTHS OF THE DATE OF APPROVAL					
3(1)	Within 3 months of the date of this approval, or as otherwise agreed by the Director-General, the Proponent shall: a) engage an independent registered surveyor to survey the boundaries of the approved limit of extraction and the approved ancillary work areas; b) submit a survey plan of these boundaries to the Director-General; and c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits. *Note: The limit of extraction and ancillary areas is shown conceptually on the layout plans in Appendix 1.*	Engage Southern Cross Surveyors to complete work in accordance with these directions Clearly mark surveyed points with coloured start picket surrounded by tyre	Survey confirmation Completed survey plan Photography	Quarry Manager	
3(23)	Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a rehabilitation and offset bond for the project with the Director-General. The sum of the bond shall be calculated at: • $2.50/m^2 for the area of new disturbance in each 3 year review period; • $1.00/m^2 for the total area of land previously disturbed by the quarry, or as otherwise directed by the Director-General. *Notes:* • *If the rehabilitation is completed to the satisfaction of the Director-General, the Director-General will release the bond.* • *If the rehabilitation is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the bond, and arrange for the satisfactory completion of the relevant works.*	Payment in accordance with this condition	Landscape Management Plan Disturbance area calculation	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(33)	Within 3 months of the Director-General approving this report (*Visual Impact Report*), the Proponent shall advise all owners of privately-owned residences identified in the report that they are entitled to additional mitigation measures to reduce the visibility of the quarry from their properties.	Preparation and approval or Visual Impact Report Advise any neighbouring properties on mitigation measures that would apply to them	Visual Impact Report or Visual Assessment Report	Environmental Compliance Officer	
3(34)	Upon receiving a written request from an owner of a residence identified in this report (*Visual Assessment Report*), the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of the Director-General. These mitigation measures must be reasonable and feasible. If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution. *Note: The additional visual impact mitigation measures must be aimed at reducing the visibility of the quarry from significantly affected residences and do not necessarily require measures to reduce visibility of the quarry from other locations on the affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).*	Engage the services of a landscape architect to assist in the design of visual screens	Visual Impact Report or Visual Assessment Report	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
4(2)	If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 3 months of the Director-General advising that an independent review is warranted: a) consult with the landowner to determine his/her concerns; b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the project is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and c) give the Director-General and landowner a copy of the independent review.	Noted			
5(9)	COMMUNITY CONSULTATIVE COMMITTEE The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General, in general accordance with the Department's *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects*. The CCC must be established within 3 months of the date of this approval, unless otherwise agreed by the Director-General. *Notes:* • *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.* • *In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council, adjoining landholders, residents of Bungonia village and resident/s along the haulage route.*	Advertise for interested parties to be part of this committee Find suitable person to sit as independent chair Submit to Director-General for approval Meet with committee on a regular basis (at least biannually)	Guidelines to establishing Community Consultative Committee's	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3. WITHIN 6 MONTHS OF THE DATE OF APPROVAL					
3(32)	**Visual Impact Mitigation** Within 6 months of this approval, the Proponent shall prepare a report that: a) identifies the privately-owned residences that are likely to experience significant visual impacts during the construction and operation of the project; and b) describes (in general terms) the additional mitigation measures that could be implemented to reduce the visibility of the quarry from these residences, to the satisfaction of the Director-General.	Identify any surrounding residences with views of the proposed operational areas within the Project Site Prepare a report (including photographs) that outlines the expected visual impact and the mitigation measures to reduce this impact	Report addressing a) and b)	Environmental Compliance Officer	DoP
4. PRIOR TO CARRYING OUT ANY DEVELOPMENT					
3(6)	The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This plan must: a) be prepared in consultation with DECC, and be submitted to the Director-General for approval prior to carrying out any development on site; and b) include details of how the noise performance of the project would be monitored, and include a noise monitoring protocol for evaluating compliance with the relevant noise limits in this approval.	Prepare Noise Program Consult with DECCW by preparing a draft and request Department to review/accept as advised by Alison McLeod at DECCW Queanbeyan office	Noise Monitoring Program agreed with by DECCW	Environmental Compliance Officer	DECCW

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(9)	The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program shall: a) be prepared in consultation with DECC, and be submitted to the Director-General for approval prior to carrying out any development on site; b) include details of how the air quality performance of the project would be monitored, and include a protocol for evaluating compliance with the relevant air quality criteria in this approval.	Prepare Air Quality Program Consult with DECCW by preparing a draft and request Department to review/accept as advised by Alison McLeod at DECCW Queanbeyan office	Air Quality Program agreed with by DECCW	Environmental Compliance Officer	DECCW
3(13)	The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must: a) be prepared in consultation with DWE, DECC and SCA, and be submitted to the Director-General for approval prior to carrying out any development on site; and b) include a: • Site Water Balance; • Erosion and Sediment Control Plan; • Surface Water Monitoring Program; • Groundwater Monitoring Program; and • Surface and Groundwater Response Plan.	Prepare and implement approved Water Management Plan Consult with DECCW, DWE, SCA	Include site water balance Erosion and Sediment Control Plan Surface Water Plan Groundwater Plan Surface & Groundwater response plan	Environmental Compliance Officer	DECCW NOW SCA

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(14)	The Site Water Balance must: a) include details of: • sources and security of water supply; • water use on site; • water management on site, including the location and capacity of water storages on site and the means of access; • off-site water transfers; and • reporting procedures; and b) investigate and describe measures to minimise water use by the project.	Prepare document with nominated components	Water Usage Record for Water Bore Water Usage Record for Water Cart Annual record of water drawn from on-site sources, water usage and extent of recycling	Quarry Manager	
3(15)	The Erosion and Sediment Control Plan must: a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition, 2004* (Landcom); b) identify activities that could cause soil erosion and generate sediment; c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters; d) principles for the design and construction of waterway crossings along the transport route, in consultation with DPI; e) describe the location, function, and capacity of erosion and sediment control structures; f) demonstrate that the design capacity of basins intended to collect storm runoff will not be compromised by storage of operational water; and g) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.	Reflect all requirements in Plan	Comprehensive Plan	Quarry Manager	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(16)	The Surface Water Monitoring Program must include: a) detailed baseline data on surface water flows and quality in downstream watercourses that could be affected by the project; b) surface water quality and stream health impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts; c) a program to monitor: • surface water flows, quality, and impacts on water users; • stream health; and • channel stability.	1. Collect water samples from sites both upstream and downstream from the potentially affected areas 2. Take photographs of stream conditions (regularly)	Baseline flow data Photographs	Quarry Manager Quarry Manager	
3(17)	The Groundwater Monitoring Program must include: a) detailed baseline data on groundwater levels, flows and quality in the region, and particularly any groundwater bores, springs and seeps (including spring and seep fed dams) that may be affected by operations on site; b) groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; and c) a program to monitor: • groundwater levels and quality in new and existing monitoring bores; • the impacts of the project on: - any groundwater bores, springs and seeps (including spring and seep fed farm dams) on privately-owned land; and - any groundwater dependent ecosystems.	1. Compile all nominated information for program 2. Undertake monitoring prior to works and during quarry operation	Baseline groundwater monitoring levels & flows on the property and at surrounding properties	Quarry Manager	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(18)	The Surface and Groundwater Response Plan must include: a) a protocol for the investigation, notification and mitigation of any exceedances of the surface and ground water impact assessment criteria; b) measures to mitigate and/or compensate potentially affected landowners, including provision of alternative long-term supply of water to the affected landowner that is equivalent to the loss attributed to the project; and c) the procedures that would be followed if any unforeseen impacts are detected during the project.	Noted	Response Plan	Quarry Manager	
3(21)	The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must: a) be prepared in consultation with the DECC, and be submitted to the Director-General for approval prior to carrying out any development on site; and b) include a: • description of the subsurface test pit investigations that would be implemented in the extraction area to determine if archaeological material is present and the significance of any such material; • description of the measures that would be implemented if any new Aboriginal objects or relics are discovered during the project; and • protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.	1. Prepare Aboriginal Heritage Management Plan 2. Consult with DECCW by preparing a draft and submit for review 3. Undertake subsurface test pit investigations in accordance with AHMP 4. Consult with local Aboriginal stakeholders	Aboriginal Management Plan agreed to by DECCW and local Aboriginal stakeholders Aboriginal artefact/relic action plan	Quarry Manager	DECCW DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(27)	The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This plan must: a) be prepared in consultation with Council and the RTA by suitably qualified independent expert/s whose appointment/s have been approved by the Director-General, and be submitted to the Director-General for approval prior to carrying out any development on site; b) provide for Road Safety Audits prior to the commencement of each stage of road upgrade works in accordance with RTA's *Accident Reduction Guide Part 2 Road Safety Audits (August 2005)*; c) include a program for an action plan and outline the measures to be implemented to address any issues identified by the Road Safety Audit; d) include traffic control plans to describe proposed traffic control measures during construction activities on public roads; e) include a protocol for the management of quarry vehicles on the bypass road, including the prevention of trucks from queuing on Mountain Ash Road to enter the bypass road; f) identify arrangements with school bus drivers including any restrictions on activities during school bus pick up/drop off times and provision of any other measures (e.g. bus bays); and g) include a driver's Code of Conduct.	1. Seek confirmation from the DoP that the Traffic Management Plan can be prepared by Christopher Hallam as a suitably qualified independent expert 2. Prepare road safety audits of proposed upgrade works 3. Identify arrangements with School Bus operators on the local roads	Traffic Management Plan Safety Audits Drivers Code of Conduct Agreement(s) or arrangement(s) documented with school bus operators	Environmental Compliance Officer	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5(1)	The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy shall be submitted to the Director-General prior to carrying out any development on site, and must; a) provide the strategic context for environmental management of the project; b) identify the statutory requirements that apply to the project; c) describe in general how the environmental performance of the project would be monitored and managed; d) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the life of the project; • respond to any non-compliance; • manage cumulative impacts; and • respond to environmental incidents and emergencies; and e) describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the project.	Complete Environmental Management Strategy, and obtain approval from Director-General	Approved Environmental Management Strategy	General Manager	DoP
5(2)	The Proponent shall prepare an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General prior to carrying out any development on site, and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document.	Prepare an Environmental Monitoring Program – essentially a timetable for monitoring	Program	Environmental Compliance Officer	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5. PRIOR TO COMMENCEMENT OF QUARRYING ACTIVITIES					
3(1a)	Prior to the commencement of any extraction the Proponent shall make a firm and binding offer to acquire Lot 23 DP 1001312 ("Residence 7" in Appendix 3) in accordance with the terms of the agreement, dated 14 July 2008, as amended, between the Proponent and the owners of this property, unless otherwise agreed by the Director-General.	Undertake formal purchase of Residence 7 Get contract for sale organised through solicitor Settle as per the contract	Contract for sale	General Manager	DoP
3(5)	The Proponent shall construct the western earth mound and acoustic barrier prior to the commencement of any extraction (apart from overburden extraction for the purpose of constructing the mound) or processing activities to the east of the earth mound and acoustic barrier, unless otherwise agreed by the Director-General.	Get bund location pegged Set offset pegs so peg location does not obstruct construction Prepare excavation plan for bund	Survey plan showing bund location Onsite Excavation Plan	Quarry Manager	DoP
3(20)	The Proponent shall prepare and implement a Landscape Management Plan for the project to the satisfaction of the Director-General. This plan must: a) be prepared in consultation with DECC by suitably qualified expert/s whose appointment/s have been approved by the Director-General, and be submitted to the Director-General for approval prior to the commencement of quarrying operations; and b) include a: • Rehabilitation Management Plan; and • Quarry Closure Plan. *Note: The Department accepts that the initial Landscape Management Plan may not include a detailed Quarry Closure Plan. However, the initial plan must include an outline and a timetable for completion of the detailed Quarry Closure Plan.*	Consult and engage suitably qualified expert Obtain approval from Director-General to use proposed expert Include Rehabilitation Management Plan & Quarry Closure Plan in this report	Completed & Approved Landscape Management Plan	Environmental Compliance Officer	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(21)	**Rehabilitation Management Plan** The Rehabilitation Management Plan must include: a) the rehabilitation objectives for the site; b) a description of the short, medium, and long term measures that would be implemented to: • rehabilitate the site; and • maintain and enhance existing site vegetation outside the disturbance area; c) detailed performance and completion criteria for the site rehabilitation; d) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for: • progressively rehabilitating disturbed areas; • protecting vegetation and soil outside the disturbance areas; • rehabilitating creeks and drainage lines on the site to ensure no net loss of stream length and aquatic habitat; • undertaking pre-clearance surveys; • managing impacts on fauna; • landscaping the site to minimise visual impacts, including a landscape plan for the visual/noise bund and other boundaries of the site; • conserving and reusing topsoil; • VENM quality assurance; • collecting and propagating seed for rehabilitation works; • salvaging and reusing material from the site for habitat enhancement; • controlling weeds and feral pests; • bushfire management;	Incorporate all requirements in Plan	Final Document	Quarry Manager	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
	l) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria; m) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and n) details of who would be responsible for monitoring, reviewing, and implementing the plan.	Incorporate all requirements in plan	Final Document	Quarry Manager	DoP
3(22)	**Quarry Closure Plan** The Quarry Closure Plan must: a) include provision for certification from a qualified geotechnical engineer that the final proposed landform is stable; b) define the objectives and criteria for closure of the quarry; c) investigate options for the future use of the site, including any final void; d) describe the measures that would be implemented to minimise or manage the ongoing (post closure) environmental effects of the project; and e) describe how the performance of these measures would be monitored over time.				

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
6. PRIOR TO UNDERTAKING ANY PRODUCT TRANSPORT FROM THE SITE					
3(26)	The Proponent shall: a) upgrade the acceleration lane for northbound traffic on the Hume Highway at its junction with Jerrara Road, to the satisfaction of the RTA, prior to undertaking any product transport from the site; or b) restrict any product transport from the site until a suitable grade separated interchange is operational at the junction of the Hume Highway and Jerrara Road, unless otherwise agreed by the RTA.	1. Consult with the RTA to identify the appropriate intersections improvement 2. Undertake the required upgrade works, as agreed with the RTA	Correspondence from the RTA	Quarry Manager	RTA

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
7. TRANSPORT ROUTE – OPERATIONAL REQUIREMENTS					
3(25)	Transport Route Upgrades The Proponent shall: a) restrict all product transport from the site until it has completed the Stage 1 road upgrade works, to the satisfaction of Council; b) restrict product transport to a maximum of 20 truck movements (in + out) per day Monday to Friday, and 12 truck movements per day on Saturdays, until it has completed the Stage 2 road upgrade works, to the satisfaction of Council; c) restrict product transport to a maximum of 56 truck movements (in + out) per day Monday to Friday, and 30 truck movements per day on Saturdays, until it has completed the Stage 3 road upgrade works, to the satisfaction of Council; d) restrict truck movements associated with the project to a maximum of 88 truck movements (in + out) per day Monday to Friday, and 42 truck movements per day on Saturdays, upon completion of the Stage 3 road upgrade works. *Notes:* • *The road upgrade stages are defined in Schedule 1 of this approval.* • *The restrictions on product transport in this condition do not apply to any product transport to and from the road upgrade sites.*	Record daily truck movements during each stage of roadworks	Weighbridge Records and Truck Movements Register	Environmental Compliance Officer	GMC
3(28)	**Road Haulage** The Proponent shall ensure that: a) all loaded vehicles entering or leaving the site are covered; and b) all loaded vehicles leaving the site are cleaned of materials that may fall on the road, before they leave the site.	Implement driver inductions to notify all drivers of the covering requirement Install signage at the exit point to remind drivers Randomly check trucks leaving the site	Driver Induction Manual Signed driver induction forms	Quarry Manager	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(29)	No project-related heavy vehicles shall use King Street to get to or from the site, except in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.	Implement driver inductions to notify all drivers transporting products from the Quarry of this requirement	Driver Induction Manual Signed driver induction forms	Quarry Manager	
3(30)	**Haulage Records** The Proponent shall record and maintain a log of the extraction quantities and traffic movement in and out of the site, available for inspection at the request of the Director-General or Council.	Document all loads over the weighbridge in & out	Daily load log for all truck loads in and out Truck Movements Register	Quarry Manager	DoP GMC

<table>
<tr><th>Schedule (Condition No.)</th><th>Condition / Commitment</th><th>Actions Required to Achieve Compliance</th><th>Documentation Required to Demonstrate Compliance</th><th>Personnel Responsible</th><th>Authorising / Responsible Agency</th></tr>
<tr><td colspan="6">8. MONITORING COMPLIANCE REQUIREMENTS</td></tr>
<tr><td>3(2)</td><td>Operational Noise Assessment Criteria
The Proponent shall ensure that the noise generated by the project, including the bypass road, does not exceed the noise impact assessment criteria in Table 1 at any residence or on more than 25 per cent of any privately-owned land.
Table 1: Noise Impact Assessment Criteria
Noise Assessment Location — $L_{Aeq\ (15\ minute)}$
Residence 1 — 35
Residence 2 — 35
Residence 3 — 35
Residence 4 — 35
Residence 5 — 35
Residence 6 — 36
Residence 8 — 35
Residence 9 — 36
Residence R1 — 35
Residence R2 — 35
Residence R3 — 36
Residence R4 — 35
Residence V1 — 38
Residence V2 — 36
Notes:
• To interpret the locations referred to Table 1, see the figures in Appendix 3.
• Noise generated by the project is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy.
• The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</td><td>Develop Noise Monitoring Program & submit this program for approval by the Director-General
Install noise monitoring equipment on site to monitor site specific noise
Ensure up to date noise reduction practice take place
Use only well serviced equipment
Undertake periodic noise monitoring at non related residences</td><td>Approved Noise Monitoring Program
Noise management logs
Vehicle/Machinery daily check sheets
Noise report prepared by independent expert on a periodic basis</td><td>Environmental Compliance Officer</td><td></td></tr>
</table>

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(3)	**Traffic Noise Impact Assessment Criteria** The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the project (after commencement of quarrying operations) does not exceed the traffic noise impact assessment criteria in Table 2. ***Table 2: Traffic noise criteria dB(A) $L_{Aeq\ (1\ hour)}$*** **Roads** — **Day/Evening** Oallen Ford Road Mountain Ash Road — 55 Jerrara Road *Note: Traffic noise generated by the project is to be measured in accordance with the relevant procedures in the DECC's Environmental Criteria for Road Traffic Noise.*	Develop Noise Monitoring Program & submit this program for approval by the Director-General Drivers Operating Manual that teaches the importance of traffic noise reduction Use only well maintained equipment at all times Undertake periodic noise assessment of transport route	Approved Noise Monitoring Program Multiquip Professional Drivers Manual Vehicle daily check sheets Service logs Noise report prepared by independent expert on a periodic basis	Environmental Compliance Officer	

<table>
<tr><th>Schedule (Condition No.)</th><th>Condition / Commitment</th><th>Actions Required to Achieve Compliance</th><th>Documentation Required to Demonstrate Compliance</th><th>Personnel Responsible</th><th>Authorising / Responsible Agency</th></tr>
<tr><td>3(4)</td><td>Operating Hours
The Proponent shall comply with the operating hours in Table 3.
Table 3: Operating Hours
<table>
<tr><th>Activity</th><th>Day</th><th>Time</th></tr>
<tr><td rowspan="3">Construction work</td><td>Monday - Friday</td><td>7.00am to 6.00pm</td></tr>
<tr><td>Saturday</td><td>8.00am to 1.00pm</td></tr>
<tr><td>Sunday and Public Holidays</td><td>None</td></tr>
<tr><td rowspan="3">Quarrying, processing (including overburden removal) and product transportation</td><td>Monday – Friday</td><td>7.00am to 6.00pm</td></tr>
<tr><td>Saturday</td><td>7.00am to 1.00pm</td></tr>
<tr><td>Sunday and Public Holidays</td><td>None</td></tr>
</table>
Notes:
• Maintenance activities may be conducted outside the hours in Table 3 provided that the activities are not audible at any privately-owned residence beyond the boundary of the site.
• This condition does not apply to delivery of material if that delivery is required by police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, notification is to be provided to DECC and the affected residents as soon as possible, or within a reasonable period in the case of emergency.</td><td>Quarry Manager to indicate start and finish time of Quarry activities and transport each day</td><td>Quarry Operating Log recording all</td><td>Quarry Manager</td><td></td></tr>
</table>

<table>
<tr><th>Schedule (Condition No.)</th><th>Condition / Commitment</th><th>Actions Required to Achieve Compliance</th><th>Documentation Required to Demonstrate Compliance</th><th>Personnel Responsible</th><th>Authorising / Responsible Agency</th></tr>
<tr><td>3(7)</td><td>
Impact Assessment Criteria
The Proponent shall ensure that dust generated by the project does not cause exceedances of the criteria listed in Tables 4, 5 and 6 at any residence or on more than 25 per cent of any privately owned land.
Table 4: Long term impact assessment criteria for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Criterion</th></tr>
<tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>90 µg/m3</td></tr>
<tr><td>Particulate matter < 10 µm (PM10)</td><td>Annual</td><td>30 µg/m3</td></tr>
</table>
Table 5: Short Term impact assessment criterion for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Criterion</th></tr>
<tr><td>Particulate matter < 10 µm (PM10)</td><td>24 hour</td><td>50 µg/m3</td></tr>
</table>
Table 6: Long Term impact assessment criterion for particulate matter
<table>
<tr><th>Pollutant</th><th>Averaging period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr>
<tr><td>Deposited dust</td><td>Annual</td><td>2 g/m2/month</td><td>4 g/m2/month</td></tr>
</table>
Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter – Gravimetric Method.
</td><td>Develop an Air Quality Monitoring Program & submit this program for approval by the Director-General
Use dust suppression techniques when ever available
Engage the services of an Air Quality expert periodically to prepare a report</td><td>Approved Air Quality Program
Air Quality report prepared by independent expert on a periodic basis</td><td>Environmental Compliance Officer</td><td></td></tr>
</table>

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(8)	**Operating Conditions** The Proponent shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately owned land.	Complete an air quality visual check at least twice per day	Visual air pollution check log sheets	Quarry Manager	
3(10)	**Meteorological Monitoring** During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.	Obtain quotes for appropriate equipment Install and operate appropriate weather station in accordance with this requirement Use these report within the air quality and noise monitoring programs	Obtain reports from software included with the weather station	Environmental Compliance Officer	
3(11)	**Water Supply** The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations to match its water supply. *Note: The Proponent is required to obtain necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.*	Obtain water licence in accordance with approval Prepare a water management plan and obtain approval from the Director-General Monitor Water Usage through meter on bore Maintain a log in the water cart for loads per day	Water licence Water Management Plan Water bore pumping record log Water cart loads per day log	Environmental Compliance Officer	
3(12)	**Discharges** The Proponent shall not discharge any water from the quarry or its associated operations except in accordance with an EPL.	Train all staff and contractors on “no discharge” policy	No discharge policy enforced to all employees and contractors Signs around the site displaying no discharge policy	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(41)	**Production Data** The Proponent shall: a) provide annual production data to the DPI (now I&I NSW) using the standard form for that purpose; and b) include a copy of this data in the AEMR.	Complete daily production log for both sand and hard rock products	Compile daily/weekly/monthly production data Complete annual production data on the DPI standard form	Quarry Manager Environmental Compliance Officer	I&I NSW
4(1)	**Notification of Landowners** If the results of monitoring required in Schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.	Review monitoring in accordance with all plans/programs and notify neighbours if impacts are greater than assessment criteria	All environmental monitoring plans/programs	Environmental Compliance Officer	DoP
4(2)	**Independent Review** If a landowner of privately-owned land considers that the quarrying operations are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the relevant impacts of the project on his/her land.	Advise publicly on the web site of this condition	Keep a complaints register, identifying any potential impacts	Environmental Compliance Officer	DoP
4(3)	If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.	Noted	Report from Independent Review	Quarry Manager	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
4(4)	If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this non-compliance, then the Proponent shall: a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and b) conduct further monitoring to determine whether these measures ensure compliance; or c) secure a written agreement with the landowner to allow exceedances of the relevant criteria in schedule 3, to the satisfaction of the Director-General. If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General. If the Proponent is unable to finalise an agreement with the landowner, then the Proponent or landowner may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 5).	Noted – respond to any issues that are contributing to a non-compliance	Record additional measures implemented and the additional monitoring conducted	Quarry Manager	DoP
4(5)	If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 5).	Noted	Correspondence	General Manager	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
9. QUARRY SITE – OPERATIONAL REQUIREMENTS					
3(19)	**Rehabilitation** The Proponent shall progressively rehabilitate the site, in a manner that: a) is generally consistent with the concept final landform in the EA (as reproduced in Appendix 4); and b) provides at least 14.7 hectares of Yellow Box – Red Gum Woodland, to the satisfaction of the Director-General	Noted	Rehabilitation Management Plan	Environmental Compliance Officer	DoP
3(31)	**Visual Amenity** The Proponent shall minimise the visual impacts of the project to the satisfaction of the Director-General.	Implement the mitigation measures within the Visual Amenity Report	Visual Amenity Report	Environmental Compliance Officer	DoP
3(35)	**Lighting Emissions** The Proponent shall: a) take all practicable measures to mitigate off-site lighting impacts from the project; and b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting,* to the satisfaction of the Director-General.	Identify and address any inappropriate lighting emissions in the visual amenity report	Visual Amenity Report	Environmental Compliance Officer	DoP
3(36)	**Advertising** The Proponent shall not erect or display any advertising structure(s) or signs on the site without the written approval of the Director-General. *Note: This does not include traffic management and safety or environmental signs.*	Only erect approved signs	Formal Correspondence to the DoP re. signs on the site	Quarry Manager	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
3(37)	Waste Minimisation The Proponent shall: a) only import VENM to the site; and b) minimise the amount of waste generated by the project to the satisfaction of the Director-General.	Only allow VENM onto site Minimise waste generated on site through a waste minimisation plan	Material import records Waste management & minimisation plan	Environmental Compliance Officer / Quarry Manager	DoP
3(38)	**Dangerous Goods** The Proponent shall ensure that the storage, handling, and transport of dangerous goods are conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code*.	Establish a dangerous goods area and handle in accordance with AS	Dangerous good register	Quarry Manager	
3(39)	**Safety** The Proponent shall secure the project to ensure public safety to the satisfaction of the Director-General.	Keep property fenced Erect advisory and “no entry” signs Only allow inducted people on site	Site induction forms	Quarry Manager	DoP
3(40)	Bushfire Management The Proponent shall: a) ensure that the project is suitably equipped to respond to any fires on-site; and b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on site.	Prepare & Implement a Bush fire management plan Maintain equipment ready & available for fire fighting at all times	Bushfire management plan	Environmental Compliance Officer	

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
10. AUDIT REQUIREMENTS					
5(6)	Independent Environmental Audit Within 2 years of the date of the commencement of quarrying operations, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General; b) include consultation with the relevant agencies; c) assess the environmental performance of the project, and its effects on the surrounding environment; d) assess whether the project is complying with the relevant standards, performance measures and statutory requirements; and e) review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval. *Note: The person(s) conducting the audit should have expertise in the fields of traffic management, hydrogeology and quarry rehabilitation.*	1. Locate an independent auditor and send Auditor's CV to DoP for approval to undertake the independent audit. 2. Commission an independent auditor to conduct audit	Independent Audit Report	Environmental Compliance Officer	DoP
5(7)	Within 6 weeks of completion of each Independent Environmental Audit, the Proponent shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations in the audit report.	Forward Audit Report or Response	Response Document	Environmental Compliance Officer	DoP

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5(8)	Within 3 months of submitting a copy of the audit report to the Director-General, the Proponent shall review and if necessary revise the: a) environmental management and monitoring strategies/plans/programs in Schedules 3 and 5; and b) sum of the Rehabilitation Bond (see Schedule 3), to consider: • the effects of inflation; • any changes to the total area of disturbance; and • the performance of the revegetation against the completion criteria of the Rehabilitation Management Plan, to the satisfaction of the Director-General.	Undertake the review of (a) or (b) and adjust documents, if appropriate	Adjusted documents	Environmental Compliance Officer	DoP
11. REPORTING					
5(3)	**Incident Reporting** Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.	An incident report action plan to identify at what level a harm to the environment may be caused and who to contact Take relevant photographs and/or organise relevant monitoring	Environmental Incident Report Action Plan	Quarry Manager	DoP DECCW

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5(4)	Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that: a) describes the date, time, and nature of the exceedance/incident; b) identifies the cause (or likely cause) of the exceedance/incident; c) describes what action has been taken to date; and d) describes the proposed measures to address the exceedance/incident.	Provide report to Department with nominated information	Written report	Quarry Manager	DoP DECCW

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5(5)	**Annual Reporting** Within 12 months of the commencement of construction activities, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must: a) identify the standards and performance measures that apply to the project; b) describe the works carried out in the last 12 months, and the works that will be carried out in the next 12 months; c) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; d) include a summary of the monitoring results for the project during the past year; e) include an analysis of these monitoring results against the relevant: • impact assessment criteria/limits; • monitoring results from previous years; and • predictions in the EA; f) identify any trends in the monitoring results over the life of the project; g) identify any non-compliance during the previous year; and h) describe what actions were, or are being, taken to ensure compliance.	1. Maintain folder records/photographs, etc. of all components required to be addressed in the Annual Environment Management Report 2. Compile all nominated components of the AEMR	AEMR	Quarry Manager	DoP DECCW GMC

Schedule (Condition No.)	Condition / Commitment	Actions Required to Achieve Compliance	Documentation Required to Demonstrate Compliance	Personnel Responsible	Authorising / Responsible Agency
5(10)	**Access to Information** Within 1 month of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMR required under this approval, the Proponent shall: a) provide a copy of the relevant document/s to the relevant agencies and to members of the general public upon request; and b) ensure that a copy of the relevant document/s is made publicly available on its website and at the Proponent's office.	1. Forward copies of all completed documents to relevant agencies 2. Place document as necessary on web site	Document distribution register to record when documents are handed out and/or when placed on the internet	Environmental Compliance Officer	DoP DECCW GMC
5(11)	During the project, the Proponent shall: a) make a summary of monitoring results required under this approval publicly available on its website and at the site office; and b) update these results on a regular basis (at least every 3 months).	Summarise monitoring results at least every 3 months for display on the Multiquip Website	Monitoring Summary	Environmental Compliance Officer	

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Annexure 3

Implementation Table for Commitments Recorded within the Project Approval

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Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
PART A: TRANSPORT ROUTE AND PRODUCT TRANSPORT			
A1. Prior to Construction of Transport Route			
Area of Activities a. Peg the centre line of the Bungonia By-pass section of the transport route, specifically where a meander is to be created to avoid any mature natives trees.	Survey road and peg as necessary	Survey report	Surveyor
b. Survey and mark the boundaries of the areas of disturbance on the ground			
A2. During Construction and Upgrading Works along the Transport Route			
Waste Management a. Collect all waste materials in temporary skip bin(s) at the construction / upgrade site and transfer to local landfill as required..	Instruct contractors to remove own rubbish Provide bins at common areas Pick up residual waste weekly		Contractor
b. Install temporary toilet and ablution facilities away from natural drainage lines			
Re-fuelling a. Undertake all vehicle refuelling within a bunded area of the Project Site or protected area in the vicinity of the construction site.	Only put fuel in refuelling areas, with no access elsewhere	Map of bypass route showing refuelling areas. Photography	Contractor
Rehabilitation a. Maintain aquatic and terrestrial habitat corridors along Bungonia Creek.	Establish silt fencing & undertake regular inspections	Silt fencing inspection register, maintain monthly photography	Contractor
Vegetation Clearing a. Avoid unnecessary disturbance to vegetation along the alignment of the Bungonia By-Pass through the Crown land.	Mark areas to be disturbed and instruct contractors not to remove or damage other areas	Survey area a peg areas of disturbance	Contractor
b. Inspect trees to be cleared prior to clearing to ensure no native fauna is in residence at the time.			
c. Clearly define all areas to be cleared.			

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. Construct appropriate drainage and erosion and sediment control features and implement procedures to prevent water containing high sediment levels from discharging from the transport route.			
Surface Water a. Protect areas of concentrated flow, eg. drainage pathways, table drains etc., using appropriate erosion control measures such as a biodegradable Rolled Erosion Control Product (RECP), eg. coconut fibre matting or jute matting.	Identify areas where protection is required and place erosion control in these areas	Map identifying areas, photos before and after erosion control is installed	Contractor
b. Stabilise batters following construction or reshaping with vegetation	Instruct contractors stabilisation of batters is required		Contractor
Operating Hours a. Undertake road upgrade and construction operations within the hours of 7.00am to 6.00pm / Monday to Friday and 7.00am to 1.00pm / Saturday.	Instruct all contractors not to start of finish outside of these times through and onsite induction	Induction manual outlining working hours	Contractor
A3. Components of Stage 1 of Roadworks			
a. Stage 1 Roadworks. Construct the Project Site entrance with Oallen Ford Road (see **Detail A**)	Construct site entrance as per approved plan	Project approval	Contractor
b. Construct the Bungonia Bypass, including the crossing of Bungonia Creek (see **Detail B)**, as follows. Two 2.5m lanes with 0.5m shoulder between Oallen Ford Road and the Crown land (see **Detail E**). Single lane bridge spanning Bungonia Creek as described in Section 3.2.4.5 and **Figure 3.6** in the EA. A singe lane of 3.0m, with 0.5m shoulder on both sides, through the Crown land (see **Detail F)**. A pass-by bay would be included over already cleared land at both the Northern and Southern ends of this section of the by-pass.	Construct as per approval Survey the route Prepare engineering design drawings Submit to contractor for construction Finalise bridge design through engineer, prepare working drawings Submit for approval and construction	Survey Approved Engineering design of road and bridge	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
c. Construct the intersections of the Bungonia Bypass with Oallen Ford Road (see **Detail C**) and Mountain Ash Road (see **Detail D**).	Construct as per project approval	Approved Intersection engineering drawings	Contractor
d. Upgrade the Mountain Ash Road – Jerrara Road intersection.	Construct as per project approval	Approved Intersection engineering drawings	Contractor
e. Upgrade Water Course Crossing I as part of the Mountain Ash Road – Jerrara Road intersection upgrade (see **Detail D**).	Construct as per project approval	Approved Intersection engineering drawings	Contractor
f. Widen the carriageway of Jerrara Road at Water Course Crossings E (5.94km from the Hume Highway to accommodate an 8m sealed pavement).	Construct as per project approval	Approved water course extension engineering design	Contractor
g. Install "Give Way" signs on the southbound approach to Water Course Crossings: • B (3.16km from the Hume highway); • C (3.43km from the Hume Highway); • D (5.12km from the Hume Highway); and • G (9.72km from the Hume highway).	Install as per project approval	Give way signs should be place on approved road construction drawings	Contractor
h. Install other road signage as required by Goulburn Mulwaree Council.	As determined by engineering road design	Approved road construction plans	Contractor
Noise a. Prevent deliveries of saleable products until construction of the Bungonia By-pass is complete.	Noted		General Manager
Air Quality a. Restrict all vehicles to designated routes within the Bungonia By-pass construction area with a speed limit of 20km/h.	Notify all contractors of speed limit Place speed limit signs around construction area	Contractor Induction forms	Contractor
b. Clean dirt tracked onto the public road network.	Check for dirt on public road daily – clean as necessary	Include public road on site check form	Contractor
Aboriginal Heritage a. Align the Bungonia By-pass to avoid the identified sites containing Aboriginal artefacts.			

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
b. Apply for the relevant permit to undertake test pitting over BPAD1 (in accordance with the recommendations of AASC (NPWS).			
c. Supply formal site cards for all identified Aboriginal artefacts to the DECC Aboriginal Heritage Information Management System (AHIMS) Registrar.			
A4. Throughout Stage 1 Roadworks			
Air Quality a. Apply water using a water cart to exposed surfaces.	Use a water cart as required	Water cart activity log	Contractor
b. (During hot, dry and/or windy conditions) limit topsoil stripping activities to that required for the ensuing days construction.	Noted	Meterological Records and Worksheets	Contractor
c. Minimise the number of stockpiles and restrict access to a single working face.	Noted		Contractor
d. Compact stockpiles as material is removed or added to stockpiles.	Notify all contractors that material must be compacted	Contractor induction	Contractor
e. Minimise clearing ahead of construction.	Plan work to minimise clearing to stay just in from of construction works	Construction plan	Contractor
Surface Water a. Construct diversion banks to divert "clean" runoff from upslope of any construction areas. Discharges would be onto a stabilised, well-vegetated area, preferably using a level spreader or sill.	Inform contractors prior to start of construction and implement in construction plan	Construction plan	Contractor
b. Restrict construction traffic access to the minimum required for efficient operation of activities.	Plan all movements to ensure efficient use of vehicles	Construction plan	Contractor
c. Minimise clearing of groundcover in advance of upgrading / construction activities.	Plan work to minimise clearing to stay just in from of construction works	Construction plan	Contractor
d. Install sediment fencing, in accordance with Standard Drawing SD 6-8 of Landcom (2004) down-slope of any construction area until works are complete.	Inform contractors and make periodic inspections of work site	Construction Plan	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
e. Strip and stockpile topsoil, in accordance with Standard Drawing SD 4-1 of Landcom (2004), for later re-use.	Inform contractors and make periodic inspections of work site	Construction plan	Contractor
f. Maintain upslope catchment length of exposed soil areas below 80m. Any slope length exceeding 80m should have a diversion bank, constructed in accordance with Standard Drawing SD 5-5 of Landcom (2004), to direct overland flows onto well-protected, vegetated lands.	Inform contractors and make periodic inspections of work site	Construction Plan	Contractor
A5. Following Completion of Stage 1 Roadworks			
Traffic Levels a. Restrict the number of truck loads exiting the Quarry site to 10 per day until the Stage 2 road upgrading works are completed.	Noted	Daily load log for all truck loads in and out	General Manager
A6. Prior to Commencement of Transport Operations			
Product Transportation a. Erect "Trucks Entering" signs on Oallen Ford Road on both the southbound and northbound approaches to the Project Site entrance and on Lumley Road 200m from the Project Site entrance.	Noted	Include signs on engineering drawings	Contractor
b. Establish a complaints register, advertised in the local telephone directory, to allow concerned residents to report any traffic related incidents, unsafe operation or general concern. Multiquip would thoroughly investigate all complaints.	Advertise a complaints line. Respond to all enquiries and investigate as necessary	Complaints register	Quarry Manager
A7. Components of Stage 2 Roadworks			
Transport Route Construction and Upgrading a. The widening and minor realignment of the public roads of proposed transport route between the Project Site and the Hume Highway.		As constructed Drawings / Photographs	Contractor
b. The upgrade of Water Course Crossings A, F and H.	Upgrade crossing	As constructed Drawings / Photographs	Contractor
c. Rehabilitate those sections of pavement identified as having a pavement life of less than 10 years.	Undertake rehabilitation identified	As constructed Drawings / Photographs	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. Complete centreline and edge marking over the entire length of the transport route.	Undertake nominated marking	As constructed Drawings / Photographs	Contractor
A8. Throughout Stage 2 Roadworks			
Surface Water a. Complete specific roadside drainage upgrades as identified in **Table 6.9** (in the EA)	Undertake drainage upgrades	As constructed Drawings / Photographs	Contractor
b. Complete standard drainage upgrades on all drainage line crossings including: • extension of the pipes, culverts or bridges to facilitate the wider road; • raising of the pipe headwalls to accommodate higher batters; and/or • steepening batter slopes between the road pavement and the pipe headwall.	Undertake drainage upgrades	As constructed Drawings / Photographs	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
c. Implement a standard suite of design measures on all piped and box culvert drainage line crossings, as follows. • All pipes and culverts would be provided with inlet protection (in accordance with Chapter 5.4.3 of Landcom (2004)) made from locally-sourced rock cobbles. • All pipes and culverts would be provided with outlet protection, ie. energy dissipaters (in accordance with Standard Drawing 5-8 of Landcom (2004)), made from locally-sourced rock cobbles. • Excess accumulations of sediment or leaf litter would be removed from pipes and culverts as works progress. • Where table drains discharge into watercourses or drainage depressions, the outlet point will be provided with scour protection in the form of riprap (or equivalent). • Where drainage lines show evidence of gullying deeper than 1.0m within 20m of the road crossing, batters would be graded back to 6H:1V and stabilised using appropriate erosion control measures and native vegetation would be planted in and around energy dissipation structures.	Install box culverts	As constructed Drawings / Photographs	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. (Where the general crossing design works would require the construction of, or remedial work to, fill batters), undertake the works as follows. • Prevent stormwater runoff from drain down the fill batters. Where unavoidable, direct the water as sheet flow over sections of the fill batter vegetated using a hydromulch or equivalent erosion control measures. • Direct any concentrated flows via flumes constructed from suitably robust material, including flow arresting measures, and discharging onto an energy dissipater. • Fill batters would not exceed 2H:1V gradients. • Stabilise fill batters by compaction and use a hydromulch (or equivalent) to aid the establishment of grasses. • Install sediment fencing 1m from the toe of any batters.	Undertake nominated works	As constructed Drawings / Photographs	Contractor
e. Install table drains to manage stormwater runoff from the road pavement as specified by SEEC Morse McVey (2008).	Undertake nominated works	As constructed Drawings / Photographs	Contractor
A9. Following the Completion of the Stage 2 Roadworks			
Traffic Levels a. Restrict the number of truckloads exiting the Project Site to 28 per day until the Stage 3 watercourse crossing upgrades are completed.	Noted	Weighbridge records	General Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
A10. Components of Stage 3 Roadworks			
a. Stage 3 Road Works Upgrade Water Course Crossings: • B (3.16km from the Hume highway); • C (3.43km from the Hume Highway); • D (5.12km from the Hume Highway); and • G (9.72km from the Hume highway); to provide a sealed pavement crossing of 8.0m.	Prepare engineering plans to carry out this work and have this approved by council to commence works	As constructed	Contractor
b. Remove "Give Way" signs from the southbound approach to these crossings once the Stage 3 roadworks are completed.		Photograph	Contractor
A11. Throughout Stage 3 Roadworks			
Surface Water a. Complete specific roadside drainage upgrades as identified in **Table 6.9** (in the EA)		As constructed drawings	Contractor
b. Complete standard drainage upgrades on all drainage line crossings including: • extension of the pipes, culverts or bridges to facilitate the wider road; • raising of the pipe headwalls to accommodate higher batters; and/or • steepening batter slopes between the road pavement and the pipe headwall.		As constructed drawings	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
c. Implement a standard suite of design measures on all piped and box culvert drainage line crossings, as follows. • All pipes and culverts would be provided with inlet protection (in accordance with Chapter 5.4.3 of Landcom (2004)) made from locally-sourced rock cobbles. • All pipes and culverts would be provided with outlet protection, ie. energy dissipaters (in accordance with Standard Drawing 5-8 of Landcom (2004)), made from locally-sourced rock cobbles. • Excess accumulations of sediment or leaf litter would be removed from pipes and culverts as works progress. • Where table drains discharge into watercourses or drainage depressions, the outlet point will be provided with scour protection in the form of riprap (or equivalent). • Where drainage lines show evidence of gullying deeper than 1.0m within 20m of the road crossing, batters would be graded back to 6H:1V and stabilised using appropriate erosion control measures and native vegetation would be planted in and around energy dissipation structures.	Install nominated crossings	As constructed drawings	Contractor

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. (Where the general crossing design works would require the construction of, or remedial work to, fill batters), undertake the works as follows. • Prevent stormwater runoff from drain down the fill batters. Where unavoidable, direct the water as sheet flow over sections of the fill batter vegetated using a hydromulch or equivalent erosion control measures. • Direct any concentrated flows via flumes constructed from suitably robust material, including flow arresting measures, and discharging onto an energy dissipater. • Fill batters would not exceed 2H:1V gradients. • Stabilise fill batters by compaction and use a hydromulch (or equivalent) to aid the establishment of grasses. • Install sediment fencing 1m from the toe of any batters.	Constraint nominated fill batters	As constructed drawings	Contractor
e. Install table drains to manage stormwater runoff from the road pavement as specified by SEEC Morse McVey (2008).	Install nominated table drains	As constructed drawings	Contractor
A12. Ongoing and Following the Completion of Stage 3 Roadworks			
a. Following the completion of the Stage 3 roadworks (see Commitments 5.13 and 5.14) restrict the number of truckloads exiting the Project Site to 44 per day.	Noted		
A13. Product Transportation			
a. Adhere to the nominated hours of operation, ie. no vehicles would arrive at the Project Site before 7:00am or leave the Project Site after 6:00pm.	Promote hours of operation with all truck drivers	Weighbridge Records	Quarry Manager
b. Enforce driver adherence to all speed limits. • 80km/hr on public roads. • 60km/hr on the Bungonia Bypass.	Promote adherence to nominated speed limits	Drivers Code of Conduct	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
c. Ensure each exiting truck uses an on-site weighbridge to ensure all legal weight restrictions are adhered to.	No dockets issued for overweight trucks	Weighbridge Records	Quarry Manager
d. Use only vehicles which employ the most up-to-date noise/emission reducing technology.	All trucks to be checked upon first arrival for compliance	Heavy Vehicle Register	Quarry Manager
e. Cover all loads to minimise dust and particulate matter and debris emissions	Ensure all trucks have quality covers	Code of Conduct	Quarry Manager
d. Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance.	Promote adherence to avoidance policy	Code of Conduct	Quarry Manager
e. Regularly service all trucks to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Regular emphasis of maintenance requirement	Code of Conduct	Quarry Manager
f. Prepare and implement a transport Code of Conduct developed for the project. The Code of Conduct would require drivers to obey all traffic signs, speed zones and to operate in a safe and courteous manner at all times.	Prepare Code	Code of Conduct	Quarry Manager
g. Stand down vehicles with smoky exhausts (more than 10 seconds) for maintenance.	Deal with offending vehicles	Code of Conduct	Quarry Manager
A14. Monitoring Noise			
a. Ensure noise levels attributable to the construction and operation of the transport route, ie. product transportation, complies with the nominated noise criteria at residences fronting the transport route, within Bungonia village and within audible range of the Bungonia By-pass.	Undertake noise monitoring in accordance with Noise Monitoring Program	Monitoring Results	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
PART B: QUARRY SITE ACTIVITIES			
B1. Prior to Commencement of Site Activities/Extraction			
Non-Aboriginal Heritage a. Prepare a Cultural Heritage Management Plan (CHMP) for the project which would: • Be prepared in consultation with the NSW Heritage Office • Include an inventory of all listed heritage items locally; • Provide opportunity for further research as to any physical evidence of the Old Argyle Road; • Include a protocol for surface disturbing activities in the vicinity of the recorded location of the Old Argyle Road; and • Include a protocol to be followed in the event that archaeological material is exposed as a result of surface disturbing activities.	Prepare CHMP	Cultural Heritage Management Plan	Environmental / Compliance Officer to Coordinate
Area of Activities a. Survey and mark the boundaries of the areas of disturbance on the ground.	Engage surveying company. Provide survey plan to Dept. Planning	Survey Plan (as pegged)	Surveyor and Environmental / Compliance Officer
b. Survey and peg the centre line of the Site Access Road.	Engage surveying company. Provide survey plan to Dept. Planning	Survey Plan (as pegged)	Surveyor
Groundwater Springs a. Establish photo points at representative spring (“Inverary Park:, southern and western springs) and other locations to assess any changes in flow regimes and vegetation over time.	Photograph Phil’s Spring	Photograph spring points	Environmental / Compliance Officer
Bushfire Hazard a. Prepare a Bushfire Management Plan for the Project.	Prepare a protocol for dealing with fires on site and in local area.	Contact & meet with Bungonia RFB Prepare bushfire plan	Quarry Manager Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
B2. During Site Establishment and Construction			
Waste Management a. Install adequate toilet and ablution facilities within the Administration and Quarry Services Area for the site workforce and visitors.	Install facilities as required	Record on as constructed drawings	Quarry Manager
Surface Water a. Construct catchment and settlement structures 'in-line' such that overflow from one structure is directed to another downstream.	Construct structures as nominated	Surface Water Management Plan	Quarry Manager
Noise a. Construct an acoustic bund wall to the west of the internal road network and around the sand processing area.	Construct bund as nominated	Noise Management Plan	Quarry Manager
b. Locate the mobile crushing plant and hard rock processing plant within a cut section of the Project Site, approximately 8m below surface level (to the east).	Cut plant as described below ground level	As constructed drawings	Quarry Manager
c. Enclose the hard rock processing plant using Panel-Tech Thermaspan Colorbond panels, leaving openings only for plant conveyors.	Enclose fixed plant with appropriate materials	As constructed drawings	Quarry Manager
Non-Aboriginal Heritage a. Locate the Project Site entrance to avoid any potential impact on the "Larbert Tree".	Avoid "Larbert Tree"	Photographs	Quarry Manager
Flora and Fauna a. Construct the Quarry Site infrastructure to avoid where possible, remnant stands of vegetation.	Construct infrastructure, as nominated	Aerial Photograph	Quarry Manager
b. Construct appropriate drainage and erosion and sediment control features and implement procedures to prevent water containing high sediment levels from discharging from the transport route.	Construct drainage controls, as nominated	Surface Water Management Plan	Quarry Manager
Visibility a. Construct a 4m bund wall around the sand washing plant, along the internal product transport route and ultimately along the Project Site access road to the west of the "Ardmore Park" residence.	Construct bund as outlined and shown on survey	As constructed drawings	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
b. Orient the various components of the Project Site in such a way that the existing topographical features would offer maximum screening of the Project Site.	Construct / located components, as nominated	As constructed drawings	Quarry Manager
B3. Prior to Disturbance in Relevant Catchment of the Project Site			
Surface Water a. Construct diversion banks upstream of the extraction area and other related disturbance of the design specifications of Landcom (2004).	Notify staff and contractors on site	As constructed drawings	Quarry Manager
b. Construct clean water storage dam (Dam 8) at the discharge points of the main diversion structures.	Construct dam, as nominated	As constructed drawings	Quarry Manager
c. Construct catch banks downstream of disturbed ground to the design specifications of Landcom (2004).	Construct catch banks, as nominated	As constructed drawings	Quarry Manager
d. Construct sediment basins and clarification ponds as identified on Figure 5.15 (in the EA) and to the design) specifications of Landcom (2004).	Construct sediment basins, as nominated	As constructed drawings	Quarry Manager
B4. Daily			
Waste Management a. Collect general waste bins daily and place contents in large waste skip bins positioned adjacent to the heavy vehicle maintenance building to await removal by licensed contractor.	Have sufficient waste collection points and remove via licensed contractor	Waste register	Quarry Manager
B5. Monthly			
Waste Management a. Organise the regular collection of industrial wastes.	Have a suitable contractor engaged to remove this waste	Waste register	Quarry Manager
b. Store waste oils and grease at the maintenance workshop for collection by a licensed waste recycling contractor.	Have a suitable contractor engaged to remove this waste	Waste register	Quarry Manager
Groundwater a. Measure water levels on a monthly basis up to and throughout the extraction phase from Bores BHAP1, BHAP5, BHAP7 and BHAP10.	Measure levels in accordance with the management plan – Prepare a monthly bore log measurement document	Groundwater management plan and bore log	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
B6. Monthly or Following Rainfall of >25mm/24hours			
Surface Water a. Inspect the diversion banks and storage dams on a monthly basis, or following rainfall of >25m/24hours, and undertake maintenance work as necessary.	Inspect and log during rainfall events	Surface water inspection register	Environmental / Compliance Officer
b. Inspect the catch banks on a monthly basis, or following rainfall of >25m/24hours, and undertake maintenance work as necessary.	Insect on a monthly basis and record in a log	Surface water inspection register	Environmental / Compliance Officer
c. Inspect the sediment basins on a monthly basis, or following rainfall of >25m/24hours, and clean out the sediment basins of consolidated sediment once capacity reduced by 20%.	Inspect basins and record on a monthly log	Surface water inspection register	Environmental / Compliance Officer
B7. 6 Monthly			
Groundwater a. Assess the flow rate and water quality of groundwater from the "Inverary Park" and Southern Spring against low flow records.	Get a copy of any flow records and monitor any changes in flows over time	Ground water management plan	Environmental / Compliance Officer
B8. Annually			
Rehabilitation a. Report each year's rehabilitation within an Annual Environmental Management Report (AEMR).	Report progress in yearly plan	Rehabilitation management plan	Environmental / Compliance Officer
b. Undertake a targeted weed spraying programs, to eliminate or control noxious weeds currently occurring on the Project Site.	Weed spraying register outlining dates or spraying, chemical used/quantities & locations of control	Weed spraying register	Environmental / Compliance Officer
Groundwater a. Collect samples of groundwater in all monitoring wells on a 12-month basis and submit to a NATA registered laboratory for the testing of pH, Electrical conductivity (EC), Total Dissolved Solids (TDS) and the determination of major anions, major cations, iron and hydrocarbons. (Frequency of monitoring and analytes to be reviewed annually).	Ground water collection register to outline location of samples. Register of results assembled and maintained	AEMR	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
b. Commission review of all monitoring results on an annual basis by a consulting hydrogeologist or other environmental professional and report in each AEMR.	Commission hydrogeologist	AEMR	Environmental / Compliance Officer
B9. Ongoing			
Operating Hours a. Undertake all activities within the hours of: • 7.00am to 6.00pm / Monday to Friday and • 7.00am to 1.00pm / Saturday.	Install site signage to notify staff on operating hours	Outline during staff/contractor induction	Quarry Manager
Waste Management a. Place all paper and general wastes originating from the Administration and Quarry Services Area, together with routine maintenance consumables from the daily servicing of equipment in garbage bins located adjacent to the various buildings.	Instruct all on-site personnel regarding appropriate practices	Outline during staff/contractor induction – induction records	Quarry Manager
b. Direct sewage to either the existing septic system of the "Ardmore Park" property or a bio-cycle (or equivalent system) within the Administration and Quarry Services Area with effluent irrigation to land.	Design sewage systems in the correct manner	System Maintenance Records	Quarry Manager
Groundwater a. Securely store all hydrocarbon products within designated and bunded areas.	Create bunded areas for these items and only place in these areas	Outline during staff/contractor induction	Environmental / Compliance Officer
b. Refuel all of the project fleet within designated areas of the Project Site.	Maintain a designated refuelling area	Outline during staff/contractor induction	Quarry Manager
c. Undertake all maintenance activities within designated areas of the Project Site facilities area, ie. maintenance workshop.	All maintenance will be undertaken in appropriate area	Outline during staff/contractor induction	Quarry Manager
d. Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Have an oil water separator installed and service/workshop area	Outline during staff/contractor induction	Quarry Manager
e. Ensure all storage tanks are either self-bunded tanks or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity.	Install self bunded tanks only	Tank Register (and photographs)	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
Surface Water a. Review general performance of catchment and settlement structures and upgrade the existing structures or install additional structures to ensure all dirty water is captured and settled prior to discharge.	Undertake regular review	Surface Water Management Plan	Environmental / Compliance Officer
b. Ensure drainage paths between the catchment and settlement structures are well grassed.	Note in plan	Surface Water Management Plan	Environmental / Compliance Officer
c. Refuel all but the less mobile mining equipment which would be refuelled within the open cut area, within designated areas.	Have designated refuelling points	Surface Water Management Plan	Quarry Manager
d. Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Install an oil / water separator in service/workshop area	Surface Water Management Plan	Quarry Manager
Noise a. Commence extraction from southern sand resource area at the north extremity of Stage 1 and move progressively southward toward Stage 2.	Commence extraction in nominated area	Noise management plan	Quarry Manager
b. Adhere to the nominated hours of operation, ie. no extraction, processing and associated activities would take place before 7:00am or after 6:00pm.	Instruct all contractors not to start of finish outside of these times through and onsite induction	Noise management plan Site signage	Quarry Manager
c. Use equipment with lower sound power levels in preference to more noisy equipment.	Carefully corridor noise levels of equipment	Have a site preference for lower noise equipment	Quarry Manager
d. Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance.	Promote adherence to avoidance policy	Drivers Code of Conduct	Quarry Manager
e. Regularly service all equipment used on site to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Service notes, included in service tracker program	Service equipment as required for optimum performance	Quarry Manager
f. Grade the internal road network to limit body noise from empty trucks travelling on the Project Site.	Grade roads on a regular basis particularly after bad weather that may destroy roads	Equipment Record	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
Air Quality a. Minimise clearing ahead of construction and operational activities.	Only clear areas that will be used within the next few weeks not months	Air quality management plan	Quarry Manager
b. Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant lift-off of dust.	Noted	Air quality management plan	Quarry Manager
c. Avoid stripping soil in periods of high wind.	Noted	Air quality management plan	Quarry Manager
d. Use water application to increase soil moisture should stripping occur during periods of high wind or low soil moisture.	Use water cart as necessary	Air quality management plan	Quarry Manager
e. Apply water to the hard rock processing plant feed hopper and crushers.	Install water spraying devices for dust control	Air quality management plan	Quarry Manager
f. Install bund walls and wind breaks as required.	Install controls, as required	Air quality management plan	Quarry Manager
g. Use a 10 000 litre water truck to regularly wet the active internal unsealed roads.	Regularly (on drier days) use water truck	Air quality management plan Water cart daily log	Quarry Manager
h. Seed topsoil stockpiles, acoustic bund walls and areas where landform preparation is complete to assist in stabilising the exposed surface	Undertake seeding, as required	Air quality management plan	Environmental / Compliance Officer
i. Minimise the drop heights between front-end loader buckets and trucks carrying sand/basalt or overburden through operator training and education on the management of dust	Driver / operator induction	Air quality management plan	Quarry Manager
j. Cover all trucks carrying quarry products with approved covers and securely fix the tailgates to prevent windblown dust emission or spillages.	Advise drivers through transport code of conduct and on site signage	Air quality management plan Transport code of conduct	Quarry Manager
Flora and Fauna a. Undertake vegetation clearing on a campaign basis to provide for immediate extraction operations.	Only clear areas that will be used within the next few weeks not months	Landscape Management Plan	Quarry Manager
b. Construct any additional internal roads required on the cleared lands well away from stands of native vegetation.	Inspect areas before clearing to check for native vegetation	Landscape Management Plan	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
c. (Where practicable), directly transfer soil material and biomass stripped to completed sections of the final landform for spreading.	Plan when possible to move this directly to landform for spreading	Landscape Management Plan	Quarry Manager
d. Carry out, where possible, tree removal, especially the mature trees in late spring and early autumn to avoid spring nesting birds and over-wintering bats.	Notify staff and contractors of this during on site induction Plan works to occur outside these times when possible	Landscape Management Plan	Quarry Manager
e. Retain felled trees for use in rehabilitation of the final landform.	Plan to use when possible	Landscape Management Plan	Quarry Manager
f. Ensure the quality of water discharged from the Project Site has a neutral or beneficial impact on the downstream catchment.	Measure any water quality	Landscape Management Plan	Environmental / Compliance Officer
g. Control noxious weeds at all times.	Spray periodically	Landscape Management Plan	Environmental / Compliance Officer
h. Maintain the existing fences around the remnant forest communities associated with the knolls on the "Ardmore Park" property.	Inspect fences and maintain documentation of areas inspected and repaired	Fence inspection program	Environmental / Compliance Officer
i. Regularly liaise with Goulburn Mulwaree Council personnel in relation to bushfire hazard.	Liaise and record all correspondence	Landscape Management Plan Bushfire Management Plan	General Manager
Aboriginal Heritage a. Ensure the in-situ protection of the identified artefacts through workforce education	Have a protocol developed for artefact discovery	Site staff / contractor induction	General Manager
b. Invite Aboriginal monitors to site to review the results of test pitting activities.	Issue invitation prior to activities	Aboriginal Management Plan	Quarry Manager
c. Cease work at any area if further Aboriginal objects are uncovered during the course of the Project, and contact the DECC (NPWS) for advice.	Have a protocol developed for artefact discovery	Site Card for AHIMS	Quarry Manager
d. Conduct a Cultural Heritage Awareness Induction Course for staff, contractors and any heritage monitors working on the Project Site.	Have this included in on site induction	Site staff / contractor induction	Quarry Manager
e. Supply formal site cards for all identified Aboriginal artefacts to the DECC Aboriginal Heritage Information Management Systems (AHIMS) Registrar.	Complete and lodge site cards, if necessary	Site cards	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
Visibility a. Minimise the extent of land disturbance / clearing in advance of extraction.	Only clear areas that will be used within the next 12 months	AEMR	Environmental / Compliance Officer
b. Plant out the elevated areas immediately west of the processing plants and internal road network as part of an ongoing commitment to re-establish areas of native vegetation (particularly those of the White Box Yellow Box Blakely's Red Gum Woodland community).	Plant areas as soon as possible	AEMR	Environmental / Compliance Officer
Soils, Land Capability and Agricultural Suitability a. Strip topsoil and subsoil to the depths nominated in the EA. Only those areas required for immediate construction or extraction activities would be stripped.	Strip topsoil / subsoil as nominated	Landscape Management Plan	Quarry Manager
b. Provide mobile equipment operators with clear instructions to keep the topsoil and subsoil separate	Advise operators during site induction	Landscape Management Plan	Quarry Manager
c. Transfer and respread directly stripped soil materials directly over areas to be rehabilitated following the first 18 to 24 months of mine operations.	Plan to spread this material directly when possible	Landscape Management Plan	Quarry Manager
d. Stockpile soil away from natural surface drainage lines.	Advise staff and contractors during site induction	Landscape Management Plan	Quarry Manager
e. Install erosion protection around soil stockpiles.	Advise staff and contractors during site induction	Landscape Management Plan	Quarry Manager
f. Divert surface water flow away from soil stockpile areas.	Advise staff and contractors during site induction	Landscape Management Plan	Quarry Manager
g. Monitor erosion from soil stockpiles or rehabilitated surfaces throughout the life of the Project with remedial works undertaken should erosion be observed.	Advise staff and contractors during site induction	Landscape Management Plan	Environmental / Compliance Officer
Bushfire Hazard a. Undertake refuelling within designated fuel bays or within cleared area of the Project Site.	Have a designated area near the service workshop and in the pit area for less mobile equipment	Landscape Management Plan Bushfire Management Plan	Quarry Manager
b. Turn vehicles off during refuelling.	Install signage	Staff Induction	Quarry Manager
c. Enforce no smoking policy in designated areas of the Project Site.	Install and enforce with signs	Staff Induction	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. Maintain fire extinguishers within site vehicles.	Install and check as necessary	Site safety management plan	Environmental / Compliance Officer
Operating Hours a. Ensure no truck exits the site before 7.00am Monday to Saturday or enters the site after 6.00pm Monday to Friday and 1.00pm Saturday.	Advise staff/contractors during induction. Have signs visible at entry and around site to advise staff	Staff Induction form	Quarry Manager
Rehabilitation a. Stabilise earthworks, drainage lines and disturbed areas no longer required for project-related activities.	Stabilise areas after use, within 2 months of ceasing to use a particular area.	Landscape Management Plan	Environmental / Compliance Officer
Flora and Fauna a. Undertake vegetation clearing on a campaign basis to provide for construction operations.	Clear vegetation as nominated	AEMR	Quarry Manager
b. Retain felled trees for use in rehabilitation of the final landform.	Retain any trees	AEMR	Environmental / Compliance Officer
c. Control noxious weeds at all times.	Weed spraying register outlining dates or spraying, chemical used/quantities & locations of control	Weed spraying register	
B10. As Required			
Waste Management a. Collect all parts and packaging and transfer to the maintenance workshop for disposal or recycling.	Have appropriate collection points and advise staff to use correct disposal methods	Waste Register	Quarry Manager
b. Store potentially hydrocarbon-contaminated water in the oil/water separator for regular removal from site by a licensed contractor.	Have appropriate collection points and advise staff to use correct disposal methods	Waste Register	Quarry Manager
Groundwater a. Replace the bores that are destroyed during the staged extraction process with strategically positioned and suitable installed new monitoring wells where appropriate.	Replace bores, as nominated	Groundwater Management Plan	Environmental / Compliance Officer
b. Undertake remedial action if the available drawdown attributable to the mine for the existing groundwater users is reduced by over 15%. The remedial actions that may be appropriate include the deepening of bores or replacement of bores to accommodate deeper, high lift pumps.	Undertaken remedial action, if required	Groundwater Management Plan	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
Surface Water a. Implement a 3-phase remedial action plan in the event of a major hydrocarbon spill as follows: Phase 1 – Initial Recover: Recover as much as possible at the source by pumping free hydrocarbon from the surface and excavating hydrocarbon-contaminated materials Phase 2 – Source Control: Being hydraulic control of the source to prevent spreading of contamination. Phase 3 – Recover: If necessary, install boreholes to remove and treat contaminated groundwater.	Have a spill management plan that address any hydrocarbon spills	Surface Water Management Plan	Environmental / Compliance Officer
b. Soils, Land Capability and Agricultural Suitability Seed any stockpile retained for in excess of three months with cereal and pasture species.	Noted	Landscape Management Plan	Environmental / Compliance Officer
c. Cover long-term subsoil stockpiles with a cover of topsoil.	Advise staff	Landscape management plan	Quarry Manager
B11. Ongoing During Rehabilitation Activities			
Rehabilitation a. Maintain a number of water storages to facilitate the subsequent use of the land for agricultural purposes.	Do not fill in current dams on site	Surface water management plan	Quarry Manager
Rehabilitation a. Adopt a progressive approach to rehabilitation to ensure that completed areas are quickly shaped and vegetated to provide a stable landform	Plan rehabilitation to be progressive	Landscape management plan	Quarry Manager
b. Replant native vegetation along reinstated drainage lines and lower lying areas of the Project Site totalling approximately 14.7ha.	Plan to replant area as available	Landscape management plan	Quarry Manager
c. Utilise native tree, shrub and grass species that would promote the re-establishment of the endangered ecological community White Box Yellow Box Blakeley's Red Gum Woodland, and link existing areas of native vegetation to the southeast and northwest of the Project Site.	Use native plants and tress	Landscape management plan	Quarry Manager

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
d. Retain cleared trees and branches for use in stabilising slopes identified for rehabilitation with native woodland communities.	Advise staff	Landscape management plan	Quarry Manager
Offset Area a. Progressively establish a Vegetation Offset Area (VOA) as part of Project Site rehabilitation activities. The VOA would: • Cover an area of 14.7ha; • Be established through a combination of hand seeding and tube stock planting; • Focus plantings on the reinstated drainage lines and topographically lower areas of the Project Site; • Involve a mix of native Acacia, Eucalyptus and Casuarina species, specifically targeting the re-establishment of the White Box Yellow Box Blakely's Red Gum woodland community in some areas; • Be planted at a density of between 1000 and 2 000 trees per hectare. • Be protected from stock by fencing for at least tear years; • Be watered regularly to promote survival; and • Have signage erected identifying the area as a vegetation offset planting area for the management of water quality within the Sydney Drinking Water Catchment.	Noted	Landscape management plan	Quarry Manager
B12. Performance and Monitoring			
Groundwater a. (In the event that monitoring indicates a decreasing SWL trend attributable to the proposed extraction of groundwater), reduce pumping rates, initially through reducing water provided for ongoing stock watering and if required through a reduced processing rate at the sand washing plant.	Monitor bores/springs to obtain baseline flow. Obtain monthly measurement to show movements in bore levels Compare to bore extraction	Groundwater Management Plan	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
b. (In the event of a deterioration of low rates and/or water availability to below historic low flows) undertake one of the following options: i. Supply ground water to the affected water user from Multiquip's proposed production bore (BHAP6) to the measured and documented loss and with a water quality commensurate or better; or ii. Provide monetary compensation to the affected water use; or iii. Install a replacement bore to provide the measured and documented loss of groundwater with a quality commensurate or better.	Put action plan into place if flows drop	Groundwater Management Plan	Quarry Manager
Surface Water a. Ensure any water discharged meets the DECCW Environment Protection Licence criteria, expected to be as follows. • TSS <50mg/L. • pH: 5.5 to 8.5. • Oil & grease <10mg/L. • Electrical conductivity <350µS/cm	Noted	Surface water management plan	Environmental / Compliance Officer
Noise a. Establish a noise monitoring program (NMP) to initially validate the predictions arising from the modelling and then record noise levels against the Project noise criteria. The NMP would include a noise monitoring protocol which would include the contingent measures to be followed should non-compliant noise levels be measured.	Implement the findings of the noise management program	Noise monitoring program	Environmental / Compliance Officer
Air Quality a. Undertake an air quality monitoring program to demonstrate compliance with the nominated goals. Deposited dust at selected residences and strategic locations surrounding the Project Site. Continuous wind speed and direction at the Project Site weather station.	Implement the findings of the air monitoring program	Air Monitoring program	Environmental / Compliance Officer

Action	Actions Required to achieve compliance	Documentation required to demonstrate Compliance	Personnel Responsible
Blend the created landform with the surrounding land fabric.	Noted	Landscape Management Plan	Quarry Manager

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