



**Part B**  
*Planning Framework,  
Consultation and  
Issues Identification*



### 3 PLANNING PROVISIONS

#### 3.1 INTRODUCTION

The following chapter assesses the proposed development against the relevant planning controls which are applicable to the site. The proposed development is not considered to be a controlled action under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) or trigger any other Commonwealth environmental legislation. Therefore, the assessment concentrates on the NSW planning controls.

There are a number of relevant NSW planning controls which affect the proposed project including:

- *Environmental Planning and Assessment Act 1979;*
- *Environmental Planning and Assessment Regulations 2000;*
- *Protection of the Environment Operations Act 1997;*
- *State Environmental Planning Policy (Major Development) 2005;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy 33 – Hazardous and Offensive Development;*
- *State Environmental Planning Policy 44 – Koala Habitat Protection;*
- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007;*
- *State Environmental Planning Policy (Rural Lands) 2008;*
- *North Coast Regional Environmental Plan 1988; and*
- *Lismore Local Environmental Plan 2000.*

*Appendix M* provides further consideration of the objectives and principles of the relevant legislation with respect to the project.

#### 3.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 AND ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATIONS 2000

##### 3.2.1 *Approvals Mechanism and Determining Authority*

The application is submitted under Part 3A *Major Infrastructure and Other Projects* of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and

*Environmental Planning and Assessment Regulations 2000 (EP&A Regulations)*. The proposed development is identified as being a “Major Project” in Clause 75(b) of the EP&A Act which states that:

*“This Part applies to the carrying out of development that is declared under this section to be a project to which this Part applies:*

*(a) by a State environmental planning policy.”*

The proposal is identified as a Major Project in *State Environmental Planning Policy (Major Development) 2005* (further details of this SEPP are provided below in *Section 3.3.1*. Pursuant to Part 3A, the Minister for Planning is the determining authority. This EA has been prepared in relation to the environmental assessment requirements as discussed within *Chapter 1*.

### **3.2.2 *Environmental Assessment Requirements***

Prior to the preparation of the EA, the Director General of the Department of Planning (DoP) was consulted to determine the issues that were to be addressed (Clause 75(F)). The key requirements raised by the Director General are presented within *Appendix A*, with *Table 1.1* providing a cross reference of the requirements against the contents of this EA.

A project under Part 3A does not require the referral and approval from other relevant authorities prior to the determination in accordance with Clause 75(U) of the EP&A Act. However, a licence in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act) will be required pursuant to the provisions of 75(V) of the EP&A Act (See *Section 3.6.1*).

Pursuant to Part 3A, Clause 75(R), environmental planning instruments other than SEPP’s do not apply to a Major Project. The zoning of the site as defined within the Lismore Local Environmental Plan 2000 (LLEP 2000) is discussed within *Section 3.5.1*. A discussion of the SEPP’s applicable to the proposed development is contained within *Section 3.3*.

## **3.3 STATE ENVIRONMENTAL PLANNING POLICIES**

### **3.3.1 *State Environmental Planning Policy (Major Projects) 2005***

*State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP) defines certain developments that are Major Projects under Part 3A of the EP&A Act and determined by the Minister for Planning.

Schedule 1 identifies classes of development that are classified as a ‘Major Project’, to which Part 3A of the EP&A Act applies. Clause 7 refers to extractives industries identifying the following:

*“(1) Development for the purposes of extractive industry that:*

- (a) *extracts more than 200,000 tonnes of extractive industries materials per year, or*
  - (b) *extracts from a total resource (the subject of the development application (or other relevant application under the Act)) of more than 5 million tonnes, or*
- ....”

As the proposed development will result in the extraction of more than 200,000 tonnes of material per annum, from a total resource of more than 5 million tonnes, Part 3A of the EP&A Act applies. This application has been prepared in response to this approval process.

### 3.3.2 *State Environmental Planning Policy (Infrastructure) 2007*

*State Environmental Planning Policy (Infrastructure) 2007* (SEPP Infrastructure) aims to streamline the approval process for infrastructure projects in NSW. In addition to this, it also provides for consultation with relevant public authorities pertaining to defined developments during the assessment process or prior to development commencing.

Clause 104 relates to traffic generating developments, and states that:

“(1) *This clause applies to development specified in Column 1 of the Table to Schedule 3 that involves:*

- (a) *new premises of the relevant size or capacity, or*
- (b) *an enlargement or extension of existing premises, being an alteration or addition of the relevant size or capacity.”*

Industrial developments with a size with a size or capacity of 5,000m<sup>2</sup> or greater with access to a classified road or to a road that connects to a classified road (if access is within 90m of connection, measured along the alignment of the connecting road) are listed in Schedule 3 of SEPP Infrastructure. Clause 93 of SEPP Infrastructure defines a “classified road” as:

- (a) *a main road,*
- (b) *a highway.....*
- (f) *a tourist road.....”*

Wyrallah Road is classified as a main road (MR 147).

Clause 104 of SEPP Infrastructure gives procedural mechanisms for determining development applications:

“(3) *Before determining a development application for development to which this clause applies, the consent authority must:*

(a) give written notice of the application to the RTA within 7 days after the application is made, and

(b) take into consideration:

(i) any submission that the RTA provides in response to that notice within 21 days after the notice was given (unless, before the 21 days have passed, the RTA advises that it will not be making a submission), and

(ii) the accessibility of the site concerned, including:

(A) the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and

(B) the potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, and

(iii) any potential traffic safety, road congestion or parking implications of the development.”

The proposed quarry expansion is considered to be a ‘traffic generating development’ pursuant to SEPP Infrastructure as it is an industry with an area of greater than 5,000m<sup>2</sup> with access to a classified road (Wyrallah Road). This environmental assessment (EA) report is therefore required to be forwarded to the New South Wales Roads and Traffic Authority (RTA) during the assessment phase.

A traffic impact assessment has been provided part of this EA report. The results of the assessment are summarised within Chapter 6, with the complete assessment provided as *Appendix F*.

### 3.3.3

#### ***State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007***

*State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) - 2008* (SEPP Mining) aims to ensure the sustainable operation and management of mineral, petroleum and extractive material resources. The policy requires that the determining authority consider the following:

- the compatibility of the proposed mining, petroleum or extractive development with surrounding land uses;
- the compatibility of any proposed development on land that is in the vicinity of a mine, petroleum production facility or extractive industry or on or near land that has been identified as a significant resource of minerals, petroleum or extractive materials;
- the environmental impacts of the proposal;
- the efficiency of resource recovery;

- the implications of the development on the public roads network; and
- the rehabilitation of the land, including final landforms and disposal/treatment of wastes and contaminated land.

The information provided in this EA report satisfies the above and demonstrates that the proposal will be undertaken in an environmentally sustainable manner. A comprehensive assessment of the project against the principles contained within the *SEPP Mining* is contained within *Appendix M*.

### 3.3.4 *State Environmental Planning Policy (Rural Lands) 2007*

The principles of *State Environmental Planning Policy (Rural Lands) - 2008* (Rural Lands SEPP) are as follows:

*“(a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas,*

*(b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State,*

*(c) recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development,*

*(d) in planning for rural lands, to balance the social, economic and environmental interests of the community,*

*(e) the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land,*

*(f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities,*

*(g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing,*

*(h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.”*

Champions Quarry is located on land that is zoned rural and riverland and is surrounded by other rural properties and as a result, the provisions of the Rural Lands SEPP apply.

The proposed quarry will result in the disturbance to approximately 16 hectares of Class 3 agricultural land as identified by the Department of Primary Industries (DPI 2004). The Far North Coast Regional Strategy (DoP 2006) identifies the project site as partially containing farmland of regional significance.

The proposed development will allow for the expansion of a quarry to allow access to be gained to a valuable resource which will provide considerable economic benefit to the broader Far North Coast area. The quarry plan that has been developed will minimise disturbances to the agricultural carrying capacity of the property as quarrying activities will only result in the long term disturbance of the *Central Section* (approximately 3ha for the installation of processing and storage facilities). It is proposed to disturb only three by 3ha interconnected quarry cells at any one time during extraction within the *Southern Section*, thus limiting the amount of agricultural land excluded from grazing activities at any one time. These cells are proposed to be rehabilitated to allow for grazing activities to resume within 12 months of completion of each cell.

The development will not restrict the use of surrounding lands for rural activities. The only community infrastructure that the quarry will potentially impact upon is the road network on Wyrallah Road and other elements of the identified haulage routes. These are identified and discussed within *Chapter 6* and *Appendix F*.

The proposed re-subdivision is also required to address the objectives of this policy.

*Appendix L* comprehensively addresses the objectives of this policy in relation to both the proposed quarry and the re-subdivision.

### 3.3.5 ***State Environmental Planning Policy 33 – Hazardous and Offensive Industries***

State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33) relates to ‘hazardous industry’, ‘hazardous storage establishment’, ‘offensive industry’ and ‘offensive storage establishment’. The policy also requires specified matters to be considered for proposals that are ‘potentially hazardous’ or ‘potentially offensive’. SEPP 33 defines ‘potentially offensive industry’ as:

*“development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.”*

A proposal cannot be considered to be an ‘offensive industry’ unless it is first identified as a ‘potentially offensive industry’. SEPP 33 ensures that appropriate measures are taken to reduce the impact of the development on the environment. All reasonable and feasible mitigation measures will be employed in site and activities and emissions will be monitored and



controlled within Department of Environment, Climate Change and Water licensing requirements. It is therefore concluded that the proposed expansion of Champions Quarry is not a hazardous or offensive industry.

### 3.3.6 *State Environmental Planning Policy 44 – Koala Habitat Protection*

*State Environmental Planning Policy 44 – Koala Habitat Protection (SEPP 44) applies to land in the Lismore LGA. It aims to “...encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free – living population over their present range and reverse the current trend of koala population decline:*

*(a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and*

*(b) by encouraging the identification of areas of core koala habitat, and*

*(c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.”*

A Koala habitat assessment in accordance with SEPP 44 was undertaken as part of detailed site ecological investigations. No Koala feed trees as listed under Schedule 2 of SEPP 44 or Koalas were identified within the *Project Area* during field investigations. Consequently, the site does not constitute core or potential core Koala habitat, and further consideration of SEPP 44 is not required.

Further discussion of the Koala habitat assessment is provided within *Appendix C* and Chapter 7.

## 3.4 *REGIONAL PLANNING POLICIES*

### 3.4.1 *North Coast Regional Environmental Plan 1988*

The aim of the North Coast Regional Environmental Plan 1988 (NCREP 1988) is to encourage the development of regional policies that protect the natural environment, encourage an efficient and attractive built environment and guide development into a productive yet environmentally friendly and sound region. The NCREP 1988 also aims to provide a basis for growth in the region, optimizing the economic and social benefits to the local community and visitors.

In relation to geological resources, the NCREP aims *to prevent the sterilization of known resource by inappropriate development on or near to potential extraction site.*

The proposed quarry will provide a significant financial benefit to the local community, as well as providing a long term resource for the construction

industry. It will also allow for effective utilisation of the known geological resource.

### 3.5 LOCAL PLANNING POLICIES

#### 3.5.1 *Lismore Local Environmental Plan 2000*

Pursuant to the provisions of Clause 75(R) of the EP&A Act, only the zoning provisions within Lismore Local Environmental Plan 2000 (LLEP 2000) apply to the proposal. However, the Director General's Requirements have requested that the EA include an assessment of the proposal against all provisions of the LLEP 2000 and any other local planning instruments.

The land in which extraction is proposed is located within land zoned 1(a) "General Rural" and 1(r) "Riverlands" under the provisions of the Lismore Local Environmental Plan 2000 (LLEP 2000).

The objectives of the abovementioned zones are outlined below.

##### *1(a) "General Rural" Zone*

The objectives of the 1(a) zone are:

- (a) to maintain and encourage sustainable agricultural activities within the zone; and*
- (b) to enable a range of uses to occur on rural land providing such uses do not conflict with existing or potential agriculture and do not detract from the scenic amenity and character of the rural environment;*
- (c) to discourage the fragmentation of rural land;*
- (d) to restrict the establishment of inappropriate traffic generating uses along main road frontages; and*
- (e) to enable the provision of rural tourist accommodation and facilities only where such facilities are compatible with the form and density of the nature of the locality.*

##### *1(r) "Riverlands" Zone*

The objectives of the 1(r) zone are:

- (a) to encourage the use of the land for its optimum productive potential; and*

- (b) to permit a range of activities that support the agricultural industries being conducted on the land and limit development that may, in the opinion of the Council, reduce the agricultural production potential of the land; and
- (c) to discourage the fragmentation of rural land; and
- (d) to control development that may restrict the function of, or create a traffic hazard along, classified and other formed roads; and
- (e) to limit the development of non – agricultural uses, except those which will not be adversely affected by flooding.

The proposed quarry expansion is considered to be not inconsistent with the zone objectives as discussed within *Appendix L*. Extractive industries are permissible within these zones with consent.

Section 20(2) “Buffer zone to avoid potential land use conflicts” of LLEP 2000 provides that:

“Despite any other provision of this plan, consent must not be granted to residential, rural residential or tourism development (including subdivision for those purposes), unless it has been demonstrated, to the satisfaction of the consent authority, that the proposed development will be compatible with any existing specified land uses in the locality and with surrounding established development”.

Section 20(3) provides that a quarry is a “specified land use” for the purposes of this clause.

The specialist impact assessments undertaken to accompany this report, particularly noise, air quality and visual, indicate that any impacts from the proposed expansion of Champions Quarry can be successfully ameliorated with regards to established rural dwellings in the area.

### 3.5.2 *Lismore Development Control Plan – Part A*

The Lismore Development Control Plan (DCP) aims to provide controls and guidelines for new developments that assist in achieving the aims and objectives of the LLEP 2000. Specific elements of the DCP applicable to the proposed expansion of Champions Quarry include:

- Chapter 11 – Buffer Areas;
- Chapter 15 – Waste Minimization; and
- Chapter 18 – Extractive Industries.

## Chapter 11 – Buffer Areas

The primary objective of Chapter 11 is to minimize land use conflicts between potentially incompatible land uses through the establishment of appropriate buffer areas. Clause 11.4 sets out preferred buffer areas for a variety of land uses, including extractive industries. These buffer areas as outlined are intended as a guide for establishing a physical separation between residential development and certain activities and developments where potential conflicts between land uses may arise. With regards to extractive industries, the DCP states that “it is desirable to provide a buffer area around quarries to minimize land use conflicts and safeguard quarry resources which could be sterilized as a result of encroachment by residential land uses”.

Under the provisions of the DCP, the quarry is classified as a ‘large quarry’ (being a quarry extracting greater than 10,000m<sup>3</sup> per annum) and is subject to the following buffer zones:

- Primary buffer zone (in which single dwellings, urban/village and rural residential development is excluded) covering 500 metres; and
- Secondary buffer (in which single dwellings are permitted if no suitable location is available, with urban village and rural residential development remaining excluded) covering 800 metres.

Presently, there are five dwellings located within the primary buffer (one of which is owned by the proponent), with one dwelling contained within the secondary buffer zone. The proposed expansion of Champions Quarry will not change the amount of dwellings within either the primary or secondary buffer. The intent of *Chapter 11* of the DCP is to protect quarry resources as a result of encroachment by incompatible sensitive land uses. In this instance, the proposed expansion of the quarry is eroding further into a buffer zone that is below the prescriptive standards provided by the DCP. The impact assessments undertaken, particularly with regards to noise and air quality impacts, demonstrate that any impacts to dwellings within the primary and secondary buffer zones can be ameliorated. This can be achieved due to attenuation by distance or with the implementation of specific design and behavioural based mitigation measures (i.e. bunds) such that they are within statutorily accepted limits. In this regard it is considered that a reduced buffer zone is acceptable.

The matter of buffer zones is also raised in *Chapter 18 – Extractive Industries* of the DCP.

## Chapter 15 – Waste Minimization

The intent of Chapter 15 – Waste Minimization is to:

- reduce waste to landfill;

- extend the life of landfill operations in the area; and
- contribute to environmental and economic sustainability through resource conservation.

The matter of waste management is addressed within *Section 12* of this EA.

#### *Chapter 18 – Extractive Industries*

The objectives of Chapter 18 – Extractive Industries of the DCP, as outlined within *Section 18.1* are:

- ensure that extractive industries do not adversely impact on the environment and surrounding land uses;
- identify and protect mineral and extractive resources of significance and associated extractive industries;
- identify preferred haulage routes and desired road standards;
- ensure continued efficient, appropriate and responsible operation of extractive industries of regional and local significance;
- provide for adequate “buffer areas” around quarries and resources of significance, so as to prevent encroachment of inappropriate land uses such as residential and rural residential development and to minimize land use conflicts;
- identify quarries which have been exhausted of resource, or are no longer required and encourage effective rehabilitation of these sites;
- outline requirements and information needed for obtaining development consent to establish new quarries and extend or intensify existing quarries; and
- provide guidelines for preparation and implementation of management plans for operating and rehabilitating quarries, so as to minimise adverse environmental impacts.

*Section 18.3 “Extractive Resources in Lismore”* acknowledges that “it is imperative to minimize the distance between the resource and end – user construction sites. Where resource sites are sterilized by the encroachment of inappropriate development, construction projects in that area will have to rely on resources from less accessible extraction sites, with a consequent increase in costs”. *Section 13* of this EA and *Appendix L* provide a comprehensive assessment of the resource proposed to be extracted from the expanded Champions Quarry and its potential contribution to the provision of a locally scarce resource.

*Section 18.4 “Haulage Routes”* sets out specific haulage routes and road design requirements. The matter of traffic impacts on the local road system resulting

from the proposed expansion of Champions Quarry is assessed within *Chapter 6* and *Appendix F* of this EAR.

*Section 18.5* “Buffer areas around Extractive Industry sites” essentially restates the buffer zone requirements outlined within Chapter 15 of the DCP. However, it provides a strong indication that these buffer zones may need to be increased or decreased depending on the nature of the quarry:

- buffer areas may be reduced where topographic, climatic, site conditions or production techniques are favourable to reducing distance separation; and
- in some cases, buffer zones may need to be increased where, for example, the topography is very flat or a development site is located upwind of a quarry.

As stated previously, the impact assessments undertaken indicate that the buffer distances proposed to existing established sensitive receivers is appropriate. Any future sensitive land uses, such as rural tourist facilities, will have to comply with the DCP in that the onus is on the proponent of the proposed sensitive land use to demonstrate that, should it be proposed to construct in the primary or secondary buffer, it will not sterilize present or future operations of the quarry.

*Section 18.6* - ‘Rehabilitation of Quarries’ aims to require that exhausted and disused quarries not be left in an unrestored state. A rehabilitation plan has been developed and is discussed within *Section 16* and *Appendix J* of this EA.

*Section 18.7* - ‘Obtaining Development Consent for Extractive Industries’ requires that all extractive industries without a current valid development approval from Council are required to obtain Council’s development consent for an increase in production or for any lateral extension of the area quarried. The existing quarry has development consent in place. Approval for expansion is being sought under Part 3A of the *EP&A Act 1979*.

*Section 18.8* - ‘Extractive Industry Management Plans’ requires that a management plan be prepared for the continuing operation and rehabilitation of the extractive industry and the site. A preliminary quarry management plan has been prepared and is provided within *Appendix J* of this EAR.

## **3.6 OTHER NSW LEGISLATION**

### **3.6.1 Protection of the Environment Operations Act 1997**

The existing quarry is not subject to an Environmental Protection Licence (EPL) issued under the provisions of the *Protection of the Environment Operations Act 1997* (POEO Act 1997). Part 3.2 of the *POEO Act 1997* requires that an EPL be granted for scheduled development work and scheduled activities. Section 19 of Schedule 1 - provides that an extractive industry

involving the “*extraction, processing or storage of more than 30,000 cubic metres per year of extractive material*” is a scheduled activity for which an EPL is required.

As the proposed sandstone quarry will extract greater than 30,000 cubic metres of material per annum, an EPL will need to be issued prior to extraction commencing.

## 4.1

## GENERAL COMMUNITY CONSULTATION

A community consultation plan has been developed and implemented as required by the EAR's issued on 22 June 2009. The object of this was to gain highly individualized input from nearby residents such that the impact assessment could be undertaken in a manner that addresses specific matters of concern. This has included:

- Champions Quarry Expansion Community Information Newsletter – May 2009 delivered to residents within a 3km radius of the quarry (a copy is attached in *Appendix N*). This newsletter invited residents to contact ERM on a 1800 number or by mail to arrange for face to face meetings if required to discuss matters of concern;
- a general media release was distributed in local media outlets in May 2009. This is attached in *Appendix N*; and
- following distribution of the newsletter, and follow up of correspondence was received (four letters), face to face meetings were held with two nearby residences in August 2009.

Additionally, a request was received from the Tucki Community Against the Mega Quarry Inc. to hold an open public meeting. This offer was declined by ERM and the Proponent in a letter dated 6 August 2009 as it was considered that this would not add value to the environmental assessment process. This letter is provided in *Appendix N*).

It is considered that the above consultation measures have provided interested residents within the vicinity of the *Project Site* the opportunity to register their interest in the project and make a meaningful contribution to the impact assessment process.

*Table 4.1* below outlines the primary issues raised by individuals through the consultation process.

**Table 4.1** *Summary of Community Issues Raised Through Consultation*

Issue	How and Where Addressed
Home is within 2 kilometres of the proposed quarry in line with the spring and summer prevailing north easterly winds at that time. This will be a major problem	Comprehensive air quality and noise impact assessments have been undertaken (Included as <i>Appendix E</i> and <i>Appendix D</i> ) which indicate that all potentially affect residences, impacts are well within acceptable limits.
The increase of truck movements on the narrow, winding road, not up to road base standard is scary and will become even more hazardous. Children at bus stops will need constant vigilance by parents or others at all times.	A traffic impact assessment has been undertaken ( <i>Appendix F</i> ) which identifies a number of upgrades required to the road network to accommodate the increased traffic movements associated with the expansion of Champions Quarry.



Issue	How and Where Addressed
Have been advised by professionals in this area the interruption of Koala corridor travel particularly from Tuckurimba Hill to areas further north by the proposed quarry is unacceptable.	An ecological assessment has been carried out ( <i>Appendix C</i> ) which assesses all matters relating to preservation of Koalas and their habitats in accordance with the requirements of SEPP 44. Where required, appropriate mitigation measures are to be implemented including extensive Koala feed tree plantings.
Presently unacceptable noise impacts resulting from maintenance of quarry equipment at a shed isolated from the quarry. Recommend that this be moved to the site of the quarry and bunded and screened.	The maintenance of all equipment will take place in newly constructed structures in the floor of the <i>Central</i> or <i>Southern Section</i> pits.
Request that Hazelmount Lane be bitumen sealed.	The proponent recently constructed a new intersection at Wyrallah road, such that all quarry traffic enters and exits the quarry via the main access road only. It is therefore not proposed to undertake any upgrades to Hazelmount Lane.
Dust suppression along the internal roads is presently not occurring – unsure as to if it will be done upon expansion of the quarry.	The entirety of the internal access road is watered when in use by quarrying vehicle. The quarry has its own water truck, however, it is proposed to bitumen seal the existing internal access/haulage road such that dust suppression requirements will be minimal.
	The expanded Champions Quarry would be subject to an Environmental Protection Licence issued under the provisions of the Protection of the Environment Operations Act 2000. The Department of Environment and Climate Change would then be the appropriate regulatory body governing the quarry, including the need for annual reporting and compliance and complaints monitoring.
Raised issues pertaining to water flows across the property.	An extensive soil and water management plan has been developed and is included as <i>Appendix I</i> .  The water on the site passes through 3 km of the Proponents land before reaching Tucki Creek.
Potential for sulfides to be present in the water management system given the nature of the material to be extracted. In the event of an overflow of the water management system, potential pollutant could be dispersed into the surrounding farmland and water ways.	An extensive Soil and Water Management Plan has been developed as is included as <i>Appendix I</i> .

Issue	How and Where Addressed
Given past experiences with the quarry operators, concern is raised over their capacity to comply with statutory requirements and manage the quarry in a responsible manner.	The expanded Champions Quarry would be subject to an Environmental Protection Licence issued under the provisions of the Protection of the Environment Operations Act 1997. The Department of Environment, Climate Change and Water would then be the appropriate regulatory body governing the quarry, including the need for annual reporting and compliance and complaints monitoring.  It is noted that the quarry has never been subject to any regulatory action as a result of its operations.
Potential dust and visual impacts associated with the primary access road.	The primary access road is proposed to be bitumen sealed such that dust generation potential is minimal. Additionally, screen planting of native vegetation will take place either side of this road such that it will be substantially concealed from view from any sensitive visual receptors.
Main quarry pit will be visually intrusive	An extensive visual impact assessment has been undertaken and is included as <i>Appendix K</i> .
In addition to the primary access road from Wyrallah Road, access to the quarry is also being obtained from an internal road to the east which is creating an additional dust and noise source.	All access to the quarry is and will be via the newly constructed intersection and the primary access point from Wyrallah Road. The internal road, which is also used as an agricultural road, will be maintained such that a secondary access point to the quarry is available in case of an emergency.

## 4.2

### CONSULTATION WITH GOVERNMENT DEPARTMENTS AND AGENCIES

During development of the Director General's Environmental Assessment Requirements, a number of government departments and agencies provided specific input as to what the EA report is required to address. These are summarized in *Table 4.2*.

**Table 4.2** *Department of Environment and Climate Change*

Issue	How and Where Addressed
The following environmental impacts of the project need to be assessed, quantified and report on: <ul style="list-style-type: none"> <li>• Air Quality</li> <li>• Noise and vibration</li> <li>• Water quality</li> <li>• Threatened species</li> <li>• Aboriginal cultural heritage</li> </ul>	Comprehensive impact assessments have been undertaken with regards to each of these issues.
The above matters are required to be assessed in accordance with the relevant guidelines.	All impact assessments have been undertaken in accordance with the relevant guidelines.

Issue	How and Where Addressed
Described mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures have been implemented.	Mitigation measures have been developed within the scope of each impact assessment. These have been incorporated into the statement of commitments contained within <i>Chapter 17</i> .
Based on the information provided to the Department of Environment and Climate Change, the applicant will not require an Environment Protection Licence because the activity is not scheduled under the Protection of the Environment Operations Act 1997.	It is considered that the proposed expansion of Champions Quarry will require an Environment Protection Licence be granted pursuant to the provisions of the Protection of the Environment Operations Act 1997.

**Table 4.3** *Department of Primary Industries*

Issue	How and Where Addressed
The project should have regard to the Northern Rivers Catchment Action Plan (CAP) which has identified land use conflict in and adjacent to rural areas as a priority natural resource management and planning issue.	An assessment of the proposed expansion of Champions Quarry has been undertaken against the CAP and is included within <i>Appendix L</i> .
The merits and impacts of any proposed boundary adjustment should consider: <ul style="list-style-type: none"> <li>• The Lismore LEP;</li> <li>• The North Coast REP; and</li> <li>• The Rural Lands SEPP.</li> </ul>	An assessment of the proposed boundary adjustment has been undertaken and is included within <i>Appendix L</i> .
The Environmental Assessment should address: <ul style="list-style-type: none"> <li>• the agricultural and rural uses of the subject and adjoining lands;</li> <li>• the agricultural values of the subject property including the site to be developed;</li> <li>• the location, extent, duration and features of the associated activities;</li> <li>• consistency of the proposal with relevant policies and guidelines;</li> <li>• the impact of the proposal on future agricultural production;</li> <li>• the impact of the proposal on any existing or former cattle tick dip sites;</li> <li>• alternatives to the proposal;</li> </ul>	See Section 2.2.3 and Chapter 3 See Section 2.2.3 and Chapter 3 Chapter 2 Chapter 3 and <i>Appendix L</i> Chapter 3 No registered or known cattle tick dip sites within the vicinity of the proposed expansion. Chapter 18

Issue	How and Where Addressed
<ul style="list-style-type: none"> <li>proposed rehabilitation measures and long term management/use of the subject lands;</li> </ul>	Chapter 2 and <i>Appendix I</i>
<ul style="list-style-type: none"> <li>proposed exclusion of livestock from the operational area in the short term as well as during the rehabilitation phase;</li> </ul>	<i>Appendix I</i>
<ul style="list-style-type: none"> <li>the compatibility of the operation with adjoining and nearby agricultural enterprises;</li> </ul>	Chapter 2 and Chapter 3
<ul style="list-style-type: none"> <li>management of any adverse impacts on water resources and other water users;</li> </ul>	Chapter 8 and <i>Appendix I</i>
<ul style="list-style-type: none"> <li>management of any drainage, local flooding and flood behaviour impacts on agricultural enterprises and farm access; and</li> </ul>	Chapter 8 and <i>Appendix I</i>
<ul style="list-style-type: none"> <li>consultation with agencies, neighbours and community organisations and management of issues arising.</li> </ul>	Chapter 4
Mineral Resources Issues	

**Table 4.4** *Department of Water and Energy*

Issues	How and Where Addressed
The EA should include a comprehensive outline of proposed water management on the site, including the details, dimensions capacities and purpose of structures, and the sources and quantities of any water supply or process water including groundwater. Requirements for licensing under water legislation should be considered.	An extensive soil and water management plan has been developed and is provided within <i>Appendix I</i> , with a summary provided in Chapter 8.
The EA should clearly indicate the proposed extraction depths and final landform in relation to surrounding land, and any likely impacts of the proposal on local drainage, water quality and flooding.	An extensive soil and water management plan has been developed and is provided within <i>Appendix I</i> , with a summary provided in Chapter 8.
The EA should include a comprehensive description of the groundwater regime beneath the site, including the prevailing depths of water tables, the extent of likely groundwater interception and inflows expected, and the extent, volumes and discharge destination, of any dewatering proposed. This information will be essential for licensing considerations, and should include the results from the 4 monitoring bores already installed at the site. The likely	A groundwater assessment was undertaken as part of geotechnical assessments for the site. This document is included as <i>Appendix B</i> with a summary provided in Chapter 8.

Issues	How and Where Addressed
impacts on any surrounding groundwater users should be addressed.	
The EA should include post extraction rehabilitation and the final land use for the site. It should be noted that DWE's strong preference is for final landforms not to penetrate below the prevailing water table resulting in a remnant water body connecting with the aquifer. Where deep water bodies are proposed they are required to be effectively sealed, to minimize the risk of groundwater contamination, and to avoid a source of permanent evaporative loss.	A rehabilitation plan has been developed and is detailed within Section 2.7 and the preliminary quarry management plan provided as <i>Appendix J</i> .

**Table 4.5** *Lismore City Council*

Issues	How and Where Addressed
The traffic impact assessment should assess the total number of trucks resulting on the haulage routes and the adequacy and appropriateness of the haulage routes to accommodate the level of heavy vehicle anticipated. Any deficiencies identified within haulage routes should be detailed and the relevant corrective action and timing for action identified within the assessment.	A traffic impact assessment was undertaken and is provided as <i>Appendix F</i> , and is summarized in Chapter 6.
Compliance with adopted statutory planning controls in the Lismore Local Environmental Plan and Development Control Plan, specifically for the objectives of the zone in which the quarry is situated, buffer requirements for quarries and avoidance of land use conflicts.	Chapter 3
Effect of noise and vibration on fauna such as koalas in nearby areas.	A flora and fauna assessment has been undertaken and is provided as <i>Appendix C</i> , and is summarized in Chapter 7.
The economic impacts on eco - tourism businesses.	There are no eco - tourism facilities within the vicinity of the proposed quarry expansion that could be directly adversely affected. Any future development applications made for eco - tourism facilities in the area in the future would be required to have regard for the buffer zone requirements as outlined in the Lismore City Council DCP (See Chapter 3) and be placed such that it does not sterilize the resource.

### 4.3 *ABORIGINAL COMMUNITY CONSULTATION*

Aboriginal consultation is required for any assessment of Aboriginal heritage. The DECCW has released the 'Interim Community Consultation Requirements Guideline' (2005) for Aboriginal consultation in relation to any

study that might eventually be used to support an application under Part 3A under the *Environment and Planning Act*.

The interim guideline sets out a process for inviting Aboriginal groups to register interest as a party to consultation (including local press advertisement), seeking responses on proposed assessment methodology, and seeking comment on proposed assessments and recommendations. The interim guidelines requires proponents to allow ten working days for Aboriginal groups to respond to invitations to register, and then 21 days for registered Aboriginal parties to respond to a proposed assessment methodology. Additional time should be allowed for groups to review a draft report and comment on the results and management recommendations.

The Aboriginal community consultation for the project has been carried out in accordance with the DECCW guidelines. This is detailed within *Chapter 11*.

#### 4.4 *POST ADEQUACY ASSESSMENT CONSULTATION*

In response to issues raised by the DECCW during the adequacy assessment phase, a meeting was held between ERM, the Proponent and representatives of the DECCW on 17 November 2009. This meeting discussed the following:

- adequacy of flora and fauna survey methodologies;
- impacts of vibration upon microchiropteran bats;
- threatened species records, particularly with regards to Koala;
- extent of vegetation clearing, and the proposed development of a vegetation restoration and biodiversity offset strategy; and
- weed management measures.

In response to the above points of discussion, the desired outcomes of this meeting have been incorporated into *Chapter 7, Annex C* and the Statement of Commitments.

## 5 RISK ASSESSMENT

### 5.1 INTRODUCTION

This chapter provides an assessment of the key environmental issues and risks arising from the proposed development and recommends mitigation and management regimes to address these issues. The implications addressed are in accordance with the Director General's EARs issued on 22 June 2009.

### 5.2 GENERAL ENVIRONMENTAL RISK ANALYSIS

The following qualitative risk analysis was undertaken at the commencement of the assessment process in order to prioritise issues for assessment assist in formulating the assessment methodologies for the project. A risk analysis is an integral step in the Part 3A process whereby key issues identified within the preliminary environmental investigations and government and community consultation can be indentified for a more focussed assessment process.

The risk analysis is presented in *Table 5.1* and includes the identification of key aspects to be addressed within the EA report and the proposed assessment methodologies to complete the assessment. Detailed analysis of each aspect is provided within the following Environmental Interactions section of the EA report.

**Table 5.1 General Environmental Risk Analysis**

Aspect	Sub Topic	Level of Risk	Scope of Works	Justification
Ecology	Impacts to flora and fauna as a result of the Project	Low	A detailed Ecological site assessment is to be undertaken. This will include a desktop assessment and literature review of the State and Commonwealth threatened species registers to determine threatened species previously recorded or likely to occur at the site. A field survey will be undertaken targeted towards results from this desktop assessment.	The proposed level of assessment is considered adequate due to the largely cleared nature of the site. Management plans will be prepared should any threatened species or communities be identified.
Aboriginal Heritage	Aboriginal Relations	High	Develop and ensure ongoing communication with Aboriginal groups.	It was identified that further consultation with the Aboriginal community needed to take place.
	Aboriginal archaeological assessment	Low	The site has been subject to previous Aboriginal cultural heritage assessment and ERM understands that LALC determined that the site holds low cultural heritage values. Additional assessment is to be undertaken in accordance with the DECCW <i>Guidelines for Aboriginal Heritage Surveys</i> (National Parks and Wildlife Service 1997) and <i>Interim Community Consultation Requirements</i> .	Heritage sites that may be required to be destroyed will be identified. The property has experienced past disturbances due to grazing and quarrying activities and has been previously assessed to have low archaeological significance.
Noise and Vibration	Quarrying at Champions Quarry	Medium	A noise assessment will be undertaken based upon the DECCW's <i>Industrial Noise Policy</i> (INP). This will include attended and unattended ambient noise surveys at surrounding residential locations and passive recreational areas, noise modelling and site validation of the modelling results. Noise contours for the surrounding area and project specific limits will then be derived in accordance with the INP.	The proximity of a small number of sensitive receivers to the quarry necessitates undertaking a noise impact assessment. The operators of Champions Quarry will be provided with data to allow management of operational activities to minimize potential noise impacts upon these receivers. Determination of specific noise limits will allow for maximum flexibility of quarry operations within these limits.



Aspect	Sub Topic	Level of Risk	Scope of Works	Justification
	Cumulative Noise	N/A - there are no other noise producing industries or activities located near the quarry.		
	Blasting	N/A - due to the soft nature of the material, no blasting will be required.		
Air Quality	Air quality model and assessment.	Medium - there are a number of rural residences located within a reasonably close proximity to the quarry.	The assessment will be based on the NSW DECCW's <i>Guideline on the use of Air Quality Models for Modelling Assessments</i> . The assessment will cover a range of operational scenarios including realistic initial production rates and 'worst case' operational scenarios. Modelling of the proposed and cumulative air emissions will be undertaken.	The operators of Champions Quarry will be provided with data to allow management of operational activities to minimize potential air emission impacts on the surrounding community.
	Cumulative assessment	N/A - There are no other industries or activities in close proximity to the quarry to cause cumulative air quality impacts.		
	Greenhouse Gas Assessment	Low	A comprehensive green house gas assessment will be undertaken, taking into account all potential sources.	Given the present policy position of the Federal government, it is considered necessary to undertake this level of assessment.

Aspect	Sub Topic	Level of Risk	Scope of Works	Justification
Soil and Water Management	Water balance	Medium	A desktop assessment will be undertaken to determine hydrological characteristics of the site. Bureau of Meteorology data will be sourced for review such that a water balance for the site can be determined.	The water balance is a critical component of any quarry and thus requires detailed consideration and calculations. A detailed Soil and Water Management Plan will provide guidance to the operators of Champions Quarry in this regard.
	Erosion and Sediment Control	Medium	Following determination of the water balance, a soil and water quality management regime will be developed to negate any potential adverse air and water quality impacts resulting from the proposed quarry expansion.	A detailed Soil and Water Management Plan will provide guidance to the operators of Champions Quarry in this regard.
	Groundwater	Low	Assessment of the hydrogeological properties of the property will be undertaken. This will consist of a desktop review of geological and hydrogeological information already available for the site. The contribution of groundwater to the water balance of the proposed quarry will also be undertaken.	This level of assessment will provide sufficient information to develop an understanding of groundwater conditions at the site and for determining the impacts of the quarry on the groundwater system.
Traffic	Vehicle movements generated by the project	Medium	An assessment of the proposed road transport network will be undertaken to define the likely impact. This will include an assessment of existing use levels and the maximum limits of the road and intersections along the nominated haulage routes.	Increased production from the proposed quarry will result in more truck movements along Wyrallah Road. This level of assessment is necessary to ensure that safe driveways and driving conditions can be maintained and/or implemented for all road users.

Aspect	Sub Topic	Level of Risk	Scope of Works	Justification
Visual	Rural residences within close proximity to the Project	Low	Views towards the site from sensitive visual receivers will be assessed to determine the likely visual impacts associated with the proposed quarry expansion. A site inspection of the quarry and surrounding area and an examination of aerial photographs and topographic information will be undertaken. Photo of the site when viewed from sensitive view points, taking into account the proposed expansion areas and any mitigation measures will also be provided.	A quarry of this size has the potential to visually impose itself on the landscape. A detailed visual impacts assessment is considered necessary to assess these potential impacts and develop appropriate mitigation measures.
Historical Heritage	European Archaeological Assessment	Low	A review of European heritage lists and archived plans will be undertaken.	This low level of assessment reflects the limited evidence for historic sites within the study area and therefore the low potential for subsurface archaeological sites to be present.
Socio economic considerations	Economic benefits to local and regional communities and government from the project; potential impacts to social values; and social benefits from quarrying	Medium	Documenting of the social and economic values provided by the quarry to the community. The existing amenity value will also be discussed.	Social values of the community typically relate to quality of life and the social amenity of the region. These values necessitate the need for an assessment of potential air quality, noise, traffic and visual amenity issues.

Aspect	Sub Topic	Level of Risk	Scope of Works	Justification
Waste	Identification of waste streams from quarrying activities	Low	<p>Opportunities for waste recycling and reuse will be identified, as well as methods of disposal for waste streams that cannot be effectively reused.</p> <p>The DECCW's Sustainability Programs Division is presently responsible for initiating waste avoidance and resource recovery strategies as a method of ensuring ecological sustainability. These strategies are the basis for the waste analysis and amelioration methods.</p>	The production of numerous types of both liquid and non liquid waste necessitates mitigation measures to be formulated and implemented to minimize waste generated by the quarry.
Utilities and Infrastructure	Demand on utilities and infrastructure	Low	Should the water balance indicate that the quarry is able to extract and process resources without the need to import water onto the site, no connection to the water mains (as is potentially available) will be required. It is also proposed to install an onsite domestic waste water treatment system. Therefore no assessment of these services will be required.	It is considered that the site will be able to be entirely self sufficient with regards to sewer and water services. The impacts upon the road infrastructure is being undertaken as a separate traffic impact assessment.

### 5.3

#### KEY ISSUES

The design and management of the proposed development has evolved in response to environmental, social and economic investigations and the recommended mitigation and management measures included in the supporting technical documents. Further information is contained in the technical reports submitted in *Part B* of this environmental assessment report.

In scoping the key issues arising from the proposed development, some issues were identified as being reasonably minor in this instance and area addressed in *Table 5.2*, with no further investigations required.

**Table 5.2** *Issues Not Requiring Further Assessment*

Issue	Comment
European Heritage	Searches of the local, regional, State and Commonwealth heritage registers indicate that there are no European heritage items in close proximity to the site.
Utilities and Infrastructure	The proposed development will not place any demand upon sewer and water infrastructure. The proposed quarry expansion will impact upon the road network which is being assessed in a separate specialist study, provided by within the 'Traffic Impact Study' (RoadNet 2009) which is provided as <i>Appendix F</i> and summarized within Chapter 6.

