



STATEMENT OF ENVIRONMENTAL EFFECTS

EXTRACTIVE INDUSTRY (QUARRY)

Lot 42 DP 815711, Lot 34 DP 875572 & Lot 85 DP 750194
1399 Sapphire Coast Drive, Wallagoot

JULY 2021

Prepared for Blu Wren Pty Ltd

APPENDICES

- A. *Plan Set*
- B. *Resource Availability – Drill Test Results*
- C. *Blast & Noise Impact Assessment*
- D. *Sediment Basin Assessment*
- E. *Test of Significance - Biodiversity*
- F. *Traffic Impact Assessment*
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1.0 INTRODUCTION

Property: Lot 42 DP 815711, Lot 34 DP 875572 & Lot 85 DP 750194

Location: 1399 Sapphire Coast Drive, Wallagoot

Proposal: Extractive Industry (Quarry)

This Statement of Environmental Effects (SEE) has been prepared to support a Development Application to Bega Valley Shire Council (BVSC) seeking approval for an Extractive Industry (Quarry) at Lot 42 DP 815711, Lot 34 DP 875572 and Lot 85 DP 750194, 1399 Sapphire Coast Drive, Wallagoot.

The application proposes to reinstate operations at the previously approved Bournda Downs Quarry on the site and extract a maximum of 29,000m³ of material per annum for a period of 15 years.

The SEE demonstrates due consideration of environmental issues and addresses those matters considered to be of relevance to this proposal under Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The SEE details the statutory requirements relevant to the proposal, along with general merits and impacts.

Information to support this proposal has been sourced from Council's website, NSW legislation website, Six Maps, the Office of Environment and Heritage, the Department of Planning, Infrastructure & Environment Planning Portal and relevant reports by suitably qualified consultants.

1.1 Site

The site is located approximately 17 kilometres North of Merimbula and approximately 17km South of Bega. The three Lots that make up the quarry site are part of the larger Bournda Downs Property which is approximately 340Ha in size. The property adjoins Bournda Nature Reserve to the West and South and freehold land to the North and East. Wallagoot Lake is located approximately 1000m from the Eastern Boundary of the property and 2600m from the quarry site.

The proposed quarry site is identical to the footprint of the previous approval. The quarry site is in the southwest corner the property. Located near to the top of a ridge it is surrounded by dense forest. Given it is a previously operational site the quarry floor is surrounded on three sides by substantial walls of rock face and overburden.

The subject site is located in a rural landscape. The surrounding land is predominately either heavily forested or used for cattle grazing. There are smaller, rural residential allotments located in the vicinity of the subject site with the closest residence being 1.2km from the quarry site.

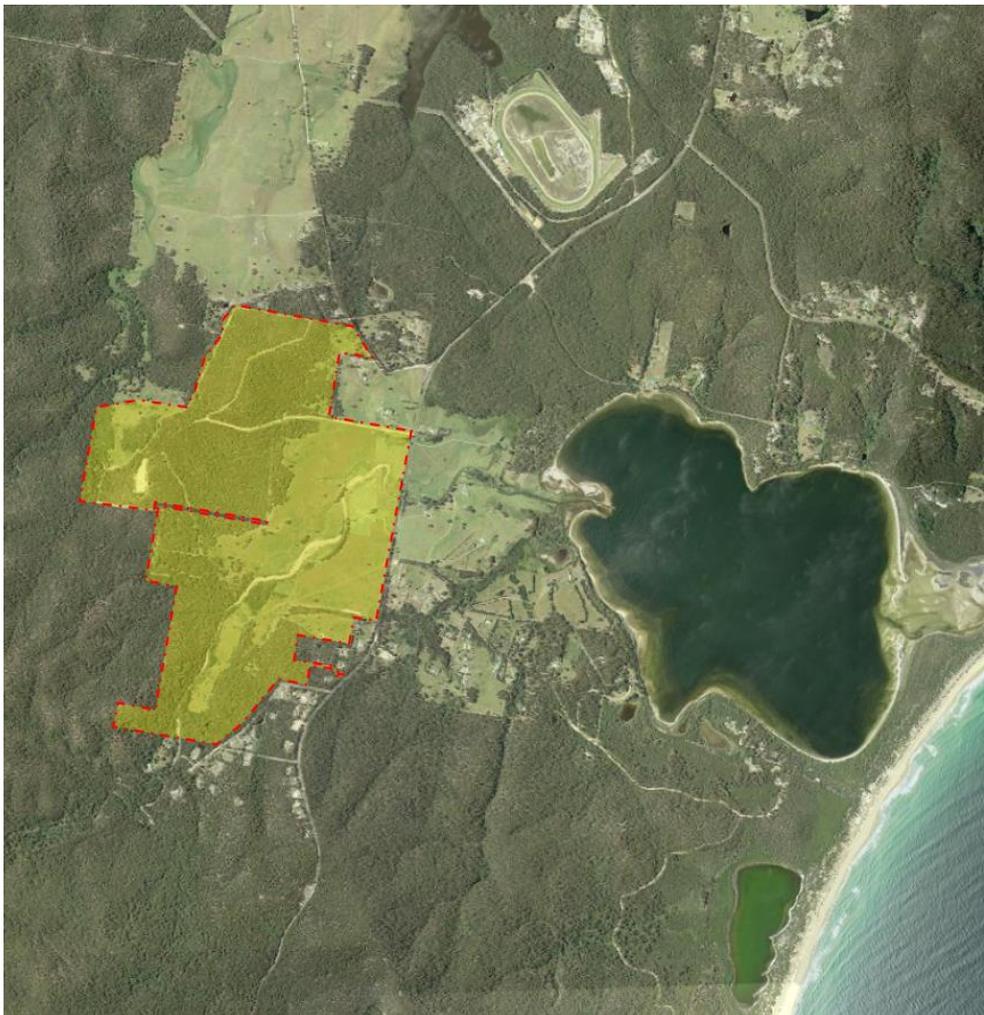


Figure 1: Location Map showing Bournda Downs Property- Source: SIX Maps



Figure 2: Subject Site map showing 3 Lots containing quarry and associated infrastructure.

1.2 Background

The proposed development site is located on the property known as Bournda Downs. The Bournda Downs Quarry was previously approved to operate from the same site. DA96.1332 for a Road Base Quarry was approved by Bega Valley Shire Council on 2 September 1997. The approval was for a maximum of 30,000m³ per annum with no crushing or screening work to be carried out onsite. The development was therefore not considered designated development under the EP&A Act and did not require an Environmental Protection Licence.

The original site was approved at a size of 1.97Ha. The whole site has been cleared of vegetation, and a stormwater management system and haul road constructed to connect to Sapphire Coast Drive

The quarry operated until around 2010 when its consent expired. During the time the quarry operated the material extracted was used as road base in the local area both on private and public/ Council roads. It has proven to be a durable product and has performed well over time.

Previous owners of the property had investigated reinstating quarry operations and even submitted a Development Application in 2012. However, this application was withdrawn, and the quarry was not reinstated. A survey was undertaken of the quarry site, the footprint remains the same and no works have been undertaken at the site since the quarry closure.

The property recently changed hands and the new owners is now seeking to reinstate quarry operations to make this valuable resource available to the local area. A Development Advisory Panel

meeting was held with representatives from Bega Valley Shire Council on 22 April 2021 to discuss the proposed extractive industry and lodgement of this Development Application.

2.0 PROPOSED DEVELOPMENT

This development application seeks to re-establish quarry operations at the previously approved Bournda Downs Quarry on Lot 42 DP 815711, Lot 34 DP 875572 & Lot 85 DP 750194, 1399 Sapphire Coast Drive, Wallagoot. The proposed Extractive Industry (Quarry) would extract rhyolite for use in local road construction. The proposal does not trigger designated development provisions by operating within the existing quarry footprint and keeping extraction within appropriate limits. The proposal is both summarised and detailed below.

- Operations not to exceed previously approved footprint. 1.97Ha.
- Excavation to a greater depth within the approved footprint
- Annual limit of extraction of 29,000m³
- Material to be won via ripping and blasting.
- Process up to 29,000 tonnes via screening and crushing onsite per annum.
- Life span of 15 years with an option to add a further 5 years.
- Operational hours of 7am – 5pm Monday to Friday, 7am – 1pm Saturday. No operations on Sundays or public holidays.
- Provision of site office and staff amenities.

2.1 Purpose

To provide high quality road base materials for road construction. The proposed Extractive industry will provide a locally available resource for road construction that meets the plasticity index and grading specifications. This resource will be available for use by local and state government and private landowners, reducing the long-term need to transport materials large distances for local use.

2.2 Resource availability

The resource on site is a volcanic rock commonly known as rhyolite. Rhyolite is not commonly available in the area making it a valuable resource. Rhyolite is suitable for road construction, aggregates for concrete, asphalt and sealing aggregates. Oversize rock is used for environmental/erosion control and building of structures and numerous other usages.

A number of test holes have been drilled across the site and around the periphery to prove up material reserves. Results of test drilling have enabled estimates to be made of the quantities and location of resources available on the property. The resource presents consistently having similar penetration rates and mix of both fresh and weathered rock present and a low plasticity index. Full Drill Test results are outlined in *Appendix B*.

2.3 Quarrying operations

The general work methods associated with the proposed quarrying activities are summarised below:

- **Preparation**
 - Installation of erosion and sediment controls prior to extraction re-commencing
- **Extraction and processing**
 - Ripping with bulldozer or excavator in areas where material is sufficiently weathered

- Drilling and blasting of fresh material
 - Extraction of material using a front-end loader or excavator
 - Crushing, screening and stockpiling of materials
- **Transportation**
 - Loading stockpiled materials into haulage trucks
 - Transport of materials from the quarry site along haul routes for delivery

Site preparation prior to extraction commencing would be in accordance with the attached Stormwater Plan and conditions of consent following issue of Approval from Council.

Extraction methods will vary according to the type of material being extracted. Where rock is sufficiently weathered, the resource can be extracted by ripping with a bulldozer or excavator.

For the extraction of hard rock, explosives would be used to dislodge and fracture the rock into a size which can be handled by the crushing plant. Holes would be drilled into the rock in a particular pattern having regards for such factors as hole depth, spacing, bench configuration and angle. The holes are filled with explosives, comprising a small explosive charge at the base of the hole followed up by a bulk explosive which makes up the remainder of the explosive charge, then stemmed with aggregate at the top to minimise airblast and flyrock. Blasting then occurs. Drillers and blasting experts would be contracted to undertake these works in accordance with the *Blast & Noise Impact Assessment (Appendix C)* The number of blasts per year would be dependent on the degree of weathered rock encountered during quarrying operations.

A large portion of the material will be further processed into useable products to today's standards and use. The raw material will be reduced in size and graded through crushers and screening plant. This is a common process in most quarries. The won materials will be stockpiled awaiting sale requirements. Several large stockpiles will need to be made as they will have to be tested for quality gradings and ready for market demands. Material will be loaded with either a loader or excavator from the stockpiles.

It is noted that under the SEPP extractive industries that are located more than 1000m from a dwelling not associated with the property are exempt from requiring approval for crushing and screening plant. This is as it is generally considered the distance is more than sufficient to mitigate against noise generation from the processing of material. It is still proposed to consider the impact from the crushing and screening to local amenity although approval would not be required under this exemption.

The proposed extraction operations will occur on an intermittent, on-demand basis throughout the year. Extraction from the pit will comprise a batch operation which would cease when sufficient material had been stockpiled and would recommence only when the stockpile had been exhausted. It is likely that the operation would remain idle for extended periods.

Hours of operation would occur within daylight hours only, nominally 7am – 5pm Monday to Friday and 7am – 1pm on Saturdays. It is not intended that the quarry operations would occur on Sundays or public holidays.

No electricity or water supply is required. Waste produced by employees at the site will be collected in a portable facility. Amenities for employees will be portable and will be provided as per the attached Site Plan (*Appendix A*).

No fuel for plant equipment is proposed to be stored on site with operators and contractors bringing necessary fuel into the site each day.

3.0 PLANNING CONTEXT

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and associated regulations and environmental planning instruments provide the framework for assessing environmental impacts and determining planning approvals for developments in NSW.

The proposed works have been assessed under Part 4 of the EP&A Act. The assessment also considers the requirements of the *Biodiversity Conservation Act 2016* (BC Act). The following section outlines relevant planning instruments and how the proposed development addresses or meets objectives.

3.1 Environmental Planning and Assessment Act 1979 & Environmental Planning and Assessment Regulations 2000

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the principal piece of legislation governing the use and development of the land. The proposal will be assessed under Part 4 of the EP&A Act.

The proposal is not identified as Integrated Development under Part 4 Division 4.8 of the EP&A Act. The proposal does not require an Environmental Protection Authority Licence as crushing and screening will not exceed set limits. No other referrals or approvals are anticipated to be required.

The proposal is not identified as Designated Development under Part 4 Division 4.3 Section 4.10 of the EP&A Act and Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (the Regulations). *Schedule 3 Designated Development – Clause 19 - Extractive industries* of the Regulations outlines when an Extractive Industry shall be considered Designated Development. The proposal is assessed against these criteria below:

(1) Extractive industries (being industries that obtain extractive materials by methods including excavating, dredging, tunnelling or quarrying or that store, stockpile or process extractive materials by methods including washing, crushing, sawing or separating):

Section from Regulations	Extractive Industry Proposal
<i>(a) that obtain or process for sale, or reuse, more than 30,000 cubic metres of extractive material per year, or</i>	The proposal is to extract a maximum of 29,000m ³ of material from the site per annum.
<i>(b) that disturb or will disturb a total surface area of more than 2 hectares of land by— (i) clearing or excavating, or (ii) constructing dams, ponds, drains, roads or conveyors, or (iii) storing or depositing overburden, extractive material or tailings, or</i>	The proposal is to use the previously approved Extractive Industry footprint and infrastructure which is an area of 1.97Ha.
<i>(c) that are located— (i) in or within 40 metres of a natural waterbody, wetland or an environmentally sensitive area, or</i>	The proposed quarry site is over 40m from a natural waterbody, wetland or environmentally sensitive area.
<i>(ii) within 200 metres of a coastline, or</i>	The proposed quarry site is over 200m from a coastline.

<i>(iii) in an area of contaminated soil or acid sulphate soil, or</i>	It is not in an area of contaminated or acid sulphate soil.
<i>(iv) on land that slopes at more than 18 degrees to the horizontal, or</i>	The natural landform does not comprise of slopes greater than 18° to the horizontal. However, as a result of past excavation, battered areas of the Quarry are measured in excess of 18° to the horizontal. Nevertheless, these battered areas are not considered to create an adverse environmental impact.
<i>(v) if involving blasting, within 1,000 metres of a residential zone or within 500 metres of a dwelling not associated with the development, or</i>	While blasting is proposed, the nearest residence is over 1000m away.
<i>(vi) within 500 metres of the site of another extractive industry that has operated during the last 5 years.</i>	The site is not within 500m of another extractive industry that has operated in the last 5 years.

3.2 Protection of the Environment Operations Act 1997

The Protection of the Environment Operations Act 1997 (POEO ACT) is the primary legislative means controlling all forms of pollution within New South Wales and is primarily administered by the Office of Environment and Heritage (OEH). The objects of the Act include:

- *To protect, restore and enhance the quality of the environment in New South Wales having regard to the need to maintain ecologically sustainable development;*
- *To reduce risks to human health and prevent the degradation of the environment by the use of mechanisms that promote pollution prevention, cleaner production, elimination of harmful waste, reduction of pollution at the source, and the monitoring and reporting of environmental quality on a regular basis;*
- *To provide for increased public participation in environmental protection.*

In accordance with Chapter 3 and Schedule 1 of the Act, the proposal does not require an Environmental Protection Licence as it does not conform to the definition of a Scheduled Activity for “crushing, grinding or separation works” or “extractive industries” which is:

16 Crushing, grinding or separating

(1) This clause applies to crushing, grinding, or separating, meaning the processing of materials (including sand, gravel, rock or minerals, but not including waste of any description) by crushing, grinding or separating them into different sizes...

...(2) The activity to which this clause applies is declared to be a scheduled activity if it has a capacity to process more than 150 tonnes of materials per day or 30,000 tonnes of materials per year.

3.3 State Environmental Planning Policy (Mining, Petroleum Production and Extractive industries) 1997

The aims of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive industries) 1997* (Mining SEPP) are to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management of their development.

The Mining SEPP recognises the importance of the industry and allows extractive industries in zones that allow agriculture activities with or without consent. Specifically, Clause 7 states:

Part 2 Permissible development

7 Development permissible with consent

(3) Extractive industry Development for any of the following purposes may be carried out with development consent—

(a) extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent),

The E3 Zone in which the proposed quarry site is located, allows extensive agriculture without consent. As such, the Extractive Industry is permissible in the E3 Zone with Development Consent.

Under Part 3 of the Mining SEPP, before determining an application for consent for development for the purpose of mining, petroleum production or extractive industries, the consent authority must consider a number of matters. Assessment of such matters, where relevant, is included below.

12 Compatibility of proposed mine, petroleum production or extractive industry with other land uses	
(a) consider— (i) the existing uses and approved uses of land in the vicinity of the development, and	Existing and approved land uses within the vicinity of the subject site are primarily Bournda Nature Reserve and agricultural or rural-residential developments. The closest rural residence is approximately 1.2km to the North of the Quarry. As such it is considered that the proposal will not result in changes to existing land uses.
(ii) whether or not the development is likely to have a significant impact on the uses that, in the opinion of the consent authority having regard to land use trends, are likely to be the preferred uses of land in the vicinity of the development, and	The location of the Bournda Downs Quarry was considered by BVSC during the assessment and determination of DA1996.1332. the 1.2km buffer between the proposal and existing rural residential receivers is heavily vegetated thus precluding the potential for conflict.
(iii) any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses, and	See response to (a)(i)(ii). Along with impacts, and mitigation as detailed in this report.

<i>(b) evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a)(i) and (ii), and</i>	The proposal will not result in conflicts with adjacent land uses given the significant vegetated buffer. It will make use of a regionally valuable resource currently in short supply.
<i>(c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii).</i>	See response to (a)(i)(ii). Along with impacts, and mitigation as detailed in this report.
13 Compatibility of proposed development with Mining, Petroleum Production or Extractive Industry	
<i>(1) This clause applies to an application for consent for development on land that is, immediately before the application is determined:</i>	
<i>(a) in the vicinity of an existing mine, petroleum production facility or extractive industry.</i>	The subject site is within the footprint of, not the vicinity of, the previously approved Bournda Downs Quarry.
<i>(b) Identified on a map (being a map that is approved and signed by the Minister and copies of which are deposited in the head office of the Department and publicly available on the Department's website) as being the location of State or regionally significant resources of minerals, petroleum or extractive materials, or</i>	The subject site is not identified on a map approved by the Minister as being the location of State or regionally significant resources of minerals, petroleum or extractive materials.
<i>(c) Identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials.</i>	The subject site is not identified by an EPI as being the location of significant resources of minerals, petroleum or extractive materials.
<i>(2) Before determining an application to which this clause applies, the consent authority must:</i>	
<i>(a) Consider:</i> <i>(i) The existing uses and approved use of land in the vicinity of the development</i>	See response to Clause 12(a)(i) and (ii) above.
<i>(ii) Whether or not the development is likely to have significant impact on current or future extraction or recovery of minerals, petroleum or extractive materials (including by limiting access to, or impeding assessment of, those resources), and</i>	The proposal is not likely to have a significant impact on current or future extraction or recovery of materials, petroleum or extractive minerals from land in the immediate vicinity.
<i>(iii) Any ways in which the development may be incompatible with any of those existing or approved uses or that current or future extraction or recovery</i>	Not applicable. No incompatibility.
<i>(b) Evaluate and compare the respective public benefits of the development and the uses, extraction and recovery referred to in paragraph (a)(i) and (ii)</i>	Not applicable. No incompatibility.
<i>(c) Evaluate any measure proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii)</i>	Not applicable. No incompatibility.

14 Natural resource management and environmental management	
<i>(1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following</i>	
<i>(a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable</i>	The buffer area between the proposal and significant water resources will minimise any potential for adverse hydrogeological impacts. See Stormwater Section of this report along with <i>Appendix D – Sediment Basin Assessment</i> .
<i>(b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable</i>	See Biodiversity section of this report along with <i>Appendix E – Biodiversity Test of Significance</i> .
<i>(c) that greenhouse gas emissions are minimised to the greatest extent practicable.</i>	The proposal will provide for a local gravel wholesale quarry for the region. This will assist in reducing haulage distance for gravel, save fuel and generate savings in greenhouse gases.
<i>(2) Without limiting subclause (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider:</i>	
<i>An assessment of the greenhouse gas emissions (including downstream emissions) of the development and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.</i>	Refer to (1)(c) above.
<i>(3) Without limiting subclause (1), in determining a development application for development for the purposes of mining, the consent authority must consider</i>	
<i>Any certification by the Chief Executive of the Office of Environment and Heritage or the Director-General of the Department of Primary Industries that measures to mitigate or offset the biodiversity impact of the proposed development will be adequate.</i>	n/a
15 Resource Recovery	
<i>** This section does not apply. Resource recovery is not proposed as part of the development.</i>	
16 Transport	
<i>(1) Before granting consent for development for the purposes of mining or extractive industry that involves the transport of materials, the consent authority must consider whether or not the consent should be issued subject to conditions that do any one or more of the following—</i>	
<i>(a) require that some or all of the transport of materials in connection with the development is not to be by public road,</i>	The proposal intends to transport extracted material via existing haul routes established for use in the original Bournda Downs Quarry approval. The initial route is via a gravel road within the property boundary. This private road joins directly to Sapphire Coast Drive, a major route to distribute the material without impact to residential areas or schools. See Access and Traffic
<i>(b) limit or preclude truck movements, in connection with the development, that occur on roads in residential areas or on roads near to schools,</i>	

<p><i>(c) require the preparation and implementation, in relation to the development, of a code of conduct relating to the transport of materials on public roads.</i></p>	<p>section of this report along with <i>Appendix F – Traffic Impact Assessment</i>.</p> <p>The applicant engages reputable contractors for distribution of material through the Eurobodalla Quarry and intends to do the same in the Bega Valley.</p>
<p><i>(2) If the consent authority considers that the development involves the transport of materials on a public road, the consent authority must, within 7 days after receiving the development application, provide a copy of the application to—</i></p>	
<p><i>(a) each roads authority for the road, and</i></p>	<p>Noted.</p>
<p><i>(b) the Roads and Traffic Authority (if it is not a roads authority for the road).</i></p>	
<p><i>(3) The consent authority—</i></p>	
<p><i>(a) must not determine the application until it has taken into consideration any submissions that it receives in response from any roads authority or the Roads and Traffic Authority within 21 days after they were provided with a copy of the application, and</i></p>	<p>Noted.</p>
<p><i>(b) must provide them with a copy of the determination.</i></p>	
<p>17 Rehabilitation</p>	
<p><i>(1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.</i></p>	
<p><i>(2) In particular, the consent authority must consider whether conditions of the consent should—</i></p>	
<p><i>(a) require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated, or</i></p>	<p><i>See Appendix G – Rehabilitation Plan.</i></p>
<p><i>(b) require waste generated by the development or the rehabilitation to be dealt with appropriately, or</i></p>	
<p><i>(c) require any soil contaminated as a result of the development to be remediated in accordance with relevant guidelines (including guidelines under clause 3 of Schedule 6 to the Act and the Contaminated Land Management Act 1997), or</i></p>	
<p><i>(d) require steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation, does not jeopardize public safety.</i></p>	

3.4 State Environmental Planning Policies

State Environmental Planning Policy No. 33 (Hazardous and Offensive Developments)

State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33) requires developers and consent authorities to specifically assess the hazards and risks associated with a proposed development before approval is granted for construction and operation. Two of the relevant objectives of SEPP 33 are:

d. To ensure that in determining whether a development is a hazardous or offensive industry, any measures to proposed to be employed to reduce the impact of the development are taken into account.

e. To ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact.

In order to determine whether a development is hazardous, offensive or potentially hazardous or offensive industry, Clause 8 of SEPP 33 states that consideration must be given to current circulars or guidelines published by the Department of Planning and Infrastructure. Based on these circulars and guidelines, the proposal is not considered to be offensive industry because it does not require an Environmental Protection Licence from the Office of Environment and Heritage due to its small scale.

In applying the SEPP 33 merit-based assessment guidelines, risk screening methods and thresholds (e.g. types and quantities of hazardous materials and dangerous goods, location, distance to boundaries and vehicle movements) to the proposal, it is considered that the development is not a potentially hazardous industry. No hazardous materials or dangerous goods will be stored site for the proposal. A preliminary hazard analysis is therefore not required.

The proposal is not likely to have a significant adverse impact on the environment. As such, it is considered that the proposal is not “offensive industry” and is acceptable on safety and environmental grounds.

State Environmental Planning Policy (Koala Habitat Protection) 2020

The subject lot is over 1Ha in size and within a Koala Habitat defined Local Government Area, therefore *State Environmental Planning Policy (Koala Habitat Protection) 2020* applies.

There is no Strategic Koala Plan of Management applying to the land. As noted in the TOS (Appendix D) and in accordance with the SEPP, a survey of the lot for potential Koala Habitat determined there is no record of the species on the site and no potential habitat vegetation occurs.

State Environmental Planning Policy No. 55 – Remediation of Land

The subject site has been in small scale agricultural/rural residential use since the lot was created. There is no reason to believe there would be any contamination of the land.

3.5 Bega Valley Local Environmental Plan 2013

The three lots forming part of the Extractive Industry proposal are zoned under the *Bega Valley Local Environmental Plan 2013* (BVLEP13) as follows:

- Lot 42 DP 815711 - E3 Environmental Management
- Lot 85 DP 750194 – Part E3 Environmental Management & Part E4 Environmental Living
- Lot 34 DP 875572 – Part RU2 Rural Landscape & Part E4 Environmental Living

The Extractive Industry Site and associated stormwater infrastructure is located wholly within the E3 parts of Lot 42 and Lot 85. The access and haul route is the only part of the proposed development situated on Lot 34.

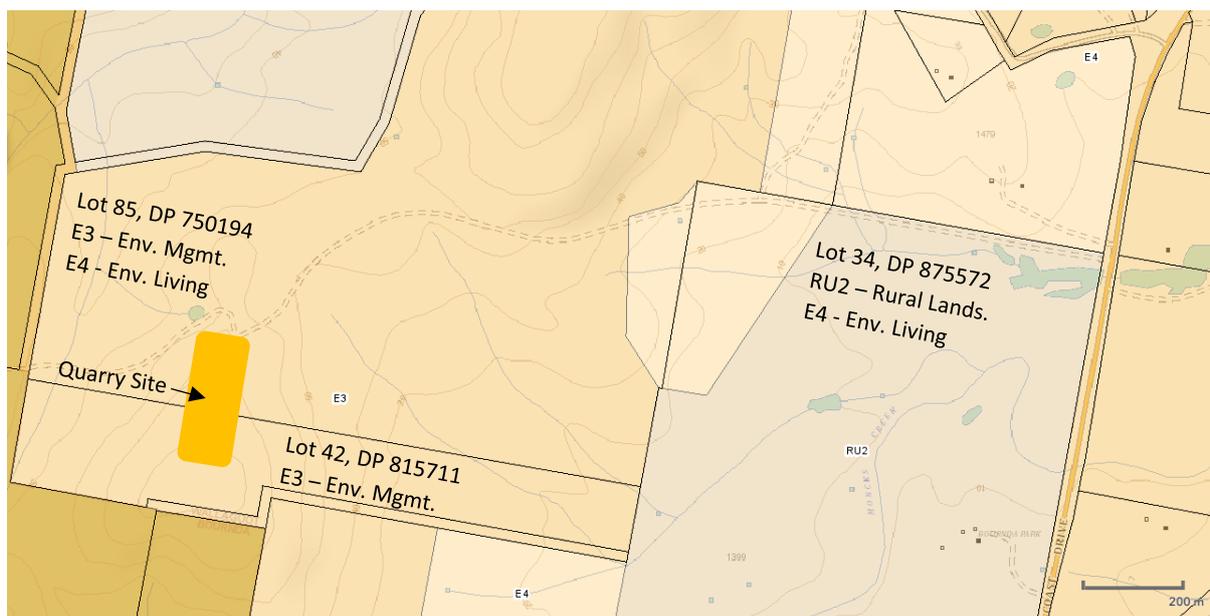


Figure 3: Subject Site map showing 3 Lots containing quarry and associated infrastructure.

The BVLEP13 outlines the objectives and permissible land uses within the E3 zone in which the proposed Extractive Industry is sited. As demonstrated below via an excerpt from the Plan, Extractive Industry is not permitted within the E3 Zone.

It is proposed to use the provisions of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive industries) 1997* (Mining SEPP) outlined above.

Zone E3 Environmental Management

1 Objectives of zone

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To provide for low density development and land use activities relating to settlement in natural surroundings, for sustainable agriculture and for other types of land uses compatible with the primary environmental values of the zone.
- To limit residential development in environmentally sensitive areas.

2 Permitted without consent

Environmental protection works; Extensive agriculture; Home businesses; Home industries; Home occupations

3 Permitted with consent

Bed and breakfast accommodation; Bee keeping; Boat launching ramps; Building identification signs; Camping grounds; Cellar door premises; Community facilities; Dwelling houses; Eco-tourist facilities; Environmental facilities; Farm buildings; Farm stay accommodation; Function centres; Home-based child care; Information and education facilities; Jetties; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Roads; Roadside stalls; Secondary dwellings; Tank-based aquaculture; Viticulture; Water recreation structures; Water storage facilities

4 Prohibited

Industries; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Part 6 - Additional Local Provisions

6.5 Terrestrial biodiversity

The two primary Lots for the proposed development, Lot 42 DP 815711 and Lot 85 DP 750194 are mapped in the BVLEP13 Terrestrial Biodiversity mapping. The objectives of this Clause are to maintain biodiversity by:

- (a) protecting native fauna and flora, and*
- (b) protecting the ecological processes necessary for their continued existence, and*
- (c) encouraging the conservation and recovery of native fauna and flora and their habitats.*

The Clause requires the consent authority to consider any adverse impacts on biodiversity from the proposed development and appropriate measures to avoid, minimise or mitigate those impacts.

The proposal uses the existing footprint of the old Bournda Downs Quarry which was approved in 1996 and operational until the early 2000's. Extensive environmental studies were done to support this original application to Council. Further studies have been done in recent years and are outlined in the biodiversity section of this report. The proposed development has minimal impact on native flora, fauna or ecological processes as outlined in the *Biodiversity Test of Significance – Appendix E. The Rehabilitation Plan (Appendix G)* outlines the process for restoration of the site once the Extractive Industry ceases encouraging conservation and recovery of the site and its native species.

6.6 Riparian land and watercourses

All three lots that form part of the proposal are mapped on the BVLEP13 Riparian Land and Watercourses mapping. The objectives of this Clause are to protect and maintain:

- (a) water quality within watercourses,*
- (b) the stability of the bed and banks of watercourses,*

- (c) aquatic and riparian habitats,
- (d) ecological processes within watercourses and riparian areas.

The Clause applies to land identified as “Watercourse” and all land within 40m of the top of the bank of each of those watercourses. The Clause requires the consent authority to consider any adverse impacts on water quality and flows, ecosystems, stability and biodiversity from the proposed development along appropriate measures to avoid, minimise or mitigate those impacts and rehabilitate the site where necessary.

The proposed development is not within 40m of a watercourse mapped on the BVLEP13 Riparian land and watercourses mapping. The existing quarry footprint was sited to avoid or minimise adverse environmental impact. The Stormwater section of this report details the proposed water flows, impacts and management and mitigation measures designed for the site and surrounding riparian areas. Concluding there will be no direct or indirect impact on the riparian areas or water quality and flows downstream.

6.7 Environmentally sensitive land

All three lots that form part of the proposal are mapped on the BVLEP13 Environmentally Sensitive / “Constrained Land” mapping. The objectives of this Clause are to protect, maintain or improve the diversity or stability of landscapes by:

- (a) restricting development on land that is generally unsuitable for development due to steep slopes, or shallow or erodible soils, and
- (b) restricting development on land with a high proportion of rock outcropping.

The Clause requires the consent authority to consider potential adverse impacts on land with a slope greater than 25%, high erosion potential or a high proportion of rock outcropping. The mapping shows small sites mapped as constrained land on all three Lots however no development is proposed within or close to those areas.

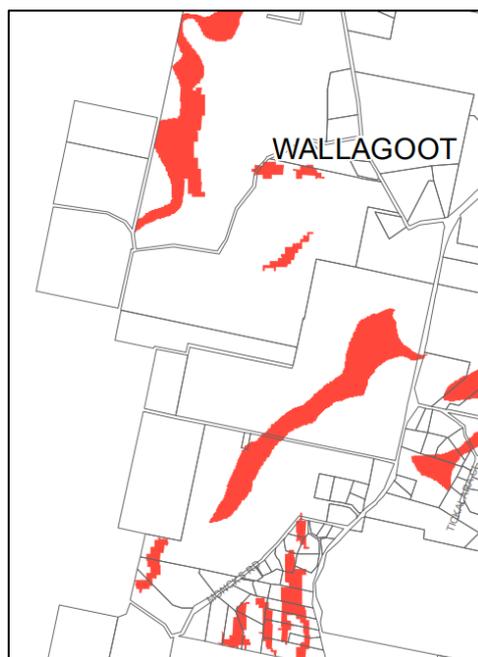


Figure 4: Subject Site mapped on the Environmentally Sensitive/ Constrained Land map BVLEP13.

3.6 Bega Valley Development Control Plan 2013 (Dec 2020)

The Bega Valley Development Control Plan 2013 (BVDCP) provides further parameters in which development needs to be designed and considered. Any development must demonstrate that the objectives and requirements of the BVDCP have also been met. Relevant sections of the BVDCP and the subsequent response through the Development Proposal are outlined below.

4.4 Environmental Zones

In order to meet the objectives of the environmental zones, consideration need to be given to the design and location of any development on the land. While the *E3 – Environmental Management Zone* does not provide for Extractive industry, the Development Proposal meets many of the more significant general requirements outlined in the BVDCP. Including:

- *Identify and protect any sensitive or significant vegetation present on the site.*
- *Locate development outside environmentally sensitive areas.*
- *Choose a building site that has been cleared or disturbed, wherever possible.*
- *Maintain habitat and habitat corridors and avoid fragmentation of such.*
- *Retain as much native vegetation as possible. View the uncleared areas as a resource to be conserved.*
- *Rehabilitate disturbed areas with indigenous plants.*

The Development Proposal uses an existing disturbed quarry site that has a significant vegetated buffer between the proposed development and surrounding land uses. No adverse impacts on character, landscape or biodiversity of the locality are anticipated and rehabilitation is planned once quarrying operations cease.

4.5 Mineral and Extractive Industries

The objectives of the BVDCP in relation to Extractive Industry are to:

- *Minimise adverse environmental impacts of quarrying activities and mitigate potential conflict with other land uses, particularly those of a residential nature, and some farming activities.*
- *Prevent the sterilisation of existing and potential extractive resources.*

4.5.1 Requirements

Requirement	Response
4.5.1.1 Buffers - To minimise any potential land use conflict a buffer will be constructed around quarries. Buffer sizes are affected by topographic, climatic, site conditions or production techniques.	The site has a significant vegetated buffer to nearby rural residential and agricultural uses. The nearest receiver/residence is over 1200m from the quarry site. As detailed in the attached Noise Impact Assessment this sizeable buffer meets legislative requirements and Australian Standards in relation to extractive Industries and Blasting.
4.5.1.2 Setbacks - Extractive industries must be setback a suitable distance from adjoining property boundaries, public roads, water storage areas and watercourses, sites of cultural significance and dwellings. Setbacks will vary Council will encourage a maximum building	As noted above, significant setbacks are provided to the quarry site. Setbacks to watercourses and cultural sites are addressed in the respective sections of this report and meet legislative requirements.

<p>setback to haulage roads, to reduce noise and dust nuisance. Residential and rural lifestyle development along or near unsealed quarry haulage routes will require suitable design measures such as acoustic treatments in building construction and appropriate setbacks and landscaping to minimise noise and dust impacts.</p>	<p>The existing haul route adjoins an operational farm and a rural lifestyle lot. While the potential impact is considered low, appropriate mitigation measures in relation to noise and dust are outlined in the respective reports appended to this Report.</p>
<p>4.5.1.3 Quarry Rehabilitation - Appropriate rehabilitation measures are required to be undertaken once extraction activities cease. Council's aim is to ensure rehabilitated areas can return to a beneficial use appropriate for the zone and locality.</p>	<p>See <i>Rehabilitation Plan (Appendix G)</i></p>
<p>4.5.1.4 Extractive Industry Management Plans - Applications for development consent for an extractive industry must be accompanied by an Extractive Industry Management Plan describing how the extractive activities are to be carried out, machinery, processes and methods to be utilised, staging of quarrying and rehabilitation, transport of materials, site management and measures by which adverse environmental impacts are to be minimised. Council, as a condition of development approval for all extractive industries, requires the developer to prepare a management plan for the continuing operation and rehabilitation of the extractive industry and site.</p>	<p>This Statement of Environmental Effects and associated Appendices forms the Extractive Industry Management Plan for the proposed quarry.</p>

5.1 Aboriginal Heritage Objectives

The objectives of the BVDCP in relation to Aboriginal Heritage are to:

- *Protect and conserve Aboriginal cultural and spiritual sites within the Shire*
- *Ensure the impact of a proposed development on the heritage significance of an Aboriginal place, cultural value, landscape value or object is considered by adequate investigation and assessment processes.*
- *Guide the preparation of Due Diligence assessments*
- *Outline considerations for and levels of assessment of Aboriginal cultural heritage for development application*

Due Diligence Code of Practice

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW sets out a process to determine whether an Aboriginal object will be harmed by an activity, whether further investigation is needed, and whether the application to harm requires an Aboriginal heritage impact permit.

An Archaeological study has been undertaken on the property and the result used to inform the location of the quarry through the previous approval process. The results of the AHIMS search and subsequent Due Diligence process is addressed in the Cultural Heritage Section of this Report and in the *Due Diligence Assessment (Appendix H)*.

4.0 IMPACT ASSESSMENT

4.1 Biodiversity

All three lots are partially mapped on the *Biodiversity Values* map. The existing quarry footprint and access road are not mapped. All development proposed by this application will be within the existing footprint. While this development extends across three of the larger lots of the property the actual development footprint is only 1.94Ha in size, pre-existing and the area potentially impacted by the proposed development is not inclusive of the whole property.

The Minimum Lot Size of the E3 Land where the existing quarry footprint sits is 40ha. Therefore, the *Biodiversity Offsets Scheme Threshold* is 1Ha. The proposed development does not require clearing/disturbance as it utilises the existing quarry footprint and access route.

The proposal does not exceed the *Biodiversity Offset Scheme Thresholds* and as such a ToS has been applied to the proposed development site. The ToS provides assessment and response under Section 7.3 of the *Biodiversity Conservation Act 2016* (BC Act) This ToS draws on previous studies conducted for the site as well as including additional information from site inspections and assessments in May 2021.

Almost all the vegetation on the property appears to be regrowth following clearing for agriculture. The regrowth trees vary in size depending on the quality of the site on which they are growing, and their age. The site has in the past been subject to considerable disturbance on a broad scale. The vegetation occurring onsite belongs to a number of described vegetation types which are mostly common, widespread and adequately reserved within the Far South Coast.

The dominant vegetation structure surrounding the proposed development was determined as **PCT 1084 Red Bloodwood – Silvertop Ash – White Stringybark healthy open forest on coastal foothills, southern Southeast Corner Bioregion**. None of the potentially threatened flora species possible for the subject location were identified across the Extractive Industry Development Area during the 1997, 2004 or 2021 floristic survey efforts.

Threatened Species Data based on the predominant PCT indicates a total of 3 Threatened species in the development area. Previous studies and surveys in 1997 and 2004 indicated that a further 4 species may utilise the property as a whole for either breeding, foraging or habitat. While the property provides habitat resources for a diverse faunal assemblage. Particularly in the region of Moncks Creek and the associated flats these resources are less diverse and abundant on the slopes and ridge where the quarry development site is located. Onsite habitat assessment within the vicinity of the proposed Extractive Industry Site suggests none of these species are occurring within the development area and that no potential exists within the quarry site or immediate surrounds.

The western boundary is the site's most sensitive region, in that it adjoins Bournda Nature Reserve. It is likely that many animals access the site from this boundary. Impacts in this area would have the greatest impact on fauna. The northern section of the site provides a somewhat fragmented vegetated link between inland Bournda Nature Reserve and coastal Bournda National Park. Impacts in this region could act as a barrier to faunal movement and fragment local populations as a consequence. No works are proposed within this area and consideration of inclusion of this area in the rehabilitation program could occur.

Compared with other lands uses, such as farming, the direct impacts of extractive industry on biodiversity are often small due to the relatively small footprints. However, extraction sites can impact

upon flora and fauna through general disturbances arising from quarry operation (such as traffic, noise, dust, vibration, water pollution and loss of groundwater supplies). However, these impacts can be managed, and extraction sites can enhance and protect biodiversity during operation and post-closure. Potential impacts at the proposed site are outlined below along with potential mitigation measures detailed elsewhere in this report.

Impact	Potential Biodiversity impacts	Mitigation Measures
Noise & Vibration	Operations taking place on site such as blasting and crushing of rock and aggregates and the movement of materials can disturb local species and communities.	Noise control measures as outlined in the SEE including optimised blasting design, restricting vehicle speeds and ongoing maintenance of plant machinery.
Air Quality (Dust)	Extractive activities have the potential to generate dust from extraction of material, loading and haulage and vehicle movement. This can travel to waterways and impact on sensitive habitats.	Best practice mitigation measures are outlined in this SEE including limiting operations in severely dry windy conditions and use of watering to minimise dust in operations.

The current proposal will not result in any expansion of the existing quarry footprint, there is considered to be no changes in the impacts to ecology beyond that already assessed. It is our conclusion that the development impacts as presented can be determined as negligible given the type of development action. The project as presented will not produce a significant or measurable impact on threatened species, populations and ecological communities.

4.2 Cultural Heritage

In accordance with *Section 5.1 of the Bega Valley Development Control Plan an Aboriginal Heritage Information Management System (AHIMS)* search with a buffer of 200m was conducted for each lot contained within the proposal.

All three searches returned results showing various aboriginal sites within the buffer zone. An extensive AHIMS Search for each of the lots was undertaken and site cards and archaeological reports obtained to inform a *Due Diligence Assessment* (Appendix H).

The Due Diligence Assessment notes: a thorough survey was undertaken encompassing the quarry and its surrounds. Two artefacts were found in the vicinity of the existing quarry site. It is concluded following a comprehensive review of the archaeological studies and the development proposal that given the development will be wholly within the existing quarry footprint that no damage will occur to known sites and that the likelihood of additional objects being located in the vicinity of the quarry are low given the landform and historical use of the area by Aboriginal people.

4.3 Stormwater

All surface water from the existing Quarry Site is directed via contour drains to the sedimentation pond (basin) located to the Northwest of the quarry. This has historically minimised the impacts of the discharge of untreated stormwater into adjoining watercourses.

It is acknowledged that sediments can be mobilised in storm events. The existing stormwater system has contour drains channelling into the basin. As the quarry pit deepens sediment will also be held within the footprint. The depth of the basin allows sediments to settle and eventually excavated and

reincorporated into the road base products. This periodic excavation of the basin will maintain a good depth in the basin and ensure the system continues to function optimally.

Water from the basin will be used for dust suppression activities on haul routes, in the pit and during operations as required.

Southeast Engineering and Environmental were engaged to assess the existing detention/sediment basin to determine if the size and capacity was sufficient for planned quarry operations and to provide protection of the Wallagoot Lake and the down stream environment. The report (Appendix D) details that in a worst-case scenario, the existing basin has sufficient capacity and is considered to be adequate moving forward provided it is pumped out within a five-day period following rainfall.

Further, the report outlines that drainage works within the operational area should be configured to limit the erosion of soils and other materials. This may include:

- Clear delineation of haul roads;
- Providing drainage for haul roads as required, particularly around the outer edge of the quarry works area and ensure that erosion and sediment controls such as sediment fencing, armoured drainage and outlets are installed;
- Diversion of clean flows away from the quarry pit
- Diversion of runoff away from stockpiles, particularly stockpile of finer materials;
- For concentrated flow paths use appropriate erosion and sediment controls to limit erosion where possible refer to *section 5.4.3 of Managing Urban Stormwater: Soils and Construction; sediment fence SD 6-8 (Landcom, 2004) and drawings SD 5.4, SD 5.5, SD 5.6 and SD 5.7;*
- Use sediment controls such as sediment fences, filter systems and armouring where feasible within the quarry works area to prevent erosion and collect sediment; and
- Limit cut floor grades to as low as possible to limit erosion and allow for sediment collection.
- Pump collected runoff from internal ponding to sediment basins as required.



Figure 5: Existing contour drain and sediment basin at quarry site.

4.4 Access & Traffic

Access to the proposed quarry is from Sapphire Coast Drive via an existing intersection and private haul route constructed as part of the 1996 approval. This transportation system has been in operation for many years servicing the quarry and has functioned adequately. The internal haul road is in good condition with no upgrade required to service anticipated traffic.

The existing intersection with Sapphire Coast Drive which has a lengthy and flat approach from both directions meets requirements in terms of sight distances for the 100km/hr speed environment, configuration and safety.

Traffic generation for the development is outlined below and the application seeks a maximum daily transportation quantity of 1300 tonnes.

Staff

2 part time staff arriving at the site between 6:30 and 7:00am and leaving between 5:00 and 5:30pm Monday to Saturday each week.

Contractors

Contractors will attend the site for blasting, OSMS pump out, repairs and maintenance. It is anticipated that there will be an average of 4 vehicle movements per month.

Trucks

The operating times for truck movements will be the same as the operating hours of the quarry. Truck movements will be intermittent based on demand. The nature of the industry has peaks and troughs for the requirements of materials.

Each truck movement will consist of a truck and dog which can generally carry 33 tonnes of material per load. It is anticipated that the largest projects the quarry would service would require 1000 tonnes of material per day. This would result in approximately 30 truckloads in the maximum case scenario. Additionally, upon such a day there may be other clients seeking material. It is proposed to cap the maximum daily transport amount from the Quarry to 1300 Tonnes.

It is noted that the annual extraction capacity is capped at 29,000 tonnes and that large projects such as this will be few and far between and this scenario is simply demonstrating a maximum requirement for operations. On many days there will be only a few or even no trucks coming and going from the site.

The traffic likely to be generated by the development will be minimal and will not create any adverse traffic conditions along Sapphire Coast Drive in terms of traffic flow efficiency and local amenity considerations.

These access roads and intersection are considered to be of a standard and capacity suitable for the servicing of the Quarry without the need for upgrade as detailed in *Appendix F: Traffic impact Assessment*.

4.5 Noise

While noise impacts were satisfactorily managed during past quarry operations, the Application to reinstate operations proposes blasting to extract the material which was not part of the previous approval. *The Blast & Noise Impact Assessment* (Appendix C) assesses current noise levels, potential impacts and mitigation strategies for quarry operations including blasting.

The existing background noise at sensitive receiver sites is high given the volume and speed of traffic on Sapphire Coast Drive. Further, potential impacts will be limited as a result of the smaller scale of operations and the sites relative isolation. The proposed extraction operations are considered to involve the following noise generating activities:

- Ripping, crushing/screening and stockpiling of material in-pit.
- Loading, transport and distribution of the extracted resource.
- Progressive rehabilitation of finished quarry batters and benches.
- Blasting to extract material.

Proposed safeguards and mitigation measures are outlined and will ensure the extractive industry operates to best practice standards with negligible noise impacts and not exceed 5dB(A) above background noise level as measured at the nearest residence.

4.6 Air Quality

Quarry operations to win and process and transport the material including blasting, screening, crushing and loading has the potential to generate airborne dust and affect air quality.

The following activities have the potential to generate dust or air quality issues on site:

- Haul routes, extraction operation areas and other vehicle operating areas
- Fire and explosion including blasting to win material.
- Air quality, airborne dust and other airborne contaminants.

These hazards have the potential to impact quarry staff and visitors, adjoining land uses in the vicinity of the quarry site and haul routes including nearby residences in terms of safety, health and amenity.

- **Safety** – reduced vision/sight distances
- **Health** – inhalation of airborne dust
- **Amenity** – impact on rural residential lifestyle

This *Air Quality Management Plan* (Appendix I) notes that due to the nature and composition of the material proposed to be extracted, and the significant natural barrier provided by the vegetation, distance and topography of the site, there is unlikely to be any significant dust issues resulting from the development. The mitigation measures outlined in the Plan along with operator compliance with best practice should see any potential or arising air quality issues and impacts dealt with satisfactorily.

4.7 Bushfire

The subject site is Bushfire Prone Land and the proposed development should be assessed against Planning for Bushfire 2019(PBP) aims and objectives. Given there is no residential development proposed *Sections 8.3 Other non-residential development* and *8.3.10 Commercial and industrial development* are deemed to apply in this case.

The NCC does not provide any bushfire specific performance requirements for these particular classes of buildings. As such AS3959 and the NASH Standard are not considered as a set of Deemed to Satisfy provisions, however compliance with AS3959 and the NASH Standard must be considered when meeting the aims and objectives of PBP.

While bush fire is not captured in the NCC for Class 5-8 buildings, the following objectives will be applied in relation to access, water supply and services, and emergency and evacuation planning:

- *To provide safe access to/from the public road system for firefighters providing property protection during bushfire and for occupant egress for evacuations*
- *To provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development*
- *To provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and*
- *Provide for the storage of hazardous materials away from the hazard where possible.*

The general fire safety construction provisions of the NCC are taken as acceptable solutions however construction requirements for bushfire protection will need to be considered on a case-by-case basis.

Commercial and industrial development on BFPL where no residential component is included, is addressed through the aim and objectives of PBP. A suitable package of BPMs should be proposed commensurate with the assessed level of risk to the development. The scale of the development and numbers of people likely to be occupying the building will be directly relevant to the BPMs proposed.

The development is deemed low risk with low occupancy of only 2 staff. In terms of Bushfire Protection Measures:

- a nominal 10m APZ is to be provided around the proposed Office, Amenities and Storage buildings in line with requirements of Chapter 7 of PBP. Given the siting of the buildings on the quarry floor this is in reality far larger.
- Abundant water supply is available from the stormwater basin and appropriate systems will be in place to distribute water around the site.
- Access and egress via the haul route meets PBP Standards of construction.
- No services such as electricity or gas are to be provided on site and no hazardous material such as fuel will be stored on site.

This suite of BFPM is deemed to meet PBP requirements for the proposed industrial development.

4.8 Social & Economic

There is strong and ongoing demand for the construction material that would be produced from the quarry. The Bega Valley Shire has demonstrated resilience in disaster recovery and still shown steady growth over recent years. These efforts must be supported by appropriate, quality local materials and infrastructure. The proposed quarry provides an excellent material source to develop and construct new infrastructure as well as maintain existing infrastructure within the Shire.

One of the major cost and impacts for providing these materials to job sites is haulage, in terms of both economic and environmental cost. There are very few extractive industries within the Bega Valley Shire. Pits are located further to the North near Bermagui, West near Wolumla and South at Eden. Most of these pits are operating at their licensee extraction limits given the increased and ongoing demand for these materials.

This results in high grade materials and aggregates often being sourced from Bombala and Nimmitabel adding those additional freight miles, environmental costs and impacts on key infrastructure such as the Snowy Mountains Highway over the Brown Mountain.

The proposed quarry is centrally located and with an extensive high-quality resource is well positioned to service the local area. It is centrally located to a growth part of the Shire and would service it well.

There are both direct and indirect employment benefits with staff and contractors required to be engaged to undertake quarry operations, increased development and maintenance facilitated by the new available resources as well as employment in service industries that would support the activities on the site.

The proposed quarry will provide an important regionally significant resource and associated employment to the Bega Valley Shire which will aid in its sustainable economic, environmental and social development.

5.0 MONITORING

Environmental Management and Impact Monitoring are an integral part of the quarry development process. An appropriate level of management will be required to ensure that the commitments contained in the Statement of Environmental Effects, subsequent assessment reports and Conditions of Consent are implemented in a satisfactory manner.

Quarrying activities can have a variety of environmental impacts, many being short term and reversible. These and other impacts can be ameliorated to an acceptable degree by commencing rehabilitation works early, ensuring mitigation measures are implemented effectively and that best practice standards are implemented across the site.

The *Annual Environmental Management Report* (Annual EMR) will be designed to summarise progress or issues in meeting commitments contained in the SEE and conditions of consent. Additionally, the Annual EMR will provide information on specific site management issues relating to potential environmental impacts from the quarry.

The first Annual EMR would be prepared following twelve months of quarry operations and content would be dependent on conditions of consent. However preliminary work has been undertaken in developing a list of control measures to achieve the following objectives for the proposed quarry development:

- Compliance with Statutory Requirements
- Appropriate management of Biodiversity Impacts
- Minimal disturbance of land
- Success of impact control measures
- Minimal community complaints

To this aim, the Annual EMR will include monitoring information and data on the following key issues and impacts:

- Statutory compliance
- Air Quality
- Stormwater, Sediment & Erosion
- Noise & Blasting
- Biodiversity
- Quarry Operations & Management
- Rehabilitation
- Amenity & Complaints

The Annual EMR would be used to inform and improve quarrying operations, highlight areas for future efficiencies and demonstrate effectiveness of mitigation measures overtime. A copy of the Annual EMR would be forwarded to Council at the end of each monitoring and reporting period.

6.0 CONCLUSION

Hard rock quarries are a vital component of growth and maintenance of infrastructure in the Bega Valley Shire. The materials available at the subject site are uncommon in the region. The proposal would reduce the long term need to transport materials large distances for local use.

Rhyolite aggregates are a highly sought-after material for road surfacing as they have high skid resistance. They are also highly suitable for use as a decorative landscaping material and as gabion rock and rock armour stone. The resources available at the proposed quarry site represent a quality product at economical prices for the community.

The proposed development is appropriate within the context of the site and is consistent with statutory and policy requirements. Land use conflicts are minimal and amenity values of surrounding residents are able to be protected with no significant impacts envisaged in relation to the surrounding natural and residential area.

Impacts are considerably reduced, and well understood, given the proposed quarry will operate wholly within the previously approved footprint. The proposed reinstatement of operations at the previous quarry site makes use of existing infrastructure in terms of stormwater and haul routes, as well as historical data to inform accurate forecasting of potential impacts.

Specific mitigation measures have been designed and detailed in this SEE and associated reports and appendices to minimise environmental impacts, undertake rehabilitation progressively and implement a monitoring program to determine effectiveness of mitigation and act proactively should further measures be required.

On balance, the proposed quarry is justified in a regional context as a valuable source of resource materials. It provides significant economic benefits to the Bega Valley Shire and with effective implementation of mitigation measures the identified impacts are not considered significant. The proposed development is recommended for Council approval.