

# Statement of Environmental Effects

Accompanying a s.96 Application to Clarence Valley Council

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**Sheridan's Hard Rock Quarry Pty Ltd**  
**Pt. Lot 62 & 63 in Deposited Plan 752807**  
**No. 242 Faheys & Bulgins Road**  
**Hernani, NSW**

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**June 2016**



**Outline Planning Consultants Pty Ltd**

*Town Planning & Project Management*



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Dated:	June 2016
Signed:	

***Section 96 Application  
for Modification of Development  
Consent DA2014/0098  
Existing Approved Quarry,  
Pt. Lot 62 & 63 in Deposited Plan  
752807, No.242 Faheys & Bulgins  
Road Hernani, NSW  
June 2016***

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**ATTACHMENT A:**

*Current Development Consent DA 92/523*

**ATTACHMENT B:**

*VIPAC acoustic & dust advice*

**ATTACHMENT C:**

*Traffic assessment & advice Streetwise Pty Ltd*

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## Executive Summary

■ Outline Planning Consultants Pty Ltd has been engaged by Sheridan's Hard Rock Quarry Pty Ltd (the Quarry Operator), to prepare this Statement of Environmental Effects report.

■ This Statement of Environmental Effects supports an application under Section 96(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for a modification to Development Consent DA2014/0098, issued by Clarence Valley Council on 10 September 2014, for quarrying the site. This development consent, supported by an Environmental impact statement prepared by Outline Planning Consultants Pty Ltd and dated March 2014, allows for an annual extraction rate of 73,600 cubic metres (198,000 tonnes) per annum of quarry product from an enlarged quarry of 5.73ha. The consent also provide for a limit of 20 loaded quarry trucks per day along the quarry haul route.

■ In practice, and based on the experience of the quarry operator, the current consent condition that limits daily loaded truck numbers to just 20 per day can have the effect of actually reducing the potential to achieve the maximum approved annual output of the quarry significantly, well below that permitted under the terms of the Council consent. This is because the demand for quarry product fluctuates significantly according to contracts for supply of material, with demand for quarry material (and trucks) typically “spiking” during periods of peak demand. The current limit of only 20 loaded trucks per day has the practical effect of throttling the ability of the quarry to supply the required quantity of quarry product at the volumes demanded during these peak periods- an unintended consequence of this limit on daily quarry truck numbers.

■ This Section 96 application does not seek to modify the existing limit on yearly quarry production. Rather, it seeks to enable flexibility in truck numbers during peak periods of demand for quarry products, hence the increase in daily quarry truck traffic sought in this application, to 66 loaded trucks per week day and 36 loaded trucks every Saturday. These peak levels of quarry truck traffic is supported by the noise and traffic studies accompanying the 2014 EIS and Development Application lodged in 2014 referred to in the issued consent.

■ Importantly, no change is sought to the restrictions on Saturdays on truck traffic on The Waterfall Way, east of the intersection of Waterfall Way and Maynards Plains Road, in accordance with Condition 13A of the issued Development Consent.

The modification application is made pursuant to the provisions of Section 96(2) of the *Environmental Planning & Assessment Act 1979* as amended (“the EP&A Act”).

The following report provides the information required by Clause 115 of the *Environmental Planning & Assessment Regulation 2000*, which details the requirements for an application for modification of any development consent.

The report demonstrates that the proposed modification would have minimal impact on the surrounding environment.

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The proposal is considered substantially the same quarry development as approved by DA2014/0098, for the reasons outlined in this report, including:

- No increase is sought in annual quarry production as set down in the original Development Consent (ie. a limit of 198,000 tonnes per annum).
- The proposed modification will result in minimal change to the operation of the existing haul route and intersections and flows will be well within the threshold limits for such intersections and roads.
- There have been no reported accidents at the site entry associated with the truck movements as currently approved. The changes in truck movements will have a minimal impact upon existing road safety.
- Acceptable noise impacts are likely to result from a peak of 66 trucks per day, previously modelled by noise consultants when Council assessed the EIS and granted its consent to DA2014/0098 in 2014.
- The modification sought will allow more flexibility in daily quarry trucking movements to better service the peak needs of major infrastructure projects and construction material industries.
- The modification sought better reflects actual quarry production and may prove a better overall arrangement for residents along the quarry haul route, that is, short periods of increased activity followed by lesser daily quarry truck movements for longer periods.



# 1.Introduction

## 1.1 Overview

This Statement of Environmental Effects (SEE) is submitted to Clarence Valley Council (Council) in support of a Section 96 Application to modify the consent applying to an existing Council-approved quarry at Pt. Lot 62 & 63 in Deposited Plan 752807, No.242 Faheys & Bulgins Road Hernani, NSW, in the Clarence Valley local government area.

Outline Planning Consultants Pty Ltd act for Sheridan's Hard Rock Quarry Pty Ltd, who operate the subject quarry.

This application is submitted to Council in support of a Section 96(2) Application to modify Development Consent DA2014/0098, issued by Clarence Valley Council on 10 September 2014. Refer **Attachment A**.

This s.96 modification seeks to increase currently permitted limits on maximum daily quarry truck numbers, to a maximum limit of 66 loaded trucks per weekday (ie. Monday to Friday) and 36 trucks every Saturday.

These changes will enable Sheridan's Hard Rock Quarry Pty Ltd to meet the demand for quarry products (and resultant truck loads) during periods of peak demand and peak quarry production, and in particular, during the supply of quarry products for major regional road works projects.

No other changes are sought to the nature of quarrying undertaken on the site.

This Statement of Environmental Effects (SEE) concludes that the proposed development is substantially the same as that consented to in DA2014/0098.

It also concludes that there will be no significant adverse environmental impacts arising from the proposed modifications, having regard for the relevant sections of the NSW *Environmental Planning and Assessment Act 1979* ("EP&A Act"), and in particular, sections 96(2) and 79C(1).

The proposed modification to the consent is such that the development retains the same fundamental characteristics as the originally approved quarry, and is therefore substantially the same development. The modified development remains consistent with the aims and objectives of the relevant environmental planning instruments and local amenity.

## 1.2 This Section 96 Application

The *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) establishes the system of planning, impact assessment and development approvals in NSW. The ability to modify development consents is provided in Section 96 of the EP&A Act, which confers three separate powers to modify a development consent:

- Modifications involving errors etc.- contained in s.96(1).
- Modifications with minimal environmental impact- contained in s.96(1A).
- Other modifications- contained in s.96(2). Subs (2) confers the more general and widely



based power. Pursuant to s.96(2), the consent authority is granted a general power to grant a modification if it involves more than minimal environmental impact, provided the development is substantially the same development and provided other conditions are fulfilled as set out in s.96(2) (c) and (d).

In each case above, it is relevant to note that the same wording is used, namely "to modify a development consent". Subsection (2) requires any such modification to be "substantially the same" development.

This application is an application under s.96(2) of the EP&A Act, which is more general in nature and which does not contain any wording that implies "minor" or "minimal" environmental impact.

[NOTE: This is in marked contrast to a development application (DA) made in support of alterations and additions to designated development. Pursuant to regulation 35 of Schedule 3 of the *Environmental Planning & Assessment Regulation 2000* in these cases the onus is on an applicant to prove that the changes sought "*do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.*" No such test applies under Section 96 of the EP&A Act.

Moreover, in considering the language used in s.35 of Schedule 3, it is clear that reference is being made to *development* involving alterations or additions, not a *modification* to a consent.]

Relevantly, this Section 96 application does not seek the grant of a development consent, merely an approval to modify an existing consent issued by Clarence Valley Council( ie. DA2014/0098).

As a result, s.78A of the EP&A Act 1979 has no application and neither does Schedule 3 of the *Environmental Planning & Assessment Regulation 2000*. In this regard reliance is made on the provisions of s.96(4) of the EPA&A, Act which provides as follows:

"(4) *The modification of a development consent in accordance with this section is taken not to be the granting of development consent under this Part, but a reference in this or any other Act to a development consent includes a reference to a development consent as so modified.*"

The above provision of the EP&A Act was explained in *Windy Dropdown v Warringah Council* (2000) NSWLEC 240 at para 28, where Talbot J opined as follows:

"[28] Subsection (4) of s 96 is the same as the previous subs (4) of s 102. It expressly distinguishes modification of a development consent from the granting of development consent, thereby suggesting that at least in some respects **the consideration and approval of an application for modification is to take place in a different context to the consideration of an application for development consent.**

*Furthermore, the subject of an application made pursuant to s 96 is the development consent, not the development itself.*"[Our emphasis]

Any consent authority has a statutory obligation to consider this application under s.96(2) of the EP&A Act, as well as to the matters referred to in under s.79C(1).





No changes are sought to any other features of the currently approved quarry under the terms of Development Consent DA2014/0098 as a result of the s.96 modification sought in this application. The subject application has been submitted pursuant to s96(2) of the EPA&A Act and involves a modification request relating to DA2014/0098. In this instance, to modify means to alter without radical transformation.

### 1.3 Structure of the report

This report is divided into five subsequent sections.

- Section 2 examines the context of the quarry at No.242 Faheys & Bulgins Road Hernani, NSW by describing its location, ownership, and the local context.

- Section 3 describes the proposed modification of the consent (DA2014/0098).

- Section 4 assesses the planning context of the proposed modification and prevailing planning instruments.

- Section 5 analyses the environmental effects of the proposed modification based on the requirements of s.96(2) and s.79C(1) of the EP&A Act. This includes an assessment of the compliance of the proposal with prevailing planning controls and guidelines, including *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

- Section 6 concludes the statement of the environmental effects.





## 1.4 Documents relied on

Outline Planning Consultants Pty Ltd has relied upon the adequacy and accuracy of information provided by the quarry operator and the assessments and advice prepared by traffic consultants RoadNet and consultants VIPAC as contained in the reports accompanying the 2014 EIS, prepared by Outline Planning Consultants Pty Ltd.

Reliance is also placed on the more recent advice of VIPAC and Streetwise Pty Ltd- refer **Attachment B & Attachment C**. Outline Planning Consultants Pty Ltd does not, and cannot, accept responsibility for any errors or omissions in the materials prepared and provided in the above specialist reports.

## 1.5 History of approvals

The history of consents granted by Clarence Valley Council allowing quarrying on the site are summarised in the following:

- 4 May 2011 (DA 2010/0358). Allowed quarrying on a 2ha site, producing approximately 80,000 tonnes per annum of quarry product, with up to 20 loaded trucks per day permitted.
- 21 February 2012. Modification of 2011 consent conditions (MOD2011/0074).
- 10 September 2014. Development Consent DA2014/0098, allowing quarrying over a site area of 5.73ha, producing approximately 198,000 tonnes per annum of quarry product, with up to 20 loaded trucks per day permitted.

Refer **Attachment A**.



## 2.Site Analysis

### 2.1 Site description

Sheridan's Hard Rock Quarry is located approximately 60km west of Coffs Harbour, on the northern side of Faheys and Bulgins Road, approximately 10.4km north-east of Waterfall Way. Faheys & Bulgins Road is a rural road that terminates at the northern boundary of the Sheridan rural holding. Refer **Figure 2.1** and **Figure 2.2**. The quarry site lies within the Dorrigo Plateau, approximately 19km to the west of Dorrigo township.

The quarry site forms a part of a larger rural holding beneficially owned by the Sheridan family, comprising Lots 62, 63 and 64 DP 752807, with a combined area of 429.2ha. This provides an enhanced buffer area around the quarry site. The existing quarry contains the quarry pit, including quarry crushing and processing plant and equipment, pre-coat facility, as well as storage and other ancillary facilities associated with the operation of the quarry including an office and car parking. Refer **Photograph 1**.

### 2.2 Quarry operations

#### Overview of quarrying

The quarry provides gravel to meet the demand for road construction and associated uses in the local region. The material won from the quarry is a reliable quality road base and sub-base.

The existing Council Development Consent (DA2014/0098) allows the extraction, processing and transport off-site of a volume equivalent to approximately 198,000 tonnes per annum of quarry product from the quarry, with the hours of operation limited to 7.00am to

6.00pm Monday to Friday (ie. 11 hours operation per day) and 7.00am to 1.00pm on Saturdays (ie. 6 hours operation). Refer **Figure 2.1** for plan of approved quarry footprint.

The s.96 modification seeks an increase in daily loaded truck numbers from 20 loaded trucks to 66 loaded trucks per weekday and 36 loaded trucks on Saturdays. This increase will enable the quarry operator to meet the demand for loading of quarry trucks during periods of peak demand, in particular, that associated with the Pacific Highway upgrades. Importantly, no change is sought to:

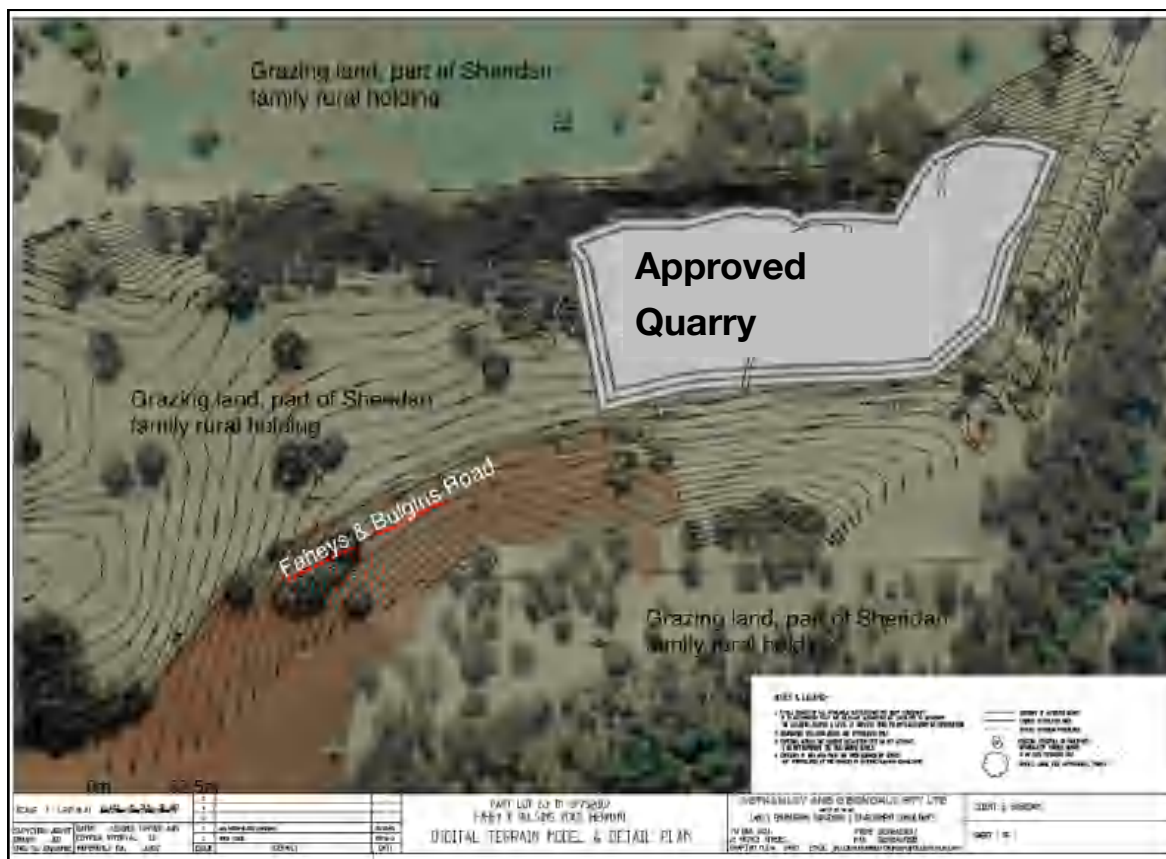
- The maximum annual production of the quarry- limited to 198,000 tonnes per annum.
- The restrictions on Saturdays on truck traffic on The Waterfall Way, east of the intersection of Waterfall Way and Maynards Plains Road, as currently imposed in accordance with Condition 13A of the current Development Consent DA2014/0098.

In summary, the quarry operations comprise the following:

- Clearing of land ahead of extraction.
- Ripping of weathered basalt resource and blasting of unweathered (hard) basalt.
- Loose rock is then transported from the worked quarry face to the processing plant within the quarry, where it is then crushed and screened, before being transported off-site. The current consent limits truck volumes to a maximum of 20 loaded quarry trucks per day exiting the site.
- Transport of quarry product from the site via Faheys & Bulgins Road, and thence to Waterfall Way. Refer **Figure 2.2**.

Refer also to **Photographs 2,3 and 4**.





**FIGURE 2.1: Approved Quarry Footprint & Surrounds**



**PHOTOGRAPH 1: Operating Quarry** (View looking NW over quarry, September 2015)

## Quarry management

The quarry has operated from this site for the past 4-5 years. The quarry operations have had limited, and minor, environmental effects on surrounding residential amenity.

At the same time, it has been an important and reliable supplier to the market for processed quarry material. The potential impacts from ongoing operations are well understood and are expected to be similar in nature to those experienced over the past 4-5 years. The quarry operator is responsible for all activities on-site and it is their responsibility to ensure all environmental measures are in place and are being managed according to the issued Council Development Consent. The quarry operator is also responsible for ensuring all site safety protocols are in place; managing quarry pit works and onsite water and soil management; contractor/employee/visitor management; respond to environmental incidents; as well as liaison with government agencies and relevant stakeholders.

In accordance with the provisions of Condition 4 of the consent, Sheridan's hard Rock Quarry has prepared an updated Quarry Plan of Management (PoM) dated November 2014, prepared by Outline Planning Consultants Pty Ltd.

The updated PoM also includes a Pollution Incident Management Plan and revised sediment basin volumes calculations, as required by the NSW EPA in their General Terms of Approval accompanying and forming a part of the 2014 Development Consent (DA2014/0098), and Condition 31 of the consent.

Refer to Outline Planning Consultants Pty March 2014 EIS for further details

## 2.3 Quarry haul route

Transportation of much of the quarry products is by truck and trailer ('truck and dog') style vehicles from the site to service markets- refer **Photograph 2**. Smaller trucks may also be used. NOTE: a nominal truck and dog payload of 30-33 tonnes has been assumed.



**PHOTOGRAPH 2: Truck and 'dog' quarry haulage vehicle, with covered load, at Sheridan's Hard Rock Quarry**

■ The Council consent specifies that the haul route is Faheys & Bulgins Road to the Waterfall Way via Cornells Road and Bald Hills Road (Council Consent Condition No.29). Refer **Figure 2.2**.

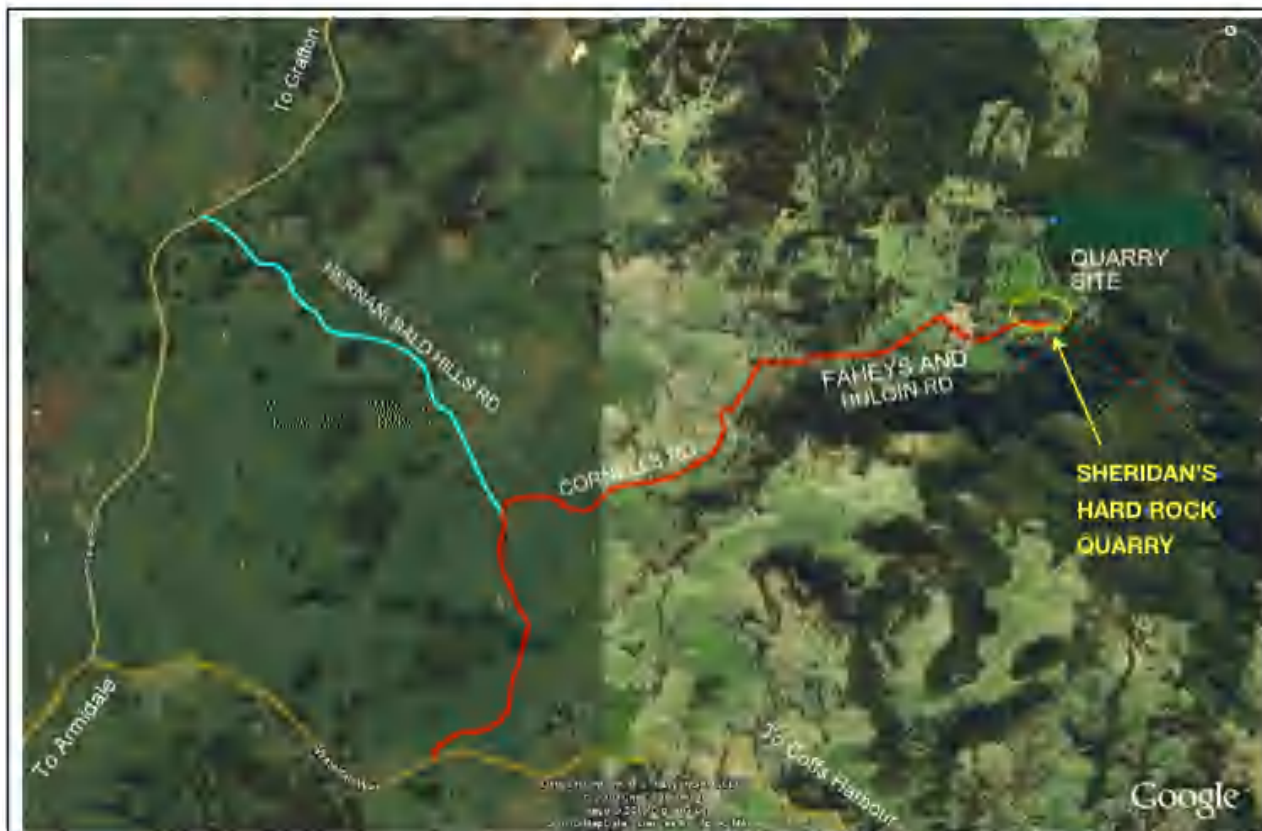
■ The Council Development Consent allows up to 20 loaded trucks on any day (a provision referred to in the documents referred to in Condition 1 of Development Consent (DA2014/0098)).

■ Condition 33 of the Council Consent requires that no quarry trucks are permitted on the local haul route within 15 minutes before and after the morning and afternoon school bus run.

■ No haulage of quarry products is permitted east of the intersection of Waterfall Way and Maynards Plains Road except for emergency purposes (Condition 13A).







**FIGURE 2.2: Approved Quarry Haul Route to Waterfall Way (marked in red)**

Following the initial grant of consent in 2011 Faheys & Bulgins Road has been upgraded by Sheridan's Hard Rock Quarry Pty Ltd to a standard beyond that required the 2011 Council Consent (ie. DA 2010/0358 & MOD 2011/0074), comprising the following works:

- Upgrading Faheys & Bulgins road to a generally 2 lane (gravel) rural road standard, with improvements to road drainage- the Council consent requiring only an upgraded rural road to a 1-lane standard with passing bays.
- Sealing of 648m of rural road in front of the Braund residence and 530m in front of the Welsh residence, a total of 1.178km of road sealing work, to a minimum sealed width of 7m.

■ Upgrading of the intersection of Bald Hills Road and the Waterfall Way. Construction works undertaken by the RMS, paid for by Sheridan's Hard Rock Quarry Pty Ltd.

These road improvements have been made to improve local amenity by minimising dust and noise impacts, and provide a much safer, less hazardous road environment for all users of the haul road.

As a part of the (now approved) 2014 EIS RoadNet Pty Ltd were engaged to undertake a traffic and transport assessment for the proposed expansion of an existing Council-approved hard rock quarry.



**PHOTOGRAPH 3: Crusher working in quarry pit at Sheridan's Hard Rock Quarry**

The conclusions and recommendations of the March 2014 RoadNet assessment report, accompanying the March 2014 EIS, included the following:

■ The quarry operator has carried out extensive upgrades to the approved quarry haulage route in response to Council's conditions of consent for the existing quarry development. The upgrades go well beyond what was identified as being required.

■ The upgrading of the intersection of Bald Hills Road and the Waterfall Way *"have not only led to an improvement in safety for all traffic using the intersection, but they also provide additional capacity which will extend the overall 'life' of the intersection."*(p.11 of the RoadNet report)

■ Prior to the quarry development the local road system was in a poor state of repair even though it accommodated a similar volume of truck traffic associated with agricultural activities in the area. The upgraded haulage route therefore provides a much higher and safer standard of road for all motorists that use it.

■ No additional upgrades to the road network beyond those already undertaken will be required in the absence of any traffic impacts arising from the proposed development. *"Furthermore, no additional upgrades to the road network beyond those already undertaken will be required in the absence of any traffic impacts arising from the proposed development. The haulage route has already been extensively upgraded from a one lane route with limited passing opportunities to a generally two lane two way rural road standard.."*(p.15 of RoadNet report)

■ The approved, upgraded, haulage route is expected to operate acceptably, with a capacity of at least 150 vehicles per day, with a resultant spare capacity available for up to an additional 63 vehicles per day. *"Overall, therefore, it is concluded that the upgraded quarry haulage route could accommodate a design volume of at least 150 vehicles per day."*(p.30 of RoadNet report)

## 2.4 Acoustic environment

The acoustic environment of the quarry site and haul route has been previously considered in the detailed report prepared by VIPAC dated February 2014, which accompanied the March 2014 EIS. This acoustic report now forms a part of the Development Consent DA2014/0098 (Condition 1).

The above noise impact assessment report was undertaken to determine the potential noise impact of the proposed quarry expansion in terms of operational and construction phases on noise sensitive receptors in the surrounding area. Traffic noise impact from quarry truck movements was also undertaken to determine the noise impact on the surrounding area along the haul route.



The VIPAC report made various conclusions, including the following:

■ Noise impacts from the quarrying operations will be “...within the applicable criteria... The results of the noise impact assessment for both the operational and construction phases of the proposed quarry expansion indicate that the predicted noise levels will be in compliance with the applicable noise criteria. It is therefore Vipac’s professional opinion that the expansion of operations at the Sheridan’s Quarry is acceptable from an acoustic point of view...” (p.15 of VIPAC report)

■ “The predicted results associated with the truck movements along the Faheys & Bulgins Road indicate that the noise levels are within the noise criteria at all of the noise sensitive locations.” (p.14 of VIPAC report)

■ “Vipac has also carried out a series of calculations to determine the maximum number of loaded trucks per hour based on the improved section of road (i.e. the sealed sections of sealed road in front of the two nearest noise sensitive receptors) as describe above. The calculation indicates that under these conditions, a maximum of up to 6 loaded trucks per hour would be possible along the haul road and still achieve compliance with the Road Noise Criteria.” (p. 154 of VIPAC report) The quarry has consent to operate for 11 hours per weekday and 6 hours every Saturday. **The above acoustic limits equate to 66 loaded quarry trucks per weekday and 36 trucks every Saturday.**

## 2.5 Site Features

Refer to Outline Planning Consultants Pty March 2014 EIS for further details.

## 2.6 Local context & visual landscape

The quarry is situated in a remote rural location, with only three rural dwellings located along the haul route back to Waterfall Way. Refer to Outline Planning Consultants Pty March 2014 EIS for further details.

## 2.7 The basalt resource

The quarry site sits on the eastern edge of and is underlain by Ebor Basalts. The existing approved quarry site consists of a massive basalt rock outcrop shelf more than 20m in depth. Refer to Outline Planning Consultants Pty March 2014 EIS for further details.



**PHOTOGRAPH 4: Machinery working in quarry pit at Sheridan’s Hard Rock Quarry**

## 2.8 Local climate

The quarry site lies within the Dorrig Plateau of NSW. Temperatures are generally warm during summer months, with cool to cold conditions experienced in winter. Refer to Outline Planning Consultants Pty March 2014 EIS for further details.



## 3. Description of Modification Sought

### 3.1 Overview

Development Consent DA2014/0098, issued by Clarence Valley Council on 10 September 2014, allows for an annual extraction rate of some 198,000 tonnes per annum of quarry product from the approved quarry, with a limit of 20 loaded quarry trucks per day permitted along the quarry haul route.

In practice, and based on the experience of the quarry operator, the current consent condition that limits daily loaded truck numbers to just 20 per day can have the effect of actually reducing the potential to achieve the maximum approved annual output of the quarry significantly- well below that permitted under the terms of the Council consent DA2014/0098.

This is because the demand for quarry product fluctuates significantly according to contracts for supply of material, with demand for quarry material (and trucks) typically “spiking” during periods of peak demand.

The current limit of only 20 loaded trucks per day has the practical effect of throttling the ability of the quarry to supply the required quantity of quarry product at the volumes demanded during these peak periods- an unintended consequence of this limit on daily quarry truck numbers.

This Section 96 application does not seek to modify the existing limit on yearly quarry production.

Rather, it seeks to enable flexibility in truck numbers during peak periods of demand for quarry products, hence the increase in daily quarry truck traffic sought in this application, to 66 loaded trucks per weekday and 36 loaded trucks every Saturday.

This peak level of quarry truck traffic is supported by the noise and traffic studies accompanying the 2014 EIS and Development Application lodged in 2014 referred to in the issued consent.

Importantly, no change is sought to the restrictions on Saturdays on truck traffic on The Waterfall Way, east of the intersection of Waterfall Way and Maynards Plains Road, in accordance with Condition 13A of the issued Development Consent.

The modification application is made pursuant to the provisions of Section 96(2) of the *Environmental Planning & Assessment Act 1979* as amended (“the EP&A Act”).

The first ‘test’ of the modification application is whether or not the proposal is ‘substantially the same’ development.

The second ‘test’ is an assessment of the likely environmental impacts of the proposed modification under s.79C(1) of the EP&A Act.

Refer also Section 4 of this SEE report.

### 3.2 ‘Substantially the same’

The proposal is considered substantially the same quarry development as approved by DA2014/0098, for the reasons outlined in this report, including:

- No increase is sought in annual quarry production as set down in the original Development Consent (ie. a limit of 198,000 tonnes per annum).



■ The proposed modification will result in minimal change to the operation of the existing haul route and intersections and flows will be well within the threshold limits for such intersections and roads.

■ There have been no reported accidents at the site entry associated with the truck movements as currently approved. The changes in truck movements will have a minimal impact upon existing road safety.

■ Acceptable noise impacts are likely to result from a peak of 66 trucks per day, previously modelled by noise consultants when Council assessed the EIS and granted its consent to DA2014/0098 in 2014.

■ The modification sought will allow more flexibility in daily quarry trucking movements to better service the peak needs of major infrastructure projects and construction material industries.

■ The modification sought better reflects actual quarry production and may prove a better overall arrangement for residents along the quarry haul route, that is, short periods of increased activity followed by lesser daily quarry truck movements for longer periods.

The proposed Section 96 modification does not radically transform the approved development DA2014/0098.

It remains a quarry, with the same hours of operation and quarry methods generally. No lateral expansion of the currently approved quarry footprint is proposed. Truck numbers over the life of the quarry will remain the same, given that no increase is sought in the size of the resource to be won.

In short, the character of the use remains the same.

The proposed modification will result in a development that is not a significant departure from the current approved development. Refer also to **Table 4.1**.

### 3.3 Proposed Modification to Council Consent

This Section 96 modification seeks the following conditions of the original development consent for DA2014/0098 to be modified, as follows.

The provisions of the existing Development Consent DA2014/0098 proposed to be deleted are ~~struck through~~. New wording is shown in **bold**:

#### Proposed modification of Condition 1:

"1. The development being completed in conformity with the Environmental Planning & Assessment Act 1979, the Regulations thereunder, the Building Code of Australia and being generally in accordance with the following documents and plans:

● 'Hard Rock Quarry: Statement of Environmental Effects', dated March 2014, prepared by Outline Planning Consultants Pty. Limited; including

○ Flora & Fauna Assessment by BushfireSafe (Australia) Pty Ltd, February 2014

○ Noise Impact Assessment by Vipac Engineers & Scientists, dated 18 February 2014

○ Aboriginal Objects Due Diligence Assessment Report, BushfireSafe (Australia) Pty Ltd, dated February 2014

○ Traffic & Transport Assessment by RoadNet, dated March 2014

~~& Erosion and Sediment Management Plan prepared by RoadNet, dated 8 October 2010,~~  
**where modified by the following:**



- The report entitled **Statement of Environmental Effects** accompanying a s.96 Application to Clarence Valley Council Sheridan's Hard Rock Quarry Pty Ltd Pt. Lot 62 & 63 in Deposited Plan 752807 No. 242 Faheys & Bulgins Road Hernani, NSW, prepared by Outline Planning Consultants Pty Ltd and dated June 2016;
- Acoustic advice from consultants VIPAC dated 11 May 2016 Ref: 29N-12-0122-GCO-473113-0;
- Dust advice from consultants VIPAC dated 23 June 2016 Ref: 29N-12-0122-GCO-399163-0;
- Advice from traffic consultants Streetwise Pty Ltd to Clarence valley Council dated 22 June 2016;
- Traffic Impact Assessment report prepared by traffic consultants Streetwise Pty Ltd dated 15 June 2016.

or where modified by any conditions of this consent.

[To ensure the legibility of the consent. NOTE: The 8 November 2010 Erosion & Sediment Control Plan, which only applies to the original 2ha approved quarry, has been superseded by details provided in the March 2014 EIS and November 2014 Quarry Plan of Management, both documents prepared by Outline Planning Consultants Pty Ltd, which relate to an (2014 approved) expanded, 5.73ha quarry ]

**Proposed addition of proposed Condition 13B regarding maximum daily truck numbers permitted:**

**"13B. A maximum of 66 loaded quarry trucks per day are permitted to travel along the approved haul route every weekday (ie. Monday to Friday) and a maximum of 36 loaded quarry trucks on Saturdays."**

[To make clear the maximum number of loaded quarry trucks that are permitted to travel along the approved haul route on any particular day of the week]



## 4. Planning Assessment

### 4.1 Overview

This report has been prepared pursuant to the EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation 2000), and reviews the relevant environmental planning instruments and guidelines that apply to the subject Section 96 application.

It also assesses the potential environmental impacts of the proposed modification with particular reference to the relevant heads of consideration listed under Section 79C(1) of the EP&A Act 1979.

The proposed modification to DA2014/0098 is considered to be consistent with the objects of the EP&A Act for the following reasons:

- The site already supports an existing, lawfully established, operating quarry. Development Consent DA2014/0098, allows quarrying over a site area of 5.73ha, producing approximately 198,000 tonnes per annum of quarry product.
- The proposed modification seeks to maximise the efficient and economic recovery of the valuable basalt quarry resource, in particular, during periods of peak demand, without any increase in annual production at the quarry (limited to 198,000 tonnes per annum of quarry product).
- The quarry haul route has been found to be capable of accommodating the increased daily truck numbers proposed in this Section 96 application, on acoustic and traffic grounds.

- There will be no significant adverse impacts on the environment or the amenity of the neighbourhood resulting from the proposed modification.

### 4.2 Section 96 considerations

In consideration of a modification of development consent the consent authority is to have regard to the following.

***Section 96(2)(a)- It is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all) under this section***

The proposed modification involves one key change to the consent, namely, to allow up to 66 quarry trucks to use the approved haul route per day.

[NOTE: Importantly, no change is sought to the restrictions on Saturdays on truck traffic on The Waterfall Way, east of the intersection of Waterfall Way and Maynards Plains Road, in accordance with Condition 13A of the issued Development Consent]

This change would have minor implications for the development and acceptable resultant environmental impacts, as summarised below.

The proposed modification does not significantly transform the approved quarry development. Importantly:

- The purpose of the development is unchanged, namely, that of a quarry.
- The size of the basalt resource and the quarry footprint remain the same as that originally approved in DA2014/0098.



■ The method of quarrying the site remains unchanged.

■ The approved quarry plant and equipment already on site has the capacity to absorb the increased (daily) production sought during periods of peak demand, commensurate with the increase in daily truck numbers sought.

■ There is no alteration proposed to the method of processing quarry material won from the site, or to the hours of operation or operation of noise generating activities resulting from the modification sought, including hours of use of the approved quarry haul route. Refer to VIPAC report in **Attachment B**.

■ There will be no change in overall truck numbers over the life of the quarry, as the resource remains fixed.

Having regard to the above the requirements of Section 96 are thus satisfied.

The development for which the modification is sought is substantially the same development within the meaning of that provision. Refer also to Section 3 of this SEE report for further details.

#### **Section 96(2)(b)- Consultation with Minister or approval body**

It is a responsibility of Council to approach the relevant agency, for their comments, where there is a statutory duty to do so.

#### **Section 96(2)(c)- Notification requirements**

It is the responsibility of Council to ensure that the application is appropriately advertised for public comment.

[NOTE: The notification requirements for an application of this type is set down in clause 118 of the EPA Regulation. For example, clause 118(3) requires that the relevant consent authority must also cause notice of the application to be given to each person who made a submission in relation to the original development application/EIS]

#### **Section 96(2)(d)- Consideration of submissions made to application**

The responsibility of Council. Any submissions received will need to be duly considered by Council and the JRPP prior to any determination of the proposed modification application.

#### **Section 96(3)- In determining an application for modification of a consent under this section, the consent authority must take into consideration such of the matters referred to in section 79C(1) as are of relevance to the development the subject of the application**

This has been addressed elsewhere in this SEE report and in the following. The incorporation of the proposed modifications will result in a development which is substantially the same as the original (JRPP) approved Development Consent DA2014/0098, issued by Clarence Valley Council on 10 September 2014.

The proposed modification can therefore be lawfully approved under Section 96(2) of the EP&A Act.





### 4.3 Section 79C assessment

Section 96(3) of the EP&A Act states:

*"In determining an application for modification of a consent under this section, the consent authority must take into consideration such of the matters referred to in section 79C(1) as are of relevance to the development the subject of the application."*

Section 79C(1) of the EP&A Act states:

*"In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:*

*(a) the provisions of:*

*(i) any environmental planning instrument, and*

*(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and*

*(iii) any development control plan, and*

*(iv) any matters prescribed by the regulations, that apply to the land to which the development application relates,*

*(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*

*(c) the suitability of the site for the development,*

*(d) any submissions made in accordance with this Act or the regulations,*

*(e) the public interest."*

The following is an assessment of the environmental effects of the proposed development. The assessment includes only those matters under Section 79C(1) that are relevant to the proposal. It reviews the relevant environmental planning instruments and development control plans that apply to the site subject to the Section 96 application.

### **Section 79C(1)(a)(i) the provisions of any environmental planning instrument**

#### **Clarence Valley Local Environmental Plan (LEP) 2011**

The Clarence Valley LEP 2011 is the comprehensive environmental planning instrument applying to the site. Under this LEP the land is zoned RU1 Primary Production. Refer **Figure 4.1**. Under this zoning "extractive industries" (ie. quarries) are a use permitted in this zone. The quarry (project site) has been previously found by Council to be an appropriate land use in this rural location under the same (RU1) zoning. The proposed modification is consistent with the following relevant objectives of the Clarence LEP 2011:

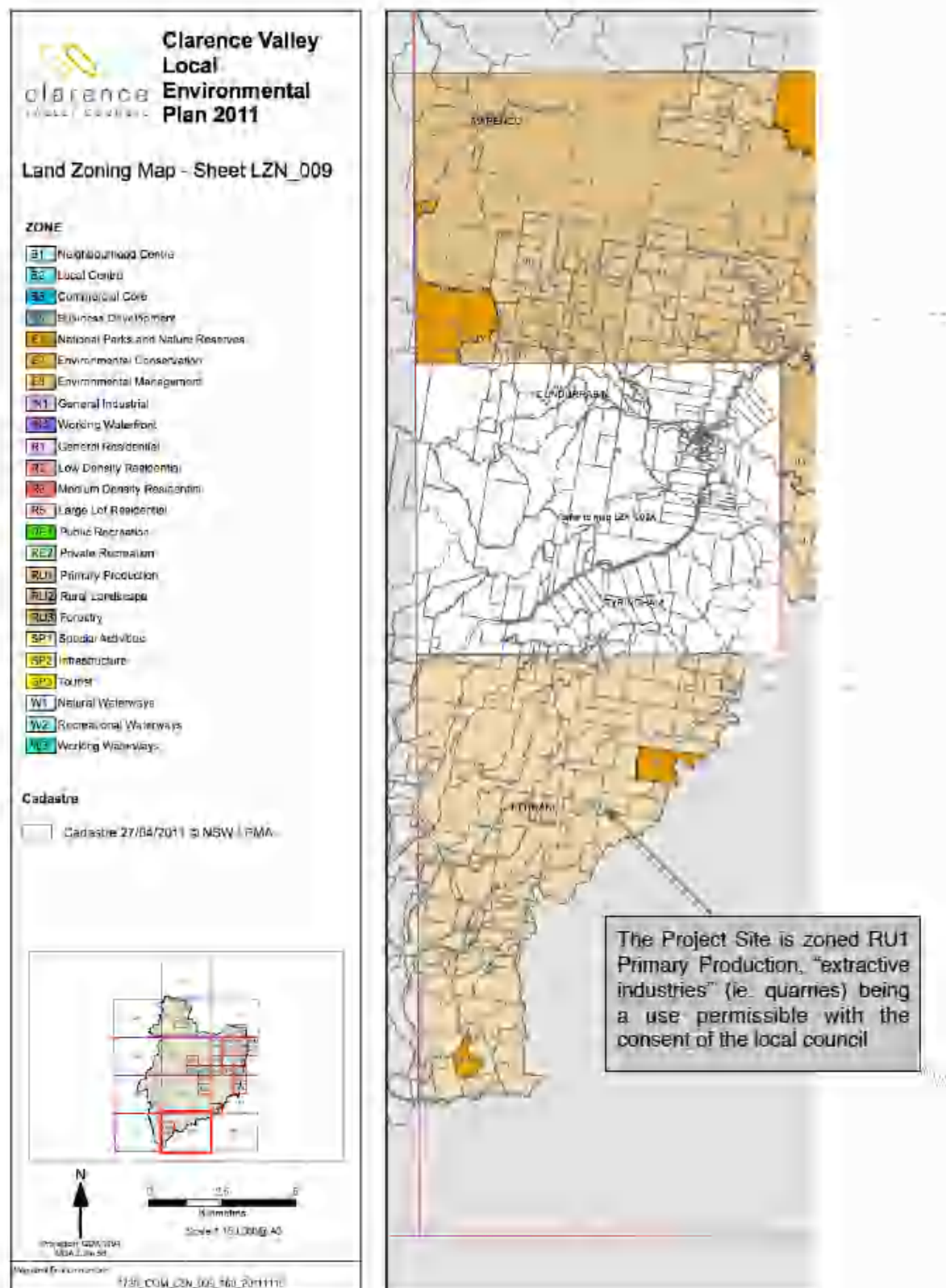
■ To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. The s.96 modification seeks to maximise the efficient and orderly extraction of the natural (extractive) resource from the site, in particular during periods of peak demand for quarry product.

■ To encourage diversity in primary industry enterprises and systems appropriate for the area. Not relevant to this s.96 modification.

■ To minimise the fragmentation and alienation of resource lands. No fragmentation of rural land is proposed.

■ To minimise conflict between land uses within the zone and land uses within adjoining zones. The s.96 modification seeks an increase in the number of quarry trucks per day along the haul route, the limit determined by and in accordance with relevant traffic and acoustic parameters.





**FIGURE 4.1: Existing Zoning of Sheridan's Hard Rock Quarry (ie. Project Site)**



■ To prevent dispersed rural settlement. The s.96 modification does not involve any further rural settlement.

■ To ensure that development does not unreasonably increase the demand for public services or public facilities. The s.96 modification will not require any significant increase to or amplification of the road system that currently serves the existing quarry.

■ To ensure development is not adversely impacted by environmental hazards. The existing quarry operates in accordance with stringent environmental safeguards, to ensure that development is not adversely affected by hazards associated with quarrying. These safeguards will be maintained.

All of the approved quarry is within land zoned RU1 Rural Primary Production.

The compliance of the proposed modification with relevant objectives of the RU1 zone are considered in the following table.

**Table 4.1: Compliance of s.96 modification with objectives of RU1 zone**

Clarence Valley LEP 2011 Objectives of RU1 zone	Compliance
To encourage sustainable primary industry production by maintaining and enhancing the natural resource base	Quarries form an important part of the resource base of any local area
To encourage diversity in primary industry enterprises and systems appropriate for the area	Not applicable

Clarence Valley LEP 2011 Objectives of RU1 zone	Compliance
To minimise the fragmentation and alienation of resource lands	No fragmentation of rural land proposed
To minimise conflict between land uses within this zone and land uses within adjoining zones	The proposed modification can occur within acceptable noise and traffic criteria without detriment to the surrounding neighbourhood
To prevent dispersed rural settlement	Not applicable
To ensure that development does not unreasonably increase the demand for public services or public facilities	The haul route can accommodate the increased truck movements proposed
To ensure development is not adversely impacted by environmental hazards	The approved quarry development complies with these objectives. The proposed modification does not change the nature of quarrying on the site- or along the haul route- in terms of these hazards

Quarries (ie. "extractive industries", as defined) are a permissible use under the existing RU1 Rural Primary Production zoning, being permitted with development consent.

The site is located outside of the NSW Coastal Zone.

The following table summarises the compliance of the proposed modification with other relevant provisions of the Clarence Valley LEP 2011.



**Table 4.2: Compliance with other relevant provisions of Clarence Valley LEP 2011**

Other Clarence Valley LEP 2011 provisions	Compliance
Clauses 4.1- 4.2C	Not applicable. No rural housing or subdivision proposed
Clause 4.6	No variation sought
Clause 5.4 Controls relating to miscellaneous permissible uses	Extractive industries are not listed under this clause of the LEP
Clause 5.9 Preservation of trees or vegetation	Complies. The proposed modification does not change existing consent conditions that relate to tree protection
Clause 5.11 Bush fire hazard reduction	Not applicable
Clause 7.3 Flood planning	Not applicable. No rural housing or subdivision proposed

## State Environmental Planning

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

*State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* aims for the sustainable operation and management of mineral, petroleum and extractive material resources.

This State Planning Policy overrides any other inconsistent environmental planning instrument, including local council DCPs, and provides the relevant assessment framework for this Section 96 modification application.

The aims of the Extractive Industries SEPP are set down in clause 2, which states:

#### *"2 Aims of Policy*

*The aims of this Policy are, in recognition of the importance to New South Wales of mining, petroleum production and extractive industries:*

*(a) 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, and*

*(b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and*

*(c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources."*

The subject quarry is an "extractive industry", covered by this SEPP. It requires that determining authorities consider the following when assessing any application for such development including:

■ The compatibility with surrounding land uses. Assessed by Council prior to the grant of the first consent for a quarry in 4 May 2011 (DA 2010/0358) and subsequent consent for an enlarged quarry issued on 10 September 2014 (DA2014/0098).

■ The environmental impacts of the most recent quarry development were the subject of a detailed EIS prepared by Outline Planning Consultants Pty Ltd entitled *Environmental Impact Statement Sheridan's Hard Rock Quarry, Hernani, NSW Expanded Quarry Operations* dated March 2014. This EIS was assessed by Council and subsequently consented to in July 2014. The Development Consent DA2014/0098 contains numerous conditions that aim to



ensure that the impacts of quarrying the site are satisfactorily mitigated.

■ The efficiency of resource recovery. The Section 96 modification seeks to enable the quarry to supply sufficient quarry product during periods of peak demand- but still within the annual quarry production limit set down in the consent DA2014/0098 (ie. 198,000 tonnes per annum).

■ The implications of the development on the public road network. Most recently assessed by Council at the time of lodgement and approval of the EIS in 2014. The Development Consent DA2014/0098 contains various conditions relating to roads and access generally. The capacity of the road system to accommodate various levels of quarry truck traffic was addressed in the 2014 EIS. Refer also to **Attachment B** and **Attachment C** for further details.

■ The rehabilitation of the land, including final landforms. Unchanged by this Section 96 modification application.

■ To encourage ecologically sustainable development through the environmental assessment, and sustainable management of extractive material resources. The modification satisfies this objective. The Development Consent DA2014/0098 contains numerous conditions that, taken as a whole, will assist in ensuring that this outcome is achieved.

The compliance of the proposed development with other relevant parts of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* are further assessed in the following.

The assessment framework that is to be followed in this case of this Section 96 application is that which is set out in clauses 7, 12, 13, 14, 15, 16 and 17, in particular, of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

The following Table 4.3 summarises the compliance of this Section 96 modification application with the provisions of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

**Table 4.3: Compliance with SEPP (Mining, Petroleum Production and Extractive Industries) 2007**

Relevant Clause of SEPP	Degree of Compliance with SEPP
Clause 7 - Permissibility Extractive industries permissible on land on which development for the purposes of agriculture or industry may be carried out	Extractive industries are permissible on the subject property
Clause 12 - (a) consider: (i) the existing uses and approved uses of land in the vicinity of the development, and (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 (iii) any ways in which the development may be incompatible with any of those existing, approved or likely preferred uses	The compatibility of the proposed extractive industry (quarry) development and impact on surrounding land uses was assessed by Council prior to the grant of the first consent for a quarry in 4 May 2011 (DA 2010/0358) and subsequent consent for an enlarged quarry issued on 10 September 2014 (DA2014/0098)- acceptable impacts found.





Relevant Clause of SEPP cont.	Degree of Compliance with SEPP cont.	Relevant Clause of SEPP cont.	Degree of Compliance with SEPP cont.
<p>Clause 12 -</p> <p>(b) evaluate and compare the respective public benefits of the development and the land uses referred to in paragraph (a) (i) and (ii)</p> <p>(c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii)</p>	<p>Refer to above.(b) and (c) both was assessed by Council prior to the grant of the first consent for a quarry in 4 May 2011 (DA 2010/0358) and subsequent consent for an enlarged quarry issued on 10 September 2014 (DA2014/0098)</p> <p>Mitigation measures already in place. The public and other benefits of the proposed modification are also discussed under separate headings elsewhere in this SEE report</p>	<p>Clause 15 -</p> <p>Resource recovery</p>	<p>The s.96 modification will enable the optimisation of a valuable, high quality basalt resource that will provide economic benefit to the locality and to the broader region.</p> <p>The s.96 modification is considered to be highly efficient as it proposes, inter alia, working within an existing lawfully operating quarry where environmental controls and management are already in place.</p> <p>It enables full access to the quarry resource during periods of peak demand.</p> <p>Moreover, the s.96 modification offers benefits including but not limited to the more efficient use of existing quarry processing equipment and optimisation of resource recovery, as well as continuing extraction from an established quarry</p>
<p>Clause 13-Compatibility</p>	<p>Refer to above. The modification seeks to utilise the already approved quarry haul route, adopting daily truck limits in keeping with the traffic and acoustic recommendations contained in the 2014 EIS</p> <p>The impacts of the Project have been considered elsewhere in Section 4 of the SEE report and found to be both manageable and satisfactory</p> <p>Section 3 contains details of the modification and mitigation measures proposed</p> <p>The s.96 modification seeks to make the most efficient use of the existing high quality, hard rock resource found on the site</p>	<p>Clause 16 -</p> <p>transport</p>	<p>Considered by Council when assessing the (approved) 2014 application.</p> <p>The s.96 modification adopts the maximum daily truck limits imposed by traffic and acoustic consultants, contained in the 2014 EIS report.</p> <p>Transportation of quarry product will be along the same approved quarry haul route.</p> <p>Moreover, as the modification does not involve any additional extraction of a resource above that originally approved in 2014 there will be no overall increase in quarry truck traffic over the life of the quarry</p>
<p>Clause 14</p> <p>(a) Impacts on water resources</p> <p>(b) Impacts on threatened species, biodiversity avoided or minimised to the greatest extent possible</p> <p>(c) Greenhouse gas emissions are minimised</p>	<p>Assessed by Council prior to the grant of the first consent for a quarry in 4 May 2011 (DA 2010/0358) and subsequent consent for an enlarged quarry issued on 10 September 2014 (DA2014/0098).</p> <p>No change is sought to the approved quarry footprint.</p> <p>No likely adverse impacts arising from modification not already addressed in the 2014 EIS. Existing quarry mitigation measures will be retained</p>	<p>Clause 17 -</p> <p>Rehabilitation</p>	<p>The modification will require no change in the final profile of the quarry as a consequence of the modification, nor should any change in on site rehabilitation arise</p>



The proposed modification thus complies with the relevant provisions of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

### **Statutory obligation to protect quarries**

Additionally, since 16 February 2007 Clarence Valley Council has had an additional obligation to ensure that quarries are protected from incompatible uses, pursuant to the provisions of clause 13 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* which applies to any application for consent for a use on land that is in the vicinity of an existing quarry.

In short, this SEPP provision puts the onus on any local council to ensure that any proposed non-quarry use is compatible with the existing quarry, not the other way around. This statutory obligation also extends to compatibility with future extraction, not just existing quarry operations. Clause 13(2) of this SEPP states:

*" (2) Before determining an application to which this clause applies, the consent authority must:(a) consider:*

*(i) the existing uses and approved uses of land in the vicinity of the development, and*

*(ii) whether or not the development is likely to have a 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*

*(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, and*

*(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), and*

*(c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a) (iii)."*

### ***State Environmental Planning Policy (State and Regional Development) 2011***

The proposal does not constitute a 'State Significant Development' under Schedule 1 of this SEPP.

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

In terms of traffic impacts, the proposed Section 96 modification will result in an increase in the daily number of trucks hauling quarry products over the haul route. However, given that there is no proposed increase in the size of the quarry resource to be won, there will be no appreciable change in total quarry truck traffic over the life of the quarry.

### ***State Environmental Planning Policy 14 (SEPP 14) – Coastal Wetlands***

This Policy is not applicable as the proposed site is not within a designated coastal wetlands area.

### ***State Environmental Planning Policy 26 (SEPP 26) – Littoral Rainforest***

This Policy is not applicable as the proposed site is not on, or within, the 100m buffer zone of any littoral rainforest.

### ***State Environmental Planning Policy (SEPP) No. 33***

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) relates to "potentially hazardous" or "potentially offensive" developments, such as quarries, and requires specified matters to be considered by consent authorities when assessing such applications.

The proposed modification will not result in any changes to the approved quarry development likely to give rise to any trigger under this SEPP being activated.



The proposal is for the continuation of existing established quarrying operations and established quarry management procedures.

Mitigation measures are currently in place within the quarry to limit any hazardous or offensive discharges. Quarry truck traffic can use the existing haul route without giving rise to any safety or similar concerns. Blasting and processing of quarry products on site are undertaken in accordance with EPA blasting criteria for quarries in NSW. No change is sought to these arrangements. Site water is contained within the quarry site. There is no storage of explosives and/or detonators on the land and subsequently, given these measures, the development is unlikely to be a "hazardous industry", "hazardous storage establishment", "offensive industry" or "offensive storage establishment".

Council's (JRPP Assessment Report DA2014/0098 p. 6) assessment of the quarry in 2014 concluded that:

*"Having regard to the existing approved and proposed operation of the quarry it is considered that the operation does not constitute a potentially hazardous or offensive operation."*

#### **State Environmental Planning Policy No 44 – Koala Habitat Protection**

SEPP No. 44 was considered in detail in the 2014 EIS. The proposed modification will not result in any changes to the approved project disturbance boundary, or to habitats generally. No further assessment under SEPP 44 is required

#### **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 life-style, 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."*

The subject quarry has no land of agricultural significance. The quarry is not identified as comprising Strategic Agricultural Land. The proposed s.96 modification will enable greater, and more efficient utilisation of a quarry resource that will provide economic benefit to the broader region generally.

Council's (JRPP Assessment Report DA2014/0098 p. 8) assessment of the quarry in 2014 concluded that in regard to compliance with this State Policy:



*"The proposed development will result in positive economic benefits to the local economy and adverse social impacts can be mitigated through the imposition of appropriate conditions of consent."*

### **North Coast Regional Plan**

Clause 18 of the REP requires the implementation both during and after extraction operations of an erosion and sediment control plan and rehabilitation plan. The approved quarrying operation has in place appropriate erosion and sediment control strategies and a plan of management, approved by Council prior to commencement of quarrying pursuant to the consent. The provisions of clause 16 of the REP are also relevant. It states:

#### *"16 Objectives*

*The objective of this plan in relation to geological resources is to prevent sterilisation of known resources by inappropriate development on or near to potential extraction sites."*

The s.96 modification does not affect the above provisions.

### **Mid North Coast Regional Strategy 2006-2031**

The Mid North Coast Regional Strategy 2006-31 applies to Clarence Valley, Coffs Harbour, Bellingen, Nambucca, Kempsey, Port Macquarie-Hastings, Great Lakes and Greater Taree local government areas. It focuses more on ensuring that there is sufficient land available to accommodate forecast population growth and employment needs.

### **Draft North Coast Regional Plan**

The Draft North Coast Regional Plan (draft Plan) applies to 13 councils - Tweed, Byron, Ballina, Lismore, Richmond Valley, Kyogle, Clarence Valley, Coffs Harbour, Bellingen, Nambucca,

Kempsey, Port Macquarie-Hastings and Greater Taree. Once adopted, it is intended to replace the Mid North Coast Regional Strategy 2006-31, currently applicable to the Clarence Valley and nearby local councils.

Direction 1.5 of the Draft Plan is to "Deliver economic growth through sustainable use of, and access to, mineral and energy resources". Action 1.5.1 is to "Facilitate investment in the resources and energy sector". It further states:

*"The region's natural resources have the potential to drive regional economic development and prosperity. They include traditional and renewable energy sources and a broad range of mineral resources and construction materials. These mineral resources include hard rock aggregate, clay, sand and coarse aggregate. The development of these resources is necessary to support major infrastructure projects, the new housing needed for a growing population, and industrial and agricultural businesses. The extraction of these resources generates employment in the region. Local extraction of these resources is particularly important as transporting these bulky materials can be relatively expensive."*

(from page 28 of the Draft Plan)

Of particular relevance to this s.96 modification application, the Draft Plan also notes that 4 million tonnes of rock will be needed from local quarries in order to service the upgrade of the Pacific Highway from Woolgoolga to Ballina alone.

Refer to accompanying **Figure 4.2**, from the Draft North Coast Regional Plan.





**FIGURE 4.2: Draft North Coast Regional Plan (from p.31)**

**Section 79C(1)(a)(ii) the provisions any draft environmental planning instrument**

Refer to the above section of the SEE report addressing the draft North Coast Regional Plan.

**Section 79C(1)(a)(iii) the provisions of any development control plan**

**Clarence Valley Development Control Plan (DCP) 2011 Rural Zones**

The Clarence Valley *Development Control Plan for Development in Rural Zones* (DCP) 2011 applies to the Clarence Valley local government area. There are no provisions within this DCP that specifically apply to extractive industries.

The quarry complies with the general objectives of the DCP in terms of:

- Setbacks from surrounding land uses. This issue also assessed by Council in 2011 and, most recently, in 2014.
- Acceptable traffic impacts. This issue also assessed by Council in 2011 and, most recently, in 2014.
- The provision of satisfactory erosion and sediment controls.

■ Council has approved a site-specific plan of management for the quarry operations.

■ Acceptable water management. This issue also assessed by Council in 2011 and, most recently, in 2014.

It is also relevant to note that the quarry has been the subject of a recent EIS assessment/ approval process, in 2014, in order to ensure that quarry activities can be undertaken in a manner that has no significant adverse impacts on the character of the surrounding rural locality. It is noted that Council's (JRPP Assessment Report DA2014/0098 p. 9) assessment of the quarry in terms of the DCP concluded that:

*"There are no specific requirements for extractive industries under the DCP. The application was advertised and notified in accordance with the DCP and the requirements of the DCP provisions were adequately addressed through the Environmental Impact Statement submitted with the application. The proposed development is considered to be consistent with the relevant development controls in the DCP."*



### **Any planning agreements (Section 79C (1)(a)(iii)(a))**

There is no planning agreement that has been entered into under section 93F, or any draft planning agreement that the applicant has offered to enter into under section 93F.

### **The regulations (Section 79C (1)(a) (iv))**

The quarry development quarry has undergone a recent EIS approval process and was approved in 2014 with numerous stringent conditions. These conditions of consent are designed to minimise the impact of the development on the environment, and the applicant has generally complied with those conditions.

The modification seeks to increase daily quarry truck numbers in order to meet peak demand for quarry products, in particular to the Pacific Highway Upgrade.

The Section 96 Modification proposed does not radically transform the approved quarry development, operated by Sheridan's Hard Rock Quarry Pty Ltd. It remains a quarry, with the same hours of operation, blasting and processing methods.

No further upgrading of roads, either internal or external to the quarry site, is required in order to accommodate the modification sought.

### **S. 79C(1)(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979)**

The approved quarry and haul route lie outside of the coastal zone.

### **S. 79C(1)(b) Impact on the environment**

#### **Environmental Impacts Generally**

In assessing the quarry development in 2014 Council officers reported as follows:

*"The proposal, if implemented with the recommended conditions, will on balance provide a sustainable development. Ecologically, the impacts of the development can be adequately managed. Economically there are positive outcomes through the creation of employment opportunities and efficient use of available natural resource for infrastructure. Socially there are potential negative impacts on adjoining communities through the impacts on the road network. These impacts will be intermittent (during project periods) and dependant on demand for quarry product and can be managed through consent requirements. There is also a positive outcome for the overall community through providing a demanded high quality resource to develop infrastructure. There will be minimal impacts on cultural values."*

The above conclusions were reached having regard for the traffic and acoustic reports at that time that recommended the following capacities for the quarry haul route:

- A total of 83 trucks per day, based on the traffic assessment by RoadNet 2014.
- A total of 66 trucks per weekday and 36 every Saturday, based on the acoustic assessment by VIPAC 2014.

The Section 96 modification adopts the lower of the two assessed figures, namely, 66 trucks per weekday and 36 every Saturday, as determined by the acoustic consultants.





Additionally., the following factors are relevant:

- There will be no change to the total approved tonnage of hard rock won from the quarry.
- Noise to be generated from quarrying over the life of the quarry should be little changed, given that there is no change proposed in the total tonnage of quarry rock to be removed from the quarry over the life of the quarry. This applies to noise generated by the quarry, as well as by quarry truck traffic.
- The total truck numbers generated from quarrying over the life of the quarry should not be altered, given that there is no change proposed in the total tonnage of quarry rock to be removed from the quarry over the life of the quarry. As such, no further upgrading of local roads, access areas or quarry entry is required in order to accommodate the modification sought.
- The quarry footprint remains the same.
- No further clearing is proposed, vegetation removal limited to the quarry footprint already approved in 2014.
- There will be no change to the approved hours of operation.
- The quarry operator will be subject to the same environmental mitigation measures and other requirements as required by the 2014 development consent DA2014/0098.

### **Context, views**

The impact of the proposal on the visual amenity and the landscape was considered at the time of the assessment of the EIS in 2014, prior to approval being granted. The proposed modification will not result in any changes to the visual impacts predicted in the 2014 EIS.

No change to the quarry footprint, or any significant changes to likely visual impacts, arise from the proposed modification.

The site will continue to be used for the purposes of a quarry, involving use of heavy machinery, crushing plant and heavy truck traffic. No further assessment of potential impacts on visual amenity is required. The character of the site will not change with the introduction of the modifications sought.

### **Land use impacts**

The impact of the proposal on agriculture and land use was considered at the time of the assessment of the original application and the more recent 2014 EIS.

The modification sought does not give rise to any change in the likely impact of quarry operations on agriculture or land use generally as described in the 2014 EIS.

In fact, this s.96 modification adopts the maximum daily quarry truck limits recommended in the the traffic and acoustic accompanying the 2014 EIS.

There will be no negative impact on land uses in the locality arising from the proposed modification.

### **Health of people**

The expected impacts on the health of people associated with the proposed modification are not expected to vary from those identified under the currently approved quarry development. The modification proposed gives no rise the method of quarrying the site or size of the quarry footprint. The proposed increase in maximum daily truck numbers can be undertaken in an acceptable manner having regard for likely traffic, air quality and acoustic impacts.





## **Hazards, dust**

Potential hazards are managed under the current consent and existing quarry plan of management regime. The quarry and processing area is located on private property. The site is fenced, signed and gated.

The haul route has been upgraded in order to safely accommodate the increased truck volumes sought in this Section 96 application including the sealing of a total of 1,178m of the haul route in front of the Braund and Welsh dwellings, as follows:

■ Braund residence, Faheys & Bulgins Road: the sealed section of the road extends by approximately 180m to the east of the dwelling entry and approximately 480m to the west, comprising a total of 648m of sealed road with a minimum sealed width of 7.4m and up to 9.0m wide seal in places.

■ Welsh residence, Faheys & Bulgins Road: the sealed section of the road extends by approximately 300m to the east of the dwelling entry and approximately 230m to the west, comprising a total of 530m of sealed road with a minimum sealed width of 7.4m.

At the closest point, the unpaved part of the haul road is 180m from the nearest dwelling, with a resultant low likelihood of dust nuisance being generated from trucks travelling on the haul road. VIPAC conclude that:

*"Overall, the increase in truck movements associated with the [Sheridan's Hard Rock Quarry] is unlikely to increase the dust emissions at nearby dwellings due to the existing mitigation of sealing large sections of the road."*

Refer VIPAC dust advice in **Attachment C**.

Equipment, roads, fences, and security have been maintained in compliance with relevant requirements. There will be no increase in risk associated with the modification.

## **Noise impacts**

A noise and blasting impact assessment was prepared as a part of the 2014 EIS. The noise assessment found that the quarry operations will result in noise and blasting levels that comply with relevant EPA criteria. Since that time, blasts at the quarry have been monitored, to ensure compliance with the terms of the consent issued by Council.

The proposal is unlikely to cause any negative impacts on the privacy or acoustic amenity of the adjoining properties with the modification proposed. These measures should be sufficient to to ameliorate the impacts associated with quarry noise, including quarry truck traffic noise.

In a letter of advice dated 11 May 2016 VIPAC (refer **Attachment C**) have clarified noise impacts associated with the proposed increase to 66 trucks per day (ie. 6 loaded quarry trucks per hour over an 11 hour working day), previously assessed in the February 2014 VIPAC acoustic assessment. It states, inter alia:

*"In addition to the assessment of the traffic noise impact associated with the 20 loaded trucks per day from the quarry, Vipac also undertook an assessment to determine the maximum number of trucks per day that could travel along the haul route and maintain noise emissions at the nearest sensitive receptors (located in proximity to the quarry site), within the Road Noise Policy limit criteria."*



*It was determined that a maximum of up to 6 loaded trucks per hour could travel along the haul road without exceeding the Road Noise Policy noise limit at the nearest neighbouring noise sensitive receptor located along Faheys's and Bulgins Road, taking into account the improved sections of the road with the sealed sections of the road passing the nearest noise receptors. This equated to a total of 66 loaded trucks based on the permitted operating hours for the quarry of 07:00hrs to 18:00hrs Monday to Friday and 7:00hrs to 13:00hrs on Saturdays, in accordance with the Conditions of Consent for the quarry."*

### **Flora and fauna**

The proposed modifications will not affect flora and fauna. Significantly, no additional clearing of land or lateral expansion of the quarry (ie the quarry footprint) is proposed. In conclusion, no additional impacts on flora or fauna are anticipated arising from the proposed s.96 modification.

### **Cultural heritage**

The impact of the proposal on cultural heritage was considered at the time of the assessment of the original application. The proposed modification will not result in any changes to the cultural heritage impacts predicted in the 2014 EIS. No change is proposed to the quarry footprint.

No further assessment of potential impacts on cultural heritage is required.

### **Drainage, sediment and erosion control**

The impact of the proposal on drainage, soils and erosion control was considered at the time of the assessment of the 2014 EIS.

Ongoing adherence to the Council consent and quarry plan of management should ensure that the quarry site will continue to be managed in a satisfactory manner if the modification is approved. Safeguards are in place to prevent pollution of nearby lands or waterways. No additional contamination via chemicals, hydrocarbons or other contaminants from accidental spillage is likely.

Having regard for the above, the proposed modification will not change the likely hydrology, or stormwater or sediment and erosion control impacts of the quarry operation.

### **Siting and design**

The proposed modification will not change the essential features of the quarry, nor will there be any changes in the quarry footprint.

### **Traffic and access**

The impact of the approved quarry on transportation was considered at the time of the assessment of the 2014 EIS. The quarry operator has upgraded access to the site. These improvements include upgrades to the main entry to the quarry. Additionally:

- The current consent provides for a limit of 20 loaded quarry trucks per day along the quarry haul route.
- In practice, and based on the experience of the quarry operator, the current consent condition that limits daily loaded truck numbers to just 20 per day can have the effect of actually reducing the potential to achieve the maximum approved annual output of the quarry significantly, well below that permitted under the terms of the Council consent. This is because the demand for quarry product fluctuates significantly according to contracts for supply of material,



with demand for quarry material (and trucks) typically “spiking” during periods of peak demand. The current limit of only 20 loaded trucks per day has the practical effect of throttling the ability of the quarry to supply the required quantity of quarry product at the volumes demanded during these peak periods- an unintended consequence of this limit on daily quarry truck numbers.

■ This Section 96 application does not seek to modify the existing limit on yearly quarry production. Rather, it seeks to enable flexibility in truck numbers during peak periods of demand for quarry products, hence the increase in daily quarry truck traffic sought in this application, to 66 loaded trucks per weekday and 36 trucks on Saturdays. These peak levels of quarry truck traffic is supported by the noise and traffic studies accompanying the 2014 EIS and Development Application lodged in 2014 referred to in the issued consent.

■ Importantly, no change is sought to the restrictions on Saturdays on truck traffic on The Waterfall Way, east of the intersection of Waterfall Way and Maynards Plains Road, in accordance with Condition 13A of the issued Development Consent.

■ As the modification still involves the recovery of the same volume of material (ie. 1 million tonnes of quarry resource) there will be no increase in anticipated quarry truck volumes over the overall life of the quarry. As such, this modification does not give rise to the need for any upgrading of the approved quarry haul route.

All other existing approved traffic and access arrangements (and resultant impacts) are proposed to be retained.

### ***Social and economic impact in the locality***

This modification optimises the quarry operation and enables full economic recovery of the approved quarry resource.

In allowing the modification it will enable the quarry operator to supply quarry products during peak demands generated by regional infrastructure projects, such as the Pacific Highway upgrades.

This will contribute to the local economy in terms of ongoing operational expenditure on local goods and services, as well as generating local employment opportunities. Flow-on and multiplier effects can be expected, which will further enhance the local economy. The economic impact of the proposed modification will result in increased productivity and output for the quarry, which is also an important consideration.

### **Sustainability, greenhouse gases**

The modification does not seek to increase the size of the resource to be won by quarrying. It is limited to that originally approved in 2014.

As such, there should be no negative impact on sustainability or greenhouse gas emissions arising from the proposed modification. As there is no change proposed in the tonnage of quarry material to be hauled from the quarry site, there should be appreciable change in total emissions of greenhouse gases over the life of the quarry. Over time, it is expected that the efficiency of quarry equipment will further improve, thus resulting in further potential energy savings.

Therefore the modification is not expected to increase the total quantity of fuel combusted over the life of the project.



### **Suitability of the site for the development (Section 79C (1)(c))**

The suitability of the site for a quarry- as well as the approved haul route- was comprehensively addressed by Clarence Valley Council prior to the grant of the original consent in 2011 and, more recently, in July 2014. The quarry and haul route now enjoy relevant consents from Council.

It is relevant too note that Council's (JRPP Assessment Report DA2014/0098 p. 10) assessment of the quarry in terms of the suitability of the site as a quarry concluded that:

*"The subject site is considered suitable for the proposed development. The lot has a current approval for an extractive industry and the resource located on the site is of a high quality. The development footprint is over an area that is not considered to be of high ecological significance. The adjoining escarpment which is of high ecological significance will be protected from ongoing quarry operation. The surrounding lands are zoned for rural purposes and the proposal is considered to have a minimal impact on these uses. The site is located in close proximity to major roads, being the Waterfall Way and the Armidale-Grafton Road, and associated potential markets."*

### **Section 79C(1)(e) public interest**

#### **Overall public interest**

The quarry is a lawfully approved quarry. Additionally, the haul route has been approved by Council.

There will be no overall significant detrimental effects on the site or surrounds as a result of this modification, in particular relating to noise and traffic issues.

All relevant environmental, operational and planning issues were considered by Clarence Valley Council in detail prior to consent being issued in 2011 to the quarry operation, and more recently in 2014 to an enlarged quarry development.

In short, the proposal can occur within satisfactory environmental parameters and predicted likely environmental impacts.

#### **An essential supply to highway projects**

It is documented in the NSW Department of Primary Industries 2006 report entitled *Primary Industries in the North Coast Region of NSW Strategic Review* that construction materials are an "essential supply of materials for maintenance and development of infrastructure including the Pacific Highway upgrade."

The key resourcing issues identified in the Review are:

- Declining identified resource base.
- Declining access to resources.
- Sensitivity to transport costs.
- Uncertainty over long-term sustainability of supply.

The above Review also documented that construction materials are characterised by:

- Use in large volumes.
- Low unit cost.
- Sensitivity to transport costs.

The above considerations, amongst others, are relevant to an assessment of the respective public benefits of this Section 96 application.



### **Economic recovery of quarry resource**

In addition to the above, allowing the proposed increase in peak truck numbers along the haul route will provide benefits including:

- Continued uninterrupted supply of quarry product to roads projects, including major infrastructure projects, the modification meaning that the quarry will be capable of meeting peaks in demand for these projects.
- Economic recovery of a high quality quarry resource.
- Economic benefits to the local and regional economy through local employment, purchase of local goods and services and wages.
- Effective use of a regionally significant quarry resource.

### **Environmental management**

Sheridan's Hard Rock Quarry Pty Ltd has demonstrated its commitment to good quarry management in its existing quarry operations. The quarry operates pursuant to an adopted plan of management, including the operation of quarry trucks along the haul route.

This approach to good quarry management will continue under the proposed Section 96 modification.

### **ESD principles**

The proposal has also been assessed against clause 7(4) of Schedule 2 of the EP&A Regulations and is consistent with the five accepted principles of ecologically sustainable development (ESD), as summarised below.

#### **Precautionary principle**

The proposed Section 96 modification is supported by the traffic and noise assessments.

#### **Integration principle**

The integration principle states that decision-making processes should effectively integrate both long-term and short-term economic, environmental and social considerations. The modification ensures that the quarry can accommodate the "spikes" in demand arising from major roads projects, without any increase in currently approved yearly production limits or likely detrimental impacts.

### **Intergenerational equity**

This principle holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

The proposal would have longer-term benefits for future generations by providing a secure a significant quarry resource close to markets and to committed infrastructure projects.

### **Biological diversity**

Under the provisions of this principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making. The modification proposes no additional clearing or physical disturbance to the existing approved quarry footprint.

As such, there is anticipated to be no additional adverse impacts on the surrounding biological environment arising from the proposed modification.

### **Valuation & pricing of environmental resources**

Under this principle, improved valuation, pricing and incentive mechanisms as well as environmental factors should be included in the valuation of assets and services.



In the case of this Section 96 modification, this principle has been satisfied in that it proposes to fully utilise the existing, approved quarry resource and meeting the peaks in demand arising from major roads and infrastructure projects.

Refer also to other sections of this SEE report for a further discussion relating to possible impacts. It is in the public interest to approve the modification sought.

### ***Disclosure of political donations***

The NSW Government introduced *The Local Government and Planning Legislation Amendment (Political Donations) Act 2008* (NSW). This disclosure requirement is for all members of the public relating to political donations and gifts.

The law introduces disclosure requirements for individuals or entities with a relevant financial interest as part of the lodgement of various types of development proposals and requests to initiate environmental planning instruments or development control plans.

Outline Planning Consultants have been advised by the applicant that no relevant donation for the purposes of this Act has been made.

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

The Protection of the Environment Operations Act, 1997 provides an integrated system of licensing for industries, like quarries.

Sheridan's Hard Rock Quarry operates under the terms and requirements of Environment Protection License (EPL No. 20077) for a Land Based Extractive Activity, issued pursuant to the provisions of the *Protection of the Environment Operations Act, 1997*.

The proposed modification to the development will be subject to the conditions of any EPL issued by the EPA. No significant changes to the EPL are required as a result of the proposed Section 96 modification.





## 5. Conclusion

Sheridan's Hard Rock Quarry is a significant source of quality basalt rock for the region, the quarry resource used in roads, building and the construction industry. The most recent development consent issued in 2014 requires Sheridan's Hard Rock Quarry to comply with stringent consent conditions designed to minimise the impact of the development on the environment. Sheridan's Hard Rock Quarry have reported annually to Council.

The modification seeks no change to the nature of quarrying on the land, or change to the area used for quarrying, or quarry production limits.

Rather, it seeks to enable flexibility in truck numbers in order to meet the "spikes" in daily demand for quarry products that arise when servicing major roads projects, like the Pacific Highway upgrade.

This is why the this s.96 modification seeks an increase in daily quarry truck traffic sought in this application, to 66 loaded trucks per week day and 36 loaded trucks every Saturday. These peak levels of quarry truck traffic is supported by the noise and traffic studies accompanying the 2014 EIS and Development Application lodged in 2014 referred to in the issued consent

Sheridan's Hard Rock Quarry will continue to undertake quarry operations in accordance with the Council consent, the EIS (referred to in the consent), the approved plan of management and EPL license provisions.

The proposed modification will provide for the continued, viable operation of a quarry which is well positioned to supply quarry products to the surrounding region.

In conclusion, the application of Section 96(2) is justified in that the development for which the modifications are sought is substantially the same development for which the consent was originally granted. The Modification sought is little different to the quarry approved by Council in 2014 and will have limited, manageable environmental impacts.

The proposal is considered substantially the same quarry development as approved by DA2014/0098, issued by Clarence Valley Council on 10 September 2014, for the reasons outlined in this SEE report.

Approval is sought for the modification proposed.



## 6. Glossary of Terms

Term	Meaning
<b>AADT</b>	Annual Average Daily Traffic.
<b>Aggregate</b>	Rock crushed to the required size for use in concrete, masonry products, road sealing, pavement materials and other uses.
<b>Air Blast Overpressure</b>	Air vibration or air blasts are the pressure or shock waves that radiate in air from an exploding charge. When a pressure wave passes a given point, the pressure of the air rises rapidly before returning to atmospheric pressure after a period of oscillations. The maximum pressure is the 'Air Blast Overpressure' measured in dB.
<b>AHD</b>	Australian Height Datum. The standard reference level used to express the relative elevation of various features. A height given in metres, AHD is essentially the height above sea level.
<b>Ambient noise</b>	This is the total encompassing sound in a given situation at a given time where no particular sound is dominant. It is composed of sound from all sources near and far, normally experienced in the area. Ambient noise is measured as dB ('A' weighted) over a set period of time.
<b>ANZECC</b>	Australian and New Zealand Environment and Conservation Council.
<b>Attenuation</b>	Reduction in sound level between a noise source and another location.
<b>A-Weighted Sound Level dB(A)</b>	A level of sound pressure in which the sound pressure levels of the various frequency bands have been weighted to accord roughly with human aural system frequency sensitivity.
<b>Batter</b>	The face of the slope eg. quarry walls, banks, cuttings, etc.
<b>Basalt</b>	Fine grained, dark volcanic igneous rock.

Term	Meaning
<b>(Quarry) Bench</b>	A ledge constructed in a batter or natural slope within a quarry. A step in the face of a quarry.
<b>Biodiversity</b>	Biological variety at genetic, species and ecosystem scales. The maintenance of biodiversity, at all levels, is acknowledged internationally as a high conservation priority.
<b>Blasting</b>	The operation of breaking rock in a quarry by means of explosives.
<b>Bund</b>	An earthen mound wall which may be used for noise attenuation or visual screens or for redirecting stormwater/runoff around a part of a site. Bunds may also be used to contain spillage of liquid materials.
<b>Burden</b>	Distance between rows or distance from front row to free face of quarry.
<b>Catchment</b>	Drainage area of a river, creek. Can also refer to a visual catchment, which is the area within view of a particular viewing location, or road catchment, which is the area reliant on a particular road in order to gain access to another centre or locality.
<b>Contour Drain</b>	Drainage channel constructed approximately along the contour, and which is designed to slow down and direct the flow of water across a disturbed area to a sediment trap for sediment removal.
<b>DA</b>	Development Application.
<b>dB (A)</b>	To approximate the human response to sound, noise level meters have weighting networks which correspond approximately with subjective loudness. The 'A-Weighting' is used to simulate human hearing.
<b>DECCW</b>	NSW Department of Environment, Climate Change and Water (now a part of the NSW Office of Environment and Heritage ("OEH")).
<b>Deposited Plan (DP)</b>	Deposited Plans (DP) define legal boundaries of land and often record subdivisions, easements and the like.
<b>Director General</b>	Director General of the NSW Dept. Planning & Infrastructure.



Term	Meaning
<b>Designated Development</b>	Section 77A of the Environmental Planning and Assessment Act 1979 states that " <i>Designated development is development that is declared to be designated development by an environmental planning instrument or the regulations.</i> " Schedule 3 of the Environmental Planning and Assessment Regulation 2000 defines the type of development which is classified as designated development.
<b>Drainage Line</b>	A natural depression with no streambed channel, which may only carry surface water during rainfall events.
<b>Drill hole</b>	A hole drilled into the material to be blasted for the purpose to contain the explosive charge.
<b>EIS</b>	Environmental Impact Statement.
<b>Environment</b>	A general term for all the conditions (physical, chemical, biological and social) in which an organism or group of organisms (including human beings) exists.
<b>EP&amp;A Act</b>	NSW Environmental Planning and Assessment Act 1979.
<b>EPA</b>	NSW Environment Protection Authority.
<b>EPL</b>	Environment Protection Licence.
<b>Erosion</b>	The process of wearing away of the land surface (whether natural or artificial) by the action of water, wind.
<b>Excavator</b>	Item of earth moving equipment either tracked or wheeled fitted with a bucket on an articulated boom and used for digging material from a quarry pit face in front of, or below the machine.
<b>Extraction</b>	A term synonymous with quarrying. Under the Environmental Planning and Assessment Act, 1979, quarrying is defined as "extractive industries".
<b>Flocculation Treatment</b>	The addition of an approved agent to water with high suspended sediment levels that cause the suspended material to clump together and fall out of solution as sediment.

Term	Meaning
<b>Flyrock</b>	Rocks propelled from the blast area by the force of an explosion.
<b>Ground vibration</b>	This defined as the Movement of the ground by elastic waves emanating from a blast, measured by particle velocity.
<b>ha</b>	hectare
<b>Initiation</b>	Detonation in an explosive material.
<b>Integrated Development</b>	Development which requires development consent and one or more of the approvals listed in Section 91 of the Environmental Planning and Assessment Act 1979.
<b>Habitat</b>	The place where an organism normally lives; habitats can be described by their floristic and physical characteristics.
<b>Haul Road</b>	Road used in quarry for haulage of extractive material from the worked quarry face to processing areas and for general site access to markets beyond the quarry.
<b>Local Environmental Plan (LEP)</b>	Local Environmental Plans are planning documents prepared by a Council which detail the zoning of land and the type of development which is permitted with consent in a particular zone. Controls on development are also provided.
<b>m/s</b>	Metres per second
<b>MIC</b>	Maximum instantaneous charge for blasting, measured in kg. Number of kg or holes firing at any instant during the blast.
<b>ML</b>	Megalitre: 1,000,000 litres.
<b>Monitoring</b>	The regular measurement of components of the environment to ensure that environmental guidelines standards are being met. eg. monitoring of noise from quarry blasting.
<b>Overburden</b>	Subsoil and decomposed rock overlying the main quarry rock body.
<b>Particle velocity</b>	A measure of ground vibration and is the velocity of motion of the ground particles as they experience wave energy resulting from a blast.



Term	Meaning
<b>( Quarry ) Processing Plant &amp; Facilities</b>	In the case of a quarry extraction operation, the combination of crushers, screens, conveyors and the like used to reduce the size of the rock and separate it into various sized products. Used in association with other quarry plant that includes aggregate pre-coating facility, fuel storage, sheds, offices, haul roads, weigh bridge and sediment basins.
<b>PPV</b>	Peak Particle Velocity (mm/s) - standard unit for measuring vibrations from blasting.
<b>RL</b>	Reduced Level. A height of the land relative to an established datum-usually AHD.
<b>Rehabilitation</b>	The preparation of a final landform after quarrying is completed and its stabilisation with grasses, trees and/or shrubs.
<b>Regional Environmental Plan (REP)</b>	A planning instrument made by the State. Regional Environmental Plans deal with planning issues of regional significance.
<b>River</b>	River has the meaning given under the Water Management Act 2002. In summary, this is "any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved".
<b>Road Base</b>	Road pavement usually made up of densely graded crushed rock in varying sizes.
<b>RMS</b>	NSW Roads & Maritime Services (formerly NSW Roads and Traffic Authority- RTA).
<b>Screening</b>	A process which separates quarry product into various sizes.
<b>Sediment pond / basin</b>	Collects waterborne sediment from disturbed areas within the quarry and stores that water while suspended sediments fall out of solution (settle).
<b>SEE</b>	Statement of Environmental Effects, required for a development application (DA) lodged pursuant to the provisions of the (NSW) EP&A Act.

Term	Meaning
<b>Soil Landscape</b>	An area of land that has recognisable and describable topography and soils that are capable of being represented on maps and of being described by concise statements. The Soil Conservation Service of NSW has published a Soil Landscapes Series, describing the soils of NSW.
<b>Spacing</b>	Distance between drill holes (used in blasting).
<b>Stemming</b>	Backfill on top of explosive column to contain explosive energy
<b>Stakeholder</b>	Persons, groups, government and semi-government agencies, and non-government organisations with a legitimate interest in the process of assessment, its inputs and outcomes, as described in the Director General's Requirements.
<b>State Environmental Planning Policy (SEPP)</b>	A planning instrument made by the State. State Environmental Plans deal with planning issues of State significance.
<b>The Site, or Project Site</b>	Refers to the land upon which the proposed development is to take place.
<b>Tertiary</b>	Period of geological time, prior to the Quaternary, 65 million years ago.
<b>Weathered Rock</b>	Rock affected to any degree by the processes of chemical or physical weathering.
<b>Visual Analysis</b>	Landscape analysis based on visual qualities only, excluding consideration of heritage, cultural or social values
<b>Visual Catchment</b>	Land within viewsheds. Viewsheds are edges or limits to views from a single place or combination of viewpoints.
<b>Zone</b>	A planning tool used to apply planning policy and provisions of an environmental planning instrument to specific areas of land within a local government area.



## ATTACHMENT A:

*Current development consent DA2014/0098*



10 September 2014

Reference: GD14/0098CVC: 1352573  
Contact: Pat Ridgway

Matsid Pty Ltd  
C/- Outline Planning Consultants P/L  
Suite 18  
No 5 Vuko Place  
WARRIEWOOD NSW 2102

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**NOTICE OF DETERMINATION OF APPLICATION**

Pursuant to Section 81(1)(a) of the Environmental Planning and Assessment Act, 1979

<b>Application No:</b>	DA2014/0098
<b>Applicant:</b>	Matsid Pty Ltd
<b>Owner:</b>	Matsid Pty Ltd
<b>Property Address:</b>	242 Faheys & Bulgins Road HERNANI NSW 2458
<b>Legal Description:</b>	Lot 62 DP 752807 & Lot 63 DP 752807
<b>Development Proposal:</b>	Expansion of Extractive Industry - Sheridan's Hard Rock Quarry

**DEVELOPMENT CONSENT**

Pursuant to Section 81(1)(a) of the Environmental Planning and Assessment Act, 1979, notice is hereby given that Council has considered your application for the subject Development. The subject determination is an "**operational**" consent which is effective from the date appearing on the bottom of each page of the formal notice.

**The Development Application has been determined by:**

Consenting to the development with conditions.

**Determination of the application was made:**

By the Joint Regional Planning Panel (Northern) at its meeting of 21 August 2014.

**Determination Date:**

21 August 2014

**Approved Plans and Documentation**

THE DEVELOPMENT SHALL COMPLY WITH THE PLANS LODGED WITH THE APPLICATION AND AS MAY BE AMENDED BY THE FOLLOWING CONDITIONS OF CONSENT AND/OR BY AMENDED PLANS AND DETAILS.

Consent Validation Date: 10 September 2014  
DA Consent: DA2014/0098  
Page 1 of 9



## Definitions

**Applicant** means Matsid Pty Ltd or any party acting upon this consent.

The current Engineering Standards are ;

- The Northern Rivers Local Government Development and Design Manual (AUS-SPEC)
- The Northern Rivers Local Government Construction Manual (AUS-SPEC)
- The Northern Rivers Local Government Handbook of Stormwater Drainage Design

Hereafter, these documents are referred to as NRDC. The current version of NRDC can be obtained from the Clarence Valley Council webpage

~~Throughout the advices and conditions civil works shall mean where applicable to the development :~~

- a) Earthworks
- b) Roadworks
- c) Drainage
- d) Structures

## Advice to Applicant

Council in determining the subject application requests you to take note of the following advice and where pertinent to convey the advice to future owners or tenants:

1. A suitably accredited private certifier may be engaged for all or part of the civil engineering works associated with this development. A private certifier who issues a construction certificate must forward a copy of the certificate along with a copy of the plans to which the certificate relates, to Council at least two days before work commences on the development.
2. Prior to work commencing on a development the applicant must give notice to Council of their intention to commence work on the development. Such notice shall be in the form of Form 7 of the Regulation and must be submitted to Council at least two (2) days before work commences.
3. **Signage** A sign must be erected in a prominent position on any work site on which work is being carried out:
  - a) Stating that unauthorised entry to the work site is prohibited, and
  - b) Showing the name of the person in charge of the work site and a telephone number at which that person may be contacted outside of working hours, and
  - c) Showing the name, address and telephone number of the principal certifying authority for the work, andAny such sign is to be removed when the work has been completed.

4. No civil construction works, including the removal of vegetation or topsoil, shall be commenced until a Construction Certificate for civil works has been issued by the Principle Certifying Authority.
5. The payment to Council of the schedule fee for development construction certificate/inspections is required in accordance with the adopted fees and charges current at the time of making application for the Construction Certificate.
6. Occupation of the road reservation is to be minimised and where absolutely necessary the appropriate approvals for traffic management, pedestrian access and construction traffic shall be obtained and shall be in accordance with the consent conditions of this approval. Any approval shall be in accordance with Section 138 of the Roads Act.
7. All building and construction work, which includes subdivision and civil works, which cost \$25,000 or more require the payment of the long service levy prior to a construction certificate being issued. The levy is required under the Building and Construction Industry Long Service Payments Act 1986. The total value of works must be included on the Construction Certificate Application form.
8. The name of the person/s responsible for the civil work design is to be submitted to Council (including details of qualifications, accreditations and insurances where these have not been submitted to Council within the 12 months prior to the work commencing or these details have changed) for approval prior to the submission of the construction certificate plans.

Approval of the Construction Certificate Plans will be current for a period of two years after which time Council may require the alteration to the Engineering Design to comply with standards current at that date unless the work has been substantially commenced. Three copies of the engineering plans for the construction certificate are required in hardcopy and one electronic copy in PDF format saved to PDF at the original drawing size.
9. It is the Developers responsibility to make satisfactory arrangements with other property owners affected by the development and to meet all costs associated therewith.
10. Effective measures are to be taken to prevent any nuisance being caused by noise, vibration, smell, fumes, dust, smoke, waste water products and the like at all times.

## Conditions of Consent

1. The development being completed in conformity with the Environmental Planning & Assessment Act 1979, the Regulations thereunder, the Building Code of Australia and being generally in accordance with the following documents and plans:
  - 'Hard Rock Quarry: Environmental Impact Statement', dated March 2014, prepared by Outline Planning Consultants Pty. Limited; including
    - Flora & Fauna Assessment by BushfireSafe (Australia) Pty Ltd, February 2014
    - Noise Impact Assessment by Vicpac Engineers & Scientists, dated 18 February 2014
    - Aboriginal Objects Due Diligence Assessment Report, BushfireSafe (Australia) Pty Ltd, dated February 2014 &
    - Traffic & Transport Assessment by RoadNet, dated March 2014
  - Erosion and Sediment Management Plan prepared by RoadNet, dated 8 October 2010,or where modified by any conditions of this consent.
2. Any proposal for the use of the existing structure on the site for an office and/or staff amenities building will require additional approval from Council.
3. This consent shall not take effect until such time as Development Consent DA2010/0358 is surrendered in writing.
4. Submission of a Plan of Management prepared by suitably qualified and experienced person/s to Council for approval prior to the commencement of quarrying under this development application. The Plan of Management is to include at least the following details:
  - operating details including: numbers, type and location (if fixed plant) of plant and machinery; numbers of employees on site and off site; stockpile and overburden storage areas; vehicle storage and refuelling areas; and fuel storage areas.
  - a plan identifying the sedimentation dam(s) at each proposed stage of the quarry operations. That is, as quarry expansions are proposed, any necessary relocation of sedimentation structures should be identified on the plan. The dimensions, capacity and anticipated levels of waste water within these structures should be included in this detail.
  - Details of measures for drainage or pumping from the dams after storm events are to be provided, including the time taken for the dams to empty.
  - any proposals for the re-use of waste water from the dams is to be provided. Such water could be used for water of access roads and exposed areas to avoid dust nuisance.
  - details of the monitoring and recording program of ground vibration and overpressure for blasting activities in accordance with the NSW EPA General Terms of Approval requirements.
  - full rehabilitation details, including fencing and signage details.

- details of dust mitigation measures and monitoring program.
  - details of noise mitigation measures for fixed and mobile plant and machinery and monitoring programs.
  - a schedule is to be included which allows for the annual update of the rates of extraction. This will ensure monitoring of the amount of material extracted and enable Council to calculate the contributions for Council road maintenance.
  - a waste management plan, including measures to optimise the efficiency of resource recovery and the reuse or recycling of material.
  - a code of conduct relating to the transport of materials on public roads, including a schedule so that haulage times do not coincide with school bus services.
  - a code of conduct for truck drivers
5. The establishment, operation and management of the development is to comply with the approved Plan of Management at all times.
- 
6. An annual update of the Plan of Management is to be submitted to Council by 31 July of each year. This update is to include a plan by a registered surveyor and statement demonstrating compliance with this consent and the Plan of Management. Specifically, the statement is to include:
- a) A site plan by a registered surveyor showing;
    - the extraction area at the date of report
    - the areas intended for extraction in the next twelve (12) months
    - sediment ponds
    - stockpile sites
    - overburden storage sites
    - erosion controls in place at the time of the report
  - b) Written details addressing:
    - state of compliance with each condition of consent and the Plan of Management at the time of the report
    - the quantity of material extracted in the immediately preceding twelve (12) months
    - the quantity of material proposed to be extracted in the next twelve (12) months
    - results from all monitoring programs for the preceding twelve (12) months
    - sedimentation ponds constructed during the proceeding twelve (12) months or proposed to be constructed in the next twelve (12) months
    - revision of the expected life of the extractive operation
    - a staged rehabilitation plan for the life of the quarry
7. Development consent is given to extract a maximum of up to 73,600 cubic metres of material per year.

8. The area of the quarry is not to exceed 5.73ha as shown in the 'staging of quarry operations' in the Environmental Impact Statement submitted with the application. All blasting, crushing, screening, stockpiling, and loading is to be undertaken in this area. All sedimentation dams are to be located in this area.
9. The quarry/extraction area is to be defined on the ground by the establishment of permanent survey marks located and shown on a plan by a registered surveyor and submitted to council, prior to the commencement of quarrying.
10. All vehicles associated with the use of the premises, including employee's vehicles, are to be parked within the confines of the site, at all times.
11. The hours of operation shall be limited to between 7.00am to 6.00pm Monday to Friday and 7.00am to 1.00pm on Saturdays.

---

12. Hours of blasting to be restricted to 9.00am to 3.00pm Monday to Fridays.
13. There is to be no quarrying, processing or transportation on Sundays or statutory public holidays except for emergency purposes; for example, but not limited to, sudden damage to public infrastructure or any damage posing an immediate risk to life or property.

The quarry operator is to inform Council on the first working day following the emergency that trucks were carrying quarry products outside the approved hours for emergency purposes.
- 13A. No haulage of quarry product is permitted east of the intersection of Waterfall Way and Maynards Plains Road on Saturdays except for emergency purposes.

The quarry operator is to inform Council on the first working day following the emergency that trucks were carrying quarry products outside the approved hours for emergency purposes.
14. A sign must be erected on the subject land in a prominent position visible from the entrance of the property during quarry operations. The sign is to:
  - state that unauthorised entry to the quarry work area is prohibited; and
  - show the name of the person in charge of the quarry operations and a contact number for that person.
15. Accurate records of quantities extracted are to be kept, maintained and available for inspection by authorised council officers on request. The method of recording and the location where records are to be kept are to be outlined in the Plan of Management.
16. Should any aboriginal relics or artefacts be uncovered during works on the site, all work is to cease and the Director-General of the NSW Department of Environment and Conservation shall be contacted immediately and any directions or requirements of that Department complied with.

17. No advertising sign is to be erected, painted or displayed without approval from Council.
18. Payment to Council of a road maintenance contribution per annum for the use of Council's roads by extractive industry trucks based on \$0.21 per cubic metre.

NB

1. The contribution(s), as assessed, will hold for a period of 12 months from the date of this approval. Contributions not received by Council within 12 months of the date of this determination will be adjusted in accordance with the movement in the Consumer Price Index.
  2. The contributions are to be paid to Council on an annual basis with the submission of the annual update of the Plan of Management. The amount will be determined by the extraction amounts specified in the Plan of Management and revised annually by the operator.
  3. In the event of any subsequent amendment of the approved Development Plans, the calculated contribution amounts may vary and if so will become the contribution payable.
19. Prior to the commencement of quarrying, submission of satisfactory Work as Executed Plans for all works relevant to the development as stipulated in the Traffic Impact Assessment prepared by RoadNet dated 14 March 2014, and certification from the supervising professional engineer or land surveyor, that the works have been constructed in accordance with the approved plans and specifications.  
  
The Work as Executed plans shall include detailed records of the materials used, inspection and testing for the construction of WSUD components in accordance with the Council approved staging plans, NRDC and SEQ WSUD.
20. The developer shall be responsible for any costs relating to alterations and extensions of existing roads, drainage and services for the purposes of the development.
21. During the course of work on the development should it become necessary to occupy the road reservation for any reason not included in an approved Traffic Management Plan, even short term, then a specific Traffic Control Plan for the event or events, prepared by a person authorised by the RTA to prepare Traffic Control Plans, must be submitted to and approved by Council prior to the occupation. The submission must include the reasons that the occupation is required and any revision of the Construction Management Plan and/or Traffic Management Plan to accommodate the change in the construction methodology.
22. All quarry trucks are to travel via Bald Hills Road onto the Waterfall Way.
23. No access of quarry trucks shall be allowed on Bald Hills Road within 15 minutes before and after the school bus run morning and afternoon.



24. Council's Development Engineer shall be notified before commencement of any vehicular crossing or road works on the haul route.
  25. During dry weather, standard dust suppressions methods are to be used as often as is necessary to ensure that adjoining properties are not adversely affected by undue dust.
  26. The zone 10-15m from the edge of the rock scarp is to be surveyed and clearly demarcated with fencing on the top adjacent to the quarry and other suitable permanent measures elsewhere and is to be protected from any potential impacts arising from the quarry operations.
  27. No existing trees are to be removed from the site, with the exception of those identified for removal in the application.
  28. The quarry is to operate in accordance with the Noise Impact Assessment by Vicpac Engineers & Scientists, dated 18 February 2014.
- 
29. Compliance with the conditions and advice of the NSW Environmental Protection Authority as contained in the General Terms of Approval, dated 24 April 2014, consisting of 12 pages and as attached to this Notice of Determination.
  30. The applicant is to develop a staged rehabilitation plan for the life of the quarry and submitted to Council for approval prior to operation of the quarry under this approval.
  31. A copy of the updated Stormwater Management Plan (SWMP), required by the NSW EPA is to be submitted to the NSW EPA and Council prior to operation of the quarry under this approval.
  32. All hazardous materials are to be appropriately stored so as to prevent environmental damage in case of spillage or contaminated lands. Oils and lubricants shall be stored in an impermeable permanent bunded and roofed area with holding capacity of 110% of the total volume of all containers. Fuel and oil shall be only handled or transferred in designated areas on the site. Plans showing the designated areas and details of bunds and drainage shall be submitted to and approved by the Council and approved works shall be carried out before any such handling or transfer area is used.
  33. Drainage berms are to be constructed so as to direct clean run-off around the quarry area. All run-off from disturbed areas, including access roads, is to be diverted into sedimentation dams. The design and location of these features is to be incorporated into the plan of management and revised as required.
  34. All trucks carrying quarry or crusher products from the site shall ensure their loads are fully covered by a suitable material to prevent spillage or dust falling from the truck.

85. The applicant is required to implement the recommendations identified in Section 6.1 of the Traffic & Transport Assessment prepared by RoadNet dated March 2014. All proposed works must be supported with a detailed design plan submitted to Council for approval prior to construction. No construction is to be commenced until a Civil Construction Certificate for works on Council roads has been issued.

All works must be completed prior to the activation of the development approval.

#### **Reasons**

1. To ensure that the development complies with Council's Local Environmental Plan and any Development Control Plan that may be applicable to the proposed development.
2. To ensure that the surrounding environment is not detrimentally affected as a result of the development.
3. To comply with legislative requirements.
4. To ensure works are completed to an appropriate standard and documented.
5. To ensure that adequate infrastructure and services are provided in accordance with Council's Engineering Specifications for development.

#### **Right of Appeal and Validity of Consent**

Section 97 of the Act provides that you have a right of appeal to the Land and Environment Court against Council's decision in the matter, exercisable within 6 months after receipt of this notice.

Section 98 of the Act provides that any person who makes a submission in writing objecting to the proposal and who is dissatisfied with the decision may appeal to the Land and Environment Court, exercisable within 28 days of the date of this notice.

Consent becomes effective from the consent validation date. Section 95 of the Act provides for the period of validity of consent, and it is the applicant's responsibility to ensure that commencement of the development is carried out within the prescribed period. The consent period for this application will be five (5) years.

If you require any further information in regard to this notice of determination please contact Pat Ridgway of Council's Environment, Development and Regulated Services section on (02) 6645 0288.

Yours sincerely,



Pat Ridgway  
Senior Development Planner



# ATTACHMENT B:

## VIPAC acoustic & dust advice





**Vipac Engineers & Scientists Ltd.**

4/5 Leo Lewis Close, Toronto, NSW 2283, Australia

PO Box 306, Toronto, NSW 2283, Australia

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Sheridan's Hard Rock Quarry (Hernani)

11 May 2016

c/o Outline Planning Consultants Pty Ltd

Suite 18, Pittwater Business Park, 5 Vuko Place

Ref: 29N-12-0122-GCO-473113-0

Vuko Place, New South Wales, 2102, Australia

**Re: Sheridan's Hard Rock Quarry (Hernani) – Traffic Noise Assessment – Truck Volumes**

Dear Gary,

This letter is written to confirm the details regarding the Traffic Noise Assessment included within the Noise & Vibration Impact undertaken by Vipac in February 2014, regarding the proposed expansion of the Sheridan's Hard Rock Quarry, located at 242 Fahey's (& Bulgins) Road, Hernani, NSW 2453.

At the time the Noise Assessment was undertaken, the Conditions of Consent permitted a maximum of 20 loaded trucks per day along the haul route and the noise emissions associated with the permitted volume of trucks servicing the quarry was found to be within the acceptable noise criteria in accordance with the NSW EPA Road Noise Policy.

In addition to the assessment of the traffic noise impact associated with the 20 loaded trucks per day operating from the quarry, Vipac also undertook an assessment to determine the maximum number of loaded trucks per hour that could travel along the haul route and maintain noise emissions at the nearest noise sensitive receptors (located in proximity to the quarry site), within the Road Noise Policy limit criteria.

It was determined that a maximum of up to 6 loaded trucks per hour could travel along the haul road without exceeding the Road Noise Policy noise limit at the nearest neighbouring noise sensitive receptors located along Fahey's & Bulgins Road, taking into account the improved sections of the road with the sealed sections of the road passing the nearest noise sensitive receptors. This equated to a total of 66 loaded trucks based on the permitted operating hours for the quarry of 07:00hrs to 18:00hrs Monday to Friday and 07:00hrs to 13:00hrs on Saturdays, in accordance with the Conditions of Consent for the quarry.

Should you require any further information regarding the details of the Noise & Vibration Impact Assessment undertaken for the quarry, please do not hesitate to contact us.

Yours sincerely,

Darragh Kingston

**Manager Hunter Valley/Newcastle, Team Leader - Acoustics**

**Vipac Engineers & Scientists Ltd**

11 May 2016





**Vipac Engineers & Scientists Ltd.**

4/5 Leo Lewis Close, Toronto, NSW 2283, Australia

PO Box 306, Toronto, NSW 2283, Australia

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Outline Planning Consultants Pty Ltd  
Suite 18, Pittwater Business Park, 5 Vuko Place  
Vuko Place, New South Wales, 2102, Australia

23 Jun 2016

Ref: 29N-12-0122-GCO-399163-0

Dear Gary Peacock,

Sheridans Hard Rock Quarry – Dust Review Letter

Clarence Valley Council (CVC) requested a dust impact assessment in respect to the proposed increase in traffic movements associated with Sheridans Hard Rock Quarry (SHRQ), Hernani, NSW.

Vipac Engineers and Scientists (Vipac) have not undertaken a full dust impact assessment as requested in CVC's letter dated 9<sup>th</sup> June 2016 as we do not consider a full assessment is required. Vipac have reviewed the information and this letter presents the justification.

SHRQ proposes to increase the maximum number of loaded trucks per day along the haul from 20 trucks to 66 trucks (six loaded trucks per hour during the operational hours 07:00 - 18:00 hours Monday to Friday and 07:00 - 13:00 hours on Saturdays).

There are two dwellings adjacent to the haul road used by the trucks; Braund and Welsh dwellings. The increase in dust emissions associated with traffic movements relates primarily to the wheel generated dust emissions on unpaved roads.

When considering the wheel generated emission it has been noted that the road in the vicinity of the two dwellings has been sealed as follows:

- Braund dwelling – the sealed section of the road extends approximately 180 m to east of the dwelling entry and approximately 468 m to the west of the dwelling, comprising of a total 648 m of bitumen sealing, with a minimum width of seal of 7.4 m and up to 9 m seal or wider in places.
- Welsh dwelling – the sealed section of road extends approximately 300 m to east of the dwelling entry and approximately 230 m to the west of the dwelling, comprising of a total 530 m of bitumen sealing, with a minimum width of seal of 7.0 m.

The equation used to determine the emissions from wheel generated dust is detailed in *National Pollution Inventory (NPI) Emission Estimation Technique (EET) Manual for Mining* (Department of Sustainability, Environment, Water, Population and Communities, 2012). The equation relates to unpaved roads, however the EET also provides suitable emission controls for unpaved haul roads to allow the appropriate mitigation to be assessed. For haul roads, the EET states that sealing (or salt-encrusted roads) will provide 100% reduction in wheel generated dust emissions and is considered the best form of dust mitigation.

At the closest point, the unpaved road is 180 m from a dwelling; previous dust impact assessments for similar projects has shown that wheel generated dust does not disperse very far due to the weight of the dust particles. As such, the likelihood of the wheel generated dust from the unpaved sections of road dispersing beyond 180 m is very unlikely.

23 Jun 2016



It should be noted that all loaded trucks are covered during transportation and therefore wind erosion from product material is not considered to be a concern.

Overall, the increase in truck movements associated with the SHRQ is unlikely to increase the dust emissions at nearby dwellings due to the existing mitigation of sealing large sections of the haul road.

Yours faithfully

**VIPAC ENGINEERS & SCIENTISTS LTD**

A handwritten signature in black ink, appearing to read "M. Clifton", written over a faint horizontal line.

Michelle Clifton

Consulting Scientist

23 Jun 2016

# ATTACHMENT C:

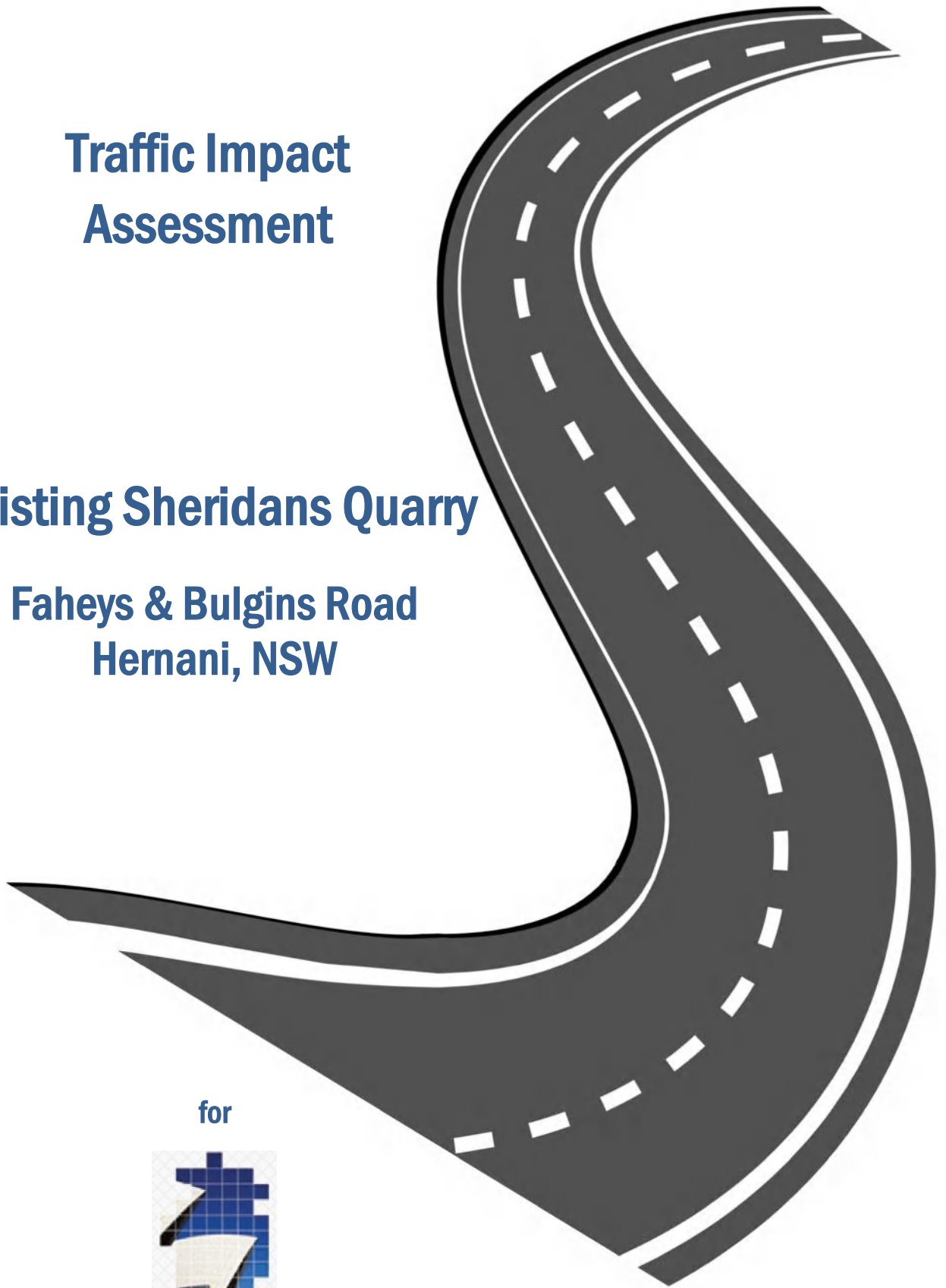
## Traffic assessment & advice Streetwise Pty Ltd



# **Traffic Impact Assessment**

## **Existing Sheridans Quarry**

**Faheys & Bulgins Road  
Hernani, NSW**



for



Outline Planning Consultants Pty Ltd

15 June 2016

## Sheridans Quarry – S.96 Traffic Impact Assessment

Generic Document No.				
Edition / Revision No.	1	2		
Document Status	Draft	Final		
Prepared By	Andy Davis Director	Andy Davis Director		
Reviewed By	Craig Nethery Director	Craig Nethery Director		
Date	15 June 2016	16 June 2016		
Internal Review Completed By / Date				

**StreetWise Road Safety & traffic Services Pty Ltd**  
PO BOX 1395  
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NSW 2444

Mob:- 0412 009 558 (Craig Nethery)  
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Email:- andy@streetwisersa.com.au

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## 1. BACKGROUND

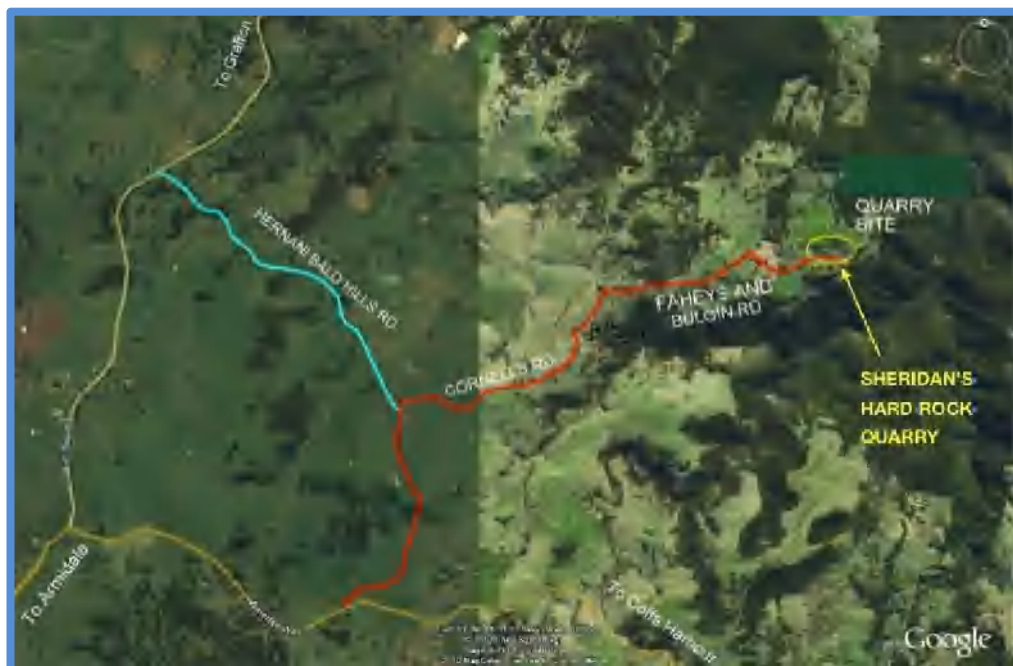
### 1.1 Introduction

StreetWise Road Safety and Traffic Services have been engaged by Outline Planning Consultants, on behalf of quarry operators, Sheridan's Hard Rock Quarry Pty Ltd, to assess the traffic volumes and impacts of proposed changes to existing quarry activities at Sheridans Quarry, Faheys & Bulgin Road, Hernani.

The quarry operator currently manages an existing hard rock quarry with approval to extract crushed gravel at a rate of up to 198,000 tonnes per annum. The current conditions allow up to 20 loaded truck & dog trailer movements per day. The operator is not planning to increase the annual output of the quarry, but requires more flexibility to meet peak demands for crushed gravel, including the increased demands of the current Pacific Highway upgrade projects. To meet these demands, the operator seeks to occasionally increase the haulage of gravel to 66 loaded trucks per weekday and 36 trucks on Saturdays.

### 1.2 Location of Quarry

Sheridan's Hard Rock Quarry is located within the Clarence Valley Council area, approximately 60km west of Coffs Harbour and 19km to the west of the township of Dorrigo. It is located on the northern side of Faheys & Bulgins Road which is a local rural road, approximately 10.4kms north-east of Waterfall Way. A locality plan is provided at Figure 1.



**Figure 1 – LOCALITY SKETCH**

The existing quarry site is located within a remote rural area and is surrounded by a mix of agriculture, native vegetation and isolated rural dwellings. It is currently accessed via an approved quarry haul route made up of local rural roads. These roads include Faheys & Bulgins Road (on which the site access to the quarry is located), Cornelius Road and Hernani – Bald Hills Road. At its southern end Hernani – Bald Hills Road connects to Waterfall Way (MR78), which is a state controlled road operated and maintained by the Roads and Maritime Services (RMS). The Waterfall Way intersection was upgraded as a condition of the original DA approval.

### 1.3 Background

Development consent to operate a quarry on the subject site was originally approved 4 May 2011 (DA 2010/0358), which allowed quarrying on a 2ha site, producing approximately 80,000 tonnes per annum of quarry product, with up to 20 loaded trucks per day permitted.

Since that time, the quarry and associated processing facility, has operated generally in accordance with the development consent conditions. A further Development Consent (DA2014/0098) was approved in September 2014, allowing quarrying over a site area of 5.73ha, and increasing the output to 198,000 tonnes per annum of quarry product, with up to 20 loaded trucks per day permitted.

### 1.4 Previous Traffic Assessments

Following the initial grant of consent in 2011 Faheys & Bulgins Road has been upgraded by Sheridan's Hard Rock Quarry Pty Ltd to a standard beyond that required the 2011 Council Consent (ie. DA 2010/0358 & MOD 2011/0074), comprising the following works:

- Upgrading Faheys & Bulgins road to a generally 2 lane (gravel) rural road standard, with improvements to road drainage- the Council consent requiring only an upgraded rural road to a 1-lane standard with passing bays.
- Sealing of 648m of rural road in front of the Braund residence and 530m in front of the Welsh residence, a total of 1.178km of road sealing work, to a minimum sealed width of 7m.
- Upgrading of the intersection of Bald Hills Road and the Waterfall Way. Construction works undertaken by the RMS, paid for by Sheridan's Hard Rock Quarry Pty Ltd. These road improvements have been made to improve local amenity by minimising dust and noise impacts, and provide a much safer, less hazardous road environment for all users of the haul road.

As a part of the (now approved) 2014 EIS, RoadNet Pty Ltd were engaged to undertake a traffic and transport assessment for the proposed expansion of an existing Council approved hard rock quarry. The conclusions and recommendations of the March 2014 RoadNet assessment report, accompanying the March 2014 EIS, included the following:

- The quarry operator has carried out extensive upgrades to the approved quarry haulage route in response to Council's conditions of consent for the existing quarry development. The upgrades go well beyond what was identified as being required.
- The upgrading of the intersection of Bald Hills Road and the Waterfall Way "have not only led to an improvement in safety for all traffic using the intersection, but they also provide additional capacity which will extend the overall 'life' of the intersection."(p.11 of the RoadNet report)
- Prior to the quarry development the local road system was in a poor state of repair even though it accommodated a similar volume of truck traffic associated with agricultural activities in the area. The upgraded haulage route therefore provides a much higher and safer standard of road for all motorists that use it.
- No additional upgrades to the road network beyond those already undertaken will be required in the absence of any traffic impacts arising from the proposed development. "Furthermore, no additional upgrades to the road network beyond those already undertaken will be required in the absence of any traffic impacts arising from the proposed development. The haulage route has already been extensively upgraded from a one lane route with limited passing opportunities to a generally two lane two way rural road standard.."(p.15 of RoadNet report)



RoadNet's recent Traffic Report also assessed the capacity of the haulage route, and found it had adequate capacity to cater for the existing quarry-generated trips, local traffic and the estimated future increase in haulage truck movements i.e. "The approved, upgraded, haulage route is expected to operate acceptably, with a capacity of at least 150 vehicles per day, with a resultant spare capacity available for up to an additional 63 vehicles per day. "Overall, therefore, it is concluded that the upgraded quarry haulage route could accommodate a design volume of at least 150 vehicles per day."(p.30 of RoadNet report)"

## 2. TRAFFIC

### 2.1 Existing Traffic Generation

As per previous traffic assessments, the following total daily volumes of traffic (two-way) are estimated the southern end of the approved quarry haulage route on Hernani – Bald Hills Road:

- Background traffic (mainly existing residential trips) – 27 vehicles per day
- Trip generation from current quarry operations:
  - 40 truck movements per day (20 loaded movements + 20 return)
  - Staff movements (AM and PM) - 15 trips per day,
  - Miscellaneous movements - 5 trips per day (say) (external contractors etc.)
- Maximum traffic demand on haulage route: 87 vehicle movements per day

### 2.2 Future Traffic

The operator is seeking to occasionally increase haulage movements to 66 loaded trucks on weekdays and 36 on Saturdays. This is an increase of up to 46 loaded trucks per day, or 92 trips. However, spread over a 9 hour working day, the increase is approximately 5 loaded trucks or 10 trips per hour.

Therefore, on a peak day, the total estimated vehicle movements on the haulage route would be 179. Given the existing haulage route has a capacity of at least 150 vehicles per day, and the operator is planning only occasional increases to the 66 loaded trucks per day, it is unlikely that the additional traffic on peak days will have any significant impact on the haulage route or local traffic movements. Table 4.5 below indicates the current rural road formation of the existing haulage route can cater for up to 500 vehicles per day.

### 2.3 Existing road capacity

As per the recent RoadNet report, Table 4.5 below indicates that a single carriageway with one sealed traffic lane 3.7m wide and 2.5m unsealed shoulders could accommodate a design AADT (Annual Average Daily Traffic Volume) of up to 150 vehicles per day. This is similar to the arrangement provided on Hernani - Bald Hills Road, which has a seal width of approximately 4m and gravel shoulders of approximately 1.0m either side, depending on the specific location.

Cornells Road and Faheys & Bulgins Road which provides a minimum formation width of 7.0m, could accommodate up to 500 vehicles per day. However, the latter is unsealed which is likely to reduce its capacity, but the roadway should accommodate at least 150 vehicles per day. Overall, therefore, it is concluded that the upgraded quarry haulage route to Waterfall Way could accommodate a design volume of at least 150 vehicles per day. Hence the approved haulage route is expected to operate acceptably with spare capacity available.

Some guidance on the daily volumes that can be accommodated by single carriageway rural roads with varying widths of seal is provided in Austroads Guide to Road Design, Part 3: Geometric Design, 2009. Table 4.5 from that document is reproduced below for reference.



Table 4.5: Single carriageway rural road widths (m)

Element	Design AADT				
	1 – 150	150 – 500	500 – 1,000	1,000 – 3,000	> 3,000
Traffic lanes <sup>1</sup>	3.7 (1 x 3.7)	6.2 (2 x 3.1)	6.2 – 7.0 (2 x 3.1/3.5)	7.0 (2 x 3.5)	7.0 (2 x 3.5)
Total shoulder	2.5	1.5	1.5	2.0	2.5
Minimum shoulder seal <sup>2</sup> (Shoulder only)	0	0.5	0.5	1.0	1.5
Total carriageway	8.7	9.2	9.2 – 10.0	11.0	12.0

1. Traffic lane widths include centre-lines but are exclusive of edge-lines.
2. Where significant numbers of cyclists use the roadway, consideration should be given to fully sealing the shoulders. Suggest use of a maximum size 10mm seal with a 20 km radius of towns.
3. Wider shoulder seals may be appropriate depending on requirements for maintenance costs, soil and climatic conditions or to accommodate the tracked width requirements for Large Combination Vehicles.
4. Short lengths of wider shoulder seal or lay-bys to be provided at suitable locations to provide for discretionary stops.
5. Full-width shoulder seals may be appropriate adjacent to safety barriers and on the high side of super-elevation.
6. A minimum 7.0 m seal should be provided on designated heavy vehicle routes (or where the AADT contains more than 15% heavy vehicles).

Table 2 – Design Volumes for Single Carriageway Rural Roads  
(Austroads Guide to Road Design, Part 3: Geometric Design, 2009)

The capacity of Waterfall Way has been discussed in earlier reports. The classified road currently carries less than 1000 vehicles per day, and has been shown to have adequate capacity to cater for any future increase in traffic generated by the quarry.

## 2.4 Traffic Impacts

Existing traffic volumes on the local network in the vicinity of the quarry, and also on Waterfall Way, are relatively low. As per the Traffic Impact Assessment submitted with the previous development Application, the increased traffic generated by the quarry operations will not have a significant impact on existing traffic flows.

The roads utilised in the existing haul route have adequate capacity to cater for the current truck and dog trailer movements. The roads used for haulage to Waterfall Way have all been upgraded to cater for the loaded haulage trucks, while the intersection with Waterfall Way has also been upgraded recently.

## 3. CONCLUSION

- The S.96 proposal seeks to occasionally increase the daily number of loaded truck movements to meet peak construction demands, but does not plan any increase in the overall production of the site (198,000 tonnes per annum)
- It is intended that the occasional increase in the daily number of loaded quarry trucks along the quarry haulage route would be a maximum of 66 laden trucks per day, and a maximum of 36 laden trucks on Saturdays. This is an average increase of 5 loaded trucks per hour on the haulage volumes currently approved under the existing development consent (20 loaded trucks per day).
- Other relevant aspects of the proposed development which are intended to remain unchanged include:
  - \* Annual production from the quarry (198,000 tonnes)
  - \* Existing hours of operation
  - \* Approved haulage route



- \* Maximum sized vehicle used for transport of product from quarry which would be a truck and dog with a nominal payload capacity of 30-33 tonnes
- \* General nature of quarrying process and operations on site, types of machinery used, etc.
- \* General management of site operations, safety, impacts on local amenity, environmental impacts etc., through the existing consent conditions, Quarry Plan of Management etc.

The previous Traffic Report by RoadNet states that the existing haulage route, including Faheys & Bulgins Road, Cornells Road and Hernani – Bald Hills Road has adequate capacity to cater for at least 150 vehicles per day. Austroads guidelines indicate the existing road formation of the haul route can cater for up to 500 vehicles per day.

In conclusion, the operator is seeking to occasionally increase haulage truck movements to a maximum of 66 loaded movements per day to meet peak demands. The number of times the maximum truck volumes can be generated is restricted by the current annual production limit of 198,000 tonnes per annum.

Based on this assessment it is concluded that the traffic impacts of the proposed S.96 amendment are acceptable. StreetWise therefore recommends that the proposed occasional increase in haulage truck movements (to 66 loaded trucks per day) should be allowed to proceed on traffic engineering grounds.







**Address:-**  
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**Contact:-**  
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The General Manager  
Clarence Valley Council  
Locked Bag 23,  
GRAFTON  
NSW 2460

Attention:- Renan Solatan, Development Engineer

22 June 2016

## DEVELOPMENT CONSENT CONDITIONS FOR SHERIDANS QUARRY 242 FAHEY'S & BULGINS ROAD, HERNANI

Dear Renan

On Friday 5 February 2016 you attended a meeting / site inspection at the above location with myself and the Quarry Operator – Graham Sheridan to discuss the development consent conditions (mainly no.35 – DA2014/0098) with respect to what was required to gain development approval.

The following is an extract of the RoadNet report in question outlining the conditions required to be completed.

No.	Item	Status
1	<u>Waterfall Way</u> G3-3 & G3-3 Signage to be provided at the Waterfall Way & Hernani / Bald Hills Road Intersection.	Completed under separate RMS WAD.
2	Shrubs on left hand edge of westbound carriageway of the Waterfall Way impact on Approach Sight Distance for the Hernani / Bald Hills Road intersection.	Completed under separate RMS WAD.
3	Large super advanced trees within clear zone located approximately 80m west of the Hernani / Bald Hills Road intersection.	Completed under separate RMS WAD.
1	<u>Hernani / Bald Hills Road (Waterfall Way to Cornells Road)</u> Provision of lay bys / overtaking bays at approximately 2km spacings to allow safe passing/overtaking on the existing single lane road (see [2010 Traffic Report] - Appendix 6).	Design to be submitted
2	Assessment of alignment to be completed for the provision of W5-11 "Crest" and accompanying advisory speed signage where required.	No longer required. CVC to investigate.
3	Insufficient provision of guideposts along route.	No longer required.



4	<i>No advanced warning signage and delineation at existing cattle / stock grids.</i>	Not required as this cattle grid is to be removed as part of passing bay construction.
5	<i>No advanced intersection warning signage W2-4 at the "Bald Hills" access.</i>	No longer required. CVC to investigate.
6	<i>Investigate extension of all cross road culverts so as inlets / outlets are inside the clear zone requirements for the function of the road.</i>	No longer required.
7	<i>Determine what vegetation (trees) are to be removed / lopped in order to maintain a safe travel corridor.</i>	No longer required as part of this consent. CVC to monitor as part of their road maintenance.
1	<u>Cornells Road</u> <i>Provision of lay bys / overtaking bays at approximately 2km spacings to allow safe passing/overtaking on the existing single lane road</i>	Has previously been completed where a section of road has been widened to cater for passing.
2	<i>Assessment of alignment to be completed for the provision of W5-11 "Crest" and accompanying advisory speed signage where required.</i>	No longer required. CVC to investigate.
3	<i>Assessment of alignment to be completed for the provision of advanced curve warning and accompanying advisory speed signage where required.</i>	No longer required. CVC to investigate.
4	<i>Insufficient provision of guideposts along route.</i>	No longer required.
5	<i>Provision of advanced warning signage and delineation at existing cattle / stock grids.</i>	No longer required. Maintenance of cattle grids is the responsibility of the owner of the property.
6	<i>Investigate extension of all cross road culverts so as inlets / outlets are outside the clear zone requirements for the function of the road.</i>	Culverts were extended as part of previous road upgrade.
7	<i>Determine what vegetation (trees) are to be removed / lopped in order to maintain a safe travel corridor.</i>	No longer required as part of this consent. CVC to monitor as part of their road maintenance.
8	<i>Ponding of water in table drains after rain events.</i>	No longer required as part of this consent. CVC to monitor as part of their road maintenance.
1	<u>Faheys Road and Bulgins Road</u> <i>Substandard gravel formation.</i>	No longer required as part of this consent. Quarry Operator has previously upgraded

		this section of road to provide safer access for public and quarry vehicles.
2	<i>Provision of lay bys / overtaking bays at approximately 2km spacings to allow safe passing/overtaking on the existing single lane road.</i>	Has previously been completed where a section of road has been widened to cater for passing.
3	<i>Assessment of alignment to be completed for the provision of W5-11 "Crest" and accompanying advisory speed signage where required.</i>	No longer required. CVC to investigate.
4	<i>Assessment of alignment to be completed for the provision of advanced curve warning and accompanying advisory speed signage where required.</i>	No longer required. CVC to investigate.
5	<i>Insufficient provision of guideposts along route.</i>	No longer required.
6	<i>Provision of advanced warning signage and delineation at existing cattle / stock grids.</i>	No longer required. Maintenance of cattle grids is the responsibility of the owner of the property.
7	<i>Investigate extension of all cross road culverts so as inlets / outlets are outside the clear zone requirements for the function of the road.</i>	Culverts were extended as part of previous road upgrade.
8	<i>Determine what vegetation (trees) are to be removed / lopped in order to maintain a safe travel corridor.</i>	No longer required as part of this consent. CVC to monitor as part of their road maintenance.
9	<i>Ponding of water in table drains after rain events.</i>	No longer required as part of this consent. CVC to monitor as part of their road maintenance.

The above table indicates what was agreed to by yourself at the site inspection / meeting leaving the design and construction of the passing bays on Bald Hills / Hernani Road remaining outstanding.

Should you wish to discuss the information provided in this letter further please contact either Craig or Andy on the contact details provided in this proposal.



Craig Nethery (Director)  
StreetWise Road Safety & Traffic Services Pty Ltd