



Environmental Management Strategy



Bentley Quarry

R & S Contracting Pty Ltd

12 March 2024

→ The Power of Commitment



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GHD Pty Ltd | ABN 39 008 488 373

230 Harbour Drive,

Coffs Harbour, New South Wales 2450, Australia

T +61 2 6650 5600 | **F** +61 2 9475 0725 | **E** cfsmail@ghd.com | **ghd.com**

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1. Introduction

R&S Contracting Pty Ltd own and operate the hard rock quarry known as Bentley Quarry at Lot 2 DP 1196757 – 1465 Bentley Road, Bentley in Richmond Valley Council Local Government Area (the site) (Figure 1.1). The quarry provides a range of materials to local Councils and contractors.

This Environmental Management Strategy (EMS) has been prepared in response to Condition 101 of the Notice to Applicant of Determination of a Development Application for Development Application No. DA2022/0107:

ENVIRONMENTAL MANAGEMENT STRATEGY

101. Prior to commencement of operations, the Operator must prepare and implement an Environmental Management Strategy for the development taking into consideration any management and mitigation measures identified in the Environmental Impact Statement titled *Bentley Quarry Environmental Impact Statement* (GHD 11 November 2021) and any management plans and monitoring programs approved under the conditions of this approval. The Strategy must:

- a) Provide the strategic context for environmental management of the project;
- b) Identify the statutory requirements that apply to the project;
- c) Describe the role, responsibility, authority and accountability of the key personnel involved in the environmental management of the project; and;
- d) Describe the procedures that would be implemented to:
 - i. Keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project;
 - ii. Receive, handle, respond to and record complaints;
 - iii. Resolve any disputes that may arise during the life of the project;
 - iv. Respond to any non-conformances;
 - v. Manage cumulative impacts; and
 - vi. Respond to emergencies.

The EMS provides the framework for environmental management of the site operations. The EMS identifies and documents the key environmental risks and mitigation measures implemented to ensure that the environmental objectives and legal obligations are met.

This EMS has been prepared in consultation with Richmond Valley Council (RVC) and the Environment Protection Authority (EPA) and with reference to the following documentation:

- Bentley Quarry Environmental Impact Statement (GHD 2021).
- ISO14001:2015 – Environmental Management Systems.
- Department of Infrastructure, Planning and Natural Resources (DIPNR) (2004) Guidelines for the preparation of Environmental Management Plans.
- Notice of Determination of Development Application (No. DA2022/0107) dated 16/12/2022.
- Relevant legislation (Section 4).

1.1 EMS objectives

The key objectives for this EMS are:

- Compliance with relevant environmental legislation and regulations
- Compliance with the Conditions of Development Consent No. DA2022/0107
- Minimising community and environmental impacts

1.1 Scope and limitations

This report has been prepared by GHD for R & S Contracting Pty Ltd and may only be used and relied on by R & S Contracting Pty Ltd for the purpose agreed between GHD and R & S Contracting Pty Ltd as set out in Section 1.1 of this report.

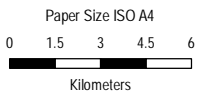
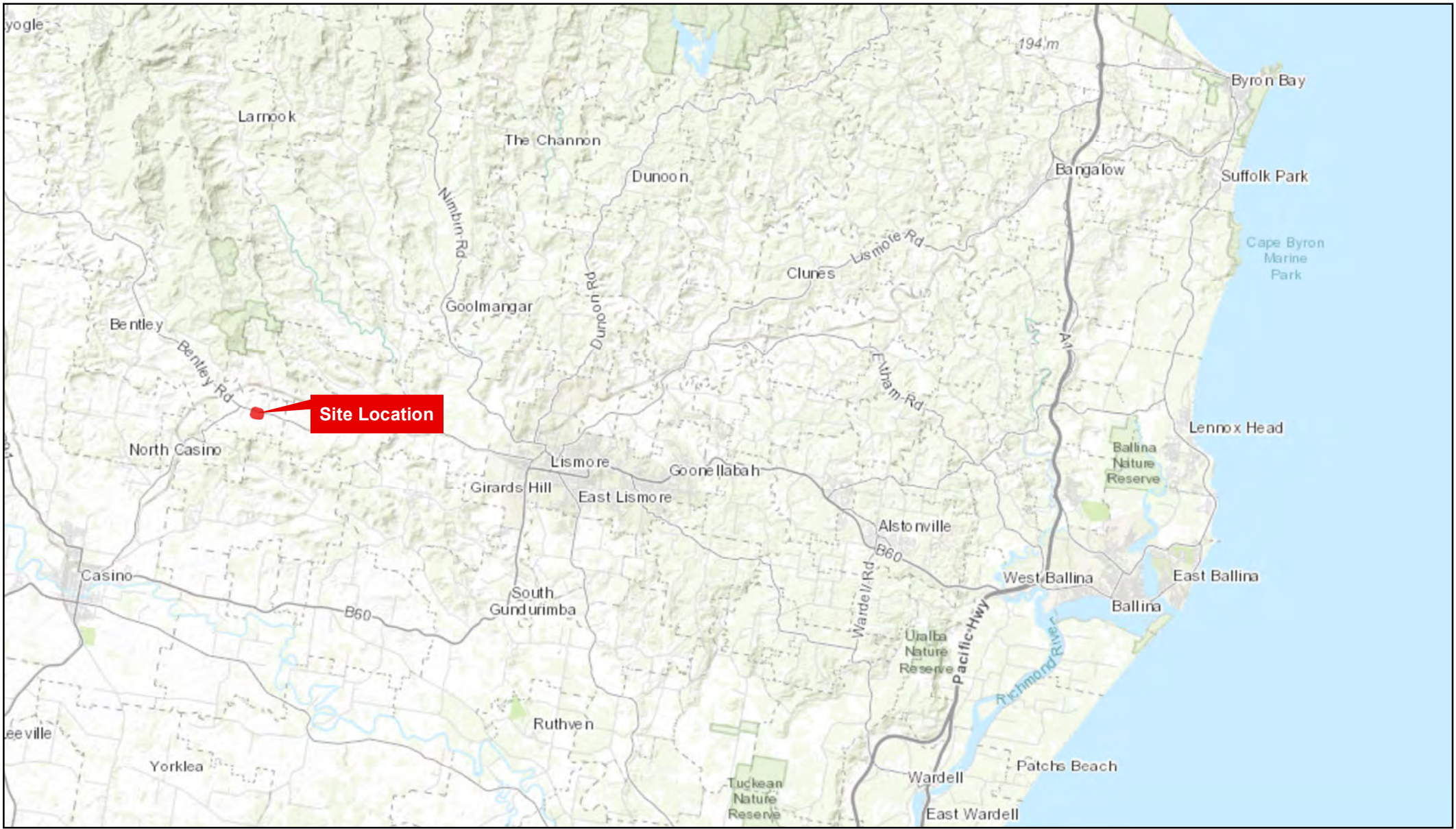
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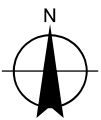
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The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

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Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 56



Bentley Quarry

Site Location

Project No. 12547851
 Revision No. -
 Date 14/04/2021

FIGURE 1-1

2. Site overview

The site is located adjacent to Bentley Road at Lot 2 DP 1196757 – 1465 Bentley Road, Bentley - approximately 14 kilometres west of Lismore (see Figure 1.1). The quarry and ancillary areas occupy approximately 6.5 hectares which has been cleared due to historical agricultural and previous quarrying activities, with scattered paddock trees remaining.

The site has previously been used to graze beef cattle and operate a small quarry with a disturbance footprint of approximately 1 hectare (see Figure 1.1). The site has been used as a quarry for many years, with obvious signs of benching from past operations.

The site is zoned RU1 Primary Production under *Richmond Valley Local Environmental Plan 2012*, as is the surrounding land.

The surrounding area is sparsely populated. The closest residence lies 650 m north of the site; however, it is not currently occupied. The closest occupied dwelling is located 1.25 km east of the site. Dwellings are proposed to the west and north of the site, but these have not been constructed to date.



Figure 2.1 Existing quarry looking north-west

3. Project description

3.1 Overview

The project involves a hard rock quarry with an annual extraction rate of 300,000 tonnes per annum and a maximum daily extraction rate of 2,000 tonnes per day. The total disturbance area is approximately 6.5 hectares which includes an extraction area of approximately 3.65 hectares. The primary purpose of the project is to supply materials for use as fill and for road construction and maintenance. Plans of the project are provided in Appendix A.

3.2 Operation

3.2.1 Staging

The quarry operations will be carried out in four stages and in response to demand. To minimise the initial impact of the proposed quarry, Stage 1 will encompass the existing footprint of the quarry and expand to 2.15 hectares at a depth of RL63 m until the northern half of the proposed quarry is exhausted. Stage 2 will continue at RL63 m to the southern extent of the proposed quarry, making the extraction area approximately 3.65 hectares in area. Stage 3 will involve lowering Stage 1 of the quarry to its final depth of RL49 m. Stage 4 will be the final stage which would continue at a depth of RL49 m to the southern extent of the quarry. A summary of the stages is outlined in Table 3.1 and the general layout and benching diagrams are provided in Appendix A.

Table 3.1 Quarry stages

Stages	Volume (m ³)	Volume (tonnes*)
1	107,000	214,000
2	148,000	296,000
3	188,000	376,000
4	190,000	380,000
Total	633,000	1,266,000

* based on a density of 2 tonnes per m³

Topsoil stripping will occur in stages prior to excavation. Generally areas will be stripped immediately prior to quarrying. Overburden will either be stockpiled for future rehabilitation works or placed in final location as voids are created.

3.2.2 Extraction limits

The extraction limits for the operation are provided in Table 3.2.

Table 3.2 Extraction limits

Limits	Quantity
Total extraction volume	1,266,000 tonnes
Annual extraction volume	300,000 tonnes
Daily extraction volume	2,000 tonnes
Maximum depth	RL49m, excluding the in-pit sump/basin which can extend to a level of RL47m
Annual transport volume	300,000 tonnes (includes quarry products, concrete waste, ENM or VENM)
Daily transport volume	2,000 tonnes (includes quarry products, concrete waste, ENM or VENM)

The volume of material extracted from the quarry will be recorded using a loader with scales until the quarry is selling 100,000 tonnes of material per annum. At this stage, a weighbridge will be installed. When a weighbridge is installed, it is proposed to use it as a public weighbridge.

3.2.3 Quarry activities

The main activities during operation of the quarry would include the following:

- Drilling and blasting
- Crushing and screening
- Blending
- Stockpiling
- Pre-coat operation

3.2.4 Imported material

Materials will be imported to site for constructing landscape mounds, rehabilitation and blending with aggregate material. The site is not open to the public or trucks not directly contracted by Bentley Quarry. This will ensure all materials imported to site will be from a known source and of a known quality. Typical materials to be imported to site and the approximate quantities are provided in Table 3.3. The quantities are approximate and will vary depending on supply and demand.

No other types of waste will be accepted at the facility.

Table 3.3 Imported materials and approximate volume

Material	Classification	Approximate volume (t/year)	Use
Concrete waste	General solid waste (non-putrescible)	50,000	Crushed and blended with materials from the quarry
ENM	Excavated natural material exemption 2014		Used to construct bunds and rehabilitation works
VENM	General solid waste (non-putrescible)		Used to blend with materials from the quarry and construct bunds and rehabilitation works

Processing

- Materials will be stored on site in separate stockpiles of ENM, VENM and concrete.
- When sufficient quantities of soil, aggregate or concrete materials have been obtained, the materials will be crushed, screened and/or blended.
- Material would be tracked throughout the importing, processing, and stockpiling on a stockpile register.

3.2.5 Project life and working hours

The development consent (No. DA2022/0107) expires on 16 December 2052.

Operation will be limited to the following times:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 8:00 am to 1:00 pm
- No work on Sundays or Public Holidays

Maintenance and general pre-start activities may occur outside the hours above provided they are inaudible at privately-owned residences.

Blasting will only occur on weekdays between the hours of 10:00 am and 3:00 pm.

3.2.6 Operational plant and equipment

Equipment at the quarry will depend on levels of activity which will vary from time to time. A description of the plant and equipment to be used is provided in Table 3.4.

Table 3.4 Proposed quarry plant and equipment

Type	Approximate Number	Description
Dozer	1	Clearing and grubbing of vegetation and stripping of topsoil Construction of bunding Rehabilitation
Excavators	2	Excavating material and stockpiling Clearing and grubbing of vegetation and stripping of topsoil
Jaw, cone, and impact crusher	1	Crushing rock and waste concrete
Screen	1	Aggregate/gravel production and overburden screening Mixing imported waste concrete with aggregate
Front-end Loader	1	Loading material onto the haul trucks and stockpiling material within the pit floor
Grader	1	Road and bund construction and maintenance
Haul Trucks	Up to 70/day	Delivery of materials to customers, carting unsuitable materials to rehabilitation areas, importing soil, and importing waste concrete
Pre-coat plant	1	Used to produce pre-coated aggregates as required
Water Cart	1	To water haul roads and stockpiles
Water Pump	2	To dewater excavation/basin and to fill watercart from standpipe To water stockpiles and put moisture in products
Hand tools	5	General activities maintaining plant
Light vehicles	Up to 5	Transporting staff to, from and around site

3.3 Access and traffic

The source, destination and route of light and heavy vehicles accessing the quarry is difficult to predict, however it is assumed they will travel via various routes to projects and customers around the area via Bentley Road.

The site access road will provide a stable all weather surface for traffic and minimise dirt being tracked onto Bentley Road.

3.3.1 Operational traffic generation

Workforce traffic

During operation there will be a maximum of 5 workers or plant operators on the site at any one time. This will yield a daily workforce traffic generation in the order of 10 vehicle trips per day (vtpd). It is assumed the majority of the workforce will arrive between 6:30 am and 7:30 am and depart generally between 3:00 pm and 6:30 pm.

Heavy vehicle traffic

The maximum trucks per day will be 70 or 140 truck movements per day. The truck movements will start at 7:00 am and continue evenly throughout the day until 6:00 pm, with a maximum of 7 truckloads or 14 movements per hour.

The total truck movements, includes any movements associated with importing materials or trucks using the weighbridge but not hauling materials to or from the quarry.

3.4 Site facilities

As shown on the plans in Appendix A, site facilities include:

- Site office, including toilet
- Weighbridge
- Signage

4. Statutory requirements

4.1 Environmental Planning and Assessment Act

The *Environmental Planning and Assessment Act 1979* (EP&A Act) provides the statutory basis for planning and environmental assessment in NSW. All development is assessed in accordance with the provisions of the EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). The EP&A Act institutes a system for environmental planning and assessment, including approvals and environmental impact assessment for proposed developments. The EP&A Act contains several relevant parts that impose requirements for planning approval.

Bentley Quarry was assessed in accordance with the EP&A Act and was approved on 16 December 2022 by the Northern Regional Planning Panel.

Other environmental planning instruments developed according to the EP&A Act that were relevant at the time the application was submitted are outlined in Table 4.1.

Table 4.1 Relevant environmental planning instruments

Environmental Planning Instrument	Comment
State Environmental Planning Policy (State and Regional Development) 2011 (now Planning Systems SEPP 2021)	<p>A regional development needs to be notified and assessed by a Council and then determined by the relevant Planning Panel. Regional development is defined in Schedule 6 of the Planning Systems SEPP 2021.</p> <p>The project was classified as 'regional development' because it is within the specified category of Schedule 6 and the Northern Regional Planning Panel (Northern RPP) was the determining authority for the project.</p>
State Environmental Planning Policy (Mining Petroleum and Extractive Industries) 2007 (now Resources and Energy SEPP 2021)	<p>Under the MPEI SEPP, extractive industries may be carried out with consent on any land for which agriculture or industry is permitted with or without consent. The Project site is zoned RU1 Primary Production pursuant to Richmond Valley LEP 2012. Development for the purpose of extractive industries is permissible with development consent within the RU1 zone.</p> <p>The MPEI SEPP also permits the co-location of some industries with extractive industries. Imported soil and concrete and pre-coat operations would be ancillary to the quarry operations and permitted as co-location of industry.</p>
State Environmental Planning Policy No. 33 (Hazardous and Offensive Development) (now Resilience and Hazards SEPP 2021)	<p>State Environmental Planning Policy No. 33 (Hazardous and Offensive Development) (SEPP 33) (now Resilience and Hazards SEPP 2021) presents a systematic approach to planning and assessing proposals for potentially hazardous and offensive development or industry.</p> <p>The very nature of extractive industries suggests the potential for such uses to be hazardous or offensive to the local environment if not appropriately managed.</p> <p>However, all appropriate site management controls and environmental impact mitigation measures would be implemented and monitored during the site's operations.</p>
State Environmental Planning Policy (Koala Habitat Protection) 2020 & 2021 (now Biodiversity and Conservation SEPP 2021)	<p>This Policy aims to encourage the conservation and management of areas of natural vegetation that provides habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.</p>
State Environmental Planning Policy No. 55 – Remediation of Land (now Resilience and Hazards SEPP 2021)	<p>State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55) (now Resilience and Hazards SEPP 2021) provides a state-wide planning approach to the remediation of contaminated land.</p> <p>A search of the EPA record of notified and contaminated and a detailed site investigation indicated the site is not contaminated and it is therefore considered that the site is suitable for the proposed quarry, in respect to contamination.</p>

Environmental Planning Instrument	Comment
Richmond Valley Local Environmental Plan 2012	The Richmond Valley LEP 2012 is the principal planning instrument within the LGA. The project is located on land within zone RU1 Primary Production. Under the provisions of zone RU1 Primary Production, development for the purpose of extractive industries is permissible with development consent. The project is defined as an extractive industry and is therefore permissible on the site with development consent.
Richmond Valley Development Control Plan 2021	The Richmond Valley Development Control Plan 2021 (RDCP 2021) contains detailed guidelines and planning controls applying to all development within the LGA. Two chapters are relevant to the Project: <ul style="list-style-type: none"> – Part I Chapter 7 – Noise Impact Assessment – Part I Chapter 11 – Land Use Conflict Risk Assessment – LUCRA A Noise Impact Assessment has been prepared which indicated the noise levels are less than the relevant criteria and a LUCRA indicated the land use conflicts are acceptable.

4.2 Other relevant legislation

Other State and Federal legislation relevant to the project is outlined in Table 4.2.

Table 4.2 Relevant legislation

Legislation	Comment
Commonwealth legislation	
<i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	The EPBC Act protects Matters of National Environmental Significance (MNES), such as threatened species and ecological communities, migratory species (protected under international agreements), and National Heritage places (among others). The assessment found that the project would not result in significant impacts and as such approval under the EPBC Act would not be required.
State legislation	
<i>Heritage Act 1977</i>	The property does not contain any heritage items listed in the NSW State Heritage Inventory or Schedule 5 of the Richmond Valley LEP 2012. The heritage listed Disputed Plains Homestead is 650 m north of the project. The homestead has been vacant since the 1990's. The homestead is severely dilapidated and is currently used to store hay. The project is not expected to impact on the homestead.
<i>Protection of the Environment Operations Act 1997</i>	The POEO Act establishes a licensing regime for pollution generating activities in NSW. Under Sections 47 and 48, an EPL is required for scheduled development work and scheduled activities, respectively. The project would extract more than 30,000 tonnes of extractive material per year and therefore meets the definition of a scheduled activity under Clause 19 of Schedule 1 of the POEO Act. Although ancillary, the Project also meets the POEO Act Schedule 1 definition of Clause 16 - crushing, grinding, or separating and Clause 41 waste processing (non-thermal). An EPL is therefore required from the EPA.
<i>National Parks and Wildlife Act 1974 (NPW Act)</i>	The NPW Act is administered by the Department of Planning, Industry and Environment (DPIE) and aims to prevent the unnecessary or unwarranted destruction of Aboriginal relics and the active protection and conservation of Aboriginal relics of high cultural significance. The Act also provides for the protection of native flora and fauna. A search of the Aboriginal Heritage Information Management System was conducted on 29 March 2021 for the site with a 50 m buffer, which found no Aboriginal heritage items. A site inspection by Casino Bolangle Local Aboriginal Land Council did not locate any visual evidence of Aboriginal objects or occupation sites.
<i>Biodiversity Conservation Act 2016 (BC Act)</i>	Projects assessed under Part 4 of the <i>EP&A Act</i> are required to address the requirements of the <i>BC Act</i> which includes provisions for offsetting once certain thresholds for vegetation clearing are met. The project requires clearing of 0.23 ha of native vegetation. A Biodiversity Assessment Report was prepared for the project which addresses the relevant requirements of the <i>BC Act</i> .

Legislation	Comment
<i>Roads Act 1993</i>	<p>The <i>Roads Act 1993</i> determines the rights of the public and adjacent land owners to use public roads, and establishes procedures for the opening and closing of public roads. Under the Act applications are required to be made for the closure of roads and for works in road reserves.</p> <p>The project involves the upgrading of the intersection with Bentley Road and therefore requires a Section 138 permit from Transport for NSW.</p>
<i>Water Management Act 2000 (WM Act)</i>	<p>This Act regulates the taking, interception, storage and use of surface water and groundwater within areas subject to water sharing plans. The Project is within the <i>Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010</i>. As such, surface water within the catchment is managed under the WM Act.</p> <p>The project is covered by the:</p> <ul style="list-style-type: none"> – For surface water: Coraki Non Tidal Management Zone within Coraki Area Water Source under the Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources (2010). – For groundwater: North Coast Volcanics groundwater sources under the Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources (2016). The maximum harvestable right dam capacity for the site is 14.805 ML (Megalitres). <p>The Water Assessment for the Project found that no approvals are required under the WM Act.</p>
<i>Rural Fires Act 1997</i>	<p>Development on land that has been dedicated as bushfire prone must meet specific requirements under the <i>Rural Fires Act 1997</i> (Rural Fires Act) and the EP&A Act. The EP&A Act establishes a system for requiring bushfire protection measures on bushfire prone land at the DA stage.</p> <p>The site is mapped as bushfire prone land but a bushfire assessment indicated the risk is low.</p>

5. Environmental risk assessment

The environmental risks have been assessed by examining all site activities associated with quarry operations to determine their potential impacts on the environment. The risk rating is determined by considering the likelihood and consequence of an activity using the matrix shown in Table 5.1 and applying that rating to select environmental aspects, as shown in Table 5.2.

Table 5.1 Risk matrix

Likelihood	Consequence		
	Low	Medium	High
Will occur	M	H	H
Likely to occur	L/M	M	H
Unlikely to occur	L	L/M	M
Will not occur	L	L	L/M

The results of this broad risk assessment are shown in Table 5.2.

Table 5.2 Risk assessment

Aspect	Clearing & Grubbing	Blasting / Extraction	Screening / Crushing	Material Transport	Rehabilitation
Land and Soil	L/M	H	L/M	L/M	L
Surface Water	H	M	L/M	L/M	L/M
Groundwater	L	M	L	L	L
Noise & Vibration	L/M	H	H	M	L
Air	L/M	M	H	M	L
Waste	M	M	M	L	L
Biodiversity	H	L/M	L/M	L	L
Transport	L/M	L	L	H	L
Heritage	L/M	L	L	L	L
Visual	M	M	L	L	L
Social	L/M	H	H	H	L

As indicated by Table 5.2, all aspects, except heritage, have at least one medium or higher rated risk. Most of the other aspects have at least one high rated risk, with noise and vibration having two and social having three. Heritage risks are rated L/M or below because of the limited heritage value at the site.

Appropriate control measures to mitigate or minimise the risks are provided in Sections 7 to 15 below.

6. Environmental management

6.1 Roles and responsibilities

Key site personnel and environmental management responsibilities are outlined in Table 6.1.

Table 6.1 Roles & responsibilities

Role	Responsibilities
Quarry Manager	<p>The Quarry Manager (QM) is responsible for the overall implementation of the EMS and environmental management on site. Key responsibilities include:</p> <ul style="list-style-type: none">– Reviewing and endorsing the EMS as required.– Maintaining compliance with relevant legislation, conditions of approval and any licences.– Communicating environmental objectives, targets, and commitments to site staff.– Delivering environmental training.– Leading environmental incident investigations and reporting to regulatory authorities where appropriate.– Responding to community complaints and enquiries.– Liaison with stakeholder agencies and community groups where required.– Approving any environmental reports required to be submitted to relevant authorities.
Quarry Operations Manager	<p>The Quarry Operator Manager (QOM) is responsible for managing the daily quarry activities and implementing environmental controls. Key responsibilities include:</p> <ul style="list-style-type: none">– Providing input to EMS reviews.– Communicating environmental management requirements during toolbox talks or other regular meetings.– Undertaking environmental monitoring and inspections.– Monitoring the work of subcontractors on site.– Stop work in the event of a pollution incident and implementing the emergency response procedure.
Quarry Operators	<p>Site workers and operators are responsible for implementing environmental control measures associated with their daily work. This includes:</p> <ul style="list-style-type: none">– Minimising their impact on the environment while undertaking works.– Implementing and maintaining environmental controls.– Reporting to the QM when an incident occurs and taking measures to respond to the incident.– Completing any reporting and monitoring requirements for their specific role.

6.1.1 Subcontractors

As a minimum, subcontractors and their employees will comply in full with the requirements of this EMS as it applies to site environmental management and controls. Subcontractor personnel are considered equivalent to site personnel in all aspects of environmental management and control and their responsibilities in this respect are the same as site personnel.

6.2 Environmental training and awareness

Site environmental management requirements are communicated in the site induction to all staff, subcontractors, and visitors. The induction includes the following information:

- Environmental legal context including due diligence and duty of care
- Site environmental objectives and targets
- Site environmental setting and sensitive environmental aspects
- Environmental incident response and management procedure
- Overview of environmental control measures

There are no specific environmental training requirements beyond the environmental site induction for site operations. Subcontractors engaged to undertake specialist tasks (e.g. water quality monitoring), will be appropriately qualified to conduct the works.

Other environmental issues are communicated to site staff through toolbox talks and other meetings.

6.2.1 Training records

Training records are maintained in a site training register which includes:

- Details of the person being trained (name, role, company)
- Training date
- Type of training

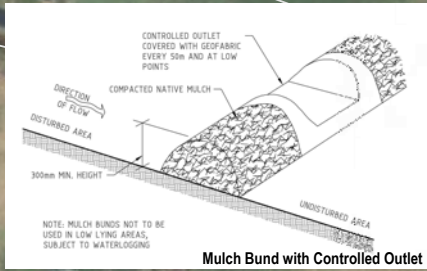
A training register is provided in Appendix B.

7. Soil and water management controls

Objective	– Maintain receiving surface water and groundwater quality and quantity during the operation of the quarry.			
Targets	<ul style="list-style-type: none"> – Manage erosion associated with operational activities, in accordance with <i>Managing Urban Stormwater Soil and Construction – Volume 2e Mines and Quarries</i> (DECC,2008). – No exceedances of the EPL discharge limits. 			
No.	Control	Reference	Timing	Responsibility
SW1	Train all staff on soil and water control practices and the requirements of the EMS through inductions, toolboxes, and targeted training.	-	Pre and operations	Quarry Manager
SW2	One month prior to commencing quarrying operations, a registered surveyor will be engaged to carry out a baseline topographical survey to determine the footprint of the existing excavations and set the benchmark against which all other surveys will be compared.	Condition 10	Pre-operations	Quarry Manager
SW3	One month prior to commencing quarrying operations, a registered surveyor will mark out the boundaries of the approved limits of extraction within the site and submit a survey plan of these boundaries with applicable GPS coordinates to the Council.	Condition 13	Pre-operations	Quarry Manager
SW4	During quarrying operations the boundaries will be clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.	Condition 14	Pre and operations	Quarry Operations Manager
SW5	Develop the quarry as shown in Appendix A, with a 15 m setback between the quarry crest and road reserve boundary. Allow for final batter slope of 54° in the variably (highly) weathered rockmass, and include a 3 m wide bench where batter slopes exceed a height of 7 m. In slightly weathered or better rockmass conditions it is recommended that batter slopes are developed to a maximum inter-bench angle of 65° (i.e. two vertical faces with a minimum bench width of 3 m).	EIS 7.1.3	Operation	Quarry Operations Manager
SW6	As benches progress a geological assessment will be undertaken to review the rock mass integrity, jointing and weathering to check that adverse conditions do not affect the stability of the slopes. As a minimum a geological review will be undertaken with the excavation of each bench.	EIS 7.1.3	Operation	Quarry Manager
SW7	Pit wall stability and maintenance conditions will be inspected monthly.	EIS 7.1.3	Operation	Quarry Operations Manager
SW8	The crest of the slope adjacent to Bentley Road reserve will be inspected monthly for signs of slope movement and poor surface water control. Any surface water control issues will be remediated immediately. Where tension cracks, hummocky or broken ground or ground movements are noted or suspected specialist geological review will be sought immediately.	EIS 7.1.3	Operation	Quarry Operations Manager
SW9	A soil and erosion control plan will be prepared and implemented in accordance with Managing Urban Stormwater soils and Construction, Volume 1, and Volume 2E. Mines and Quarries – refer to Figure 7.1.	Condition 55 & EIS 7.1.3	Operation	Quarry Operations Manager
SW10	Stripping topsoil and extraction will be done in stages to minimise the area of disturbance.	EIS 7.1.3	Operation	Quarry Operations Manager
SW11	Topsoils will be stored to allow for rehabilitation of the quarry at the cessation of use. The soils will be stored in such a manner to prevent their erosion, such as by stormwater or wind.	Condition 54	Operation	Quarry Operations Manager

SW12	Where possible, freshly stripped topsoil will continue to be placed directly onto rehabilitated areas to reduce the potential for loss of soil structure and make best use of soil seed stores.	EIS 7.1.3	Operation	Quarry Operations Manager
SW13	Stockpiled topsoils to remain in place for longer than three (3) months will be re-grassed/vegetated with local native seed to inhibit erosion, dust, and siltation.	Condition 54 & EIS 7.1.3	Operation	Quarry Operations Manager
SW14	The scale of quarrying operations will be adjusted according to available supply and water entitlements.	Condition 52	Operation	Quarry Operations Manager
SW15	If obvious signs of contamination such as discoloured soils or odorous soils are encountered during operation, work will stop in the vicinity of the area and a suitably experienced environmental consultant contacted for advice.	EIS 7.1.3	Operation	Quarry Operations Manager
SW16	Fuels, lubricants, and chemicals will be stored and, where practicable, used within containment/hardstand areas designed to prevent the escape of spilt substances to the surrounding environment.	EIS 7.1.3 and EPL O2.11	Operation	Quarry Operations Manager
SW17	The amount of hazardous material stored and used on site will be kept to the minimum practicable.	EIS 7.1.3	Operation	Quarry Operations Manager
SW18	Personnel will be trained in spill containment and response procedures.	EIS 7.1.3	Operation	Quarry Manager
SW19	Appropriate spill response material will be kept on site.	EIS 7.1.3	Operation	Quarry Operations Manager
SW20	Appropriate maintenance schedules for plant and equipment will be followed to detect and repair leaks.	EIS 7.1.3	Operation	Quarry Manager
SW21	Spills will be reported and managed in accordance with legislative and licensing requirements.	EIS 7.1.3	Operation	Quarry Operators
SW22	If the quarry intercepts groundwater, WaterNSW are to be contacted and a licence obtained, if necessary.	EIS 7.2.3	Operation	Quarry Manager
SW23	At least 5 years prior to the closure of the quarry, a detailed Quarry Closure Strategy will be prepared in consultation with Council and other relevant regulatory agencies. The Quarry Closure Strategy will include: <ul style="list-style-type: none"> – Objectives and criteria for quarry closure. – Options for the future use of the site, including any final void/s. – The measures that would be implemented to minimise or manage the ongoing environmental effects of the quarry. – How the performance of these measures would be monitored over time. A Concept Quarry Closure Strategy is in Appendix A.	Condition 100	Operation	Quarry Manager
Monitoring				
SW24	A rain gauge will be installed and measurements recorded daily. A rainfall register is provided in Appendix B.	EPL M4.1	Operation	Quarry Operations Manager
SW25	The basin will be monitored at the discharge point, shown on Figure 7.2, and managed in accordance with Appendix C to ensure all discharges comply with the EPL or Section 120 of the POEO Act.	Condition 53	Operation	Quarry Operations Manager

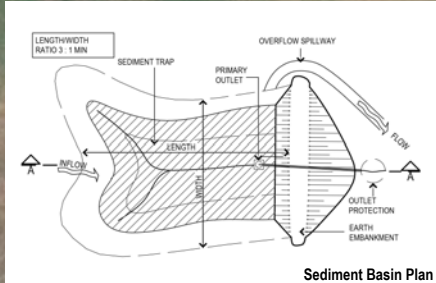
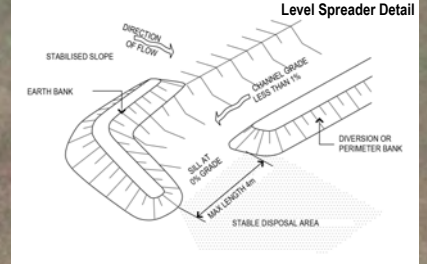
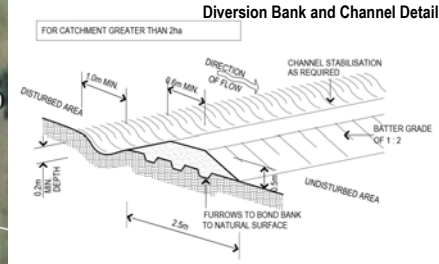
SW26	Quarterly monitoring of groundwater levels and quality will be undertaken at the existing monitoring bore (GW1), shown on Figure 7.2, to confirm the groundwater drawdown predictions. Samples will be analysed for pH, EC, major ions (sodium, potassium, calcium, magnesium, chloride, sulfate, and alkalinity) and dissolved metals.	Condition 57 & EIS 7.2.3	Operation	Quarry Operations Manager
SW27	Provide financial year annual quarry production data, verified by volumetric survey, including the volume of material excavated and volume of product stockpiles. Include this information in the Annual Review.	Condition 11	Operation	Quarry Manager



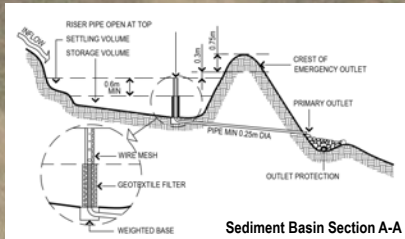
Mulch Bund with Controlled Outlet

57
DP755742
41.8ha

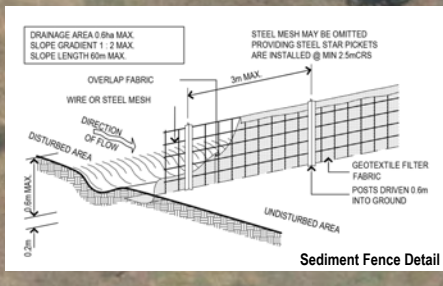
1
DP122850
25.2ha



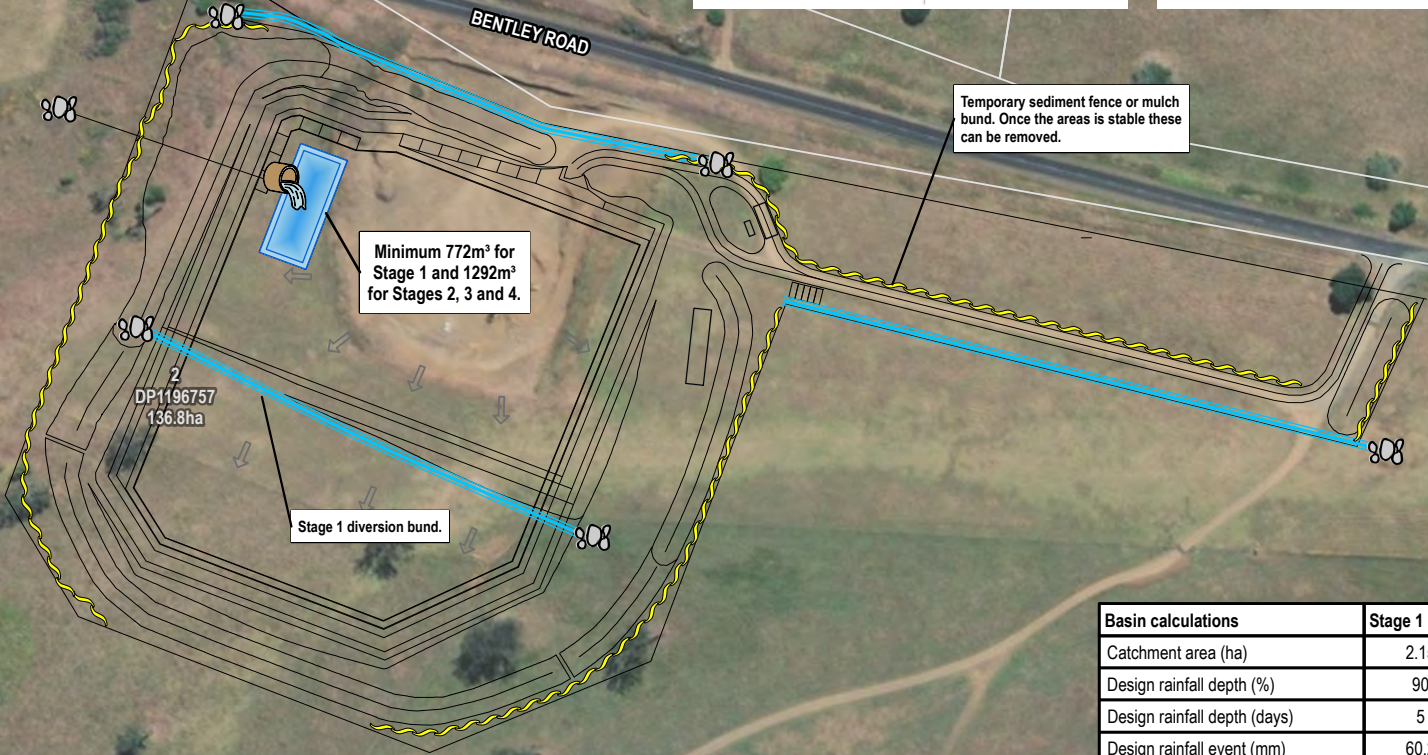
Sediment Basin Plan



Sediment Basin Section A-A

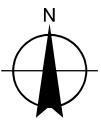
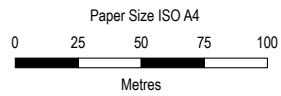


Sediment Fence Detail



Basin calculations	Stage 1	Stages 2-4
Catchment area (ha)	2.15	3.6
Design rainfall depth (%)	90	90
Design rainfall depth (days)	5	5
Design rainfall event (mm)	60.2	60.2
Sediment storage volume (m³)	112	187
Soil loss (m³/ha/yr)	104	104
Soil type	D	D
Storage zone design (months)	6	6
Total basin volume (m³)	772	1292

- LEGEND**
- Clean water drain/diversion bund
 - Temporary sediment fence or mulch bund
 - Discharge location/sampling point
 - Level spreader/Rock check
 - Site layout
 - Basin
 - Cadastre

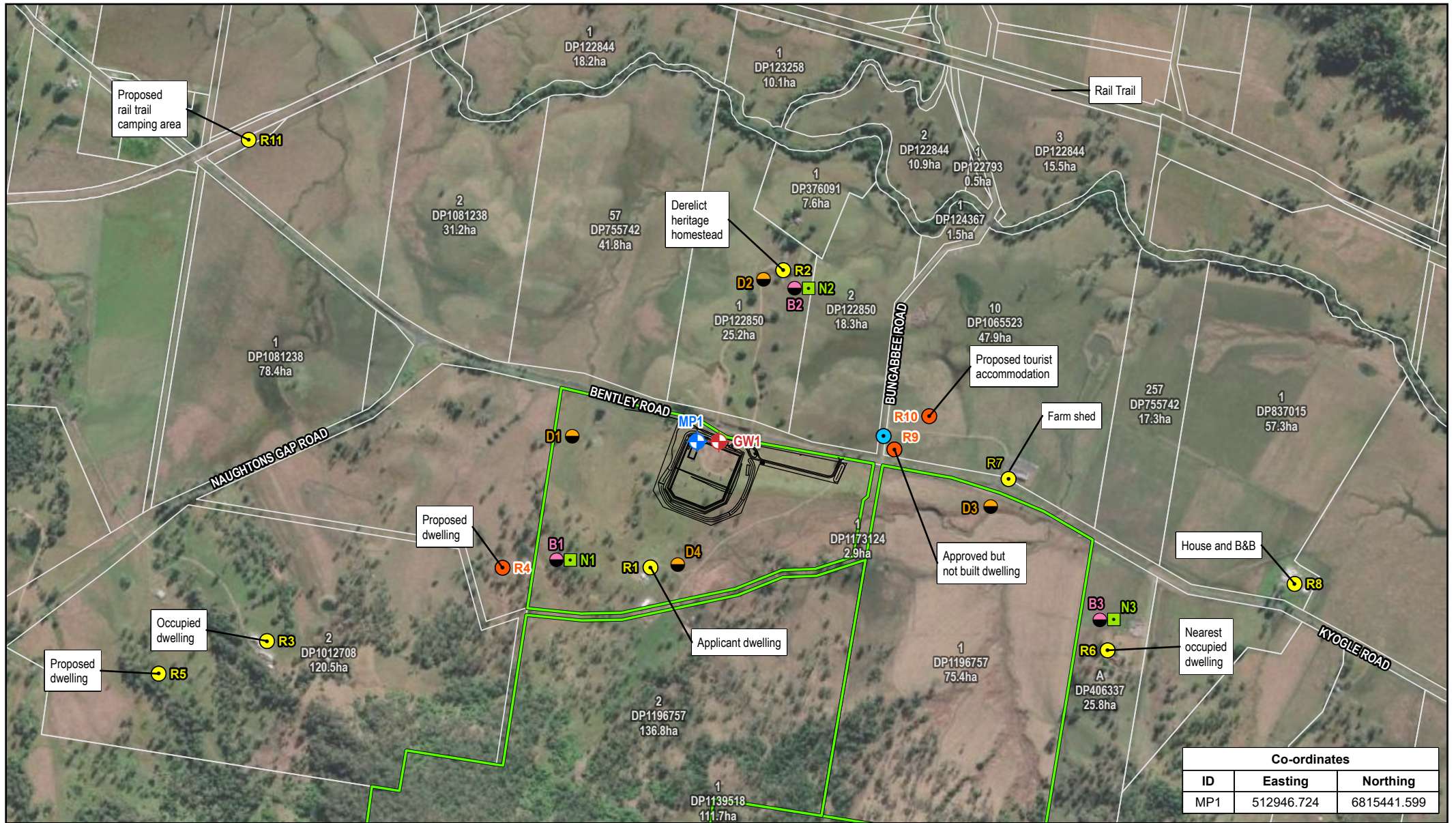


R&S Contracting Pty Ltd
Bentley Quarry
EMS

Project No. 12547851
Revision No. 0
Date 28/06/2023

Erosion and sediment controls

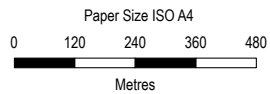
FIGURE 7.1



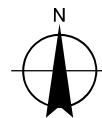
Co-ordinates		
ID	Easting	Northing
MP1	512946.724	6815441.599

LEGEND

- Alternate monitoring location
- + Basin sampling location
- Blasting monitoring location
- Dust Deposition Gauge location
- + Groundwater monitoring location
- Noise monitoring location
- Proposed receiver
- Receiver
- R&S Contracting property
- Cadastre
- Site layout



Map Projection: Transverse Mercator
 Horizontal Datum: GDA2020
 Grid: GDA2020 MGA Zone 56



R&S Contracting Pty Ltd
 Bentley Quarry
 EMS

Project No. 12547851
 Revision No. 0
 Date 13/03/2024

Monitoring locations

FIGURE 7.2

8. Noise management actions

Objective		– Minimise disturbance to local residents from operational noise.		
Targets		<ul style="list-style-type: none"> – No exceedance of the noise criteria. – No justified complaints from adjacent residents in relation to noise generation. – No out of hours works. 		
No.	Action	Reference	Timing	Responsibility
N1	Train all staff on noise control practices and the requirements of the EMS through inductions, toolboxes, and targeted training.	-	Pre operation	Quarry Manager
N2	LAeq,15min noise levels from the quarry will not exceed the noise criteria of 40 dB(A) at any residence on privately owned land. The criteria do not apply if there is a written agreement with the relevant owner/s or infrastructure provider/owner, and the operator has advised the EPA and Council in writing of the terms of this agreement.	Condition 35 and 36. EPL L4.1 and L4.3	Operation	Quarry Manager
N3	Noise generated by traffic from the quarry must not exceed an LAeq(1 hour) daytime noise criterion of 55dB(A) (external) at any residence on privately-owned land.	Condition 37	Operation	Quarry Manager
N4	Working hours are limited to those outlined in Section 3.2.5. Maintenance and general pre-start activities may occur outside the hours specified provided they are inaudible at privately-owned residences.	Condition 34 and EPL L5.1	Operation	Quarry Operator
N5	During Stage 1 of operations, an earth bund, at least 2 metres high and 80 metres long on the northern boundary of the quarry (shown in Appendix A) will be constructed, within 2 months of commencement of conversion or alteration of sensitive receiver R2 to residential occupation.	Condition 39	Stage 1 – if R2 occupied	Quarry Manager
N6	An earth bund, at least 3 metres high and 60 metres long, east of the access road entrance (shown in Appendix A) will be constructed, within 2 months of commencement of construction of sensitive receiver R9. The bund will be designed to ensure it does not impact surface water drainage within the Bentley Road reserve.	Condition 40	If R9 is constructed	Quarry Manager
N7	Where practical, machines will be operated at low speed or power and switched off when not being used rather than left idling for prolonged periods.	Condition 38 and 41	Operation	Operators
N8	Dropping materials from height and metal to metal contact on material will be avoided, where possible.	Condition 38 and 41	Operation	Operators
N9	All engine covers will be kept closed while equipment is operating.	Condition 38 and 41	Operation	Operators
N10	Equipment will be maintained and operated in accordance with manufacturer's recommendations. Equipment identified as being excessively noisy will be serviced. If problems still remain after servicing, equipment will be fitted with noise attenuation devices or removed from site.	Condition 38 and 41	Operation	Quarry Operations Manager
N11	Noisy equipment will be located behind structures that act as barriers, or at the greatest distance from the noise-sensitive area; or oriented so that noise emissions are directed away from any sensitive areas.	Condition 38 and 41	Operation	Quarry Operations Manager
N12	All equipment will not be operating simultaneously, i.e. using only two pieces of crushing plant simultaneously instead of three would lower the predicted noise impacts at the closest receptors by up to 2 dB.	Condition 38 and 41	Operation	Quarry Operations Manager

N13	Truck speeds on site will be limited to 20 km/h.	Condition 38 and 41	Operation	Operators
N14	A non-acoustic warning method to warn if a vehicle is reversing will be used or if this method does not prove satisfactory for safety reasons, adjusting the reversing alarm volume on heavy equipment to make them "smarter", by limiting acoustic range to immediate danger area.	Condition 38 and 41	Operation	Quarry Operations Manager
Monitoring and compliance				
N15	Routine weekly inspections will occur throughout the operational lifetime of the quarry to identify any ad-hoc noise issues such as faulty equipment, noisy works.	Condition 38 and 41	Operation	Quarry Operations Manager
N16	Noise monitoring will be undertaken by a qualified acoustic consultant in accordance NSW <i>Noise Policy for Industry</i> (NPI) (EPA, 2017) within three months of commencement of Stage 1 operation at the three locations shown on Figure 7.2 during the day period. The alternate monitoring locations, as shown, will also be monitored, if R9 or R10 are constructed. Truck passby monitoring will also be undertaken to ensure road traffic noise levels associated with Bentley Quarry are within the identified RNP road noise criteria.	Condition 38 and 41	Operation	Quarry Manager/ Consultant
N17	If there are persistent and justified noise related complaints or a change in the operations e.g. an additional crusher is employed, production increases, when starting excavation of a new stage, further compliance monitoring will be implemented in consultation with Council and EPA.	Condition 38 and 41	Operation	Quarry Manager/ Consultant

9. Blasting management controls

Objective	– To minimise the impacts of quarry operations on the local community and the built environment from blasting and vibrations.			
Targets	<ul style="list-style-type: none"> – No exceedance of the blasting criteria. – No justified complaints from adjacent residents in relation to blasting and vibrations. 			
No.	Control	Reference	Timing	Responsibility
B1	Train all staff on blasting control practices and the requirements of the EMS through inductions, toolboxes, and targeted training.	-	Pre - operations	Quarry Manager
B2	<p>Within three months of commencing operations, a suitably qualified engineer will prepare a dilapidation report detailing the structural condition of existing buildings and structures located within 1 km of the maximum approved quarry pit footprint, if requested by the landowner and subject to safe access being provided by the landowner.</p> <p>Within 6 months of commencing operations, the landowners within 1 km of the maximum approved quarry pit footprint will be made aware of this condition in writing.</p>	Condition 48	Pre - operations	Quarry Manager
B3	At least one week prior to blasting all landholders within the 1 km buffer zone will be notified in writing or email, unless the landowner advises in writing they do not need to be notified. A list of the properties to be notified is provided in Appendix D.	Condition 46	Operation	Quarry Operations Manager
B4	As a guide, the maximum instantaneous charge of no more than 50 kg will be used initially in order to remain within the recommended 115 dB(L) criteria at the nearest identified sensitive receptor not associated with the Quarry (R6). This may change based on monitoring results, see below.	EIS 7.3.3	Operation	Quarry Operations Manager
B5	Blasting is to be done by a qualified and experienced subcontractor.	-	Operation	Quarry Manager
B6	Blasting will be restricted to between 10:00 am – 3:00 pm Monday to Friday.	Condition 34 and EPL L6.4	Operation	Quarry Operations Manager
B7	There will be a maximum of one blast a month unless an additional blast is required following a blast misfire.	Condition 45	Operation	Quarry Operations Manager
B8	Blasting is to achieve the limits in Table 9.1. These criteria do not apply if there is a written agreement with the relevant owner/s or infrastructure provider/owner, and the EPA and Council have been informed in writing of the terms of this agreement.	Condition 42, 43 and EPL L6.1 and L6.3	Operation	Quarry Operations Manager
B9	<p>Two months prior to a blast, a Section 138 Roads Act application will be submitted to Council for the approval of the temporary closure of Bentley Road.</p> <p>In association with this Section 138 Roads Act application a Traffic Guidance Scheme (TGS), dilapidation survey of the Bentley Road cutting and a Blast Management Plan will be prepared and submitted. As will the certificate of currency for the Public Liability Cover of \$20,000,000.</p> <p>Blasting operations will not commence until the Section 138 Roads Act application has been approved and the Blast Management Plan has been satisfied.</p>	Condition 44	Operation	Quarry Manager
B10	One week prior to the blast a VMS (or similar) will be installed adjacent to Bentley Road advising motorists of the planned closure. Emergency services will be advised by email.	Condition 47	Operation	Quarry Manager

B11	During the blast, traffic control will be engaged to close Bentley Road and Bungabbee Road at least 500 m from the blast location.	-	Operation	Quarry Manager
B12	Following the blast and prior to Bentley Road being reopened, any debris on Bentley Road will be removed.	-	Operation	Quarry Manager
B13	No explosives are to be stored on site.	-	Operation	Quarry Operations Manager
Monitoring				
B14	<p>Blast monitoring will occur for every blast and will be undertaken by a suitably trained professional. Blast monitoring will be undertaken:</p> <ul style="list-style-type: none"> – Every blast at R1, R2 and R3, as shown on Figure 7.2, for the first 12 mths. Also at the alternate location, if either R9 and R10 are constructed. – At other locations following receipt of a justifiable blasting related complaint. <p>If blast monitoring indicates the criteria is exceeded, a qualified consultant will be consulted and any recommendations implemented.</p> <p>If results in the first 12 months are significantly less than criteria, the monitoring can be revised in consultation with Council and EPA.</p>	Condition 47	Operation	Quarry Manager/ Consultant

Table 9.1 *Blasting criteria*

Location	Airblast overpressure (dB(Lin Peak))*	Ground vibration (mm/s)*	Allowable exceedance
Any residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

* The criteria do not apply if there is a written agreement with the relevant owner/s or infrastructure provider/owner, and the operator has advised the EPA and Council in writing of the terms of this agreement.

10. Air quality management actions

Objective	– Minimise air quality impacts from site activities.			
Targets	<ul style="list-style-type: none"> – Compliance with the air quality criteria. – No visible offsite air quality impacts as a result of site operations. – No justifiable complaints related to air quality attributable to site operations. 			
No.	Action	Reference	Timing	Responsibility
A1	All personnel working at the site will be made aware of their responsibilities to minimise dust and the requirements of the EMS through inductions, toolboxes, and targeted training.	Condition 50	Pre-operation	Quarry Manager
A2	The quarry is not to cause particulate matter emissions to exceed the criteria in Table 10.1 at any residence on privately-owned land. These criteria do not apply if there is a written agreement with the relevant owner/s or infrastructure provider/owner, and the EPA and Council have been informed in writing of the terms of this agreement.	Condition 49	Operation	Quarry Manager
A3	Exposed areas will be minimised with areas not actively used for a month stabilised or revegetated.	Condition 50, 97 and EIS 7.8.3	Operation	Quarry Operations Manager
A4	Water sprays will be used on crushing and screening plant when dust is visibly leaving site.	Condition 50 and EIS 7.4.3	Operation	Quarry Operations Manager
A5	Loaded trucks leaving the site will be covered to minimise the transport of dust off site.	Condition 50 and EPL O1.2	Operation	Quarry Operations Manager/ Truck Drivers
A6	Dust suppression will be undertaken when dust is observed to be leaving site, using level 2 watering (> 2 L/m ² /h) via water sprays and water carts at: <ul style="list-style-type: none"> – Unpaved work areas subject to traffic or wind. – Topsoil and aggregate stockpiles. – During the loading and unloading of dust generating materials. 	Condition 50 and EIS 7.4.3	Operation	Quarry Operations Manager
A7	Ambient dust levels will be considered and care taken on days when ambient dust levels are high, such as days when bushfires or hazard reduction burns are nearby. High dust generating activities, will be actively minimised on these days to avoid cumulative dust impacts.	Condition 50 and EIS 7.4.3	Operation	Quarry Operations Manager
A8	Equipment, machinery, and vehicles will be maintained and operated in a proper and efficient manner to minimise potential emissions.	Condition 15	Operation	Quarry Operations Manager/ Quarry Operators
A9	Work vehicles/machinery will not be left running or idling when not in use.	Condition 15	Operation	Quarry Operator

Monitoring				
A10	Routine weekly inspections will occur throughout the operational lifetime of the quarry to identify any air quality issues such as dust emissions.	Condition 50 and 51	Operation	Quarry Operations Manager
A11	Dust deposition gauges will be installed at the locations shown on Figure 7.2 and monitored for the first year of operations. The alternate monitoring locations, as shown, will be monitored if R9 or R10 are constructed. Monitoring requirements are to be reviewed after 12 months of monitoring in consultation with Council and EPA.	Condition 50 and 51	Operation	Quarry Manager/ Consultant
A12	If there are persistent and justified complaints or the dust monitoring indicates exceedances, real-time dust monitoring will be implemented in consultation with Council and EPA.	Condition 51	Operation	Quarry Manager/ Consultant

Table 10.1 Air quality criteria

Pollutant	Averaging period	Assessment criteria ($\mu\text{g}/\text{m}^3$)*
TSP (total suspended particulates)	Annual	90
PM ₁₀	24 hour	50
	Annual	30
Deposited dust	Annual (maximum increase)	2 g/m ² /month
	Annual (maximum total)	4 g/m ² /month

* The criteria do not apply if there is a written agreement with the relevant owner/s or infrastructure provider/owner, and the operator has advised the EPA and Council in writing of the terms of this agreement.

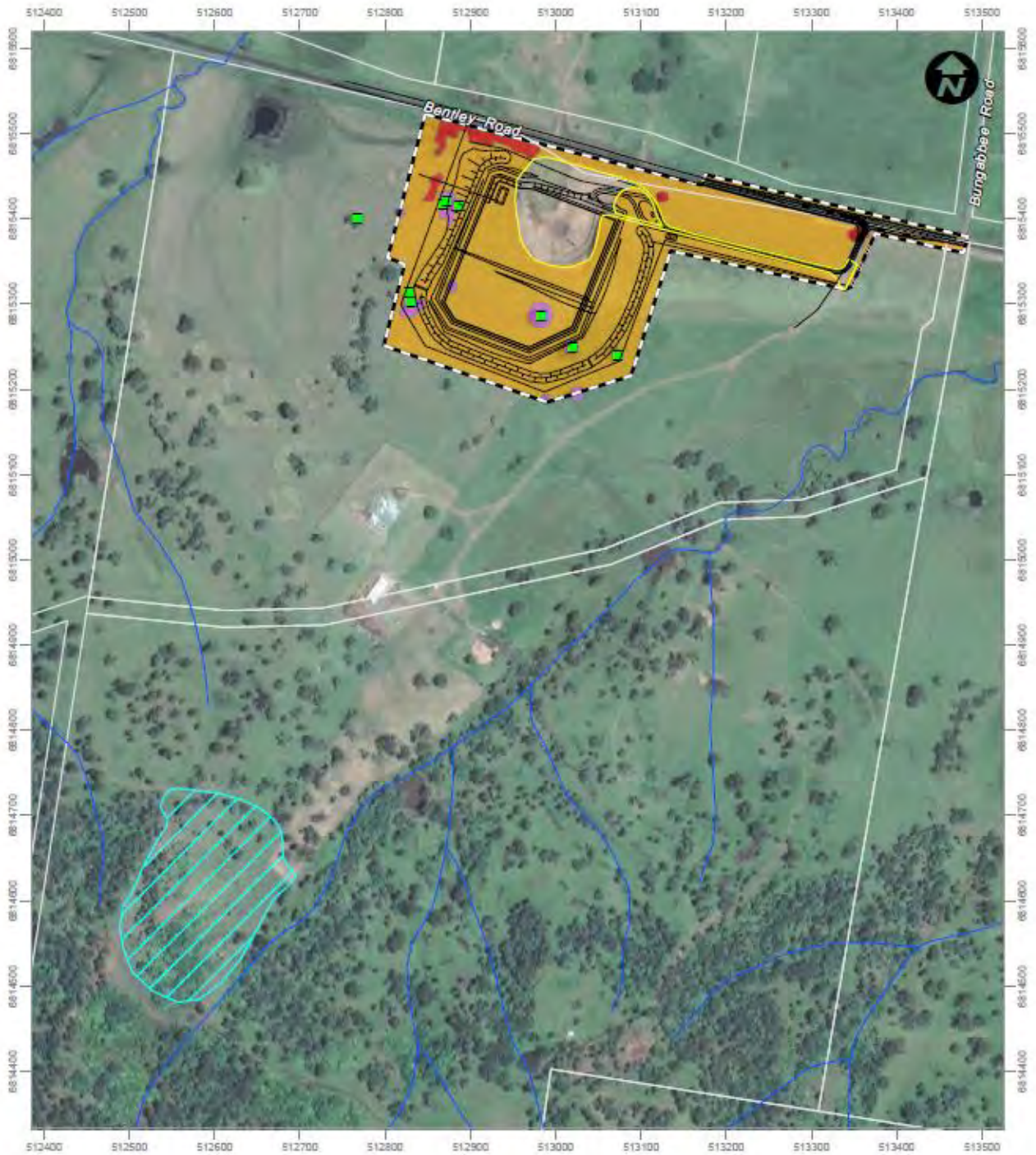
11. Traffic management actions

Objective	– Minimise impacts to the local residents and public infrastructure from traffic generated by the operation.			
Targets	<ul style="list-style-type: none"> – Ensure full compliance with the relevant legislative requirements and conditions of consent. – No justified complaints related to site traffic. – No road damage from quarry vehicle movements beyond normal wear and tear. 			
No.	Action	Reference	Timing	Responsibility
T1	Ensure all employee inductions include the relevant requirements and controls outlined in the TMP, including the Drivers Code of Conduct (Appendix E). Use regular toolbox talks to reinforce the requirements.	-	Pre-operation / Operation	Quarry Manager
T2	Prior to commencement of operations, hinged 'Trucks Turning' warning signs will be permanently erected and displayed during truck operations on Bentley Road at both approaches to the quarry intersection. The signage to be installed on the western approach is to be erected on the crest 310 m from the intersection, the signage to be installed on the eastern approach is to be erected a minimum of 200 m from the intersection.	Condition 65	Pre-operation	Quarry Manager
T3	All internal access roads will be constructed and maintained as an all-weather standard.	Condition 61	Operation	Quarry Manager
T4	The gate to Bentley Quarry will be set back 25 m from the through traffic lane of Bentley Road to ensure heavy vehicles do not block traffic access when entering and exiting the site.	Condition 62	Operation	Quarry Manager
T5	<p>The quarry operations will not:</p> <ul style="list-style-type: none"> – Dispatch more than 70 laden trucks from the site per day. – Dispatch more than 7 laden trucks from the site per hour. <p>The date, time, weight, and registration details of all trucks dispatched from the quarry will be recorded.</p>	Condition 4 and 76	Operation	Quarry Operations Manager
T6	During periods where 50 trucks per day or more will be hauling material from the quarry. Bentley Quarry will notify all residential properties within 2 km and advise motorist via a sign on Bentley Road at least one week prior, if possible, or as soon as possible.	Condition 60	Operation	Quarry Manager
T7	Bentley Quarry will not hire out any plant or equipment or undertake any associated maintenance and repair of hire plant and equipment.	Condition 9	Operation	Quarry Manager
T8	Prior to the quarry extracting or transporting 100,000 tonnes of quarry material, concrete waste, ENM or VENM in a 12 month period, a weighbridge will be installed. Once installed, all heavy vehicles will be weighed on the weighbridge upon entry and exit, with a docket provided to the driver, for the life of the operation.	Condition 12	Operation	Quarry Manager
T9	<p>All plant and equipment used at the site, or to monitor the performance of the development will be:</p> <ul style="list-style-type: none"> – Maintained in a proper and efficient condition. – Operated in a proper and efficient manner. 	Condition 16	Operation	Quarry Operations Manager

12. Vegetation and rehabilitation management controls

Objective	<ul style="list-style-type: none"> – Maintain significant habitat and minimise vegetation disturbance. – Minimise the spread of weeds. 			
Targets	<ul style="list-style-type: none"> – No fauna fatalities. – No unapproved disturbance of vegetation. – No new occurrences of weeds on site. 			
No.	Control	Reference	Timing	Responsibility
V1	Train all staff on flora and fauna control practices and the requirements of the EMS through inductions, toolboxes, and targeted training.	-	Pre-operation	Quarry Manager
V2	A stock proof fence and appropriate warning signage will be erected around the quarry perimeter, incorporating lockable gates.	-	Pre-operation	Quarry Manager
V3	Prior to operation activities commencing, the limits of clearing will be marked and temporary fencing installed around the quarry footprint area to avoid unnecessary vegetation and habitat removal/disturbance.	Condition 94, EIS 7.5.3	Operation	Quarry Manager
V4	<p>Prior to clearing commencing a suitably qualified ecologist is to undertake a pre-clearing survey to ensure no fauna are present within clearing area. Implement clearing protocols, including:</p> <ul style="list-style-type: none"> – Marking trees to be removed and preparing an inventory of trees and hollows to be removed. – Checking hollow-bearing trees for the presence of bird nests and arboreal mammals, such as possum and bats, prior to felling. – Animals found to be occupying trees should be safely removed before the clearing of trees if possible and relocated into nearby woodlands. 	Condition 94, EIS 7.5.3	Operation	Quarry Manager / Consultant
V5	Within two (2) years of commencement of operations, compensatory / offset planting of native trees species will include planting a total of 50 <i>Eucalyptus tereticornis</i> , <i>Eucalyptus siderophloia</i> and <i>Corymbia intermedia</i> trees in the designated area shown in Figure 12.1.	Condition 95 and EIS 7.5.3	Operation	Quarry Manager
V6	Prior to clearing hollow bearing trees, they will be replaced with microbat nest boxes, at a ratio of 2 (nest boxes):1 (hollow-bearing tree removed). Nest boxes are to be designed for microbat use and positioned in mature trees within the designated area shown in Figure 12.1.	Condition 93 and EIS 7.5.3	Operation	Quarry Manager
V7	Weeds within the study area would be managed in accordance with the Biosecurity Act 2015.	EIS 7.5.3	Operation	Quarry Operations Manager
V8	All native animals, including snakes, will not be harmed, or handled.	-	Operation	Quarry Operations Manager/Quarry Operators
V9	If injured native wildlife is found on the site, W.I.R.E.S will be contacted to collect and care for the animal.	-	Operation	Quarry Operations Manager
V10	If any pest animals are observed on site, Local Land Services will be called for guidance.	-	Operation	Quarry Operations Manager

V11	Landscaping of the visual bunds will use endemic native shrubs and ground cover species. Tree species are not to be used due to potential stability issues. Vegetation will be maintained until the visual bunds achieve 80% cover.	EIS 7.5.3	Operation	Quarry Manager
V12	Rehabilitation at the site is to be generally consistent with the conceptual final landform, as provided in Appendix A.	Condition 96	Operation	Quarry Manager
V13	<p>Within 6 months of the approval of the Rehabilitation Management Plan, a Rehabilitation Bond is to be lodged with the Council to ensure that the rehabilitation of the site is implemented in accordance with the performance and completion criteria set out in the Rehabilitation Management Plan.</p> <p>The sum of the bond must be determined by:</p> <ol style="list-style-type: none"> calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and engage a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Council. 	Condition 98	Operation	Quarry Manager
V14	<p>Within 3 months of each Independent Environmental Audit (see Section 17.2), a suitably qualified quantity surveyor or other expert will be engaged to review, and if necessary, revise, the sum of the Rehabilitation Bond to the satisfaction of the Council. This review will consider the:</p> <ol style="list-style-type: none"> effects of inflation likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next three years of the development), and performance of the implementation of the rehabilitation of the site to date 	Condition 99	Operation	Quarry Manager
Monitoring				
V15	Routine weekly inspections will occur throughout the operational lifetime of the quarry to identify any biodiversity issues, such as weeds, injured wildlife.	-	Operation	Quarry Operations Manager
V16	The boundary markers will be inspected monthly to ensure they can still clearly be seen and no works have extended outside the quarry limits.	-	Operation	Quarry Operations Manager
V17	Vegetation in the compensatory habitat area and on the visual bunds will be monitored every month for the first six months and every six months thereafter. Any required weeding, replacement trees, guards or watering will be completed within one week of the inspection.	-	Operation	Quarry Operations Manager



LEGEND

- | | | |
|---------------------------|---|-----------------------------------|
| Cadastre | Miscellaneous ecosystem - highly disturbed areas with no or limited native vegetation (exotic vegetation) | Offset planting and nest box area |
| Study area | Miscellaneous ecosystem - highly disturbed areas with no or limited native vegetation (exotic grasslands) | Proposed quarry layout |
| Existing quarry footprint | PCT 841 Forest Red Gum grass open forest | Hollow-bearing tree |

0 120 Metres



Biodiversity Assessment Report - Bentley Quarry Expansion
4071-1013

Proposal Footprint - Illustration 7.1

Information shown is for illustrative purposes only
 Drawn by: AB Checked by: TLJ Reviewed by: DGH
 Source of base data: Google Earth 2021
 Date: 29/04/2022
 Revision: A

Figure 12.1 Offset area

13. Waste management measures

Objective	– Minimise the volume of waste generated from site operations.			
Targets	<ul style="list-style-type: none"> – The volume of waste disposed at landfill is less than 1% of the volume extracted. – No recyclable products disposed to landfill. – No contamination of the quarry. 			
No.	Control	Reference	Timing	Responsibility
W1	All personnel working at the site will be made aware of their responsibilities in minimising waste.	-	Pre-operation	Quarry Manager
W2	All waste is to be managed in accordance with the requirements of the <i>Waste Avoidance and Resource Recovery Act 2001</i> , the POEO Act, and the <i>Waste Classification Guidelines</i> (NSW EPA, 2014) and the principles of the waste management hierarchy.	EIS 7.9.3	Operation	Quarry Manager
W3	The site will be maintained in a tidy manner at all times.	Condition 88	Operation	Quarry Operations Manager
W4	All building waste must be stored in a designated waste storage area and removed from the site to an approved waste disposal facility.	Condition 88, EIS 7.9.3	Operation	Quarry Operations Manager
W5	Any waste storage area used for the storage of liquid wastes will be covered, have an impervious surface and be bunded to prevent the escape of spills and leaks.	Condition 88	Operation	Quarry Operations Manager
W6	All waste generated is to be collected by appropriately licensed waste contractors.	Condition EIS 7.9.3	Operation	Quarry Operations Manager
W7	No on-site disposal of waste or burning of site refuse and materials is to occur.	Condition 89	Operation	Quarry Operations Manager
W8	The project may receive up to 50,000 tonnes (in total) of ENM or VENM on the site in a financial year. No other materials classified as waste (including concrete) under the EPA Waste Classification Guidelines 2009 (or its latest version) may be received and processed on the site.	Condition 7	Operation	Quarry Operations Manager
W9	The process for accepting ENM and VENM is outlined in Appendix F.	Condition 86	Operation	Quarry Operations Manager
W10	ENM and VENM will be stored separately in the area nominated on the plans in Appendix A, with ENM only to be used on site, in accordance with the Excavated Natural Material Exemption 2014. VENM may be used on site or blended with quarry products to achieve the relevant specifications.	-	Operation	Quarry Operations Manager
W11	Prior to importing onto the site any concrete waste or any other material that may be classified as a waste under the EPA Waste Classification Guidelines 2009 (or its latest version), a 'resource recovery exemption' under the POEO Act will be obtained and provided to Council.	Condition 87, Condition 8	Operation	Quarry Operations Manager
W12	Only waste which meets the conditions of a current Resource Recovery Order and Exemption issued by the EPA is permitted to be accepted at the premises for processing and offsite reuse. Any waste material that is received at the premises must be processed and disposed of offsite within 12 months of its receipt at the premises.	L3.3 Waste	Operation	Quarry Operations Manager

W13	The amount of waste imported onto the premises will be weighed and recorded.	L3.4 Waste	Operation	Quarry Operations Manager
W14	<p>Prior to the commencement of any works, a Section 68 application to install a system of sewage management for the development must be submitted and be approved by Council.</p> <p>Prior to the issue of an Occupation Certificate the installation of the on-site sewage management system must be completed in accordance with the Section 68 approval and all of the requirements of the approval must be complied with.</p> <p>Prior to any work commencing toilet facilities must be provided at or in the vicinity of the work site.</p>	Condition 24, 58, 59, 89	Operation	Quarry Operations Manager
Monitoring				
W15	Routine weekly inspections will occur throughout the operational lifetime of the quarry to identify any waste issues.	Condition 86, 88	Operation	Quarry Manager
W16	The septic tank will be inspected six monthly or as required by Council to ensure it is functioning as required.	-	Operation	Quarry Manager

14. Heritage management measures

Objective		– Avoid damage or disturbance of heritage items.		
Targets		– No damage to heritage items. – All site staff and contractors trained on unexpected finds protocol.		
No.	Control	Reference	Timing	Responsibility
H1	All personnel working at the site will be made aware of their responsibilities in relation to heritage and the requirements of the EMS through inductions, toolboxes, and targeted training.	-	Pre-operation	Quarry Manager
H2	All grass and topsoil stripping works on the site will be monitored at all times by a suitably qualified and experienced archaeologist or representative of the Local Aboriginal Land Council.	Condition 79, EIS 7.7.3	Operation	Quarry Manager
H3	If any Aboriginal object is uncovered or identified during the operations, the work shall immediately cease in the vicinity of the Aboriginal object and contact NSW Heritage and the relevant Local Aboriginal Land Council to arrange their assessment.	Condition 80, EIS 7.7.3	Operation	Quarry Manager
H4	If any human remains are discovered during any construction work and/or operations, then all activity in the vicinity of the find must cease. As a first step the local police must be notified, followed by NSW Heritage and advice sought on appropriate next actions. No work can continue on the site until cleared with police and NSW Heritage.	Condition 81	Operation	Quarry Manager
Monitoring				
H5	Routine weekly inspections will occur throughout the operational lifetime of the quarry to identify if any Aboriginal material is uncovered.	-	Operation	Quarry Operations Manager

15. Social management measures

Objective	– To minimise impacts on the local community.			
Targets	– No detectable impact on the community. – No justifiable complaints related to site operations.			
No.	Control	Reference	Timing	Responsibility
S1	All personnel working at the site will be made aware of their responsibilities in relation to minimising their impact on the community.	-	Pre-operation / Operation	Quarry Manager
S2	One month prior to commencing quarrying operations, a community consultative advisory committee will be established. The Committee will consist of: a. The operator (or representative). b. A member of Richmond Valley Council (if available). c. At least three community representatives. d. An independent chair approved by the Council. The Committee will meet twice yearly while the Quarry remains in operation. The purpose of the Committee is to: a. Review the operator's performance with respect to environmental management and community relations, including complaints-handling. b. Undertake inspections of quarry operations as required.. Bentley Quarry will be responsible for: a. Funding the independent chair's fees. b. Making meeting facilities available. c. Organising the twice-yearly meetings. d. Taking minutes and make the minutes available to the public and Council.	Condition 107	Pre-operation / Operation	Quarry Manager
S3	Prior to commencing operations, a business identification sign will be installed, including phone number for registering complaints.	Condition 22	Pre-operation	Quarry Manager
S4	The site will be clearly fenced with warning signs to prevent public entering the site.	Condition 91	Pre-operation	Quarry Manager
S5	Employ locals and local sub-contractors, where possible.	EIS 7.11.3	Pre-operation / Operation	Quarry Manager
S6	Prior to commencing operations, the visual bunds to the east and west of Stage 1, shown on the plans in Appendix A, are to be established and vegetated.	Condition 82	Pre-operation / Operation	Quarry Manager
S7	Prior to commencing operations within Stage 2, the visual bunds to the east, south and west of Stage 2, shown on the plans in Appendix A, are to be established and vegetated.	Condition 83	Pre-Stage 2	Quarry Manager
S8	Existing vegetation outside the extraction limit boundary will be maintained to provide visual screening.	EIS 7.8.3	Operation	Quarry Manager
S9	Stockpiles, plant, and equipment will be located in positions which are screened from views into the site, where possible.	EIS 7.8.3	Operation	Quarry Operations Manager
S10	All areas where quarrying is completed will be revegetated.	EIS 7.8.3	Operation	Quarry Operations Manager
S11	No fixed external lighting is to be installed on site.	Condition 84 and 85	Operation	Quarry Manager

S12	The site will be maintained in a tidy manner at all times.	Condition 88 and EIS 7.8.3	Operation	Quarry Manager
S13	Areas of disturbance will be minimised.	EIS 7.8.3	Operation	Quarry Operations Manager
S14	The management and monitoring requirements outlined in this EMS will be implemented.	-	Operation	Quarry Manager
S15	The complaints management system in Section 16.2 will be implemented.	-	Operation	Quarry Manager
Monitoring				
S16	Hold the community consultative advisory committee meetings twice yearly.	Condition 107	Operation	Quarry Manager
S17	Monitor complaints for recurring issues which will identify issues to focus on.	-	Operation	Quarry Manager

16. Incidents and complaints

16.1 Incident response

Incidents and near misses may occur with potential or actual environmental harm. Incidents resulting from normal operations are likely to include:

- Spills or leaks of hazardous substances (oils, fuels, chemicals).
- Release of contaminated stormwater from the site.
- Excessive noise or dust levels at sensitive receivers.

Environmental control measures are established to minimise the risk of environmental harm occurring. A fire extinguisher is to also be stored on site and in vehicles to respond to any fires on site, if required. Bentley Quarry will also assist the rural fire service and emergency services as much as possible if there is a fire on site.

16.1.1 Emergency contacts

Details for organisations that may be contacted to respond to an environmental emergency are provided below in Table 16.1. These details are to be made available to all site personnel on site signage and induction material.

Table 16.1 Emergency contact details

Agency	Contact
Police / Fire / Ambulance	000
Hospital	Uralba Street, LISMORE 02 6621 8000
SafeWork NSW	131 050
EPA	131 555
Richmond Valley Council	02 6660 0300
WIRES Wildlife Rescue	02 6628 1898

16.1.2 Incident investigation

All incidents are documented, investigations conducted and action plans established in order that the incident does not occur again. Where lessons are learnt from the investigation or current procedures are identified as being ineffective, the EMS will be revised to include the improved procedures or requirement.

An incident investigation includes the following basic elements:

- The cause, time, and duration of the event.
- Contact details for all personnel involved in the incident and subsequent response.
- Action taken in relation to the event with respect to containment, notification, and residual effects.
- Details of any measure taken or proposed to be taken to prevent a recurrence of such an event.

All personnel are required to report all incidents, as it is regarded as a valuable method of addressing shortcomings in procedures, training, or equipment, and is an opportunity for improvement.

16.1.3 Notification

The Quarry Manager will immediately notify the EPA and Council of pollution incidents on or around the site which have occurred in the course of activities in the following circumstances:

- If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- If actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000.

Written details of the notification are to be submitted to the EPA and Council within 7 days of the date on which the incident occurred.

16.2 Complaints

A telephone complaint line will be established to receive complaints from members of the public in relation to activities conducted at the quarry. The complaints line will be publicly available and advertised on signage at the site entry.

A legible record (see Appendix B) of all complaints in relation to pollution arising from any activity must include:

- The date and time of the complaint.
- The method by which the complaint was made.
- Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect.
- The nature of the complaint.
- The action taken in relation to the complaint, including any follow-up contact with the complainant.
- If no action was taken, the reason why no action was taken.

17. Reporting and review

17.1 Reporting and records

17.1.1 Environmental inspection checklist

The effectiveness of environmental protection measures is assessed weekly. To achieve this, an environmental inspection checklist will be used to address the key mitigation actions as well as any specific approval requirements. A copy of the checklist is in Appendix G.

The purpose of the checklist is to:

- Provide a surveillance tool to ensure that safeguards are being implemented.
- Identify where problems might be occurring.
- Identify where sound environmental practices are not being implemented.
- Facilitate the identification and early resolution of problems.

Any non-conformances identified through the checklist process would be highlighted and an environmental action report or a non-compliance/environmental incident notification report completed. The checklist would remain “open” until:

- The issue has been resolved.
- A new or revised procedure has been established and implemented.
- Training has been provided to relevant personnel/sub-contractors.

17.1.2 Annual Review

Prior to the end of August each year, an annual review detailing the environmental performance of the operations will be prepared and submitted to Council. The annual review will:

- Describe the development that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year.
- Include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against:
 - The relevant statutory requirements, limits, or performance measures/criteria.
 - Requirements of any plan or program required under this consent.
 - The monitoring results of previous years.
- Identify any non-compliance in the previous financial year, and describe what actions were (or are being) taken to ensure compliance.
- Identify any trends in the monitoring data over the life of the development.
- Identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies.
- Describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

17.1.3 Records

Environmental reporting and records are maintained on site to demonstrate compliance with the EMS. Records to maintain include:

- The Notice to Application of Determination.
- The Environmental Impact Statement (EIS) (GHD 2021) and supporting documents.
- Submissions Report titled Proposed Bentley Quarry Submissions Report (GHD 2022).

- The EMS.
- Annual Reviews (refer Section 17.1.2).
- Independent Environmental Audit (refer to Section 17.2).
- Induction and training register.
- Environmental inspection and monitoring reports/results (refer to Section 17.1.1 and Appendix G).
- Compliance reports (refer Section 17.1.2).
- Incident reports and register (refer to 16.1).
- Complaints register (refer to 16.2).
- Truck movements (refer to 11).
- Extraction volumes, based on truck records (refer to 7).
- All regulatory correspondence.

The above documents must be made publicly available on a website, if required by Council.

All records are to be:

- Maintained in a legible form.
- Kept for at least four years.
- Produced to any authorised officer of the EPA or Council upon request.

17.2 Audits

Within one year of the commencement of operations and every five years after, an Independent Environmental Audit (Audit) of the operations will be prepared. The Audit will:

- Be led and conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by Council.
- Assess the environmental performance of the development and whether it is complying with the relevant requirements in the consent and any relevant EPL (including any assessment, plan or program required under these approvals).
- Review the adequacy of any approved strategy, plan or program required under the consent.
- Recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan, or program required under the consent.
- Be conducted and reported to the satisfaction of Council.

Within three months of commencing an Independent Environmental Audit a copy of the audit report must be submitted to Council, and any other NSW agency that requests it, together with responses to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations.

17.3 Review and improvement

The Quarry Manager will review the EMS and its operation and implementation every three years. The purpose of the review is to ensure that the EMS is meeting the requirements of the standards, policies, and objectives. Between the scheduled reviews, a register of issues will be maintained to ensure that any issue raised by internal and external personnel associated with the quarry operations is recorded.

The review will consider (where available or applicable):

- Site personnel comments.
- Agency comments.
- Audit findings.
- Environmental monitoring records.
- Complaints.
- Details of corrective and preventative actions taken.

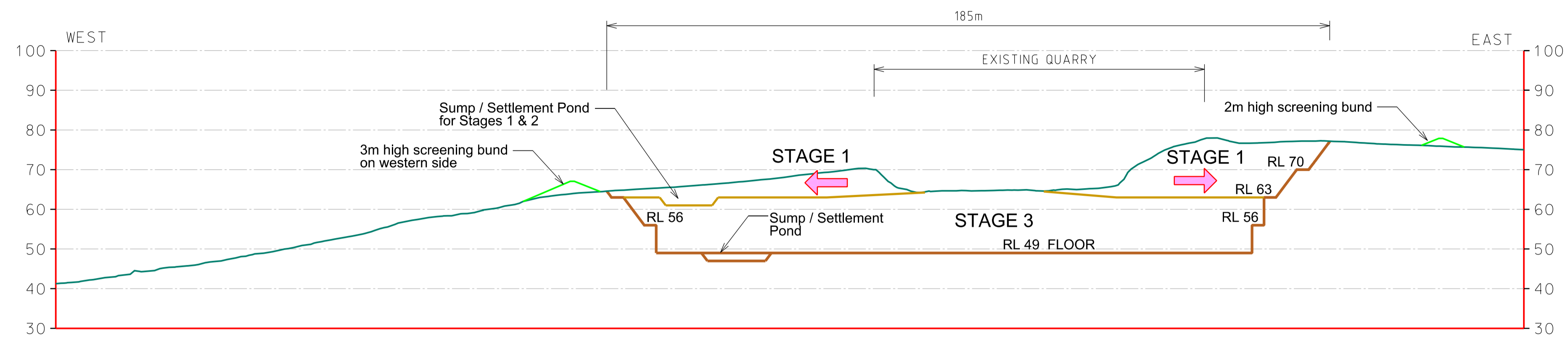
- Environmental non-conformances, environmental inspection notices, inspection reports, and non-conformance reports.
- Incident reports.
- Changes in organisation structures and responsibilities.
- The extent of compliance with objectives and targets.
- The effect of changes in standards and legislation.
- Co-ordination of environmental management of sub-contractors.

Details of any significant changes made to the EMS, as a result of the review, will be summarised in a table and forwarded in a memo to all site staff, contractors, and Council.

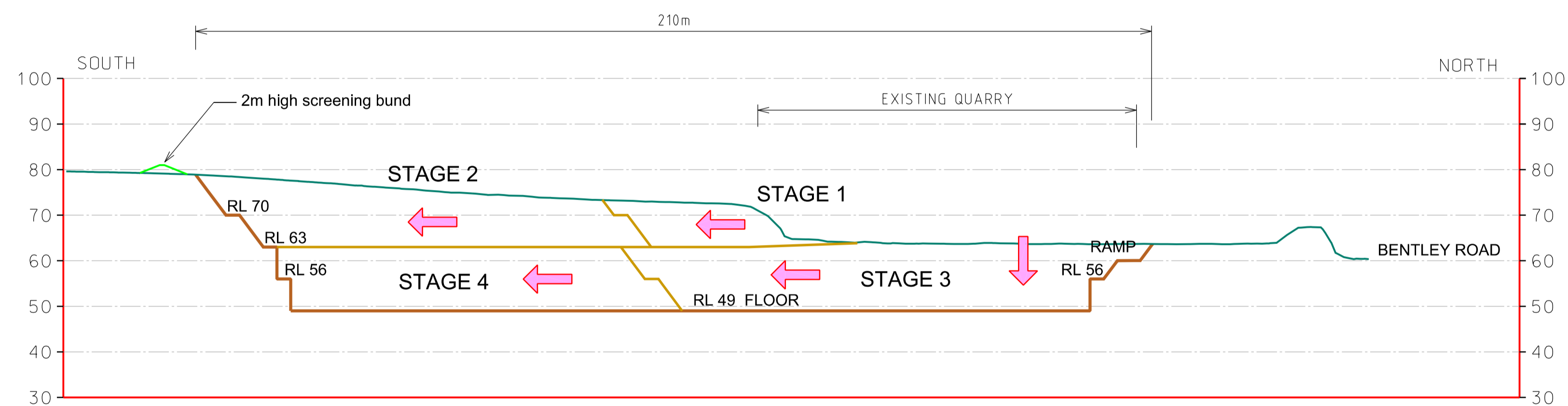
Appendices

Appendix A

Site plans



SECTION A - A



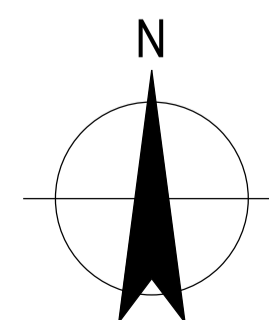
SECTION B - B

**RICHMOND VALLEY COUNCIL
DEVELOPMENT CONSENT**

This is the plan attached to
DEVELOPMENT CONSENT No. DA2022/0107

Date of Endorsement: 16/12/2022

Per: 
General Manager



GHD
230 Harbour Drive Coffs Harbour
NSW 2450 Australia
T 61 2 6650 5600 F 61 2 6650 5601
E cfsmail@ghd.com W www.ghd.com



Project No.

Client **R & S CONTRACTING Pty Ltd**
Project **BENTLEY QUARRY**

Drawing Title **PROPOSED QUARRY SECTIONS**

Size **A1**

Rev	Description	Checked	Approved	Date
Author	S. Verhellen			
Designer				

File Name: C:\oy\Minedata\StefanV\GHD A1 Landscape Sheet.dgn

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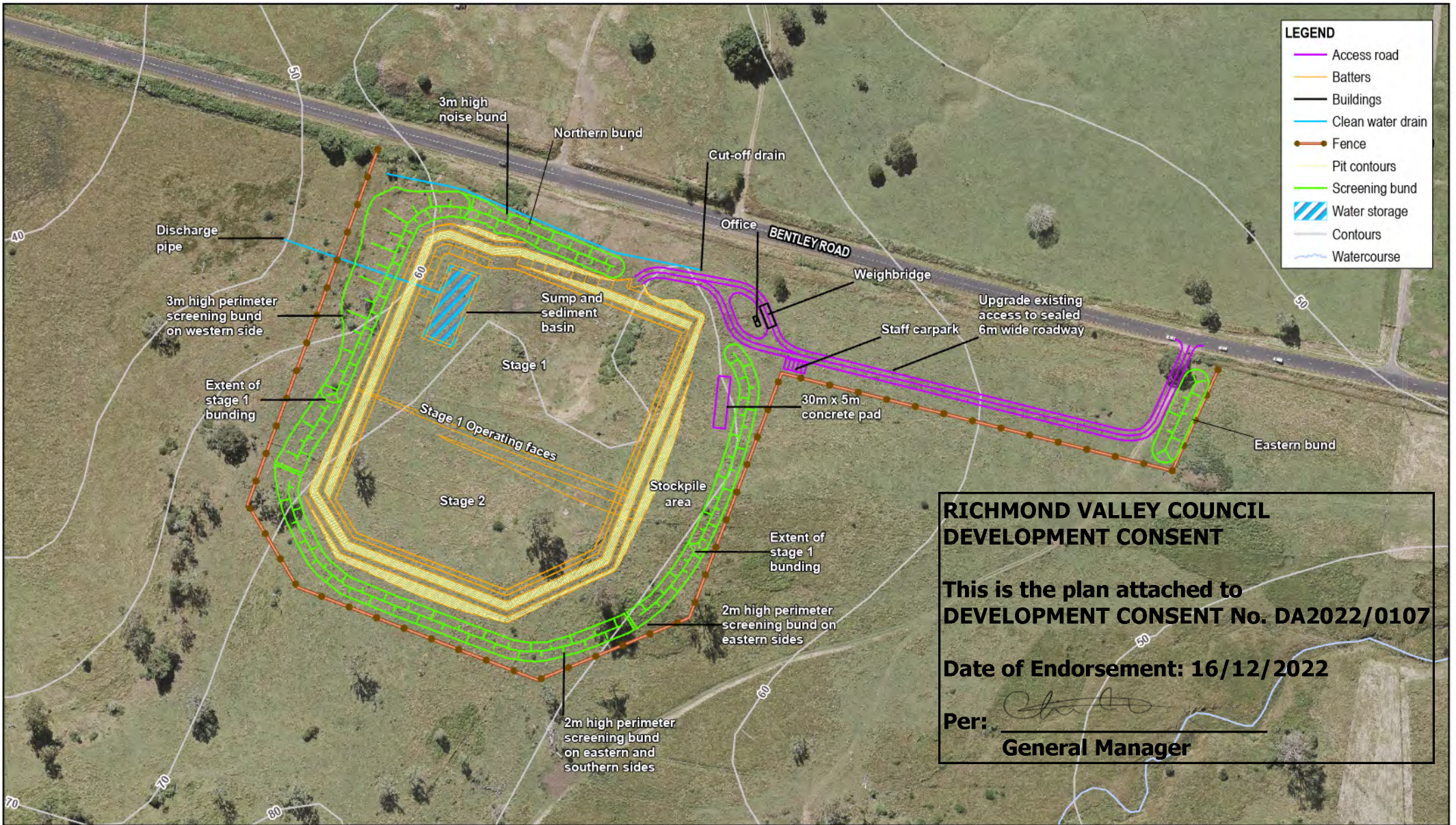
Status

Status Code

Drawing No. **22-12547851-002**

Rev

Develop outwards from existing faces to final pit batter at RL 63 and RL 70 levels then excavate to depth in Northern/Western area to allow

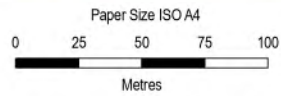


**RICHMOND VALLEY COUNCIL
DEVELOPMENT CONSENT**

**This is the plan attached to
DEVELOPMENT CONSENT No. DA2022/0107**

Date of Endorsement: 16/12/2022

Per: 
General Manager



Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 56

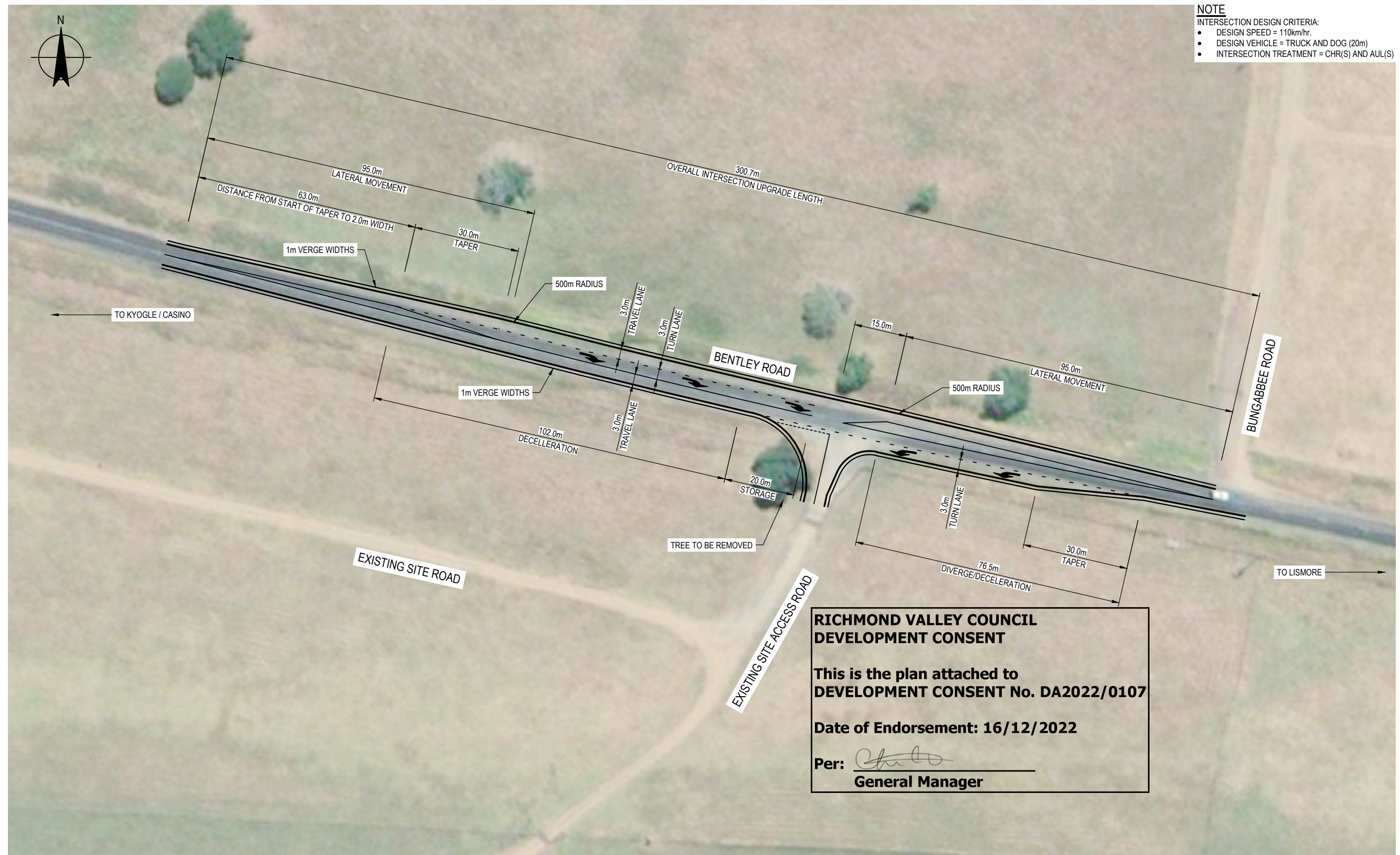
R&S Contracting Pty Ltd
Bentley Quarry
Noise Impact Assessment

Project No. 12547851
Revision No. 0
Date 04/05/2022

Proposed noise bunds

Figure 8-1

NOTE
 INTERSECTION DESIGN CRITERIA:
 • DESIGN SPEED = 110km/hr.
 • DESIGN VEHICLE = TRUCK AND DOG (20m)
 • INTERSECTION TREATMENT = CHR(S) AND AUL(S)



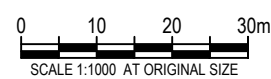
**RICHMOND VALLEY COUNCIL
 DEVELOPMENT CONSENT**

**This is the plan attached to
 DEVELOPMENT CONSENT No. DA2022/0107**

Date of Endorsement: 16/12/2022

Per: *[Signature]*
General Manager

Rev	Description	App'd	Date
A	ISSUED FOR COUNCIL DA	BL	17.11.22



R & S CONTRACTING Pty Ltd
 BENTLEY QUARRY
 Lot 2 DP 1196757, No. 1465 Bentley Road
 BENTLEY ROAD SITE ACCESS
 INTERSECTION PLAN

Scale 1:1000 for A3

Status code **S3** Project No. **12547851** Sketch no. **12547851-SKT-0002** Rev no. **A**

Appendix B

Records

Appendix C

Basin management

Sediment Basin Management

The sedimentation basin is to be constructed, in accordance with the details in Figure 7.1 and must have a marker (the “sediment basin marker”) that identifies the upper level of the sediment storage zone.

Whenever the level of liquid and other material in the sedimentation basin exceeds the level indicated by the sedimentation basin marker, the level of liquid and other material above the sediment basin marker must be removed as soon as possible and at most within five days of the cessation of a rainfall event that causes runoff to occur on or from the site.

Prior to discharging water from the sediment basin offsite, it must meet the concentration limits in Table C.1. The concentration limits in Table C.1 do not apply to any discharge from the sediment basin solely arising from rainfall measured at the premises exceeding 60.2 mm in total falling over any consecutive five day period.

Table C.1 Concentration limits

Pollutant	Units of measure	100% concentration limit
Total Suspended Solids	mg/L	50
pH	pH units	6.5-8.5
Oil and Grease	Visible	Nil

The sampling point for water discharged from the sediment basin will be provided and maintained in an appropriate condition to permit:

- The clear identification of the sediment basin and discharge point.
- The collection of representative samples of the water discharged from the sediment basin.
- Access to sampling point at all times by an authorised officer of the EPA.

If the water does not meet the concentration limits in Table C.1, the following treatment procedures will be followed:

pH treatment

- Treat for pH prior to T.S.S.
- Hydrochloric acid (32% Muriatic) or sulfuric acid will be used to lower pH when the pH exceeds 8.5.
- Agricultural Lime (Aglime) or Hydrated lime will be used to treat water with a pH less than 6.5.
- Determine the volume of water in basin.
- Determine percentage of lime or acid required by taking a 10 litre sample of basin water and adding a known amount of lime or acid (initially 0.004%). If the pH is still not acceptable, vary the amount of lime or acid until within the limits.
- Repeat the above procedure to confirm the amount of acid or lime required.
- Once the required percentage has been determined, calculate the actual amount of lime or acid to be added by multiplying the volume of water in the basin by the determined percentage.
- Add the required amount of lime or acid to the basin.
- Mix the water in the sediment basin well.
- Test water to confirm it is within pH of 6.5 to 8.5.

TSS treatment

- If the basin requires treatment/flocculation (e.g. T.S.S. >50 mg/l), gypsum is to be immediately applied evenly across the top of the water at the manufacturer’s recommended dosage initially, then at an acceptable rate should more flocculants be required.

- The basin should be monitored daily after flocculation until desired TSS is achieved and to assist in determination of optimal dosage levels.
- Method of application involves mixing in a drum with water and spraying across the whole surface of the basin.
- When spraying flocculants, the mixture must hit the water at between 10 to 20 degrees to increase surface areas exposure to the water column.
- When using liquid gypsum such as “Hydra-Gyp” the solution must be mixed before use to ensure gypsum is evenly suspended throughout mixture. This is best achieved using an aeration device at 3 bars of pressure for approximately 15 minutes.
- Flocculation of sediment basins must occur within 24 hours of the conclusion of each rain event. Ongoing visual monitoring of the basins should occur during this time.
- Test water to confirm it is less than 50 mg/L.
- Alternative flocculation agents may be investigated if gypsum is found to be unsuitable. Use of alternative flocculating agent will only occur after approval from the Council.

Oil and Grease treatment

- Treatment of oil and grease is not practical and so an appropriately experience consultant will be contacted for advice or the water will be disposed at an appropriately licenced facility.

Basin management activities are to be recorded on the Basin Monitoring Record form (Appendix B).

Appendix D

Properties to be notified

Table D.1 *Properties to be notified prior to a blast*

Lot/DP	Address*
Lot 2 DP1012708	1022 Naughtons Gap Road, Bentley
Lot A DP406337	1365 Bentley Road, Bentley
Lot 10 DP1065523	Bentley Road, Bentley
Lot 2 DP122850	1480 Bentley Road, Bentley
Lot 1 DP122850	1480 Bentley Road, Bentley
Lot 1 DP 376091	1480 Bentley Road, Bentley
Lot 1 DP124367	1480 Bentley Road, Bentley
Lot 57 DP755742	1480 Bentley Road, Bentley
Lot 2 DP1081238	1480 Bentley Road, Bentley
Lot 2 DP122844	87C Bungabbee Road, Bungabbee
Lot 1 DP123258	87C Bungabbee Road, Bungabbee

* Addresses sources from maps.six.nsw.gov.au on 29/06/2023

Appendix E

Drivers Code of Conduct



Drivers Code of Conduct



Bentley Quarry

R&S Contracting

12 March 2024

→ The Power of Commitment



Project name		Drivers Code of Conduct					
Document title		Drivers Code of Conduct Bentley Quarry					
Project number		12547851					
File name		12547851_RPT_Bentley Drivers Code of Conduct.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	B Luffman	S Lawer		S Lawer		03/02/23
S4	1	B Luffman	S Lawer		S Lawer		10/03/23
S4	2	B Luffman	S Lawer		S Lawer		16/03/23
S4	3	B Luffman	S Lawer		S Lawer		12/03/24

GHD Pty Ltd | ABN 39 008 488 373

230 Harbour Drive,

Coffs Harbour, New South Wales 2450, Australia

T +61 2 6650 5600 | **F** +61 2 9475 0725 | **E** cfsmail@ghd.com | **ghd.com**

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Appendices

Appendix A Bus company consultation

1. Introduction

This Drivers Code of Conduct applies to trucks servicing Bentley Quarry, located at Lot 2 DP 1196757, 1465 Bentley Road, Bentley. It has been developed to outline the expectations of drivers hauling material from the quarry because:

- The quarry is operated near residences.
- The route used by heavy vehicles servicing the quarry is also used by local buses, including school buses.
- There is a need for the drivers of heavy vehicles to understand the limitations and conditions associated with quarry operations.

The Drivers Code of Conduct has been prepared to achieve, at a minimum, the requirements of the draft condition 59(b) of DA2022/0107, which is:

- a. *Include a Driver Code of Conduct, including but not limited to:*
 - *A map of the vehicle movement plan highlighting critical locations.*
 - *An induction process for vehicle operators and regular toolbox meetings.*
 - *Procedures for travel through residential areas, school zones and/or bus route/s.*
 - *Evidence of consultation with relevant bus service providers where applicable.*
 - *A complaint resolution and disciplinary procedure.*
 - *Community consultation measures proposed for peak extraction periods.*
 - *Work, health and safety requirements under the Work Health and Safety Regulation 2017*

1.1 Scope and limitations

This report: has been prepared by GHD for R&S Contracting and may only be used and relied on by R&S Contracting for the purpose agreed between GHD and R&S Contracting as set out in Section 1 of this report.

GHD otherwise disclaims responsibility to any person other than R&S Contracting arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

2. Operating hours

Heavy vehicles are not to arrive or leave the quarry outside of the approved operating hours of:

- Weekdays - 7.00 am - 6.00 pm
- Saturdays - 8.00 am - 1.00 pm

No heavy vehicles are to enter or leave the quarry on a Sunday or a public holiday.

3. Truck movements

Truck movements, inclusive of all incoming and outgoing trucks, shall not exceed:

- 70 truck movements in any one day
- 7 truck movements in any hour

To monitor compliance with this requirement all Bentley Quarry owned or contracted trucks will have a GPS tracker installed and their movements recorded.

4. Designated routes

Heavy vehicles travelling to and from the quarry must use the following routes (see Figure 9.1), unless there is no other way to access the delivery location:

East – Lismore

- Bentley Road/Kyogle Road

South – Casino

- Bentley Road/Naughtons Gap Road. If Naughtons Gap Road is not open, Manifold Road is to be used in the interim

West – Kyogle

- Bentley Road

North

- Bentley Road/Kyogle Road and then Rosehill Road

5. Speed limits

- All speed limits on the designated routes are to be observed.
- Heavy vehicles are to abide by the site speed limit on the access track to the quarry, which is 10 km/hr.
- Drivers will use two way radios in order to establish the position of heavy vehicles entering or leaving the quarry on the access road to ensure the safety of all heavy vehicle drivers and reduce queuing along the access road or designated route.
- Drivers of heavy vehicles will comply with any instructions given by quarry staff in relation to speed, position, entry and exiting of the quarry.
- Drivers of heavy vehicles should drive at a speed appropriate to the conditions and always observe speed restrictions relevant to the vehicle configuration.
- Vehicles may be fitted with speed limiters so that the manager can monitor truck speed and ensure vehicles do not exceed the maximum permitted speed limit.

6. No convoying

- Heavy vehicles are to leave at least 200 metres between the rear of each heavy vehicle and the front of each other heavy vehicle, whilst on the designated route.
- If on the designated route a heavy vehicle is placed in a situation where the distance between heavy vehicles is less than 200 metres, the heavy vehicle at the rear will slow down, or pull off the road at a safe place to allow the vehicle in front to proceed without convoying taking place.

7. Loads to be covered

- All loads are to be covered appropriately and properly so that material/dust is not lost from the load.
- Drivers are to avoid any action that may cause pollution of the environment, over and above that created by works under normal circumstances.

8. The use of exhaust brakes

While heavy vehicles are on designated routes, exhaust brakes are not to be used, where possible.

9. Heavy vehicles and the public

Drivers of heavy vehicles must be:

- Conscious of the safety of others on the designated route
- Obedient to road rules
- Courteous towards other road users and pedestrians
- Consider the level of noise being made by their vehicles and keep noise to a minimum
- Conscious of actions that may cause pollution and avoid such actions

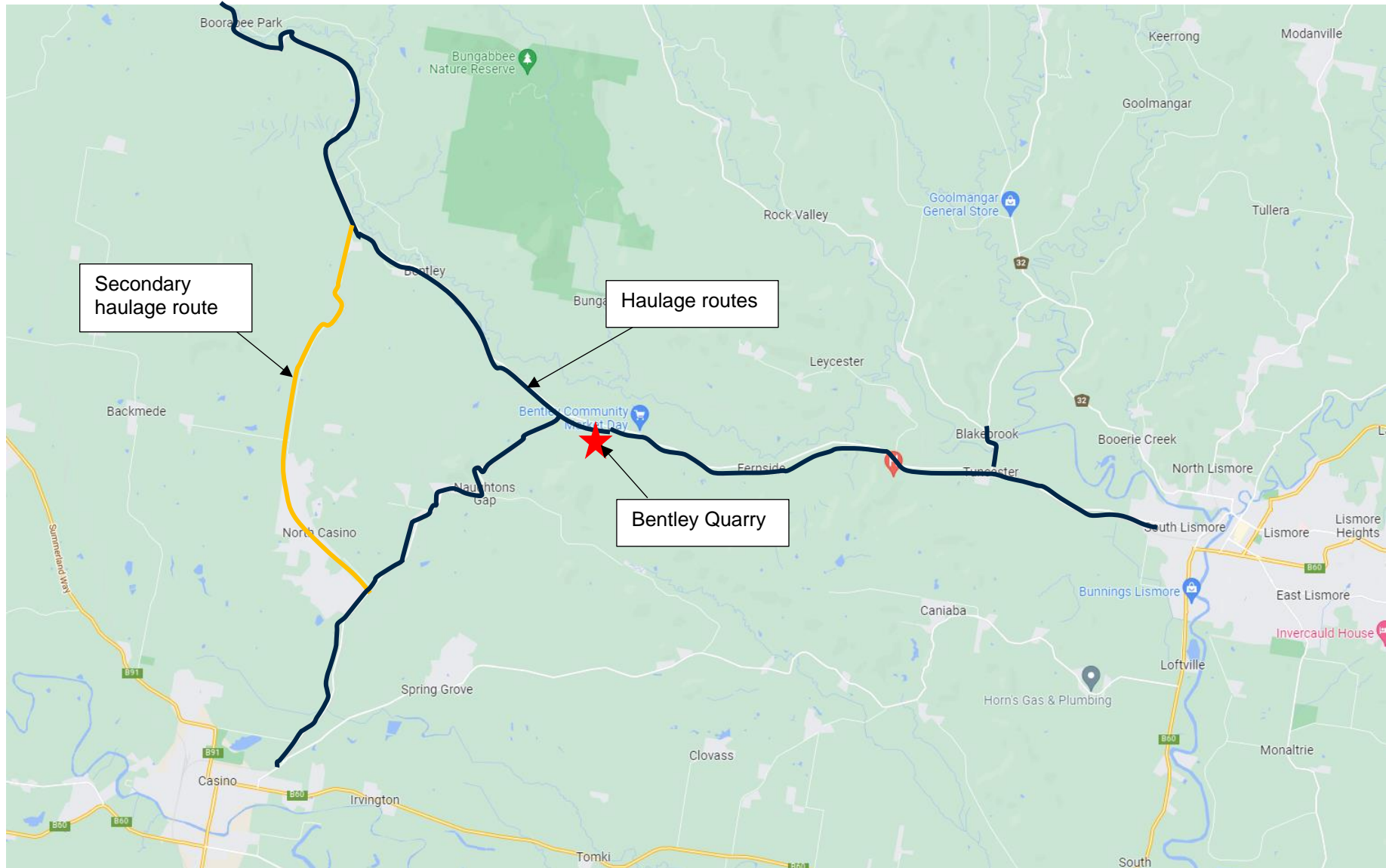


Figure 9.1 Designated routes for heavy vehicles associated with Bentley Quarry

10. School bus requirements

Table 10.1 provides the school bus timetables, as advised by the bus companies (see Appendix A).

Table 10.1 Bus timetables

Company	Route	Morning	Afternoon
Casino Bus Service	Manifold Road, Naughtons Gap Road and Bentley Road	7:15 am to 9:15 am	2:30 pm to 4:30 pm
Sodhi Bus Services	Bentley Road	8:00 am to 8:15 am	3:35 pm to 4:00 pm
Casino Christian School	Bentley Road and Manifolds Road	8:33 am to 8:40 am	-
	Manifolds Road and then west to Kyogle on Bentley Road	8:45 am	3:10 pm

Trucks are not to enter or exit Bentley Quarry between the peak school bus periods of:

- Morning – 8:00 am to 9:00 am
- Afternoon – 3:00 pm to 4:00 pm

The weighbridge boom gate will be closed during these periods.

The restrictions on truck operating hours do not apply during school holidays. At the start of each year, each bus company operating on Bentley Road is to be contacted to confirm school holiday dates. This information is to be provided to Council.

In addition, the following measures will be enforced:

- Truck drivers are to be particularly cautious during other periods when school buses are using the route.
- The Quarry Manager will notify all truck drivers by UHF when buses are operating on the haulage routes and instruct heavy vehicle operators to be cautious.
- Heavy vehicles are to remain 500 m behind school buses and if the bus stops, slow to 40 km before overtaking the bus.
- Be vigilant for school kids waiting by the side of the road and slow to 40 km before passing them.

11. Rest stops

- Where it is reasonably practicable, sleep and breaks shall be taken where there is access to amenities such as toilets, showers and facilities for meals.
- Rests shall be taken in accordance with Table 11.1.

Table 11.1 Rest stops

In any period of...	A driver must not work for more than a total of	And must have at least...
5 hrs 30 mins	5 hrs 15 mins	15 continuous mins rest
8 hrs	7 hrs 30 mins	30 mins rest, in blocks of 15 continuous mins
11 hrs	10 hrs	60 mins rest, in blocks of 15 continuous mins
24 hrs	12 hrs	7 continuous hrs stationary rest
7 days (168 hrs)	72 hrs	24 continuous hrs stationary rest
14 days (336 hrs)	144 hrs	4 nights rest (includes two consecutive nights rest)

Notes: Stationary rest is rest time that the driver spends out of the heavy vehicle or in an approved sleeper berth of a stationary regulated heavy vehicle.

A night's rest is seven hours continuous rest taken between 10:00 pm and 8:00 am or 24 hours continuous stationary rest.

12. Glare

- Do not exit the quarry or enter from the west when there is a vehicle approaching from the east (Lismore) within 500 m because their visibility may be affected by the glare from the afternoon sun.

13. Emergency response

- In the event of an emergency:
 - Stop your vehicle immediately and secure it.
 - Ensure the safety of those around you and yourself.
 - Dial 000 and seek support from Police, Ambulance or Fire Brigade as required.
 - Contact the Quarry Manager and advise of the emergency.
 - Await further instructions from the Emergency Services, Quarry Manager or your supervisor.
- If a heavy vehicle driver becomes aware of a hazard or a circumstance that the driver considers dangerous the driver must immediately inform the Quarry Manager and if necessary, must deal with the hazard.
- Report all hazards and incidents to the Quarry Manager, Council and TfNSW.

14. Driver responsibilities and safety

The safety of heavy vehicle drivers, people employed and working with those drivers and people affected by the work of those drivers is to be a priority. As a result, drivers of heavy vehicles must be responsible for the following:

- Ensuring that they are fit, not suffering from fatigue, nor under the influence of drugs or alcohol and will cooperate in the undertaking of random drug and alcohol testing if required.
- That they are rested and alert prior to and during the time they are driving heavy vehicles.
- Monitor their own performance and take regular breaks and rest times as required by road safety legislation and requirements.
- Inspect their vehicle prior to start up and report any issues before proceeding with work.
- Use the designated routes when servicing the quarry.
- Inform the Quarry Manager of any matter that may affect the ability of the driver to undertake the tasks of driving a heavy vehicle.
- Stop driving the heavy vehicle and inform the Quarry Manager should the driver become aware of any issue that might endanger himself/herself or a member of the public.
- Ensure the load is appropriately covered.
- Ensure the heavy vehicle is appropriate for the load to be carried in it.
- Ensure that all safety equipment fitted to the vehicle works properly.
- Do not operate the vehicle unless the two way radio attached to the vehicle is working properly.
- Listen carefully and abide by instructions on the two way radio, particularly advice from the Quarry Manager.
- Use good road manners and operate the heavy vehicle safely and responsibly while considering the safety of himself/herself and the general public, in particular school children on the designated route.
- Complete all work diaries and timesheets properly and accurately and supply all necessary and appropriate paper work to the Quarry Manager if required.
- Ensure they are wearing the appropriate personal and protective equipment, including steel capped safety boots, high visibility clothing/vests and hearing protection.
- Understand and abide by all road rules, including speed limits, road signs, use of seatbelts, avoiding taking unnecessary risks, avoiding overhead obstructions, not driving in a convoy and always parking well off the road.

15. Complaint resolution and discipline procedure

The following outlines the procedure for when a traffic related complaint is received.

The Quarry Manager will deal with all complaints in a fair, timely and transparent manner and all complaints will be treated seriously. In the event that the allegation(s) is/are of an illegal nature, the Quarry Manager reserves the right to refer the matter(s) to the relevant authority.

The Quarry Manager will maintain confidentiality as far as possible and ensure that no one is disadvantaged for making, supporting or providing information about a complaint.

15.1 Complaints register

The Quarry Manager will keep a register of all complaints received, the register will record, where provided:

- Date of the complaint
- Time of the complaint
- Name of the complainant (if provided)
- How the complaint was made
- Detailed description of the complaint, including:
 - Location of incident
 - Time of incident
 - Vehicle registration or description of vehicle
 - Nature of the complaint
- What and when actions were taken to resolve the issue
- Details of when the complainant was informed of the response

15.2 Investigation

Once the Quarry Manager is satisfied that the complaint is substantiated, an investigation of the location and causes of the complaint will be undertaken.

To ensure fairness for everyone involved and to comply with natural justice processes, the Quarry Manager may provide the full details of the complaint to the person or people against whom the complaint has been made and ask for their response.

15.3 Response and disciplinary action

If after the investigation the Quarry Manager confirms the complaint is justified, an appropriate response will be implemented. The nature of the response will depend on the nature of the complaint, some typical complaints and responses are outlined in Table 15.1. This list of complaints and responses is not exhaustive, with even the responses outlined potentially being different to the actual response depending on the details of the complaint.

Table 15.1 Complaint responses

Complaint	Response
Dangerous driving	Disciplinary action (refer to Table 15.2)
Tracking of material onto Bentley Road	Assess the effectiveness of cleaning practices and consider installing a rumble grid or other form of control
Driving too fast	Disciplinary action (refer to Table 15.2)

Complaint	Response
Rocks on the road	Review vehicle cleaning practices and toolbox drivers on covering loads and cleaning vehicles before exiting the site
Noisy or smoky truck	Have truck inspected and serviced (if required)
Road damage	Report issue to Council

If the complaint relates to driver behaviour the disciplinary action process will be enforced, as detailed in Table 15.2.

Table 15.2 Disciplinary action

Warning	Details
1	Driver will be warned for the breach and re-inducted.
2	Driver will be warned for the breach, re-inducted and the company of the driver will be notified that a second breach of the site rules has occurred by the offending driver. The result of this second breach will result in the driver being banned from the site for a period to be determined by management, depending on the severity of their actions.
3	The driver will be banned from hauling material to or from the quarry and the company of the driver will be notified of the ban.

Following investigation of the issue, the Quarry Manager will provide feedback to the complainant that details the investigations undertaken, the result of the investigation and measures implemented to ensure that operations remain compliant. A description of any follow-up investigations and the response provided to the complainant will be recorded in the Complaints Register upon satisfactory closure of the issue.

Appendix A

Bus company consultation

Ben Luffman

From: Donna Middleton
Sent: Monday, 26 September 2022 8:37 AM
To: Ben Luffman
Subject: FW: School Bus Routes

CompleteRepository12547851
Description: Bentley Quarry
JobNo: 12547851
OperatingCentre: 22
RepoEmail: 12547851@ghd.com
RepoType: Project

Hi Ben

Email from Casino Bus Service below.

Regards

Donna Middleton
Team Administrator

GHD

Proudly employee-owned | ghd.com
Level 1 230 Harbour Drive Coffs Harbour NSW 2450 Australia
D +61 2 6650 5670 E donna.middleton@ghd.com

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From: Casino Bus <casinobus@kellambus.com.au>
Sent: Friday, 23 September 2022 8:10 AM
To: Donna Middleton <Donna.Middleton@ghd.com>
Subject: RE: School Bus Routes

Good Afternoon Donna

My apologies, I thought you were going to send me a copy of the route you guys were going to use and I would confirm if buses travelled the same route.

We do provide a bus service for Manifold Public School, on Manifold Road at Bentley Road junction, during the NSW School terms.

Our services travel on Manifold Road and sections of Naughtons Gap Road and Bentley Road, during NSW School terms, between the hrs of 7.15am to approximately 9.15am and afternoon from approx. 2.30pm to approximately 4.30pm.

Please keep in mind, depending which route you are travelling, other bus operators may also be using the roads you will be travelling on.

Kind Regards

Sharon White

Administrative Assistant
Casino Bus Service Pty Ltd
27 Dyraba Street Casino NSW 2470
Ph: 02 6662 2561
Email: casinobus@kellambus.com.au



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While all care has been taken to ensure this message and attachments are virus free, Casino Bus Service accepts no responsibility for damage caused by this message or attached files.

From: Donna Middleton <Donna.Middleton@ghd.com>
Sent: Monday, 19 September 2022 2:26 PM
To: Casino Bus <casinobus@kellambus.com.au>
Subject: School Bus Routes

Hi Sharon

Was wondering when you would be able to find time to reply to my email below?

Regards

Donna Middleton
Team Administrator

GHD

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Level 1 230 Harbour Drive Coffs Harbour NSW 2450 Australia
D +61 2 6650 5670 E donna.middleton@ghd.com

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Please consider the environment before printing this email

From: Donna Middleton
Sent: Tuesday, 13 September 2022 2:49 PM
To: casinobus@kellambus.com.au
Subject: School Bus Routes

Hi Sharon

Thank you for speaking with me on the telephone today.

I was wanting to confirm that you provide school bus services for Manifold Public School which is located on the corner of Manifold and Bentley Roads (Lismore-Kyogle Road).

- You do not use Naughtons Gap Road now that it is inaccessible due to landslides
- The bus route travels along Manifold Road via Reynolds and Savilles Roads (Backmede) to Bentley Road
- Times for the school route and between 8.15 am to 9.15 am in the morning and 2.15 pm to 3.15 pm in the afternoon.

Your assistance would be very much appreciated.

Regards

Donna Middleton
Team Administrator

GHD

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D +61 2 6650 5670 E donna.middleton@ghd.com

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Donna Middleton

From: School Office <admin@ccs.nsw.edu.au>
Sent: Wednesday, 14 September 2022 12:58 PM
To: Donna Middleton
Subject: Re: School Bus Routes

Hi Donna

Our Lismore AM bus travels from Lismore along the Kyogle/Bentley Road and turns off at Manifold Public School between 8.33 - 8.40am

Our Kyogle AM/PM bus travels to and from our school along Manifold Rd and then to Kyogle along Kyogle/Bentley Road, they are at Manifold School at 8.45 am and 3.10pm.

Thanks

On Tue, Sep 13, 2022 at 4:53 PM Donna Middleton <Donna.Middleton@ghd.com> wrote:

Thank you for your time on the telephone this afternoon.

Deb, I would be very appreciative if you would please confirm the routes of your school buses for works we are doing with Bentley Quarry.

- Morning – Bentley Road 8:35 am – Travels from ? to ? Along which roads?
- Morning – Kyogle 8:45 am travels from ? to ? Along which roads?
- Afternoon – Kyogle ?? pm travels from ? to ? Along which roads?

Regards

Donna Middleton

Team Administrator

GHD

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Level 1 230 Harbour Drive Coffs Harbour NSW 2450 Australia

D +61 2 6650 5670 **E** donna.middleton@ghd.com

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Debb Cowan - CCS Admin

Casino Christian School

Phone - 6662 5599

Email - admin@ccs.nsw.edu.au



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Appendix F

Waste acceptance procedure

F-1 Waste description

Materials would be imported to site for constructing landscape mounds, rehabilitation and blending with aggregate material. The site would not be open to the public or trucks not directly contracted by Bentley Quarry. This will ensure all materials imported to site would be from a known source and of a known quality. Typical materials to be imported to site and the approximate quantities are provided in Table F1. The quantities are approximate and will vary depending on supply and demand.

No other types of waste will be accepted at the facility.

Table F.1 Imported materials and approximate volume

Material	Classification	Approximate volume (t/year)	Use
Concrete waste	General solid waste (non-putrescible)	50,000	Crushed and blended with materials from the quarry
ENM	Excavated natural material exemption 2014		Used to construct bunds and rehabilitation works
VENM	General solid waste (non-putrescible)		Used to blend with materials from the quarry and construct bunds and rehabilitation works

F-2 Waste processing procedure

The Bentley Quarry waste material acceptance process will be in accordance with the *Standards for managing construction waste in NSW* (EPA, 2019) and *Draft Protocol For Managing Asbestos During Resource Recovery Of Construction And Demolition Waste* (EPA, 2014). A summary of the material acceptance process is presented below and in Figure F1:

- Bentley Quarry will have written agreements with all waste generators, transporters and customers that clearly state that the facility only accepts concrete, ENM and VENM and does not accept asbestos.
- Trucks will enter via the single entrance/exit off the access road.
- All vehicles will be weighed on the weighbridge (once installed) upon entry and exit with a docket provided to the driver.
- Prior to unloading, the truck covers will be removed and the loads visually inspected by the Quarry Manager or trained delegate and checked for compliance with site acceptance criteria. The minimum training for those conducting the inspections will be an asbestos awareness course.
- Where non-conforming material including asbestos containing material is sighted or suspected, the entire load will be rejected and details of the load entered into the Rejected Load Register (refer to F-3). If the load contains suspected asbestos containing material, it will be immediately wetted down.
- Details of the imported material will be documented in the Imported Waste Register including:
 - Date and time.
 - The name of the trained inspector.
 - Registration details of the waste delivery vehicle and name and address of the transporter.
 - The source of the material and name of the waste producer.
 - Waste description, mass, and physical nature.
 - Where the load was inspected.
 - Documentation accompanying the material including VENM certificates, waste classification reports, resource recovery exemptions or contaminant testing.
 - Whether asbestos containing material was observed.
- If the materials passes the initial visual inspection, the driver will be directed to a designated area for unloading.

- The Quarry Manager or trained delegate will inspect the unloaded material (for a second time) for compliance with site acceptance criteria. To facilitate the inspection, the tipped waste would be spread by an excavator to approximately 100 mm thick, so any non-conforming materials would be visible.
- Where non-conforming material including asbestos is sighted or suspected, the entire waste load will be rejected and details of the load entered into the Rejected Load Register. If asbestos containing material is sighted, the load will be wetted down prior to further handling.
- Trucks will be directed to the exit. For trucks registered at the site, weighing on exit is not required as the tare weights will have been recorded. New trucks will be required to reweigh on exit.
- The material will then be stockpiled in the area nominated on the plans in Appendix A and identified with the date and batch number that refers back to the Imported Waste Register.
- ENM will be used on site as per the ENM Order and Exemption.
- VENM will be either used on site or blended with quarry materials.
- Concrete will be crushed and either stockpiled on its own or blended with quarry materials. The stockpile would be identified with the date and batch number that refers back to the Imported Waste Register.
- Each stockpile would be tested as per the ENM Order.
- Once the test results are received and a certification prepared, the material can be transported offsite for use as per the ENM Order and Exemption. This must be done within 12 months of the concrete being received on site.
- If the test results do not meet the ENM Order criteria, the stockpile will be disposed at an appropriate facility.

F-3 Rejected Load Register

The Rejected Load Register will be based on the examples provided in the *Draft Protocol For Managing Asbestos During Resource Recovery Of Construction And Demolition Waste* (EPA, 2014) and will include:

- Type and amount of waste.
- Full name (and, if relevant, Australian Company Number) of the generator of the waste.
- Full name (and, if relevant, Australian Company Number) of the transporter of the waste.
- Registration of the waste delivery vehicle.
- Address of the source of the waste and transporter.
- Time and date that the load was rejected.

The Rejected Load Register will be maintained on site for a minimum of four years and be available for inspection by the NSW Environment Protection Authority (EPA) at any time.

F-4 Environmental management

The potential environmental impacts associated with the processing and storage of the waste materials would be managed in accordance with this EMS. Refer to Sections 7, 8, 10 and 13 for more details on the water, air, noise and waste management measures.

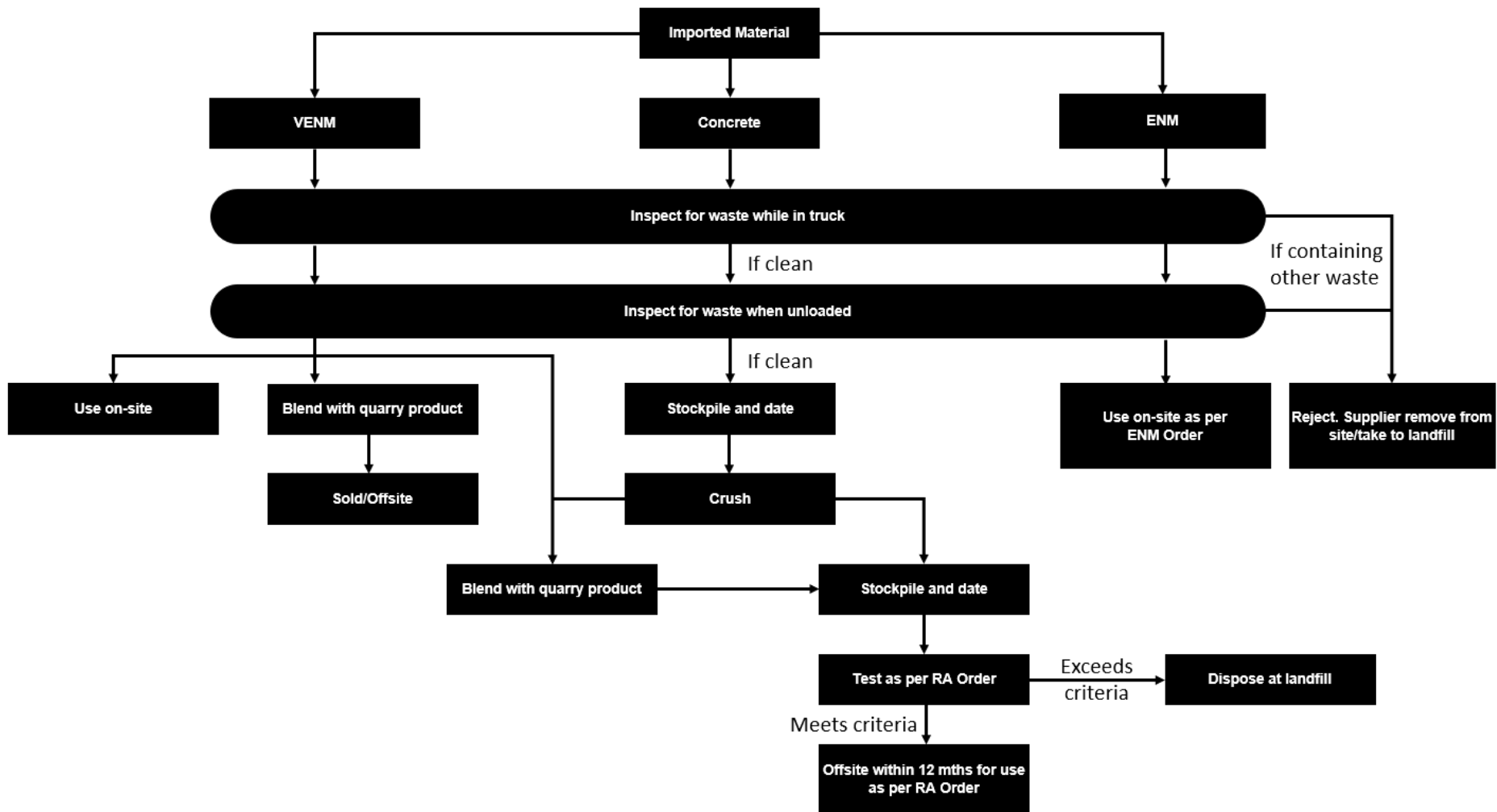


Figure F.1 Waste acceptance process

Appendix G

Environmental Inspection Checklist

Environmental Inspection Checklist

Inspection Date :	Inspection Conducted By:
Weather Conditions:	Dry <input type="checkbox"/> Slight Wind <input type="checkbox"/> Calm <input type="checkbox"/> Rain <input type="checkbox"/> Strong Wind <input type="checkbox"/>
Rainfall – Past 24 hrs:	Past 5 Days:

Item	Observation	Action required & location	Responsibility	Closed
Soil and Water				
<input type="checkbox"/>	Erosion and sediment controls installed & in good working order?			<input type="checkbox"/>
<input type="checkbox"/>	Do erosion and sediment controls require maintenance or replacement?.			<input type="checkbox"/>
<input type="checkbox"/>	Are stockpiles located and maintained in accordance with the EMS?			<input type="checkbox"/>
<input type="checkbox"/>	Are basins full and requiring treatment and discharge? If yes, check water quality			<input type="checkbox"/>
<input type="checkbox"/>	Are monitoring points discharging? If yes, check water quality			<input type="checkbox"/>
<input type="checkbox"/>	Do sediment basins require maintenance?			<input type="checkbox"/>
<input type="checkbox"/>	Are clean and dirty water separated?			<input type="checkbox"/>
<input type="checkbox"/>	Are site access locations free from mud or excessive dirt on the local roads?			<input type="checkbox"/>
<input type="checkbox"/>	Is there any groundwater seeping into the quarry?			<input type="checkbox"/>
<input type="checkbox"/>	Are pit walls and area between the pit and Bentley Road reserve stable?			<input type="checkbox"/>
Air Quality				
<input type="checkbox"/>	Is dust from quarry operations visible during inspection?			<input type="checkbox"/>
<input type="checkbox"/>	Are dust suppression measures in place? And effective?			<input type="checkbox"/>
<input type="checkbox"/>	Is any machinery emitting smoky exhaust?			<input type="checkbox"/>
<input type="checkbox"/>	Are truck loads leaving site covered?			<input type="checkbox"/>
Flora and Fauna				
<input type="checkbox"/>	Is the extent of the quarry clearly marked/fenced? Is fencing in good repair?			<input type="checkbox"/>
<input type="checkbox"/>	Are there any weeds?			<input type="checkbox"/>
<input type="checkbox"/>	Have any unexpected species of fauna been identified / relocated / injured in the past week?			<input type="checkbox"/>
<input type="checkbox"/>	Do plants on the visual bunds or offset area require watering, new tree guards, replacement?			<input type="checkbox"/>
Heritage				
<input type="checkbox"/>	Have any unexpected finds of heritage items or human remains occurred in the past week?			<input type="checkbox"/>

Item	Observation	Action required & location	Responsibility	Closed
Traffic				
<input type="checkbox"/>	Are trucks operating within the restricted hours and is the boom gate being used?			<input type="checkbox"/>
<input type="checkbox"/>	Are there more than 7 trucks per hour or 70 trucks per day accessing the site?			<input type="checkbox"/>
<input type="checkbox"/>	Is the internal road sealed and in good condition?			<input type="checkbox"/>
Noise & Vibration				
<input type="checkbox"/>	Are noise controls installed and effective?			<input type="checkbox"/>
<input type="checkbox"/>	Have all activities occurred within permitted hours in the last week?			<input type="checkbox"/>
<input type="checkbox"/>	Do plant/equipment have appropriate mitigation measures installed?			<input type="checkbox"/>
Hazardous Substances & Dangerous Goods				
<input type="checkbox"/>	Are spill kits available in all work areas and in stock?			<input type="checkbox"/>
<input type="checkbox"/>	Is there evidence of hydraulic/vehicle oil spills on site?			<input type="checkbox"/>
<input type="checkbox"/>	Are stored chemicals in bunded areas with at least 110% storage capacity of the largest container? Is the bunded area free from accumulated storm water or spilled chemicals?			<input type="checkbox"/>
Waste Management				
<input type="checkbox"/>	Is the site free from litter and waste bins available?			<input type="checkbox"/>
<input type="checkbox"/>	Are appropriate and segregated waste bins available?			<input type="checkbox"/>
	Has imported waste been inspected and stockpiled separately, as per the EMS?			
Complaints				
<input type="checkbox"/>	Have any complaints relating to environmental issues been received in the past week? If so, please detail.			<input type="checkbox"/>
Additional Items/ Opportunities for improvement/ Innovations				
Inspection By				
Signature				



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