



Narromine Shire Council

Determination Report Development Application 2019/58 Redden Quarry

October 2021

Executive summary

Matthew and Jane Redden (the proponents) originally proposed to establish a hard rock quarry at 1210 Wallaby Road, Narromine, New South Wales being described as Lot 102 DP792484 (the site). The site is located approximately 7 kilometres east of Narromine and 27 kilometres west of Dubbo, in central New South Wales. The site is zoned RU1 Primary Production.

During the assessment process the application was modified to reduce the area of the site but increase the depth with the intent of reducing biodiversity impacts. The operational life and total resource extracted also increased.

During the assessment of the revised proposal Mining, Exploration and Geoscience (MEG) identified the proposal was extracting Chert, which is a listed mineral under the Schedule 1 of the *Mining Regulation 2016*. This means the proposal is characterised as a mine under Clause 25, Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

The project is not classified as a State Significant Development (SSD), pursuant to the *State Environmental Planning Policy (State and Regional Development) 2011 (SEPP (SRD))*, as it does not meet the requirements in Clause 5 of Schedule 1 of the SEPP (SRD). The project is not considered regional development as it does not meet the requirements in Schedule 7 of the SEPP (SRD).

The proposal is considered Designated Development under Clause 25 of Schedule 3 of the EP&A Regulation, as the total disturbance area would exceed 4 hectares.

Narromine Shire Council (NSC) are the determining authority for the proposal. However, NSC has declared a conflict of interest in the proposal, so the development application will be accepted and exhibited by NSC but assessed by GHD before being determined by the Western Regional Planning Panel (WRPP) pursuant to Section 377 of the *Local Government Act 1993*.

The proposed quarry is also Integrated Development, requiring:

- General Terms of Approval (GTA) under the *Protection of the Environment Operations Act 1997*
- General Terms of Approval (GTA) under the *Mining Act 1992*
- Section 138 Permit under the *Roads Act 1993*

The modified proposed development was publicly exhibited and notified to neighbouring land owners from 2 to 30 September 2020 in accordance with Clause 80 of the EP&A Regulation.

The preparation and public exhibition of the EIS is considered to have satisfactorily addressed the relevant matters in Section 4.15 of the *EP&A Act*. The EIS and supporting documentation are also considered to adequately address the SEARs issued for the proposal.

Having regard to the assessment in the EIS and consideration of the submissions received, it is concluded that the proposal, with the implementation of the identified mitigation and management measures and the recommended conditions of approval (provided in Appendix A to this report), is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats.

The proposal is recommended to be approved subject to the proposed mitigation measures in the EIS, and the recommended conditions of approval provided in Appendix A to this report.

Table of contents

1.	Introduction.....	1
1.1	Overview	1
1.2	2019 EIS	2
1.3	2020 EIS	2
1.4	Purpose of this report.....	6
1.5	Structure of this report	6
1.6	Scope and limitations.....	6
2.	The proposal	8
2.1	Description of the proposal	8
2.2	Need and justification for the proposal	8
3.	Statutory context	10
3.1	Environmental Planning and Assessment Act 1979.....	10
3.2	Environmental Planning and Assessment Regulation 2000.....	13
3.3	State Environmental Planning Policies	13
3.4	Narromine Local Environmental Plan 2011	15
3.5	Narromine Shire Council Development Control Plan 2011	16
3.6	Other NSW legislation.....	19
3.7	Commonwealth legislation	21
3.8	Licencing and approvals	22
4.	Consultation and assessment of submissions	23
4.1	2019 EIS exhibition	23
4.2	Summary of 2019 submissions.....	23
4.3	2020 EIS exhibition	24
4.4	Future consultation	24
5.	Assessment of issues	25
5.1	Biodiversity.....	25
5.2	Noise	25
5.3	Surface water	26
5.4	Groundwater	27
5.5	Traffic	27
5.6	Air quality	28
5.7	Aboriginal Heritage	28
5.8	Historic Heritage	29
5.9	Visual amenity.....	29
5.10	Land capability	29
5.11	Natural hazards.....	29
5.12	Waste, chemicals and hazardous materials	30
5.13	Rehabilitation	31

5.14 Socioeconomic.....	31
5.15 Summary.....	31
6. Conclusion.....	32

Table index

Table 1-1 2020 EIS attachments.....	3
Table 3-1 Consideration of the objects of the <i>EP&A Act</i>	10
Table 3-2 Matters for consideration	12
Table 3-3 Relevant SEPPs	13
Table 3-4 Relevant provisions of the Narromine Shire Council Development Control Plan 2011	17
Table 3-5 Summary of other state legislation	19

Appendices

Appendix A – Recommended conditions of approval

Appendix B – Agency submissions to the 2020 EIS and responses

Appendix C – Public submissions to the 2020 EIS and responses

Appendix D – Issues raised in public submissions on the 2019 EIS and responses

Glossary

Term	Definition
AQIA	Air Quality Impact Assessment
BC Act	NSW <i>Biodiversity Conservation Act 2016</i>
BCD	Biodiversity and Conservation Division of DPIE (now known as BCD)
BCS	DPIE Biodiversity, Conservation and Science Directorate
BDAR	Biodiversity Development Assessment Report
DPI	NSW Department of Primary Industries
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	NSW Environmental Planning and Assessment Regulation 2000
EPA	NSW Environment Protection Authority
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment protection licence
ESD	Ecologically sustainable development
GHD	GHD Pty Ltd
GTA	General Terms of Approval
LEP	Local Environmental Plan
Mining SEPP	<i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>
NIA	Noise Impact Assessment
NSC	Narromine Shire Council
POEO Act	NSW <i>Protection of the Environment Operations Act 1997</i>
RFS	NSW Rural Fire Service
SEARs	Secretary's Environmental Assessment Requirements No. 1250
SEPP	State Environmental Planning Policy
SSD	State Significant Development
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
WRPP	Western Regional Planning Panel

1. Introduction

1.1 Overview

Matthew and Jane Redden (the proponents) originally proposed to establish a hard rock quarry at 1210 Wallaby Road, Narromine, New South Wales being described as Lot 102 DP792484 (the site). The site is located approximately 7 kilometres east of Narromine and 27 kilometres west of Dubbo, in central New South Wales. The site is zoned RU1 Primary Production.

During the assessment process the application was modified to reduce the area of the site but increase the depth with the intent of reducing biodiversity impacts. The operational life and total resource extracted also increased.

The modified proposal will still extract up to 490,000 tonnes of material per annum, but the quarry footprint including extraction, processing, stockpile and water management areas would be reduced to approximately 8.22 hectares with vehicular access being obtained from Wallaby Road. Vegetation clearing will be reduced to 7.84 hectares of this area. The haul route to the Mitchell Highway is anticipated to be via Wallaby Road and Webbs Siding Road.

During the assessment of the revised proposal Mining, Exploration and Geoscience (MEG) identified the proposal was extracting Chert, which is a listed mineral under the Schedule 1 of the *Mining Regulation 2016*. This means the proposal is characterised as a mine under Clause 25, Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

The project is not classified as a State Significant Development (SSD), pursuant to the *State Environmental Planning Policy (State and Regional Development) 2011 (SEPP (SRD))*, as it does not meet the requirements in Clause 5 of Schedule 1 of the SEPP (SRD). The project is not considered regional development as it does not meet the requirements in Schedule 7 of the SEPP (SRD).

The proposal is considered Designated Development under Clause 25 of Schedule 3 of the EP&A Regulation, as the total disturbance area would exceed 4 hectares.

With Designated Development, Section 4.12(8) of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* requires the preparation of an Environmental Impact Statement (EIS) to accompany the development application lodged with Council.

Narromine Shire Council (NSC) are the determining authority for the proposal. However, NSC has declared a conflict of interest in the proposal, so the development application will be accepted and exhibited by NSC but assessed by GHD before being determined by the Western Regional Planning Panel (WRPP) pursuant to Section 377 of the *Local Government Act 1993*.

The proposed quarry is also Integrated Development, requiring:

- General Terms of Approval (GTA) under the *Protection of the Environment Operations Act 1997*
- General Terms of Approval (GTA) under the *Mining Act 1992*
- Section 138 Permit under the *Roads Act 1993*

All relevant State authorities were provided notice of the development in accordance with Division 4.7 of the *EP&A Act*. A background paper describing the proposal was prepared and submitted with an application for Secretary's Environmental Assessment Requirements (SEARs) to the Department of Planning and Environment (DPE) now the Department of Industry and Environment (DPIE). The SEARs were subsequently issued in 2018 and have been addressed in the EIS for the proposal.

The modified proposed development was publicly exhibited and notified to neighbouring land owners from 2 to 30 September 2020 in accordance with Clause 80 of the EP&A Regulation.

1.2 2019 EIS

An application for development approval was lodged with NSC in 2019 for a quarry on the site. Prior to the application being submitted:

- All relevant State authorities were provided notice of the development. Submissions were received and some were responded to by the proponents.
- The proposed development was publicly exhibited and notified to neighbouring landowners from 11 September 2019 to 16 October 2019.
- A Determination Assessment was prepared by GHD for the JRPP.

1.3 2020 EIS

In 2020 the proposed development was modified, as follows:

1. The duration of the development was increased from 4 years to 6 years
2. The total volume of material to be extracted over the life of the quarry was increased from 1,960,000 tonnes to 2,940,000 tonnes, being 490,000 tonnes per year for 6 years..
3. The depth of extraction was increased by 18 m, from 251m AHD to 233m AHD.
4. The disturbance area was reduced from 14.73 ha to 8.22 ha.
5. Vegetation clearing for the development would occur in 6 stages.
6. Financial contributions for biodiversity offsets contributions would be made in stages.

The depth of the quarry was increased to reduce the quarry footprint and reduce the amount of native vegetation that would be cleared. This reduced the amount of native vegetation clearing, and the ecosystem and species credits required under the Biodiversity Offset Scheme.

A revised EIS (dated August 2020) was prepared to reflect the changed scope of development.

The 2020 EIS was accompanied by 22 attachments which are listed in Table 1-1, along with a summary of any changes from the 2019 EIS.

Table 1-1 2020 EIS attachments

Attachment No.	Title	Prepared by	Dated	Changed from 2019 application?	Reason for change
1	SEARs	NSW DPE	29 August 2018	No	
2	Site Location Plan	Groundworks Plus	29 July 2020	Yes	Reduced disturbance area
3	Site and Surrounds Plan	Groundworks Plus	29 July 2020	Yes	Reduced disturbance area
4	Conceptual Site Layout Plan	Groundworks Plus	29 July 2020	Yes	Reduced disturbance area
5	Conceptual Final Land Form	Groundworks Plus	30 July 2020	Yes	Reduced disturbance area
6	Conceptual Final Land Form Cross Sections	Groundworks Plus	30 July 2020	Yes	Reduced disturbance area and increased depth
7	Site Office Plan	MBS	15 January 2018	No	
8	Site Amenities Plan	MBS	19 October 2015	No	
9	EMP	Groundworks Plus	August 2020	Yes	Minor wording and formatting changes
10	Resource Assessment	Groundwork Plus	May 2018	No	

Attachment No.	Title	Prepared by	Dated	Changed from 2019 application?	Reason for change
11	Traffic Impact Assessment	Proterra Group	March 2019 V3	No but 2 letters were added (the TIA has since been replaced, see below)	<p>Traffic arrangements were changed between the 2019 and 2020 EIS to reflect consultation with Roads and Maritime Services (RMS), now Transport for NSW (TfNSW). The Proterra TIA was not updated since 2019, however the 2020 EIS included the following documents:</p> <ul style="list-style-type: none"> • Letter from RMS dated 1 November 2019 (attachment 12 of the 2020 EIS) • Response from Proterra dated 14 November 2019 (attachment 13 of the 2020 EIS) <p>Section 5.13 of the 2020 EIS was also updated. Following exhibition of the EIS, the Proterra TIA was replaced by one prepared by Cardno in 2021 (see below).</p>
12	RMS request for further information	RMS	1 November 2019	No	
13	Response to RMS request for further information	Proterra Group	14 November 2019	No	
14	BDAR	Advitech Environmental	24 August 2020	Yes	<p>The Biodiversity Development Assessment Report (BDAR) was updated to reflect the smaller disturbance area. The BDAR, including biodiversity credit calculations made using the Biodiversity Assessment Method Calculator was originally lodged on the NSW Biodiversity Accredited Assessor System (BAAS) on the 16 September, 2019. Under Section 6.14 of the <i>Biodiversity Conservation Act 2016</i> (BC Act), the BDAR has been modified at the request of the client who commissioned the report to include results of seasonal surveys for candidate species and address feedback provided by the Biodiversity and Conservation Division in the Department of Planning Industry & Environment (DPIE). The modification (submitted through BASS on 21 November, 2019) precedes any planning approval or vegetation clearing approval of the proposed development.</p>

Attachment No.	Title	Prepared by	Dated	Changed from 2019 application?	Reason for change
15	Landowner consent – noise and air quality impacts	Matthew and Jane Redden	18 October 2019	Yes	A letter was attached to the EIS from the proponents stating that they have no objection to their dwelling exceeding the noise and air quality criteria for the proposal (dated 18 October 2019). This letter was written in response to a submission from the EPA (document reference DOC19/766180-16) stating that their dwelling (receptor R8) exceeds air quality criteria for the proposal.
16	Air Quality Impact Assessment	Advitech Environmental	18 November 2019	No but a letter was added	A letter was attached to the AQIA from Advitech Environmental (dated 18 November 2019) responding to the EPA's submission on the EIS (dated 18 Nov 2019, document reference DOC19/766180-16). The letter addresses the EPA's concerns in relation to air quality.
17	Noise Impact Assessment	Advitech Environmental	18 November 2019	No	
18	Surface Water Assessment	Groundworks Plus	August 2020	Yes	Updated to reflect smaller disturbance area.
19	Groundwater Assessment	Ground Doctor	29 July 2020	Yes	A groundwater assessment was prepared as the increased depth of the quarry may impact groundwater.
20	Aboriginal Cultural Heritage Due Diligence	Advitech Environmental	13 June 2019	No	
21	Historic Heritage Assessment	Advitech Environmental	13 June 2019	No	
22	Bushfire Management Plan	Groundworks Plus	July 2020	Yes	2019 EIS did not have a Bushfire Management Plan (BMP), it was prepared in response to RFS submission requiring that a condition of consent be added requiring the preparation of a BMP.

1.3.1 Addendum to 2020 EIS

In response to the submissions received and the request for further information from NSC, Groundworks Plus prepared an addendum to the EIS in the form of a letter dated 29 January 2021. The addendum consists of:

- Letter dated 29 January 2021 containing responses to public and agency submissions
- Updated BDAR checklist in response to submission received from DPIE BCS Directorate dated 22 September 2020
- Response from The Ground Doctor dated 31 January 2021 in relation to Water NSW submission dated 6 January 2021
- Traffic Impact Assessment by Cardno dated 28 January 2021, in response to TfNSW submission dated 25 September 2020

1.4 Purpose of this report

The purpose of this report is to evaluate the proposal in accordance with Clause 4.15 of the EP&A Act to allow for a determination of the proposal in accordance with Clause 4.16 of the EP&A Act. This has been achieved by considering the following:

- Any relevant environmental planning instruments
- The likely impact of the development
- The suitability of the site for the development
- Any submissions made
- The public interest

1.5 Structure of this report

This report is structured as follows:

- Section 1 – Introduction
- Section 2 – Description of the proposal including the options considered and the overall need
- Section 3 – A review and consideration of the legislative and policy requirements
- Section 4 – Overview of the consultation completed to date including the exhibition of the EIS, submissions received and the response to submissions as detailed in the Submissions Report
- Section 5 – Identification of the key issues and an assessment of those issues relative to the proposal
- Section 6 – Conclusion

Recommended conditions of approval are provided in Appendix A.

1.6 Scope and limitations

This report has been prepared by GHD for Narromine Shire Council and may only be used and relied on by Narromine Shire Council for the purpose agreed between GHD and Narromine Shire Council as set out in Section 1.4 of this report.

GHD otherwise disclaims responsibility to any person other than Narromine Shire Council 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.

Where this report is relied on or used without obtaining this further advice from GHD, to the maximum extent permitted by law, GHD disclaims all liability and responsibility to any person in connection with, arising from or in respect of this report whether such liability arises in contract, tort (including negligence) or under statute.

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.

GHD has prepared this report on the basis of information provided by Narromine Shire Council and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. The proposal

2.1 Description of the proposal

The proposal includes the following activities:

- Extraction of a maximum of 490,000 tpa of material for a period of up to six (6) years
- Clearing of 7.84 ha of grassland and previously disturbed woodlands
- Establishment of ancillary infrastructure, including a demountable site office
- Removal of overburden and storage of overburden and topsoil for rehabilitation
- Transportation of material to mobile crushing and screening plant
- Operation of mobile crushing and screening plant to size and screen the material
- Stockpile of finished material for loading into trucks
- Transport of finished material within the site to Inland Rail Project/RMS stockpiling area
- Train loading operations (as required)

2.2 Need and justification for the proposal

Extractive resources are site specific, limited in occurrence by geological conditions and are finite. Because they are high-volume, low-cost materials, they need to be located close to the communities that use them as the cost of transport to the end user contributes greatly to the overall cost of the delivered product. Extractive resources underpin all urban and infrastructure development and make a major contribution to the ongoing economic growth of the community through direct and indirect employment opportunities. The Australian Government has committed \$9.3 billion for ARTC to deliver the Inland Rail Project. Construction materials are required to complete the project. By establishing the Redden Quarry in close proximity to the rail alignment it enables the cost of raw construction materials to be minimised, impacts on traffic networks to be reduced and the local communities disrupted from construction activities to benefit from local employment opportunities and spending in the local community that might not otherwise be the case should construction materials be hauled from further afield.

The EIS mentions the options considered included:

Option 1 – Do nothing

The 'do nothing' option would not satisfy the proposal objectives and would not allow for the establishment of the project. This option would rely upon the availability of suitable quality materials in the necessary volumes from existing quarries in the region introducing project risk associated with consistency of product, operational hours, output capacity and varying haulage routes. This option could result in significant adverse economic impacts to the Inland Rail Project through delayed delivery of construction materials and a higher cost of transporting material from areas further from the project alignment.

Option 2 – Redden Quarry Project

The preferred and chosen option is to proceed with the proposed project which includes extraction of a maximum of 490,000 tonnes per annum. The site comprises a resource capable of meeting majority of the construction materials demand for the Inland Rail Project. Particularly being informed by a resource assessment which indicates that the material should be suitable for use as high-quality fill and unbound pavement products pending appropriate supporting material testing.

The preferred option

Option 2 is the preferred option and is considered to be the most appropriate in terms of balancing commercial viability with environmental impacts and outcomes. Option 2 is considered more favourably given that potential impacts to the limited biodiversity values of the site can largely be avoided and other potential impacts to surrounding land uses can be mitigated through a range of typical management measures commonly employed for quarry operations.

Design refinements

An iterative design process has resulted in several revisions to the site layout to minimise potential environmental impacts on biodiversity values. The more recent revision of the site layout has been modified to minimise potential visual impacts and managed surface water impacts.

3. Statutory context

3.1 Environmental Planning and Assessment Act 1979

The *EP&A Act* provides the framework for the assessment and approval of development in NSW.

3.1.1 Objectives of the *EP&A Act*

The objects of the *EP&A Act* are listed in Section 1.3 of the Act. Table 3-1 outlines the current objects of the Act with consideration of the proposal.

Table 3-1 Consideration of the objects of the *EP&A Act*

Object	Consideration of the proposal
a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources;	The proposal would provide a resource for the Inland Rail project with the relevant environmental impacts assessed and appropriate mitigation measures identified to conserve the natural resources of the site.
b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment;	Section 8 of the EIS identifies how the project is consistent with the principles of ESD.
c) to promote the orderly and economic use and development of land;	The proposal outlines how the site would be developed in a managed fashion to provide a positive economic outcome, while complying with the relevant environmental requirements
d) to promote the delivery and maintenance of affordable housing;	Not applicable to the proposal.
e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats;	The proposal would not involve significant impacts to threatened species, populations and ecological communities, and their habitats. In addition, residual impacts would be offset, as described in Section 5.10 of the EIS.
f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage);	Heritage assessments of the site indicate there are no Aboriginal sites or sites of historic heritage significance.
g) to promote good design and amenity of the built environment;	Not applicable to the proposal.
i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State;	The proposal is integrated and designated development, so the environmental planning and assessment is shared between state and local government agencies.
j) to provide increased opportunity for community participation in environmental planning and assessment.	The application was made publicly available and the submissions have been considered in Section 4 of this report.

3.1.2 Ecologically sustainable development

Section 1.3(b) of the *EP&A Act* is:

“to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment”

The definition of ecologically sustainable development (ESD) is found in clause 7(4) of Schedule 2 to the EP&A Regulation. The ESD principles consist of:

- a) *the precautionary principle, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:*
 - (i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
 - (ii) *an assessment of the risk-weighted consequences of various options,*
- b) *inter-generational equity, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
- c) *conservation of biological diversity and ecological integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*
- d) *improved valuation, pricing and incentive mechanisms, namely, that environmental factors should be included in the valuation of assets and services, such as:*
 - (i) *polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*
 - (ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*
 - (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*

Section 8 of the EIS assesses the consistency of the proposal with the principles of ESD. The discussion provided in Section 8 of the EIS has been reviewed and the proposal is considered to be consistent with Section 1.3(b) of the *EP&A Act*.

3.1.3 Development consent under Part 4 of the *EP&A Act*

The proposal requires development consent and is therefore subject to Part 4 of the *EP&A Act*. In determining a development application, the consent authority is required to take into account the matters for consideration listed under section 4.15 of the *EP&A Act* insofar as are relevant to the development. How these matters have been considered in this assessment report is outlined in Table 3-2.

Table 3-2 Matters for consideration

Matters for consideration	Comment
The provisions of— (i) any environmental planning instrument, and	Discussed in Section 3
(ii) any development control plan, and	Discussed in Section 3.5
(iii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	Not relevant, no proposed instruments have been subject to public consultation
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	Not relevant, no planning agreements are relevant to the proposal
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	Discussed in Section 3.2
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Discussed in Section 5
(c) the suitability of the site for the development,	The suitability of the site has been assessed by considering the planning instruments and environmental impacts associated with the development
(d) any submissions made in accordance with this Act or the regulations,	Discussed in Section 4
(e) the public interest.	Discussed in Section 4

Due to the proposal being considered designated development (refer to Section 3.2), Section 4.12(8) of the *EP&A Act* requires the preparation of an EIS to accompany the development application lodged with Council.

Determining authority

NSC are the determining authority for the application.

The WRPP were the determining authority for the 2019 EIS as it was classified as an extractive industry and regional development.

MEG advised in a letter dated 1 October 2020 that the proposal is a mine. As a mine, the proposal is no longer classified as regional development and NSC are the determining authority.

In a letter dated 15 March 2021, NSC requested that the WRPP assess the proposal as the application is subject to a potential conflict of interest relating to the ownership of the site by Council's General Manager. This follows on from a resolution at the 10 March 2021 Council meeting to request that the WRPP assess the proposal.

The proposal will be assessed by the WRPP.

Integrated development

The proposal is also classified as Integrated Development under Section 4.46 of the *EP&A Act* because it requires:

- General Terms of Approval (GTA) under Clause 29 of Schedule 1 of the *Protection of the Environment Operations Act 1997*
- General Terms of Approval (GTA) under the *Mining Act 1992*
- Section 138 Permit under the *Roads Act 1993*

3.2 Environmental Planning and Assessment Regulation 2000

Under Clause 25 of Schedule 3 of the EP&A Regulation, the proposal is considered designated development, as the total disturbance area would exceed 4 hectares.

3.3 State Environmental Planning Policies

The relevant State Environmental Planning Policies (SEPPs) are summarised in Table 3-3 below.

Table 3-3 Relevant SEPPs

SEPP	Comment
<i>State Environmental Planning Policy (State and Regional Development) 2011</i>	The proposal does not meet the thresholds for State Significant development for mining, which are detailed in Clause 5 of Schedule 1 of the SEPP. The proposal does not meet the requirements for regional development as detailed in Schedule 7 of the SEPP.
<i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>	Part 3 of the Mining SEPP sets out several matters that a consent authority must consider when assessing a development application for mining, petroleum production or extractive industry. Section 4.2.8 of the EIS discusses how the proposal addresses the matters for consideration.
<i>State Environmental Planning Policy (Infrastructure) 2007</i>	Not relevant to the application as the proposal does not fit any of the criteria in the SEPP relating to electricity lines, gas pipelines, railways or roads.

SEPP	Comment
<p><i>State Environmental Planning Policy 33 – Hazardous and Offensive Development</i></p>	<p>Mines have the potential to be hazardous or offensive to the local environment if not appropriately managed. However, given that extractive industries are permissible at the site, it is not the intention of the definitions to exclude these uses from these locations. Rather, it is a trigger to ensure that all appropriate site management controls and environmental impact mitigation measures are implemented and monitored during the quarry's operations.</p> <p>In this respect, given the location of the quarry, its established operational record, its separation from neighbours, and the intended management, mitigation and monitoring measures proposed to be implemented, no such detrimental impact is anticipated to occur.</p> <p>Potential impact on the environment is specifically addressed in Section 5 of this report. In summary however:</p> <ul style="list-style-type: none"> • There would be no polluting discharge from the site which would pose a significant risk to human health, life or property. • There would be no polluting discharge from the site which would pose a significant risk to the biophysical environment. <p>The proposed hard rock quarry is therefore not considered to be a potentially hazardous or offensive industry.</p>
<p><i>State Environmental Planning Policy No. 44 – Koala Habitat Protection</i></p>	<p>Attachment 5 of the EIS contains a BDAR for the proposal (revision 5, dated 24 August 2020). The BDAR assesses the proposal against the provisions of SEPP 44 – Koala Habitat Protection. This SEPP has since been repealed, however as it was in force when the development application was lodged, it is relevant to the current proposal.</p> <p>The BDAR states:</p> <p><i>In addressing the SEPP, there are two questions that need to be considered:</i></p> <p><i>a) Is the land "Potential Koala Habitat"?</i></p> <p><i>'Potential Koala Habitat' is defined in SEPP 44 as, "...an area of native vegetation where trees of the type listed in Schedule 2 (Koala feed tree species) constitute at least 15% of the total number of trees in the upper or lower strata of the tree component"; and</i></p> <p><i>b) Is the land "Core Koala Habitat"?</i></p> <p><i>"Core Koala habitat" is defined as an area of land with a resident population of koalas, evidenced by attributes such as breeding females (females with young), recent sightings and historical records of a Koala population.</i></p> <p><i>One primary Koala food tree, Eucalyptus populnea (Bimble Box), was identified in the proposal area. This food tree was uncommon at the proposal site and does not form more than 15% of the upper and lower stratum.</i></p> <p><i>Vegetation in the proposal area is isolated from large habitat patches with known Koala populations. Woody native vegetation cover in the assessment area is low (16.09%) which may limit movement of individuals to the proposal site. No evidence of Koala usage was recorded in the proposal area, despite targeted scat searches undertaken during the vegetation survey. Additionally, no scratches indicative of Koalas were observed on any of the trees in the proposal area. The proposal site does not support potential or core Koala habitat under the definitions of SEPP 44.</i></p>

3.4 Narromine Local Environmental Plan 2011

3.4.1 Land use zoning

The site is situated within land zoned as Zone RU1 – Primary Production under the Narromine Local Environment Plan 2011 (LEP). The objectives of the zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

Open cut mining is permissible with consent in this zone.

3.4.2 Clause 6.2 Flood planning

The objectives of Clause 6.2 are:

- “To minimise the flood risk to life and property associated with the use of land.
- To allow development on land that is compatible with the land’s flood hazard, taking into account projected changes as a result of climate change.
- To avoid significant adverse impacts on flood behaviour and the environment.”

The north-western corner of the site is mapped within the Flood Planning Area of the Narromine Local Environmental Plan Flood Planning Map. This flood mapping shows the predicted extent of a 1% AEP flood event in relation to the subject site. Based on the mapping provided the extent of the flood levels would not reach the quarry footprint. The Redden Quarry would be located to the south-east of the mapped Flood Planning Area, therefore it is not anticipated that the proposal will be subject to flooding or have any adverse impacts upon flood behaviour. Section 5.12.2 of the EIS provides additional information regarding flood impacts.

3.4.3 Clause 6.6 Groundwater vulnerability

Clause 6.6 identifies the following objective with regards to groundwater vulnerability:

“To maintain the hydrological functions of key groundwater systems and to protect vulnerable groundwater resources from depletion and contamination as a result of inappropriate development.”

The LEP Groundwater Vulnerability Map Sheet GRV_004 confirms that the site is partially located within an area identified as ‘Vulnerable Land’. All areas of disturbance, including all areas utilised for operational activities, associated with the proposal are located on land which is not identified as being vulnerable. Attachment 19 of the EIS contains a Groundwater Assessment, and groundwater impacts are discussed in Section 5.9 of the EIS. A summary of groundwater impacts and proposed mitigation measures is provided in Section 5.4 of this report.

3.4.4 Clause 6.4 Terrestrial biodiversity

The objective of Clause 6.4 is the maintenance of terrestrial biodiversity, using the following approaches:

- *protecting native fauna and flora, and*
- *protecting the ecological processes necessary for their continued existence; and*
- *encouraging the conservation and recovery of native fauna and flora and their habitats.*

A review of the Terrestrial Biodiversity Map Sheet BIO_004 confirms that areas within the project site are identified as 'Sensitive Area'.

Clause 6.4 further states the following.

“(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider whether or not the development:

(a) is likely to have any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and

(b) is likely to have any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and

(c) has any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and

(d) is likely to have any adverse impact on the habitat elements providing connectivity on the land.”

A Biodiversity Development Assessment Report (Revision 5, Advitech Plus 24 August 2020) has been undertaken as part of the EIS. It states that the proposal footprint area of 8.22 ha would require the clearing of up to 7.84 ha of existing native vegetation. To offset the impacts of clearing, 213 ecosystem credits are required to offset the impact on 5 vegetation zones of “White Cypress Pine woodland on sandy loams in central NSW wheatbelt” (also known as Plant Community Type (PCT) 70). In addition, a total of 422 species credits are required to offset the impacts on two candidate species: *Diuris tricolor* (Pine Donkey Orchid) and *Pterostylis cobarensis* (Greenhood Orchid).

Based on this, although the proposal is considered to impact terrestrial biodiversity, adequate mitigation is proposed.

Section 5.10 of the EIS assesses biodiversity impacts of the proposal and Section 5.1 of this report discusses these impacts.

3.4.5 Clause 6.5 Riparian land and watercourses

The objectives of Clause 6.5 are to protect and maintain:

“(a) water quality within watercourses,

(b) the stability of the bed and banks of watercourses,

(c) aquatic riparian habitats,

(d) ecological processes within watercourses and riparian areas.”

A review of the LEP Watercourse Map Sheet WCL_004 confirms that no areas within the project site are identified as 'Sensitive Area'. It is not anticipated that the proposal will have any adverse impacts upon sensitive watercourses or riparian land.

3.5 Narromine Shire Council Development Control Plan 2011

The objectives of the Narromine Shire Council Development Control Plan 2011 (DCP) are:

- “To manage development such that it encourages planned and sustainable growth, whilst having regard to the local character, amenity, agricultural productivity and environmental values associated with the local government area;
- To provide the basis for future development; and
- To provide confidence to the community about the quality of development within the LGA.”

The EIS does not assess the proposal against the provisions of the DCP. Table 3-4 below identifies the relevant provisions of the DCP and their relevance to the proposal.

Table 3-4 Relevant provisions of the Narromine Shire Council Development Control Plan 2011

Chapter	Section of DCP	Relevant	Comment
3	Integrated Development	Y	As discussed in Section 3.1.3, the Proposal is classified as and is being assessed as Integrated Development under Section 4.46 of the <i>EP&A Act</i> .
	Designated Development	Y	As discussed in Section 3.2, the Proposal is classified as and is being assessed as Designated Development under Clause 25 of Schedule 3 of the <i>EP&A Regulation</i> .
	Certificates	N	No building or subdivision works are proposed.
	Pre-Lodgement Meetings	Y	Proterra Group consulted with Council's planning department in November 2018 to gain information used in the Traffic Impact Assessment Report (see Attachment 11 of the EIS). Council's Infrastructure and Engineering branch were consulted in January 2019 to gain access to road asset and traffic data for roads affected by this application. <i>Note: the Traffic Impact Assessment prepared by Proterra has been replaced by an assessment by Cardno, dated 28 January 2021.</i>
	Developer Contributions	Y	The Applicant would make contributions to the Council under Section 7.11 of the <i>EP&A Act</i> .
	Environmental Impact Statement/Environmental Assessment	Y	The required information specified in the DCP is provided throughout the EIS.
	Heritage Impact Statement	N	The proposal is not in the vicinity of, and would not have impacts on any locally listed heritage items or items of heritage interest.
	Development Assessment	Y	The matters for consideration listed in Section 4.15 of the <i>EP&A Act</i> are addressed throughout the EIS.
4	Notification and Advertising Requirements	Y	As a Designated Development, the Proposal is required to be publicly notified and/or advertised for at least 28 calendar days.
5a	Residential Development	N	Development is not within Zone R1 of the Narromine LEP.
5b	Rural Residential Development	N	Development is not within Zone R5 of the Narromine LEP.

Chapter	Section of DCP	Relevant	Comment
5c	Rural Development	Y	Development is within zone RU1 of the Narromine LEP
	Rural Development Objectives	Y	Considered throughout the EIS.
	Building Envelopes	Y	All structures on the site would be set back 50 metres from any local road, 100 metres from any arterial or main road and 40 metres from any side or rear property boundary.
	Dual Occupancy (Attached) or Rural Workers Dwellings	N	No dwellings are proposed.
	Building Design	N	No dwellings are proposed
	Rural Subdivision	N	No subdivision is proposed
	Rural Activities	N	No rural activities or industries are proposed.
	Other Development	N	No development within this category is proposed.
	Extractive Industries	N	No extractive industry is proposed.
	Offensive, Heavy or Hazardous Industries in Rural Areas	N	The proposal is not classified as an offensive, heavy or hazardous industry. The Narromine LEP 2011 states that mining is not a type of industry: mining means mining carried out under the Mining Act 1992 or the recovery of minerals under the Offshore Minerals Act 1999, and includes— (a) the construction, operation and decommissioning of associated works, and (b) the rehabilitation of land affected by mining. <i>Note—</i> <i>Mining is not a type of industry—see the definition of that term in this Dictionary.</i>
5d	Commercial Development	N	Development is not within Zone B2 of the Narromine LEP.
5e	Industrial Development	N	Development is not within Zone IN1 of the Narromine LEP.
5g	Heritage Development	N	The proposal is not in the vicinity of, and would not have impacts on any locally listed heritage items or items of heritage interest.
5h	Other Development	N	No development within this category is proposed.

3.6 Other NSW legislation

Table 3-5 below assesses the application of other NSW legislation to the proposal.

Table 3-5 Summary of other state legislation

Legislation	Comment
<i>Mining Act 1992</i>	<p>The material to be extracted is Chert, which is a scheduled mineral under schedule 1 of the Mining Regulation 2016.</p> <p>A mining lease is required to extract the Chert, which is detailed in section 68(4) of the <i>Mining Act 1992</i>.</p> <p>A mining lease can be applied for from MEG. This must be done after development consent is issued for the proposal, and before the commencement of any mining or ancillary activity.</p> <p>In addition to a mining lease, General Terms of Approval (GTA) are required for the mine from MEG. These were issued by MEG on 21 October 2020.</p>
<i>Heritage Act 1977</i>	<p>A historic heritage assessment for the proposal is presented in Attachment 21 and summarised in Section 5.11 of the EIS. In summary, no listed places or objects would be disturbed by the proposal.</p>
<i>Protection of the Environment Operations Act 1997</i>	<p>The <i>Protection of the Environment Operations Act 1997</i> (POEO Act) is administered by the Environment Protection Authority (EPA), which issues Environment Protection Licences (EPLs) for scheduled activities, including extractive industries.</p> <p>An EPL would be required as the proposal would disturb more than 4 ha of land, as specified in Clause 29 of Schedule 1 of the POEO Act.</p> <p>The POEO Act also requires immediate reporting of pollution incidents which cause or threaten to cause material harm to the environment. All holders of EPLs are required to prepare, implement, and regularly test a Pollution Incident Response Management Plan (PIRMP). A PIRMP is provided in Section 3.11 of the Environmental Management Plan for the proposal (dated August 2020, Attachment 9 of the EIS).</p> <p>The EPA advised (in a letter dated 11 March 2021) that the General Terms of Approval Notice 1589417 (as varied on 20 January 2020) issued for the 2019 proposal requires a small variation to apply to the current proposal. Refer to Section 3.6 of this report for further discussion.</p>

Legislation	Comment
<i>Water Management Act 2000</i>	<p>Section 56 of the <i>Water Management Act 2000</i> provides arrangements for access licences.</p> <p>As per Clause 35(a) of the Water Management (General) Regulation 2018, a person is exempt from the requirement to hold a Water Use Approval if the use of the water is for a purpose for which development consent is in force under the EP&A Act.</p> <p>NRAR provided advice in a letter dated 30 July 2021 that for the purposes of the Water Management Act 2000, a controlled activity is not required but they did provide some recommendations for conditions, which have been adopted in Appendix A.</p>
<i>National Parks and Wildlife Act 1974</i>	<p>The <i>National Parks and Wildlife Act 1974</i> protects Aboriginal places and objects. An Aboriginal Cultural Heritage Due Diligence Report for the proposal is presented in Attachment 20 of the EIS and is summarised in Section 5.11 of the EIS.</p> <p>The assessment did not locate any Aboriginal objects or potential archaeological deposits on the site. The nearest AHIMS registered site is located 1.35 km from the site. As a result, an Aboriginal Heritage Impact Permit is not required.</p> <p>This assessment was reviewed by BCD as part of the 2019 EIS consultation, who have indicated the assessment is acceptable, as discussed in Appendix D.</p>
<i>NSW Biodiversity Conservation Act 2016</i>	<p>As the proposed clearing is above the thresholds under clause 7.23 of the Biodiversity Conservation Regulation 2017, a full assessment has been conducted using the relevant provisions of the Biodiversity Assessment Method.</p> <p>This assessment has calculated the biodiversity offset requirements to ensure the project will not have a net impact to the biodiversity values of NSW.</p> <p>BCD has indicated the BDAR is acceptable, as discussed in Appendix B.</p>
<i>Roads Act 1993</i>	<p>Section 138 of the <i>NSW Roads Act 1993</i> requires that all activities undertaken within Council's road reserve be approved by Council prior to the activities being undertaken. The proposal will require a Section 138 Permit under this Act for the upgrade of the intersection of the access road and Wallaby Road.</p>
<i>Rural Fires Act 1997</i>	<p>The proposal is located on bushfire prone land. A Bushfire Management Plan has been prepared for the proposal and is found at attachment 22 of the EIS. Section 5.12 of the EIS discusses bushfire risk.</p> <p>The applicant has committed to a range of management and mitigation measures relating to the potential for bushfires, detailed in Table 24 in Section 5.12.4 of the EIS. As a result, it is not anticipated that the proposal would significantly impact bush fire hazards.</p> <p>The NSW Rural Fire Service provided a submission dated 23 September 2020 recommending some conditions, which have been adopted in Appendix A.</p>

Legislation	Comment
<i>Biosecurity Act 2015</i>	<p>The NSW <i>Biosecurity Act 2015</i> provides a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter. This includes risks from weed species, pests, contaminants, non-indigenous animals and bees.</p> <p>Revision 5 of the BDAR (dated 24 August 2020) is presented as attachment 14 of the EIS. The BDAR recorded two State priority weed species within the proposal site: <i>Centaurea solstitialis</i> (Yellow star-thistle) and <i>Lycium ferocissimum</i> (African boxthorn). Appendix I of the BDAR lists all flora species observed during the field assessment.</p> <p>The management and mitigation measures detailed in Section 5.10.3 of the EIS include measures to limit the spread of pests and weeds during construction and operation of the proposal.</p>

3.7 Commonwealth legislation

The key Commonwealth Act relating to the proposal is the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places—defined in the EPBC Act as matters of national environmental significance. The nine matters of national environmental significance to which the EPBC Act applies are:

- World heritage properties
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development

Under the Act referral is required to the Australian Government for proposed actions that have the potential to significantly impact on Matters of National Environmental Significance (MNES) or the environment of Commonwealth land. A Biodiversity Development Assessment Report (BDAR) was completed by Advitech Pty Limited for the proposal (dated 24 August 2020). Revision 5 of this report is presented as an attachment to the EIS. The report's assessment of the proposal's impact on MNES and the environment of Commonwealth land found that there is unlikely to be a significant impact on relevant MNES or on Commonwealth land. Accordingly, the proposal has not been referred under the EPBC Act.

3.8 Licencing and approvals

The development requires the following licences and approvals:

- Environmental Protection Licence under Clause 29 of Schedule 1 of *the Protection of the Environment Operations Act 1997*
- General Terms of Approval (GTA) under the *Mining Act 1992*
- Section 138 Permit under the *Roads Act 1993*

4. Consultation and assessment of submissions

4.1 2019 EIS exhibition

The 2019 EIS was placed on public display by NSC in accordance with Clause 80 of the *EP&A Regulation* from 11 September 2019 to 16 October 2019 at the following locations:

- Narromine Shire Council, 124 Dandaloo Street, Narromine, NSW
- NSW Department of Planning, Macquarie Street, Dubbo, NSW Area 1, Level 1/188 Macquarie St, Dubbo, NSW

Community consultation activities undertaken for the EIS exhibition comprised:

- Public display of the EIS in the foyer of Narromine Shire Council, 124 Dandaloo St, Narromine, NSW and the foyer of NSW Department of Planning, Macquarie St, Dubbo, NSW
- Placement of advertisements in the Narromine News on 11 September 2019 and 2 October 2019
- Placement of information on the NSC website from 11 September 2019 to 16 October 2019

All agencies which responded to the SEARs together with those that were considered relevant but did not provide a response were advised by email of the EIS exhibition and provided with a download link. All neighbours with 1 km of the proposed development were also notified.

4.2 Summary of 2019 submissions

A total of fourteen submissions were received by NSC, comprising nine Agency submissions and six public submissions. Submissions provided comment on a range of issues in relation to the proposal.

Agency submissions were received from:

- NSW Department of Planning, Industry & Environment – Crown Lands
- NSW Department of Primary Industries – Agriculture
- NSW Environmental Protection Agency
- NSW Natural Resources Access Regulator
- NSW Office of Environment & Heritage
- Rural Fire Service (RFS)
- NSW Roads and Maritime Services
- Water NSW
- NSW Department of Planning, Industry & Environment – Biodiversity and Conservation Division

The key issues raised in the submissions were:

- Noise and dust impacts
- Flood risk on Wallaby Road and Webbs Siding Road
- Traffic impacts

- Issues with the Biodiversity Diversity Assessment Report
- Water use and groundwater impacts

4.3 2020 EIS exhibition

Due to the increased scale of the quarry from the 2019 proposal, GHD and NSC determined that re-notification to some parties was necessary. The following groups were re-notified of the development:

- All agencies who were contacted in relation to the 2019 EIS
- The six members of the community who made submissions on the 2019 EIS
- All neighbours with 1 km of the proposed development

NSC notified these parties on 2-30 September 2020 in accordance with the Clause 80 of the *EP&A Regulation* (i.e., 21 days for agencies and 28 days for the community).

A total of 14 submissions were received, consisting of three public submissions and 12 agency submissions. Agency submissions were received from:

- Transport for NSW
- NSW Department of Planning, Industry & Environment – Biodiversity, Conservation and Science Directorate
- NSW Department of Primary Industries – Agriculture
- NSW DPIE – Crown Lands
- Department of Regional NSW – Mining, Exploration & Geoscience
- NSW EPA
- NSW Rural Fire Service
- NSW Natural Resources Access Regulator
- WaterNSW

The key issues raised in the submissions were:

- Noise and dust impacts
- Flood risk on haulage routes
- Traffic impacts
- Water use and groundwater impacts

Appendix B provides consideration, discussion and response to the agency submissions to the 2020 proposal, and Appendix C provides consideration, discussion and response to the public submissions.

It is considered that all issues raised have been resolved satisfactorily and would not prevent the proposal from proceeding.

4.4 Future consultation

Interested parties will be notified of the WRPP meeting to consider the application. Should the proposal receive Development Approval, consultation activities would continue in accordance with the requirements of the consent.

5. Assessment of issues

The EIS was prepared in accordance with the *EP&A Act* and DPE SEARs (No. EAR 1250) issued on 29 August 2018. Attachment 4 of the EIS identifies where each SEAR is addressed in the EIS. Section 4 of the EIS assesses these environmental issues.

In addition to the mitigation and management measures provided in the EIS, recommended conditions of approval are included in Appendix A of this report.

5.1 Biodiversity

Section 5.10 of the EIS assesses biodiversity impacts of the proposal. The assessment describes the biodiversity values present within and immediately adjacent to the site and assesses the potential impacts of the proposal on ecological values.

A Biodiversity Development Assessment Report (BDAR) (Revision 5, Advitech Plus 24 August 2020) has been prepared for the proposal, incorporating comments from BCD made in relation to the 2019 proposal and previous BDAR. In summary:

- No threatened species were identified at the site.
- The proposal footprint area of 8.22 ha may result in clearing up to 7.84 ha of existing vegetation.
- To offset the impacts of clearing, 213 ecosystem credits are required to offset the impact on 5 vegetation zones of “White Cypress Pine woodland on sandy loams in central NSW wheatbelt” (also known as Plant Community Type 70).
- In addition, a total of 422 species credits are required to offset the impacts on two candidate species: *Diuris tricolor* (Pine Donkey Orchid) and *Pterostylis cobarensis* (Greenhood Orchid).
- The credit obligations for the project will be divided among the 6 stages of the project, as shown in Table 7.4 of the BDAR. The proponent would retire the credits associated with each stage prior to any works impacting the associated staged area.
- Section 6.6 of the BDAR lists proposed mitigation measures to protect biodiversity.

The revised BDAR was submitted on 21 November, 2019. The 2020 EIS was referred to DPIE Biodiversity, Conservation and Science (BCS) Directorate, who stated in a letter dated 22 September 2020 that all issues have been addressed.

The revised BDAR and the EIS are considered to adequately assess biodiversity and address the SEARS.

5.2 Noise

Section 5.7 of the EIS assesses the impacts of the proposal on noise, drawing on a Noise Impact Assessment (NIA) (dated 18 November 2019) presented in Attachment 17 of the EIS.

The Noise Impact Assessment lists the eight closest receivers to the site. The EIS states that Receptors R5 and R8 are owned by the proponent and are not considered to be sensitive receptors to impacts of the quarry. The proponents have submitted a letter (dated 18 October 2019) stating that they have no objection to an exceedance of the noise criteria at R8 (refer Attachment 15 of the EIS).

- Receptor 8 is located at Lot 1 DP111036, 0.3 km from the proposal site.
- Receptor 5 is 1210 Wallaby Road and is on the same lot as the proposal site.

A summary of the NIA is provided below:

- While adverse operational, construction and blasting impacts are not expected, this activity may be audible at some locations given the characteristics of the receiving environment. It is thus recommended that measures be put in place to ensure the timely and effective response to any concerns raised by adjacent receivers.
- Modelling of operational activities indicate that predicted $LA_{eq,15minute}$ noise levels may be marginally above the Project Noise Trigger Level criteria at receivers R1 and R2. Recommended noise management commitments should be implemented to help reduce any potential impacts felt at sensitive receivers. The results of the sleep disturbance analysis indicate that the L_{Amax} noise levels would not exceed the sleep disturbance criterion at any receiver locations.
- Modelling indicates that road traffic noise generated by the development is likely to comply with day period and night period criteria at all receivers adjacent to the proposed haulage route during standard operational periods and periods under peak demand.
- It is predicted that cumulative impacts associated with the operation of existing quarries within the project site will comply with the recommended amenity noise levels provided that crushing operations are restricted to the day period.
- Cumulative blast impacts may be effectively managed through a program of consultation with any other quarries within the development area that are undertaking blasting, to ensure that blasting is not undertaken at the same time.

Despite the exceedance of the noise levels at two receivers, this was based on a worst-case scenario and no mitigation. With mitigation and inclusion of noise related conditions in Appendix A, the noise level exceedances are expected to be negligible and manageable, so it is considered the assessment is adequate and addresses the SEARs related to noise and vibration.

5.3 Surface water

Section 5.8 of the EIS assesses surface water impacts of the proposal and Section 5.7.3 describes the proposed water management operations associated with the proposal. A Surface Water Assessment is included in Attachment 18 of the EIS. In summary:

- A 4 ML sediment basin will be required to manage runoff from the extraction area of the site.
- The results of the water balance show that in a drier than average year up to 28.1 ML per annum of supplementary water will be required, and around 2.4 ML per annum is expected in a wetter than average year.
- The harvestable right for the property held by the Reddens is 90.42 ML, demonstrating that a number of supplementary water sources are available to cover any deficit.
- Section 5.8.3 of the EIS contains management and mitigation measures to protect water quality.

Although it appears the proposal will have a water shortage, the Redden property has sufficient harvestable rights to supply the operation and WaterNSW have confirmed this is appropriate. Likewise, although there is the potential for water quality impacts appropriate mitigation can be implemented. The assessment is therefore considered adequate and addresses the SEARs related to surface water.

5.4 Groundwater

Section 4.9 of the EIS assesses groundwater impacts of the proposal. In summary:

- The site is part of two Water Sharing Plans.
- There are several active groundwater monitoring stations in reasonable proximity to the site.
- Groundwater Dependent Ecosystems exist on the site.
- It is unlikely that groundwater will be intercepted by the development.
- A Preliminary Groundwater Impact Assessment was prepared by Ground Doctor for the proposal (dated 29 July 2020, Attachment 19 of the EIS). Ground Doctor estimated the surface elevation at the surrounding registered groundwater works locations to range from 211m AHD to 237m AHD but were typically less than 230m AHD. Water level data for NSW Government monitoring bores indicates that water within the Lower Macquarie Alluvium would typically be less than 230m AHD and would be less than 232m AHD in all but the most extreme groundwater recharge events (e.g. major flooding of the Macquarie River).
- The Ground Doctor concluded that the development would not represent an aquifer interference activity as per the definition of the *Water Management Act 2000*. Furthermore there are no high priority groundwater dependant ecosystems or high priority culturally significant sites situated within 2 km of the proposed development.
- The Ground Doctor determined that groundwater is not anticipated to be encountered because the proposed maximum depth of extraction of 233m AHD would be above all but the most extreme groundwater recharge events. Furthermore, the development does not propose to take groundwater for water supply purposes.
- Section 5.9.2 of the EIS contains management and mitigation measures to protect groundwater.

NRAR provided advice in a letter dated 30 July 2021 recommending conditions, which have been adopted in Appendix A.

The assessment is considered adequate and addresses the SEARs related to groundwater.

5.5 Traffic

2019 EIS traffic issues

The 2019 EIS contained a Traffic Impact Assessment (TIA) by Proterra Group dated March 2019. When the EIS was exhibited, a submission was received from Roads and Maritime Services (RMS) (see letter from RMS dated 1 November 2019, attachment 12 of the EIS). The submission contained a number of suggestions for the proposal. Proterra responded to the submission (see letter dated 14 November 2019, attachment 13 of the EIS).

For the 2019 proposal both Council and RMS raised concerns with the suitability of the access roads, in particular the:

- Site access
- Pavement on Wallaby Road
- Intersection of Wallaby Road and Webb Siding Road
- Corner of Booties Lane and Wallaby Road corner
- Booties Lane and Pinedene Road intersection
- Tomingley Road and Pinedene Road intersection

- Rail crossing on Tantitha Road
- Mitchell Highway intersection

These issues were addressed via the suggested conditions of consent for the 2019 proposal.

2020 EIS traffic issues

The 2019 Proterra TIA was used in the 2020 EIS.

When the EIS was exhibited, a submission was received from Transport for NSW (TfNSW) (dated 25 September 2020) objecting to the proposal and requesting further information, including the preparation of a new TIA.

In response, a new TIA was prepared by Cardno (dated 29 January 2021) and included as an attachment to the addendum to the EIS dated 29 January 2021. The addendum was referred to TfNSW, who provided a submission containing comments and recommended conditions of consent for the proposal. These conditions are discussed further in Appendix B. They have been added to the recommended conditions of consent in Appendix A.

The assessment is considered adequate and addresses the SEARs relating to traffic.

5.6 Air quality

Section 5.6 of the EIS assesses air quality impacts of the proposal and an Air quality Impact Assessment (dated 18 November 2019) is included in Attachment 16 of the EIS. In summary:

- A variety of activities on site have the potential to generate particulate emissions and greenhouse gas emissions.
- Elevated particulate impacts at R1, R2, R3, R5 and R6 are the result of elevated background dust concentrations.
- R8 is the nearest receiver. It is owned by the proponents who live in it. They have provided a letter of consent stating that they have no objection to exceedances of air quality criteria, and that a third party will not reside in the dwelling (letter dated 18 October 2019, attachment 15 of the EIS).
- Impacts from particulate emissions and greenhouse gas emissions can be adequately managed by the mitigation measures contained in Section 5.6.3 of the EIS.

For the 2019 proposal EPA raised some issues in relation to the Air Quality Impact Assessment but have since issued their GTAs. The assessment is therefore considered adequate with conditions included in Appendix A to ensure the operations manage the air quality impacts appropriately.

5.7 Aboriginal Heritage

Section 5.11 of the EIS assesses Aboriginal heritage impacts of the proposal. Attachment 20 of the EIS contains an Aboriginal Cultural Heritage Due Diligence report (dated 13 June 2019). In summary:

- No sites of significance have been registered on the property.
- The due diligence archaeological assessment did not locate any Aboriginal objects or potential archaeological deposits during the field survey.
- An Unexpected Find procedure will be implemented as part of the Quarry Environmental Management Plan (see Attachment 9 of the EIS).
- Management and Mitigation Measures are detailed in Section 5.11.4 of the EIS.

The Aboriginal Cultural Heritage Due Diligence report was referred to DPIE BCD in 2019 as part of the 2019 proposal for the site. BCD reviewed the report and EIS and did not raise any issues. The current proposal does not differ from the 2019 proposal in terms of Aboriginal heritage. The assessment is therefore considered adequate and addresses the SEARs related to Aboriginal Heritage.

5.8 Historic Heritage

Section 5.11 of the EIS assesses heritage impacts of the proposal and Attachment 21 contains a Historic Heritage Assessment. The EIS concluded that no sites of historic heritage significance occur within the site.

The assessment is considered adequate and addresses the SEARs related to heritage.

5.9 Visual amenity

Section 5.5 of the EIS assesses visual amenity impacts of the proposal. Based on relative isolation of the site and the proposed landscape and visual amenity related controls, the EIS concludes that the proposal would not impact significantly on local visual amenity.

The EIS also states that the proposed final landform would also provide for a landscape amenable for future agricultural uses and should therefore blend with the surrounding undisturbed lands.

The assessment is considered adequate and addresses the SEARs related to visibility.

5.10 Land capability

Section 5.3 of the EIS assesses land capability impacts of the proposal. Section 5.3.3 lists management and mitigation measures and rehabilitation measures. Adherence to the recommended soil and growth medium stripping, handling, stockpiling procedures and other management practices together with appropriate rehabilitation practices would result in a minimal impact to soils and land capability within the site. Furthermore, the proposal would not limit agricultural activities within undisturbed sections of the site or surrounding lands.

The 2020 EIS was referred to the NSW Department of Primary Industries (DPI) who made several suggestions as to how the EIS could be improved. They also made recommendations to ensure the physical impacts of the mine on agriculture are appropriately considered in the EIS.

The addendum to the EIS by Groundwork Plus dated 29 January 2021 responds to DPI's submission, discussing the recommendations made by DPI.

The assessment is considered adequate and addresses the SEARs related to land resources.

5.11 Natural hazards

Section 5.12 of the EIS assesses natural hazard impacts of the proposal.

5.11.1 Bushfire

In relation to bushfire:

- The site is located in Bushfire Prone Land meaning the proposed development is required to comply with the NSW Rural Fire Service (RFS) guideline "Planning for Bush Fire Protection".
- A Bushfire Management Plan has been prepared for the proposal (dated July 2020, attachment 22 of the EIS).
- Management and mitigation measures are detailed in Section 5.12.4 of the EIS.

The RFS reviewed the 2019 EIS (dated 4 December 2019) and requested:

- Preparation of a Bush Fire Management Plan.
- Preparation of an emergency/evacuation plan consistent with the NSW RFS document 'A guide to developing a bush fire emergency management and evacuation plan.'
- The proposed access/haul road shall comply with section 4.1.3(2) of 'Planning for Bush Fire Protection 2006' (PBP) except that an alternative road is not required.

The RFS reviewed the 2020 EIS and requested the same things in a letter dated 23 September 2020, with the exception that property access roads are to comply with the requirements of Table 7.4a of PBP 2019. These conditions have been included in the recommended conditions in Appendix A.

5.11.2 Flooding

In relation to flooding:

- The north-western corner of the site is mapped within the Flood Planning Area of the Narromine Local Environmental Plan Flood Planning Map. This flood mapping shows the predicted extent of a 1% AEP flood event in relation to the subject site. Based on the mapping provided the extent of the flood levels would not reach the quarry footprint. The Redden Quarry will be located to the south-east of the mapped Flood Planning Area. Therefore it is not anticipated that the proposal will be subject to flooding or have any adverse impacts upon flood behaviour.
- The impact of flooding of the proposed quarry operations is expected to be limited to loss of access of the haulage route from the quarry into Dappo Rd. Under these types of events standard road rules would apply and advice on road closures would be sought from NSW police and the SES.

The assessment is considered adequate and addresses the SEARs related to natural hazards.

5.12 Waste, chemicals and hazardous materials

The Quarry Environmental Management Plan (dated August 2020, attachment 9 of the EIS) includes a Hydrocarbons and Chemical Management Plan, Waste Management Plan, and Pollution Incident Response Plan (PIRMP).

Several sections of the EIS discuss management of waste, chemicals and hazardous materials. In summary:

- Section 5.14 of the EIS discusses management of waste, chemicals and hazardous materials. Table 26 in Section 5.14.2 of the EIS contains details of the control of waste, safeguards in relation to waste, and contingency measures.
- Table 27 in Section 5.14.2 of the EIS contains mitigation measures for hazardous waste.
- Section 5.8 of the EIS addresses surface water quality impacts of the proposal. Table 18 in Section 5.8.3 of the EIS contains management and mitigation measures to reduce the impact of potentially hazardous substances on surface water quality.
- Section 5.8 of the EIS addresses groundwater quality impacts of the proposal. Table 20 in Section 5.9.2 of the EIS contains management and mitigation measures to reduce the impact of potentially hazardous substances on groundwater quality.

The assessment is considered adequate and addresses the SEARs related to waste, chemicals and hazardous materials.

5.13 Rehabilitation

The Quarry Environmental Management Plan (dated August 2020, attachment 9 of the EIS) includes a Rehabilitation Plan for the proposal. Section 5.3.3 of the EIS contains details of the rehabilitation plan.

MEG sent a preliminary submission on 1 October 2020 and a further detailed advice letter and General Terms of Approval on 22 October 2020. In the detailed letter, MEG requested that if the proposed development is approved by NSC, the attached GTAs be included, in their entirety, in Council's development consent. The GTAs include conditions concerning quarry rehabilitation. These have been added to the recommended conditions of consent in Appendix A.

The assessment is considered adequate and addresses the SEARs related to rehabilitation.

5.14 Socioeconomic

Section 4.17 of the EIS assesses socioeconomic impacts of the proposal. The proposal is expected to have a positive socioeconomic effect by providing employment and contributing to the local economy. In summary:

- The quarry will utilise available natural resources in a sustainable manner to support construction of the Inland Rail Project (Critical State Significant Infrastructure Project). It is anticipated that this project will have positive impact to the wider community.
- The proposed development will provide employment and training opportunities for the area. It may also contribute to stimulating economic activity in the local area.
- The resources required for the Inland Rail Project need to be sourced within close proximity to the new alignment to minimise construction costs and traffic impacts. By not acting on this opportunity, it may result in resources being sourced from further afield where economic benefits to the local Narromine economy will not be capitalised.

The assessment is considered adequate and addresses the SEARs related to socioeconomic impacts.

5.15 Summary

The EIS and associated documentation has assessed the potential impacts of the proposal, considering both positive and negative impacts and identified mitigation measures to minimise the impact on the environment, where appropriate. A summary of the potential impacts of the proposal are described and summarised in Sections 5.1 to 5.14 of this report.

Overall the proposal would result in a positive socio-economic impact. Negligible and/or neutral impacts are anticipated for surface water, groundwater, air quality, heritage, visual amenity and land capability. Minor negative impacts are anticipated for biodiversity, noise and traffic as discussed in sections 5.1, 5.2 and 5.5 of this report.

The implementation of mitigation measures proposed in the EIS would minimise the negative impacts on the receiving environment.

Recommended conditions of approval are provided in Appendix A.

6. Conclusion

The preparation and public exhibition of the EIS is considered to have satisfactorily addressed the relevant matters in Section 4.15 of the *EP&A Act*. The EIS and supporting documentation are also considered to adequately address the SEARs issued for the proposal.

Having regard to the assessment in the EIS and consideration of the submissions received, it is concluded that the proposal, with the implementation of the identified mitigation and management measures and the recommended conditions of approval (provided in Appendix A to this report), is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats.

The proposal is recommended to be approved subject to the proposed mitigation measures in the EIS, and the recommended conditions of approval provided in Appendix A to this report.

Appendices

Appendix A – Recommended conditions of approval

NOTICE OF DETERMINATION OF DEVELOPMENT APPLICATION

Issued under Section 4.16 of the Environmental Planning and Assessment Act 1979

APPLICANT DETAILS

Applicant: Jane Redden and Matthew Redden
Address: 1210 Wallaby Road
NARROMINE NSW 2821

APPLICATION DETAILS

Development Application Number: **2019/58**
Description of Development: **Redden Mine**
plans, specifications and supporting documentation stamped with reference to this consent

LAND TO BE DEVELOPED

Address: 1210 Wallaby Road, NARROMINE NSW 2821
Property Description: Lot 102 DP 792484

DETERMINATION DETAILS

Decision: **Approved subject to conditions**
Determination Date: {{{[granted], "d MMMM yyyy"}}}
Approval to operate from: {{{[granted], "d MMMM yyyy"}}}
Approval to lapse on: {{{[granted + 1824], "d MMMM yyyy"}}}
BCA Classification: Class 5, 7b and 10

OTHER APPROVALS

Section 68 Local Government Act	refer Part B of this consent
Roads Act	refer Part C of this consent
EPA General Terms of Approval	refer Part H of this consent
MEG General Terms of Approval	refer Part I of this consent

A. ADMINISTRATIVE CONDITIONS

General

1. This consent relates to the Redden Quarry as described in the EIS, plans, specifications and supporting documentation listed below and as modified by the following conditions. The development must be carried out in accordance with this consent.

Plan/Doc Title	Plan/Doc Reference No.	Issue No.	Prepared by	Date
Redden Quarry Environmental Impact Statement	2517 300 001	0	Groundwork Plus	August 2020
Conceptual Site Layout	2517.DRG.004		Groundwork Plus	29/07/2020
Conceptual Final Landform	2517.DRG.011		Groundwork Plus	30/7/2020
Conceptual Final Landform – Cross Sections	2517.DRG.011A		Groundwork Plus	30/7/2020
Site office plan	MS-200108-101		MBS	15/01/2018
Site amenities plan	MS-200305-B20-101		MBS	19/10/2015

Notes:

- Any alteration to the plans and/or documentation must be submitted for the approval of Council. Such alterations may require the lodgement of an application to amend the consent under s4.55 of the Act, or a fresh development application. No works, **other than those approved under this consent**, shall be carried out without the prior approval of Council.
- Where there is an inconsistency between the documents lodged with this application and the following conditions, the conditions shall prevail to the extent of that inconsistency.

2. The Redden Quarry must not commence operation under this consent until all relevant conditions of development consent have been met or unless other satisfactory arrangements have been made with council (i.e. a security).

Limits of approval

3. The Applicant may carry out quarrying operations on the site for 6 years from the date of commencement.

Note: Under this approval, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of Council. Consequently, this approval will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

4. If the development has not been physically commenced within 5 years of the date of this consent, then this development consent will lapse.

Material extraction

5. The Applicant must not carry out extraction below a level of 233 m AHD.

Note: This condition does not apply to the construction of any bores approved by Water NSW or pollution and sediment control structures.

6. The Applicant must not extract more than 490,000 tonnes of extractive materials from the site in any 12-month period or 2,940,000 tonnes in total over the life of the quarry.

Extractive material transport

7. The Applicant must not:
 - (a) transport more than 490,000 tonnes of extractive material from the site in any 12 month period;
 - (b) dispatch more than 132 and an average of 43 laden trucks from the site on any day; or
 - (c) dispatch more than 11 and an average of 4 laden trucks from the site in any hour.
 - (d) increase the average annual daily traffic, until the access route is upgraded to the relevant standard as per Councils Roads Management Strategy (Road Manual) – Part 3: Asset Planning - Road Hierarchy.

8. The Applicant may only transport extractive material from the site on the designated haulage routes, specified in the EIS, except in circumstances where the final destination of the transported quarry products can only be accessed by other roads.

Revision of strategies, plans and programs

9. Within three months of:
 - a) the submission of an incident report under condition 88;
 - b) the submission of an Annual Review under condition 84;
 - c) the submission of an Independent Environmental Audit under condition 86; or
 - d) the approval of any modification of the conditions of this approval (unless the conditions require otherwise).

The Applicant must review, and if necessary revise the strategies, plans and programs required under this approval, to the satisfaction of Council and be submitted to Council for approval within six weeks of the review.

Evidence of consultation

10. Where conditions of this approval require consultation with an identified party, the Applicant must:
 - a) consult with the relevant party prior to submitting the subject document; and
 - b) provide details of the consultation undertaken including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

National construction code of Australia

11. All building work must be carried out in accordance with the requirements of the National Construction Code of Australia.

Note: *This condition is prescribed under the Environmental Planning and Assessment Regulation 2000.*

12. The Applicant must comply with the requirements of a Class 5, 7b and 10a, as relevant, construction as per the National Construction Code of Australia.

Section 7.11 Contributions

13. The Applicant must pay a monthly contribution to the Council for the maintenance of roads in accordance with the Council Section 7.11 Contributions Plan – Heavy Vehicles as in force at the time, unless the road impacts from the development are otherwise addressed, to Council's satisfaction, by the ARTC and the Inland Rail Project conditions.

Protection of public infrastructure

14. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the project; and
 - b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Removal of Unauthorised Signs

15. All unauthorised advertisements on the site shall be removed. Areas affected by removal shall be remediated to natural ground level and all wastes removed from the site and disposed of at licenced waste facility.

Compliance

16. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project.

B. REQUIREMENTS PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

Long Service Levy Payment

17. The payment of a long service levy as required under Part 5 of the *Building and Construction Industry Payments Act 1986*, in respect to this building work, and in this regard, proof that the levy has been paid, is to be submitted to Council/Accredited Certifier, prior to the issue of a Construction Certificate. Council acts as an agent for the Long Services Payment Corporation and the levy may be paid at Council's Office.

Construction Certificate Application

18. A Construction Certificate application is required to be submitted to, and issued by, Council/Accredited Certifier prior to any excavation or building works being carried out on site.

Engineering Plans

19. Engineering plans, showing details of all proposed construction works and adhering to any conditions of development consent, must be submitted to, and approved by, Council or an Accredited Certifier prior to issuing of the Construction Certificate.
20. Detailed design of road upgrades and construction works must be prepared in accordance with Austroads Guidelines and RMS QA Road works specifications, or to Council's satisfaction.
21. Prior to the average annual daily traffic (AADT) of an access route exceeding the trigger in the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy, the route must be upgraded as per the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy.

The Applicant will be responsible for the design and construction costs associated with any upgrades proportionate to the number of vehicles the development is contributing to the AADT, as determined by Council. If the Applicant does not fund their proportion of the upgrade, they will not be permitted to increase the truck numbers from prior to the upgrade.

Note: AADT to be calculated according to Austroads Guidelines

22. Prior to commencing haulage via designated Route 1, the Mitchell Highway / Tantitha Rd intersection is to be upgraded as follows:
 - a. Provision of a Short Channelised Right (CHR(S) eastbound turn treatment
 - b. Extension of the Basic Left (BAL) westbound turn treatment into Tantitha Road to meet current Austroads standards.

The upgrade is to be designed and constructed in accordance with Austroads Guide to Road Design and able to accommodate the largest vehicle using the intersection.

23. Detailed design for the upgrade of the site access at Wallaby Road/Dappo Road to a basic (BAL/BAR) intersection treatment must be submitted to Council for consideration. The intersection works must be designed for a 100km/h speed zone and able to accommodate the largest vehicle accessing the intersection. Prior to issue of Construction Certificate submit a design for a dust and sediment control facility, such as a rumble grid, at the road intersection with the property entrance for approval by Council. The installation, ongoing maintenance and operations of such a facility shall be at the Applicant's cost.

Pipe Backfill

24. All pipe backfill designs and construction must be in accordance with AS/NZ 3725:2007.

Building works

25. Prior to the issue of a construction certificate, the Applicant is to provide detailed construction plans of any buildings, including site office and amenities.
26. Prior to the issue of a construction certificate, a Section 68 approval is required for water plumbing works and sanitary drainage works for any associated infrastructure.

C. REQUIREMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK

S138 Roads Act Approvals

27. Prior to commencement of construction works, the proponent must contact Councils Engineering Department for determination of an Authority to Work Permit.
28. Prior to works on the Mitchell Highway, the Proponent is required to enter a formal agreement in the form of a Works Authorisation Deed (WAD) and Road Occupancy Licence (ROL) with TfNSW.

Project Plans & Testing

29. Prior to any works commencing, a project construction plan must be submitted to Council for review and approval to ensure all requirements are met. All documentation required for submission should follow Aus-spec 0161 Quality Management - Construction including road works and other services. This should include the following:
 - a) Sequence of operations
 - b) Documented procedures and work instructions
 - c) Types of equipment required, capability, maintenance and calibration certificates
 - d) Any special working environment requirements
 - e) Personnel competency and skills required
 - f) Criteria for workmanship and tolerances
 - g) Materials required
 - h) Safety requirements
 - i) Reference documents
 - j) Records produced
 - k) Planning
 - l) Verification measures
 - m) Inspection, test and control points
 - n) Monitoring of continuous suitability

- o) Responsibility for implementing and monitoring work process controls and rectifying any deficiencies.

Notice of Commencement

- 30. The applicant must advise Council's Engineering Manager at least 48 hours prior to commencement of any construction works on site or associated with the site, together with the approved contractor's name and address.

Erosion and Sediment Control

- 31. Prior to the commencement of works, erosion and sediment control measures must be in accordance with the approved soil erosion and sediment management control plan and must be installed and maintained until all disturbed areas have been revegetated and restored.

Temporary Onsite Toilet

- 32. Prior to the commencement of works, a temporary on-site toilet must be provided and maintained on-site throughout the construction of the project or until an alternative facility meeting Council's requirement is available on-site. Sewage must be disposed of at a licensed disposal facility. The Narromine Sewage Treatment Plant does not accept septic or pan waste.

D. REQUIREMENTS DURING CONSTRUCTION WORKS

Approved hours of Construction

33. Unless otherwise approved by Council, construction work may only be undertaken in during the following hours:
- Monday to Friday - 7:00am to 8:00pm
 - Saturday - 8:00am to 1:00pm
 - Sunday & Public Holidays - Nil

Building Materials, Plant and Equipment

34. During construction works, all building materials, plant and equipment must be placed on site to ensure that pedestrian and vehicular access in public places is not restricted.
35. The road reserve must be fully restored where damage has occurred as a result of these works.

Dust Abatement

36. During construction works, a water cart is required to be readily available to suppress dust during construction. During dry periods or high wind, construction works must be delayed or postponed.
37. Dust suppressant additives are also encouraged during construction works.

Fill

38. During construction works, fill material must not be placed in such a manner that natural drainage from adjoining land will be obstructed.
39. During construction works, fill material must not be placed on land in such a manner that surface water will be diverted to adjoining land.

Hazardous Substances or Dangerous Goods

40. During construction works, the storage of fuel, chemicals or any hazardous substances and dangerous goods must be secured and stored in accordance of the manufacturers' specifications.
41. Safety Data Sheets (SDS) must be kept on site along with a manifest.

Aboriginal Heritage

42. In the event that an item of Indigenous Heritage is discovered during excavation, all work is to immediately cease and the Local Aboriginal Land Council and the NSW National Parks and Wildlife Services is to be notified. Works are not to recommence until such time as any required licenses or approvals are obtained.

E. REQUIREMENTS PRIOR TO OCCUPATION CERTIFICATE

WAE Drawings

43. Prior to the issue of an Occupation Certificate, a design report (printed and bound) and three (3) copies of which 1 x A0 size and 2 x A3 size of works-as-executed (WAE) drawings of the road works must be submitted to Council in hard copy format. The certified WAE drawings must be prepared by a registered surveyor and must indicate the following:
- Subgrade surface level
 - Subbase pavement level
 - Pavement base level
 - Invert levels of all pits, pipes and orifice plates
 - Nominal diameter (DN) and class of pipe(s)
 - Surface levels of pits and surrounding ground levels.
44. The plans must be accompanied by a report from the designer stating the conformance or otherwise of the as constructed works in relation to the approved design.
45. The WAE plan and design report must be in both CAD and PDF format and must be submitted for approval to Council prior to the issue of the Occupation Certificate.

Identification of Boundaries

46. Prior to the commencement of operations, or as otherwise agreed by Council, the Applicant must:
- a) engage an independent registered surveyor to survey the boundaries of the approved limit of extraction;
 - b) submit a survey plan of these boundaries to the Council; and
 - c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

Note: The limit of extraction and ancillary areas is shown conceptually on the stamped layout plans attached, as amended/clarified by the conditions below.

Notice of Commencement

47. Notice of commencement of quarry operations (at least 48 hours prior) is to be given to Council in writing.

Signage

48. Prior to the issue of an Occupation Certificate, the installation of "Advance Truck" warning signs (W5-22 Size B) with a distance plate (W8-5 Size B) below the warning sign, must be installed 250 metres in advance of the intersection of Wallaby Road at no cost to Council.

Environmental management plan

49. Prior to the issue of an Occupation Certificate, the Applicant must prepare an Environmental Management Plan for the project to the satisfaction of Council. This plan must:
 - (a) provide the strategic framework for environmental management of the project;
 - (b) identify the statutory approvals that apply to the project;
 - (c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
 - (d) set out the procedures to be implemented to:
 - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - (i) receive record, handle and respond to complaints;
 - (ii) resolve any disputes that may arise during the course of the project;
 - (iii) respond to any non-compliance and any incident; and
 - (iv) respond to emergencies.
 - (e) a protocol for periodic review of the plan
 - (f) include:
 - (i) references to any strategies, plans and programs approved under the conditions of this approval; and
 - (ii) a clear plan depicting all the monitoring to be carried out under the conditions of this approval.

Note: The Environmental Management Plan and any other strategy, plan or program required by this consent can be satisfied by another similar document eg Mining Operations Plan, subject to Councils approval.

Noise Management Plan

50. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Noise Management Plan for the project to the satisfaction of Council. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
 - (b) be prepared in consultation with the EPA;
 - (c) include a summary of relevant background or baseline data;
 - (d) describe the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (e) outline the relevant limits or performance measures and criteria;
 - (f) describe the measures to be implemented to ensure:
 - (i) compliance with the noise criteria and operating conditions in this approval;
 - (ii) best practice management is being employed;
 - (iii) noise impacts of the project are minimised during noise-enhancing meteorological conditions under which the noise criteria in this approval do not apply;
 - (g) include a procedure for attended noise monitoring in the event of a noise related complaint or request by Council.
 - (h) include a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible
 - (i) detail who would be responsible for monitoring, reviewing and implementing the plan.

Blast Management Plan

51. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Blast Management Plan for the development to the satisfaction of Council. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
 - (b) be prepared in consultation with the EPA;
 - (c) include a summary of relevant background or baseline data;
 - (d) outline the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (e) Include relevant limits or performance measures and criteria;
 - (f) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;
 - (g) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;
 - (h) include community notification procedures for the blasting schedule;

- (i) provide a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
- (j) detail who would be responsible for monitoring, reviewing and implementing the plan.

Air Quality and Greenhouse Gas Management Plan

52. Prior to the issue of an Occupation Certificate, the Applicant must prepare an Air Quality Management Plan for the project to the satisfaction of Council. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
 - (b) be prepared in consultation with the EPA;
 - (c) include the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (d) outline the relevant limits or performance measures and criteria;
 - (e) describe the measures to be implemented to ensure:
 - (i) compliance with the air quality criteria and operating conditions in this approval, including along haulage routes;
 - (ii) best practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site and energy efficiency); and
 - (iii) air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;
 - (f) include an air quality monitoring program, undertaken in accordance with the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007), that:
 - (i) is capable of evaluating the performance of the project against the air quality criteria;
 - (ii) provides for the use of real-time monitoring measures, if directed by Council.
 - (g) provide a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible
 - (h) detail who would be responsible for monitoring, reviewing and implementing the plan.

Water Management Plan

53. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Water Management Plan for the development to the satisfaction of Council. This plan must:
- (a) be prepared by suitably qualified and experienced person/s;

- (b) be prepared in consultation with the EPA and DPIE-Water;
- (c) provide a summary of relevant background or baseline data;
- (d) outline the relevant statutory requirements (including any relevant approval, licence or lease conditions);
- (e) include the relevant limits or performance measures and criteria;
- (f) include a:
 - (i) Site Water Balance that includes details of:
 - sources and security of water supply;
 - water use and management on site;
 - any off-site water transfers;
 - reporting procedures;
 - measures that would be implemented to minimise clean water use on site.
 - (ii) Surface Water Management Plan, that includes:
 - baseline data on surface water flows and quality in water bodies that could potentially be affected by the development;
 - a detailed description of the surface water management system on site including the:
 1. clean water diversion system;
 2. erosion and sediment controls;
 3. dirty water management system; and
 4. water storages.
 - (iii) a program to monitor and report on:
 1. any surface water discharges;
 2. the effectiveness of the water management system; and
 3. surface water flows and quality in local watercourses.
 - (iv) Groundwater Management Plan, that includes:
 - baseline data on groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development; and
 - a program to monitor and report on groundwater inflows to the quarry pit and the impacts of the development on surrounding aquifers and privately-owned groundwater bores.
 - (v) Surface and Ground Water Contingency Strategy, that includes:
 - a protocol for the investigation, notification and mitigation of identified impacts on surface water flows and quality in water bodies and/or groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development; and
 - the procedures that would be followed if any unforeseen impacts are detected during the development.
- (g) detail who would be responsible for monitoring, reviewing and implementing the plan.

Traffic Management Plan

54. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Traffic Management Plan for the project to the satisfaction of Council. This plan must:
- (a) be prepared by suitably qualified and experienced person/s;
 - (b) be prepared in consultation with TfNSW
 - (c) provide a summary of relevant background or baseline data;
 - (d) include the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - (e) outline the relevant limits or performance measures and criteria;
 - (f) include details of all transport routes and traffic types to be used for project-related traffic;
 - (g) describe the processes in place for the control of truck movements entering and exiting the site;
 - (h) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users, including minimising potential for conflict with school buses and stock movements;
 - (i) include and consider Chain of Responsibility requirements under the Heavy Vehicle National Law;
 - (j) include a Drivers' Code of Conduct that includes:
 - (i) toolbox meetings to facilitate continuous improvement initiatives and incident awareness;
 - (ii) drivers to adhere to posted speed limits or other required travelling speeds;
 - (iii) haul route restrictions under the National Heavy Vehicle Regulator scheme for the classes of trucks being used, including the Narromine town centre bypass;
 - (iv) drivers implement safe and quiet driving practices;
 - (v) measures to discourage operating heavy machinery including trucks while under the influence of alcohol and/or drugs;
 - (vi) truckloads are to be covered at all times when being transported, to minimise dust and loss of material onto roads which may form a traffic hazard;
 - (vii) measures to manage haulage movements during school bus pick up / drop off times (both on rural roads and through towns) to minimise potential interactions between haulage vehicles and buses or children, and
 - (viii) the measures to be put in place to ensure compliance with the Drivers' Code of Conduct.
 - (j) a program to monitor and report on the effectiveness of the management measures to achieve the relevant criteria and conditions of this consent.

- (k) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible
- (l) detail who would be responsible for monitoring, reviewing and implementing the plan.

Aboriginal Cultural Heritage Management Plan

55. Prior to works commencing on site under this consent the Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of Council. This plan must include an Unanticipated Finds Protocol and must:
- (a) provide a summary of relevant background or baseline data;
 - (b) describe the measures to be implemented on the site to:
 - (i) ensure all workers on the site receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
 - (ii) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the project;
 - (iii) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places (unexpected finds), including provisions for burials, over the life of the project; and
 - (c) detail who would be responsible for monitoring, reviewing and implementing the plan.

Biodiversity Management Plan

56. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Biodiversity Management Plan for the project to the satisfaction of Council. This plan must:
- (a) be prepared in consultation with BCD;
 - (b) a description of the measures that would be implemented for:
 - (i) minimising the amount of native vegetation clearing within the approved development footprint;
 - (ii) minimising the loss of key fauna habitat, including tree hollows;
 - (iii) minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
 - (iv) rehabilitating and revegetating temporary disturbance areas;
 - (v) protecting native vegetation and key fauna habitat outside the approved disturbance area;
 - (vi) maximising the salvage of resources within the approved disturbance area – including vegetative and soil resources – for beneficial reuse

- (including fauna habitat enhancement) during the rehabilitation and revegetation of the site;
- (vii) collecting and propagating seed (where relevant);
 - (viii) controlling weeds and feral pests;
 - (ix) controlling erosion; and
 - (x) bushfire management.
- (c) a detailed program to monitor and report on the effectiveness of these measures.
 - (d) identify the potential risks to successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
 - (a) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

Biodiversity offsets

57. Prior to the commencement of operation (or clearing any native vegetation), the Applicant must retire biodiversity credits of a number and class specified in Table 2, in accordance with the *Biodiversity Conservation Act 2016*.

Table 2 Ecosystem and species credit requirements

Ecosystem / Species Type	Credits Required						Total Credits Required
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
PCT 70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt	25	58	29	36	37	28	213
<i>Diuris tricolor</i> (Pine Donkey Orch)	22	49	25	30	29	24	179
<i>Pterostylis cobarensis</i> (Greenhood Orchid)	30	66	34	41	39	33	243

Rehabilitation and Closure Plan

58. Prior to the issue of an Occupation Certificate, the Applicant must prepare a Quarry Rehabilitation and Closure Plan. for the project to the satisfaction of Council. This plan must:

- (a) the final land use and landform options considered, and justification of the preferred option;
- (b) detail any rehabilitation methods to be implemented for both planned and unplanned closure of the site;
- (c) suitable completion criteria;
- (d) a risk assessment to demonstrate that post-closure risks associated with the proposed final landform and land use are acceptable; and
- (e) an estimate of the closure costs prepared in accordance with the DRE ESG1-Rehabilitation cost Estimate Guidelines (DPE 2017).

The quarry rehabilitation and closure plan must be prepared in accordance with any applicable legislation and the principles of the Strategic Framework for Mine Closure produced by the Australian and New Zealand Minerals and Energy Council and Minerals Council of Australia (ANZMEC, 2000).

Bushfire Management Plan

59. Prior to the issue of an Occupation Certificate, the Applicant must prepare, to the satisfaction of Council and Bushfire Management Committee:
- (a) a Bushfire Emergency Management and Evacuation Plan consistent with Develop Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan.
 - (b) a bush fire management plan including:
 - (i) contact person / details for emergency management;
 - (ii) location and access provisions for fire fighting water supply'
 - (iii) communication strategy for coordinated response to bush fires with the RFS;
 - (iv) work involving risk of ignition should not be carried out during total fire bans;
 - (v) availability of fire suppression equipment; and,
 - (vi) storage of fuels and any flammable materials.

G. OPERATIONAL REQUIREMENTS

Environmental Management

60. The Applicant must implement the Environmental Management Plan as approved by Council.
61. The Applicant must comply with the requirements of the Environment Protection Authority (EPA) General Terms of Approval, refer Part H of this consent.
62. The Applicant must comply with the requirements of the Regional NSW – Mining, Exploration and Geoscience - General Terms of Approval, refer Part I of this consent.

Note: *The GTA's issued by Regional NSW – Mining, Exploration & Geoscience do not constitute an approval under the Mining Act 1992.*

Noise

63. The Applicant must implement the Noise Management Plan as approved by Council.

Blasting

64. The Applicant must implement the Blast Management Plan as approved by Council.

Air Quality

65. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan as approved by Council.

Odour

66. The Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

Surface and Ground Water

67. The Applicant must implement the Water Management Plan as approved by Council.

Water Supply

68. The Applicant must ensure that it has sufficient water during all stages of the project, and if necessary, adjust the scale of quarrying operations on site to match its available water supply, to the satisfaction of Council.
69. The Applicant must obtain the necessary approvals for the project under the Water Management Act 2000.

Transport

70. The Applicant must implement the Traffic Management Plan as approved by Council.
71. Safe Intersection Sight Distance (SISD) requirements outlined in Part 4A of the Austroads Guide to Road Design must be provided and maintained at the vehicular access servicing the land from the Wallaby Road.

Monitoring of Product Transport

72. The Applicant must, by the use of a weighbridge (or other means as agreed by Council), make, and retain for at least 12 months, records of the - time of dispatch, weight of load, route and vehicle identification for each laden truck dispatched from the development. These records must be made available to Council on request and a summary included in the Annual Review.

Parking

73. The Applicant must provide sufficient parking on-site for all project-related traffic in accordance with Council's parking codes.

Heritage

74. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by Council.

Biodiversity

75. The Applicant must implement the Biodiversity Management Plan approved by Council.
76. The Applicant must implement the Quarry Rehabilitation and Closure Plan approved by Council.

Visual

77. The Applicant must:

- (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the project;
- (b) revegetate overburden emplacements, emplacement extensions and bunds as soon as practicable;
- (c) not erect or display any advertising structure(s) or signs on the site without the written approval of Council.

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

Waste

78. The Applicant must:

- (a) manage on-site sewage treatment and disposal in accordance with the requirements of its Environmental Protection Licence (EPL), and to the satisfaction of the EPA and Council;
- (b) minimise the waste generated by the development;
- (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
- (d) monitor the amount of waste generated by the project.

79. Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

Storage of Liquids, Chemicals & Petroleum Products

80. The Applicant must ensure that all liquids, chemicals and/or petroleum products on site are stored in accordance with the relevant Australian Standard.

Safety

81. The Applicant must secure the site to ensure public safety to the satisfaction of Council and DRG.

Bushfire

82. The Applicant must implement the Bushfire Management Plan approved by Council.

Annual survey

83. At the anniversary of the commencement of the quarry, or other timeframe agreed by Council, the Applicant must engage an independent registered surveyor or other independent practitioner as agreed with Council to
- (a) survey the extent of the extraction area;
 - (b) survey the depth of the extraction;
 - (c) calculate the volume extracted since the previous survey; and
 - (d) confirm the boundary markers clearly mark the approved limit of extraction.

The survey must be provided to Council within six weeks of the anniversary date of the consent.

Annual Review

84. At the anniversary of the commencement of the quarry, or other timeframe agreed by Council, the Applicant must compile a report reviewing the environmental performance of the project over the past year, to the satisfaction of Council. This review must:
- (a) describe the activities (including any rehabilitation) that was carried out in the previous 12 months, and the activities that is proposed to be carried out over the current 12 months;
 - (b) include a survey of the extraction area showing the depth and extent of the extraction and the volume of material extracted in the past 12 months;
 - (c) include a comprehensive review of the monitoring results and complaints records of the project over the previous 12 months, including a comparison of these results against the:
 - (i) relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this approval;
 - (iii) monitoring results of previous years; and
 - (iv) relevant predictions in the EIS.
 - (d) identify any non-compliance or incident which occurred in the previous year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence.
85. Copies of the Annual Review must be submitted to Council within six weeks of the anniversary of the commencement date, or other timeframe agreed by Council, and made available on the Project's website.

Independent Environmental Audit

86. Once 150,000 tonnes of material has been extracted, or at the request of Council, the Applicant must commission an Independent Environmental Audit of the project to assess compliance since the previous audit. The audit must:
- (a) be led by a suitably qualified, experienced and independent auditor;
 - (b) be carried out in consultation with the relevant agencies;
 - (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval, any relevant EPL, water licences and mining leases for the project (including any assessment, strategy, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this approval;
 - (e) recommend appropriate measures or actions to improve the environmental performance of the project and any assessment, strategy, plan or program required under the abovementioned approvals and this approval; and
 - (f) be conducted and reported to the satisfaction of Council.
87. Within three months of the triggers in Condition 86 for an Independent Environmental Audit, the Applicant must submit a copy of the audit report to Council, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of Council.

Incident and Complaint Reporting

88. The Applicant must immediately (within 24 hours) notify Council and any other relevant agencies of any complaint, incident or non-compliance with the criteria in this consent. Within 7 days of the date of the complaint, incident or non-compliance, the Applicant must provide Council and any relevant agencies with a detailed report on the complaint, incident or non-compliance, and such further reports as may be requested.

H. EPA General Terms of Approval

General Terms of Approval - Issued



Notice No: 1589417

Narromine Shire Council
PO Box 115
124 Dandaloo Street
NARROMINE NSW 2821

Attention: Sam Basha

Notice Number 1589417

Dear Mr Basha

Re: Proposed Extractive Activity at 1210 Wallaby Road, NARROMINE - DA 2019/58

Issued pursuant to Section 4.46 Environmental Planning and Assessment Act 1979

I refer to the development application and accompanying information provided for the proposed extractive activity on Lot 102 DP 792484, 1210 Wallaby Road, Narromine received by the Environment Protection Authority (EPA) on 10 August 2019.

EPA has reviewed the information provided and has determined that it is able to issue a licence for the proposal, subject to a number of conditions. The applicant will need to make a separate application to the EPA to obtain this licence.

The general terms of approval for this proposal are provided at **Attachment A**. If Narromine Shire Council grants development consent for this proposal these conditions should be incorporated into the consent. The general terms relate to the development as proposed in the documents and information currently held by the EPA.

If the proposal is modified either by the applicant prior to the granting of consent, or as a result of the conditions proposed to be attached to the consent, Council needs to consult with the EPA about the changes before consent is given. This will allow the EPA to determine whether its general terms need to be modified in light of the changes.

Any water discharged from the site must comply with Section 120 of the *Protection of the Environment Operations Act 1997*. Condition L2.2 of the general terms of approval requires the applicant to identify appropriate management measures and discharge quality limits for surface water before any construction.

Mandatory environment protection licence conditions are also provided for your information at **Attachment B**.

General Terms of Approval - Issued



Notice No: 1589417

If you have any questions, or wish to discuss this matter further please contact Mr Steve Redden at the EPA's Dubbo Office on 02 6883 5357 or by email to central.west@epa.nsw.gov.au

Yours sincerely

A handwritten signature in black ink, appearing to read 'DMcG', written over a horizontal dotted line.

Duncan McGregor

Acting Unit Head

Central West

(by Delegation)

General Terms of Approval - Issued



Notice No: 1589417

Attachment A - General terms of approval

Administrative conditions

A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- the development application DA2019/58 submitted to Narromine Shire Council; and
- the *Environmental Impact Statement* prepared for the proponent by Groundwork Plus dated August 2019.

A2. Fit and Proper Person

A2.1 The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the *Protection of the Environment Operations Act 1997*, having regard to the matters in s.83 of that Act.

Limit conditions

L1. Pollution of waters

L1.1 Except as may be expressly provided by a licence under the *Protection of the Environment Operations Act 1997* in relation of the development, Section 120 of the *Protection of the Environment Operations Act 1997* must be complied with in and in connection with the carrying out of the development.

L2. Concentration limits

L2.1 The EPA will determine discharge limits following submission of the report required by Condition L2.2.

L2.2 Before construction of the quarry is commenced, the licensee must provide a report to the EPA at central.west@epa.nsw.gov.au which:

- a. identifies, for each pollutant which may be discharged from the premises' sediment ponds, the concentration that will maintain or restore the environmental values of receiving waters, in accordance with the:
 - i. *NSW Water Quality and River Flow Objectives* (2006)
 - ii. *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2018) for all affected users except for primary industries, and
 - iii. *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC and ARMCANZ, 2000) for primary industries users.
- b. identifies and commits to all practicable measures that can be used to maximise on-site reuse of sediment-laden water, and maintain or restore the environmental values of receiving waters, and
- c. nominates discharge quality limits based on the outcomes of points a and b, above.

General Terms of Approval - Issued



Notice No: 1589417

Note: The measures identified in the report required by Condition L2.2 must also be detailed in the erosion and sediment control plan required by Condition O3.2.

L3. Waste

L3.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

L3.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*.

Note: Condition L2 is included to ensure that a premises based activity is not used as a waste facility (unless that scheduled activity is permitted by another condition).

L4. Noise limits

L4.1 Noise generated at the premises must not exceed the noise limits presented in the table below at the nominated locations. The locations referred to in the table are also shown in Table 1 and Figure 2 of the noise assessment dated 19 August 2019:

Location	Noise Limits, dB(A)			
	Day	Evening	Night	Night
	LAeq(15min)	LAeq(15min)	LAeq(15min)	LAmx
R1 - 1440 Dappo Rd	40	35	35	52
R2 - 646 Webbs Siding Road	40	35	35	52
R3 - 55 Tantitha Road	40	35	35	52
R4 - 665 Wallaby Road	40	35	35	52
R5 - 1210 Wallaby Road	40	35	35	52
R6 - Dappo Road (Lot 235 DP 755131)	40	35	35	52
R7 - 444 Webbs Siding Road	40	35	35	52

L4.2 For the purposes of Condition L4.1:

- Day is the period from 7am to 6pm Monday to Saturday, and 8am to 6pm Sundays and Public Holidays.
- Evening is the period from 6pm to 10pm.
- Night is the period from 10pm to 7am Monday to Saturday, and 10pm to 8am Sundays and Public Holidays.

L4.3 The noise limits set out in Condition L4.1 apply under the following meteorological conditions:

General Terms of Approval - Issued



Notice No: 1589417

Assessment Period	Meteorological Conditions
Day	Stability Categories A, B, C, D and E with wind speeds up to and including 3m/s at 10m AGL
Evening	Stability Categories A, B, C, D and E with wind speeds up to and including 3m/s at 10m AGL
Night	Stability Categories A, B, C, D and E with wind speeds up to and including 3m/s at 10m AGL; and / or, Stability category F with wind speeds up to and including 2m/s.

Stability Categories refer to Pasquill-Gifford Stability Categories A – G as presented in Fact Sheet D of the *Noise Policy for Industry* (EPA 2017).

- L4.4** Noise from the premises must not exceed the limits in Condition L4.1 positively adjusted by 5 dB during all meteorological conditions not stated in Condition L4.3.
- L4.5** For the purposes of conditions L4.3 and L4.4:
- a) Data recorded by the onsite weather station must be used to determine meteorological conditions, and
 - b) Stability category must be determined using the sigma-theta method referred to in Fact Sheet D of the *Noise Policy for Industry* (EPA 2017).
- L4.6** To determine compliance:
- a) with the noise limits in condition L4.1 and L4.4, the noise measurement equipment must be located:
 - (i) Approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises
 - (ii) Within 30 metres of a dwelling façade, but not closer than 3 metres, where any dwelling on the property is more than 30 metres from the property boundary closest to the premises, or, where applicable,
 - (iii) Within 50 metres of the boundary of a National Park or Nature Reserve.
 - b) with the noise limits in Condition L4.1 and L4.4, the noise measurement equipment must be located:
 - (i) at the most affected point at a location where there is no dwelling at the location; or,
 - (ii) at the most affected point within an area at a location prescribed by Condition L3.6(a).
- L4.7** A non-compliance of Condition L4.1 or L4.4, as applicable, will still occur where noise generated from the premises in excess of the appropriate limit is measured:
- a) at a location other than an area prescribed by condition L4.6(a), and/or
 - b) at a point other than the most affected point at a location.
- L4.8** To determine the noise generated from the premises the modification factors in Fact Sheet C of the *Noise Policy for Industry* (EPA 2017) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

General Terms of Approval - Issued



Notice No: 1589417

L5. Blasting

- L5.1** To determine the noise generated from the premises the modification factors in Fact Sheet C of the *Noise Policy for Industry* (EPA 2017) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.
- L5.2** The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than 5% of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Ground Vibration (ppv)

- L5.3** Ground vibration peak particle velocity from blasting operations on the premises must not exceed 10 millimetres per second at any time at any noise sensitive location. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L5.4** Ground vibration peak particle velocity from blasting operations on the premises must not exceed 5 millimetres per second at any noise sensitive location for more than 5% of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Time of blasting

- L5.5** Blasting at the premises may only take place between 9:00am and 5:00pm Monday to Friday. Blasting is not permitted on Sundays or Public Holidays.
- L5.6** The hours of operation for blasting operations specified in this condition may be varied if the EPA, having regard to the effect that the proposed variation would have on the amenity of the residents in the locality, gives written consent to the variation.

L6. Hours of operation

- L6.1** Activities on the premises must only be carried out:
 - a) between the hours of 7am and 6pm Monday to Friday;
 - b) between the hours of 8am to 1pm Saturdays; and
 - c) at no time on Sundays or Public Holidays,

Construction hours

- L6.2** Unless otherwise specified by another condition of this licence, construction activities must only be carried out:
 - a) between the hours of 7am and 6pm Monday to Friday;
 - b) between the hours of 8am and 1pm Saturday; and

General Terms of Approval - Issued



Notice No: 1589417

c) at no time on Sundays or Public Holidays.

L6.3 The following activities may be carried out outside the hours in Condition L6.2:

- a) Construction work that causes LAeq(15min) noise levels that are:
 - i. no more than 5 dB above rating background level at any residence not subject to a private negotiated agreement, in accordance with the *Interim Construction Noise Guideline* (DECC 2009); and
 - ii. no more than the noise management levels in Table 3 of the *Interim Construction Noise Guideline* (DECC 2009) at other sensitive land uses.
- b) Delivery of plant, equipment and materials which is required to be delivered outside standard construction hours by Police and/or other authorities for safety reasons.
- c) Emergency work to avoid loss of life, damage to property and/or environmental harm.
- d) Activities approved through the process outlined in Condition L6.4.

On becoming aware of the need to undertake emergency work, the proponent must notify Council and the EPA.

L6.4 The hours of construction specified in condition L6.3 may be varied with the prior written approval of the EPA. Any request to alter the hours of construction shall be:

- a) considered on a case-by-case or activity-specific basis;
- b) accompanied by details of the nature and justification for activities to be conducted during the varied construction hours;
- c) accompanied by written evidence that appropriate consultation with potentially affected noise sensitive receivers and notification of relevant agencies has been and will be undertaken;
- d) all reasonable and feasible noise mitigation measures have been put in place; and,
- e) accompanied by a noise impact assessment consistent with the requirements of the *Interim Construction Noise Guideline* (DECCW, 2009).

Operating conditions

Note: Conditions O1 and O2 are mandatory on all environment protection licences and are included in Attachment B.

O3. Dust

- O3.1** Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.
- O3.2** Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

O3. Other operating conditions

- O3.1 Stormwater/sediment control – Construction Phase**

General Terms of Approval - Issued



Notice No: 1589417

A Soil and Water Management Plan (SWMP) must be prepared and implemented. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The SWMP should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (Landcom 2004).

O3.2 Stormwater/sediment control - Operational Phase

An erosion and sediment control plan must be prepared and implemented. The plan must describe the measures that will be used to minimise soil erosion and the discharge of sediment and other pollutants to land and waters for the life of the project, and be prepared in accordance with *Managing Urban Stormwater: Soils and Construction*, particularly *Volume 2E: Mines and Quarries* (DECC 2008).

Monitoring and recording conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development must be recorded and retained as set out in conditions M1.2, M1.3 and M1.4.

M1.2 All records required to be kept by the licence must be:

- a) in a legible form, or in a form that can readily be reduced to a legible form;
- b) kept for at least 4 years after the monitoring or event to which they relate took place; and
- c) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected:

- a) the date(s) on which the sample was taken;
- b) the time(s) at which the sample was collected;
- c) the point at which the sample was taken; and
- d) the name of the person who collected the sample.

M2. Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

Pollutant	Unit of Measure	Frequency	Sampling Method
Total Suspended Solids (TSS)	mg/L	Daily during any discharge	Representative sample
Oil & Grease	mg/L	Daily during any discharge	Representative sample
pH	pH	Daily during any discharge	Representative sample

General Terms of Approval - Issued



Notice No: 1589417

M3. Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area required by Condition M2 must be done in accordance with:

- the Approved Methods Publication; or
- if there is no methodology required by the Approved Methods Publication, by the general terms of approval or by a licence under the *Protection of the Environment Operations Act 1997*, a method approved by the EPA in writing before any tests are conducted,
- unless otherwise expressly provided in the licence.

M4. Weather monitoring

M4.1 An onsite meteorological weather station must be built, maintained and operated so as to be capable of continuously monitoring the parameters specified in condition M4.2.

M4.2 The proponent must monitor the parameters specified in Column 1 of the table below at the onsite weather station, using the sampling method, units of measure, averaging period and sampling frequency specified in the other columns. Sampling methods are defined in the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (DEC 2007).

Onsite weather station

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Siting	-	-	-	AM-1
Air temperature	°C	Continuous	1 hour	AM-4
Wind direction	°	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Sigma theta	°	Continuous	15 minute	AM-2 & AM-4
Rainfall	mm	Continuous	15 minute	AM-4
Relative humidity	%	Continuous	1 hour	AM-4

Note: Conditions M5 and M6 are mandatory on all environment protection licences and are included in Attachment B.

M7. Noise monitoring

M7.1 To assess compliance with the noise limits, attended noise monitoring must be undertaken in accordance with Condition L4.6 and:

- a. at each one of the locations listed in Condition L4.1;
- b. occur once every reporting period;
- c. occur during each day as defined in the *Noise Policy for Industry* (EPA 2017), for a minimum of 1.5 hours;

General Terms of Approval - Issued



Notice No: 1589417

d. occur for three consecutive operating days.

M7.2 The frequency of noise monitoring required by condition M7.1, may be varied after ongoing compliance with the noise limits is established over at least one 12-month period to the satisfaction of the EPA, and the EPA has approved the varied noise monitoring frequency through a licence variation.

M8. Blast Monitoring

M8.1 To determine compliance with condition(s) L5.1 to L5.4:

- a. Airblast overpressure and ground vibration levels must be measured and recorded, for all blasts carried out at the premises, at the nearest residence that is not owned by the applicant or subject to a private agreement relating to airblast overpressure and ground vibration levels;
- b. Instrumentation used to measure and record the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

Note: *A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the limit specified in conditions L5.1 to L5.4 at any "noise sensitive locations" other than the locations identified in the above condition.*

M8.2 The airblast overpressure and ground vibration levels in conditions L5.1 to L5.4 do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.

Reporting conditions

Note: *Conditions R1, R2 and R3 are mandatory on all environment protection licences and are included in Attachment B.*

Definitions

Approved Methods Publication - the document entitled "Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales", prepared by the EPA and published in the Gazette, as in force from time to time.

Noise Policy for Industry - the document entitled "Noise Policy for Industry" published by the Environment Protection Authority in October 2017.

Noise - 'sound pressure levels' for the purposes of Conditions L4.1 to L4.8.

Noise sensitive locations - buildings used as a residence, hospital, school, child care centre, place of public worship and nursing homes, as well as the land within 30 metres of any such building.

General Terms of Approval - Issued



Notice No: 1589417

Attachment B - Mandatory Conditions for all EPA licences

Operating conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a. the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b. the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a. must be maintained in a proper and efficient condition; and
- b. must be operated in a proper and efficient manner.

Monitoring and recording conditions

M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M5.2 The record must include details of the following:

- a. the date and time of the complaint;
- b. the method by which the complaint was made;
- c. any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d. the nature of the complaint;
- e. the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f. if no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

General Terms of Approval - Issued



Notice No: 1589417

M6 Telephone complaints line

- M6.1** The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2** The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3** Conditions M6.1 and M6.2 do not apply until 3 months after the licence is issued.

Reporting conditions

R1 Annual Return documents

What documents must an Annual Return contain?

- R1.1** The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
- a Statement of Compliance,
 - a Monitoring and Complaints Summary,
 - a Statement of Compliance - Licence Conditions,
 - a Statement of Compliance - Load based Fee,
 - a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
 - a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
 - a Statement of Compliance - Environmental Management Systems and Practices.

Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

- R1.2** An Annual Return must be prepared in respect of each reporting, except as provided below

Note: *The term "reporting period" will be defined in the dictionary at the end of the licence. Do not complete the Annual Return until after the end of the reporting period.*

- R1.3** Where this licence is transferred from the licensee to a new licensee,
- the transferring licensee must prepare an annual return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
 - the new licensee must prepare an annual return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

General Terms of Approval - Issued



Notice No: 1589417

Note: *An application to transfer a licence must be made in the approved form for this purpose.*

- R1.4** Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an annual return in respect of the period commencing on the first day of the reporting period and ending on
- a. in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - b. in relation to the revocation of the licence – the date from which notice revoking the licence operates.

Deadline for Annual Return

- R1.5** The Annual Return for the reporting period must be supplied to the EPA using eConnect EPA or registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Licensee must retain copy of Annual Return

- R1.6** The licensee must retain a copy of the annual return supplied to the EPA for a period of at least 4 years after the annual return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

- R1.7** Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
- a. the licence holder; or
 - b. by a person approved in writing by the EPA to sign on behalf of the licence holder.

R2 Notification of environmental harm

- R2.1** Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.
- R2.2** The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: *The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act*

R3 Written report

- R3.1** Where an authorised officer of the EPA suspects on reasonable grounds that:
- a. where this licence applies to premises, an event has occurred at the premises; or
 - b. where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

General Terms of Approval - Issued



Notice No: 1589417

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2** The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3** The request may require a report which includes any or all of the following information:
- a. the cause, time and duration of the event;
 - b. the type, volume and concentration of every pollutant discharged as a result of the event;
 - c. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
 - d. the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - e. action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - f. details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
 - g. any other relevant matters.
- R3.4** The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

G1 Copy of licence kept at the premises or on the vehicle or mobile plant

- G1.1** A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.
- G1.2** The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3** The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

G2 Contact number for incidents and responsible employees

- G2.1** The licensee must operate one 24-hour telephone contact line for the purpose of enabling the EPA:
- a. to contact the licensee or a representative of the licensee who can respond at all times to incidents relating to individual premises, and
 - b. to contact the licensee's senior employees or agents authorised at all times to:
 - i. speak on behalf of the licensee, and

General Terms of Approval - Issued



Notice No: 1589417

ii. provide any information or document required under licence.

G2.2 The licensee is to inform the EPA of the contact number within 3 months of the licence being issued.



Our reference: SF19/88833; DOC20/14701-1
Contact: Steve Redden – 02 6883 5357

Narromine Shire Council
PO Box 115
124 Dandaloo Street
NARROMINE NSW 2821

Attention: Sam Basha

20 January 2020

Dear Mr Basha

RE: Proposed Extractive Activity at 1210 Wallaby Road, NARROMINE – DA 2019/58

Amendments to General Terms of Approval (Notice No. 1589417)

I refer to the General Terms of Approval (Notice No 1589417) issued pursuant to Section 4.46 *Environmental Planning and Assessment 1979* on 16 December 2019.

I also refer to an email request by Groundwork Plus on 18 December 2019 to vary the General Terms of Approval, and supporting information for that request provided by email on 6 January 2020.

The EPA has reviewed the General Terms of Approval and makes the following amendments.

L2. Concentration Limits

Conditions **L2.1** and **L2.2** and the following note are removed and replaced with conditions **L2.1** to **L2.5** inclusive, and **Table 1** as follows;

- L2.1** The only authorised discharge point is the spillway of the sediment dam to be built on the premises. The exact location and coordinates must be provided to council and the EPA as soon as practical upon dam completion.
- L2.2** For each discharge point, the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in Table 1.
- L2.3** Where a pH quality limit is specified in Table 1, the specified percentage of samples must be within the specified ranges.
- L2.4** To avoid any doubt, Conditions L2.1, L2.2 and L2.3 do not authorise the discharge or emission of any other pollutants.
- L2.5** The total suspended solids concentration limits specified in Table 1 may be exceeded for water discharged from the sediment dam provided that the discharge occurs solely as a result of rainfall measured at the premises exceeding 50.7 millimetres over any consecutive 5-day period immediately before the discharge occurred.

Note: 50.7 millimetres is the 5-day 95th percentile rainfall depth for Dubbo in Table 6.3a of Volume 1 of *Managing urban stormwater: soils and construction* (4th edition, March 2004).

Table 1 – Discharge Point: Overflow from spillway of sediment dam (exact location to be confirmed)

Pollutant	Units of Measure	50% Concentration limit	90% concentration limit	3DGM concentration limit	100% concentration limit
Oil & grease	mg/L	-	-	-	10
pH	pH	-	-	-	6.5-8.5
Total suspended solids	mg/L	-	-	-	50

L6. Hours of Operation

Condition **L6.1** is removed and replaced as follows;

- L6.1** All extraction and processing work at the premises must only be conducted between:
- a) between the hours of 7am and 6pm Monday to Friday;
 - b) between the hours of 8am and 1pm Saturdays; and
 - c) at no time on Sundays or Public Holidays.

Condition **L6.5** is added to include loading and stockpile maintenance activities as follows;

- L6.5** Road dispatch activities and stockpile maintenance at the premises must only be conducted between;
- a) between the hours of 6am and 7pm Monday to Friday;
 - b) between the hours of 6pm and 1pm Saturdays; and
 - c) at no time on Sundays or Public Holidays.

If you have any questions, or wish to discuss this matter further please contact Steve Redden at the EPA’s Central West Region Dubbo office on 02 6883 5357 or by email to central.west@epa.nsw.gov.au.

Yours sincerely



DUNCAN McGREGOR
Acting Unit Head Central West Region
Environment Protection Authority

Part 4 Modification Application - EPA Comments



Notice No. - 1606951

NARROMINE SHIRE COUNCIL
PO BOX 115
NARROMINE NSW 2821

Attention: Ms Emma Yule

Notice Number 1606951
File Number SF19/88833
Date 11-Mar-2021

Dear Ms Yule

**Proposed Mining for Minerals Activity at Redden Mine - DA2019/58
Amendment to General Terms of Approval Notice 1589417 (as varied on 20 January 2020)
Issued pursuant to Section 4.46 *Environmental Planning and Assessment Act 1979***

I refer to the email from Narromine Shire Council (Council) to the Environment Protection Authority (EPA) dated 24 February 2021 with additional information regarding the proposed Redden Mine (also known as the Redden Quarry) at Lot 102; DP 792484 - 1210 Wallaby Road, Narromine, NSW (DA2019/58) and seeking advice as to whether the previously supplied General Terms of Approval (GTA's) as varied would need to be varied further.

The EPA has reviewed the information the following information:

- The EPA's GTA Notice No. 1589417 issued 10 December 2019;
- The EPA's letter amending GTA Notice No. 1589417 issued 20 January 2020;
- Regional NSW - Mining, Exploration & Geoscience GTA's dated 22 October 2020;
- "Redden Quarry" Environmental Impact Statement (EIS) prepared by Groundwork as amended and dated August 2020; and
- The specialist reports accompanying the abovementioned EIS.

The EPA, following this additional review, has identified that a small variation to the GTA's as varied is required as outlined below.

Changes to condition A1.1

Condition A1.1 as contained within the EPA's GTA Notice No. 1589417 is removed and replaced by condition A1.1 below.

A1.1. Except as expressly provided by any conditions of approval issued by Narromine Shire Council, these General Terms of Approval or the conditions of an in-force environment protection licence issued by the Environment Protection Authority, works and activities at the premises, being the Redden Mine

Part 4 Modification Application - EPA Comments



Notice No. - 1606951

(also known as the Redden Quarry) at Lot 102; DP 792484, must be carried out in accordance with the information contained in:

- a) the Development Application submitted to Narromine Shire Council by Groundwork Plus Pty Ltd on behalf of Matthew and Jane Redden on 28 August 2019 for DA2019/58;
- b) the Environmental Assessment titled "Redden Quarry - Environmental Impact Statement" prepared by Groundwork Plus Pty Ltd dated August 2020 relating to the Development Application identified above;
- c) the specialist assessments accompanying the Environmental Assessment identified above; and
- d) any response to submissions or unless superseded by an addendum response to submissions.

If you have any questions, or wish to discuss this matter further please contact Josh Loxley on (02) 6883 5326.

Yours sincerely

MATTHEW CORRADIN
Unit Head
Regulatory Operations Regional

I. MEG General Terms of Approval

General Terms of Approval

for proposed development requiring approval
Under Part 5 of the *Mining Act 1992*

Reference Number:	DOC20/85054
Issue date of GTA:	21 October 2020
Type of Approval:	Mining Lease – mining operation
Proponent:	Matthew and Jane Redden
DA Number:	2019/58
LGA:	Narromine
Mineral:	Chert

The GTA issued by the Department of Regional NSW – Mining, Exploration & Geoscience (MEG) does not constitute an approval under the *Mining Act 1992*.

The proponent must apply to MEG for the relevant approval, such as a mining lease, during the development assessment process, or once consent has been granted and before the commencement of any mining or ancillary activity. This is required if there is currently no approval in place that allows the sought activities. A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

1. Notice to Landholders

- (a) Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.
- (b) If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.

2. Rehabilitation

Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.

3. Mining Operations Plan and Annual Rehabilitation Report

- (a) The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, ancillary mining activities and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, ancillary mining activities and prospecting.
- (b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:
- (i) identifies areas that will be disturbed;
 - (ii) details the staging of specific mining operations, ancillary mining activities and prospecting;
 - (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;
 - (iv) identifies how mining operations, ancillary mining activities and prospecting will be carried out in order to prevent and or minimise harm to the environment; and
 - (v) reflects the conditions of approval under:
 - the *Environmental Planning and Assessment Act 1979*;
 - the *Protection of the Environment Operations Act 1997*; and
 - any other approvals relevant to the development including the conditions of this mining lease.
- (c) The MOP must be prepared in accordance with the *ESG3: Mining Operations Plan (MOP) Guidelines September 2013* published on the Department's website at <https://www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines>
- (d) The lease holder may apply to the Minister to amend an approved MOP at any time.
- (e) It is not a breach of this condition if:
- (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the *Environmental Planning and Assessment Act 1979*, the *Protection of the Environment Operations Act 1997*, the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014* or the *Work Health and Safety Act 2011*; and *Work Health and Safety Regulation 2017*.
 - (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.
- (f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:
- (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;
 - (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and

- (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <https://www.resourcesandgeoscience.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines>

Note: The Rehabilitation Report replaces the Annual Environmental Management Report.

4. Non-Compliance Reporting

- (a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the *Mining Act 1992* or Regulations;
- (b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.

5. Environmental Incident Report

The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.

6. Resource Recovery

The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.

7. Security

The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.

The amount of the security deposit to be provided will be assessed by the Minister.

8. Cooperation Agreement

The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:

- access arrangements
- operational interaction procedures
- dispute resolution
- information exchange
- well location
- timing of drilling
- potential resource extraction conflicts; and
- rehabilitation issues.

9. Resource Recovery – Supplementary Reporting

The proponent must submit to MEG an addendum resources report providing refined resource information and product allocations based on rock properties following the next phase of drilling. This report is to be prepared by a suitably qualified professional.

Exploration Reporting

Note: Exploration Reports (Geological and Geophysical)

The lease holder must lodge reports to the satisfaction of the Secretary in accordance with section 163C of the Mining Act 1992 and in accordance with clauses 59, 60 and 61 of the Mining Regulation 2016.

Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.

J. REASONS FOR CONDITIONS

Conditions of consent have been imposed to:

89. Ensure the proposed development:
 - (a) achieves the objects of the Environmental Planning and Assessment Act, 1979;
 - (b) complies with the provisions of all relevant environmental planning instruments;
 - (c) is consistent with the aims and objectives of Council's Development Control Plans, Codes and Policies.
90. Ensure that the relevant public authorities and the water supply authority have been consulted and their requirements met or arrangements made for the provision of services to the satisfaction of those authorities.
91. Meet the increased demand for public amenities and services attributable to the development in accordance with Section 7.11 of the Environmental Planning and Assessment Act, 1979.
92. Ensure the protection of the amenity and character of land adjoining and in the locality of the proposed development.
93. Minimise any potential adverse environmental, social or economic impacts of the proposed development.
94. Ensure that all traffic, carparking and access requirements arising from the development are addressed.
95. Ensure the development does not conflict with the public interest.

K GENERAL ADVICE

LAPSING OF DEVELOPMENT CONSENT

96. Development consent does not lapse if the approved use has actually commenced or the proposed work is physically commenced before the consent lapse date, except where a condition specifies a limit to the duration of the consent.

RIGHT OF APPEAL

97. If you are the applicant:

You can appeal against this decision in the Land and Environment Court within six (6) months of the date of this notice (section 8.7 & 8.10 of the *Environmental Planning and Assessment Act, 1979*). You cannot appeal, however, if a Commission of Inquiry was held and the development is designated development or state significant development.

REVIEW OF DETERMINATION

98. An applicant may request the Council to review this determination within one (1) year after the date the applicant received this notice. The prescribed fee must be paid with the request for a review. Once the review is completed the Council may confirm or change the determination.

If there is an appeal, the period of time within which Council may undertake a review is extended up to the time the Court hands down its decision.

A Review cannot be requested for:

- a) a determination to issue or refuse to issue a complying development certificate, or
- b) a determination in respect of designated development, or
- c) a determination made by Council under Section Division 4.6 in respect of an application by the Crown.

Date of notice: 9 December 2019

Phil Johnston
Director Community and Economic Development

L ADVISORY NOTES

Electrical and Telecommunication Services

DIAL BEFORE YOU DIG

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial Before You Dig service in advance of any construction or planning activities.

TELECOMMUNICATIONS ACT 1997 (COMMONWEALTH)

Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the Criminal Code Act 1995 (Cth) and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact Telstra's Network Integrity Team on phone number 1800 810 443.

ELECTRICAL INFRASTRUCTURE

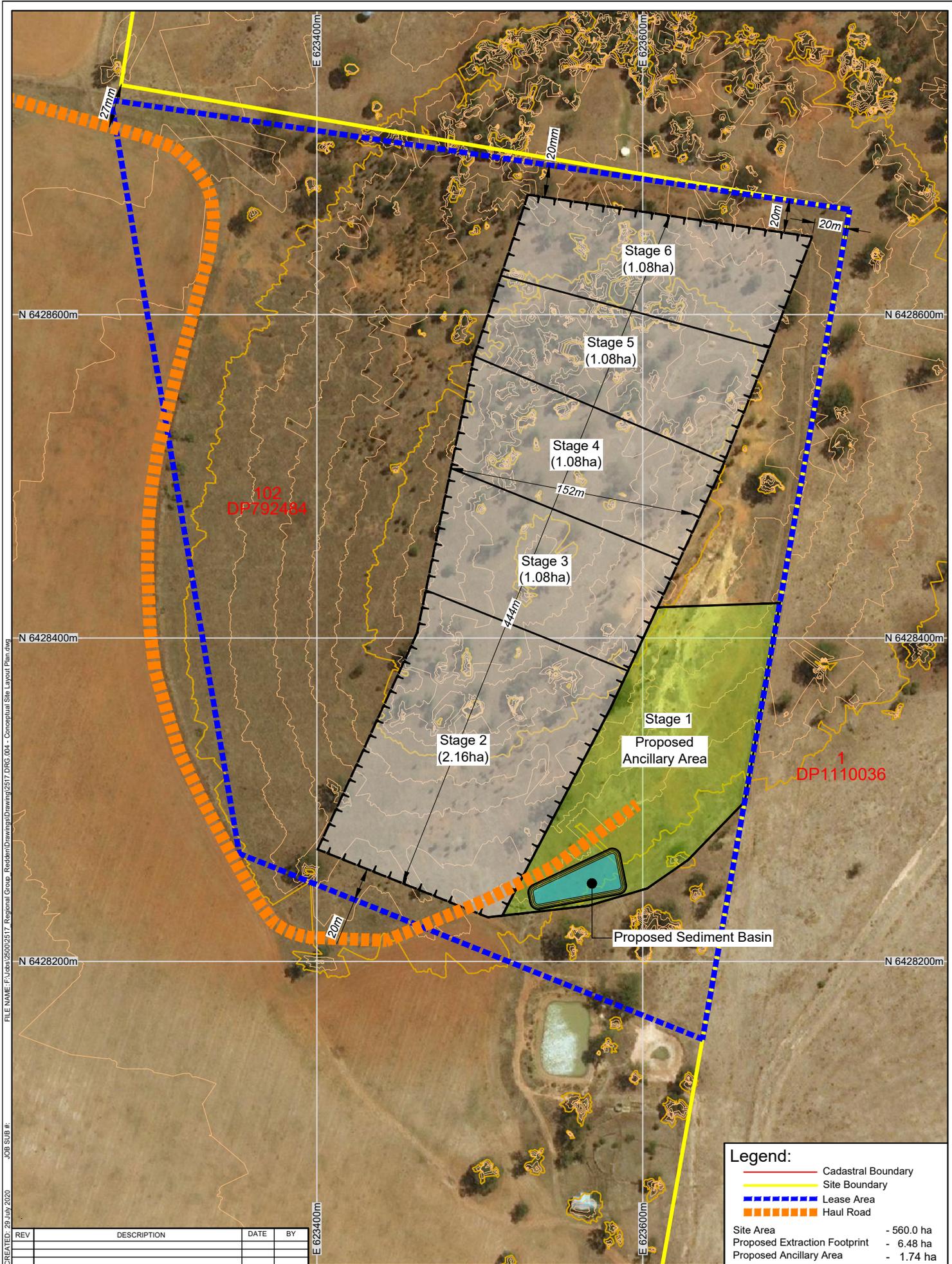
It is the responsibility of the person/s completing any works around powerlines to understand their safety responsibilities. SafeWork NSW (www.safework.nsw.gov.au) has publications that provide guidance when working close to electricity infrastructure. These include the Code of Practice — Work near Overhead Power Lines and Code of Practice — Work near Underground Assets.

National Broadband Network

If, as a result of this approval, you wish to connect to the NBN (National Broadband Network), you must do so online via:

<http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments.html>

M APPROVED PLANS



FILE NAME: F:\Data\2517_DRG_004 - Conceptual Site Layout Plan.dwg
 JOB SUB #: 2517
 CREATED: 29 July 2020

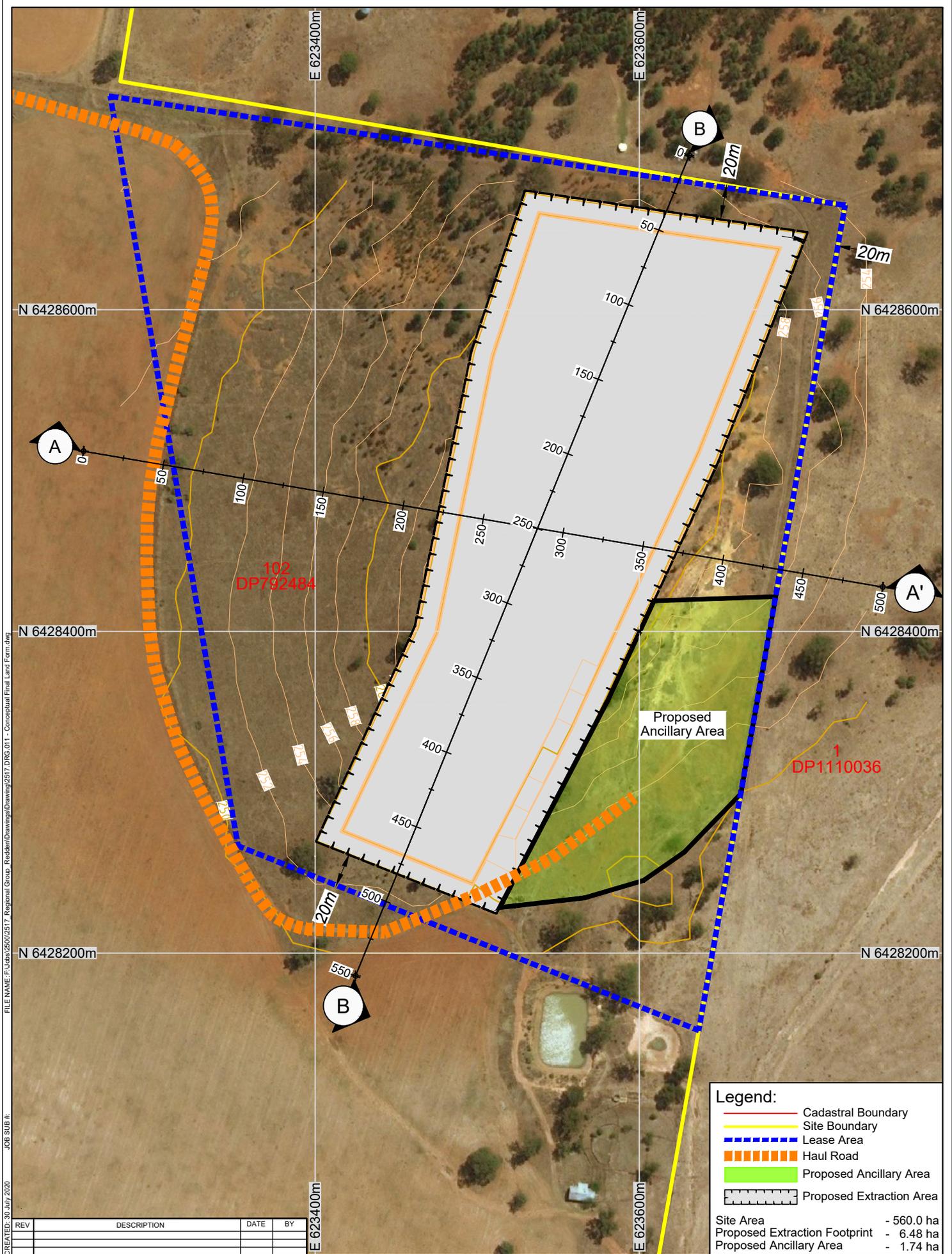
REV	DESCRIPTION	DATE	BY

Legend:	
	Cadastral Boundary
	Site Boundary
	Lease Area
	Haul Road
Site Area	- 560.0 ha
Proposed Extraction Footprint	- 6.48 ha
Proposed Ancillary Area	- 1.74 ha



PROJECT: **Redden Quarry**
 CLIENT: **Matthew & Jane Redden**

TITLE: **Conceptual Site Layout Plan**
 SCALE: 1:3,000
 DATE: 29 July 2020
 PRINTED: 29 July 2020
 DRAWING NUMBER: **2517.DRG.004**
 DRAWN: MR
 CHECKED: JL
 DATUM: HORIZONTAL / VERTICAL / ZONE
 MGA / AHD / 55



FILE NAME: F:\data\2517_Regional Group_Redden\Drawing\Drawing\2517_DRG_011 - Conceptual Final Land Form.dwg
 JOB SUB #: 2517
 CREATED: 30 July 2020

REV	DESCRIPTION	DATE	BY

Legend:

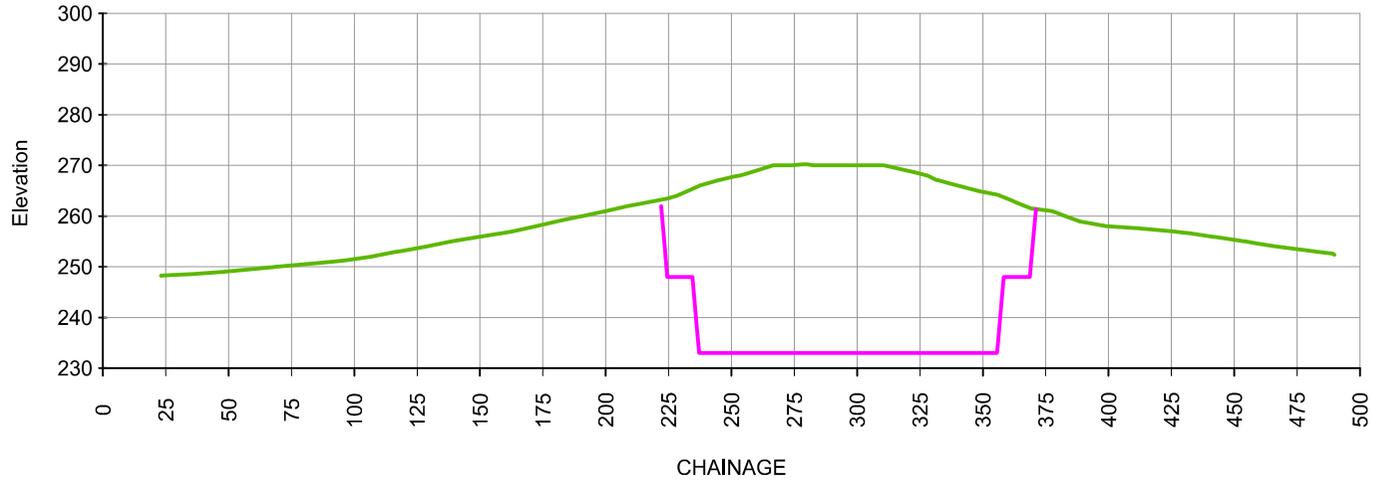
- Cadastral Boundary
- Site Boundary
- Lease Area
- Haul Road
- Proposed Ancillary Area
- Proposed Extraction Area

Site Area	- 560.0 ha
Proposed Extraction Footprint	- 6.48 ha
Proposed Ancillary Area	- 1.74 ha

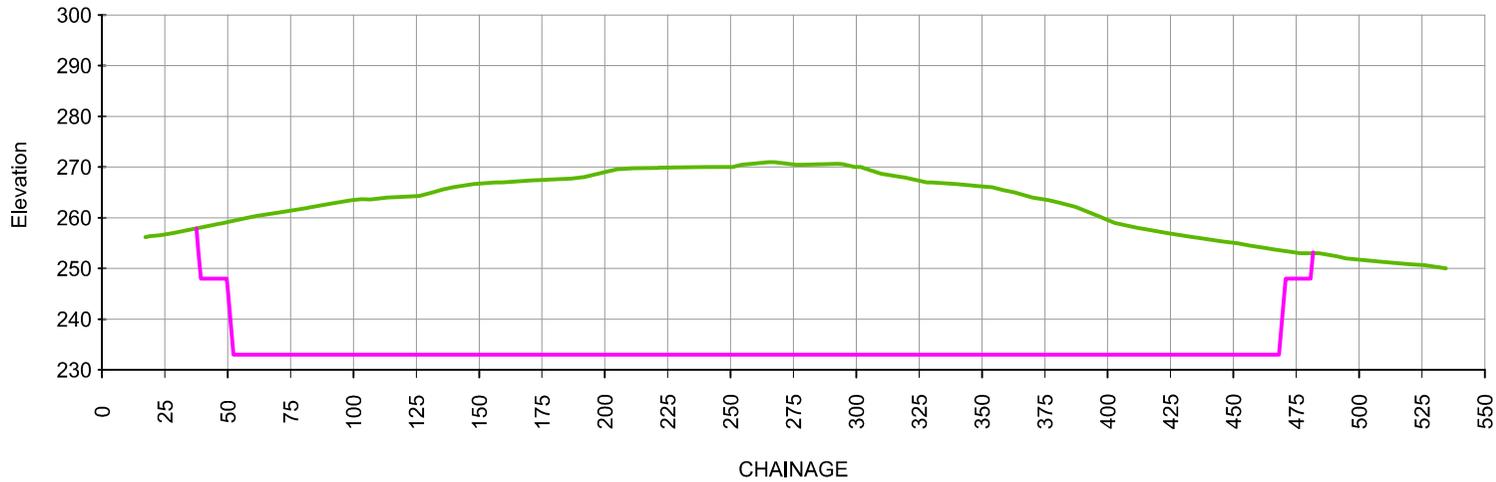
	PROJECT: Redden Quarry	TITLE: Conceptual Final Land Form		
	CLIENT: Matthew & Jane Redden	GROUNDWORK <small>plus</small>	SCALE: 1:3,000 <small>When Printed On A4</small>	DRAWING NUMBER: 2517.DRG.011
PH: +61 7 3871 0411 WWW.GROUNDWORK.COM.AU		DATE: 30 July 2020 PRINTED: 30 July 2020	DRAWN: MR CHECKED: JL	REVISION: DATUM: HORIZONTAL / VERTICAL / ZONE MGA / AHD / 55

CREATED: 30 July 2020 JOB SUB # DA1310 FILE NAME: F:\bbs\2502517_Regional Group_Redden\Drawings\Drawing\2517 DRG.011 - Conceptual Final Land Form.dwg

Cross Section A-A'
 SCALES: HORIZONTAL 1:3000 VERTICAL 1:1500



Cross Section B-B'
 SCALES: HORIZONTAL 1:3000 VERTICAL 1:1500



REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: Google Earth Image Capture 2016-01-08
 Topography: Lidar DEM, 5m, Extract 2018-07-31
 Cadastre: NSW Spatial Services Extract 2018-07-30
 Ecosystem: Other:

THESE DESIGNS AND PLANS ARE COPYRIGHT AND ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART OR TO BE USED ON ANY PROJECT WITHOUT THE WRITTEN PERMISSION OF GROUNDWORK PLUS PTY LTD. ABN: 13 609 422 791

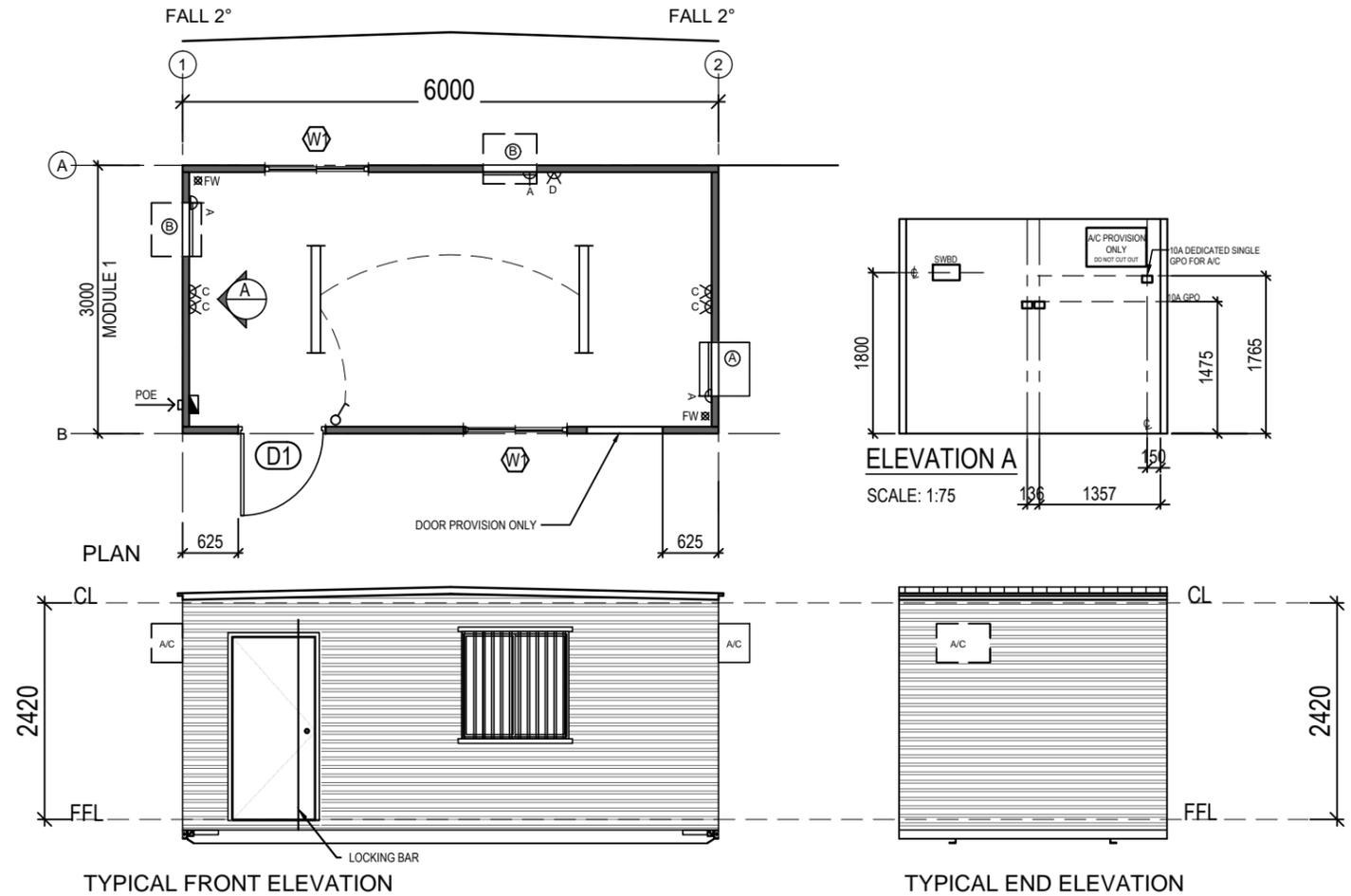
Legend:

- Existing Surface
- Conceptual Final Landform

PROJECT:	Redden Quarry
CLIENT:	Matthew and Jane Redden

TITLE:	Conceptual Final Landform - Cross Sections		
SCALE:	1:3000	0 60m	DRAWING NUMBER: 2517.DRG.011A
DATE:	30 July 2020	DRAWN: MR	REVISION:
PRINTED:	30 July 2020	CHECKED: JL	DATUM: HORIZONTAL / VERTICAL / ZONE
			MGA / AHD / 55

DESIGN SPECIFICATION		
BASEFRAME / REFER BASEFRAME LAYOUTS FOR DETAILS		
BEARER	150 x 75mm PFC, TOES OUT	
OUTRIGGER/SPREADER	100 x 50mm PFC	
BRACING ANGLE	50 x 50 x 5mm EQUAL ANGLE	
END MEMBER	100 x 50mm PFC	
LIFTING MECHANISMS	EXTENDABLE OUTRIGGERS	
TOW LUG	8mm PLATE / Ø30mm HOLE	
STEELWORK TREATMENT	FINISHED WITH ANTI CORROSIVE BLACK ENAMEL / TOW LUGS = CLARKE GREEN / LIFTING POINTS = SAFETY YELLOW	
FLOOR FRAME / REFER BASEFRAME LAYOUTS FOR DETAILS		
JOISTS	C10015 @ 480 CENTRES	
CAPPER	C10415	
END JOIST	100 x 100 x 4mm SHS	
FLOORING		
FLOOR SHEET	17mm TONGUE AND GROOVE PLYWOOD F11	
FLOOR COVERING	2.0mm VINYL - (SEALED) ARMSTRONG ARMATRANS NEUTRAL GREY	
SKIRTING	PVC D MOULD - GREY	
COMPLEXING	-	
WATERPROOFING	-	
OTHER	DRY FLOOR WASTES WITH PLUGS	
WALLS		
INTERNAL HEIGHT	2400mm	
INTERNAL LINING	4mm POLYPLY PRE-FINISHED EMBOSSED PLYWOOD - GREY	
INTERNAL TRIM	PVC D MOULD - GREY (GREY WAFER HD SCREWS)	
WALL INSULATION	R1.8 (75mm)	
EXTERNAL CLADDING	COLORBOND PANELRIB, LAID HORIZONTALLY - SURFMIST	
EXTERNAL CORNER	HD 40x40x2.5mm D'GAL ANGLE, SILICONE SEAL WALL TO FLOOR	
WALL FRAMES		
FRAMING	75 x 41 x 0.75mm G550 STEEL STUDS	
STUD SPACING	400mm CTS (WIND REGION N3)	
STRAP BRACING	WALLS TO FLOOR & WALLS TO CEILING STRAP BRACED EVERY 1200mm WITH 125 x 30 x 1.2mm BUILDERS STRAP - 8/18x20mm SCREWS x 4	
ROOF / CEILING		
CEILING TYPE	FLAT	
CEILING LINING	4mm PRE-FINISHED PLYWOOD - MIRAGE PEARL	
CEILING INSULATION	R1.8 (75MM)	
ROOF PITCH	2° CENTRE PITCH	
ROOF CLADDING	TRIMDECK 0.42 BMT - ZINCALUME	
ROOF INSULATION	-	
UNDER BARGE FLASHING	ZINC	
BARGE	WOODLAND GREY	
GUTTER	NIL	
DOWNPIPE	NIL	
STEPPDOWN FLASHING	30 x 60 STEP DOWNS - WOODLAND GREY	
ROOF / CEILING FRAMES		
FRAMING	75 x 41 x 0.75mm G550 STEEL STUDS	
STUD SPACING	400mm CTS (WIND REGION N3)	
ELECTRICS		
SPECIFICATION	TO AS3000, 3001, 3012	
S/W BOARD	P.O.E. LOCATED BEHIND SWITCHBOARD, POLY PLASTIC INTERNALLY MOUNTED SWITCHBOARD, 1800mm AFFL(TO CTR)	
ITEMS & EQUIPMENT SCHEDULE		
TAG	QTY	DESCRIPTION
A	1	FRAME FOR A/C CUT OUT - 435h x 670w FRAME OPENING & FIT A/C SUPPLIED BY COATES HIRE
B	2	FRAMEOUT FOR A/C, DO NOT CUT
NOTES:		
COATES SIGNS - 1 / PER BUILDING @ TOP RIGHT CORNERS		
COATES ASSET TAGS - FIT BESIDE ENTRY DOOR @ LOCK		
ALLOW NOGS IN CEILINGS AND EXTERNAL WALL FOR FUTURE PARTITIONS		



GENERAL ARRANGEMENT
SCALE: 1:75

DOOR SCHEDULE												
TAG	SIZE	QTY	LOCATION	COLOUR	FURNITURE	LOCKING	KEYING	ARCHITRAVE	GLASS	CLOSER	STOP	NOTES
D1	2040 x 920mm	1	EXTERNAL	SURFMIST	KNOB	PASSAGE SET	-	PVC	-	NIL	YES	NOTES: "DO NOT" REBATE BOTTOM OF DOORS FOR DOOR SWING TO MISS VERANDAH DECKING CABIN HOOK REBATED EDGE; SECURITY - ZINC PLATED PIVOT LOCKING BAR - BOTTOM OF BAR TO BE 5mm ABOVE DOOR THRESHOLD

WINDOW SCHEDULE											
TAG	SIZE H x W	QTY	LOCATION	HEIGHT	OPENING	COLOUR	KEYING	ARCHITRAVE	GLASS	BLINDS	NOTES
W1	1200 x 1180mm	2	EXTERNAL	900 AFFL	1210 x 1190mm CUT-OUT	WHITE	-	PVC	CLEAR	NIL	TAPE & SILICON SEAL TOP SIDES. GAL. SEC. BARS BOLT FIX w/NYLOC NUTS @ 4 CORNERS

ELECTRICAL LEGEND			
ITEM	DESCRIPTION	HEIGHT	QTY
EDB	ELECTRICAL DISTRIBUTION BOARD	-	1
POE	ELECTRICAL SUPPLY POINT OF ENTRY	1800 AFFL	1
	2xSL 9732/40cw LED LIGHTS - SURFACE MOUNT	C/MNTD	2
	SINGLE LIGHT SWITCH	1300 AFFL	1
	SINGLE GPO - 10 AMP DOUBLE POLE	1765 AFFL	3
	SINGLE GPO - 10 AMP DOUBLE POLE	1765 AFFL	-
	DOUBLE GPO - 10 AMP DOUBLE POLE	1475 AFFL	4
	DOUBLE GPO - 10 AMP DOUBLE POLE	375 AFFL	1



THIS SPECIFICATION TO BE COMPLIANT IN CONJUNCTION WITH THE COATES HIRE PURCHASE SPECIFICATIONS (PLANT) PART 2 - EQUIPMENT TYPE AND PART 3 - COMMON REQUIREMENTS WITH MBS MARK UPS DATED 21.06.17

FOR CONSTRUCTION



132 WARREN RD, SMITHFIELD NSW 2164
TEL: 1800 217 131 D: (02) 8718 2500
FAX: (02) 8718 2599

PROJECT / TYPE : PROJECT: **COATES HIRE COMMONWEALTH GAMES 6.0 x 3.0m SHELL**

SIGNATURE: _____
NAME: _____
DATE: _____

© COPYRIGHT. THE INFORMATION IDEAS AND CONCEPTS CONTAINED IN THIS DOCUMENT ARE CONFIDENTIAL. THE RECIPIENT(S) OF THIS DOCUMENT IS/ARE PROHIBITED FROM DISCLOSING SUCH INFORMATION, IDEAS AND CONCEPTS TO ANY PERSON WITHOUT THE PRIOR WRITTEN CONSENT OF MODULAR BUILDING SYSTEMS Pty. Ltd

DATE: 15.01.2018 TITLE: **PLAN- GENERAL ARRANGEMENT**

DRAWN BY: TW

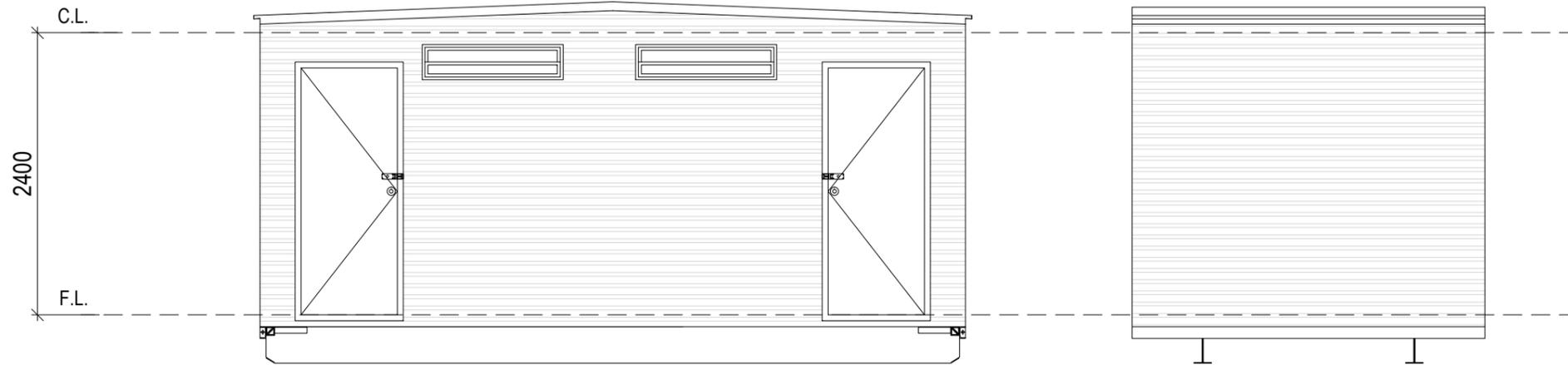
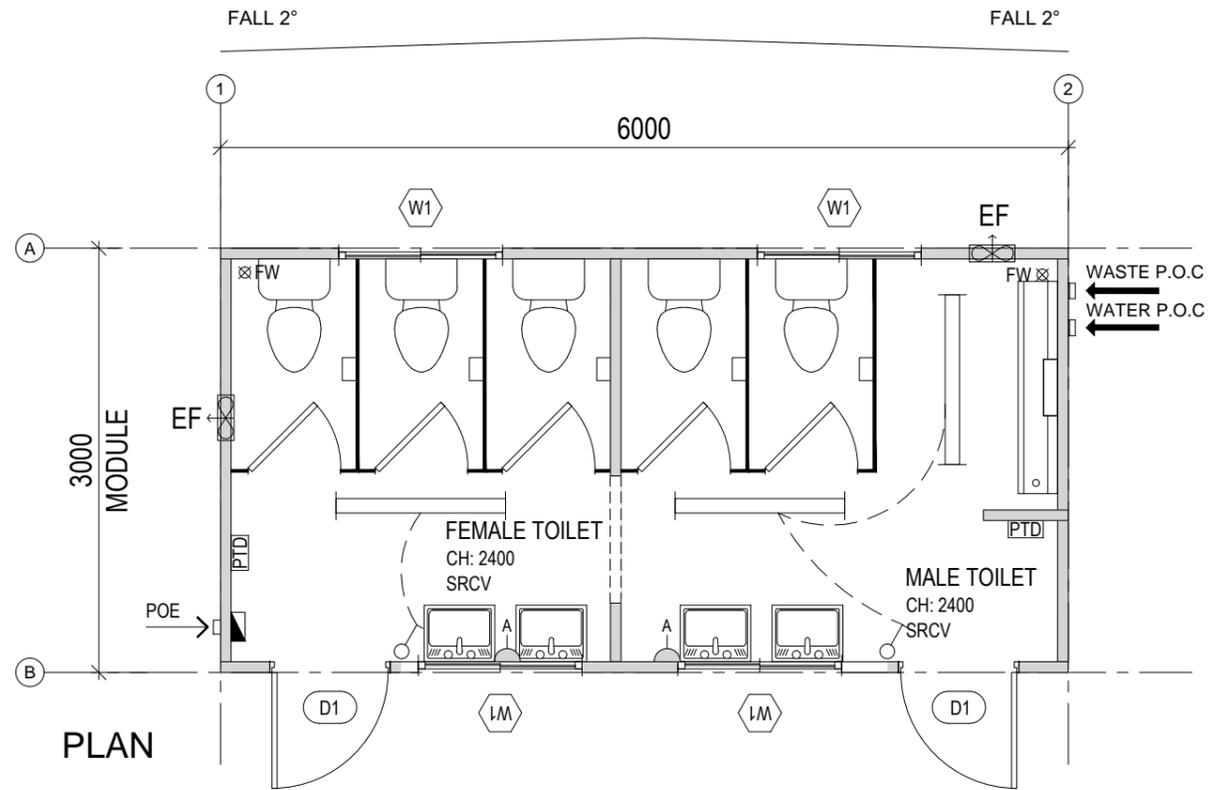
CHECKED BY: DT DRAWING NUMBER: **MS-200108-101** BUILDING NUMBER: **#0000**

SCALE: SHOWN QUOTATION NUMBER: 200108 REV: [1]

ISSUE	AMENDMENT	BY	DATE
1	FOR CONSTRUCTION	TW	15.01.2018

DESIGN SPECIFICATION

BASEFRAME / REFER BASEFRAME LAYOUTS FOR DETAILS	
BEARER	310 UB
OUTRIGGER/SPREADER	100 x 50mm PFC
BRACING ANGLE	50 x 50 x 5mm EQUAL ANGLE
END MEMBER	100 x 50mm PFC
LIFTING MECHANISMS	EXTENDABLE OUTRIGGERS
TOW LUG	10mm PLATE / Ø30mm HOLE
STEELWORK TREATMENT	PRIMED WITH RED OXIDE / FINISHED WITH BLACK ENAMEL
FLOOR FRAME / REFER BASEFRAME LAYOUTS FOR DETAILS	
JOISTS	C10015 @ 480 CENTRES
CAPPER	C10415
END JOIST	100 x 100 x 4mm SHS
FLOORING	
FLOOR SHEET	15mm TONGUE AND GROOVE PLYWOOD F11
FLOOR COVERING	2.0mm NON-SLIP VINYL - POLYSAFE HYDRO EVOLVE TIGRIS #4257
SKIRTING	100mm COVERED VINYL
COMPLEXING	-
WATERPROOFING	NO
OTHER	DRY FLOOR WASTES
WALLS	
INTERNAL HEIGHT	2400mm
INTERNAL LINING	4mm POLYPLY PRE-FINISHED EMBOSSED PLYWOOD - GREY
INTERNAL TRIM	PVC D MOULD - WHITE (3 ROWS OF GREY SCREWS)
WALL INSULATION	-
EXTERNAL CLADDING	COLORBOND PANELRIB, LAID HORIZONTALLY - SURFMIST
EXTERNAL CORNER	HD 40x40x2.5mm D'GAL ANGLE
WALL FRAMES	
FRAMING	75 x 41 x 0.75mm G550 STEEL STUDS
STUD SPACING	400mm CTS
ROOF / CEILING	
CEILING TYPE	FLAT
CEILING LINING	4mm PRE-FINISHED PLYWOOD - MIRAGE PEARL
CEILING INSULATION	R 1.8 (75mm)
ROOF PITCH	2° CENTRE PITCH
ROOF CLADDING	TRIMDECK 0.42 BMT - ZINCALUME
ROOF INSULATION	-
UNDER BARGE FLASHING	ZINC
BARGE	WOODLAND GREY
GUTTER	-
DOWNPIPE	-
STEPDOWN FLASHING	30 x 60 STEP DOWN - WOODLAND GREY
ROOF / CEILING FRAMES	
FRAMING	75 x 41 x 0.75mm G550 STEEL STUDS
STUD SPACING	400mm CTS
ELECTRICS	
SPECIFICATION	TO AS3000, 3001, 3012(TO COATES HIRE PURCHASE SPECIFICATIONS)
S/W BOARD	P.O.E. LOCATED BEHIND SWITCHBOARD, POLY PLASTIC INTERNALLY MOUNTED SWITCHBOARD, 1800mm AFFL(TO CTR)



TYPICAL FRONT ELEVATION

TYPICAL END ELEVATION

GENERAL ARRANGEMENT

SCALE: 1:50

DOOR SCHEDULE												
TAG	SIZE	QTY	LOCATION	COLOUR	FURNITURE	LOCKING	KEYING	ARCHITRAVE	GLASS	CLOSER	STOP	NOTES
D1	2040 x 920mm	2	EXTERNAL	WHITE	KNOB	PASSAGE	-	PVC	-	STD	YES	REBATED EDGE; SECURITY - ZINC PLATED HASP & STAPLE, CABIN HOOK

WINDOW SCHEDULE												
TAG	SIZE H x W	QTY	LOCATION	HEIGHT	OPENING	COLOUR	KEYING	ARCHITRAVE	GLASS	BLINDS	NOTES	
W1	280 x 1175mm	4	EXTERNAL	2020 AFFL	290 x 1190mm CUT-OUT	PEARL WHITE	-	PVC	OBS& PERMANENT VENT	-	TAPE & SILICON SEAL TOP SIDES.	

ELECTRICAL LEGEND			
ITEM	DESCRIPTION	HEIGHT	QTY
EDB	ELECTRICAL DISTRIBUTION BOARD	-	1
POE	ELECTRICAL SUPPLY POINT OF ENTRY	1800 AFFL	1
	2x28W FLURO LIGHT DIFFUSED - SURFACE MOUNT	C/MNTD	3
	SINGLE LIGHT SWITCH	1300 AFFL	2
	SINGLE GPO - 10 AMP	1550 AFFL	2
EF	EXHAUST FAN	-	2

ITEMS & EQUIPMENT SCHEDULE		
TAG	QTY	DESCRIPTION
A	5	TOILET SUITE , DUAL FLUSH w/HASP & STAPLE
B	4	S/S HAND BASIN (H&C) PUSHBUTTON TYPE w/ MIRROR OVER
C	2	PAPER TOWEL DISPENSER (ROLL TYPE)
-	-	-
E	1	S/S URINAL - 1500
NOTES:		
COATES SIGNS - 4 PER BUILDING @ TOP RIGHT CORNERS		
COATES ASSET TAGS - FIT BESIDE ENTRY DOOR @ LOCK		
WASTE OUTLET TO BE MIN. 70mm HIGHER THAN BOTTOM OF SKID		
5		TOILET CUBICLES IN WHITE

PRELIMINARY ISSUE



132 WARREN RD, SMITHFIELD
 TEL: 1800 217 131
 FAX: (02) 8718 2599

NSW 2164
 D: (02) 8718 2500

CLIENT APPROVAL

SIGNATURE: _____

NAME: _____

DATE: _____

PROJECT:

COATES - CAPEX 3.0 x 6.0m M/F TOILET

© COPYRIGHT. THE INFORMATION IDEAS AND CONCEPTS CONTAINED IN THIS DOCUMENT ARE CONFIDENTIAL. THE RECIPIENT(S) OF THIS DOCUMENT IS/ARE PROHIBITED FROM DISCLOSING SUCH INFORMATION, IDEAS AND CONCEPTS TO ANY PERSON WITHOUT THE PRIOR WRITTEN CONSENT OF MODULAR BUILDING SYSTEMS Pty. Ltd

DATE: 09.10.2015

TITLE: **PLAN-
GENERAL ARRANGEMENT**

DRAWN BY: ML

CHECKED BY: DT

SCALE: SHOWN

DRAWING NUMBER: **MS-200305-B20-101**

QUOTATION NUMBER: 200305

BUILDING NUMBER: **#0000**

REV: E

SHEET A3

ISSUE	AMENDMENT	BY	DATE
E	AS CLOUDED	ML	04.05.18
D	AS CLOUDED	ML	06.02.18
C	REVISED SPECIFICATIONS	TW	18.08.17
B	PRELIMINARY ISSUE	SN	27.07.16
A	PRELIMINARY ISSUE	ML	09.10.15

Appendix B – Agency submissions to the 2020 EIS and responses

Table B-1 Agency submissions for the 2020 EIS and responses

Agency submission for 2021 proposal	Response
NSW DPIE – Biodiversity, Conservation & Science (BCS) Directorate	
<p>By letter dated 22 September 2020, the Biodiversity, Conservation & Science (BCS) Directorate of DPIE provided comment confirming that the previous BCS comments and issues have been addressed but recommended that a copy of a checklist and shapefiles for the BDAR be provided to Council for future reference.</p>	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 provided a copy of the ‘checklist’ referred to in the BCS letter (refer Attachment 2) and the GIS shapefiles for the BDAR (refer Attachment 3).</p>
NSW Rural Fire Service	
<p>The NSW RFS letter dated 23 September 2020 was in response to correspondence regarding the proposal which was received on 3 September 2020.</p> <p>The letter states that a Bush Fire Management Plan must be prepared prior to the commencement of construction and must be implemented over the life of the development. Details of the plan are in the letter.</p> <p>The letter also requires preparation of an emergency/evacuation plan consistent with the NSW RFS document ‘A guide to developing a bush fire emergency management and evacuation plan.’</p> <p>The letter also requires property access roads to comply with requirements of Table 7.4a of Planning for Bushfire Protection 2019. The requirements are listed in the letter.</p> <p>Note: Some short constrictions in the access may be accepted where they are not less than 3.5m wide, extend for no more than 30m and where the obstruction cannot be reasonably avoided or removed. The gradients applicable to public roads also apply to community style development property access roads in addition to the above.</p>	<p>A Bush Fire Management Plan has been prepared and was attached to the 2020 EIS that the NSW RFS reviewed.</p> <p>The Bush Fire Management Plan contains an emergency/evacuation plan.</p> <p>Property access roads have been shown to comply with section 4.1.3 (2) of Planning for Bush Fire Protection 2006, as detailed in the Bush Fire Management Plan. An assessment against PBP 2019 has not been undertaken, however the requirements are similar.</p>
Transport for NSW	
<p>By letter dated 25 September 2020, Transport for NSW (TfNSW) stated:</p> <p>The Traffic & Access Impact Assessment Report provided with the amended application has not adequately considered the impact of the development on the local road network and has not addressed the then, Roads and Maritime Services’ input into the Secretaries Environmental Assessment Requirements (SEARs). Which remains valid</p> <p>TfNSW objects to the proposed development, as submitted, and withholds its concurrence. To enable TfNSW to reconsider its position, the following additional information is required to be submitted:</p> <ul style="list-style-type: none"> • A Traffic Impact Assessment, prepared by a suitably qualified and experienced consultant in accordance with Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments. In particular the assessment needs to consider. 	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 states that:</p> <p><i>Cardno have prepared the TIA to address the matters raised by Transport for NSW. The information provided in the attached TIA supersedes and replaces the traffic information contained in the EIS and previously submitted TIA prepared by the Proterra Group.</i></p> <p>The TIA by Cardno is dated 29 January 2021 and is attached to the addendum. It was developed through consultation with TfNSW, details of which are discussed in the TIA.</p>

Agency submission for 2021 proposal	Response
<ul style="list-style-type: none"> • The volume of traffic (both daily and peak hour) generated by the development. This is to include all traffic generated by the development, including haulage vehicles, staff vehicles, and other vehicles required for servicing of the development, and should provide details of both light and heavy vehicles. • Peak traffic generated by the development should consider worst case scenario of quarry operation and not average in order to determine the worst-case impact. • The impacts of the additional development related traffic on the functioning, capacity and safety of all the local roads affected by the haul routes and the associated intersections, up to and including the intersection of Tantitha Road and Mitchell Highway. • Consideration of relevant crash history along the proposed haulage routes, particularly at key intersections. • Swept path diagrams to demonstrate that the largest vehicle permitted to access the site can travel through the local road network in a lane correct manner for all intersections. • Identification of any road and/or intersection upgrades required to cater for the additional development traffic and/or types of vehicles required by the development, in accordance with relevant sections of Austroads. • The potential for stacking and queuing of B-double (24 metre) heavy vehicles at the level crossing between Webb's Siding Road and the Mitchell Highway (HW7). 	
<p>TfNSW provided a submission on the proposal dated 26 February 2021 in response to being notified of the DA on the Planning Portal on 4 February 2021. It provides the following recommendations to assist Council in its assessment and determination of DA2019/58:</p> <p>State Road Works</p> <ul style="list-style-type: none"> • Prior to commencing haulage via designated Route 1, the Mitchell Highway / Tantitha Rd intersection is to be upgraded as follows: <ul style="list-style-type: none"> ○ Provision of a Short Channelised Right (CHR(S) eastbound turn treatment ○ Extension of the Basic Left (BAL) westbound turn treatment into Tantitha Road to meet current Austroads standards. <p>The upgrade is to be designed and constructed in accordance with Austroads Guide to Road Design (copies attached) and able to accommodate the largest vehicle using the intersection.</p> <p><i>Note: To undertake the upgrade, widening of the existing road reserve may be required.</i></p>	<p>In relation to the recommendations:</p> <ul style="list-style-type: none"> • The recommended Mitchell Highway / Tantitha Rd intersection upgrades have been added to the recommended conditions of consent in Appendix A. • NSC have recommended a condition of consent for the proponent to upgrade to the Tomingley Road/Pinedene Road intersection consisting of BAL/BAR treatment. This is captured in the recommended conditions of consent. • The recommended conditions of consent include a requirement for a Traffic Management Plan. • The recommended conditions of consent state: <i>The Applicant must not:</i> <ol style="list-style-type: none"> a) transport more than 490,000 tonnes of extractive material from the site in any 12 month period;

Agency submission for 2021 proposal	Response
<ul style="list-style-type: none"> To undertake private financing and construction works on the Mitchell Highway, in which TfNSW has a statutory interest, the developer is required to enter a formal agreement in the form of a Works Authorisation Deed (WAD) with TfNSW prior to works commencing. A Road Occupancy Licence (ROL) is required prior to any works commencing within three (3) metres of the travel lanes of the Mitchell Highway. Please contact 1300 656 371 for further information regarding a ROL. A Traffic Control Plan prepared by a SafeWork NSW accredited person is to be submitted as part of the ROL application. <p>Classified Regional Road Works</p> <ul style="list-style-type: none"> Prior to the commencement of haulage via designated Route 3, the Tomingley Road/Pinedean Road intersection must be upgraded to provide a Basic Right Turn (BAR) northbound turn treatment into Pinedean Road. The BAR treatment is to be designed and constructed in accordance with Austroads Guide to Road Design (copy attached) and able to accommodate the largest vehicle travelling through or turning at the intersection. <p>General</p> <ul style="list-style-type: none"> Prior to commencement of haulage operations, a Traffic Management Plan (TMP) including Driver Code of Conduct is to be prepared in consultation with Transport for NSW, Narromine Shire Council, principal haulage contractor(s) and relevant stakeholders. The requirements of the TMP and Driver Code of Conduct are to cover the matters referred to within the TMP Annexure (attached). The TMP is to be implemented, reviewed and updated, for the life of the project. A copy of the TMP and Driver Code of Conduct is to be provided to contractors and employees as a part of the site induction and a copy is to be made available to Council and TfNSW upon request. No more than 490,000 tonnes per annum of extracted material is to be transported by public roads during any 12-month period. Traffic generation from the project is not to exceed 22 truck movements per hour (11 in and 11 out). <p>The submission was accompanied by an attachment describing what should be in the Traffic Management Plan (TMP) and Driver Code of Conduct.</p>	<ul style="list-style-type: none"> <i>b) dispatch more than 132 and an average of 43 laden trucks from the site on any day; or</i> <i>c) dispatch more than 11 and an average of 4 laden trucks from the site in any hour.</i>

Agency submission for 2021 proposal	Response
Department of Regional NSW – Mining, Exploration & Geoscience	
<p>By letter dated 1 October 2020, the Department of Regional NSW – Mining, Exploration & Geoscience (MEG) identified that “a review of the information provided to MEG indicates the material to be extracted is Chert. Chert is a scheduled mineral under the Mining Regulation 2016. A mining lease is required to extract the Chert, unless the proponent can establish that the material proposed to be extracted is not Chert or a prescribed mineral.”</p> <p>MEG provided a further detailed advice letter and General Terms of Approval on 22 October 2020 identifying that Chert is a mineral and that the development is characterised as a Mine under Schedule 3, Clause 25 of the <i>Environmental Planning and Assessment Regulation 2000</i>. Therefore, the development will require a mining lease to operate.</p> <p>MEG requested that if the proposed development is approved by Council, the attached GTAs be included, in their entirety, in Council’s development consent.</p>	<p><i>The addendum to the EIS by Groundwork Plus dated 29 January 2021 states that:</i></p> <p><i>The proponent accepts the MEG advice and therefore it is understood that the description of the proposal changes in the following ways.</i></p> <p>Narromine Local Environmental Plan</p> <p><i>The site is located in the Narromine local government area. The Narromine Local Environmental Plan 2011 (NLEP) is the current local government planning policy for land administered by Narromine Shire Council. The site is located in the RU1 ‘Primary Production’ zone. The proposal is ‘mine’ and ‘open cut mining’ under the NLEP being defined as:</i></p> <ul style="list-style-type: none"> • <i>‘mine means the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming’.</i> • <i>‘open cut mining means mining carried out on, and by excavating, the earth’s surface, but does not include underground mining’.</i> <p><i>Open cut mining within the RU1 Primary Production zone is a permissible land use subject to development consent.</i></p> <p>Environmental Planning and Assessment Regulation 2000</p> <p><i>The proposal is designated development pursuant to the Environmental Planning and Assessment Regulation 2000, Schedule 3:</i></p> <ul style="list-style-type: none"> • <i>Clause 16 (1) (a) being Crushing, grinding or separating works that have an intended processing capacity of more than 150 tonnes per day or 30,000 tonnes per year; and</i> • <i>Clause 25 being Mines that mine, process or handle minerals that will disturb a total surface area of more than 4 hectares of land</i>

Agency submission for 2021 proposal	Response
	<p>Protection of the Environment Operations Act 1997</p> <p><i>The proposal is integrated development pursuant to the Protection of the Environment Operations Act 1997, Schedule 1:</i></p> <ul style="list-style-type: none"> • <i>Clause 16 being Crushing, grinding or separating; and</i> • <i>Clause 29 being Mining for minerals.</i> <p>The MEG's GTAs have been included in Appendix A.</p>
<p>NSW Department of Primary Industries</p>	
<p>By letter dated 6 October 2020, Department of Primary Industries stated the following: There are a number of areas where the where the EIS should be strengthened in line with the requirements for agriculture. The main areas include:</p> <ol style="list-style-type: none"> 1. An assessment of the land resource in the area to provide an understanding of the site, its use and the soil information for project development, and final information for rehabilitation. 2. Consideration of the impacts of the proposal on adjacent agricultural lands and enterprises. 3. The need for a community consultation plan and a process to deal with information and enquiries. 4. A rehabilitation plan that considers the final soil material properties and how the pre- existing land and soil capability can be achieved. Also consideration of the most appropriate species for the landuse elected to be undertaken considering the final landform, growing medium, and the nominated end landuse. <p>DPI's recommendations are attached and aim to ensure the physical impacts of the mine on agriculture are appropriately considered in the EIS.</p> <p>DPI made the following comments on the EIS:</p> <ol style="list-style-type: none"> 1. A LUCRA has not been completed especially in relation to adjacent agricultural lands uses. The EIS has demonstrated distances to surrounding rural dwellings (page 31) but not assessed the impacts on adjacent landuses e.g. the surrounding cropping lands, and if any grazing or other specialized activity is located nearby. The impacts of operating conditions such as dust and noise on plant growth, livestock management etc. also requirement further assessment with specific and appropriate mitigating strategies described. 2. We note Figure 3 shows the conceptual quarry layout. Further details such as soil stockpiles, storage areas, processing facilities, erosion control features, and buffers to boundaries etc. should also be shown. 	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 responds to some aspects of DPI's submission, stating that:</p> <p><i>Section 5.2 and 5.3 of the EIS addresses land resources and land capability. As outlined in the EIS the landowners of the site (Lot 102 DP792484) are the proponents for the proposal are also the landowners of the adjacent land (Lot 1 on DP1110036) and hold no objection to the proposal. Therefore, it is considered that the proposal does not conflict with adjacent agricultural lands and enterprises.</i></p> <p><i>The development application has been publicly notified in accordance with the requirements of the Act. The Environmental Management Plan attached to the EIS, includes a procedure for engagement with the community including the handling of incidents and complaints.</i></p> <p><i>The Environmental Management Plan attached to the EIS, includes matters in relation to rehabilitation of the site. Rehabilitation of the proposal will be regulated in further detail as part of the documentation required to be prepared for the Mining Lease application. Draft conditions of consent previously prepared by Council included the requirement for a Quarry Rehabilitation Strategy and no objection is held to such a requirement.</i></p> <p>A representative from DPI – Agriculture sent an email to NSC on 2 February 2021 stating that DPI - Agriculture's submission is advice only. The advice has been considered in the assessment of the proposal.</p>

Agency submission for 2021 proposal	Response
<ol style="list-style-type: none"> 3. The EIS indicates the broadly mapped soil landscapes and land and soil capabilities on the quarry site and surrounding lands. Further clarification of these on site should indicate the local presence of these landscapes and the soils present, as the EIS shows some discrepancy in the soils described in the immediate area. Ideally a soil survey should be undertaken to determine soil types, characteristics and inform the availability of soil available for rehabilitation purposes, and provide a guide to the on-site land and soil capability. 4. Agricultural use and productivity of the site and surrounding lands should also be described. Sound soil baseline information and agricultural production data provides a guide to final closure parameters that can assist in achieving final land and soil capability. 5. The impacts on current and future agricultural developments and resources need to be assessed and mitigation/avoidance strategies described. The area is noted as being surrounded by dryland cropping lands so this should be considered in any impact assessment. It is important to identify the surrounding agricultural land uses and enterprises to assess any impacts. These may include dust and the mitigation to ensure plant growth is not impacted, or impacts such as noise and blasting on any livestock enterprises in the area. The LUCRA assessment should be able to assist with this. 6. Any cumulative impact on agricultural enterprises and landholders need to be described, that may include dust or water impacts. 7. The expected lifespan of the proposed development has been detailed. 8. Bushfire risk to adjacent agricultural landuses should be considered as part of the overall approach to fires in the quarry area. 9. The shortfall in surface- water for the quarry is noted (Section 2.5, page 13). The site plan should indicate the water storages on site. 10. Any water harvested on site should be shown. The impact of any modelled reductions of water to adjoining lands needs to be accounted for especially in relation to adjoining landholdings and the impacts on their water supply 11. Details of water storage onsite have not been included. We note the shortfall that will be delivered to the site. A water management system that ensures offsite impacts to adjacent agricultural land and water systems should be implemented. 12. The proposal should detail how design and operation will be undertaken for by-product management in accordance with best practice to prevent excess build-up of nutrients and salts in the soil profile and increase the risk of 	

Agency submission for 2021 proposal	Response
<p>leaching. A monitoring program should be developed.</p> <p>13. We note the measures described and the commitment to a weed and pest management strategy (5.15.3, page 69-70). The risk to adjacent lands should also be considered to deal with weed incursion either way, or the opportunity to liaise with adjacent land managers. Consideration of feral animal management should also be undertaken.</p> <p>14. The soil stockpiles should be managed during this time to avoid weed infestations. Consideration of a short term cover crop may be more feasible over the long term to deal with weed issues and soil quality issues during storage.</p> <p>15. We note the consideration of traffic movement to the site. Consideration of the impacts of traffic movement and the noise and dust on receptors such as plants and livestock should also be considered.</p> <p>16. The site plan should show the mitigation plantings/screens/bunding to deal with visual amenity.</p>	
NSW Department of Planning, Industry & Environment – Crown Lands	
Crown Lands sent a letter dated 17 September 2020 stating that Crown Lands is the adjoining landowner and offers no objections to the proposal.	No response is necessary.
NSW Natural Resources Access Regulator	
<p>The Natural Resources Access Regulator sent a letter dated 27 October 2020 and states that for the purposes of the for the purposes of the <i>Water Management Act 2000</i>, a controlled activity approval is not required and no further assessment by this agency is necessary.</p> <p>A further letter from NRAR dated 30 July 2021 confirmed the earlier letter but also provided some recommendations for inclusion in the Notice of Determination.</p>	The recommendations have been considered in the recommended conditions in Appendix A.
WaterNSW	
<p>WaterNSW made a submission in a letter dated 6 January 2021 in relation to correspondence seeking WaterNSW consideration in respect to requirements under section 89 of the <i>Water Management Act 2000</i>.</p> <p>WaterNSW advised that no water use approval is required to be administered by WaterNSW.</p> <p>The letter also states:</p> <p>WaterNSW has however referred the proposed changes to DA2019/58 to the Department of Planning, Industry and Environment (DPIE) for hydrogeological consideration.</p>	<p>The Groundwater Doctor responded to the WaterNSW submission. It is part of the addendum to the EIS.</p> <p>The Groundwater Doctor response was provided to NRAR, refer above.</p>

Agency submission for 2021 proposal	Response
<p>A response has now been furnished to WaterNSW and is detailed below;</p> <p>DPIE Water believes that there is remote chance of finding any aquifers under the project footprint, hence this proposal is a low risk with regard to groundwater impacts. Nevertheless, the proponent has not substantiated with certainty that no aquifers would be found above the maximum depth (233 m AHD) of the quarry.</p> <p>The quarrying is reported as non-aquifer interference activity based on the dry test holes drilled on site up to 24 m deep in 2018 (dry year) for resource investigation and the water level of bores screened against nearby alluvial aquifers. Elevation of the bottom of test holes was not provided to rule out occurrence of any aquifers above the bottom (233m AHD) of the proposed quarry. Considering the maximum depth of test hole is 24 m, the current peak of topographic relief of the project footprint is about 270 m AHD and the test holes were drilled in a dry year, it appears that groundwater is not investigated down to the depth of 233 m AHD and beyond at the project footprint. Therefore, the proponent has not proven that this project will not be an aquifer interference activity.</p> <p>DPIE Water recommends the following. Prior to approval:</p> <p>The proponent provide details of the locations, elevations at surface, and depths of investigation boreholes to substantiate the absence of the water table at and above the proposed maximum pit depth (233m AHD), supported by, geological strata information of each holes and the drillers log, and with sufficient buffer to account for any water table variation. If this is not possible with existing information, the proponent shall drill further investigation bores to meet this purpose.</p> <p>WaterNSW requests that the proponent supply the abovementioned information to be further considered by DPIE hydrogeologists. Should the supplied information be deemed as satisfactory, approval will be endorsed by WaterNSW.</p> <p>WaterNSW advised in a letter dated 16 June 2021 that the appropriate consenting authority was NRAR because the application was in relation to a mine.</p>	

Agency submission for 2021 proposal	Response
<p>NSW Environmental Protection Authority</p> <p>The NSW EPA provided a submission dated 11 March 2021 in regard to NSC seeking information if the previously supplied General Terms of Approval Notice 1589417 (as varied on 20 January 2020) need to be amended further.</p> <p>The EPA advises that a small variation to the GTAs is required:</p> <p>Condition A1.1 as contained within the EPA's GTA Notice No. 1589417 is removed and replaced by condition A1.1 below. A1.1. Except as expressly provided by any conditions of approval issued by Narromine Shire Council, these General Terms of Approval or the conditions of an in-force environment protection licence issued by the Environment Protection Authority, works and activities at the premises, being the Redden Mine (also known as the Redden Quarry) at Lot 102; DP 792484, must be carried out in accordance with the information contained in:</p> <ul style="list-style-type: none"> a) the Development Application submitted to Narromine Shire Council by Groundwork Plus Pty Ltd on behalf of Matthew and Jane Redden on 28 August 2019 for DA2019/58; b) the Environmental Assessment titled "Redden Quarry - Environmental Impact Statement" prepared by Groundwork Plus Pty Ltd dated August 2020 relating to the Development Application identified above; c) the specialist assessments accompanying the Environmental Assessment identified above; and d) any response to submissions or unless superseded by an addendum response to submissions. 	<p>The EPA GTA have been included in Appendix A.</p>

Appendix C – Public submissions to the 2020 EIS and responses

Table C-1 Issues raised in public submissions for the 2021 proposal and response

Issue raised in public submissions	Response
<p>Revised EIS documentation does not mention community submission issues as raised in the 2019 exhibition period.</p>	<p>The SEARs supplied on 29 August 2018 state: <i>In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers and any surrounding landowners that may be impacted by the development.</i> <i>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</i></p> <p>The EIS states: <i>Surrounding Landholders Consultation</i> <i>The development is in the centre of the site providing a minimum separation distance of over 1km from any adjoining property boundary. The project proponents have consulted with surrounding residents.</i></p> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that: <i>The proposal has been publicly notified in accordance with the requirements of the Environmental Planning and Assessment Act 1979 providing opportunity for the public to be informed of the proposal and provide submissions.</i></p>
<p>Community consultation undertaken does not meet the requirements of the SEARs.</p>	<p>The SEARs supplied on 29 August 2018 state: <i>In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers and any surrounding landowners that may be impacted by the development.</i> <i>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</i></p> <p>The EIS states: <i>Surrounding Landholders Consultation</i> <i>The development is in the centre of the site providing a minimum separation distance of over 1km from any adjoining property boundary. The project proponents have consulted with surrounding residents.</i></p> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that: <i>The proposal has been publicly notified in accordance with the requirements of the Environmental Planning and Assessment Act 1979 providing opportunity for the public to be informed of the proposal and provide submissions.</i></p>

Issue raised in public submissions	Response
<p>The 30 residences between the Project site and Narromine have not been correctly consulted and may not know about the proposed increase in traffic movements from the Project, compared to the 2019 proposal.</p>	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>The proposal has been publicly notified in accordance with the requirements of the Environmental Planning and Assessment Act 1979 providing opportunity for the public to be informed of the proposal and provide submissions.</i></p> <p>The landholders between the Project site and Narromine have been notified of the Project via public notification.</p>
<p>The EIS does underestimate the risk of flood in the area. Haulage routes are heavily affected by flooding. Specifically, the flow routing desktop analysis undertaken by the original and the revised EIS is incorrect.</p>	<p>The SEARs supplied on 29 August 2018 state:</p> <p><i>The EIS must address the following specific issues:</i></p> <p><i>an assessment of any likely flooding impacts of the development;</i></p> <p>The EIS uses the Narromine Local Environmental Plan 2001 Flood Map, which shows the predicted extent of a 1% AEP flood event. The Project site is located above the 1% AEP flood extent. The EIS concludes that</p> <p><i>The impact of flooding of the proposed quarry operations is expected to be limited to loss of access of the haulage route to the Mitchell Highway.</i></p> <p>The Surface Water Assessment dated August 2020 (attachment 18 of the EIS) does not contain an assessment of flood risk of the proposal.</p> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>The proposal is located outside the mapped flood planning area of the Narromine Local Environmental Plan. The Environmental Management Plan includes an Emergency Response Plan which would be utilised in a flood event. Draft conditions of approval previously prepared by Council required the preparation of a Traffic Management Plan (TMP). The condition of consent could require the TMP to include management measures for flood events and wet weather. No objection is held to a condition of consent directing that haulage of material does not occur on roads closed because of flooding.</i></p> <p>The submission contains photographs of flooding on the proposed haul routes of Wallaby Road, Webbs Siding Road and Bootles Road. The proposed haulage routes may flood, however as they are above the 1% AEP flood extent mapped by NSC, the risk of flood is not considered to be significant.</p>

Issue raised in public submissions	Response
<p>The Traffic & Access Impact Assessment Report does not transparently disclose the full traffic impact on the haulage and access roads to be utilized by the project.</p>	<p>The SEARs supplied on 29 August 2018 state:</p> <p><i>Traffic & Transport – including:</i></p> <ul style="list-style-type: none"> • <i>accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products;</i> • <i>an assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road networks, detailing the nature of the traffic generated, transport routes, traffic volumes and potential impacts on local and regional roads;</i> • <i>a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road network (particularly the proposed transport routes) over the life of the development;</i> • <i>evidence of any consultation with relevant roads authorities, regarding the establishment of agreed contributions towards road upgrades or maintenance; and</i> • <i>a description of access roads (specifically in relation to the proposed site access from Wallaby Road or Dappo Road), the intersection of Tantitha Road and the Mitchell Highway, and nearby Crown roads and fire trails;</i> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains an updated Traffic Impact Assessment (TIA) for the proposal, dated 28 January 2021.</p> <p>The TIA contains an operational traffic assessment which assesses the impact of the proposal on the proposed haulage and access roads. The TIA states that in relation to the operation of the proposal:</p> <p><i>Whilst the road geometry of the surrounding roads and intersection are generally satisfactory for heavy movements, it has been identified that some intersection may require localised improvements to accommodate wheel tracking and vehicle paths, as well as a review of Council’s maintenance program particularly with attention to the cumulative impacts of the N2N project. Relevant roads and intersections are listed below:</i></p> <ul style="list-style-type: none"> • <i>Site Access / Wallaby Road localised widening for outbound southbound movement</i> • <i>Bootles Road cattle grid near Pinedean Road</i> • <i>Pinedean Road / Tomingley Road localised widening for outbound southbound movements.</i> • <i>Maintenance requirements for Wallaby Road, Pinedean Road and Tantitha Road</i> <p>In addition to the payment of Section 7.11 contributions, the following conditions of consent have been included in Appendix A:</p> <ul style="list-style-type: none"> • <i>Prior to the average annual daily traffic (AADT) of an access route exceeding the trigger in the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy, the route must be upgraded as per the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy.</i> • <i>The Applicant will be responsible for the design and construction costs associated with any upgrades proportionate to the number of vehicles the development is contributing to the AADT, as determined by Council. If the Applicant does not fund their proportion of the upgrade, they will not be permitted to increase the truck numbers from prior to the upgrade.</i>

Issue raised in public submissions	Response
	<ul style="list-style-type: none"> • <i>Prior to commencing haulage via designated Route 1, the Mitchell Highway / Tantitha Rd intersection is to be upgraded as follows:</i> <ul style="list-style-type: none"> ○ <i>Provision of a Short Channelised Right (CHR(S) eastbound turn treatment</i> ○ <i>Extension of the Basic Left (BAL) westbound turn treatment into Tantitha Road to meet current Austroads standards.</i> ○ <i>The upgrade is to be designed and constructed in accordance with Austroads Guide to Road Design and able to accommodate the largest vehicle using the intersection.</i>
<p>The EIS and the associated BDAR report fails to consider the potential occurrence of a once local common vegetation community 'Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia'.</p>	<p>The latest version of the BDAR is dated 24 August 2020 (Rev 5). It discusses the presence of Western Grey Box (<i>Eucalyptus microcarpa</i>) on the site but does not discuss the presence of 'Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia'.</p> <p>By letter dated 22 September 2020, the Biodiversity, Conservation & Science (BCS) Directorate of DPIE provided comment confirming that the previous BCS comments and issues have been addressed but recommended that a copy of a checklist and shapefiles for the BDAR be provided to Council for future reference.</p> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains a copy of the checklist and shapefiles for the BDAR. The addendum also contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>The Biodiversity Development Assessment Report has been prepared by a suitably qualified and certified person and reviewed by the BCS which confirmed that the issues previously raised by BCS have now been addressed.</i></p>
<p>The EIS states that the project has a capital works budget of \$18,577. This means that the proponent will not pay much contributions towards road upgrades and maintenance.</p>	<p>In addition to the payment of Section 7.11 contributions, the following conditions of consent have been included in Appendix A which involve the proponent paying for road upgrades:</p> <ul style="list-style-type: none"> • <i>Prior to the average annual daily traffic (AADT) of an access route exceeding the trigger in the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy, the route must be upgraded as per the Narromine Shire Council Roads Management Strategy (Road Manual) – Part 3: Road Hierarchy.</i> • <i>The Applicant will be responsible for the design and construction costs associated with any upgrades proportionate to the number of vehicles the development is contributing to the AADT, as determined by Council. If the Applicant does not fund their proportion of the upgrade, they will not be permitted to increase the truck numbers from prior to the upgrade.</i> • <i>Prior to commencing haulage via designated Route 1, the Mitchell Highway / Tantitha Rd intersection is to be upgraded as follows:</i> <ul style="list-style-type: none"> ○ <i>Provision of a Short Channelised Right (CHR(S) eastbound turn treatment</i> ○ <i>Extension of the Basic Left (BAL) westbound turn treatment into Tantitha Road to meet current Austroads standards.</i> ○ <i>The upgrade is to be designed and constructed in accordance with Austroads Guide to Road Design and able to accommodate the largest vehicle using the intersection.</i>

Issue raised in public submissions	Response
<p>The Project will have noise and vibration impacts, air quality (dust) impacts, water impacts and traffic impacts.</p>	<p>The EIS for the Project dated August 2020 is accompanied by:</p> <ul style="list-style-type: none"> • Noise Impact Assessment by Advitech Environmental dated 18 November 2019 (attachment 17) • Air Quality Impact Assessment by Advitech Environmental dated 18 November 2019 (attachment 16), which was revised from the version dated 19 August 2019 in response to comments from EPA. • Surface Water Assessment by Groundwork Plus dated August 2020 (attachment 18) • Ground Water Assessment by Groundwork Plus dated 29 July 2020 (attachment 19). The EIS was referred to Water NSW who responded in a letter dated 6 January 2021 requesting further information. This information was supplied in the addendum to the EIS by Groundwork Plus dated 29 January 2021. • Traffic Impact Assessment by Proterra Group dated 28 January 2021. The Traffic Impact Assessment dated March 2019 was revised in response to a letter dated 25 September 2020 from Transport for NSW requesting further information. <p>The EIS dated August 2020 contains an assessment of impacts including noise, vibration, air quality, water and traffic. The EIS contains recommended mitigation measures. The EIS has been reviewed by the relevant agencies and updated where necessary to meet their requirements. These mitigation measures have been included in the recommended conditions of approval for the Project.</p> <p>It is considered that the EIS and recommended mitigation measures adequately address the anticipated impacts of the Project and address the SEARs.</p>

Issue raised in public submissions	Response
<p>A greater area of vegetation will be removed than the area described in the EIS, because more space is needed for vehicle parking, maintenance, fuelling, product stockpiles & processing areas needed as quarry support services. The Project will have a great many haulage trucks, heavy earth moving equipment, fuel & chemical storage depots and processing pads all of which will result in the existing vegetation being completely removed.</p>	<p>The EIS by Groundwork Plus dated August 2020 states that the development footprint including extraction, processing, stockpile and water management areas is 8.22 ha. A number of tracks are present through this area. Overall, the proposed clearing will only impact on 7.84 ha of existing native vegetation. The BDAR prepared by Advitech Environmental dated 24 August 2020 (Rev 5) also states this. The disturbance area is shown on the Conceptual Site Layout Plan by Groundwork Plus dated 29 July 2020 (attachment 4). The ancillary area covers 2.74 ha and is considered to be large enough for vehicle parking, maintenance, fuelling, product stockpiles & processing areas.</p>
<p>The rehabilitation plan seems very open ended with little commitment to restoring damage to the good to very good condition grassland areas. Our community would expect a timely response to rehabilitation with lists of plants and numbers appropriate to the vegetation community being documented to show they have thoroughly researched and have an implementation monitoring and review program.</p>	<p>The EIS by Groundwork Plus dated August 2020 contains details of the quarry rehabilitation plan. It is accompanied by:</p> <ul style="list-style-type: none"> • A Conceptual Final Land Form plan by Groundwork Plus dated 30 July 2020 (attachment 5) <p>A Conceptual Final Land Form Cross Sections by Groundwork Plus dated 30 July 2020 (attachment 6)</p> <p>The EIS was referred to the BCS Directorate of DPIE who stated in a letter dated 22 September 2020 that the previous BCS issues and comments have been addressed but recommended that a copy of a checklist and shapefiles for the BDAR be provided to Council for future reference.</p> <p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>Documentation required to be prepared for the Mining Lease application will address rehabilitation of the site. Furthermore, draft conditions of consent previously prepared by Council included the requirement for a Quarry Rehabilitation Strategy to be prepared in consultation with the DPI and EPA and to be approved by Council.</i></p> <p>As the BCS Directorate of DPIE have no further issues with the EIS, the rehabilitation plan is considered to be adequate to address the SEARs.</p> <p>In addition, the recommended conditions of consent include a condition relating to quarry rehabilitation:</p>

Issue raised in public submissions	Response
<p>The proposed development is a mine which requires authorisation under the Mining Act 1992.</p> <p>Unless and until DP&E has been informed that the project involves the extraction of a prescribed mineral, and given an opportunity to issue General Terms of Approval for any mining lease in accordance with the integrated development provisions in the EP&A Act, the proposed development cannot lawfully be approved.</p>	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>Correspondence from the MEG has confirmed a mining lease is required. No objection is required to a condition of consent requiring the necessary authorisations and licences be obtained pursuant to the Mining Act 1992.</i></p> <p>By letter dated 1 October 2020, MEG identified that, <i>'review of the information provided to MEG indicates the material to be extracted is Chert. Chert is a scheduled mineral under the Mining Regulation 2016. A mining lease is required to extract the Chert, unless the proponent can establish that the material proposed to be extracted is not Chert or a prescribed mineral.'</i></p> <p>MEG provided a further detailed advice letter and General Terms of Approval on 22 October 2020 identifying that Chert is a mineral and that the development is characterised as a Mine under Schedule 3, Clause 25 of the <i>Environmental Planning and Assessment Regulation 2000</i>. Therefore, the development will require a mining lease to operate.</p>
<p>The key justification for the proposed development (i.e. that it will provide materials for the Inland Rail Project) was too uncertain and speculative to be given any weight.</p> <p>In the 12 months since the Initial Objection was made, very little progress appears to have been made on the Narromine to Narrabri Project which remains mired in the "pre-EIS" stage.</p>	<p>The addendum to the EIS by Groundwork Plus dated 29 January 2021 contains responses to the issues raised in the 3 public submissions on the 2020 EIS. In response to this issue, the addendum states that:</p> <p><i>A submission referred to lack of progress by ARTC on the Narromine to Narrabri (N2N) section of the Inland Rail Project as evidence that the proposal for the Redden Quarry was not justified. In December 2020 the ARTC released the EIS for the N2N section. The N2N project alignment follows Wallaby Road immediately east of the site. It is apparent that the N2N section of the Inland Rail Project is progressing and the proponent wishes to obtain development consent for the proposal in preparation for tendering for supply to the N2N section.</i></p>

Appendix D – Issues raised in public submissions on the 2019 EIS and responses

Table D-1 Issues raised in public submissions and responses

Issue	Response
SITE REHABILITATION	
<p>Deficient detail provided on operations and rehabilitation. The description of the proposal does not identify the depth of the excavation, volumes and use, location and type of crushing operations on site, location of stock piles and their management, type and location of any site buildings and sheds. The proposal also does not identify what the final land forms rehabilitation should be, and the lands intended final use.</p> <p>Lists of plants and numbers appropriate to the vegetation community have not been provided.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“Details of site rehabilitation are provided in the EIS. It is understood that the community are eager to understand the exact species to be established when rehabilitating the site, however supply of seed is subject to availability at the time of commencing rehabilitation works which is difficult to determine at this stage. As discussed during consultation with adjacent landowners, the applicant is open to sourcing seed and fertiliser from local suppliers with suitable stock.”</i></p>
TRAFFIC IMPACTS	
<p>Deficient traffic assessment of road requirements. There has been no assessment of current road pavement conditions and status, in particular:</p>	
<ul style="list-style-type: none"> • Whether the roads are adequate for the proposed traffic. Many of these roads are unsealed and are not usable during wet weather which often results in prolonged flooding. 	<p>Groundwork Plus prepared a Traffic & Access Impact Assessment Report for Redden Quarry, dated March 2019. The report states:</p> <p><i>“The expected impact on the local roads would be the usual wear and tear expected from heavy vehicles. Unsealed roads are likely to experience disproportionately higher levels of wear during wet periods.”</i></p> <p><i>“The photos in the below sections show the current state of the access to Redden Quarry from Dappo Road. The current access is unsealed, in good condition and has been in existence for many years. Dappo Road has a heavy vehicle proportion of 45%, so is regularly used by heavy vehicles. The property currently accepts heavy vehicles for current agricultural operations through the existing access from Dappo Road.”</i></p> <p>“4.3 SUITABILITY OF INTERSECTIONS ON HAULAGE ROUTES (NSC ROADS)</p> <p><i>A detailed survey and/or investigation of the geometric design including sight distance calculation or swept paths has not been undertaken. An assumption has been made that the existing NSC rural road network was designed, constructed and maintained to a standard capable of accommodating the heavy vehicles proposed to access the quarry.</i></p> <p><i>Further survey and design checking of intersections may be conducted following further consultation with NSC.</i></p>

Issue	Response
	<p>4.4 PROPOSED UPGRADES AND MAINTENANCE REQUIRED FOR NSC ROADS</p> <p><i>The analysis above shows that the traffic volumes generated from the proposed development will affect the road classification of all roads except for Webb's Siding Road.</i></p> <p><i>As a result, Webb's Siding Road will not require any upgrades or increased maintenance activities to meet NSC level of service. The remaining roads will be investigated further to determine the implications of the increased traffic with respect to both upgrades and maintenance activities."</i></p>
<ul style="list-style-type: none"> • If any upgrades are required along the identified haulage route 	<p>The Traffic & Access Impact Assessment Report for Redden Quarry, dated March 2019 states:</p> <p>"4.4.1 Proposed Road Upgrades</p> <p><i>In the absence of any road design standard widths or treatments in NSC's asset management plan or development control plan, an analysis of any required upgrades is unable to be made. No recommendation for road upgrades is included in this report and any road upgrades should be discussed further with NSC (if required)."</i></p> <p>However, it is considered road upgrades are required and have been included in the Conditions of Consent in Appendix A</p>
<ul style="list-style-type: none"> • Whether maintenance requirements are needed 	<p>Council considers road maintenance is required and a condition for contributions has been included in Appendix A.</p>
<p>The Traffic & Access Impact Assessment Report contains the following errors and omissions:</p>	
<p>The days of operation are listed as 6 when they are in fact 5.5. This increases the daily truck movements required to meet the tabled output of 1,500t from 43 to 48 laden truck movements. A >10% increase.</p>	<p>This is correct but it is not considered to alter the conclusions of the assessment.</p>
<p>There is no disclosure of the number of heavy vehicle and machinery movements associated with site development and maintenance which will be additional to the abovementioned number.</p>	<p>Section 2.5 of the EIS states that construction traffic will be minimal and well within the traffic movements assessed for the operation. Likewise it is considered maintenance generated traffic movements are considered to be minimal. Regardless, to ensure traffic movements do not exceed what has been assessed a condition limiting truck movements is included in Appendix A.</p>

Issue	Response
<p>The document contains no disclosure of routine operational movements of staff, supply and sundry vehicles. Again, this figure will be in addition to the above-mentioned number.</p>	<p>The EIS and Traffic & Access Impact Assessment Report do not discuss vehicle movements associated with staff, supply and sundry vehicles but this is typically a minor component of the total vehicles and is not expected to alter the conclusions of the assessment.</p>
<p>There are references in the documentation to periods of increased product deliveries listed at 5,000t a day. This would require a minimum of 264 delivery truck movements per day. Even at the base operational level, this project will be altering existing road use on an enormous scale, creating substantial change to the living and working environment of nearby residents and substantially increasing associated traffic risks.</p>	<p>The increased traffic movements will alter the amenity and traffic conditions in the area but the assessment and conditions address issues associated with the road condition. It is also noted the quarry is primarily being established to supply material for the construction of the inland rail project and will cease operation once it is complete. Inland rail will need to import material, which will create additional truck movements, regardless of the source, so the change to the traffic movements in the area are inevitable.</p>
<p>The Environmental Impact Statement and Traffic Impact Assessment do not detail:</p>	
<ul style="list-style-type: none"> • Traffic haulage routes, including routes through Narromine township 	<p>Proposed haul routes are detailed in Section 4.13.1 of the EIS.</p>
<ul style="list-style-type: none"> • SISD assessment of Bootles Road / Pinedean Road 	<p>The Traffic & Access Impact Assessment Report explains a <i>detailed survey and/or investigation of the geometric design including sight distance calculation or swept paths has not been undertaken. An assumption has been made that the existing NSC rural road network was designed, constructed and maintained to a standard capable of accommodating the heavy vehicles proposed to access the quarry.</i></p>
<ul style="list-style-type: none"> • Impact on peak hour traffic and school buses and subsequent traffic safety 	<p>Due to the infrequent operation of buses on the proposed routes, it is considered these can be managed by a condition and Drivers Code of Conduct.</p>
<ul style="list-style-type: none"> • Recent traffic count assessment 	<p>Traffic surveys are not discussed in the EIS or Traffic & Access Impact Assessment Report.</p>
<ul style="list-style-type: none"> • No intersection performance showing vehicle swept paths / tracking 	<p>Groundwork Plus prepared a Traffic & Access Impact Assessment Report for Redden Quarry, dated March 2019. The report states: <i>“4.3 SUITABILITY OF INTERSECTIONS ON HAULAGE ROUTES (NSC ROADS)</i> <i>A detailed survey and/or investigation of the geometric design including sight distance calculation or swept paths has not been undertaken. An assumption has been made that the existing NSC rural road network was designed, constructed and maintained to a standard capable of accommodating the heavy vehicles proposed to access the quarry.</i> <i>Further survey and design checking of intersections may be conducted following further consultation with NSC.”</i></p>

Issue	Response
<ul style="list-style-type: none"> Acceptable traffic controls during wet weather and fog, dust storms etc or for other traffic like school buses, seasonal harvest vehicles 	<p>The trucks will be subject to the road rules but will also be required to comply with a Drivers Code of Conduct.</p>
<ul style="list-style-type: none"> Noise and vibration impacts from heavy vehicle movements to dwellings on Webbs Siding Road. 	<p>Advitech Environmental prepared a Noise Impact Assessment for Redden Quarry, dated 19 August 2019 assesses noise and vibration impacts from heavy vehicle movements to dwellings on Webbs Siding Road.</p>
<p>Proposed annual levy of \$50,000 from the landowner to NSC to cover the cost of road upgrades is insufficient.</p>	<p>A condition in Appendix A requires contributions to be paid which will be used to maintain roads.</p>
<p>Risk of heavy vehicles causing structural damage to roads in wet weather. Impact this would have on other road users.</p>	<p>A condition in Appendix A requires contributions to be paid which will be used to maintain roads.</p>
<p>Potential for damage to occur on the unsealed haulage road proposed to be utilised by the project</p>	<p>A condition in Appendix A requires contributions to be paid which will be used to maintain roads.</p>
<p>NOISE & VIBRATION IMPACTS</p>	
<p>Inconsistency between Noise Impact Assessment and statements in the Environmental Impact Statement. The Environmental Impact Statement advises the quarry would comply with noise limits, but the noise impact assessment identifies breaches to the noise level requirements.</p> <p>It is also unclear what the committed management measures for noise are as these are not confirmed or stated within the Environmental Impact Statement.</p>	<p>The Noise Impact Assessment indicates there may be marginal exceedances of the relevant criteria, however, EPA have issued their GTAs which require compliance with the criteria, so Redden Quarry will be required to implement the required noise mitigation.</p>
<p>The EIS identifies only the proposed hours within which blasting will occur. The EIS does specify the frequency or methods of the blasting.</p> <p>Without this critical information, the potential impacts of the blasting cannot be meaningfully assessed or appropriate conditions of consent imposed.</p>	<p>The Noise Impact Assessment and Air Quality Impact Assessment both assess blasting. Blasting will need to be managed to comply with the Conditions in Appendix A, including the EPA GTAs.</p>
<p>The proposed development will introduce intense industrial noise into what is currently a tranquil rural area.</p> <p>At peak periods, there will be up to 264 heavy vehicles entering and leaving the site each day. Some or all of these vehicles will travel along Webbs Siding Road which is located immediately adjacent to the Owners' residential dwelling.</p> <p>The noise assessment contained in the EIS predicts that the increased traffic along Webbs Siding Road may result in "noise levels approaching the criteria" for the Owners.</p> <p>In addition, the proposed dwelling will employ blasting (frequency and type unspecified) and the use of heaving machinery to excavate the mineral chert.</p>	<p>The Noise Impact Assessment <i>indicates that traffic generated by the development during periods of standard and peak production is likely to comply with the relevant criteria during the day and night periods at all receivers adjacent to the proposed haulage route for Redden's quarry.</i></p> <p>Compliance with the criteria will be enforced by a condition in Appendix A.</p>

Issue	Response
<p>This noise will be constant and, even if below relevant statutory standards, will be extremely obtrusive having regard to the local environmental context.</p> <p>The noise generated by the proposed development will have unacceptable impacts upon the owners of 444 Webbs Siding Road and it should not be approved on this basis.</p>	
<p>COMMUNITY CONSULTATION</p>	
<p>Lack of consultation. The application does not provide documentation that consultation has been made to all relevant community stakeholders prior to the submission of the application.</p> <p>No documentation is provided regarding consultation of environmental impacts e.g. noise, cultural heritage, traffic, land use (neighbours) and water.</p> <p>The SEARs specify that community consultation should be conducted as part of the EIS preparation process. No community or landholder consultation occurred which meets the conditions described in the SEARs.</p> <p>Section 1.8 of the EIS states that a stakeholder engagement process was undertaken as part of the EIS process. The EIS provides no description of issues raised or explanation of how these issues are addressed. The EIS does not disclose to the reader that the proponent is carrying out the community consultation post EIS development with a telemarketing firm currently (4/10/2019) contacting impacted residents. The EIS does not contain any documentation describing the “project specific stakeholder engagement process” mentioned at Section 1.8. These issues seriously call into question the sincerity of the EIS statements made by Groundwork Plus in Section 1.8.</p> <p>The above observations are reinforced when considered in the context of Groundwork Plus explanation of Key Issue – Social Impacts in Section 4.17. In this section Groundwork Plus provide a brief tabled assessment of potential social impacts of the proposed development. This table provides no reference to information which came to light in their ‘community consultation’ process. There are no references in their explanation notes to ‘discussions with neighbours indicated X’ or ‘surveys of residents found Y.’ Indeed, they did not back up any of their Social Impact statements with consultation data because they have not conducted any community consultation within the time frames stipulated in the SEARs (i.e. within the EIS preparation phase.) Groundwork Plus’s scramble to now undertake community consultation after they have developed and submitted their EIS causes a high degree of consternation.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“All of the surrounding landowners identified as sensitive receivers in the EIS where consulted on the 10th of September 2019. Aspects relating to the proposal were discussed. No major objections were raised during this process. Additionally, relevant regulatory bodies were also consulted throughout the development of the EIS. Consultation is continuing during the assessment of the EIS.”</i></p> <p>The SEARs states:</p> <p><i>“In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers and any surrounding landowners that may be impacted by the development.</i></p> <p><i>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.”</i></p> <p>While the consultation undertaken for the EIS by the applicant is considered to be minimal, the community has been provided an opportunity to provide comment during the exhibition period.</p>

Issue	Response
<p>Whatever new information or concerns come to light after the EIS is developed and approved, there is little opportunity for it to be considered or actioned by the consent conditions.</p> <p>There is an Australian legal requirement of procedural fairness wherein <i>“administrative decision-makers must accord procedural fairness to those affected by their decisions.”</i> Procedural fairness “requires a decision maker to afford a person an opportunity to be heard before making a decision affecting their interests.” The opportunity to be heard must include <i>“Prior notice that a decision that may affect a person’s interests will be made and a substantive hearing – oral or written – with a reasonable opportunity to present a case.”</i> (Australian Law Reform Commission, ‘Procedural fairness: the duty and its content’)</p>	
AIR QUALITY	
<p>The EIS does not assess dust emissions resulting from truck haulage to the north along the unsealed Wallaby Road and then along the sealed but narrow Webbs Siding Road.</p> <p>The air quality assessment assumes that, during peak times, there will be 264 vehicle movements in and out of the quarry each day. Wallaby Road is a narrow, unsealed road running along the eastern boundary of 444 Webbs Siding Road. Existing traffic already creates dust plumes.</p> <p>Existing traffic along this road already creates intense dust plumes which affect the amenity of the owners.</p> <p>These trucks will also emit diesel fumes and particulates which will further impact amenity.</p> <p>Unless and until this critical oversight is addressed, the air quality impacts upon the owners of 444 Webbs Siding road cannot be meaningfully assessed.</p>	<p><i>EPA is the regulator of air impacts from the proposal. EPA have reviewed the EIS and have issued their GTAs. Management of dust impacts from public roads has been included in Appendix A.</i></p>

Issue	Response
ABORIGINAL HERITAGE ASSESSMENT	
<p>Aboriginal heritage assessment. No consultation has been documented within the Environmental Impact Assessment with the local Aboriginal community. This appears misleading given the Archaeological Due Diligence Assessment refers to Aboriginal Cultural Heritage Consultation Requirements, but no consultation has been undertaken. It is suggested the local Aboriginal Land Council be informed.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“The Due Diligence Code of Practise for the Protection of Aboriginal Objects in NSW 2010 sets out the consultation requirements when completing an Aboriginal Due Diligence assessment. As per the report completed by Advitech Environmental Archaeological Report Aboriginal Cultural Heritage Due Diligence Redden Quarry 13th June 2019 Rev 2 the requirements of the code have been met during the development of this report.”</i></p> <p>BCD have reviewed the EIS and have indicated they agree with the outcomes. They have not raised any concerns or requested further information, hence the assessment is considered adequate.</p>
SURFACE WATER AND GROUNDWATER	
<p>Estimates on water requirements are uncertain given the potential errors / omissions in the proposed sites water balance;</p> <ul style="list-style-type: none"> • It is unclear how daily usage is calculated (150kL); • What sediment basin storage has been assumed; • The basin appears to operate as an empty basin and therefore where will the deficit of water come from and how will it be imported to the quarry; <p>Based on the above it is unclear how the proposal will impact upon other water users.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“The EIS considered a ‘worst case’ scenario as a conservative assessment of potential water usage. The EIS assumed a daily water usage 150kL, 365 days a year. As Council is aware it is not proposed to operate the quarry 365 days a year. The operations are likely to only occur 5.5 days per week (Monday to Saturday morning) for a maximum of 50 weeks per year due to the ordinary break over the Christmas to New Year Period. This reduces the annual expected water usage to 41 ML, compared to 54.7ML as originally stated for operating 365 days per year in the EIS. Furthermore, a proprietary product has been identified that can reduce dust mitigation water usage by an average of 30% (Haulage DC, by Polo Citrus Australia Pty Ltd). This product will reduce water usage by around 45kL/day compared to the amount stated in the EIS. Therefore, daily water usage is more likely to be 105kL and based on the above clarifications and proposed strategy the annual water usage is likely to be 28.875 ML per year. On the understanding that annual water usage will be 28.875ML and that the water balance indicated a supply of 55.8ML and 30.1ML in an above and below average rainfall year respectively, it is anticipated that the quarry will be self-sufficient for water.”</i></p>

Issue	Response
<p>The water balance predicts between 6 and 25 discharge events. What are the proposed pollution controls against downstream land and water? A detailed sediment and erosion control plan is requested to support the application and not a concept plan.</p>	<p>The quarry may not be self sufficient in water during average and dry years. However, the quarry has access to sufficient water via the harvestable rights of the greater property it is located on.</p> <p>Groundwork Plus Pty Ltd responded to the EPA's submission on behalf of the applicant in a letter dated 21 November 2019. Groundwork Plus stated:</p> <p><i>“The management measures documented in the EIS indicate that water quality will be sampled prior to discharge into the nearby farm dam to ensure that water quality of all discharges meet the objectives of the NSW Water Quality Objectives and Australia and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC and ARMCANZ 2000). Further, the EIS prescribed water quality objectives in accordance with industry best practice that are provided below;</i></p> <ul style="list-style-type: none"> • <i>Total Suspended Solids - 50 mg/L</i> • <i>pH range - 6.5 – 8.5</i> <p><i>Based on these management measures it is understood that compliance with Section 120 of the Protection of the Environment Operations Act 1997 can also be maintained.</i></p> <p><i>The EIS also outlines the design of a proposed sediment basin with 4.04ML of capacity, which is adequate to contain the 5-day 90th percentile event, which is consistent with the industry standard prescribed in Managing Urban Stormwater – Soils and Construction (Volume 2E) (DECC 2008).</i></p> <p><i>The proposed infrastructure and water quality objectives are hence considered to be sufficient for implementing all practicable measures to maintain the environmental values of receiving waters.”</i></p> <p>It is considered the site is able to adequately manage water quality. A detailed soil and erosion control plan is required in the conditions (Appendix A) and the quarry will also be required to meet the EPL requirements.</p>
<p>The assessment advises groundwater will not be affected, however no clear documentation is provided which details monitoring or testing of resource bore holes to confirm such.</p>	<p>Section 4.9.1 of the EIS lists potential impacts on groundwater from the quarry. Management and mitigation measures to protect groundwater quality are found in Section 4.9.2 of the EIS. Groundwater monitoring has been recommended by NRAR and has been included in Appendix A.</p>

Issue	Response
<ul style="list-style-type: none"> The EIS identifies that the proposed development will have a water deficit of between 28.1ML/pa (dry year) and 2.4ML/pa (wet year). With respect to licensing, the EIS merely states that “The quarry will be responsible to ensure that any licensing requirements and other approvals required under the Water Act 1912 and/or Water Management Act 2000 are obtained.” <p>This is clearly inadequate. The EIS does not indicate which WSP (or water source within the WSP) the water will be extracted from, whether the WSP has any available allocations, the effect of any relevant Available Water Allocations, or whether the proposed extraction complies with the relevant WSP rules.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“The EIS considered a ‘worst case’ scenario as a conservative assessment of potential water usage. The EIS assumed a daily water usage 150kL, 365 days a year. As Council is aware it is not proposed to operate the quarry 365 days a year. The operations are likely to only occur 5.5 days per week (Monday to Saturday morning) for a maximum of 50 weeks per year due to the ordinary break over the Christmas to New Year Period. This reduces the annual expected water usage to 41 ML, compared to 54.7ML as originally stated for operating 365 days per year in the EIS. Furthermore, a proprietary product has been identified that can reduce dust mitigation water usage by an average of 30% (Haulage DC, by Polo Citrus Australia Pty Ltd). This product will reduce water usage by around 45kL/day compared to the amount stated in the EIS. Therefore, daily water usage is more likely to be 105kL and based on the above clarifications and proposed strategy the annual water usage is likely to be 28.875 ML per year. On the understanding that annual water usage will be 28.875ML and that the water balance indicated a supply of 55.8ML and 30.1ML in an above and below average rainfall year respectively, it is anticipated that the quarry will be self-sufficient for water.”</i></p> <p>The proposal may not be self sufficient in water but it has access to other water resources. WaterNSW have provided clarity on the licencing requirements in this respect and have not objected to the proposal.</p>
<p>The water balance assessment itself lacks important detail. It is not explained why it is assumed that the development will require 54.7ML/pa for processing and whether the proposed dust suppression includes the offsite haulage route along unsealed roads.</p>	<p>The Surface Water Assessment indicates a 150kL daily water use and Attachment 2 shows the calculation. It is unlikely to include watering the public road.</p>
<p>The whole of the Narromine Local Government Area (LGA) is in the midst of a drought. The northern part of the LGA is subject to intense drought: see Figure 1.</p> <p>In these circumstances, particularly close consideration needs to be given to any development which proposes to extract additional water from finite and dwindling reserves.</p> <p>The NSW Aquifer Interference Policy provides that any mining development (or development for the purposes of extractive industries) which requires the extraction of water from an aquifer constitutes an “aquifer interference activity”.</p>	<p>The proposal may not be self sufficient in water but it has access to other water resources. WaterNSW have provided clarity on the licencing requirements in this respect and have not objected to the proposal.</p>

Issue	Response
<p>Such activities require approval under Section 91 of the WMA. In addition, the taking of water for commercial purposes from a water source to which a Water Sharing Plan (WSP) applies must be authorised under a Water Access Licence with sufficient entitlements to permit the extraction.</p> <p>As noted above, the EIS contain only a cursory water balance assessment (based on certain assumptions as to the amount of water required for operational purposes which are obscure in origin) and no detailed analysis, whatsoever, as to whether, and if so how, additional water can be lawfully extracted.</p> <p>The owners of 444 Webbs Siding Road are wholly reliant on bore water for domestic and stock use. They are understandably concerned that the additional extraction of groundwater will lower the water table and/or reduce the amount available for their domestic and stock use.</p>	
FLOODING	
<p>Wallaby, Pinedene, Bootles & Webbs Siding roads are frequently cut by deep flood waters as these waters converge together to form the Backwater Cowal. There is a massive catchment behind these tributary streams, much of it elevated rock which sheds water at an alarming velocity.</p> <p>Flooding from the Macquarie exits the Macquarie River over topping the Mitchell Highway and pours into the Backwater Cowal. These flooding instances occur when the Backwater Cowal is also in flood. This convergence of flood waters creates a bottleneck which holds water in the surrounding landscape for kilometres around the proposed quarry site. The waters are deep and at times fast moving. In the past, animals as large as horses have actually drowned in these deep waters which overtop property fences. These floods stop any attempts to move around the area for weeks to months.</p> <p>The EIS describes the quarry site 'Section 4.2.1, the Redden Quarry (i.e. the proposed disturbance area, not the balance of the site,) drains in a northerly direction to an unnamed tributary of the Macquarie River.' This statement is incorrect. EIS Site Plans clearly show that 50% of the Extraction Footprint, 100% of the Ancillary Areas including the Sediment Basin and 100% Haulage Roads drain west through to south toward tributaries of the Backwater Cowal. The Backwater Cowal, a 4th order magnitude stream approximately 1.5km away, is not mentioned in the Surface Water study.</p>	<p>The proposal is not directly impacted by flooding or impact on flooding. In regards to flooding of the access routes, the quarry staff will need to monitor the weather and follow the relevant road rules.</p>

Issue	Response
<p>This omission is very concerning as a key component of the project is the use of haulage roads to deliver the 490,000 tonnes of quarried material per annum using over 100 heavy vehicle movements per day. All the haulage roads mapped in the EIS are subject to regular, severe and extensive flooding covering many kilometres north and south of the project site. Flooding depth varies with depths of > 0.5m common. Large areas surrounding the extraction footprint are clearly mapped on the Sappa Bulga 8533 1:50,000 map sheet as inundated lands. To put this in perspective, no are within a 20km radius of Narromine comes remotely close to this level of mapped inundation. Severe flooding, which makes the roads completely impassable for weeks to months has occurred in the years 2010, 2011, 2012 and 2016 in the last decade. Moderate flooding, causing minor traffic delays (i.e. impassable for several days) has occurred on these roads in all the intervening years excluding the recent drought years. The Backwater Cowal is a drainage point for over 300 square kilometres of elevated ranges located to the east, south-east and south of Narromine. On this point alone it is unique in the Narromine District. But it is not alone, the Macquarie River is located several hundred metres away.</p> <p>The EIS Surface Water study also fails to mention a very significant feature which directly impacts the project site and designated haulage roads of the development proposal. The Macquarie River (Narromine to Oxley Station) Floodplain Management Plan makes special mention of the area east of Narromine between the sand hill (High Park Road) and Tanitha Road (even though it is upstream of the document's study area.) Section 1.2.2 states that "Upstream of Narromine the floodplain of the Macquarie River is well defined and relatively narrow and hence flooding is confined and within river banks. A number of break-outs occur from the Macquarie River near Narromine, a significant one being at Webbs Siding." Section 4.2.1 states that "Webbs Siding outflows in the 1955 flood in the Macquarie River, floodwaters left the Macquarie River Catchment at a number of points by crossing over the Narromine to Nyngan Road (Mitchell Highway) and either flowing through culverts or overtopping the railway line which runs parallel to the road. In this flood, one of the largest outflows occurred at Webbs Siding just upstream of Narromine where the railway line was overtopped and washed out." Approximately 2km of rail line was washed away.</p>	

Issue	Response
<p>Not mentioning the outflows is a significant oversight. The outflow directs 100's of megalitres of flood water out of the Macquarie system through the Backwater Cowal landscape. This landscape includes the project development site, all surrounding roads and rural properties, the outflow combines with the local floodwaters of the Backwater Cowal effectively creating an inland sea. The Webb Siding outflows are predicted to be strongly active during a 1% AEP flood event. This event would see extensive flood waters between 1 to 2m depth across all listed haulage roads. This water would likely be retained for many months.</p> <p>No risk management strategy, policy or contingency plans have been made for a scenario which will definitely occur at least twice in the 5 year planned operational life, that is – the scenario where vehicles have no site access due to localised flooding for weeks or months at a time (NB this scenario does not include activation of the Webb Siding Outflows.) As waters impact the haulage roads any vehicular activities will destroy them.</p> <p>These floodwaters cover extensive areas measured in kilometres not meters. The project's Wallaby Rd entrance point has numerous flood prone locations north and south making the following EIS statement impracticable "The inclusion of Booties Road and Pinedean Road (Route 3) is to provide an alternate route if the first-choice route along Dappo Road to Webbs Siding Road is inaccessible for any reason."</p> <p>EIS Table 25 - Management and Mitigation Measures - Traffic: "Wet Weather - Minimise truck movements on unsealed roads immediately following rainfall events." This statement fails to recognise the flood prone nature of the haulage roads and surrounding landscapes. These areas fill with water during wet weather with flood waters continuing to rise long after rain fall has stopped. The communities view is that haulage trucks need to immediately stop using the unsealed roads during and after wet weather. Before any traffic can recommence an independent evaluation needs to be undertaken to assess the depth, velocity and extent of rising flood waters plus potential for damage to occur if used.</p>	

Issue	Response
BIODIVERSITY	
<p>The proposal foot print is centrally located within the EPBC SPRAT profile distribution mapping for the potential occurrence of 'Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia'.</p> <p>The EIS and the associated BDAR report fails to consider the potential occurrence of a once local common vegetation community 'Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia'. This ecosystem is found on nearby conservation reserves (adjacent Webbs Reserve), Webbs Reserve and road side corridors surrounding the project area. This community is listed as endangered under the EPBC Act. The quarry project site is centrally positioned within the EPBC SPRAT profile distribution mapping for the community. The community is typically found on low slopes and plains of the region as found on the proposal site.</p> <p>The identification of <i>E microcarpa</i> in the BOAR as a dominant and commonly occurring canopy tree on surrounding cultivation paddocks is indicative of this community once occurring on surrounding farmland. The site vegetation assessment list all proposal site vegetation zones as being in the condition range - good to very good. Very large <i>E microcarpa</i> are a stand out feature of the 4.4.1 Habitat Trees assessment with many > 100 cm dbh hollow bearing trees identified within the site. The combination of the above lends substantial weight to community being present on site.</p> <p>The discussion at 4.2 dismisses the potential of the site to contain remnant BGGW but omits the more likely scenario that 'Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia' may be present in either the intact canopy or derived grassland form.</p> <p><i>E microcarpa</i> grassy woodland PCTs are widely distributed across the surrounding landscape. The species features as a site significant tree in Zones 1, 3 and 4. Height and size classes (as dbh measurements) identified are indicative of potential grassy subformations being present as intact and/or derived forms;</p>	<p>BCD also raised some concerns in regards to the BDAR but following a number of revisions have confirmed it adequately assesses the biodiversity impacts of the proposal.</p>

Issue	Response
<p>The BDAR selects one PCT occurring on the proposal site: White Cypress Pine woodland on sandy loams in central NSW wheatbelt. BDAR does not disclose that White Cypress Pine is an extremely common secondary canopy species found in numerous eucalypt woodlands and dry sclerophyll forests of our region. <i>C. glaucophylla</i> is also listed within the Biodiversity Conservation Act 2016 as an invasive native species in described situations. It is regionally well documented as a species which can aggressively regenerate and increase in biomass, this issue however is not mentioned (discussed, confirmed or dismissed) in the BDAR. PCT Zone Photos 1 and 3 indicate situations where <i>C. glaucophylla</i> could either be described as secondary canopy species sub dominant to <i>E. microcarpa</i> or acting invasively accounting for the numerical dominance of <i>C. glaucophylla</i> individuals. PCT Photos of Zones 4 and 5 are unlikely to have been White Cypress Woodlands having clear evidence of the presence and dominance of Box eucalypts. Blanket use of one PCT across this proposal site is not appropriate.</p> <p>Regions which have tracts of White Cypress Pine Woodlands typically include State Forest Reserves (SFR) to secure supply of the important construction timber. No State Forests are located in this area, the closest being Mamo State Forest 18 km away on other side of the Sappa Bulga Range.</p>	<p>BCD also raised some concerns in regards to the BDAR but following a number of revisions have confirmed it adequately assesses the biodiversity impacts of the proposal.</p>
<p>The Proposal Site is located at the juncture of three IBRA regions - NSS, DRP and BBS. The BDAR describes the site as locates within the DRP and makes no reference to the site being located on a significant transition point for the three IBRA regions. This omission leaves the reader unsure as to how the assessors dealt with any transitional issues associated with PCT identification options (e.g. PCT search results being dismissed as not being within DRP IBRA, leading to potential identification errors).</p>	<p>BCD also raised some concerns in regards to the BDAR but following a number of revisions have confirmed it adequately assesses the biodiversity impacts of the proposal.</p>
<p>Potential species identification error. <i>Eucalyptus dwyeri</i> is listed in the Appendix 1. Flora Species List and Table 4.6 hollow bearing trees. <i>f. dwyeri</i> referenced in Table 4.6 as attaining 89 cm dbh. The location and growth is highly uncharacteristic of this species which typically grows in mallee or small tree form. The species should be flagged for formal identification, potentially <i>f. blakelyi</i> or <i>f. chloroclada</i>.</p>	<p>BCD also raised some concerns in regards to the BDAR but following a number of revisions have confirmed it adequately assesses the biodiversity impacts of the proposal.</p>

Issue	Response
<p>Quarry footprint area will be larger than that shown on the submitted plans, due to space required for vehicle parking, maintenance, fuelling, product stockpiles and processing areas. This will result in a greater loss of vegetation than that described in the EIS.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated:</p> <p><i>“The ancillary facilities of the site are detailed in the EIS. The BDAR has also included these areas within the total disturbance footprint that was assessed. No other areas outside the total disturbance footprint will be cleared as a result of the proposed development.”</i></p> <p>The footprint included in the EIS will be included in the approval, so the proposal will be limited to operating within this area.</p>
<p>PLANNING AND APPROVALS PROCESS</p>	
<p>The application has been incorrectly characterised as development for the purposes of “extractive industries” rather than as development for the purposes of “mining”.</p> <p>While the application for SEARs indicated only that the quarry would extract “hard rock aggregate”, the more detailed analysis contained in the EIS identifies that the resource to be recovered from the proposed quarry includes “chert”: see Section 2.2.</p> <p>The Narromine Local Environmental Plan 2011 (NLEP) relevantly stipulates that, for its purposes (see Dictionary):</p> <ul style="list-style-type: none"> i. “mining” includes “mining carried out under the Mining Act 1992”; and ii. “extractive industries” includes “the winning or removal of extractive materials (otherwise than from a mine)”. <p>The NLEP further stipulates that “extractive materials” include “sand, soil, gravel, rock or similar substances that are not minerals within the meaning of the Mining Act 1992.”</p> <p>The Mining Act 1992 relevantly defines (see Dictionary):</p> <ul style="list-style-type: none"> i. the word “mining”, when used as a verb, as including “to extract material from land for the purpose of recovering minerals from the material so extracted”; and ii. the word “mineral” as including “any substance prescribed by the regulations as a mineral for the purposes of this definition”. <p>The Mining Regulation 2002 relevantly provides that “chert” constitutes a “mineral”: see Clause 5 and Schedule 1.</p> <p>Section 5 of the Mining Act 1992 stipulates that it is an offence to mine for minerals in the absence of an authorisation under the Act (i.e. a mining lease).</p>	<p>Based on advice from MEG, the application is now considered and assessed as a mine.</p> <p>MEG have provided their GTA which are included in Appendix A.</p> <p>A Section 138 approval will be required as reflected in this report and the Appendix A.</p> <p>NRAR have confirmed an activity approval under the WM Act is not required.</p>

Issue	Response
<p>It follows that:</p> <ul style="list-style-type: none"> i. the proposed development, which involves the extraction of a mineral (chert), is properly characterised as development for the purposes of mining; ii. the proposed development requires authorisation under a mining lease issued under the Mining Act 1992; and iii. the EIS has been prepared on the basis of a mischaracterisation of the proposed development (as development for the purposes of extractive industries). <p>The “Integrated Development” procedures have not been properly followed. As acknowledged in the EIS, the Environmental Planning and Assessment Act 1979 (EP&A Act) prescribes special procedures for development which is, as is the case here, “integrated development”: see Division 4.8 of Part 4 of the EP&A Act and Section 3.2.1 of the EIS.</p> <p>However, perhaps in part because the proposed development has been mischaracterised as development for the purposes of an mine rather than mining (see Section 3.1 above), the EIS does not identify the full suite of secondary approvals listed in Section 4.46(1) of the EP&A Act that are required for the proposed development.</p> <p>In particular, the EIS does not identify the need to obtain:</p> <ul style="list-style-type: none"> (i) a mining lease under the Mining Act 1992; (ii) an activity approval under Part 3 of Chapter 3 of the Water Management Act 2000 (WMA) (see discussion in Section 3.5(c) below); or (iii) a consent under Section 138 of the Roads Act 1993 (see discussion in Section 3.5(d) below). <p>As a result of these oversights, it is likely that the process set out in Section 4.47 of the EP&A Act, by which “General Terms of Approval” are obtained from each of the relevant approval bodies, has not been followed.</p> <p>In addition, while the EIS correctly identifies that the proposed development will require an Environment Protection Licence under the Protection of the Environment Operations Act 1997, it mischaracterises the relevant “scheduled activity”.</p>	

Issue	Response
<p>That is, the EIS mistakenly asserts that the proposed development constitutes a “land based extractive activity” rather than the correct scheduled activity being “mining for minerals”. As a result, any General Terms of Approval issued by the Environment Protection Authority (EPA) may not be “fit for purpose”.</p>	
<p>The Environmental Impact Statement does not detail consideration of the Narromine Local Environmental Plan or the Development Control Plan i.e. permissibility and buffer zones.</p>	<p>Section 3.3.1 of the EIS discusses the Narromine Local Environmental Plan 2011. The Narromine Development Control Plan is not discussed. There are no relevant provisions in either the Local Environmental Plan or Development Control plan regarding buffer zones.</p>
<p>The EIS must address the requirements of Schedule 2 of the Environmental Planning and Assessment Regulations and Environmental Impact Assessment Guideline – Quarries.</p>	<p>The SEARs state: “The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000.” The EIS is considered to comply with the requirements of Clauses 6 and 7.</p>
<p>OTHER ISSUES</p>	
<p>Incorrect CIV calculation. It appears that proposed quarry is significantly cheaper to establish than that of an expansion of an existing operational quarry. The proposed ‘Capital Investment Value’ of only \$18,577.00 is approximately \$106,400 less than that presented under DA2019/36.</p>	<p>Groundwork Plus Pty Ltd responded to public submissions on behalf of the applicant in a letter dated 18 October 2019. In relation to this issue, Groundwork Plus stated: <i>“The budget provided for capital cost of establishing the infrastructure at site relate to the item listed and do not relate to the maintenance of public roads. The length of unsealed council road nominated a possible haulage routes for the project is approximately 8.4 km (1.8km to Webbs Siding Rd and 6.6 Km to Pindean Rd) which is discussed in the Traffic section above.”</i></p>
<p>Potential Health Risks from Silica. The material is nominated as having potential for ‘significant Alkali Silica Reactivity’ but no assessment of health risks is provided. Silica is a known health hazard. I believe the quarry should not be approved until such time as the health risk has been assessed and documentation is provided that demonstrates that it can be managed.</p>	<p>Groundwork Plus Pty Ltd prepared a Preliminary Resource Investigation for Redden quarry. The investigation found that the rock proposed to be quarried is chert, a sedimentary rock. Quarrying of chert, including dust exposure from quarry operations, is not associated with health risks related to silica. Excessive exposure to quarry dust is associated with health impacts. Section 4.6.3 of the EIS contains management and mitigation measures to reduce dust exposure. Advitech Environmental has prepared an Air Quality Impact Assessment for Redden quarry, dated 19 August 2019. The Assessment calculated that the operation of the Redden Quarry will result in some incremental increases in particulate matter or dust deposition at surrounding sensitive receivers. However, these increases are predicted not to result in any additional exceedances of the NSW EPA assessment criteria for TSP, PM10, PM2.5 or dust deposition.</p>

Issue	Response
<p>The key justification for the project (that it will supply material for the Inland Rail Project) is too uncertain.</p> <p>The key justification for the proposed development is that it will provide materials required for the Inland Rail Project (IRP). The IRP is comprised of 13 “sub-projects” which include the locally relevant Narromine to Narrabri project (N2N Project).</p> <p>The N2N Project is at a very early stage of development. The project proponent (ARTC) is still conducting preliminary alignment investigations along a 400m wide “investigation corridor”: see https://inlandrail.artc.com.au/N2N. Actual construction of the N2N may not commence for several years.</p> <p>The IRP is also the subject of a current Commonwealth Senate Inquiry which may further delay the project or result in some or all of it being significantly amended.</p> <p>The EIS contains no details of any agreements or commercial arrangements between the proponents of the proposed development and ARTC which would lead to a conclusion that the proposal to provide materials to the IRP is anything other than highly speculative.</p> <p>In circumstances where the key justification for the proposed development is that there is a mere possibility that it might provide material for a project that, on a best case scenario, will not commence construction for several years (or at all) that justification should be given very little weight.</p>	<p>The EIS and discussion with the proponent have clearly expressed the intention of the proposal is to supply material to Inland Rail. This is reflected in the conditions which include a commencement and expiry date which relate to Inland Rail. Regardless, the intention of supplying the material to Inland Rail has not influenced the assessment process.</p>
<p>One of the applicants for DA 2019/58 is the current General Manager of Narromine Shire Council. This creates at least the appearance of potential probity issues which will need to be very carefully managed both at the DA assessment stage, and during any negotiations over developer contributions or the terms of any Voluntary Planning Agreement.</p>	<p>Jane Redden is one of the applicants for DA 2019/58 and is one of the landowners of 1210 Wallaby Road, Narromine, New South Wales being described as Lot 102 DP792484. Jane is also the current General Manager of Narromine Shire Council.</p> <p>To avoid any probity issues, NSC have engaged an independent consultant to assess the application on NSC behalf and the application will ultimately be determined by the WRPP.</p>

GHD

230 Harbour Drive

Coffs Harbour NSW 2450

T: 61 2 6650 5600 F: 61 2 9475 0725 E: cfsmail@ghd.com

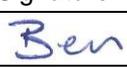
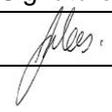
© GHD 2021

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

12519337-95004-

11/[https://projectsportal.ghd.com/sites/pp01_04/q382019reddenquarryd/ProjectDocs/12519337-REP_Revised Determination Assessment for JRPP.docx](https://projectsportal.ghd.com/sites/pp01_04/q382019reddenquarryd/ProjectDocs/12519337-REP_Revised%20Determination%20Assessment%20for%20JRPP.docx)

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	C Harris	B Luffman		D Mees		01/10/2021

