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Your ref: SSD-65146459
Our ref: 2127708
04 February 2025

Jesse Evans
Director Resource Assessments
Department of Planning, Housing and Infrastructure

Via email: jesse.evans@dpie.nsw.gov.au
cc carl.dumpleton@planning.nsw.gov.au

**Response to agency advice on the Supplementary Response to Submissions for Marulan Quarry
(SSD-65146459)**

Dear Jesse

Global Quarries Australia Pty Ltd (Global Quarries) seeks to develop a proposed quarrying operation on Lot 3 DP 247199, Lot 7001 DP 1025585, and Lot 4 DP 247199 and a portion of the Hume Highway road verge in Marulan in the Southern Tablelands of NSW (the project). GHD Pty Ltd (GHD) has supported Global Quarries throughout the approvals process through preparation of the Environmental Impact Statement and responding to submissions raised by Government agencies throughout the post exhibition period of the project.

This letter has been prepared in response to the request for additional information issued by Department of Planning and Infrastructure on 19 December 2025. The response provides additional assessment details and clarification of the applicant's position in regards to the issues raised as outlined in Table 1.

If you require any further information to assist with the assessment, please don't hesitate to contact the undersigned.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Karl Rosen', written in a cursive style.

Karl Rosen
Technical Director - Environment
Karl.rosen@ghd.com

Issue ID	DPHI Comment	Response
1	C3 zoning I note the proposed development is located on land zoned C3 Environmental Conservation, the objectives of the zone are as follows: – To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values. – To provide for a limited range of development that does not have an adverse effect on those values. – To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value. I note the development would directly impact 29.23 hectares (ha) of predominately native woodland vegetation, which provides habitat for threatened species. In accordance with Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i>, the consent authority must consider the abovementioned objectives and whether a development is appropriately consistent with them. Please provide a legal opinion regarding the consistency of the proposal with the objectives of the C3 Environmental Conservation zone per the <i>Goulburn Mulwaree Local Environmental Plan 2009</i>.	It is noted the site is zoned C3 – Environmental Management in accordance with the Goulburn Mulwaree LEP 2009 and the objectives are. – To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values. – To provide for a limited range of development that does not have an adverse effect on those values. – To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value. The project is a permissible development by virtue of section 2.9(3)(a) of the <i>State Environmental Planning Policy (Resources and Energy) 2021</i> (Resources and Energy SEPP) which states that extractive industry may be carried out on land with development consent, on land which development for the purposes of agriculture may be carried out with or without development consent. Agriculture is permitted with consent within the C3 Environmental Management Zone and the development is therefore permissible with consent. The Resources and Energy SEPP applies to the State and has been developed in recognition of the importance to NSW of mining, petroleum production and extractive industries. The Resources and Energy SEPP prevails to the extent of any inconsistency with any other environmental planning instrument including the Goulburn Mulwaree LEP and aims to: <i>to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and</i> <i>to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and</i> <i>to promote the development of significant mineral resources, and</i> <i>to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources,</i> A detailed EIS has been prepared as part of the development application and demonstrates the project has been developed in accordance with the aims of the Resources and Energy SEPP. The project design has been undertaken to be sympathetic to surrounding land use and a series of mitigation measures have been proposed to ensure the appropriate management of the target resource. The project has also been developed to be consistent with the <i>South East and Tablelands Regional Plan 2036</i> (the Regional Plan) which provides an overarching framework to guide local land use planning and notes the importance of extractive industries in the Marulan region, including the value of the resources within close proximity to freeways which provide

Issue ID	DPHI Comment	Response
		access to Australia's biggest construction materials market in Sydney, which makes them particularly important to the state of NSW. The project is also considered broadly consistent with the objectives of the C3 Environmental Management Zone. The objectives for the zone are focussed towards protection of areas with special ecological, scientific, cultural or aesthetic values and water catchment areas, whilst allowing for a range of development that does not have a significant adverse effect on those values. The clearance of around 29 ha of native vegetation at the site forms part of a partially fragmented patch that extends to the south, east and west of the site and comprises around 1,057 ha in size. The clearance represents less the 3% of native vegetation available in the patch and has primarily avoided threatened ecological communities located on the site. While the site provides habitat for a variety of flora and fauna species, the native vegetation comprises areas of regrowth are representative of the habitat available in the broader region and does not provide particular special ecological values. The removal of native vegetation is proposed to be offset in accordance with rules established by the Biodiversity Conservation Regulation 2017 prior to commencement of the project. The project site provides connectivity to bushland lots on private property and into Morton National Park to the east and forms part of the South-east and Tablelands Regional Plan Biodiversity Corridor. The site forms part of a vegetated corridor between Bungonia State Conservation Area (10.5 kilometres south east of the site) to Tarlo River National Park (24 kilometres north of the site). Large patches of native vegetation outside of the Southeast and Tablelands Regional Plan Corridor also provide connectivity through the landscape. The project would not completely sever or isolate any patches of native vegetation and a vegetated corridor would be maintained to the west of the project site, providing ongoing north-south connectivity through the landscape. Rehabilitation of the site would eventually be undertaken, but it is noted that the vegetation would not provide the same degree of shelter or habitat resources until the canopy trees have matured. A cultural heritage investigation has been undertaken as part of the EIS in consultation with Registered Aboriginal Parties and identified a small number of Aboriginal sites within the proposed development footprint, which were largely considered to be low in aesthetic, historic, scientific and social significance. The project site is located within Sydney's Drinking Water catchment and a detailed water management system has been developed to ensure the project will have a neutral or beneficial environmental (NorBE) impact on water quality in the catchment. The project is a permissible development and will not result in a significant impacts upon environmentally sensitive land or areas of high conservation value. The project has been designed to avoid and minimise impacts where possible within the bounds of the available resource area and residual impacts upon the environment will be managed and appropriately offset throughout the construction and operation of the development.

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		Global Quarries has also engaged Hetherington Legal to provide a legal interpretation of the consistency of the project with the objectives of the C3 Environmental Management zone which is provided as Attachment 1.
2	Out of hours construction noise I note the following: – upgrades to the Hume Highway are proposed outside of standard construction hours, however the proposed time period (i.e. evening or night) of these works is not specified; – exceedances of the relevant out of hours Noise Management Levels are predicted at ten sensitive receivers; and – the Noise and Vibration Impact Assessment outlines standard mitigation measures for construction noise generally and indicates that further assessment and mitigation measures are required for works during non-standard hours. Given the predicted noise impacts of the proposed out of hours works and that the Department is the consent authority that approves the environmental impacts associated with Section 138 permits, additional information is required. – Detail the intended time period (i.e. evening or night) of out of hours works. – Undertake a sleep disturbance assessment for the impacted receivers using the maximum noise level (<i>LAFmax</i>). – Specify the noise mitigation measures appropriate to the level of impact proposed, including consideration of at receiver mitigation.	Global Quarries will work closely with Transport for NSW for works associated with new or upgraded intersections to the Hume Highway and with Goulburn Mulwaree Council for any works with potential to impact upon Winfarthing Road. The traffic management process will include the preparation and implementation of a Construction Traffic Management Plan (CTMP) for construction staging sequence prior to the commencement of construction. The CTMP will be prepared by the Contractor in consultation with TfNSW and be submitted for approval to by DPHI prior to commencing construction on site and will address: – Existing traffic conditions – vehicles, cyclists, parking – Construction impact on traffic conditions – vehicles, cyclists, parking – Construction vehicle routes – Number of trucks – Construction hours – Access arrangements – Traffic controls and devices. The construction contractor for intersection works has not yet been appointed and final construction hours will not be known prior to completion of detailed planning and preparation of the CTMP. Construction activities will be primarily located within the existing road verge with minor widening and establishment of batters to surface levels, with improved line markings and widening of the existing Hume Highway median crossing at the intersection with Winfarthing Road. The intersection works will require temporary closures of one traffic lane along the Hume Highway and access along the Hume Highway for through traffic would be maintained for majority of the construction period. The upgrade for line marking and widening at the median crossing at the Hume Highway / Winfarthing Road intersection would also require the temporary closure of the median and traffic diversions will be required Global Quarries will work closely with the road authorities to determine the need for out of hours works to minimise disruption to traffic flow on the Hume Highway and ensure access is maintained to Winfarthing Road. If out of hours works are required, it is expected that this would primarily be undertaken during off-peak times (for example, between 10:00 pm – 7:00 am as stated in Section 2.2.4 in the <i>Draft Construction Noise Guideline 2020, NSW Environment Protection Authority</i>). An Out of hours noise assessment has been completed to assess the potential impact upon sensitive receivers during any construction activities undertaken outside of standard construction hours as shown on Attachment 2.

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		The assessment demonstrates the construction works are not expected to exceed the sleep disturbance criteria at any nearby sensitive receivers and mitigation measures have been proposed for adoption as part of the CTMP.
3	School bus turning circle I note that Goulburn Mulwaree Council's (Council) advice of 18 June and 26 September states that a formal dedication of land through a planning agreement is required for the proposed school bus turning circle on Winfarthing Road. I acknowledge Global Quarries would prefer to avoid a planning agreement and have suggested operational controls in place of a turning circle if Council insist on a formal agreement. However, the Department considers that the school bus shelter and turning circle is important safety infrastructure that would provide broader social benefits for the residents of Winfarthing Road. Please re-engage with Council regarding the provision of this infrastructure, including exploring alternative agreements for control and maintenance of the infrastructure. The Department is available to meet with both parties to advance an agreed outcome.	Global Quarries agrees that the turning circle and bus shelter is important social infrastructure that would be of benefit to the residents of Winfarthing Road. An online meeting was held with representatives from Goulburn Mulwaree Council, DPHI and Global Quarries on the 10th of February, 2026. It was noted that the bus stop was originally included as part of the proposed development in response to concerns raised by the local community relating to road safety and conflict between haulage vehicles and the current school bus operation servicing Winfarthing Road. The turning circle and bus shelter would be positioned primarily on the Global Quarries land and provide effective separation from the haulage route. The extent of infrastructure located within the Council road reserve would be primarily limited to line markings and signage around the entrance and exit of the turning circle which is considered appropriate to be approved by a section 138 Roads Act approval following the determination of the project The turning circle will be used once per day by the school bus in a rural setting and effectively separates school children from any potential for interaction with haulage vehicles. The exit from the turning circle would provide a site distance of approximately 200 metres to allow the bus to safely join Winfarthing Road prior to returning to the Hume Highway via the new acceleration lane. A planning agreement is only considered necessary if a formal land transfer for the land and infrastructure is required. Global Quarries have a strong preference for a solution to be developed without a formal land transfer, given the limited expected use of the turning circle and bus shelter. Global Quarries would be happy to enter into a Deed of Management to guarantee the upkeep and use of the turning circle for the life of the quarry as a condition of consent. This will provide the social benefit to the community by providing a marked safety improvement to the current informal arrangements and remove the burden for maintaining the infrastructure from Council.
4	Landowners consent – Hume Highway upgrades Landowners consent for all works associated with the development application is required prior to determination of the development application. Landowners consent has not been provided for the land on which the Hume Highway and Winfarthing Road upgrade works are proposed. Please provide landowners consent for the proposed upgrades to the Hume Highway and Winfarthing Road (incl. bus shelter & turning circle) or advise of the applicable exemption.	The intersection works on the Hume Highway are confined to a classified State road corridor and do not involve dedicated or reserved Crown land and therefore section 2.23 of the Crown Land Management Act 2016 is not engaged. Extensive consultation has been undertaken with TfNSW in relation to development of the preferred access for heavy vehicles to the site. TfNSW authorises works in a road reserve under Section 138 of the Roads Act and is treated as the relevant owner for SSD / DA purposes where the land is a State Road corridor and consent is typically evidenced by written TfNSW concurrence or approval. TfNSW have provided draft conditions indicating that Global Quarries must enter into a Works Authorisation Deed (WAD) for all works on the Hume

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		Highway (including the proposed access roads and upgrades to the Hume Highway and Winfarthing Road intersection) generally in accordance with the preliminary design. The WAD is a legally binding contract between TfNSW and the developer, authorising the developer to undertake works on a State road and is progressed following consent for the DA. Further correspondence with TfNSW has indicated that they are typically not required to provide a land owners consent for works within the road corridor outside a WAD process. Winfarthing Road is a public road (local road) open for road purposes and Goulburn Mulwaree Council has statutory power to authorise works within the road reserve under section 138 of the Roads Act. The works proposed on Winfarthing Road are limited to pavement line marking and minor road works to facilitate a turning circle on Global Quarries property which are considered routine road works within the road reserve. Such works are lawfully authorised through the roads authority's statutory powers and are typically carried out subject to Council approval under the Roads Act. Accordingly, no separate landowner consent is required for line marking works on Winfarthing Road. Goulburn Council have been consulted in relation to the proposed markings for a turning circle and bus stop located on adjoining private land and Global Quarries is happy to work with Council to determine the most acceptable outcome for Council and local residents.
5	Hollow bearing trees I note the EIS, November 2024 BDAR and August 2025 BDAR state hollow-bearing trees are abundant within the study area. However, the total number of hollow-bearing trees proposed for impact is not defined in these documents. Please provide the total number of hollow-bearing trees the project intends to impact.	GHD previously prepared a Biodiversity Development Assessment Report (BDAR) (GHD Pty Ltd, 2025) to support the Environmental Impact Statement (EIS) for the project and address the Secretary's environmental assessment requirements (SEARs) related to biodiversity values The field surveys undertaken for the BDAR included systematic traverses targeting candidate nests or roosts for species credit matters. These nest tree censuses were completed by walking parallel traverses spaced 5-20 m apart across the entire proposal site and including searches for signs of fauna occupancy and/or breeding activity such as stick nests, pellets, whitewash, scratch/chew marks on hollows, calls of dependent young etc. The locations of hollow-bearing trees and other potentially important habitat resources were captured with a handheld GPS along with information such as tree species and height; number, position and orientation of hollows; and diameter of hollow entrances, broken down into size classes appropriate to the requirements of candidate threatened species. Candidate nest and roost trees were visually inspected over multiple survey rounds with particular focus on previously identified and mapped hollow-bearing trees or stick nests. Traverses were conducted over multiple seasons appropriate to the breeding season and associated BAM survey requirements of candidate threatened species. Hollow-bearing trees revealed by these nest tree censuses are shown on Figure 1 included as Attachment 3. Based on field survey results and geographic information system (GIS) analysis: – A total of 150 hollow-bearing trees fall within the proposal site (i.e. the disturbance area) and would be removed for the project

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		– At least 88 hollow-bearing trees would be retained in the study area outside of the proposed disturbance area With regards these results it should be noted that tree hollows may, in general, be difficult to detect with ground-based surveys with results limited by terrain, vegetation, height and other factors. Conversely not all tree hollows visible from the ground would be suitable for fauna occupancy and comprise an important habitat resource. The proposal site was subject to multiple rounds of targeted survey over several seasons and using multiple techniques including the core nest tree census but also related diurnal bird surveys, spotlighting and stag watching surveys. Survey effort has been demonstrated with GPS tracklogs and field notes submitted along with the BDAR. As such these results should be considered a reliable indicator of the maximum number of hollow-bearing trees to be removed for the project. The broader study area outside of the proposal site was not subject to systematic survey and as such these results are likely to represent only a small proportion of the hollow-bearing trees to be retained in the local area. Based on the vegetation zone mapping and habitat assessments undertaken, the entire areas of vegetation map units '731_medium', '888_medium' and '1330_medium' shown on Figure 1 are likely to have a similar density of hollow-bearing trees as the parts within the proposal site. The quantum of hollow bearing trees to be removed should be considered in this context
6	Hume Highway medium strip closure timeframe I note that the Traffic Impact Assessment states that the Hume Highway medium strip would be temporarily closed for a 'short period' while widening and line marking upgrades take place. Please provide an estimated timeframe for the closure of the Hume Highway medium strip.	The construction activities required for widening of the median strip by 5.5 metres involve minor civil to install road base and maintain batter, sealing and line marking. Temporary closure of the median crossing is expected during these works, which subject to approval from TfNSW may be undertaken out of hours with an expected duration of around 1 week. During this period, the vehicles the following traffic diversions would be required: – Vehicles turning right out or Winfarthing Road would be required to travel westbound along the Hume Highway, before turning right at Rampion Hills Road to make a U-turn and then travel eastbound along the Hume Highway. This would result in an additional travel distance of around 900 metres, or around three minutes travel time. – Vehicles turning right into Winfarthing Road from the Hume Highway would be required to travel eastbound along the Hume Highway and take the offramp at Marulan Road / Jerrara Road interchange then head westbound along the Hume Highway (an additional detour of around 12 minutes / 16.5 km).
7	Preliminary site investigation Consideration of the need for a Preliminary Site Investigation to address clause 4.6(2) and (4) of the Hazard and Resilience SEPP (site visit discussions on November 18 2025)	Please see PSI as Attachment 4 as emailed on December 24, 2025.

Attachments

Attachment 1

Hetherington Legal advice



23 February 2026

BY EMAIL

Department of Planning, Housing and Infrastructure
Resource Assessments
c/o Carl Dumpleton
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2124
Email: carl.dumpleton@planning.nsw.gov.au

Dear Mr Dumpleton,

**RE: ASSESSMENT FOR MARULAN QUARRY (SSD-65146459) - REQUEST FOR
ADDITIONAL INFORMATION – ISSUE 1**

Introduction

1. Hetherington Legal Pty Ltd (ACN 642 301 522) has been instructed by Global Quarries Australia Pty Ltd ("**Global Quarries**") to prepare this legal opinion in relation to a proposed new hard rock quarry in Marulan, currently under assessment as a State Significant Development (Application No. SSD-65146459) ("**Proposal**").
2. The Department of Planning, Housing and Infrastructure ("**DPHI**") has requested a legal opinion regarding the consistency of the Proposal with the objectives of the C3 Environmental Conservation zone pursuant to the *Goulburn Mulwaree Local Environmental Plan 2009* ("**Goulburn Mulwaree LEP**"). The objectives of Zone C3 are as follows ("**Objectives**"):
 - a. To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
 - b. To provide for a limited range of development that does not have an adverse effect on those values.
 - c. To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value.
3. Copies of the relevant legislative and plan provisions referred to in this opinion are enclosed in full at Appendix 1.

Legislative / Plan References

1. *Environmental Planning and Assessment Act 1979* (NSW) ("**EP&A Act**").

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2. *State Environmental Planning Policy (Resources and Energy) 2021* (“**Resources and Energy SEPP**”).
3. *Goulburn Mulwaree Local Environmental Plan 2009* (“**Goulburn Mulwaree LEP**”).
4. *Draft South East and Tablelands Regional Plan 2041* (“**Draft Regional Plan**”).

Executive Summary

5. It is the opinion of Hetherington Legal that the Proposal is broadly consistent with the statutory and strategic planning scheme and that pursuant to relevant environmental planning instruments is a development permissible with consent.
6. While the location of the resources identified for extraction means the Proposal will result in unavoidable impacts to ecological values, including native vegetation and threatened species habitats, the proposed development has been carefully located and subject to several design iterations in response to the biodiversity values of the site. Various mitigation measures are proposed to protect and manage these values, including rehabilitation with native vegetation, restoring natural habitat for potentially occurring threatened species and the conservation value of the impacted land as far as possible.
7. The Environmental Impact Statement (“**EIS**”) prepared by Environmental Consultants GHD Pty Ltd (“**GHD**”) demonstrates that the Proposal has been developed to avoid and minimise impacts, and offset residual impacts, making it broadly consistent with the relevant environmental planning instruments, including the Resources and Energy SEPP and Goulburn Mulwaree LEP, as well as strategic planning instruments including the Draft Regional Plan.

Hierarchy of Planning Instruments

8. Section 4.15(1)(a)(i) of the EP&A Act provides that the provisions of any environmental planning instrument must be taken into consideration to the extent they are relevant to the development the subject of the development application. This includes consideration of whether the Proposal is consistent with the Objectives of the LEP in respect of Zone C3.
9. Section 3.28(1)(a) of the EP&A Act provides that to the extent of any inconsistency between environmental planning instruments; there is a general presumption that a State Environmental Planning Policy (“**SEPP**”) prevails over a Local Environmental Plan or other instrument made before or after the SEPP.
10. In addition, Section 2.6(1) of the Resources and Energy SEPP provides that to the extent of any inconsistency with any other environmental planning instrument, Chapter 2 of the Resources and Energy SEPP prevails.¹ Section 1.9(1) of the LEP provides that the provisions of any SEPP prevail over the LEP pursuant to the general presumption at Section 3.28 of the EP&A Act.

¹ With the exception of the Major Projects SEPP and the Coastal Management SEPP which will prevail over Chapter 2 of the Resources and Energy SEPP.

11. Section 1.9(2) of the LEP does not identify any SEPP's which do not apply to the land to which the LEP applies, meaning that all SEPP's apply to the extent of any inconsistency with the LEP.

Statutory and Strategic Context

Resources and Energy SEPP & Goulburn Mulwaree LEP

12. Section 2.1 of the Resources and Energy SEPP sets out the aims of the policy in recognition of the importance to NSW of mining, petroleum production and extractive industries. These include:
- a. Providing for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State.
 - b. Facilitating the orderly and economic use and development of land containing mineral, petroleum and extractive material resources.
 - c. Promoting the development of significant mineral resources.
13. In accordance with Section 2.9(3)(a) of the SEPP, extractive industry development may be carried out with development consent on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent).
14. 'Extractive industry' is defined in Section 2.2 of the SEPP and includes the winning or removal of extractive materials by quarrying.
15. Pursuant to the provisions of Zone C3 of the LEP, extensive agriculture is permitted without development consent, and agriculture (excluding intensive livestock agriculture) is permitted with development consent.
16. In accordance with Sections 1.9(1) of the LEP and Section 2.6(1) of the Resources and Energy SEPP, Section 2.9(3)(a) of the SEPP prevails over the provisions of Zone C3 in the LEP, meaning that extractive industry such as the proposed Marulan Quarry is permitted development with consent in Zone C3.
17. In addition, under Part 2.3 of the SEPP the consent authority is required to have consideration to a number of matters when determining development applications, including:
- a. Whether or not the consent should be issued subject to conditions aimed at ensuring the development is undertaken in an environmentally responsible manner, including conditions to ensure that impacts on threatened species and biodiversity, are avoided, or minimised to the greatest extent practicable (Section 2.20).
 - b. Whether the consent should be issued subject to conditions aimed at ensuring rehabilitation of the land that will be affected by the development including a plan proposing the end use and landform following rehabilitation or related to waste regeneration or remediation of any soil contamination (Section 2.23).



18. The Objectives of the LEP Zone C3 and the consistency of the Proposal with these objectives is also a mandatory consideration in the assessment of the development proposal by reason of Section 4.15(1)(a) of the EP&A Act.
19. However, while the LEP Zone C3 Objectives and the objectives of the SEPP are not expressly in conflict with one another, the hierarchy of planning instruments requires the LEP to be read in a way that gives effect to the aims and objectives of the Resources and Energy SEPP and the policies and principles of other higher order environmental and strategic planning instruments. Therefore, the SEPP objectives to manage, facilitate and promote extractive industry development are to form part of the consideration of whether proposals are consistent with the LEP Zone C3 Objectives.
20. It follows that the consistency of the Proposal with the Objectives of LEP Zone C3 can also be further addressed through the imposition of conditions to manage impacts on native woodland vegetation, threatened species habitats and to ensure restoration of areas with special ecological value.

Draft Regional Plan

19. Objective 10 of the Draft Regional Plan seeks to manage the role and operation of extractive industries, recognising that the region contains valuable extractive resources of state, regional and local importance but that the impacts of the extraction of these materials on the environment and ecological communities must be mitigated and managed.
20. The Draft Regional Plan proposes to adopt strategies whereby the local and regional benefits of these resources is retained, and the proximity to the country's largest construction materials market is capitalised on. At the same time, the economic and social benefits must be balanced against impacts on threatened and endangered species and habitats in the region, and the management and remediation of local environments.
21. While the provisions of strategic planning instruments are not mandatory considerations for the consent authority, the Draft Regional Plan provides a long-term strategic vision outlining objectives and actions for the Region which align with the SEPP objective, to facilitate orderly and economic use and development of land containing extractive material resources, and the LEP Zone C3 objective to provide for a limited range of development that does not have an adverse effect on special ecological, scientific, cultural or aesthetic values.

Consistency with the Goulburn Mulwaree LEP

22. There is a general understanding that the Proposal will involve impacts to ecological values, including native vegetation, flora and fauna. However, the Proposal is consistent with the Zone C3 Objectives as the proposed development will not have an adverse effect on the values identified.
23. 'Adverse effect' is not defined in the Goulburn Mulwaree LEP or the EP&A Act. Using the standard dictionary definitions, 'adverse' means:



- I. Antagonistic in purpose of effect; Opposing one's interests or desire; Being or acting in a contrary direction; Opposed or opposing; Opposite; Confronting.*

and 'effect' means:

- II. That which is produced by some agency or cause; a result; a consequence.*

Therefore, the Proposal will be inconsistent with the Zone C3 Objectives if the proposed development will have an effect that is contradictory to the values sought to be protected.

24. As outlined in the EIS, following extensive desktop studies and field surveys of the site conducted and in response to the recognised biodiversity values at the project site, Global Quarries has proposed detailed measures to mitigate and manage impacts on native vegetation and threatened species habitats prior to and during construction, and during the operational life of the quarry. The following is a non-exhaustive list of examples, as outlined at Appendix E of the EIS:
- a. Preparation of a pre-construction flora and fauna management plan as part of the CEMP, and the implementation of a biodiversity management plan from the commencement of construction and for the operational life of the Proposal;
 - b. Limiting disturbance of vegetation to the minimum necessary to undertake the Proposal;
 - c. Conducting pre-clearance surveys;
 - d. Presence, oversight and ongoing monitoring by a trained ecologist including daily pre-clearance inspections of site for fauna;
 - e. Progressive clearing allowing fauna to vacate the site via the connected vegetated corridor;
 - f. Conducting vegetation clearing outside of the breeding season of fauna with potential to occur at the site;
 - g. The capture and relocation of any fauna discovered on site to nearby ecological areas as well as relocation of habitat features where possible; and
 - h. Implementation of no-go zones and tree protection fencing to protect areas of retained vegetation.
25. These measures will be implemented in accordance with industry standards and relevant government policies and guidelines.
26. The rehabilitation strategy for the project site following completion of operations is outlined at Appendix H of the EIS and will involve replanting of native vegetation, with a proposed final landform similar to what currently exists at the site. The restoration of the biodiversity values of the site impacted by the Proposal through the rehabilitation of native vegetation and habitat is consistent with the Zone C3 objective of restoring areas with special ecological value.
27. In addition, as outlined at Section 2.7 of the EIS, the Proposal has been subject to ongoing amendments and refinements to reduce the scale and impact of the development, including reduction of the development footprint, with the aim of avoiding and minimising as far as possible impacts on native vegetation and threatened species habitats. These include locating the proposed development away from the highest biodiversity values and limiting the clearance of native vegetation removal on site to

29.19 ha. These revisions to scale back the scope and impact of the Proposal are consistent with Zone's objective of providing for a limited range of development.

28. It is acknowledged by Global Quarries that the opportunity for alternative site locations and design is constrained by the location of the identified target resource. While the Proposal will directly impact an area of native vegetation, and thereby the ecological value of the site, the developments design and mitigation and management of these impacts as outlined at Appendix E and Appendix I of the EIS mean they will not be adverse. Impacts on areas of high conservation value is not inherently inconsistent with the Objectives, and the management of these impacts as proposed in the EIS and the rehabilitation of the site and offsetting of residual impacts is consistent with preservation of the ecological value of the site.
29. Further, in accordance with the SEPP, it is open to the consent authority to impose conditions to minimise the impacts and secure rehabilitation. This would help to ensure that the Proposal does not have an adverse effect on the values sought to be protected by the Objectives.
30. Global Quarries' environmental consultants, GHD have provided a submission outlining the ways in which the Proposal was developed to be consistent with the objectives of the SEPP, LEP and Regional Plan, per the detailed EIS prepared for the development application and as set out at Appendix C to the EIS.
31. Hetherington Legal agrees with GHD that the Proposal is broadly consistent with the Objectives of the LEP's C3 Environmental Management zone as the proposed development has been designed and located in such a way as to avoid adverse effects on the values sought to be protected by the zone, including areas of special ecological value.

Yours faithfully,



Hetherington Legal Pty Ltd



APPENDIX 1

Environmental Planning and Assessment Act 1979 No 203

Current version for 15 December 2025 to date (accessed 23 February 2026 at 9:53)

[Part 3](#) > [Division 3.2](#) > Section 3.28

3.28 Inconsistency between instruments (cf previous s 36)

- (1) In the event of an inconsistency between environmental planning instruments and unless otherwise provided—
 - (a) there is a general presumption that a State environmental planning policy prevails over a local environmental plan or other instrument made before or after that State environmental planning policy, and
 - (b) (Repealed)
 - (c) the general presumptions of the law as to when an Act prevails over another Act apply to when one kind of environmental planning instrument prevails over another environmental planning instrument of the same kind.
- (2), (3) (Repealed)
- (4) Nothing in this section prevents an environmental planning instrument from being expressly amended by a later environmental planning instrument, of the same or a different kind, to provide for the way in which an inconsistency between them is to be resolved.

Environmental Planning and Assessment Act 1979 No 203

Current version for 15 December 2025 to date (accessed 23 February 2026 at 9:53)

[Part 4](#) > [Division 4.3](#) > Section 4.15

4.15 Evaluation (cf previous s 79C)

- (1) **Matters for consideration—general** In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—
- (a) the provisions of—
 - (i) any environmental planning instrument, and
 - (ii) any 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
 - (iii) any development control plan, and
 - (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
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
 - (v) (Repealed)that apply to the land to which the development application relates,
 - (b) the significant likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
 - (c) the suitability of the site for the development,
 - (d) any submissions made in accordance with this Act or the regulations,
 - (e) the public interest.
- (1A) The regulations may, for the purpose of the consideration of a matter referred to in subsection (1)(b), (c) or (e), declare—
- (a) factors that are of relevance to development the subject of the development application, and
 - (b) factors that are not of relevance to development the subject of the development application.
- (1B) Despite subsection (1), a consent authority, in determining a development application, must not take into consideration a factor the subject of a declaration under subsection (1A)(b).

- (2) **Compliance with non-discretionary development standards—development other than complying development** If an environmental planning instrument or a regulation contains non-discretionary development standards and development, not being complying development, the subject of a development application complies with those standards, the consent authority—
- (a) is not entitled to take those standards into further consideration in determining the development application, and
 - (b) must not refuse the application on the ground that the development does not comply with those standards, and
 - (c) must not impose a condition of consent that has the same, or substantially the same, effect as those standards but is more onerous than those standards,
- and the discretion of the consent authority under this section and section 4.16 is limited accordingly.
- (3) If an environmental planning instrument or a regulation contains non-discretionary development standards and development the subject of a development application does not comply with those standards—
- (a) subsection (2) does not apply and the discretion of the consent authority under this section and section 4.16 is not limited as referred to in that subsection, and
 - (b) a provision of an environmental planning instrument that allows flexibility in the application of a development standard may be applied to the non-discretionary development standard.

Note.

The application of non-discretionary development standards to complying development is dealt with in section 4.28(3) and (4).

- (3A) **Development control plans** If a development control plan contains provisions that relate to the development that is the subject of a development application, the consent authority—
- (a) if those provisions set standards with respect to an aspect of the development and the development application complies with those standards—is not to require more onerous standards with respect to that aspect of the development, and
 - (b) if those provisions set standards with respect to an aspect of the development and the development application does not comply with those standards—is to be flexible in applying those provisions and allow reasonable alternative solutions that achieve the objects of those standards for dealing with that aspect of the development, and
 - (c) may consider those provisions only in connection with the assessment of that development application.

In this subsection, *standards* include performance criteria.

- (4) **Consent where an accreditation is in force** A consent authority must not refuse to grant consent to development on the ground that any building product or system relating to the development does not comply with a requirement of the *Building Code of Australia* if the building product or system is accredited in respect of that requirement in accordance with the regulations.
- (5) A consent authority and an employee of a consent authority do not incur any liability as a consequence of acting in accordance with subsection (4).
- (6) **Definitions** In this section—
- (a) reference to development extends to include a reference to the building, work, use or land proposed to be erected, carried out, undertaken or subdivided, respectively, pursuant to the grant of consent to a development application, and

- (b) ***non-discretionary development standards*** means development standards that are identified in an environmental planning instrument or a regulation as non-discretionary development standards.

State Environmental Planning Policy (Resources and Energy) 2021

Current version for 23 February 2024 to date (accessed 23 February 2026 at 12:15)

[Chapter 2](#) > [Part 2.1](#) > Section 2.1

2.1 Aims of Chapter

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

- (a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and
- (b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and
- (c) to promote the development of significant mineral resources, and
- (d) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and
- (e) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development—
 - (i) to recognise the importance of agricultural resources, and
 - (ii) to ensure protection of strategic agricultural land and water resources, and
 - (iii) to ensure a balanced use of land by potentially competing industries, and
 - (iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.

State Environmental Planning Policy (Resources and Energy) 2021

Current version for 23 February 2024 to date (accessed 23 February 2026 at 12:15)

[Chapter 2](#) > [Part 2.1](#) > Section 2.6

2.6 Relationship with other environmental planning instruments

- (1) Subject to subsection (2), if this Chapter is inconsistent with any other environmental planning instrument, whether made before or after this Chapter, this Chapter prevails to the extent of the inconsistency.
- (2) Subsection (1) does not apply to any inconsistency between this Chapter and any of the following State environmental planning policies—
 - (a) [*State Environmental Planning Policy \(Major Projects\) 2005*](#),
 - (b) [*State Environmental Planning Policy \(Coastal Management\) 2018*](#),regardless of when the inconsistency arises.
- (3) Section 2.13 (Exempt development), 2.14 (Additional exempt development for land that is not within an environmentally sensitive area of State significance) and section 2.15 (Complying development) do not limit the operation of any provision of any other environmental planning instrument that identifies development as exempt development or complying development except to the extent that the provision is inconsistent with section 2.13, 2.14 or 2.15.

State Environmental Planning Policy (Resources and Energy) 2021

Current version for 23 February 2024 to date (accessed 23 February 2026 at 12:15)

[Chapter 2](#) > [Part 2.2](#) > Section 2.9

2.9 Development permissible with consent

(1) **Mining** Development for any of the following purposes may be carried out only with development consent—

- (a) underground mining carried out on any land,
- (b) mining carried out—
 - (i) on land where development for the purposes of agriculture or industry may be carried out (with or without development consent), or
 - (ii) on land that is, immediately before the commencement of this section, the subject of a mining lease under the [Mining Act 1992](#) or a mining licence under the [Offshore Minerals Act 1999](#),
- (c) mining in any part of a waterway, an estuary in the coastal zone or coastal waters of the State that is not in an environmental conservation zone,
- (d) facilities for the processing or transportation of minerals or mineral bearing ores on land on which mining may be carried out (with or without development consent), but only if they were mined from that land or adjoining land,
- (e) mining on land that is reserved as a state conservation area under the [National Parks and Wildlife Act 1974](#),
- (f) extracting a bulk sample as part of resource appraisal of more than 20,000 tonnes of coal or of any mineral ore.

(2) **Petroleum production** Development for any of the following purposes may be carried out only with development consent—

- (a) petroleum production on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent),
- (b) petroleum production on land that is, immediately before the commencement of this section, the subject of a production lease under the [Petroleum \(Onshore\) Act 1991](#),
- (c) petroleum production in any part of a waterway, an estuary in the coastal zone or coastal waters of the State that is not in an environmental conservation zone,
- (d) facilities for the processing or transportation of petroleum on land on which petroleum production may be carried out (with or without development consent), but only if the petroleum being processed or transported was recovered from that land or adjoining land,
- (e) petroleum production on land that is reserved as a state conservation area under the [National Parks and Wildlife Act 1974](#).

- (3) **Extractive industry** Development for any of the following purposes may be carried out with development consent—
- (a) extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent),
 - (b) extractive industry in any part of a waterway, an estuary in the coastal zone or coastal waters of the State that is not in an environmental conservation zone.
- (4) **Co-location of industry** If extractive industry is being carried out with development consent on any land, development for any of the following purposes may also be carried out with development consent on that land—
- (a) the processing of extractive material,
 - (b) the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,
 - (c) facilities for the processing or transport of extractive material,
 - (d) concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix.
- (5) This section is subject to section 2.8 and to clause 8K of the [*Environmental Planning and Assessment Regulation 2000*](#).

Note—

Clause 8K of the [*Environmental Planning and Assessment Regulation 2000*](#) makes special arrangements for mining operations under a mining lease that was in force on 15 December 2005. The arrangements apply only for a limited transitional period or until the operations are approved under Part 3A of the Act, after which the operations will be subject to the usual development consent or approval requirements (including, for example, in relation to any expansion or intensification, or enlargement of the area, of the operations).

State Environmental Planning Policy (Resources and Energy) 2021

Current version for 23 February 2024 to date (accessed 23 February 2026 at 12:15)

[Chapter 2](#) > [Part 2.3](#) > Section 2.20

2.20 Natural resource management and environmental management

- (1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure the following—
 - (a) that impacts on significant water resources, including surface and groundwater resources, are avoided, or are minimised to the greatest extent practicable,
 - (b) that impacts on threatened species and biodiversity, are avoided, or are minimised to the greatest extent practicable,
 - (c) that greenhouse gas emissions are minimised to the greatest extent practicable.
- (2) Without limiting subsection (1), in determining a development application for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.

State Environmental Planning Policy (Resources and Energy) 2021

Current version for 23 February 2024 to date (accessed 23 February 2026 at 12:15)

[Chapter 2](#) > [Part 2.3](#) > Section 2.23

2.23 Rehabilitation

- (1) Before granting consent for development for the purposes of mining, petroleum production or extractive industry, the consent authority must consider whether or not the consent should be issued subject to conditions aimed at ensuring the rehabilitation of land that will be affected by the development.
- (2) In particular, the consent authority must consider whether conditions of the consent should—
 - (a) require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated, or
 - (b) require waste generated by the development or the rehabilitation to be dealt with appropriately, or
 - (c) require any soil contaminated as a result of the development to be remediated in accordance with relevant guidelines (including guidelines under clause 3 of Schedule 6 to the Act and the [Contaminated Land Management Act 1997](#)), or
 - (d) require steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation, does not jeopardize public safety.

Goulburn Mulwaree Local Environmental Plan 2009

Current version for 19 September 2025 to date (accessed 23 February 2026 at 12:08)

[Part 1](#) > Section 1.9

1.9 Application of SEPPs

- (1) This Plan is subject to the provisions of any State environmental planning policy that prevails over this Plan as provided by section 3.28 of the Act.
- (2) The following State environmental planning policies (or provisions) do not apply to the land to which this Plan applies—

Goulburn Mulwaree Local Environmental Plan 2009

Current version for 19 September 2025 to date (accessed 23 February 2026 at 12:08)

[Part](#) > pt-cg1.Zone_C3

Zone C3 Environmental Management

1 Objectives of zone

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To facilitate the management of water catchment areas, environmentally sensitive land and areas of high conservation value.

2 Permitted without consent

Environmental protection works; Extensive agriculture; Home occupations

3 Permitted with consent

Agriculture; Air strips; Animal boarding or training establishments; Camping grounds; Caravan parks; Centre-based child care facilities; Community facilities; Depots; Dwelling houses; Eco-tourist facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Farm buildings; Forestry; Home-based child care; Home businesses; Home industries; Information and education facilities; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Research stations; Roads; Rural workers' dwellings; Secondary dwellings; Signage; Stock and sale yards; Tank-based aquaculture; Tourist and visitor accommodation; Water recycling facilities

4 Prohibited

Industries; Intensive livestock agriculture; Local distribution premises; Multi dwelling housing; Residential flat buildings; Retail premises; Rural industries; Seniors housing; Service stations; Serviced apartments; Warehouse or distribution centres; Any other development not specified in item 2 or 3

OBJECTIVE 10:

Manage the role and operation of extractive industries

The South East and Tablelands Region contains valuable mineral resources including coal, precious and base metals and extractive materials. Moving towards a net zero region by 2050 requires strategic thinking about the transition of industries, management and remediation of altered environments and diversifying the knowledge and skill base from mining sectors.

Existing extractive industries in the region

Coal resources in the region are concentrated in the Wingecarribee LGA. There are 2 active underground fields (Wongawilli and Dendrobium) on the eastern border of the area, with production largely contained in the Wollongong LGA (in the Illawarra Shoalhaven region).

The location of current exploration and mining production titles in NSW, explanations of mining and production titles and the roles of community and government in the decision-making process for mining and resource projects may be accessed at commonground.nsw.gov.au

The region contains deposits of several important base metals (lead, zinc, silver, copper) in the Woodlawn and Captains Flat areas. Extractive resources, including construction material such as sand, hard rock and sources of clay and shale for brick making, are extracted throughout the region, including around Marulan, Googong, Bungendore, and Lake George. Limestone is extracted from places such as Marulan, and gold from Majors Creek.

The location of many of these resources, near rail lines and freeways, and their proximity to Australia's biggest construction materials market in Sydney, makes them particularly important to NSW. Whilst noting this, these industries can at times create adverse impacts on locally managed infrastructure and the amenity of local communities. It is critical to find a balance to ensure that the cumulative impact of these uses is mitigated/managed.

Managing mining operations and lifespan

Coal is likely to have a finite lifespan as an energy source as the world moves to cleaner forms of energy generation that will occur over the coming decades. The NSW Government will work to support communities supported by the coal industry, to diversify for the future and retain each community as vibrant places to live, with good employment opportunities.

Rather than returning land to its pre-mining state, there may be opportunities to utilise the features of some mines in a way that can leave an economic legacy for local communities.

Rehabilitated mines could become renewable energy and storage hubs for energy sources including wind, solar, pumped hydro and the associated battery storage. Other industries, such as hydrogen and ammonia, along with high value agriculture can then be leveraged.

Similarly, there may be times and circumstances when land should be kept as native vegetation, or for agriculture to maintain the character and diversity of the local area. Increased pressure to extract resources can lead to increased impact on threatened ecological communities and needs to be managed to ensure that further loss of these communities is reduced.

The impact of urban expansion on resource areas needs to be appraised when councils evaluate planning proposals to rezone land, review LEPs, or sequence land releases. In places like the Wingecarribee and Goulburn Mulwaree LGAs, where there is mining activity, this also means avoiding new settlements in subsidence areas.

Supporting initiatives:

- Work with mining operators and relevant councils to identify the operational lifespan, rehabilitation and closure obligations and opportunities for future land use activities.
- Develop a resource availability plan for the region that considers the avoidance of endangered and critically endangered ecological communities.



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Attachment 2

Out of hours noise assessment

Report

27 February 2026

1. Introduction

1.1 Purpose of this report

Global Quarries Australia Pty Ltd (Global Quarries) seeks to develop a quarrying operation on Lots 3 and 4 of DP 247199 and Lot 7001 of DP 1025585, in Marulan in the Southern Tablelands of NSW. GHD previously prepared a Noise and Vibration Impact Assessment to support the Environmental Impact Statement for the project and address the Secretary's environmental assessment requirements (SEARs) related to noise, vibration and blasting impacts from the project.

This short report has been prepared by GHD to respond to the Department of Planning, Housing and Infrastructure (DPHI) Request for Additional Information (Dated 19th December 2025) issued for the EIS. Specifically, Issue 2 raised regarding noise impacts associated with out of hours construction activities required for the intersection upgrade works.

The DPHI comment is reproduced below. The DPHI requested action and GHD's response is provided below in Table 1.

Out of hours construction noise

I note the following:

- *upgrades to the Hume Highway are proposed outside of standard construction hours, however the proposed time period (i.e. evening or night) of these works is not specified;*
- *exceedances of the relevant out of hours Noise Management Levels are predicted at ten sensitive receivers; and*
- *the Noise and Vibration Impact Assessment outlines standard mitigation measures for construction noise generally and indicates that further assessment and mitigation measures are required for works during non-standard hours.*

Given the predicted noise impacts of the proposed out of hours works and that the Department is the consent authority that approves the environmental impacts associated with Section 138 permits, additional information is required.

Table 1 **DPHI request for additional information – out of hours construction noise**

Action requested	GHD response
<i>Detail the intended time period (i.e. evening or night) of out of hours works.</i>	A construction contractor has not yet been engaged for the road works activities and therefore, exact working hours are not yet known. Given the works are located on the Hume Highway, out-of-hours works (OOHW) are likely to be required to maintain road user safety and minimise impacts to traffic operations. Notwithstanding this, indicative working hours and associated requirements, informed by typical intersection upgrade works, are outlined in Section 3 of this report.
<i>Undertake a sleep disturbance assessment for the impacted receivers using the maximum noise level (LAFmax).</i>	A sleep disturbance assessment has been undertaken based on worst-case maximum noise events, assuming a source sound power level of L_{Amax} 128 dBA. Predicted maximum noise levels at residential receivers were assessed

Action requested	GHD response
	against the external sleep disturbance screening criterion of L_{Amax} 65 dBA at each receiver. The assessment results are provided in Section 4 of this report.
<i>Specify the noise mitigation measures appropriate to the level of impact proposed, including consideration of at receiver mitigation.</i>	At this stage, the exact construction methodology, plant and equipment have not been confirmed. Accordingly, the precise level of noise mitigation required cannot yet be specified and will be detailed as part of the contractor's Construction Environmental Management Plan (CEMP) and Construction Noise and Vibration Management Plan (CNVMP) once a contractor is appointed. Notwithstanding this, in-principle noise mitigation measures have been recommended to control noise at source for both mobile and fixed plant, with the objective of meeting the applicable OOHWP P1 and P2 Noise Management Levels (NMLs). These measures are consistent with the standard mitigation measures outlined in Appendix B of the CNVG-R. Any potential residual noise impacts would be managed through the implementation of additional mitigation measures, where required, in accordance with Appendix C of the CNVG-R. This is discussed in further detail in Section 0 of this report.

1.2 Limitations

This report: has been prepared by GHD for Global Quarries Australia Pty Ltd and may only be used and relied on by Global Quarries Australia Pty Ltd for the purpose agreed between GHD and Global Quarries Australia Pty Ltd as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Global Quarries Australia Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

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

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

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 2 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

2. Assumptions

The intersection upgrade construction methodology and working hours will not be determined until a contractor is engaged. In order to address DPHI's requests concerning night works expected as part of the intersection upgrade, an indicative schedule and methodology has been adopted, based on similar minor road works projects. The construction methodology and working hours is likely to change once a contractor is engaged, and the actual methodology is developed.

3. Out of hours works

Proposed works

Some night works are proposed to construct a new intersection on Hume Highway, and to upgrade the existing access road and intersection with Winfarthing Road. Construction activity for the new intersections at the Hume Highway will be primarily located within the existing road verge with minor widening and establishment of batters to surface levels. Works are expected to use the following equipment pieces:

- Dozer
- Excavator
- Roller
- Grader
- Light vehicles

Indicative out of hours working hours

Works are proposed outside of standard hours to ensure worker safety and to avoid disruptions to the traffic network. Indicatively, night shift hours can start as early as 6pm and can continue until 7am, extending through the evening and night periods. For reference, the different standard and out-of-hours work periods that are typically adopted are shown in Figure 1.

Hour commencing	12 am	1 am	2 am	3 am	4 am	5 am	6 am	7 am	8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm	11 pm
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								
Sunday																								

Figure 1 Standard and outside of standard construction hours

Where worker safety can be ensured and disruptions to the traffic network aren't a factor, works could be completed during standard hours, which may include;

- Corridor clearing works outside of the existing road corridor
- Some mobilisation and site establishment activities
- Earthworks activities outside of the existing road corridor

Other activities such as earthworks, paving and asphaltting and road furniture installation are expected to occur predominantly during night works. Where night works are unavoidable, recommendations for respite periods, noise intensive works scheduling and duration respites are provided in Section 0.

Predicted noise levels

The night time noise management levels (NML) are $L_{Aeq15min}$ 40 dBA and 35 dBA for noise catchment areas 1 and 2 respectively. A summary of the predicted noise levels for the out of hours works is as follows:

- A total of 10 exceedances are predicted across all receivers
- The highest NCA1 level is predicted to be 48 dBA at R40 (8 dB exceedance)
- The highest NCA2 level is predicted to be 38 dBA at R032 (3 dB exceedance)

Section 5 outlines the approach to mitigating noise levels during out of hours works.

4. Sleep disturbance assessment

GHD has completed an assessment of potential sleep disturbance impacts at nearby residential receivers from the intersection works. The INCG references the NSW road traffic noise guidelines to determine the potential for sleep disturbance impacts. The RNP states that maximum internal noise levels below 50 to 55 dBA are unlikely to awaken people from sleep.

To assess maximum noise level events against an external criteria, a criteria of 65 dBA has been adopted, based on a 10 dB addition to the RNP recommended internal noise level to account for a typical noise reduction through an open window.

To assess potential sleep disturbance impacts, the road works construction scenarios provided in Appendix F of the *Construction Noise and Vibration Guideline (Roads)* (CNVG-R)(TfNSW, December 2024) has been referred to. The activity L_{A1} sound power level of 128 dBA has been assumed based on the 'Local Road Works' activity.

The DPHI request for information specifies an L_{AFmax} noise descriptor for the sleep disturbance assessment, whereas the CNVG-R provides an L_{A1} descriptor, being the noise level exceeded 1% of the measurement time. Whilst definitionally different, both descriptors are adopted for use in sleep disturbance assessments and the table values provided in Appendix F of the CNVG-R are maximum permissible levels. Given this, a sleep disturbance level of L_{AFmax} 128 dBA has been adopted for the sleep disturbance assessment.

Table 2 provides the predicted received L_{AFmax} noise level at the most affected residential receivers. Based on the assumed adopted sleep disturbance level of L_{AFmax} 128 dBA, compliance with the adopted sleep disturbance criteria is predicted. The highest predicted noise level is L_{AFmax} 63 dBA at R40. Although compliance is predicted, best practice noise management measures have been recommended to reduce the potential for sleep disturbance impacts in Section 0.

Table 2 Sleep disturbance assessment

Receiver	Criteria	Received L_{AFmax} noise level, dBA
R01	65 dBA	61
R02		57
R03		54
R04		57
R05		51
R06		51
R11		47
R20		39
R30		53
R32		53
R33		59
R34		62
R38		54
R39		47
R40		63

5. Noise mitigation measures

Once a detailed construction methodology is known for the intersection works, further assessment would be undertaken to revise predicted noise levels at nearby receivers. Based on the detailed construction working hours and methodology, mitigation measures will be implemented with the aim of meeting the nighttime NML.

At this stage, a 8 dB reduction is required to achieve compliance during the night time. It is likely that this reduction can be achieved using the recommended construction mitigation measures provided in Table 10.4 of the NVIA and reproduced below in Table 3.

Table 3 Reasonable and feasible construction mitigation measures

Control type	Mitigation measure
At source mitigation measures	
Construction hours and scheduling	Outside of road works, construction activities would be carried out during the ICNG recommended standard hours.
Equipment selection	Quieter and less vibration emitting construction methods would be used where feasible and reasonable.
Plant noise levels	The noise levels of plant and equipment will have an operating sound power lower or similar to the levels presented in Error! Reference source not found..
Location of plant	As much distance as possible would be placed between the plant or equipment and residences and other sensitive land uses, where possible.
Plan worksites and activities to minimise noise and vibration.	Where additional activities or plant may only result in a marginal noise increase and speed up works, the duration of impact will be limited by concentrating noisy activities at one location and moving to another as quickly as possible.
Reduced equipment power	Only the necessary size and power of equipment would be used.
Minimise disturbance arising from delivery of goods to construction sites.	Loading and unloading of materials/deliveries would occur as far as practically possible from sensitive receivers.
Maintain equipment	Equipment would not be operated until it is maintained or repaired, where maintenance or repair would address the annoying character of noise identified.
In transmission path mitigation measures	
Utilise acoustic shielding between the source and receiver from buildings / barriers	– Where reasonable and feasible, temporary site buildings and materials stockpiles will be used as noise barriers. – Natural landform as noise barrier – where reasonable and feasible, fixed equipment should be place in cuttings, or behind earth berms.

Additionally, It is expected then that potential construction noise impacts resulting from construction works in, on or over Hume Highway or Winfarthing Road would be assessed in accordance with the CNVG-R during detailed design as part of the section 138 permit process.

Therefore, additional mitigation measures from the CNVG-R would be implemented for any predicted residual noise impacts (exceedances of the NML after the implementation of the reasonable and feasible mitigation measures provided in Table 3). A summary of the additional mitigation measures are provided in Table 4 and the triggers for these measures are provided in Table 5.

Table 4 Additional mitigation measures

Measure	Description	Abbreviation
Notification	Advanced warning of works and potential disruptions can assist in reducing the impact on the community. The notification may consist of a letterbox drop (or equivalent) detailing work activities, time periods over which these will occur, impacts and mitigation measures. Notification should be a minimum of 5 working days prior to the start of works. The approval conditions for proposals may also specify requirements for notification to the community about works that may impact on them.	N
Specific notifications	Specific notifications are letterbox dropped (or equivalent) to identified stakeholders no later than seven calendar days ahead of construction activities that are likely to exceed the noise objectives. The specific notification provides additional information when relevant and informative to more highly affected receivers than covered in general letterbox drops. The exact conditions under which specific notifications would proceed are defined in the relevant Additional Mitigation Measures (CNVG Tables C1 to C3). This form of communication is used to support periodic notifications, or to advertise unscheduled works.	SN
Individual briefings	Individual briefings are used to inform stakeholders about the impacts of high noise activities and mitigation measures that will be implemented. Proposal representatives would visit identified stakeholders at least 48 hours ahead of potentially disturbing construction activities. Individual briefings provide affected stakeholders with personalised contact and tailored advice, with the opportunity to comment on the proposal. Where the resident cannot be met with individually then an alternative form of engagement should be used.	IB
Respite offers	Respite Offers should be considered made where there are high noise and vibration generating activities near receivers. As a guide work should be carried out in continuous blocks that do not exceed 3 hours each, with a minimum respite period of one hour between each block. The actual duration of each block of work and respite should be flexible to accommodate the usage of and amenity at nearby receivers. The purpose of such an offer is to provide residents with respite from an ongoing impact. This measure is evaluated on a proposal-by-proposal basis, and may not be applicable to all proposals.	RO
Respite period 1	Out of hours construction noise in out of hours period 1 shall be limited to no more than three consecutive evenings per week except where there is a Duration Respite. Work during these periods of work should be separated by not less than one week and no more than 6 evenings per month.	R1
Respite period 2	Night time construction noise in out of hours period 2 shall be limited to two consecutive nights except for where there is a Duration Respite. For night work these periods of work should be separated by not less than one week and 6 nights per month. Where possible, high noise generating works shall be completed before 11 pm.	R2
Duration respite	Respite offers and respite periods 1 and 2 may be counterproductive in reducing the impact on the community for longer duration proposals. In this instance and where it can be strongly justified it may be beneficial to increase the work duration, number of evenings or nights worked through Duration Respite so that the proposal can be completed more quickly. The proposal team should engage with the community where noise levels are expected to exceed the NML to demonstrate support for Duration Respite. Where there are few receivers above the NML each of these receivers should be visited to discuss the proposal to gain support for Duration Respite.	DR
Alternative accommodation	Alternative accommodation options may be offered to residents living in close proximity to construction works that are likely to experience highly intrusive noise levels (CNVG Tables C1-C3). The specifics of the offer will be identified on a proposal-by-proposal basis. Additional aspects for consideration shall include whether the highly intrusive activities occur throughout the night or before midnight.	AA
Verification	Please see CNVG Appendix F for more details about verification of Noise and Vibration levels as part of routine checks of noise levels or following reasonable complaints. This verification should include measurement of the background noise level and construction noise. Note this is not required for proposals less than three weeks unless to assist in managing complaints.	V

Table 5 Triggers for additional mitigation measures

Perception	dBA above RBL	dBA above NML	AMM
All hours			
75 dBA or greater	-	-	Notification, Verification, Respite offers
Standard hours: Mon to Fri (7am-6pm), Sat (8am-1pm), Sun / pub hol (no work)			
Noticeable	5 to 10	0	-
Clearly audible	11 to 20	1 to 10	-
Moderately intrusive	21 to 30	11 to 20	Notification, Verification
Highly intrusive	> 30	> 20	Notification, Verification
OOHW Period 1: Mon to Fri (6pm-10pm), Sat (7am-8am & 1pm-10pm), Sun / pub hol (8am-6pm)			
Noticeable	5 to 10	5 or lower	-
Clearly audible	11 to 20	6 to 15	Notification, Respite period 1, Duration respite
Moderately intrusive	21 to 30	16 to 25	Notification, Verification, Respite period 1, Duration respite
Highly intrusive	> 30	> 25	Notification, Verification, IB, Respite period 1, Duration respite, SN
OOHW Period 2: Mon to Fri (10pm-7am), Sat (10pm-8am), Sun / pub hol (6pm-7am)			
Noticeable	5 to 10	5 or lower	Notification
Clearly audible	11 to 20	6 to 15	Notification, Verification Respite period 2, Duration respite
Moderately intrusive	21 to 30	16 to 25	Notification, Verification IB, SN, Respite period 2, Duration respite
Highly intrusive	> 30	> 25	Notification, Verification, AA, IB, SN, Respite period 2, Duration respite

As part of assessment under the CNVG-R, the standard TfNSW mitigation measures are expected to be implemented. These standard mitigation measures are provided in Appendix A

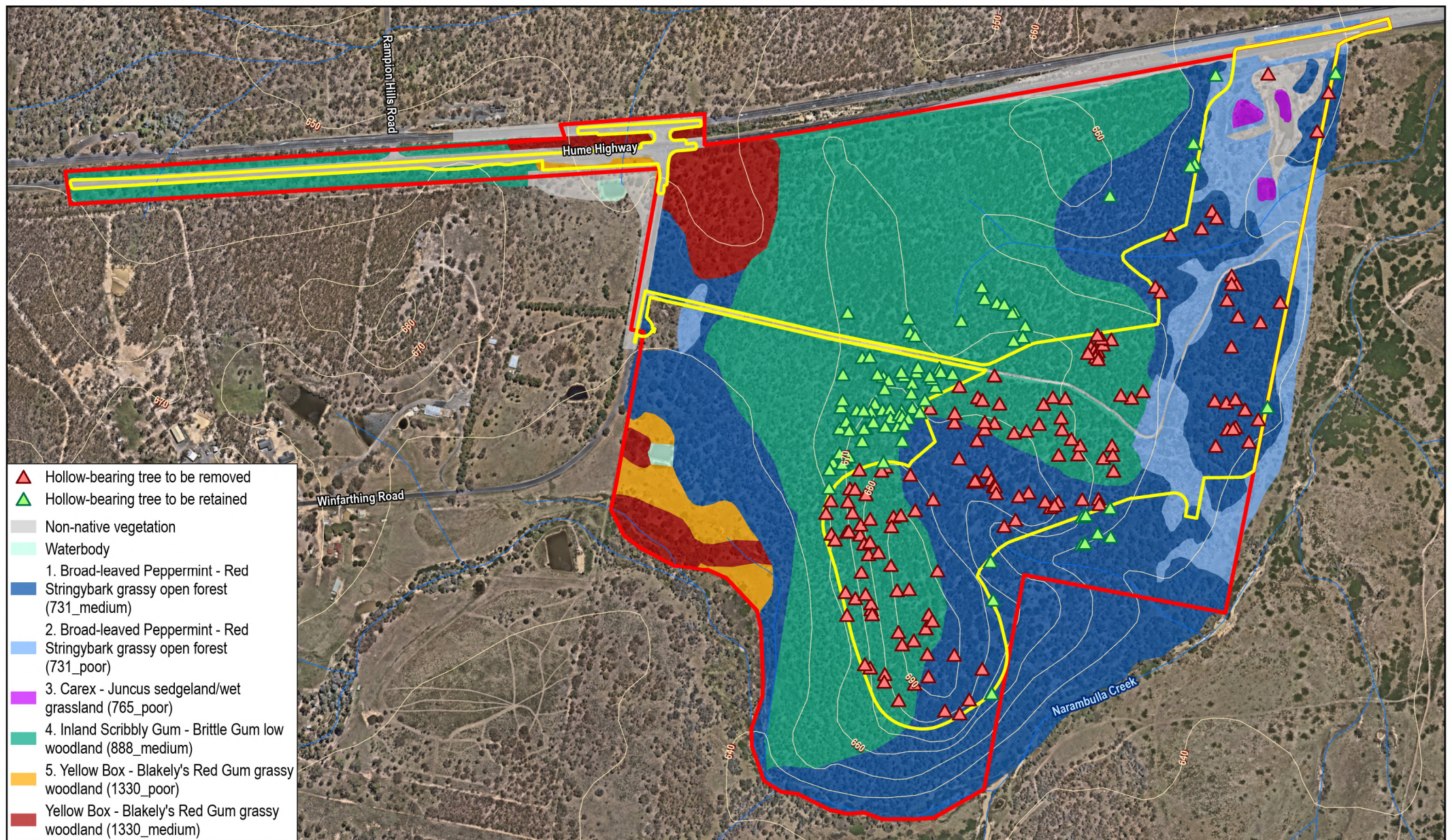
6. Conclusion

Based on the DPHI request for additional information, GHD has prepared this short report to provide more clarity around the likely out of hours working hours, conducted a sleep disturbance noise assessment, and provided further noise mitigation measures, with reference to the TfNSW CNVG-R.

Given that the sleep disturbance assessment predicts compliance with the adopted criteria, and that further noise mitigation measures have been recommended in accordance with the CNVG-R, the Request for Additional information issue regarding out of hours noise is considered to be resolved.

Attachment 3

Hollow Bearing Trees



Legend

- Study area
- Proposal site
- Waterways
- Surface contours (10m)

Paper Size ISO A4
 0 50 100 150 200
 Metres

Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55



Marulan Quarry
Biodiversity Development Assessment
Report Addendum

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 Revision No. **-**
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Hollow-bearing Trees

FIGURE 1

Attachment 4

Preliminary Site Investigation (separate file)