

2 August 2023

Department of Planning & Environment Locked Bag 5022 Parramatta NSW 2124

APPLICATION NO: SSD-10432 (Our Ref. 25-2023-10-1)

PROPOSAL: Stone Ridge Quarry Project

PROPERTY: 150 Italia Road, BALICKERA (LOT: 65 DP: 753200)

Attention: James McDonough

Dear Sir,

Thank you for your correspondence dated 16 June 2023 requesting Council's comments regarding the submitted Environmental Impact Statement (EIS) dated 25 May 2023, for the Stone Ridge Quarry Project, located at 150 Italia Road, Balickera.

On 18 March 2020, Port Stephens Council (Council) staff were briefed by The Department of Planning and Environment on this project, which has a direct impact on areas of Port Stephens.

It is understood the proposed development will seek approval as State Significant Development for the purpose of extracting hard rock resource from land within the Wallaroo State Forest. The Project Area occupies 139 ha of land; including extraction, processing, stockpiling area and buffers, with a disturbance area of approximately 79 ha. The Project would produce up to 1.5 million tonnes per annum (Mtpa) of saleable quarry product with approval sought for an initial 30-year quarrying period.

On review of the proposal and documentation, Council makes the following comments that should be taken into consideration as part of the assessment by the Department of Planning, Industry and Environment (DPIE).

Ecology

Whilst the project justification for supply of high demand rock quarry products is acknowledged, the current project footprint has not demonstrated adequate avoidance of impacts in accordance with the requirements of the *NSW Biodiversity Conservation Act 2016* (BC Act). There are several impacts (direct and indirect) associated with the project that are likely result in long-term irreversible effects on a number of threatened species and ecological communities. Of particular concern are the potential long-term impacts on:



- Roosting microbats in the Balickera Tunnel removal of foraging habitat, and vibration impacts to breeding/roosting habitats
- The local Kings Hill Koala Hub population habitat connectivity loss and cumulative removal of foraging habitat
- Habitat connectivity particularly cumulative impacts
- Groundwater drawdown indirect impacts to Endangered Ecological Communities (EECs) and threatened species

A reduced development footprint is recommended to address the above concerns as discussed in further detail below.

Avoid and minimise

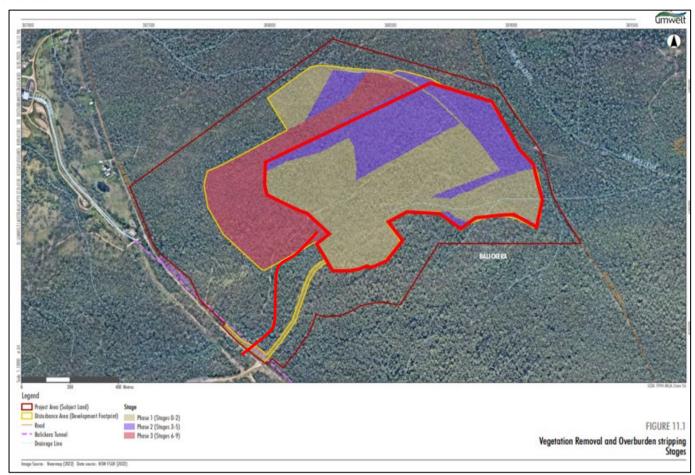
In accordance with the *Biodiversity Conservation Act 2016*, the *Biodiversity Conservation Regulation 2017* and the Biodiversity Offset Scheme (BOS), proponents must demonstrate that the hierarchy of avoid, minimise and then offset has been applied. The current project design currently does not demonstrate adequate application of the BC Act avoidance hierarchy. It is recommended that the project footprint be reduced in the northern pit area, Stages 6 – 9 and access road relocated, to avoid and minimise impacts on a number of high biodiversity values including:

- Subtropical Coastal Floodplain Forest of the New South Wales North Coast Bioregion Endangered Ecological Community & River flat eucalypt forest Endangered Ecological Community
- Rusty Greenhood Orchid (Pterostylis chaetophora)
- Squirrel Glider (*Petaurus norfolcensis*), Brush-tailed Phascogale (*Phascogale tapoatafa*) and Koala (*Phascolarctos cinereus*)
- Vibratory impacts on Balickera Tunnel threatened microbat roosting/breeding habitats and direct impacts to foraging habitats.
- Extensive groundwater drawdown impacts on Groundwater Dependant Ecosystems and threatened species habitat.
- It is noted that surveys are currently being undertaken for Corybas dowlingii and Powerful Owl. If these species are recorded on site, impacts should be avoided and minimised accordingly.

Impacts associated with proposed stages 6 – 9 of the project are highly unpredictable with regards to vibration impacts to roosting microbats within the Balickera Tunnel, and wider groundwater drawdown impacts. As there is a lack of scientific certainty for these potential impacts, the precautionary principle must be applied and impacts considered to the fullest extent.

The below figure shows an indicative reduced footprint based on Council's interpretation of how the BC Act avoidance hierarchy should be applied.





Recommended reduced project footprint and access road relocation indicated in bold red outline

Balickera Tunnel

Surveys undertaken for the Biodiversity Development Assessment Report (BDAR) are currently insufficient to determine breeding habitat for the following species credit species of microbat:

- Little Bent-winged Bat (Miniopterus australis)
- Large Bent-winged Bat (Miniopterus orianae oceanensis)
- Eastern Cave Bat (Vespadelus troughtoni)

The BDAR relies upon the findings of the Hunter Water Species Impact Statement (SIS) (EcoLogical Australia 2021) to support claims that the Balickera Tunnel does not provide breeding habitat for the microbat species listed above. However, the SIS, undertook surveys in accordance with the DECCW 2008 survey guidelines, which have now been replaced by the 'species credit threatened bats and their habitat survey guidelines' (OEH 2018). Consequently, both the survey effort undertaken in the BDAR, and the SIS is insufficient to meet BAM requirements for exclusion of the above listed species credit species of microbat.

If this roost is lost or significantly altered by the project, the impact to this shelter resource that facilitates the breeding cycle of these sensitive species should be

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considered serious and irreversible. The potential vibratory impacts associated with proposed stages 6-9 of the project are highly unpredictable and lack scientific certainty. Consequently, the precautionary principle must be applied and potential impacts assessed in detail, or the project footprint reduced to avoid impacts (remove stages 6-9).

Groundwater drawdown

Removing stages 6 – 9 from the project is recommended to ensure that impacts associated with groundwater drawdown and groundwater dependent ecosystems is avoided. The area of likely groundwater drawdown is extensive, as shown on Figure 4.4 of the BDAR, and will impact vegetation, habitat quality and the species that rely on these habitats. The BDAR states that there is an additional 82.88 ha of vegetation that forms potential Groundwater Dependent Ecosystems within the modelled groundwater drawdown impact area. It is predicted that groundwater drawdown will modify vegetation types towards more dry adapted species as stated in the EIS:

"Any impacts on vegetation associated with groundwater drawdown would be a reduction in species abundance of species with higher groundwater dependence and a succession towards drier vegetation communities such as those present in the higher elevation areas away from the shallow slope areas".

Groundwater drawdown is also likely to impact several threatened species:

- Koalas obtain the vast majority of their water from the leaves of the eucalypts that they feed on. Groundwater drawdown will directly impact leaf water content, leaf production and the nutrition value of foliage.
- Nectar production is also likely to be impacted, which has the potential to impact a
 wide range of nectar dependent threatened species including the Grey-headed
 Flying-fox and Squirrel Glider.
- Rusty Greenhood Orchid (*Pterostylis chaetophora*) requires seasonally moist conditions, which are likely to be impacted by groundwater availability and depth.

The EIS concludes that groundwater impacts are not expected to have any impacts on potential GDEs. This contradiction outlines the uncertainty of the predicted impacts. The extent of and severity of indirect impacts associated with groundwater drawdown has not been adequately addressed or calculated.

Cumulative and prescribed impacts

The land bridge over the Balickera Tunnel is the main north-south connectivity point for terrestrial fauna west of the Pacific Highway, due to the barrier to movement posed by the Balickera Canal. This location is considered a 'pinch-point' and is of very high importance in maintaining genetic linkages for local populations of threatened species, particularly the Kings Hill Koala Hub local population. The proposed quarry is located directly adjacent to this 'pinch-point' and centrally located within the main north-south corridor. The north-south corridor is cumulatively impacted by developments (including other quarries) south of Italia Road. The further reduction of this corridor should be considered highly significant, providing further justification for a reduced project footprint.



As detailed in Section 2.3 of the Biodiversity Assessment Method 2020 (BAM), prescribed impacts are often difficult to quantify or offset, as they often affect biodiversity values that are irreplaceable; consequently, avoiding or minimising such impacts is critical. Prescribed impacts of the project include:

- Human-made structures (Balickera Tunnel)
- Habitat connectivity, particularly impacts on the Kings Hill Koala Hub population
- Water bodies, water quality and hydrological processes
- Vehicle strikes (proposal will result in a 40% increase in heavy vehicle movements)

These prescribed impacts have not been adequately addressed and require detailed consideration, quantification and assessment in accordance with the BAM. Additionally, any uncertain impacts require the preparation of an adaptive management plan in accordance with Section 8.5 of the BAM.

A cumulative impact assessment is required to address all known projects that have the potential to impact on the local population of koalas. This includes, but is not limited to, the following projects:

- Seaham Quarry expansion SSD
- Eagleton Quarry SSD
- Deep Creek Quarry SSD
- Kings Hill Development and associated infrastructure
- Balickera Canal and Pacific Highway

Council, is concerned that cumulatively these impacts to habitat connectivity for terrestrial fauna species could result in a serious and irreversible impact (SAII) to the Port Stephens Koala population.

Offset and mitigation

It should be considered whether it may be appropriate for the establishment of a Biodiversity Stewardship Site on the retained lands and suitable adjacent lands (in consultation with NSW Forestry), to ensure that retained lands and biodiversity corridors will be adequately managed and maintained in perpetuity in this critical 'pinch point'.

To minimise the risk of the project resulting in a serious and irreversible impact, further investigations into feasible options for improving connectivity should be conducted such as constructing land bridges over the Balickera channel on Hunter water lands or land bridges/connectivity devices over the Pacific Highway to reconnect Hunter Water lands/state forestry lands/NPWS lands or similar.

Traffic and Transport

An enforceable undertaking will be required to ensure that all heavy vehicles use the left-in/left-out of Italia Road. The Transport Impact Assessment has not identified how physically this can be achieved.



Consideration should be given to banning all heavy vehicle right turns from Italia Road to the Pacific Highway and not just heavy vehicles from the proposed Stone Ridge Quarry, in the interests of road safety. The Transport Impact Assessment notes that this intersection treatment forms part of a separate assessment and approval process. The design of the upgrades at this intersection should be considered as part of this project under mitigation measures. Approval from TfNSW will be required for any upgrade works on the Pacific Highway. As such, SIDRA models should reflect this banning of all heavy vehicle right turns in and out of Italia Road and redistribution of all the existing, the proposed (Stone Ridge Quarry) and future (Eagleton Quarry) heavy vehicle to left-in-left-out arrangement.

The TIA has not identified any heavy vehicle north/south traffic distribution split on Pacific Highway. It assumed all the heavy vehicles will have origin and destination towards south-west of the site. Some heavy vehicles split need to be considered for north-eastern origin and destinations. As such, the impact of heavy vehicle U-turns at the interchange of the Pacific Highway with Richardson Road should be assessed/modelled.

The proposed channelisation treatment at the quarry access road off Italia Road is considered satisfactory and could cater for the right turning traffic for the life of the quarry. However, the existing Basic Left Turn (BAL) treatment for the Boral Quarry Access has been removed from the proposed design and should be included in the design.

The TIA or EIS should include a discussion on alternate design options that were previously proposed for the intersection, including the grade separated interchange and the justification for the selected intersection design.

The cumulative traffic impacts of the development with consideration to: truck volumes, congestion, noise, road safety and road maintenance from other existing and proposed quarries in the locality requires further assessment. All traffic mitigation measures should be clearly outlined in the Transport Impact Assessment, and nearby residents and community groups should be consulted.

A revised TIA addressing the above comments/concerns need to be submitted to further assess this application.

Drainage and Water Quality

Council acknowledges the applicant has provided sufficient detail for DPE and Hunter Water to make an informed assessment on the stormwater and groundwater impacts. Council has no further comments or suggested conditions in this regard.

Heritage

Council acknowledges the applicant has provided sufficient detail for DPE to make an informed assessment on heritage impacts. Council notes the EIS indicates no Aboriginal objects or areas of archaeological potential were identified during the survey, and the entirety of the Project Area was considered to be of low archaeological potential.



Noise

Council acknowledges the applicant has provided sufficient detail for DPE to make an informed assessment on noise impacts. Council notes that provided appropriate management, compliance and validation monitoring is adopted as recommended in the Noise Impact Assessment (NIA) and continues through the life of the activity, it is considered any potential noise impacts can be managed appropriately. This is on the assumption that equipment and activities identified for the purpose of the operational noise assessment remains the same, or where applicable quitter equipment can be adopted.

Notwithstanding, the potential impacts from blasting at the site where the blasting may overlap with blasting activity from neighbouring quarry sites is unclear. Noting the proposed development will generate significant noise and vibration from drill and blast extraction, the cumulative impacts from other existing and proposed quarries in the locality should be further assessed. Any mitigation measures should be clearly outlined in the NIA, and nearby residents and community groups should be consulted.

Air Quality

Council acknowledges the applicant has provided sufficient detail for DPE to make an informed assessment on air quality. The proposed development has the potential to impact local air quality from the drill and blast extraction methods, crushing and screening, earthworks, erosion, stockpiling and transport of materials and combustion of diesel fuel. Air quality with consideration to the cumulative impacts from other existing and proposed quarries in the locality should be further assessed. Any mitigation measures should be clearly outlined in the Air Quality Assessment, and nearby residents and community groups should be consulted.

Social Impact

Council acknowledges the applicant has provided sufficient detail for DPE to make an informed assessment on social impact. Social impact with consideration to the cumulative impacts from other existing and proposed quarries in the locality should be further assessed. Any mitigation measures should be clearly outlined in the Social Impact Assessment, and nearby residents and community groups should be consulted.

Community Consultation

It is expected the proposal will attract substantial community interest and likely objection, as evidenced by the community engagement undertaken to date and recent media coverage. Consultation should be undertaken with affected landholders surrounding the development and community groups in accordance with Undertaking Engagement Guidelines for State Significant Projects (DPIE, 2021). The consultation should be comprehensive and any concerns clearly addressed as part of the EIS.



Development Contributions

Section 7.11 (haulage) contributions apply whereby the Developer is charged a per tonne / kilometre rate. This is because extractive industries generate significant truck movements which impact the road performance and conditions along haulage routes. To offset the impact of haulage associated with mining and the extractive industry, the Port Stephens Local Infrastructure Contribution Plan (LIC) Plan authorises the consent authority to apply a haulage contribution rate where an application is made for such a use.

It should be noted that the haulage rate will apply to the proposed haulage route for the life of the development (subject to CPI amendments).

The haulage route for this quarry is stated as being 1.6km long, however this should be verified.

It is noted that the Developer along with two other quarry operators will upgrade the Italia Road and M1 intersection. This should not be in lieu of contributions.

Council therefore requests any determination include a condition for payment of contributions to Council in accordance with the LIC plan prior to commencement (this would include haulage levies to fund the maintenance of local roads proposed to be included in the haulage route or the capacity for the applicant to submit a variation to this rate where it is justified by a Traffic and Transport Economic Study).

It is requested Council be consulted prior to the imposition (or exclusion of) any contributions conditions that impact local infrastructure. This is because the LIC plan is amended from time to time and an amendment regarding haulage is currently underway. The rate include below may also change in as part of this.

Recommended Condition

For the life of the project, the Proponent must pay Council \$0.086/t/km (increased annually on October 1 each year, in accordance with CPI) of extractive material transported from the site on a quarterly basis, in accordance with the Port Stephens Council Development Contributions Plan for the maintenance of Italia Road. Each payment must be:

- a) Based on weighbridge records of the quantity of extractive material transported from the site quarterly and those records are to be provided to Council within 14 days of the end of the relevant quarter;
- b) Paid within 21 days of receipt of the invoice received from Council; and

Note: The amount of contribution payable under this condition has been calculated at the date of consent. In accordance with the provisions of the Contributions Plan, this amount must be indexed at the time of actual payment in accordance with the applicable Index.



Thank you for the opportunity to comment on the EIS for the Stone Ridge Quarry Project. I trust that the above information will provide an appropriate basis to inform the assessment of the application. Should you have any further enquires or if you wish to discuss the application, please contact Isaac Lancaster on (02) 4988 0566 or email isaac.lancaster@portstephens.nsw.gov.au

Yours, Faithfully

Steven Peart Group Manager Development Services Port Stephens Council

