

31/05/2026

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Submitted via Major Projects Portal

E: ethan.brice@dpie.nsw.gov.au

Att: Ethan Brice

Dear Ethan,

**Re: Response to Request for Additional Information – Barina Hard Rock Quarry
Modification 3**

The following reviews and responds to the Department of Planning, Housing and Infrastructure (DPHI) request for additional information of 30 March 2026 (refer to **Table A**).

In summary.

Quarry Traffic recommencement / Collector Road Pavement Assessment

- Collector Resources provides additional information on the state of Collector Road justifying it's reduced use for construction traffic. Further assessment of the condition and remaining life of the pavement of Collector Road has been completed (APS, 2026) which concluded the pavement of Collector Road is sufficient for at least 5 years traffic (existing + quarry).
- Collector Resources engaged with the two local Council's (Upper Lachlan Shire Council and Queanbeyan-Palerang Regional Council) seeking consideration of the pavement assessment. Both Council's indicated reluctance to provide this technical assessment based on instruction from the elected Council.
- In lieu of technical assessment of this analysis by the two local Council's (Upper Lachlan Shire Council and Queanbeyan-Palerang Regional Council), peer review of the pavement assessment and analysis was commissioned. This peer review (RGS, 2026) confirmed the conclusions of APS (2026), however, applied more conservative

modelling parameters to refine the advice to sufficient pavement life for 2.5 years (existing + quarry traffic).

- Collector Resources has agreed to implement all recommendations of APS (2026) and RGFS (2026) prior to commencement of quarry production.

Copies of APS (2026) and RGS (2026) are included with this response.

A copy of the transcript of the meeting between Collector Resources, Irwin Environmental Management, Upper Lachlan Shire Council and Queanbeyan-Palerang Regional Council on 22 April 2026 can be supplied on request.

Water Discharge

- Collector Resources is committed to the collection of data as part of a water quality objective assessment in accordance with the NSW Water Quality Objectives (NSW WQO), Australian and New Zealand Guidelines for fresh and Marine Water Quality (ANZG 2018).
- In lieu of agreement to interim WQOs by the EPA, Collector Resources commits to nil discharge from the Quarry Site with runoff from disturbed areas of the quarry collected and stored within on-site water storages (including Pit 2).
- It is requested that any condition related to nil discharge, notes a discharge point may be included subject to the completion of a water quality objective assessment to the satisfaction of the NSW EPA.

Site Layout

- Figures have been updated to identify the proposed interim location for Quarry Site office, amenities and weighbridge, being the location used for the previous quarry operations approved by DA 1-01-2000.
- On confirmation of the acceptability of the updated figures, the Consolidated Project Description will also be updated to reflect these figures.

Copies of the updated Project Description, including the modified and additional figures, is attached.

Secondary Egress Route

- There is a separate entrance from Collector Road to Lot A DP86342, however, this does not form part of the Quarry development. It would be available to on-site personnel in the event of emergency preventing egress from the Quarry Site Entrance.

I trust the information supplied in response to the Department's request is sufficient to allow for completion of assessment and determination of the application.



Table A Review and Response to Request for More Information

Issue	Department Comment	Action requested	Response
1	Traffic I note the modification proposes to replace Schedule 2, Condition 8.1(d) with the following: “From the date of determination of Modification 3, the Applicant must not undertake road haulage of quarry products until a Voluntary Planning Agreement (VPA) is reached with the relevant local Council(s) and must only undertake road haulage from the quarry access to the Federal Highway in accordance with the VPA” The draft VPA requires Collector Road to be upgraded within 2 years of the re-commencement of operations (with delays beyond control of the developer excluded from this timeframe) and permits a reduced haulage of 70 movements per day during the upgrade. Schedule 2, Condition 8.1(d) was introduced as part of modification 2, based on the Department’s assessment which determined that haulage would not be appropriate on Collector Road prior to its upgrade.	There is no justification or assessment within the modification report (or related documents) to support the proposed resumption of haulage prior to the upgrade of Collector Road. A thorough assessment, and appropriate council support would be required for the Department to consider the proposed change to Schedule 2, Condition 8.1(d).	Collector Resources engaged Aim Pavement Solutions (APS) to provide inspection, testing and analysis of the current road to support use by Quarry trucks (at 50% production capacity) (APS, 2026). APS is a locally based (Queanbeyan) pavement consultant and designer who regularly provide pavement assessment and design work for local councils (Queanbeyan-Palerang, Yass Valley, Eurobodalla) and TfNSW. APS (2026) included physical inspection, physical testing of the pavement (dynamic cone penetrometer [DCP]) and modelling using the CIRCLY Pavement Design Software. CIRCLY is a nationally recognised pavement design tool used to determine appropriate layer thicknesses for roads to perform over their design life. It forms part of the Austroads – Pavement Design Guides framework and is widely used across Australia for road pavement design. Section 9 of APS (2026) provides a detailed explanation of the inputs and outputs of the CIRCLY modelling. In summary, CIRCLY considers the thickness and aggregate size of the granular pavement layers, California Bearing Ratio (CBR) of the pavements (based on DCP testing) and subgrade, design traffic level (as Equivalent Standard Axles (ESAs)), traffic load distribution and other factors to predict a Cumulative Damage Factor (CDF) for the pavement. CDF compares the design traffic demand to the pavement’s predicted capacity with a resit of ≤ 1.0 representing satisfactory design life. Based on physical inspection, testing and modelling, APS concludes the following. - With the exception of three locations (at chainages 0, 300 and 1 150), the pavement of Collector Road is in reasonable condition, with some cracking, minor pot holes and edge breaks. Maintenance recommendations are provided for the three identified locations. - There is otherwise no pavement deformation, which suggests the existing base materials still have structural capacity. - CIRCLY modelling predicts the CDF to be 0.1197 for the design traffic of 162,000 Equivalent Standard Axles (ESA’s), being 5 years traffic (existing + quarry traffic). APS (2026) concludes “the pavement is predicted to have substantial remaining capacity against the subgrade vertical strain (rutting/deformation) criterion.” Collector Resources and Irwin Environmental Management met with personnel from Upper Lachlan Shire Council (ULSC) and Queanbeyan-Palerang Regional Council (QPRC) on 22 April 2026. In the meeting, Collector Resources requested input from ULSC engineering personnel as to the proposed temporary and restricted use of the road whilst design and upgrade were completed (and with reference to additional assessment and analysis completed by APS). It was made clear in the meeting that ULSC was not in a position to provide further advice on the matter of the road, technical or otherwise, until such time as a determination of the proposed modification was made by DPHI or the elected Council of ULSC changed their position. This position was echoed by QPRC. A copy of the transcript is available on request. In lieu of assessment, confirmation and endorsement of the APS (2026) analysis by Council engineering personnel, Collector Resources engaged a third party (Regional Geotechnical Solutions¹) to provide peer review of APS (2016). Regional Geotechnical Solutions (RGS) completed the following. - Reviewed APS (2026) and previously completed assessment of Indesco (2023) to obtain information on the subject section of the road. - Reviewed and assessed the approach, outcomes and conclusions of APS (2026) with respect to the adequacy of the existing pavement to perform following recommencement of the quarry. - Reviewed recommendations on drainage and construction requirements. - Provided advice on further analysis and testing required to support final road upgrade and pavement design. RGS (2026) provides support for the outcomes of APS (2026) with respect to the adequacy of the pavement to support quarry traffic. Where RGS (2026) identified uncertainty in the identification of parameters for design life assessment (by APS), RGS applied more conservative values to repeat design life assessment. For example, RGS (2026) applies more conservative values to base and subbase/select layer thicknesses for design life analysis. Following adoption of more conservative parameters for pavement, base and subbase materials, CIRCLY analysis completed by RGS (2026) predicts a CDF of 0.4958 (< 1.0) over a modified design life of 2.5 years. RGS supports the conclusion of APS (2026) that the road is appropriate for short term Quarry haulage for a design life of 2.5 years subject to targeted pavement repair and remediation. Collector Resources remains committed to providing for the upgrade of Collector Road to meet the required Council road design standards to accommodate the life of Quarry operations. Collector Resources commits to completing the recommended remediation works of these assessments (refer to Section 8 of APS, 2026 and Section 6 of RGS, 2026). prior to commencement of Quarry production traffic. Given the local Councils have indicated that (based on the position taken by the elected Council’s) technical engineering advice will not be provided by staff, Irwin Environmental Management sought independent technical advice. This advice confirms the existing pavement of Collector Road, subject to implementation of the

¹ Refer to [Regional Geotechnical Solutions](#)



Issue	Department Comment	Action requested	Response
			recommended remedial measures nominated by APS (2026) and RGS (2026), is adequate for the proposed period of restricted haulage whilst road design and construction is completed. On the basis that the pavement is assessed as suitable for immediate and continued use, and on the basis of the commitment of Collector Resources to upgrade the section of Collector Road to be used by quarry vehicles (as evidenced by the proposed Voluntary Planning Agreement), modification to Schedule 2, Condition 8.1(d) as proposed is considered appropriate, reasonable and justified is that it will allow for the recommencement of supply of valuable construction materials, provide for immediate improvement to local road infrastructure, and provide a source for the beneficial use of clean fill materials without unacceptable impact on the local socio-economic setting.
2	Discharge I note that in a median rainfall year, the quarry would require discharge of an estimated 10.3 ML of water. Additionally, I note that in its advice on the Submissions Report (23 January 2026), the EPA recommended a detailed water quality objective assessment be prepared prior to consideration of an approved discharge point on the Environment Protection Licence.	Given the discharge requirements of the quarry, please prepare a detailed water quality objective assessment in accordance with the NSW Water Quality Objectives (NSW WQO), Australian and New Zealand Guidelines for fresh and Marine Water Quality (ANZG 2018). Please note the Department is consulting the EPA regarding your proposal for interim criteria.	As noted in response to the request for further information from the NSW Environment Protection Authority (EPA), Collector Resources is committed to the collection of data as part of a water quality objective assessment in accordance with the NSW Water Quality Objectives (NSW WQO), Australian and New Zealand Guidelines for fresh and Marine Water Quality (ANZG 2018). Collector Resources considers the establishment of interim water quality criteria based on Drinking Water standards (as per the National Water Quality Management Strategy, Australian Drinking Water Guidelines 6, 2011, Version 4.0, June 2025 (NHMRC, 2025) as reasonable and anticipated acceptance of this by the EPA. In lieu of agreement to interim WQOs by the EPA, Collector Resources commits to nil discharge from the Quarry Site with runoff from disturbed areas of the quarry collected and stored within on-site water storages (including Pit 2).
3	Site layout I note that the proposed stockpile areas shown in Figures 3.1 and 3.3 of the Mod Report are general areas which appear to sit over an internal road, office, weigh bridge, amenities and an existing water storage.	Please provide an updated figure which shows the specific location of the proposed stockpiles in relation to site infrastructure and drainage lines.	Collector Resources notes the proposed Office and Amenities Area (including a weighbridge) presented in the figures of the Modification Report are on the constructed South Stockpile Area. While the South Stockpile Area is under construction, Collector Resources will maintain an interim Office and Amenities near the entrance to Pit 1, i.e. where these were located during the previous operation of the Quarry. Figures have been updated to identify this location and to scale concept arrangements for the Interim and Final Office and Amenities Area included with this response (refer to Figures 3.1, 3.2, 3.3, 3.5a and 3.5b). On confirmation of acceptance, the Consolidated Project Description will also be updated. Initial operations will involve the importation of clean fill material for construction of the South Stockpile Area. These materials will be weighed at source and arrive with weighbridge dockets and VENM / ENM certificates (refer to <i>Section 3.3.4</i> of the Modification Report). As such, a weighbridge will only be required in the Interim location should production and dispatch of quarry products commence prior to establishment of the final Office and Amenities Area on the South Stockpile Area.
4	Secondary egress route Table 3.1 of the modification report states the modification would include a 'secondary route of egress established via the Quarry workshop'. A secondary egress point is not discussed in the detailed description of the mod (Section 3.3.6.3) nor shown in any figures. I note however, a new internal road is proposed which would connect the quarry workshop to the realigned quarry access road and the existing site entrance.	Please clarify whether the modification proposes a second intersection with Collector Road for egress from site.	There is a separate entrance from Collector Road to Lot A DP86342, however, this does not form part of the Quarry development. It would be available to on-site personnel in the event of emergency preventing egress from the Quarry Site Entrance.

In the event further information is required, please do not hesitate to contact me to discuss the matter further.

Yours sincerely,



Alex Irwin

Director / Principal Consultant



Attachments:

Attachment A

- Aim Pavement Solutions Pty Ltd (2026). Pavement Assessment Report Collector Rd – Between Federal Hwy and Barina Quarry, Collector

Attachment B

- Regional Geotechnical Solutions Pty Ltd (2026). Access to Quarry Road Upgrade Project Collector Road, Collector, Review of Previous Reports

Attachment C

- Figure 3.1 (MOD) Modified Quarry Site Layout (Revised)
- Figure 3.2 (MOD) Crushing, Screening and Washing Operations (Revised)
- Figure 3.3 (MOD) Modified Stockpile Area 1 (Revised)
- Figure 3.5a Initial Office and Amenities Area
- Figure 3.5b Modified Office and Amenities Area

