MEMORANDUM

Bioresearches
A Babbage Company

TO:	Kings Quarry Limited	Date:	7 April 2025
COPY TO:	Barker & Associates	Job No:	66172
FROM:	Chris Wedding		

Wildlife Approvals Checklist and information Requirements

This report has been prepared to identify Wildlife Act approval requirements under Section42(4)(h), and how the substantive application complies with these requirements. This report follows Checklist E-Wildlife approval, of the Fast Track Substantive Application Form. It is reproduced here as part of the substantive application. Table 1 provides a list of the ecological documents which form part of the Fast Track consent application and are referred to in this report, and Table 2 provides the information checklist.

This Wildlife Approval application is for the capture and relocation of Native Lizards (including copper skink *Oligosoma aeneum* and forest gecko, *Mokopirirakau granulatus*) and other potentially present native lizard species from the proposed quarry footprint to an adjacent area that will be subject to habitat enhancement, pest management and restoration planting. For the avoidance of doubt, this Wildlife Approval application does not relate to native birds or bats.

Table 1. Documents and associated acronyms referred to within this memorandum

Document name	Acronym
Ecological Impact Assessment	EcIA
Ecological Management Plan (includes subsections to address edge effects, pest management and other fauna, including lizards)	EMP
Quarry Remediation Plans (Appendix 20)	
Terrestrial Ecology Residual Effects Analysis Report	TEREAR
Residual Effects Management Plan	REMP
Consultation Summary Report	
Alliance Ecology peer review memo	
Morphum Environmental peer review memo	
Pest exclusion fencing feasibility Report	

Table 2. Information checklist

Clause, Schedule 7	Information required for an approval described in section 42(4)(h) (Wildlife Act approval), clause 2 of Schedule 7	Application Reference and Response
2(1)(a)	Specify the purpose of the proposed activity	**Document** EcIA: Section 1 & 1.3 The proposal is to capture and relocate native skinks and geckos from within the proposed Kings Quarry Stage 2 area, for the purpose of minimising injury and mortality to protected lizards during vegetation removal. The proposed activity is in response to an application to expand Kings Quarry over 45 years to extract aggregate within the north-Auckland region. As a small area of

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		quarrying is already occurring at the Site ('Stage 1') this new expansion is referred to as Stage 2. Over 45 years, the quarry will gradually be expanded to eventually cover the entire proposed 26.46 ha extent, with fill material from the remainder of the Stage 2 quarry placed back into the A Pit, and remediated as quarrying progresses.
2(1)(b)	Identify the actions the applicant wishes to carry out involving protected wildlife and where they will be carried out (whether on or off public conservation land) Guidance note: Under clause 2(2) if the substantive application is to be lodged by more than 1 authorised person, the reference to the applicant in subclause (1)(b) is to the authorised person who is identified in the application as the proposed holder of the wildlife approval.	**Document** EMP: Section 4 (Lizard and Invertebrate Management Plan) **Figure 1 (of this document) and Figure 12 of EMP :** Kings Quarry and lizard relocation area The applicant proposes to capture and relocate native lizards, including skinks and geckos in accordance with a native lizard and invertebrate management plan, over a period of 40-45 years. The lizards would be captured and relocated from the proposed quarry footprint to an adjacent area that will be subject to habitat enhancement, including pest management and restoration planting (refer Appendix I), and as detailed in the draft EMP. The actions will involve pre-clearance trapping and systematic searches, followed by destructive searches during vegetation removal phase (including searches of felled tree foliage), to ensure all opportunities to relocate protected lizards are taken. These methods are detailed in Section 4.2 of the EMP. The lizards would be released into pest managed and enhanced habitats to the west of the proposed quarry footprint, over the 45-year period. Refer to Figure 10 of the EMP. Release site enhancement is detailed in Section 4.4.3 of the EMP and overarching pest management design is contained in Section 11 (Mammalian Pest Control Plan) of the EMP. The activities will all be undertaken on the applicant's land (Kings Quarry Limited), not public conservation land.
2(1)(c)	An assessment of the activity and its impacts against the purpose of the Wildlife Act	**Document** EcIA: Section 5 and Section 6: Habitat loss: Section 5.3.3 Direct effects on lizards: Section 5.3.3.2.2 **Document** EMP: Section 4 (Lizard and Invertebrate Management Plan), 5 (Avifauna Management Plan) and 6 (Bat Management Plan). The Wildlife Act protects animals classed as wildlife and controls how people interact with wildlife. The application is relevant to the Wildlife Act because it proposes vegetation removal activities that provide habitat to protected wildlife species, and these species may be killed or injured if unmanaged. These species are identified as native lizards, native birds and long tailed bats (*Chalinolobus tuberculatus*). Section 6 of the EcIA identifies actions that will be undertaken to avoid and minimise impacts on protected wildlife and these are further detailed in the EMP, specifically Section 4 (lizards and invertebrates); 5 (avifauna) and 6 (long-tailed bats).

		Section 5 of the EMP specifically proposes capture and relocation of native lizards from habitats to protected and enhanced habitats to minimise mortality where they may occur within vegetation and habitats of the Project area. We note that wildlife approval is requested in relation to the native lizards only given appropriate mitigation measures will be implemented in relation to native birds and long tailed bats
2(1)(d)	List protected wildlife species known or predicted to be in the area and, where possible, the numbers of wildlife present and numbers likely to be impacted	**Document** EMP: Section 4.4.2 **Lizard species confirmed present (for all species, a moderate proportion of these populations is considered to be affected)**: Copper skink, *Oligosoma aeneum* ≥ 200 individuals Forest gecko, *Mokopirirakau granulatus* ≥ 40 individuals **Lizard species with potential to be present (not recorded from survey):** Ornate skink, *Oligosoma ornatum* ≤ 20 individuals Pacific gecko, *Dactylocnemis pacificus* ≤ 20 individuals Elegant gecko, *Naultinus elegans* ≤ 20 individuals **Lizard species unlikely to be (not recorded from survey):** Striped skink (*Oligosoma striatum*) < 5 individuals Other species which may be present within the area but for which a wildlife act authority is not being applied for: Long-tailed bat, *Chalinolobus tuberculatus*, and a range of native bird species as listed in Appendix H, Table 10 and Section 4.3.4 of the EcIA.
2(1)(e)	An outline of impacts on threatened, data deficient, and at-risk wildlife Species (as defined in the New Zealand Threat Classification System	**Document** EcIA: Section 5.3.3.2: Fauna habitat loss and fragmentation Section 5.3.3.2.1: Effects on threatened and at risk species, specifically: 5.3.3.2.1: TAR flora 5.3.3.2.2: TAR lizards 5.3.3.2.3: TAR birds 5.3.3.2.4: long-tailed bats
2(1)(f)	A statement of how the methods proposed to be used to conduct the actions involving protected wildlife will ensure that best practice standards are met	**Document** EcIA: Section 5.3.3.2 and Section 6.2 (Adverse Effects that are Avoided where practicable) Section 6.3 (Adverse Effects that are minimised where practicable) **Document** EMP: Section 4 (Lizard Management Plan), and specifically Section 4.1.1; Section 6 (Bat Management Plan), specifically Section 6.1.1. Table 7 of the EMP addresses the nine principles for lizard salvage and transfer. Best practice standards for managing New Zealand lizards are published in the Department of Conservation document, 'Guidelines and model for producing management plans for New

		Zealand Lizards (prepared by the Department of Conservation)[1]. The recommended content of this document has been applied when developing the supporting documents of this application, particularly the Ecological Impact Assessment and Section 4 of the Ecological Management Plan. The Avifauna Management Plan (Section 5 of the EMP) sets out procedures to avoid non-volant (not flying) nesting native birds (including eggs and chicks) through pre-vegetation removal surveys and monitoring to ensure vegetation that supports an active nest is not removed such that it would cause injury or mortality. The Bat Management Plan (Section 6 of the EMP) sets out procedures to: 1. Minimise the risk of harming bats during tree removal within the Project area, adopting current best practice standards as set by the Department of Conservation's (DOC) Bat Roost Protocols for minimising the risk of felling occupied bat roosts (BRP, version 4, 2024); 2. Provide alternative, suitable artificial roost habitat for bats, both as a precautionary measure and where an active or inactive roost is identified during implementation of Bat Roost Protocols; and 3. Where artificial roost provision is triggered, provide for multiple artificial roost designs, placement and monitoring to support robust research into artificial roost use by bats.
2(1)(g)	A description of the methods to be used to safely, efficiently, and humanely catch, hold, or kill the animals and identify relevant animal ethics processes:	**Document** EMP: Section 4 (Lizard Management Plan) **Section 4.3 of the EMP** applies a multi-tool approach using DOC biodiversity toolbox methods (trapping, systematic searches, and post-trapping destructive searches with machinery- including night searching felled trees to improve opportunities for detection). Section 4.2.3.4: detail on humane handling and temporary containment of any captured lizard. Birds and bats are not proposed to be handled as part of this project, however, Section 5.3.4 (birds) and Section 6.6 (bats) of the EMP details measures to be undertaken should accidental harm occur to birds or bats during vegetation clearance.
2(1)(h)	A statement of the location or locations in which the activity will be carried out, including a map (and GPS coordinates if available)	**Document EcIA: Section 5** **Document EMP: Section 4** **Remediation Plans** The activity will be carried out over an indicative 40-45 year period. The project area is depicted in Figure 1 of the Ecological Impact Assessment, with figures showing the lizard release site in figure 23 of the EcIA (Section 5) and Figure 2 of the EMP (Section 4). This area is also reproduced in Appendix I of this document.

[1] Department of Conservation Lizard Technical Advisory Group (2018). Guidelines and model for producing management plans for New Zealand lizards. Department of Conservation, Wellington. 26 p.

		Detailed information showing staged progression through the Stage 2 area is shown over multiple maps in the Remediation Plans.
(2)(1)(i)	A statement of whether authorisation is sought to temporarily hold or relocate wildlife	**Document EMP Section 4 (Lizard and Invertebrate Management Plan)** Authorisation is sought to relocate wildlife (native lizards) to adjacent enhanced environments. This is identified in Section 4.1.3 of the EMP.
(2)(1)(j)	A list of all actual and potential wildlife effects (adverse or positive) of the proposed activity, including effects on the target species, other indigenous species, and the ecosystems at the site	**Document** EcIA Section 5.3 (Direct Effects) **Document** EMP **Document** REAR **Document** REMP Section 5.3 of the EcIA identifies adverse effects on target and other indigenous species and ecosystems, including ecosystems, flora and fauna. It covers fragmentation, edge effects and provides a more detailed analysis of threatened and at risk species at Section 5.3.3.2: Overall, the proposal will result in the direct loss of 28.97 ha of regenerating forest. Following ecological management, including fauna-specific and buffer planting, significant (moderate and higher) residual effects are expected following permanent loss of forest and habitats. While adverse effects on fauna and flora values are reduced to low through site management (e.g. remediation, buffer planting, targeted management plans as detailed through sections of the EMP), a biodiversity offset would provide for 61.8 ha of revegetation, 60 ha of predator-proof fencing and 57.52 ha of browser control to offset and compensate for the removal of high value indigenous forest ecosystem. The modelled outcomes would result in a significant overall net gain outcome for biodiversity values. This information for offset and compensation is detailed in the REAR (disaggregated biodiversity attributes for offset and compensation modelling) and REMP (Implementation of restoration planting and enhancement).
(2)(1)(k)	Where adverse effects are identified, state what methods will be used to avoid and minimise those effects, and any offsetting or compensation proposed to address unmitigated adverse effects (including steps taken before the project begins, such as surveying, salvaging, and relocating protected wildlife)	**Document** EcIA Section 6 **Document** EMP **Document** Remediation Section 6 of the document EcIA details how the effects management hierarchy is applied to avoid and minimise adverse effects as identified in section 5 of the EcIA. The EMP sets out the specific methods that will be implemented to reduced adverse effects to low levels through avoidance and minimisation. The remediation plans show a staged approach to sequentially remediate the Stage 2 footprint throughout the life of quarry. The overall level of effect on indigenous fauna, including at risk lizards (copper skinks and forest geckos) is assessed as low, following

		management actions to avoid and minimise actual and potential effects (methods / actions detailed in Section 4 of the EMP). Therefore, offset or compensation for these species is not proposed. As set out above, offset and compensation are proposed for the removal of regenerating indigenous vegetation and the high-value habitats they support. This information for offset and compensation is detailed in the REAR (disaggregated biodiversity attributes for offset and compensation modelling) and REMP (Implementation of restoration planting and enhancement).
2(1)(l)	A statement of whether the applicant or any company director, trustee, partner, or anyone else involved with the application has been convicted of any offence under the Wildlife Act	The applicant or any company director, trustee, partner, or anyone else involved with the application has NOT been convicted of any offence under the Wildlife Act.
(2)(1)(m)	A statement of whether the applicant or any company director, trustee, partner, or anyone else involved with the application has any current criminal charges under the Wildlife Act pending before a court	The applicant or any company director, trustee, partner, or anyone else involved with the application do NOT have any current criminal charges under the Wildlife Act pending before a court
2(1)(n)	Provision of proof and details of all consultation, including with hapū or iwi, on the application specific to wildlife impacts	Refer to the Consultation Summary Report attached as Appendix 7 to the Substantive Application
(2)(1)(o)	Provision of any additional written expert views, advice, or opinions the applicant has obtained concerning their proposal	Dr. Matt Baber, Alliance Ecology (Independent Review) Mr. Mark Lowe, Morphum Environmental (Independent Review) Dr. John McLennan, Pest Proof Fences Limited (pest exclusion fencing feasibility report)

Chris Wedding

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Figure 1: Kings Quarry and Lizard relocation area

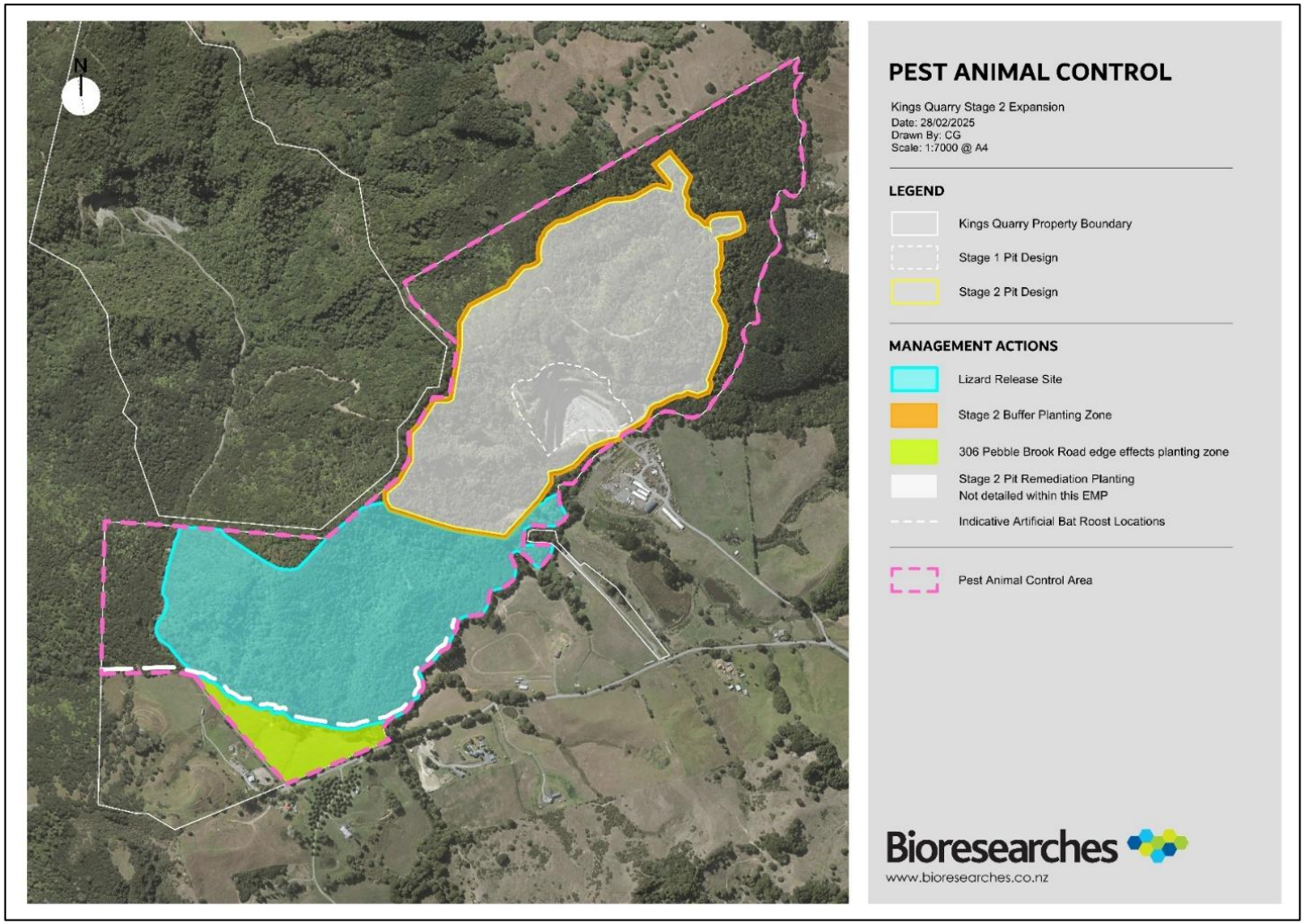

Figure 1. Map showing the location of proposed onsite mitigation (detailed in the EMP and Remediation Plans), including lizard relocation area, pest animal control, weed control and buffer planting.