Memo

To:	Alfred Lison and Aastha Shretha, Kāpiti Coast District Council	**Job No:**	1097366
From:	David Pickett – Tonkin & Taylor Ltd	**Date:**	29 May 2025
cc:	Matt Muspratt – Muspratt Consulting Ltd		
Subject:	Ecological Review for Private Plan Change Application (Change from General Rural to General Residential Zone) at 100 and 110 Te Moana Road, Waikanae		

Please find below our technical review comments of the Ecology Effects Assessment for the proposed private plan change of the properties 100 and 110 Te Moana Road, Waikanae.

Consent number: Not Applicable

DP Number: LOT 1 DP 71916 and LOT 2 DP 71916 C/T 44C/426 PT SUBJ TO QE II OPEN SPACE COVENANT

Relevant reports reviewed:

Relevant sections of the Proposed Plan Change and s32 Report

Appendix 4: Ecological Impact Assessment report (April 2025), RMA Ecology Ltd.

Memo prepared by: David Pickett, Senior Ecologist

Technical review by: Dean Miller, Principal Ecologist

Authorised for issue by: Nick Peters, Project Director

Date of review: 19 May 2025

1 Background

Tonkin & Taylor Ltd (T+T) has received the above supporting documents from Kapiti Coast District Council (KCDC) for review following the formal lodgement of a Private Plan Change (PCC) application. The applicant is seeking a change to the Kāpiti Coast District Council (KCDC) Operative District Plan (2021) for the properties 100 – 110 Te Moana Road, legal description Lot 1 DP 71916, and Part Lot 2 DP 71916. The total area of the site is approximately 5.5 ha. The applicant is requesting a Private Plan Change (PPC) to rezone the land from General Rural to General Residential. The proposed plan change would accommodate 40 – 45 dwelling units.

The site is located in Waikanae, Kapiti Coast, to the north of the Mackays to Peka Peka Expressway ('M2PP'). It was excess land from the M2PP project. It comprises inactive dunes at the southern part of the site, a natural wetland and a constructed pond[1] (protected by the QE II OPEN SPACE COVENANT) in the middle and relatively flat pastureland at the northern part of the site.

[1] Historically a wetland.

Parts of the northern flat site and near the Swamp are considered 'highly productive land' LUC 3 as currently defined in the National Policy Statement on Highly Productive Land 2022 ('NPS-HPL').

The application proposes to have the PPC divided into two stages. Stage 1 applies to the part of the site without 'highly productive land' and Stage 2 applies to the site with 'highly productive land'.

The PPC application requests to rezone the entire site (both Stage 1 and 2) excluding the QE II OPEN SPACE COVENANT from General Rural Zone to General Residential Zone, with no amendments to the District Plan, aside from the maps. Alternatively, due to the restrictions on development on LUC 3 land, the application seeks to rezone the entire site (both Stage 1 and 2) but introduce a 'Deferred Residential Precinct' to Stage 2 land.

As requested by KCDC, T+T is undertaking geotechnical, transportation and ecological review of the received documents. This memo summarises ecological review comments only. Memos for transportation and geotechnical reviews are provided separately to this memo.

Prior to lodgement T+T undertook a review of supporting documents including a 'Ecological Values Assessment' prepared by RMA Ecology Ltd and issued a pre-lodgement memo[2]. The purpose of that review was to identify gaps or inconsistencies in information. T+T noted in its review of the 'Ecological Values Assessment' that the report would need to be updated to include an assessment of ecological effects prior to lodgement of the application. Our pre-lodgement memo outlined fourteen suggestions and recommendations to be addressed prior to lodgement of the PPC. RMA Ecology Ltd has delivered a new report, hereafter the 'Ecological Effects Assessment', that includes an effects assessment to inform the application.

1.1 Review scope

This review focuses on the 'Ecological Effects Assessment' prepared by RMA Ecology Ltd draws on other reports lodged with the application as needed as well as a site walkover undertaken by a T+T ecologist on 16 December 2024 to observe ecological values present on site.

This review covers the methodologies for assessing ecological values, the ecological values findings, and the assessment of adverse effects on ecological values. However, the overall purpose of the review is to understand whether the Applicant has provided sufficient information so that council and the general public can understand:

- The nature of the request in terms of the environmental effects that would arise from the PPC (that is from rezoning the site from General Rural Zone to General Residential Zone).
- The way in which adverse effects may be managed and are if effects can be adequately addressed.
- Whether there are possible alternatives or more appropriate alternative approaches.

2 Review comments

Generally, the Ecological Effects Assessment covers the main ecological values present on this site. As noted above we detailed fourteen recommendations prior to lodgement, many of these were addressed. For our recommendations that have not been addressed, or where we disagree with the reports finding we provide comment in the following sections.

For items needing clarification and/or additional information, these are numbered and highlighted in bold text.

[2] Tonkin + Taylor, 24 January 2025. Memo to KCDC relating to a review of the 'Ecological Values Assessment' report.

2.1 Aquatic ecological values

Section 3.2 of the Ecological Effects Assessment assesses 'stream' features present on the site. The report states that the assessment of stream values has been completed against the Greater Wellington Proposed Natural Resources Plan (PNRP, now operative ONRP) definition for rivers. The report states that no streams are present on the site but does refer to one watercourse as a drain. The report states that the channel was dug in circa 1950s (RMA ecology, current owner, pers comm).

We disagree with the assessment of the watercourse. Based on the GWRC ONRP definitions, and a supplementary guidance note for determining watercourse types[3], we argue that the watercourse should be classified as a highly modified watercourse under the ONRP, and hence a stream, based on the following evidence:

- Aerial imagery from 1956 does not show the drain present on the property.
- Aerial imagery from 1956 shows that where the watercourse is located is within a historic wetland that was larger than the remaining QEII wetland (See Figure 2.1).
- The QEII wetland forms part of the historic Waimeha Stream catchment.
- The water present within the watercourse is ground water or overflow derived from groundwater/shallow aquitard associated with the remaining QEII wetland.
- The watercourse flows into the Waimeha Stream (natural stream).
- The watercourse has a natural source of flow stemming from the QEII wetland and pond

Because the watercourse has a natural source and is part of the catchment of the Waimeha Stream - it is considered a 'river' under the RMA. Additionally, the watercourse is mapped as a highly modified watercourse by GWRC[4].

No other streams are present on site.

The report refers to the watercourse as a drain, as defined in the National Planning Standards 2019, and referred to by the NES-FW. We understand that this may be the case but understand that the GWRC ONRP definitions take precedent.

1. **Please provide evidence that the watercourse does not meet the GWRC Watercourse Types Guidance classification for a highly modified watercourse/stream.**
2. **We recommend that GWRC is contacted to clarify the matter on whether the watercourse is classified as a highly modified watercourse/stream as described in the GWRC Watercourse Types Guidance Note.**

[3] GWRC, 2021. Watercourse-categorisation-guidance-document-v2.pdf.
[4] Regional Highly Modified Streams accessed May 2025.

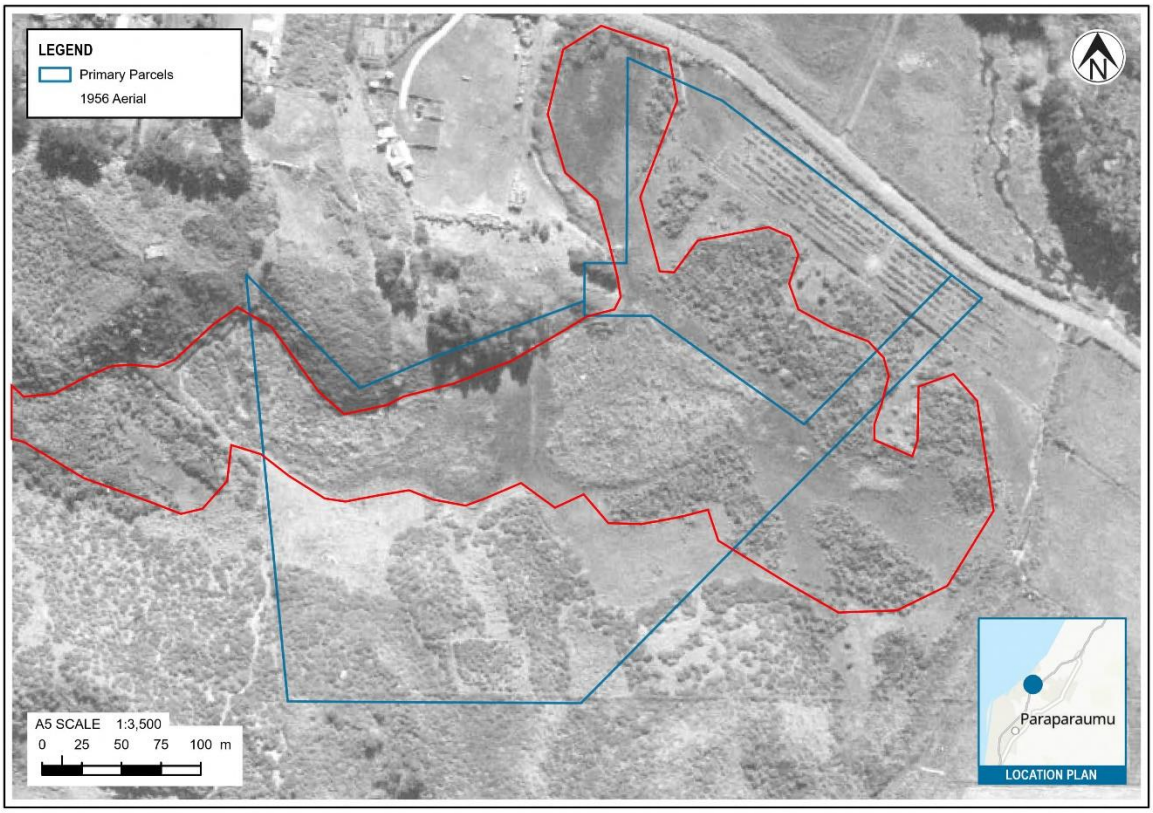

*Figure 2.1: Aerial imagery from 1956 showing our assessment of the likely extent of the historic wetland in **red** on the 100 - 110 Te Moana Road properties to provide context for the watercourse classification.*

2.2 Wetland ecological values

The Ecological Effects Assessment identified one wetland present on the site. It also included the results of 15 vegetation plots along the edge of the QEII boundary. Our site visit in December identified dominant wetland vegetation beyond the delineated wetland boundary that has not been identified in the Ecological Effects Assessment. The Ecological Effects Assessment agrees with our review[5] that during our site visit some areas outside the delineated boundary were dominated by wetland plant species, however the wetland boundary in these areas remains unchanged. We also consider that the pond should be included as part of the wetland because it is historically a wetland and forms part of a wider wetland complex.

We note that while conducting our site visit, we observed that excavations have been undertaken in the watercourse on the property since the site assessment by RMA Ecology (see Photograph 2.1 - Photograph 2.2). The excavations in the watercourse, that runs along the edge of the QEII wetland, have resulted in a drainage of the local water table. Photograph 2.3 and Photograph 2.4 show that the water level within the QEII (K068) wetland has dropped since the RMA assessment in January 2024. No standing water is visible in either Photograph 2.3 and Photograph 2.4. Water marks on vegetation visible in Photograph 2.4 suggest that the standing water level at the time of our site visit was at least 300 mm below normal.

We expect that the excavation of the watercourse has resulted in partial drainage of this wetland and the wider water table. It is likely to have impacted our assessment of wetland values and extent

[5] Tonkin & Taylor Ltd (January 2025). *Ecological Review for Draft Private Plan Change Application at 100 and 110 Te Moana Road, Waikanae.*

on site, and our observations on water tables and wetland boundaries are likely to be underestimated.

Photograph 2.1: Looking west along the watercourse, from the Ecological Effects Assessment (January 2024).

Photograph 2.2: Looking west along the watercourse on 16 December 2024, showing excavated material on the true right bank.

Photograph 2.3: Birdseye view of wetland interior (QEII) showing a reduced water table, 16 December 2024.

Photograph 2.4: Showing the wetland interior (QEII) with reduced water table, 16 December 2024. Lemna disperma (OBL) – usually grows in standing water is evidence of a recent drop in water table.

The Ecological Effects Assessment report notes the following points that in the author's view justify the wetland boundary:

- At the time of the assessment (January) the vegetation surrounding the QEII wetland was mown short, and the ground was dry.
- At the time of the applicant's assessment wetland vegetation was not present due to recent mowing and grazing.
- That *'the site has been grazed for a long time and pasture management is the usual use of the site. It does not operate as a wetland now as the drainage around the site has lowered the water table. In our opinion, this site is not a wetland even if it does occasionally during the year meet the NPS-FM vegetation criteria.'*
- *In our opinion, this site is no longer a functioning wetland and nor does it support a wetland plant community in its normal state.*

We agree that because of the disturbance regime the site no longer supports a wetland plant community in its '*normal state'*. However, we disagree that these areas are not functioning wetlands[6].

We also note, in response to the authors justifications, that wetland vegetation observed during our site visit were likely affected by the recent excavations in the watercourse, lowering the water table. Not only is this activity non-complying under clause 52 of the NES-F (within 100 m of a wetland), but any observations of wetland features we made outside the delineated wetland are likely to be underestimated and affected by the recent excavations in the watercourse.

The National Policy Statement for Freshwater Management (NPS-FM) allows for the provision of temporary / ephemeral wetlands and the loss of 'potential value'. Even if wetland vegetation is only temporarily present, they cannot be excluded from the assessment of wetland values. As our site visit confirmed potential wetlands outside the applicant's delineated wetlands, whether temporary or not, they should be considered in the assessment.

In our view the wetland boundary of the QEII wetland is incorrect. There is sufficient evidence that it extends beyond the delineated boundary. As a result, the proposed PPC has the potential to result in effects to wetland values (including loss due to resulting development) that have not been accounted for in the Ecological Effects Assessment.

Our view is based on the following evidence:

- Parts of the site not delineated as wetland were dominated by wetland vegetation during our site visit as shown in Photograph 2.5 and Photograph 2.6. These show *Carex geminata* (FACW) and *Isolepis prolifera* (OBL) in areas not delineated as wetlands.
- Photograph 2.7 shows *Carex geminata* (FACW) outside the delineated wetland boundary as dominant vegetation around a post where mowing could not be undertaken. This suggests that if the mowing regime were stopped, native wetland vegetation would proliferate and be more permanent.
- The underlying wetland hydrology and hydric soils suggest that the wetland extends beyond the delineated wetland boundary in the Ecological Effects Assessment report.
- Appendix 10 notes a '*High water table in winter and spring'* for LUC map symbol 'P' Pukepuke black sand soils and note that these are poorly drained. We note that the wetland assessments completed in the Ecological Effects Assessment were conducted at a time of year (January) when the water table in these areas is expected to be lower, and the reference to

[6] MPI (November 2024). *Expert statement: Wetland delineation and animals adapted to wet conditions*. Expert-statement-wetland-delineation-protocols.pdf Accessed 22 May 2025

300 mm is likely a dry-season estimate of highly variable water table. The mapped 'Pukepuke' black sand soils provide a good indicator of wetland hydrology and generally correlate to hydrophytic plants observed during the site visit.

- The 'constructed pond' is historically a vegetated wetland (see Figure 2.1.) and we consider this part of the wetland complex.
- Parts of the area mapped as 'constructed pond' are dominated by wetland vegetation (see Photograph 2.8).
- The surface of the 'constructed pond' includes OBL wetland species such as *Lemna disperma* and *Potomogeton cheesemanii*.
- The 'constructed pond' forms part of a wider wetland complex (including ponded water) that extends beyond the boundaries of the 110 Te Moana property and identified as KCDC ecosite K170 (4 separate wetland sites). Part of K170 boarders the 110 Te Moana Property on the western edge, the K170 wetland is contiguous with the QEII pond / wetland (ecosite K068).
- Wetland vegetation and hydrology on the boarder of the adjacent property (Lot 1 Deposited Plan 88064) shown in Photograph 2.9. This wetland vegetation and hydrology is contiguous wetland habitat with the 'constructed pond' and QEII wetland.

Photograph 2.5: showing vegetation on the true left bank of the watercourse showing Isolepis prolifera (OBL) Collected by D Pickett on 17/12/2024.

Photograph 2.6: Birdseye view of vegetation outside the assessed NPS-FM wetland, showing Carex germinata (FACW), Ranunculus repens (FAC), Lotus pedunculatus (FAC) etc. Collected by D Pickett on 17/12/2024.

Photograph 2.7: Photograph from outside the delineated wetland boundary showing 'mature' Carex geminata (FACW) adjacent to a post, proliferating in the area that is routinely mown. Collected by D Pickett on 17/12/2024.

Photograph 2.8: Wetland vegetation within the 'constructed pond' that has not been delineated as wetland. Visible also is OBL vegetation on the surface of the water body.

Photograph 2.9: Photograph showing wetland habitat on the adjacent property, from the western fence line that is contiguous with the wetland habitat on the 100 - 110 Te Moana property.

We consider that some other information in the Ecological Effects Assessment is factually incorrect, which provides important context for the wetland values present on the 100-110 Te Moana property. At Section 3.4 page 14 it is stated:

> *We could not access private land around the site to assess potential wetlands, however it is unlikely that there are qualifying natural inland wetlands as the land to the north is Te Moana Road, to the north-west is established residential housing, to the west is shrubland and ex-pine areas, and to the south is part of the same probable ex-wetland complex that has been drained and has been used for grazing for many decades.*

We note that:

- Wetland vegetation (Photograph 2.9) on the adjacent properties (Lot 1 Deposited Plan 88064 and Lot 3 Deposited Plan 85161) is visible from the western boarder of the 110 Te Moana property (see Figure 2.2 below showing KCDC ecosite K170).
- Open water on adjacent properties (as above) is visible on aerial imagery.
- The sites are identified as wetlands in the Operative District Plan 2021.

Figure 2.2: Showing the location of 100/110 Te Moana Road, property boundaries, and KCDC ecosites.

In our view, wetland ecological values have not been adequately addressed in the Ecological Effects Assessment. As a result, the proposed PPC is expected to result in effects to wetland values (including loss) that have not been accounted for. As such, we do not consider the information in the Ecological Effects Assessment to be sufficient for the council and general public to understand the nature of the request in terms of the environmental effects because the mapped wetland boundaries are incorrect.

3. Please update the Ecological Effects Assessment to correctly identify all wetland areas or otherwise respond to the evidence provided in this review.

2.3 Terrestrial ecological values

The Ecological Effects Assessment notes that no native lizards, or their sign, were observed on site and that there is no potential habitat for copper skinks. It does note that habitat is present for grass skink, but most of this has been recently modified.

We note that native lizards are highly cryptic and are rarely observed as casual observations. Native lizards, in general, rarely emerge from cover. General observations are not considered a robust enough assessment to determine presence/absence.

We disagree with the assessment that suitable habitat in not present for copper skinks. Copper skinks are known to inhabit a range of habitats including modified habitats, such as domestic gardens, pampas grass, harakeke root systems, and rank grasslands. They can be found in relatively high densities in these modified environments at a density of 20.48 ± 2.96 per 100 m^2, as found by Bell et al (2018)[7].

Habitat for copper skinks is present on, or adjacent to, the property. There is the potential for lizard (skink) habitat to establish prior any Resource Consenting stage.

Dedicated surveys, including the deployment of ACOs (Artificial Cover Objects), should be undertaken to confirm presence/absence on the property prior to future development.

4. Please update the Ecological Effects Assessment to reflect the potential presence of copper skink or provide specific evidence of their absence.

2.4 Effects assessment

The Ecological Effects Assessment includes an assessment of ecological effects and proposes avoidance and mitigation options for the listed ecological values and identified effects. However, we consider that the classification of the watercourse and the wetland boundaries on site have been incorrectly assessed. As a result, the effects assessment does not adequately address ecological effects or residual effects on these values.

In general, the Ecological Effects Assessment report covers the main potential and actual adverse effects and but does not cover:

- Potential loss of stream values if confirmed to be a highly modified watercourse.
- Potential loss of wetland values if further assessments confirm wetlands outside the current delineated boundary.

These above potential effects will need to be avoided, minimised, and remedied[8] where possible. Where the PPC change may result in the loss of stream values and/or wetland values, and these will need to be offset or compensated for as part of the Resource Consenting stage of the development.

5. Please provide an updated Ecological Effects Assessment considering responses to requests 1., 2., and 3. (repeated below):
   1. 'Please provide evidence that the watercourse does not meet the GWRC Watercourse Types Guidance classification for a highly modified watercourse/stream.'

[7] Bell, B. D., Hare, K. M., & Pledger, S. A. (2018). Lizards in the suburbs: a single-garden study of a small endemic New Zealand skink (Oligosoma aeneum). *New Zealand Journal of Zoology*, *45*(4), 341-358.
[8] As per the definitions in the NPS-FM and NPS-IB

2. **'We recommend that GWRC is contacted to clarify the matter on whether the watercourse is classified as a highly modified watercourse/stream as described in the GWRC Watercourse Types Guidance Note.'**
3. **'Please update the Ecological Effects Assessment to correctly identify all wetland areas or otherwise respond to the evidence provided in this review.'**

2.4.1 Effect on wetland values

The below measures recommended in the Ecological Effects Assessment and the s32 Report should address the potential for long term wetland loss due to a change in hydrology or discharges of sediment.

- Management of stormwater runoff to achieve hydraulic neutrality using low impact stormwater design options. These will filter and discharge to ground as close as possible to the source to mimic the natural hydrology of the pre-developed site.
- Avoidance of changes to the overall catchment area and overland discharge rates
- Avoidance of any earthworks within the covenant area – encompassing the pond and wetland areas.
- Earthworks will be required to comply with a 10 m setback from the wetland at the site.
- Good practice erosion and sediment controls during earthworks in accordance Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (2021).

We note that activities within 10 m or 100 m of a natural inland wetland are managed under the NES-F. For the purposes of the PPC, the activities managed under the NES-F include modification to watercourses and hydrology, discharges of water, earthworks or land disturbance, and vegetation clearance.

We think that flood events (peak events) are important for recharging ground water hydrology that maintains the character and permanence of the QEII wetland. On page 12 of the Flood Assessment and Stormwater Management assessment (Appendix 9) the memo states that 'for larger events runoff from roads will be directed to soakage devices with overflows via secondary overflow paths.' It is not clear whether these flows will be retained on site or diverted away from site.

6. **Please clarify whether the overflows via secondary overflow paths will be diverted within or away from the site.**

It is anticipated that to develop the low-lying areas on the 100 Te Moana Road property earthworks will be required. These will include the removal of unsuitable soil (e.g. peaty soils), filling with suitable material, and compaction of sands (Appendix 5). We note that this appears to contradict the proposed effects management measure, the *'avoidance of changes to the overall catchment area and overland discharge*'. We note that the large-scale earthworks proposed have the potential to dewater the water table during development, and reduce recharging of ground water following development, which have the potential to result in a loss of wetland values.

7. **Please clarify how effects on wetland hydrology, resulting from large-scale earthworks, will be mitigated to ensure no effects of wetland values.**
8. **Please assess the effects of removing peaty soils, filling and compaction of sands on wetland hydrology.**

Additional to the proposed effects management, we also recommend planting of a vegetated buffer extending to the proposed 10 m setback from delineated wetlands prior to any development. This will ensure that effects on wetland values and wetland / waterfowl will be limited during subsequent development of the site.

Generally, direct effects on terrestrial fauna will be addressed through the resource consent phase. The below measures recommended in the Ecological Effects Assessment and the s32 Report should address direct effects on fauna:

- A lizard survey to confirm whether lizards are present or not, if confirmed a Lizard Management Plan and DOC Wildlife Act Authority will be required.
- A fish capture and relocation plan if the watercourse is to be realigned.

Adverse effects on wetland birds or waterfowl are considered, but no management plan has been recommended to manage effects during development of the site. This is likely because direct effects are not expected on these values.

As above we recommend planting of a vegetated buffer extending to the proposed 10 m setback from QEII wetland is undertaken prior to any development. This will reduce disturbance effects on wetland birds/waterfowl during construction.

The following effects on avifauna do not appear to have been considered in Ecological Effects Assessment:

- Potential effects on ground nesting avifauna (e.g. New Zealand Pipit; *Anthus novaeseelandiae*) have not been considered. There is the potential for grassland habitats to re-establish within areas proposed to be modified under development. The NZ Pipit is known to nest in grassland habitats and is present in the wider area.
- The potential for cumulative effects associated with habitat fragmentation resulting in a loss of habitat for highly mobile fauna (assessment required by the NPS-IB).

9. Please update the Ecological Effects Assessment to reflect the potential for NZ pipit and include effects mitigation for ground nesting avifauna.

3 Summary

The purpose of this review is to understand whether there is sufficient information so that council and the general public can understand nature of the PPC application.

We do not consider some findings in the Ecological Effects Assessment to be an accurate description of the ecological values of the site. As such, the proposed effects management of the PPC is unlikely to account for all potential effects arising from a change in land use.

We have identified further information required to better assess the ecological effects of the PPC application.

4 Applicability statement

This report has been prepared for the exclusive use of our client , with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

This memo has been technically reviewed by Dean Miller (Principal Ecologist) and authorised by Nick Peters (Project Director).