

16 October 2023

WDC ref: PC/0002/23
MD ref: MDL002198

L Cudby & LY&NZ Investment Limited
C/- Mitchell Daysh
PO Box 1307
Hamilton 3240
Attn: Abbie Fowler

Digitally Delivered

Dear Abbie,

PROPOSED PRIVATE PLAN CHANGE 31 – FURTHER INFORMATION REQUEST

Application number: PC/0002/23
Applicant: L Cudby & LY&NZ Investment Limited
Address: 5 Pokuru Road & 540 Wallace Terrace, Te Awamutu 3800
Proposed activity(s): Proposed Private Plan Change 31 - T4 Growth Cell - Residential Live Zoning and Structure Plan

Thank you for your Private Plan Change application which Council received on 8 September 2023, and payment which was received on 19 September 2023. Council staff have now reviewed the application and require further information prior to making the decision to accept, adopt or reject the Private Plan Change. This letter sets out the request for further information pursuant to Clause 23(1) of Schedule 1 to the Resource Management Act 1991 ('the Act') in relation to the application.

I advise that the purpose of the information requested is to better understand the following:

- The nature of the Plan Change request in respect of the potential effects it will have on the environment, including taking into account the provisions of Schedule 4 of the Act;
- The ways in which any adverse effects may be avoided, remedied, or mitigated; and
- The nature of any consultation undertaken or required to be undertaken.

For ease of reference, the request has been split into relevant subheadings within the request. Where appropriate, additional clarification and context is provided for each aspect to assist you with formulating a response to the questions raised. In summary the key areas of further information requested relate to:

- The assessment and supporting evidence of the identified Resource Management Issue on which the Plan Change seeks to address;

- The relationship of the Growth Cell with Centennial Park including the roading connection and associated traffic effects, and the social effects with regard to the proposed changes to this area for the surrounding community;
- The lack of consultation with the Designation Requiring Authorities and the landowner/occupier of the property at 4 Pokuru Road;
- The reliance on the Plan Change Schedule 1 process to engage with mana whenua during the process instead of prior to, including understanding the extent of Ōtāwhao Pā and any other archaeological features present within the Growth Cell and how this may limit development;
- The rationale, justification, and extent of the Commercial Overlay Areas;
- The proposed density to be achieved and what mechanisms will be used to implement these;
- The lack of bat survey/information and the ecological effects; and
- The proposed wetland network and the ecological effects.

Consultation

- 1 Evidence of consultation and engagement with KiwiRail, Waipa Networks, and the adjacent landowner/occupier of 4 Pokuru Road.

Reason: Consultation with KiwiRail and Waipa Networks is required to be undertaken as outlined on page 24 of the Application the designations are “within the plan change site”. Additionally the main roading connection to Puniu Road is located outside of the applicants’ landholdings and across the landholding of 4 Pokuru Road. Consultation is required to be undertaken with this landowner and evidence of such provided as part of this request.

Planning

- 2 An assessment and evidence of the residential development capacity within Te Awamutu, and its surrounds (i.e. Kihikihi), and demand for a post-2035 Growth Cell to be uplifted.

Note: The purpose of the Proposed Plan Change is explained as assisting with the residential development capacity in the medium term (i.e. prior to 2035), stating this is a resource management issue. While noting the 2021 NPS-UD Housing Development Capacity Assessment that was prepared for the Future Proof Partners, there is no assessment of the existing residential areas of Te Awamutu, and its surrounds (i.e. Kihikihi), to understand what capacity is currently available, what development is consented and/or underway, nor what is constraining development in the existing live zoned areas (where applicable). Further information is therefore required in order to understand the issue identified by the Plan Change and if the uplifting and bringing forward of this Growth Cell directly addresses the issue to ensure the Plan Change promoting sustainable management (as per Part 2 of the Act).

- 3 Further information and assessment advising the rationale and justification for the location, and extent of the commercial overlay areas shown on the proposed structure plan.

Note: *The structure plan provided identifies two separate commercial overlay areas with a combined area in the order of 2 hectares. These areas overlay 39 of the residential lots identified on the concept subdivision plan. It is not clear why this extent of commercial overlay is necessary for the growth cell or what area it is intended to serve.*

- 4 Justification for the exclusion of areas identified within the Growth Cell that are not shown on the Structure Plan, or provision of an amended Structure Plan to include these areas.

Note: *Appendix S1 identifies Lot 59 DP 375611 and several properties on Meddings Crescent as being within the Growth Cell. The District Plan shows Meddings Crescent as being Residential Zone so it is not considered necessary to include this area in the Structure Plan, however Lot 59 DP 375611 is shown as Deferred Zone and should be included. It is recommended this site is shown as Reserve Zone on the Structure Plan.*

- 5 Further information and assessment regarding the proposed density to be achieved as follows:

- a) Detail of what mechanisms (if any) are proposed to provide Council certainty that any future development and/or subdivision of the land following rezoning will meet the minimum densities of 25 – 30 dwellings per hectare;
- b) An assessment of what impacts could arise on the achievement of minimum dwelling densities if the commercial overlay areas are fully developed and occupied by commercial activities;
- c) Detail of what mechanisms (if any) are proposed to provide Council certainty that the Commercial Overlay Areas will not prevent the achievement of minimum densities of 25 – 30 dwellings per hectare; and
- d) Details of what considerations have been given to housing typologies, included but not limited to duplexes, townhouses, and higher density developments, to achieve affordable housing outcomes.

Notes: *The application documents imply that the minimum density of 25 – 30 dwellings per hectare is able achieved by the rezoning proposed. An analysis of the concept subdivision provided, identifies the creation of 187 residential lots ranging in size from 369m² – 2,028m², with an average size of 605m². The net area of land to be used for residential purposes in the subdivision is 11.3 hectares. To achieve the minimum density target of 25 – 30 dwellings each lot in the subdivision would each have to accommodate a minimum of two dwellings. It is not clear what mechanisms beyond the Medium Density Residential Zone provisions of PC26 are to be used to ensure that the minimum density target is achieved.*

There is some concern that implementation of the concept subdivision plan, rather than achieving density targets, could promote development outcomes that result in single-level standalone dwellings on each lot (particularly if the implementation strategy for the growth

cell is solely restricted to the creation of vacant lots for individual sale). If this outcome occurs the ability to meet minimum target densities of 25 – 30 dwellings per hectare would be compromised.

The ability to meet density targets is further reduced when considering that 39 of the 187 lots on the subdivision concept plan are within the commercial overlay areas.

6 Further information and assessment regarding the Collector Road connection as follows:

- a) An assessment of the effects of development of the Growth Cell in the event that the Collector Road identified on the Proposed Structure Plan is not able to be constructed through Centennial Park; and
- b) Identification of any additional road safety improvement works that may be required to the roading network in the event that the Collector Road is not able to be constructed through Centennial Park.

Note: *The application report promotes a Collector Road extending from Puniu Road to Rewi Street. To achieve this proposal a road through a Council reserve (outside of the Growth Cell) is required. At this point it is not clear that this roading option would be able to be achieved. It is also unclear if future development of the Growth Cell is dependent on the provision of this road connection.*

Urban Design

7 Amendment to the Urban Design Statement, and Section 32 Report as required, to address the following comments:

- a) Detail of how the outcomes identified in the Urban Design Statement will be delivered through the later development stages.

Note: The Urban Design Statement provides a clear build-up of the outcomes that could be delivered through the development of the Structure Plan, through the inclusion of a proposed subdivision concept, however the Structure Plan presents a pared back version of the conceptual subdivision layout.

- b) Assessment from an urban design perspective, of how the positive urban design outcomes are able to be achieved should an increased yield more akin to Medium Density be sought across the site when it comes to being developed.

Note: The proposed plan change seeks to adopt the Medium Density Residential Zone notified as part of PC26, however appears to have calculated the approximate yield based on larger allotments. The Urban Design Statement uses larger lots, with an average of 595m² per section to deliver the layout presumed due to the steeper terrain on the site; this appears more in line with a general residential zone outcome, rather than a medium density zone. It is noted that the UDS identifies that these larger lots could be subdivided further to achieve a higher yield and therefore density across the site.

- c) Detail of the considerations that have been made with regard to the location and function the proposed Commercial Areas from an Urban Design perspective, including any design provisions proposed to assist in delivering a quality designed centre that integrates positively with the adjacent residential development.

Note: *The prospect of a neighbourhood centre does not appear to be discussed in the Urban Design Statement. The Structure Plan identifies two areas of 'Commercial Overlay' in the structure plan, which seems to be a large area for the size of the structure plan and the proposed yield of approximately 200 dwellings.*

- d) Assessment from an urban design perspective of the change to Centennial Park as a result of the establishment a Collector Road through Centennial Park.

Note: *The outcomes of the severance of the park and the usability of the space as a recreational and amenity asset for the surrounding and new community should be assessed.*

Development Engineering – Growth

- 8 Please provide hydraulics modelling for water supply and wastewater.

Note: *While it is understood an application has been made for the modelling data, and this is underway, the outcome is required to understand if the area can be serviced.*

Roading

- 9 Amendment to Structure Plan to show Designation D154, or part thereof, which will be utilised for the collector road with a suitable note on the drawing to state that the collector road is contained within the existing designation.

Note: *This will simplify incorporation into the District Plan and also prevent misunderstandings by any party or potential submitters with regard to the location of the Collector Road and its alignment.*

- 10 Within the Section 32 Report, Table 1, an amendment is required to note part of Teasdale Street is a 40km/hr posted speed limit within the vicinity of the school.

- 11 Amendment to the 'Pokuru/Puniu Road Intersection Layout Plan' to make it clear this is an 'indicative' design only and is yet to be finalised.

Note: *This plan provides a false sense that this intersection design has been approved and it needs to be clear that this is still yet to be undertaken.*

- 12 Amendment to the 'Rewi Street Intersection Layout Plan' to make it clear this is an 'indicative' design only and is yet to be finalised.

Note: *This plan provides a false sense that this intersection design has been approved and it needs to be clear that this is still yet to be undertaken.*

- 13 Amendment to the Integrated Transportation Assessment, and Section 32 Report as required, to address the following comments:
- a) The Executive Summary of the ITA describes interim intersections and longer-term strategic intersections (i.e. roundabout) in a way that provides the impression these outcomes have already been determined when this is not the case.
 - b) Section 4.2 (Page 16) incorrectly states the Designation D154 expires in 2023. The Designation expiry date is 2032 and needs to be corrected.
 - c) Section 5 (Page 20) notes the crashes at the urban rural boundary on Puniu/Pokuru Road and the need to provide/ensure safer speeds here where new intersection is proposed into T4. Further information should be included to include methods of how this can be addressed.
 - d) Section 6.4 (Page 31) notes the potential difficulties of connecting the collector road through a recreation reserve to join Rewi Street. Further information is required regarding provision of alternative traffic routes, staging of residential development, management of additional traffic through Wallace Terrace and any nearby network effects (e.g. if the traffic through the Wallace, Downes, Teasdale, Fairview intersection increases significantly for a period of years then some interim improvement is likely required to prevent a real increase in crashes).
 - e) Section 6.4.2 (Page 32) notes the walking and cycling access in terms of form and connectivity. Further information is required regarding this access during development/progression of the built form to ensure the walking and cycling access is connected at both the northern and southern ends of the Structure Plan (e.g. While in the north, residential vehicle access might only connect to Wallace Terrace in the short term, the steep grades on this existing street mean that walking and cycling access to and through the Centennial Park reserve should be connected at the earliest stage to provide a convenient connection to Rewi Street).
 - f) Section 7.2 (Page 35) notes trip distribution from T4 to the surrounding network. The 20% to College Street is optimistic as College Street has very steep grades, is very narrow and has difficult intersections at each end, therefore Rewi Street and to a lesser degree Station Road will be more attractive for north bound trips. Rewi Street takes vehicles to Mutu Street and onto State Highway 3, and Station Road takes motorists to Alexandra Street and Paterangi Road, another popular commuter route to the south or west side of Hamilton. While the 10% eastward via Puniu Road appears to be a little on the low side. Puniu Road, Bank, Fraser Streets provide another direct route to State Highway 3 north and south and to major supermarkets, primary and middle schools so this could be more attractive. Further information or reconsideration of this assessment is required, with any consequential amendments required through the later discussion on adjoining roads traffic increases (i.e. Table 14).
 - g) Section 8.2 (Page 37) while Council's Roading Team agree that increases in traffic as a result on adjacent roads will be within the capacity of those roads, the adverse effect is

more likely in the safety of intersections on those roads, where crossroads, stop and give way-controlled intersections become busier in peak times and there are less gaps to enter traffic and hence a greater risk of crashes. For example the intersections at Wallace/Downes, Rewi/Downes, Rewi/Jacobs, Rewi/Alexandra, Rewi/Station, and Puniu/Bank. Further information regarding the downstream intersection effects is required, including, and not limited to, assessment of intersection effects if the development within the Structure Plan is staged, consideration of a potential restriction of number of dwellings/lots prior to intersection upgrades and/or connection through to Rewi Street is obtained, and interim safety improvements.

Notes: *The staging memo Appendix I attached to the ITA indicates that an additional 70 dwellings connected to Wallace Terrace would not create a safety risk at this intersection, however the intersection is rather unusual and has a crash history, so Council's Roading Team have concerns with significant additional traffic using this intersection without additional examination and safety measures.*

Section 9 (Page 48-49) discusses staging and dwellings before full collector road and north and south intersections are operational. While theoretically possible to get to 220 dwellings without a Rewi Street connection this would place a great deal of pressure on Wallace Terrace and even with some speed and safety mitigations in place it could well place an unreasonable burden on that street and the residents on it, to become a collector road but with only local road design.

- h) Further information is required regarding pedestrian and cyclist connectivity in terms of the Transport Infrastructure Staging to ensure connectivity from an early stage is provided, thereby reducing the need for car travel.
- i) Confirmation is required regarding the Transport Network Cross Sections as it appears to show the bi-directional cycleway on the railway side of the collector road on one cross section, but then the bi-directional path on the east side of the collector road on the next cross section.

Note: *All drawings should show the cycleway on the east/town side of the collector road.*

Parks & Reserves

- 14 In order to better understand the effects of the proposal on Council's existing parks and reserves the following information is requested:
- a) An assessment of the alternative layouts that have been considered by the applicant to confirm that the Growth Cell is able to be developed in the absence of the Collector Road connection through Centennial Park.
 - b) An assessment of the effects, prepared by a suitably qualified and/or experienced expert in reserves planning, on the existing and future community as a result of the proposed reduction to Centennial Park.

Notes: *The proposal is reliant on a road connection being developed through Centennial Park between the northern boundary of the Growth Cell and Rewi Street, with the exact design of*

which is noted as being to be confirmed by Council. This connection is required in the absence of the Western Arterial being constructed (that arterial road being a prerequisite for the development of the Growth Cell in Appendix S01). The establishment of this connection through Centennial Park will result in a substantial portion of the reserve being reallocated to roading and related infrastructure (e.g. stormwater).

No assessment has been provided by the applicant on what the reduction of recreation reserve land as proposed will mean for the existing and future community. Centennial Park is held as recreation reserve under the Reserves Act 1977. Revocation of this reserve status requires public notification and is at the discretion of the Minister of Conservation under s24(1) of the Reserves Act 1977.

- 15 In order to better understand the proposal in relation to provision of reserve land for recreation and amenity purposes, the following information is requested:
- a) Assessment of the proposal against the relevant provisions of the District Plan that relate to the provision of reserves, and in particular Resource Management Issue 15.2.17, Objective 15.3.11 and Policies 15.3.11.1 – 15.3.11.2.
 - b) An assessment of the proposal in terms of its adequacy for provision of recreational reserves in terms of likely demand, prepared by a suitably qualified and/or experienced expert in reserves planning.

Notes: *The Structure Plan shows limited provision of specific reserve land (identified as “General Reserve”), with that which is shown being of limited utility for active or passive recreation purposes given size and/or topography. The applicant states that “the density of residential development is expected to allow for significant areas of private garden space. In addition, there are substantial areas of public open space, including the natural inland wetlands (which will include wetland and riparian planting).”*

With regard to the first point, the proposal seeks to adopt the Medium Density Residential Standards that are subject to Plan Change 26, which will be more enabling of residential development and have lesser requirements for minimum private outdoor areas. In terms of the latter, any recreational benefits arising from the wetland areas will be ancillary to their primary purpose, with this area not anticipated to provide spaces that are fit for active recreation (e.g. fields for kicking a ball or areas to establish playground equipment). As such, greater reliance will be placed on the existing network of recreation reserves.

- 16 An archaeological report that identifies the extent of Ōtāwhao Pā and any other archaeological features present within the Growth Cell, including identification of likely impacts on sites of significance.

Notes: *The Growth Cell is located in close proximity to Ōtāwhao Pā which is recorded by the NZAA as a significant feature. While it is noted that the site has been substantially modified and destroyed by development in the area, it is considered an archaeological review should be undertaken at the plan change stage to inform the extent of developable land that is available, and what land should be potentially set aside as historic reserve.*

It is recommended that the applicant contact the authors of the Cultural Impact Assessment completed for the Wallace Terrace watermains renewal project: Haupai Puke (Purekireki Marae) and Hazel Wander (Trustee Te Iti o Apakura Papakainga).

Ecology

17 Amendment to the Ecological Impact Assessment, and Section 32 Report as required, to address the following comments:

a) Section 1.2 Ecological Context

- i) Please provide a description of the stream networks and catchments, including urban land use.
- ii) Please include ecological features in the surrounding area (including wetlands, streams and forest remnants), nearest Significant Natural Areas and large features, and potential landscape linkages and corridors.

b) Section 1.3 Methodology

- i) Please provide information on what methods were used to assess the:
 - presence (or likely presence) of native terrestrial fauna and the value of their habitats present on site. Were the Department of Conservation herpetofauna or bat database queried as part of this assessment? If not, why not? Why were surveys not carried out for native fauna?
 - ecological values of ecological features.
 - magnitude and level of ecological effects.
- ii) The methodology for streams and wetland is considered sufficient and appropriate. Ten wetland plots were undertaken, two SEVs and three eDNA samples.
- iii) No direct fish surveys such as trapping was undertaken. Please consider and discuss the potential benefits of further fish sampling. This may provide information on the abundance and distribution of black mudfish, which may inform a management and design around Stream 1, for example.

c) Section 2.1.1 Vegetation

- i) Please provide a map of the terrestrial vegetation present, beyond wetlands, within the plan change area, to better understand potential fauna habitat values.
- ii) Table 1: The reasoning for the Rarity/Distinctiveness matter includes “Mature trees may provide roosting habitat for common native fauna.” It is not clear what this refers to and if it is intended to refer to long-tailed bats, they are Threatened – nationally critical (O’Donnell et al., 2023), not common. Roosting habitat is again mentioned in ecological context. Please clarify what is meant by these statements.

- d) Section 2.1.2. Avifauna: While we agree the site is unlikely to be of specific importance for any native species, we consider the species listed to be depauperate with nocturnal species such as morepork and common diurnal native species in the area conspicuously missing. Please provide the results of the desktop assessment to provide a more fulsome understanding of the avifauna community present. Species such as morepork and kingfisher may require specific management in consideration of tree felling protocols as they are cavity nest/roosters.
- e) Section 2.1.3 Herpetofauna:
- i) While we agree with the assessment of the potential native herpetofauna species present the Department of Conservation herpetofauna database should have been queried (or if it was this should have been stated) to assist with determining what species to consider.
 - ii) Native lizards often occupy habitats of otherwise low ecological value (i.e., weedy vegetation, vegetation margins) (Anderson et al., 2012). Please provide justification for the likelihood of copper skink being present onsite being low.
- f) Section 2.1.4 Bats
- i) There is insufficient data to support the conclusions made within this section of the assessment, and any following consideration of the potential effects of the plan change on bats. The sole source of information relied upon has been the Waikato Regional Council bat distribution map which only shows areas of confirmed detection and provides no information on survey effort.
 - ii) The author should have accessed the Department of Conservation bat survey database to understand the level of survey recorded in the area and patterns of detection. The author notes “no records of bat activity onsite or immediate surrounds”, while not acknowledging that there haven’t been any surveys within the site nor within what the author considers within the immediate surrounds of the site. The area to the southwest of Te Awamutu is best characterised as not surveyed (Figure 1). The closest survey to the site is the record referred to in the assessment which detected long-tailed bats in 2020. We consider a positive detection of long-tailed bats within 2km of a site should be considered with considerably more importance in an assessment of long-tailed bats which are highly mobile and have home ranges between 300ha and 5,600 ha which can span over a distance of 19km (Griffiths, 2007; O’Donnell, 2001).
 - iii) The description of habitat preferences and habitat utilisation by long-tailed bats is not consistent with the current and emerging understanding of the use of long-tailed bats of modified and fragmented habitats, particularly in the Waikato. The site contains several features understood to be preferred by long-tailed bats in similar environs including wetlands, water ways, shelterbelts, large exotic trees. There also appears to be connectivity to the Puniu River through a series of vegetation patches and linear vegetative features.

- iv) Accordingly, the statement that the site provides only a small proportion of the habitat in the wider landscape has little relevance without understanding the use of the site by long-tailed bats and its potential importance.
- v) Long-tailed bats have been a matter of considerable importance in several recent plan changes and consent applications³ in the last several years in similar environments to the T4 growth cell and the lack of survey undertaken as part of this assessment is conspicuous in its absence. The presence and use of the site by the “Threatened – nationally critical” long-tailed bat may necessitate considerable changes to both the structure plan layout and suite of proposed development rules in the plan change area to manage effects on this species and its habitats.
- vi) We consider that at minimum a detailed bioacoustic survey of the site (potentially at two different times within the survey season to understand different usage patterns in different life history stages) is carried out by a suitably qualified and experienced bat ecologist. This is needed to understand the value of the site to long-tailed bats and thereafter carry out an assessment of the potential impacts of the proposal on these values. This information will also be required to understand how these impacts may be managed within the effects management hierarchy.

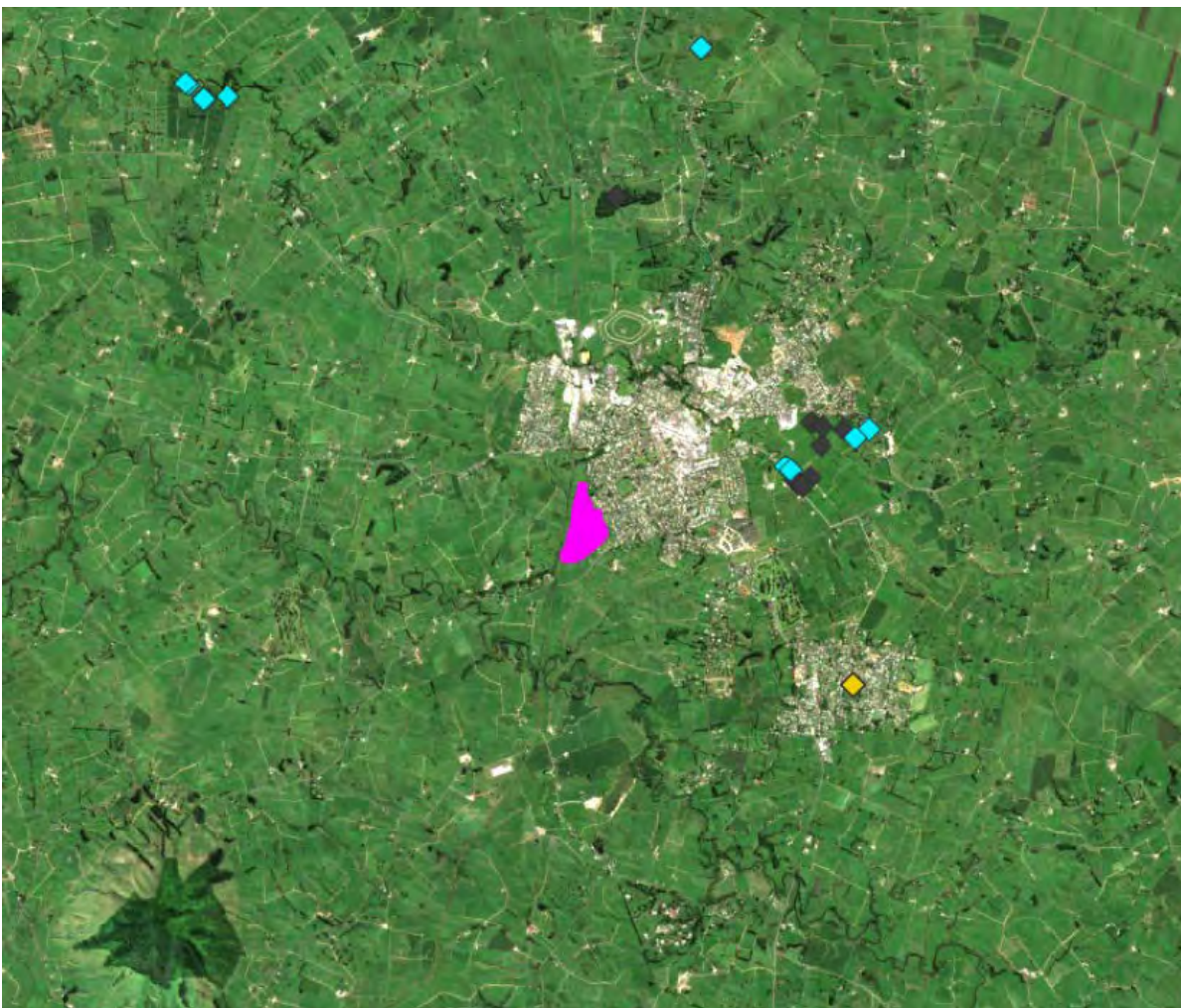


Figure 1: Extract from the Department of Conservation - Bat survey database (Data extracted March 2022). Purple = Approximate location of plan change area. Blue = positive detection of long-tailed bats, Dark grey = survey point with no detection of bats. Orange = detection of unknown bat species (in this area safely assumed to be long-tailed bat).

- g) Section 2.2.2 Streams
 - i) The SEV results for current, maximum and post-development appear reasonable. It is noted that a substantial reduction in natural flow regime is expected, from 0.57 to 0.25. An overall improvement due to shading and buffering is expected, from 0.36 to 0.62. These scores are in the range of other projects undertaken by Boffa Miskell Limited (BML).
 - ii) Clearly identify the location of the proposed culvert (s).
 - iii) Please include an assessment of macroinvertebrate community indicators. This will help assess stream values and sensitivity.
- h) Section 2.2.3 Wetlands - Hydrology: Can you please describe the overall hydrosystem function and context, such as catchment, stream, wetland and groundwater system function including connectivity and modification. To what extent are the wetlands influenced or modified by human activities such as drainage, discharges and barriers to ground or surface water flow. What is the potential variability or range of groundwater levels and is this likely to change as a result of the development? What are the potential hydrological effects on wetlands?
- i) Section 2.2.4 Ponds: Please consider the potential for ponds to support pest species and also provide habitat for at-risk fauna. This may affect the assessment of potential values, effects and effects management.
- j) Section 2.3 EIANZ assessment
 - i) This section may need to be revisited once a better understanding of the areas value to fauna is established.
 - ii) Please include more context information in the summary table.
 - iii) Please assess the streams separately.
- k) Section 4.1.1 Land Disturbance: The protection of stream and wetlands during construction works is particularly important. The erosion and sediment control plan should include inspection programme for critical system elements. A specific methodology for streamworks integrating effects management should also be included in resource consent documentation and should be noted as a separate plan or part of an already identified plan.
- l) Section 4.1.2 Vegetation Clearance
 - i) Please explain why, in regard to fauna, avifauna are noted as a particular concern compared to other fauna.
 - ii) Please revisit this assessment once a better understanding of the value of the site to herpetofauna and bats is established.
 - iii) Please explain how pre-clearance inspections manage for potential effects on native fauna and their habitats.

- m) Section 4.2.1. Anthropogenic Disturbances
 - i) Please provide an assessment of the potential effect of anthropogenic disturbances. The assessment appears to retain uncertainty on the extent of clearance and retention of habitat features. This should be based on the structure plan provided.
 - ii) Please revisit this assessment once a better understanding of the value of the site to herpetofauna and bats is established.
- n) Section 4.2.2 Stormwater effects
 - i) Can you compare macroinvertebrate communities in representative streams with and without urban stormwater to assist with assessment of stormwater effects. The sensitivity of fauna, dilution, and natural treatment from vegetation may be factors affecting the degree and extent of effects.
 - ii) Please discuss water sensitive design and explain how stormwater systems will be integrated with natural systems.
- o) Section 4.4 Summary of Activities and Effects: Please consider adding additional column for values after development (including positive effects).
- p) Section 5 Residual Adverse Effects
 - i) This section may need to be revisited once a better understanding of the areas value to fauna is established.
 - ii) Please provide an assessment against the offsetting principles within the National Policy Statement for Freshwater to confirm the proposal is feasible within the existing policy framework.
- q) Section 5.1 Stream Loss
 - i) The ECR appears to be calculated correctly and the ECR of 3.35 appears reasonable. As there is culverting but not reclamation this section should be "Stream Function Loss".
 - ii) Please show culverts and wetland reclamation in Figure 17.
- r) Section 5.2 Wetland Loss
 - i) We consider the Biodiversity Compensation model has been incorrectly applied. The author has included the areal extent of riparian planting in a calculation of loss and gain calculation of wetland value.
 - ii) The model needs to be impacts on a wetland versus gains to a wetland (which may be achieved through conservation actions in the catchment that generate improvements in the wetland itself). Riparian buffer planting can be implemented to improve the value of adjacent wetlands, but it is this effect on the value of the buffered wetland should be calculated and input into the model and the wetlands

area extent not the areal extent of the riparian planting and its ecological value (which is not the same biodiversity type).

- iii) As modelled, this does not represent a like-for-like calculation, nor would this be appropriate for estimation of the appropriateness of a compensation proposal. It represents a lack of additionality as the value of riparian planting is accounted for in both the improvement in the condition of the buffered wetlands and then counted separately. It also represents an apples and oranges comparison of values lost, and values gained.
- iv) Please review the BCM model provided and ensure the values lost and values gained are for the same biodiversity type.
- v) Please provide detail on the benchmark used in the model.
- vi) Please provide a method on how the ecological scoring of inputs relates to the benchmark.
- vii) No information to justify the value score after compensation of 4.5/5 against benchmark for a very small wetland (0.28ha) surrounded by urban development seems very optimistic. Please provide justification and description of end states to support scoring against benchmark used within the model.
- viii) Related to a similar request in Section 2.2.3; Please provide consideration of the potential effects of changes in hydrology and how that might impact the inputs into model both in terms of confidence contingencies and value scores.

In addition to the above and noting this is not part of the Clause 23 request, Council seeks the removal of the Council logo from all plans and documents within the application unless these have been prepared by Council staff. The inclusion of the Council logo is inappropriate on documents that have not been created, or endorsed, by Council or Council Staff.

Additionally, could you please provide all maps associated with the Plan Change as shape file format to enable ease of migration into Councils GIS and e-Plan.

If you have any queries, please contact the writer.

Yours faithfully



Hayley Thomas
PROJECT PLANNER