South Waikato District Council

Tokoroa Office: Phone (07) 885 0340 Fax (07) 885 0718
Putaruru Office: Phone (07) 883 7189 Fax (07) 883 7215
Tirau Agency (Information Centre): Phone (07) 883 1202

Private Bag 7 (Torphin Crescent) Tokoroa 3444 · Website: www.southwaikato.govt.nz · Email: info@southwaikato.govt.nz

OFFICER'S REPORT FOR:	**Hearing Commissioners**
IN THE MATTER OF:	**RM240115, an application for resource consent for a 73-lot rural lifestyle subdivision with two roads to vest and associated land use consent for earthworks and the future construction of a dwelling and an accessory building on each of the resulting rural lifestyle allotments at 597 Horahora Road, Tirau**
PREPARED BY:	**Eloise Lonnberg-Shaw** **Consultant Planner** **EnviroPlanning**
REVIEWED BY:	**Marnie Rydon** **Resource Consents Manager**
REPORT DATED:	**30 September 2026**
DATE OF HEARING:	**21 and 22 October 2026**

Publicly Notified Application

Applicants:	Kevin and Lynn Tylee
Location:	597 Horahora Road, Tirau
Legal Description:	Lot 1 DPS 21946 [Record of Title SA22C/92]
Site Area:	45.6120 ha
Proposal:	Undertake a 73-lot rural lifestyle subdivision with two roads to vest and associated land use consent for earthworks and the future construction of a dwelling and an accessory building on each of the resulting rural lifestyle allotments
Zone:	Rural Lifestyle Zone (RLZ)
District Plan Overlays:	Outstanding Landscape, Significant Natural Area buffer and Horahora Road Area (associated with Lot 1 DPS 21946)
Statutory Acknowledgement/s:	Yes
Overall Activity Status:	Discretionary
Recommendation:	That consent be granted, subject to conditions

APPENDICES

Appendix A	Recommended Conditions
Appendix B	Scheme Plans, dated 18 June 2026, rev 1
Appendix C	Earthworks Plans, dated 18 June 2026
Appendix D	Ecological Management Plan, dated 17 Sep 2026, Final version 4
Appendix E	Landscape Master Plan, dated June 2026
Appendix F	Internal Council Review memos, dated September 2026

EXECUTIVE SUMMARY

I. This report assesses Kevin and Lynn Tylee's application for subdivision and associated land use consent at 597 Horahora Road. The proposal now before the Commissioners is for 73 rural-lifestyle residential lots across approximately 45.6 ha, developed in three stages, with two roads to vest in Council. Consent is also sought for earthworks and the future construction of one dwelling and one accessory building on each residential lot. The site is within the Rural Lifestyle Zone (RLZ) and is subject to the Horahora Outstanding Natural Landscape (ONL) and Significant Natural Area Buffer overlays. The proposal is a discretionary activity overall.

II. The application was publicly notified as an 81-lot development. Thirty-three submissions were received, one of which was subsequently withdrawn. Most submitters opposed the proposal, raising concerns about density, landscape and ecological effects, earthworks, traffic and road safety, servicing, public access and effects on the Waikato River and tangata whenua values. Following notification, the applicant reduced the proposal to 73 lots, revised the layout and provided further technical information. The amended proposal remains within the scope of the notified application, and submitters were given an opportunity to respond to the changes.

III. The amendments materially improve the proposal. It now complies with the District Plan's average lot-size provisions, which means the subdivision is no longer a non-complying activity on that ground. Proposed earthworks have fallen from approximately 270,000 m³ to 72,000 m³, a reduction of about 73%. The revised layout retains more of the existing gullies, terraces and natural landform, particularly in Stage 3. It also provides additional indigenous planting and ecological restoration, stronger landscape and building controls, and a proposed 10 m esplanade strip along the Waikato River frontage.

IV. The development will nevertheless create a substantial and permanent change from predominantly open pastoral land to a rural-lifestyle subdivision. Buildings, roads, planting, lighting and residential activity will alter the character of part of the Horahora ONL. Localised landscape and visual effects may be moderate, particularly before mitigation planting becomes established. Council's independent landscape reviewer has identified no landscape reason to decline consent, provided the full package of planting, building controls and long-term maintenance is secured and implemented. The reduced earthworks also substantially lessen the construction disturbance and permanent landform modification associated with the notified design.

V. Council's specialist reviews provide a basis for managing the other physical effects through detailed design and enforceable conditions. These include protection and restoration of ecological areas and bat habitat; stormwater treatment, conveyance and maintenance; confirmation of suitable primary and reserve wastewater-disposal areas on each lot; road and access improvements; protection of the existing Waikato River Trail; and riverbank and slope-related building restrictions. The trail is proposed to remain in the Horahora Road corridor. Its relocation into the esplanade strip is neither part of this application nor relied upon as mitigation. The esplanade strip would secure a legal public-

access corridor along the river, although its practical accessibility will depend on the final alignment and implementation details.

VI. The submissions from Raukawa and Ngaati Koroki Kahukura identify effects on the Waikato River, its margins and the wider cultural landscape, including cultural sightlines, kaitiakitanga, cumulative development and meaningful access to the awa. The amended design responds to some of the physical concerns through reduced density and earthworks, greater landform retention, restoration and the proposed esplanade strip. It does not establish that all effects on cultural and spiritual relationships have been resolved. No final tangata whenua-led cultural assessment has been provided, and neither iwi submitter has confirmed that the amendments address its concerns. I therefore assess adverse cultural effects conservatively as at least minor and give them weight in the overall assessment.

VII. On balance, I consider the amended proposal generally consistent with the planning provisions that provide for rural-lifestyle development and address infrastructure, landscape, natural character, biodiversity and the physical and ecological health of the Waikato River. My assessment of its alignment with provisions concerning tangata whenua relationships and the River's cultural and spiritual health remains qualified. The proposal will also produce positive effects through ecological restoration and the legal provision of public access along the river frontage.

VIII. My recommendation depends on the outstanding implementation matters being satisfactorily resolved before consent is granted or through sufficiently certain conditions and legal instruments. In particular, the conditions must secure enduring private ownership and maintenance of stormwater infrastructure; suitable wastewater-disposal areas for every residential lot; the ecological management and legal protection measures identified by Council's reviewer; and the road, access and infrastructure requirements identified by Council's engineering and transport reviewers. Subject to those matters and the recommended conditions in Appendix A, I recommend that the Commissioners grant the subdivision and land use consents.

Statement of Experience – Eloise Lonnberg-Shaw

1) My name is Eloise Lonnberg-Shaw. I hold two Masters' degrees (in law) obtained from the Universities of Gothenburg and Queensland (Brisbane), in 2005 and 2006 respectively. I am an Associate member of the New Zealand Planning Institute/Resource Management Law Association and have been for 10 years.

2) I have over 15 years' experience in resource management in New Zealand. This includes both public and private experience, as well as experience working as an environmental lawyer in Hamilton for approx. 7 years, up until October 2016.

3) My current position is as a Director/Principal Planner at EnviroPlanning, a resource management and environmental consultancy based in Hamilton which I established in early 2022, after having worked for other small and large consultancies for approx. 6 years.

4) I am familiar with the planning framework for the South Waikato as I have worked with and for Council regularly for the last 5 years.

5) I have read and am familiar with the Code of Conduct for Expert Witnesses in the current Environment Practice Note (2023), have complied with it, and will follow the Code when presenting evidence. I also confirm that the matters addressed are within my area of expertise, except where relying on the opinion or evidence of other witnesses. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

1. INTRODUCTION

6) This report discussed, and makes recommendations o, the proposal and submissions received in relation to an application by Kevin and Lynn Tylee for resource consent to under a subdivision, earthworks and future construction of buildings at 597 Horahora Road, Tirau.

2. RELEVANT BACKGROUND

2.1 The Site and Locality

7) The subject site is located at 597 Horahora Road, Arapuni. It is legally described as Lot 1 DPS 21946, has an area of approximately 45.6 ha and is held in Record of Title SA22C/92. The registered owners are Kevin George Tylee and Lynn Janice Tylee.

8) The site is largely undeveloped and has historically been used for pastoral grazing. It is relatively flat land across its central and eastern parts and then transitions to terraces, gullies and steeper slopes adjoining the Waikato River along the western boundary. The site also contains streams, wetland areas and areas of existing vegetation.

9) Vehicle access is presently obtained from Horahora Road through several farm gates and informal entrances. The Waikato River Trail runs generally parallel to Horahora Road along the site's eastern frontage and intersects with the existing and proposed access locations.

10) The site is zoned Rural Lifestyle Zone (RLZ) under the Operative South Waikato District Plan (SWDP) as shown in Figure 1 below. It is also located within the Waikato River Catchment Area and is subject to the Outstanding Natural Landscape (ONL) and Significant Natural Area (SNA) Buffer overlays.

11) Council's GIS does not identify any mapped natural hazards, historic buildings, known archaeological sites or significant trees within the property. However, the application material identifies wetlands, waterways, indigenous vegetation and habitat used by indigenous fauna, including long-tailed bats.

12) The Record of Title does not contain any registered interests that materially constrain the proposal. A hydro-electric power operating easement adjoins the site and is relevant to the subdivision assessment, although it is located outside the title boundary.

13) The surrounding environment (shown in Figures 2 and 3) is predominantly rural and includes open pasture, farming activities, scattered dwellings and associated farm buildings. Although the subject site is zoned RLZ, the adjoining land is predominantly zoned General Rural Zone (GRUZ). The site is therefore not part of a larger, contiguous rural-lifestyle area.

14) Land east of Horahora Road is primarily used for farming. To the north, several rural-lifestyle properties have been established along Horahora Road, with lot sizes generally ranging between approximately 3,000 m² and 2 ha. Some of those properties remain undeveloped.

15) The land on the opposite side of the Waikato River is within Waipā District and contains a mixture of rural and rural-lifestyle properties, together with a holiday park and other recreational activities associated with the river.

16) Horahora Road is classified as a Secondary Collector Road and provides access to the site and surrounding rural properties. The Waikato River Trail follows the road frontage and forms part of a wider recreational connection through the river environment. The Waikato River itself is a prominent natural, cultural, recreational and landscape feature.

17) Overall, the area retains a strong rural character, while also containing established rural-lifestyle and recreational activities. Its character is influenced by the combination of pastoral land, rural dwellings, the Waikato River, the Waikato River Trail and nearby rural-lifestyle development.

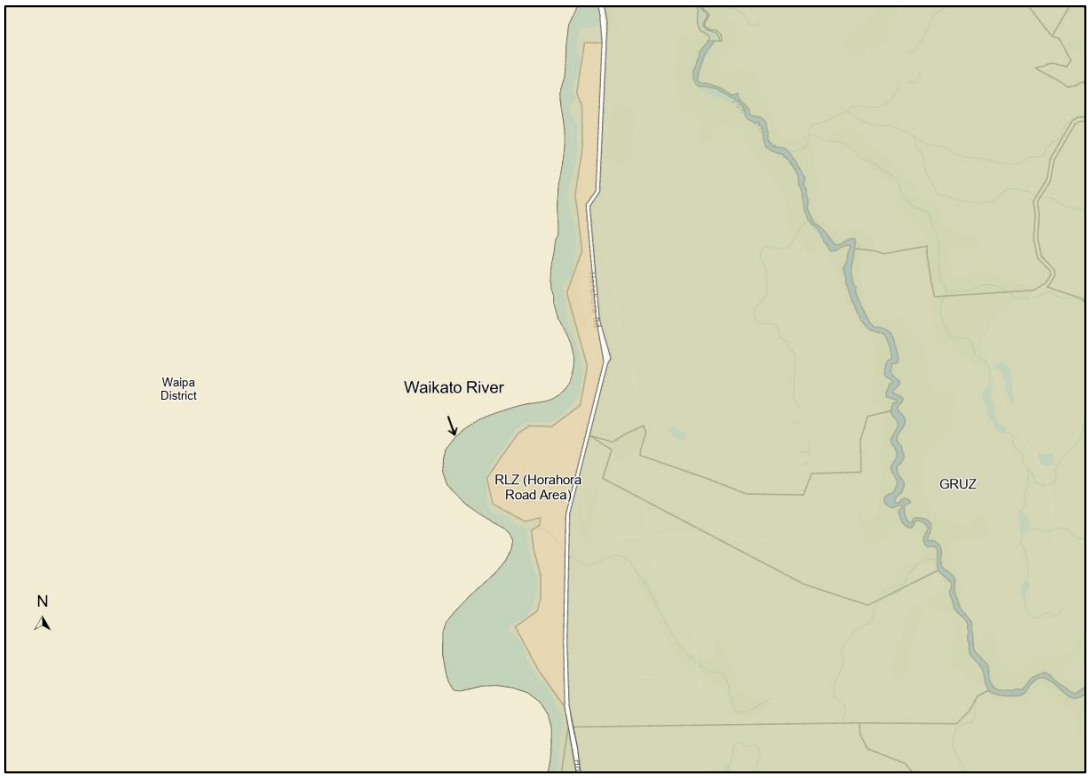


Figure 1: Zoning map of the site and surrounding environment



Figure 2: Aerial image of the subject site and surrounding environment



Figure 3: Location map (sourced from Google)

2.2 The Proposal/Application

18) Cogswell Surveys Limited, on behalf of Kevin and Lynn Tylee, has applied under section 88 of the Resource Management Act 1991 (RMA) for subdivision and associated land use consent at 597 Horahora Road, Arapuni.

19) The application was publicly notified as an 81-lot rural-lifestyle development on 13 March 2026. Following notification, submissions and further consultation, the applicant amended the proposal by reducing the number of residential lots to 73 and revising the subdivision layout, particularly within Stage 3.

20) The proposal assessed in this report is therefore the amended 73-lot development described in the applicant's addendum dated 19 June 2026, the corrected scheme plans and the subsequent supporting information. It includes two internal roads proposed to vest in the South Waikato District Council (SWDC), together with associated access, earthworks, stormwater infrastructure, ecological restoration, landscape mitigation and a proposed 10 m esplanade strip along the Waikato River frontage. Land use consent is also sought to enable one dwelling and one accessory building on each residential lot.

21) The amendments substantially reduce the extent of earthworks, retain more of the existing gullies, terraces and natural landform, provide additional ecological restoration and landscape mitigation and revise the stormwater and public-access arrangements.

22) The application material, Notification Report dated 13 March 2026, and applicant's addendum dated 19 June 2026 contain detailed descriptions of the proposal. The current proposal is summarised below and shown on the amended scheme plans, shown in Figure 4 below.

23) The amended proposal is to subdivide the site in three stages to create 73 rural-lifestyle residential lots. It includes two internal roads proposed to vest in SWDC, together with access lots, drainage infrastructure, ecological restoration areas and a proposed 10 m esplanade strip along the Waikato River frontage.

24) The amended layout complies with the SWDP provisions governing average lot size and the distribution of undersized and oversized lots. The most substantial design changes occur within Stage 3, where several previously proposed lots have been removed and the layout revised to retain more of the existing gully, terraces and natural landform.

25) The proposed esplanade strip will secure a permanent legal public-access corridor along the Waikato River frontage. Unlike an esplanade reserve, the land within the strip will not vest in Council but will remain in private ownership. Public access will be secured through an instrument registered against the relevant Records of Title, which will bind the landowners and their successors in title.

26) An esplanade strip has been selected because SWDC does not wish to acquire and maintain an isolated reserve in this location. The strip provides a practical alternative by securing public access along the river frontage while leaving ownership and the associated land-management responsibilities with the private landowners.

27) The amended stages are shown in Figures 5 to 9 below.

28) Land use consent is sought to enable the future construction and use of one rural-lifestyle dwelling and one accessory building on each residential lot. The application does not seek approval for accessory or secondary dwellings.

29) Indicative building areas and development controls are proposed to manage the location, scale and appearance of future buildings. These include setbacks from the Waikato River, wetlands, waterways and geotechnically constrained land, together with controls over building location, height, coverage, colour, materials, glazing, reflectivity and lighting.

30) Landscape planting and building controls are intended to reduce the visual prominence of future development and assist its integration into the Horahora ONL and the surrounding rural and river environment.

31) Earthworks are required to construct the internal roads, building areas, accessways and stormwater infrastructure. Compared with the notified proposal, the amended design substantially reduces the

extent and volume of earthworks within Stage 3 and retains more of the existing gullies, terraces and natural landform.

32) The applicant has advised that the earthworks within each stage will be balanced, with no fill imported to the site or transferred between stages.

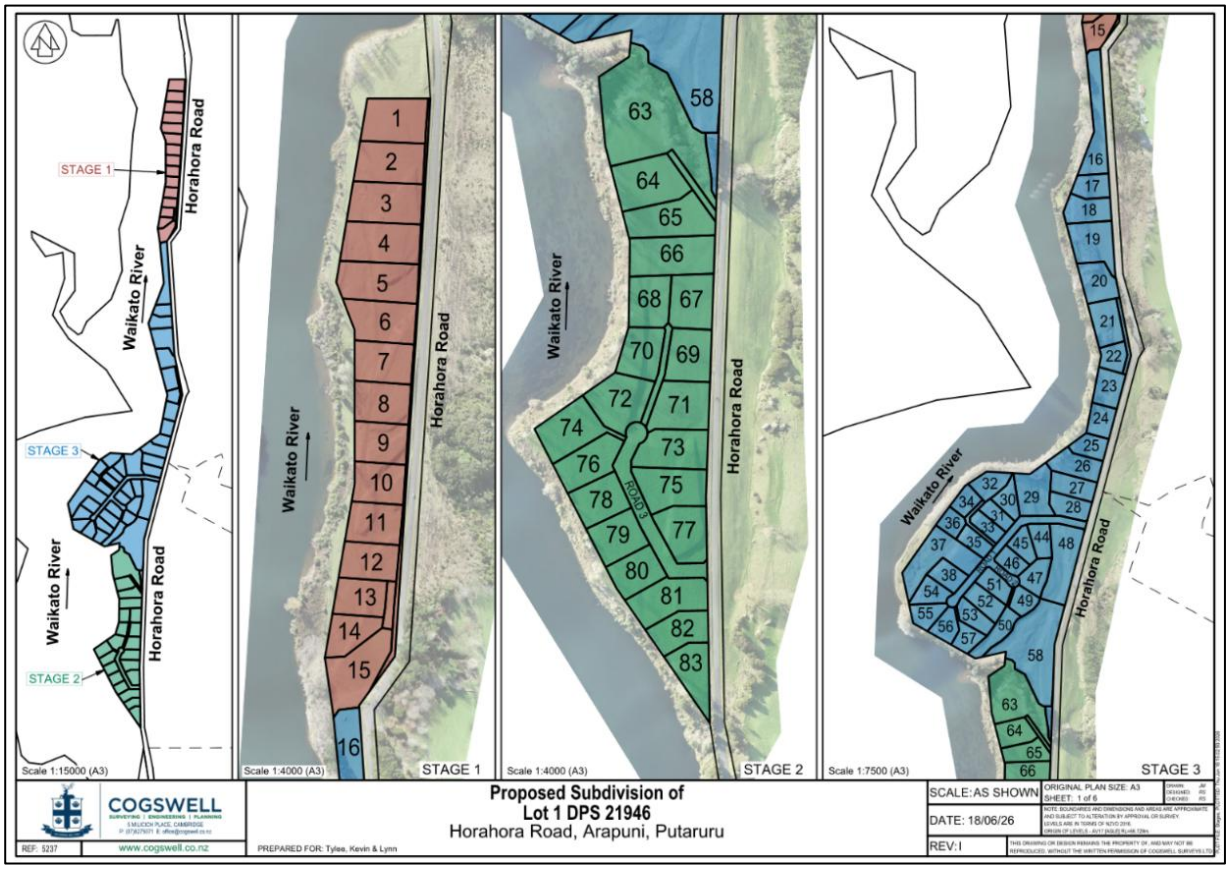


Figure 4: Proposed subdivision layout

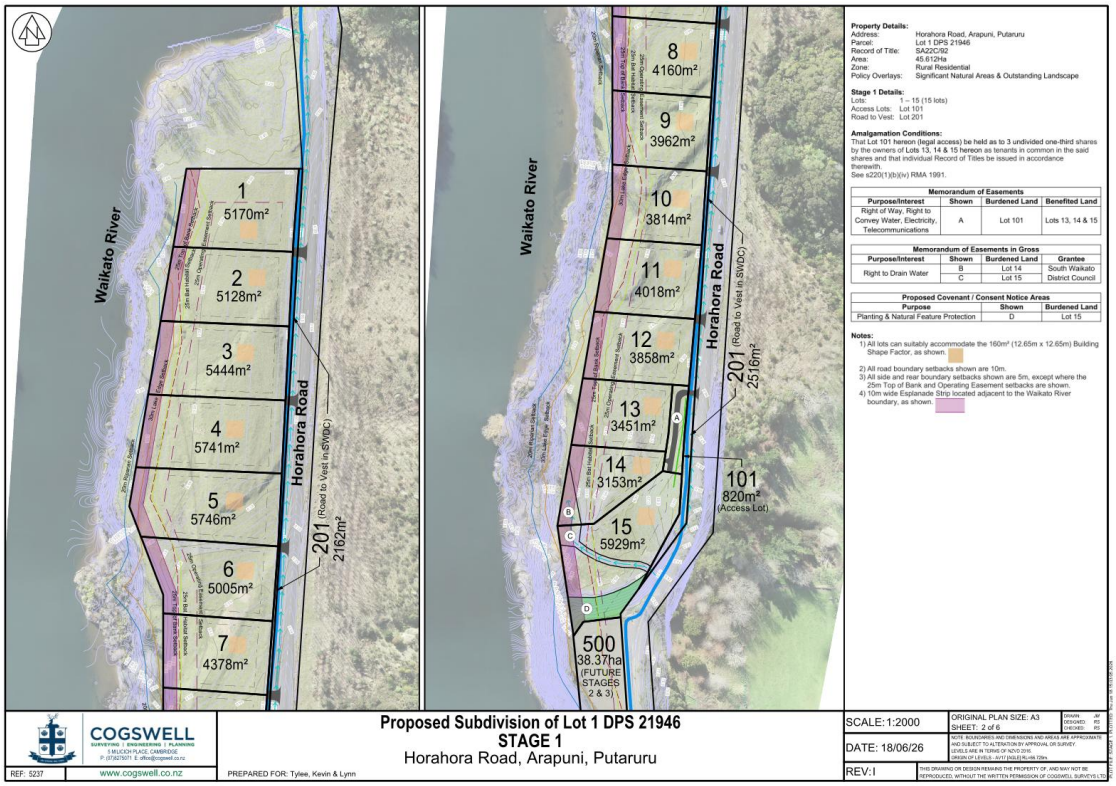


Figure 5: Stage 1 Scheme Plan

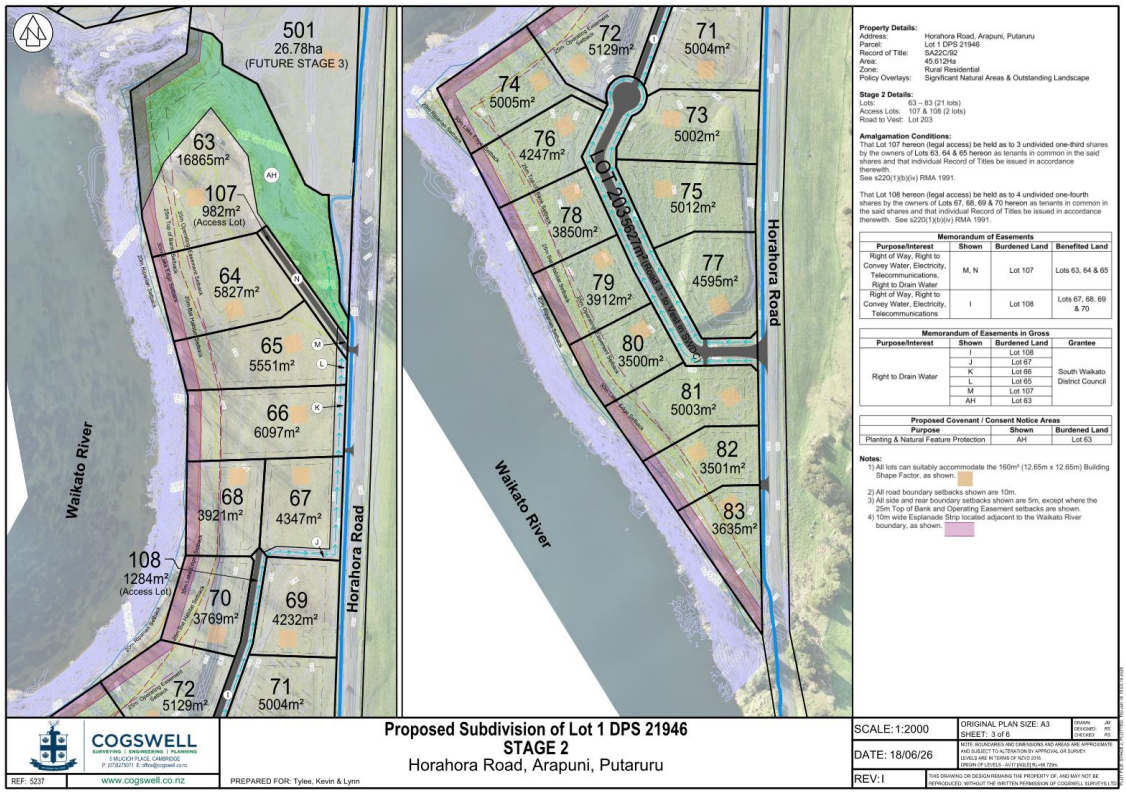


Figure 6: Stage 2 Scheme Plan

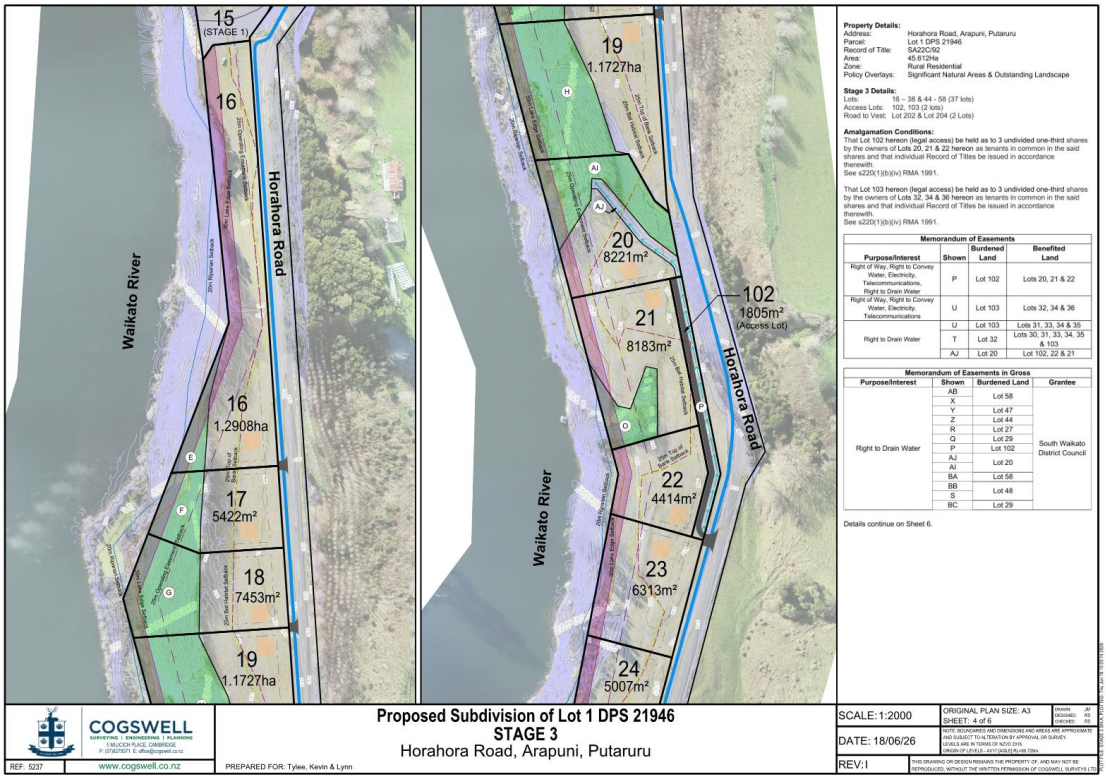


Figure 7: Stage 3 Scheme Plan

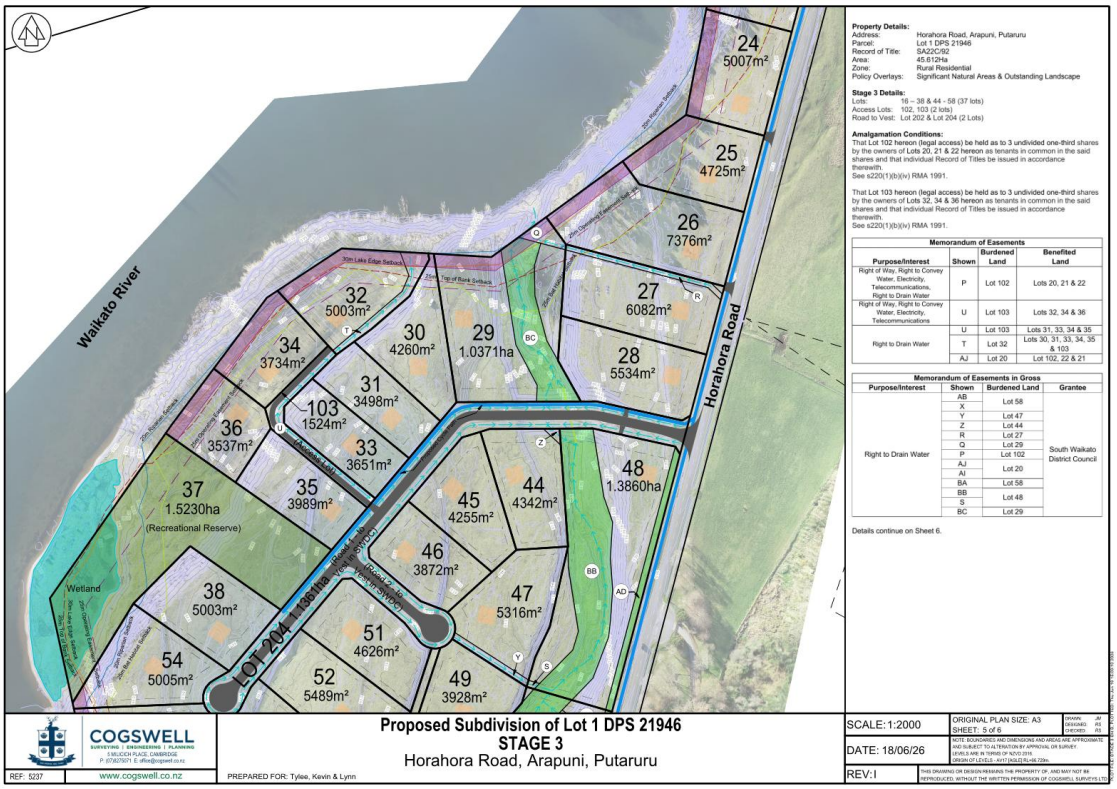


Figure 8: Stage 3 Scheme Plan

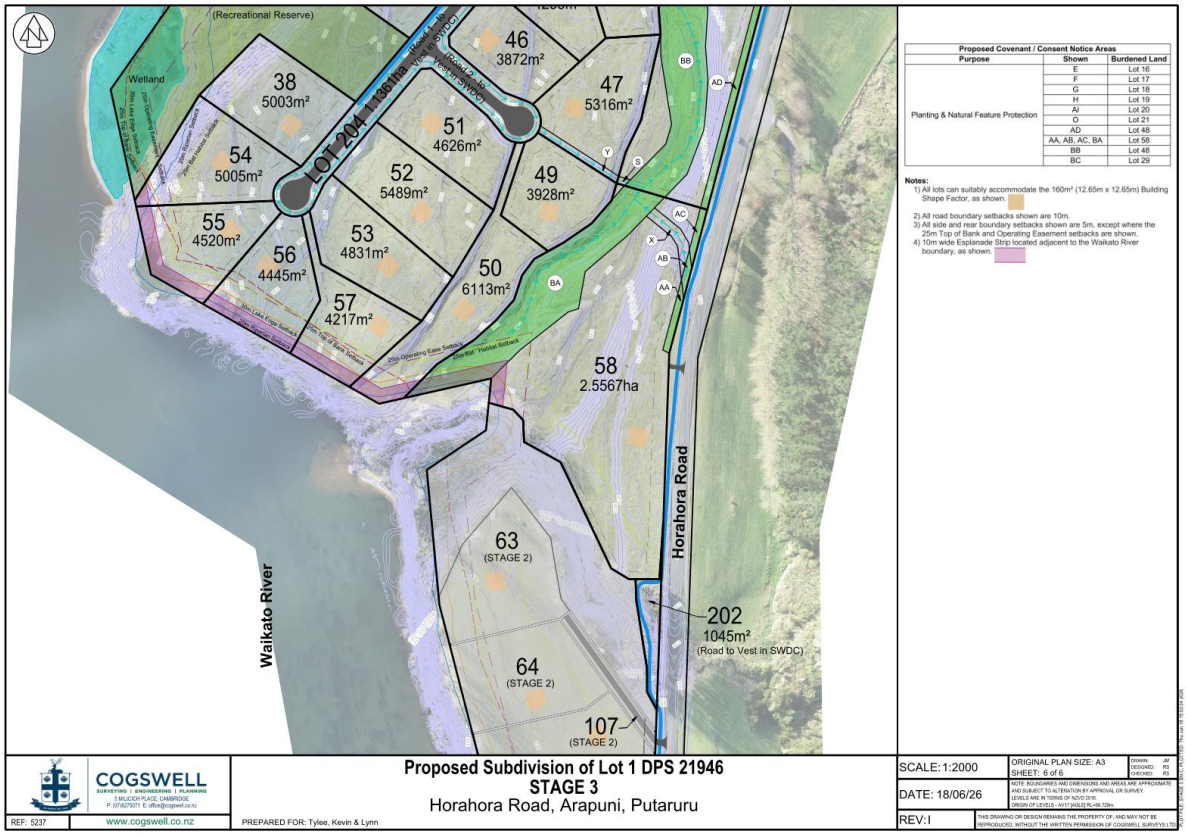


Figure 9: Stage 3 Scheme Plan

33) Stages 2 and 3 will principally be accessed by the two proposed internal roads. Stage 1 includes lots with direct access to Horahora Road. The proposal also includes vehicle crossings, rights of way and pedestrian and cycling connections.

34) The amended Stage 3 stormwater design includes changes to Swale 13 and a new culvert beneath Road 1. The wider stormwater system will comprise on-lot detention and soakage devices, vegetated swales, culverts, gullies and defined overland-flow paths.

35) SWDC will not own or maintain isolated rural stormwater assets outside the road reserve. The relevant stormwater infrastructure must therefore remain privately owned and maintained through an enforceable long-term management arrangement.

36) Each residential lot will rely on an individual secondary-treatment wastewater system and on-site disposal field. Each lot must be capable of accommodating compliant primary and reserve disposal areas outside the applicable setbacks and constrained land.

37) Potable and firefighting water supplies, electricity and telecommunications will be provided as part of the subdivision works or, where expressly provided for, when individual lots are developed.

38) The amended proposal includes additional indigenous planting, ecological restoration and habitat enhancement. Existing gullies, wetlands, riparian margins and other ecological features are proposed to be retained, restored and legally protected.

39) Within Stage 3, approximately 1.437 ha of additional land is proposed for protection and restoration following the removal of several previously proposed residential lots. Identified as Areas BA–BH on the updated ecological plans, this land will provide an approximately 20–30 m-wide vegetated connection between the existing stream gully and the riparian vegetation adjoining the Waikato River.

40) The planting is intended to increase the extent and quality of indigenous vegetation, improve habitat connectivity and enhance foraging and commuting habitat for indigenous fauna, including long-tailed bats. Existing gully and wetland habitat will be managed through the Ecological Management Plan (EMP).

41) The landscape mitigation includes planting along the Waikato River and Horahora Road frontages, within gullies and restoration areas and between residential lots. The works are to be implemented through the staged Landscape Master Plan (LMP), a certified Landscape, Visual Amenity and Mitigation Planting Plan (LVAMPP), the EMP, conditions of consent and consent notices.

42) Figures 10–12 below show the proposed staged LMP.

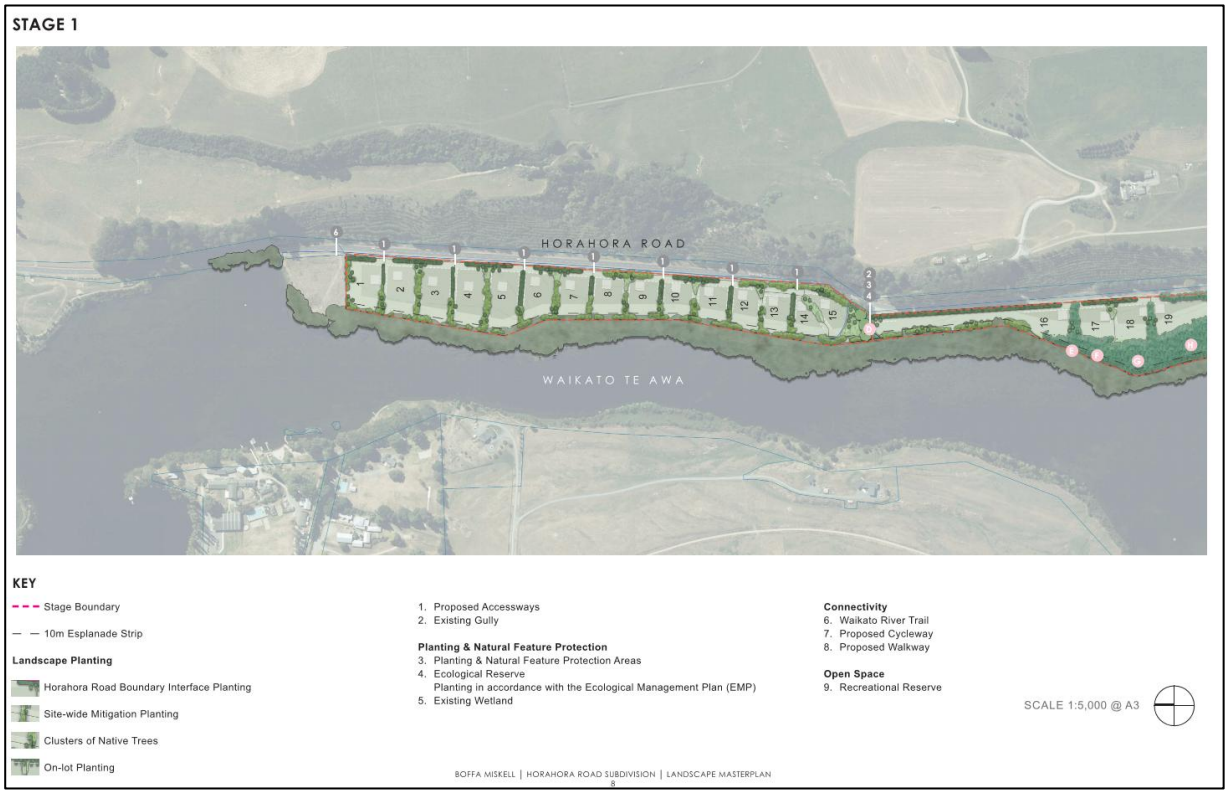


Figure 10: Stage 1 Landscape Master Plan



Figure 11: Stage 2 Landscape Master Plan



Figure 12: Stage 3 Landscape Master Plan

2.3 Application Documentation

43) The Application consists of:

a. An Assessment of Environmental Effects dated 20 December 2024 prepared by Cogswell Surveys. This included 13 appendices:

b. Record of Title (Appendix A);

c. Scheme Plans (appendix B);

d. SWDP Assessment (Appendix C);

e. Site Suitability Report and s106 Assessment (Appendix D);

f. Stormwater Management Report (Appendix E);

g. Preliminary Site Investigation (PSI) (Appendix F);

h. Archaeological Investigation (Appendix G);

i. Landscape and Visual Assessment (Appendix H);

j. Traffic Report (Appendix I);

k. Ecological Report (Appendix J);

l. Mercury Written Approval (Appendix K);

m. Waikato River Trails Written Approval (Appendix L) – later withdrawn (26 November 2025); and,

n. Pre-Application Meeting Notes (Appendix M).

2.4 Section 91(1) Deferral

44) In accordance with s91(1) of the Resource Management Act 1991 (RMA), the Council deferred processing on 24 January 2025 as resource consent was required from Waikato Regional Council.

45) The Waikato Regional Council consents were lodged and the s91(1) deferral uplifted on 30 May 2025.

46) WRC granted an earthworks consent (AUTH147638.01.01) and water diversion consent (AUTH147638.03.01) on 5 October 2025. Its combined notification and section 42A planning report, decision and consent certificates were provided to SWDC on 6 October 2025.

2.5 Further Information

47) In accordance with s92(2) of the RMA, the Council commissioned the review of the Ecological Report, Landscape and Visual Assessment and PSI on 24 January 2025.

48) The Ecological review process was undertaken by Wildlands Consultants Ltd and received by Council on 17 April 2025 (review of bat habitat assessment), 15 May 2025 (review of wetland assessment), and 24 July 2025 (review of EcIA).

49) The Landscape and Visual Assessment peer review was undertaken by Mansergh & Graham Landscape Architecture and received by Council on 22 April 2025 (review of LVA and graphic supplement) and 2 September 2025 (review of further information).

50) The Traffic peer review was undertaken by Gray Matter and received by Council on 17 April 2025 (review of ITA), 1 July 2025 (response to further information) and 14 August 2025 (further response to further information).

51) The PSI peer review was undertaken by HAIL Environmental and received by Council on 24 February 2025.

52) In accordance with s92(1) of the RMA, the Council requested further information on 23 April 2025. This requested contained 22 items relating to:

    a. Subdivision layout;
    b. Traffic and access;
    c. Earthworks;
    d. Services/infrastructure;
    e. Ecology;
    f. Landscape and visual effects;
    g. Gully areas;
    h. Recreation reserves;
    i. Stormwater management; and,
    j. Other consents and iwi engagement.

53) Further requests for information were sent out on:

    a. 21 May 2025 – relating to ecology;
    b. 19 June 2025 – providing a status summary of all further information requested;
    c. 2 July 2025 – relating to bat habitat assessment request;
    d. 9 July 2025 – relating to traffic and servicing;
    e. 29 July 2025 – relating to EcIA and bat habitat assessment;
    f. 14 August 2025 – relating to traffic; and
    g. 3 September 2025 – relating to landscape.

2.6 Post Notification Addendum

54) Following the close of submissions, Cogswell on behalf of the Applicant's advised that a revised proposal was being prepared and would be submitted to Council.

55) Council received the applicant's addendum and amended plans on 19 June 2026. Corrected plans and supplementary information were subsequently provided, including assessments addressing new or amended national direction and natural-hazard risk.

56) The principal changes were:

a. reduction from 81 to 73 residential lots;

b. reconfiguration of the subdivision, particularly within Stage 3;

c. compliance with the SWDP lot-averaging provisions;

d. substantial reduction in Stage 3 earthworks;

e. greater retention of the existing gullies, terraces and natural landform;

f. revised Stage 3 stormwater arrangements;

g. additional ecological protection, restoration planting and habitat enhancement;

h. revised landscape mitigation, building setbacks and design controls;

i. inclusion of a proposed 10 m esplanade strip along the Waikato River frontage; and

j. revised road, access and land arrangements.

57) These amendments reduce the proposed development density and several of the adverse effects associated with the notified proposal. Compliance with the lot-averaging provisions also removes the non-complying activity trigger that applied to the notified proposal. The amended subdivision is now a discretionary activity under SUB-R3(4).

58) Council issued its response to the post-notification amendments on 4 August 2026. The amended material and Council's response were then circulated to submitters, who were invited to confirm, amend or withdraw their submissions. The responses received are summarised in Section 6.

3. SOUTH WAIKATO DISTRICT PLAN AND NATIONAL ENVIRONMENTAL STANDARDS

3.1 National Environmental Standards (NES)

59) There are no consent requirements under any NES.

60) The Preliminary Site Investigation found no evidence that an activity or industry described on the Hazardous Activities and Industries List had occurred on the site. Soil sampling also recorded cadmium concentrations below the applicable rural-residential standard.

61) Council's independent contamination reviewer accepted those findings. The amendments do not change that assessment. The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) does not apply, and no resource consent is required under it.

3.2 South Waikato District Plan Maps

62) The site is zoned Rural Lifestyle under the SWDP. It is subject to Significant Natural Area bounds and Outstanding Natural Landscape overlays and is within the Horahora Road Area relating to Lot 1 DPS 21946, the Waikato River Catchment Area and a Statutory Acknowledgement Area (Waikato River).

3.3 Relevant Plan Changes

63) Proposed Plan Change 4 was notified on 22 July 2026 with submissions closing on 2 September 2026. This has not introduced any rules with immediate legal effect that would apply to the subject site and proposal; however, changes are proposed to objectives and policies, and these are assessed in Section 7 below.

3.4 Activity Status

64) The subdivision and associated land-use activities trigger resource-consent requirements under the SWDP. The relevant consent triggers are outlined below.

65) RLZ-R2 – Controlled Activities

One residential unit and associated accessory buildings on each site within the Horahora Road area are controlled activities.

The proposal provides for one residential unit and one accessory building on each of the 73 residential lots. No secondary residential units are proposed.

66) *RLZ-R6 – Performance Standards*

Future buildings must comply with the relevant standards, including:

- *Boundary, river, wetland and hydro-electric easement setbacks.*
- *A maximum building height of 6 m.*
- *Building coverage not exceeding 10% of the net site area.*
- *Applicable colour and reflectivity controls.*

Although the application refers to a maximum building footprint of 500 m², the 10% building-coverage limit must also be met on each lot.

67) *NFL-R3 – Restricted Discretionary Activities*

Structures within the ONL must not exceed 250 m² in area under NFL-R5.

The proposal provides for buildings with a combined footprint of up to 500 m² within an 800 m² building area. Consent is therefore required as a restricted discretionary activity under NFL-R3.

68) The earthworks exceed the general thresholds applying within an ONL. However, earthworks undertaken as part of an approved subdivision are permitted under EW-R5(4)(b)(i), subject to compliance with the applicable silt-control, revegetation and riparian-management requirements.

69) *SUB-R3(4) – Discretionary Activities*

70) *Subdivision of land adjoining the Waikato River or hydro-electric power operating easements is a discretionary activity.* The amended subdivision therefore requires consent under SUB-R3(4).

The amended proposal now complies with the RLZ minimum and average lot-size standards. It provides:

a. 73 residential lots.

b. An average lot size of approximately 5,668 m².

c. 37 lots above 5,000 m².

d. 36 lots below 5,000 m².

The notified proposal did not comply with the lot-averaging standard and was therefore a non-complying activity. Given that the amended proposal now complies, the non-complying activity rule under SUB-R4 is no longer triggered and the subdivision reverts to a discretionary activity.

71) The proposal does not fully comply with all subdivision servicing and access standards because potable water supplies and some vehicle crossings will be provided when the individual lots are developed. These matters can be considered as part of the discretionary activity assessment and addressed through conditions.

72) The amended plans provide the 10 m esplanade strip required by PA-R2 and PA-R3 along the Waikato River frontage. The strip will secure a legal public-access corridor along the river margin.

73) The existing Waikato River Trail will remain along the Horahora Road frontage. Relocation of the formed trail into the esplanade area does not form part of the current proposal and is not relied upon as mitigation. Any future relocation pursued by Council would be considered separately. This does not alter the proposal's activity status.

74) The land-use component requires restricted discretionary consent under NFL-R3 because the proposed combined building footprint of up to 500 m² exceeds the 250 m² standard within the Horahora Outstanding Natural Landscape.

75) The subdivision requires discretionary consent under SUB-R3(4) because the site adjoins the Waikato River and hydro-electric power operating easements. The amended proposal complies with the SWDP lot-averaging provisions, so SUB-R4 no longer applies.

76) The subdivision and future buildings are assessed together because the new lots, building areas and building controls form an integrated development, and their landscape effects overlap. The proposal is therefore assessed overall as a discretionary activity, the more stringent of the two activity statuses. Its environmental effects are assessed in Section 8.

3.5 Summary of Consents Required

Component	Rule	Activity status	Reason
One residential unit and associated accessory building on each residential lot	RLZ-R2	Controlled	The proposed residential use falls within the Horahora Road provision.
Proposed buildings within the Horahora ONL	NFL-R3	Restricted discretionary	The combined building footprint of up to 500 m² exceeds the 250 m² standard.
Subdivision	SUB-R3(4)	Discretionary	The site adjoins the Waikato River and hydro-electric power operating easements.

Overall, consent is required for a **discretionary activity**.

4. NOTIFICATION AND SUBMISSIONS

4.1 Notification

77) Council publicly notified the application on 13 March 2026 following the notification decision dated 19 February 2026. The Notification Report contains the full assessment supporting that decision.

78) At the time of notification, the proposal was for an 81-lot rural-lifestyle subdivision. Although rural-lifestyle development is anticipated by the RLZ, the proposal represented a substantial and permanent change from predominantly open pastoral land to rural-lifestyle development.

79) The notified proposal also involved extensive earthworks, particularly within Stage 3. The resulting construction traffic, noise, dust, exposed earth, visual disturbance and duration of the works were assessed as potentially generating temporary adverse effects that were more than minor.

80) The site adjoins the Waikato River and forms part of a culturally significant landscape. At the time of notification, limited information was available about the effects on tangata whenua values and the relationship of river iwi with the Waikato River and surrounding landscape. Those effects were therefore conservatively assessed as potentially more than minor.

81) The application was publicly notified under section 95A of the RMA on that basis.

82) A timeframe extension was granted for the Raukawa Charitable Trust to submit until 24 April 2026.

4.2 Submissions

83) A total of 33 submissions were received. The submission from Waikato River Trails Trust was subsequently withdrawn, leaving 32 submissions to be considered. Of those, 27 opposed the

application, three were neutral and two supported it subject to conditions. Ten submitters wished to be heard, eight indicated that they might wish to be heard and 14 did not wish to be heard.

84) The submissions are listed in the table below. This table records each submitter's position and the principal relief sought. The detailed concerns raised are grouped by topic and addressed in the effects assessment in Section 6.

Submitter	**Position**	**Principal relief sought**
Aaron Gilmore	Opposed	Provide screen planting along the river edge.
Angela Parlane	Opposed	Decline the application.
Anonymous submitter	Opposed	Upgrade Horahora Road, the SH1 intersection, the northern bridge and the Pokaiwhenua Stream one-lane bridge, together with recreational access, parking and lighting.
Arapuni Village Community Association – Rosie Cahalane, Co-chair	Neutral	Upgrade the one-lane bridge and reduce speed limits along Horahora Road.
Bates Family Trust – Joan Forret	Opposed	Decline the application.
Bernadette Winter	Opposed	Decline the application.
Brendon Cornes	Opposed	Provide a dedicated construction access and retain the 100 km/h speed limit.
Carol Dryburgh-Bernhard	Neutral	Maintain public recreational access.
Chris and Julia Hogg	Opposed	Decline the application and require lower-density development in any future proposal.
Daniela Forsythe	Opposed	No specific alternative relief recorded in the submission summary.
Elle Clarke	Opposed	Decline the application.
Evelyn Winter	Opposed	Decline the application.

Submitter	Position	Principal relief sought
Janine and Brendon Andrews	Opposed	Apply the SWDP average lot-size provisions, provide an esplanade strip, retain the natural landscape, relocate the Waikato River Trail, provide an accessible public reserve and reduce the Horahora Road speed limit.
Kelvin Osborne	Opposed	Decline the application.
Kristina Belfield	Opposed	Undertake further traffic assessment using current traffic volumes and speeds.
Roger Belfield	Opposed	Undertake further traffic assessment using current traffic volumes and speeds.
The Laxon Family – submitted by Mitchell Daysh	Supported, subject to conditions	Grant consent subject to the requested covenants and consent notices.
Loka Manu	Opposed	No specific relief recorded in the submission summary.
Ngaati Koroki Kahukura – Elizabeth Tauroa	Opposed	Decline the application.
Herenga ā Nuku Aotearoa | Outdoor Access Commission – Rachel Cook	Neutral	Provide an esplanade strip along the Waikato River to secure public access.
Patrick Carnachan	Opposed	Decline the application.
Peter Martin	Opposed	Decline the application.
Philip Winter	Opposed	Decline the application.
Pierce Winter	Opposed	Decline the application.
Profile Farms Limited – submitted by Mitchell Daysh	Supported, subject to conditions	Grant consent subject to the requested covenants and consent notices.

Submitter	Position	Principal relief sought
Rachel O'Reilly	Opposed	Provide a lower-density subdivision.
Raukawa Charitable Trust	Opposed	Decline the application or substantially redesign it to provide appropriate esplanade access, avoid linear development along the Waikato River, create a more clustered layout and protect the mauri of the River and the relationship of Raukawa with it.
Roger Fyfe	Opposed	No specific relief recorded in the submission summary.
Sue Burnett	Opposed	Decline the current application and provide a lower-density subdivision.
Tessa Winter	Opposed	Protect the existing natural character and landscape.
Tracy Rovers	Opposed	Decline the application.
Trina	Opposed	Decline the application.
Waikato River Trails Trust	Withdrawn	Submission withdrawn and not considered further.

4.3 Amended Proposal

85) Following notification, submissions and further consultation, the applicant amended the proposal. The principal changes are described in Section 4 and include a reduction from 81 to 73 residential lots, compliance with the SWDP lot-averaging provisions, substantially reduced earthworks, greater retention of existing landform and gullies, additional ecological restoration and the proposed 10 m esplanade strip.

86) The amendments reduce the scale and effects of the proposal without changing its essential nature as a staged rural-lifestyle subdivision. All submitters were provided with the amended application material and Council's response and were invited to confirm, amend or withdraw their submissions. This provided submitters with an opportunity to consider whether the amendments addressed their concerns.

87) The original submissions remain relevant except where a submitter has expressly amended or withdrawn its position.

4.4 Responses to Amended Proposal

88) After the amended proposal and Council's response were circulated, six submitters provided further responses. Those responses are summarised below.

Submitter	Position following amendments	Further comments
Profile Farms Limited	Original submission maintained	Continued to support the proposal subject to the consent notices and covenants requested in its original submission.
The Laxon Family	Original submission maintained	Continued to support the proposal subject to the building, landscape and covenant controls requested in its original submission.
Philip Winter	Opposition maintained	Confirmed that his original submission remained unchanged.
Bernadette Winter	Opposition maintained	Continued to raise concerns about effects on the Horahora ONL and views from Horahora Road, on-site wastewater disposal near the Waikato River and the loss of scenic and recreational values.
Herenga ā Nuku Aotearoa | Outdoor Access Commission	Neutral position maintained, with additional comments	Supported investigation of relocating the Waikato River Trail closer to the Waikato River. Requested early coordination with the Waikato River Trails Trust, consideration of ecological and mana whenua perspectives, minimisation of construction disruption and resolution of practical public-access matters during detailed design.
Bates Family Trust	Opposition maintained	Acknowledged that the reduced earthworks, esplanade strip and additional planting are improvements. Remaining concerns relate to the linear development pattern, protection of the Horahora ONL, clustering and open space, building controls, establishment and long-term protection of planting, construction effects and relocation of the Waikato River Trail before subdivision works begin.

89) The original submissions, as supplemented by the responses above, remain relevant to the assessment of the amended proposal. No response to the amended proposal was received from Raukawa or Ngaati Koroki Kahukura. Their original submissions nevertheless remain before Council and have been considered in full.

5. STATUTORY CRITERIA

5.1 Scope of Application

90) The application was publicly notified as an 81-lot rural-lifestyle subdivision. The amended proposal reduces the number of residential lots to 73 and changes the layout, earthworks, stormwater design, ecological restoration, landscape mitigation and esplanade arrangements.

91) The amendments do not change the essential nature of the application. They retain the same site, rural-lifestyle purpose and general form of development and, overall, reduce the scale and adverse effects of the notified proposal. They do not introduce materially different effects or affect parties who would not have been affected by the notified proposal.

92) The amended material and Council's response were circulated to all submitters, who were invited to confirm, amend or withdraw their submissions. Six submitters provided further responses, and the remaining submissions continue to apply to the amended proposal.

93) I therefore consider that the amended proposal remains within the scope of the application as notified and can be determined without further notification.

5.2 Statutory Considerations

94) Under s9(3) of the RMA:

> No person may use land in a manner that contravenes a district rule unless the use-
>
> (a) is expressly allowed by a resource consent; or
>
> (b) is allowed by s10; or
>
> (c) is an activity allowed by s10A.

95) The application is for a Discretionary Activity under the District Plan. The Council may grant or refuse consent under s104B of the Act and, if granted, may impose conditions under ss108 and 220 of the Act.

96) Section 104(1) of the Act sets out matters a consent authority shall have regard to in considering an application for resource consent and any submissions received.

97) Subject to Part 2 of the RMA (Purposes and Principles), the matters relevant to this proposal are:

> *a) any actual and potential effects on the environment of allowing the activity (Section 104(1)(a))*
>
> *ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity*
>
> *b) any relevant provisions of-*
>
> *(i) a national environmental standard:*

(ii) other regulations:

(iii) a national policy statement:

(iv) a New Zealand coastal policy statement:

(v) a regional policy statement or proposed regional policy statement:

(vi) a plan or proposed plan (Section 104(1)(b))

c) any other matter the consent authority considers relevant and reasonably necessary to determine the application (Section 104(1)(c)).

6. EFFECTS – s104(1)(a) AND (ab)

6.1 The Existing Environment

98) In determining the actual and potential effects of the proposal, those effects must be assessed against the existing environment.

99) Case law has held that the 'environment' upon which the effects are to be assessed is the existing and the reasonably foreseeable future environment (that is, the future state of the environment as it might be modified by permitted activities under the District Plan and resource consents that have been granted and are likely to be implemented). Accordingly, the existing environment includes consented activities, even if they have not yet been given effect to.

100) In this case, there are no granted but unimplemented resource consents applying to the site. The District Plan does not provide for dwellings or accessory buildings as permitted activities within the relevant zone. As such, residential development does not form part of the permitted or reasonably foreseeable future environment of the site.

101) Accordingly, the effects of the proposal (which seeks consent for 73 dwellings) must be assessed against the existing rural environment of the site and its surrounds. That environment is characterised by pasture, areas of vegetation, rural farming buildings, and rural lifestyle properties.

6.2 Permitted Baseline

102) The permitted baseline refers to the adverse effects of permitted activities on the subject site.

103) There is no permitted baseline with respect to the proposed subdivision as all subdivision within the South Waikato district require resource consent.

104) Furthermore, there are no permitted activities of comparable scale or effect that could establish a relevant baseline with regards to the land use effects.

6.3 Assessment of Environmental Effects

105) As a discretionary activity, there is no restriction as to what effects can be considered. In this case, the relevant effects for assessment have been informed by the contents of submissions and guidance from the objectives and policies of the District Plan.

106) The effects that may arise from the proposed subdivision, earthworks and future construction of buildings are:

- Subdivision layout and density effects
- Earthworks and construction effects
- Landscape, natural character and visual effects
- Ecological effects
- Stormwater effects
- Wastewater effects
- Traffic and road safety effects
- Cultural effects
- Natural hazard effects
- Positive effects

6.3.1 Subdivision layout and density effects

107) A consistent concern raised in submissions was that the notified 81-lot proposal was too intensive for its rural setting. Submitters referred to the relatively small lots, ribbon development along Horahora Road and the Waikato River, loss of openness and cumulative urbanisation of the river corridor. Some submitters also understood that an additional dwelling could be established on each lot. However, for clarity I confirm that the proposal provides for one dwelling and one accessory building on each residential lot; it does not provide for a second or additional dwelling. The future Lot owners can therefore not construct a minor residential unit or any other dwelling on these lots without needing a resource consent from SWDC, as expanded upon in the Notification Report. Several submitters nevertheless considered that the overall development would appear more like a new residential settlement than rural-lifestyle development.

108) The concerns were understandable in the context of the notified proposal. The original design did not comply with the applicable average-lot-size standard and included both undersized and oversized lots that affected the overall distribution and apparent intensity of development. Compliance with those standards is not merely a technical matter. The standards help give effect to the density and spaciousness anticipated within the Rural Lifestyle Zone.

109) The amended proposal reduces the number of residential lots from 81 to 73 and now complies with the applicable average-lot-size standard. The revised Stage 3 layout also retains more of the existing gully system, terraces and open landform. Council's Parks and Property Manager supports retaining the gullies within private lots, subject to their ongoing legal protection. Together, these changes reduce the concentration of development, provide greater separation between some areas of built development and retain more of the site's existing physical structure.

110) The amendments do not eliminate the effects identified by submitters. The proposal will still permanently change approximately 45.6 ha of predominantly open pastoral land. Roads, dwellings, accessory buildings, domestic planting, lighting and day-to-day residential activity will introduce a substantially more developed character. That change will be particularly apparent to immediate neighbours, users of Horahora Road and the Waikato River Trail, and people viewing the site from across the Waikato River.

111) The relevant planning question, however, is not whether the site will change. The Rural Lifestyle zoning anticipates subdivision and residential development of this general nature. The question is whether the amended layout and density fall within the type of rural-lifestyle outcome contemplated by the zone and whether the resulting site-specific effects are appropriately managed.

112) In my view, the amended proposal now responds more directly to the density concerns raised in submissions. Mansergh Graham Landscape Architects, Council's independent landscape reviewer, considers that the amended proposal is an improvement on the notified layout. It complies with the density standard intended to maintain an appropriate rural-lifestyle pattern, retains more open space and natural landform, and is supported by landscape planting, building-location controls and other mitigation addressed later in this report. The proposal will still produce a significant change in the appearance and use of the site, but significance of change does not, by itself, make the effect unanticipated or unreasonable.

113) On that basis, I consider that the adverse effects arising from the subdivision layout and density will be acceptable, subject to the identified landscape, building and planting controls being secured through enforceable conditions and consent notices.

6.3.2 Earthworks and construction effects

114) The notified proposal involved approximately 270,000 m³ of earthworks across the three stages. This included approximately 200,000 m³ within Stage 3 and the transfer of excess material from Stage 2 to Stage 3. The Notification Report identified the scale and duration of those works as a particular concern and concluded that the associated temporary effects could be more than minor.

115) Submitters similarly raised concerns about extensive landform modification, construction traffic, noise, dust, sediment runoff, stockpiling and the length of time over which construction would occur. The Bates Family Trust also remains concerned about the staging of the development and the potential for nearby residents to experience prolonged disruption.

116) The amended proposal substantially changes the earthworks component. Stage 1 remains generally unchanged at approximately 40,000 m³ of cut-to-fill. Stage 2 has been rationalised to approximately 20,000 m³, while the Stage 3 earthworks have been reduced from approximately 200,000 m³ to approximately 12,000 m³. The total volume is now approximately 72,000 m³, representing a reduction of approximately 198,000 m³, or 73%, compared with the notified proposal.

117) Each stage is also intended to be earthworks self-sufficient. Material will not be imported onto the site or transferred between stages. Within Stage 3, earthworks will be largely limited to road formation, stormwater infrastructure and minor surface levelling. This avoids the extensive cutting of the terraces and filling of the central valley proposed as part of the notified design and enables more of the existing gullies, terraces and natural landform to be retained.

118) These amendments respond directly to the concerns raised at notification and in submissions. The reduced earthworks will result in less exposed ground, stockpiling, internal material movement and machinery activity. They will also reduce noise, dust, sediment-generation risk and construction vehicle movements associated with transporting material. Importantly, the changes reduce both the temporary construction effects and the permanent modification of the site's landform.

119) In saying that, the amendments will not eliminate construction effects. Machinery, vehicle movements, noise, dust and exposed soil will remain evident while each stage is developed. Nearby landowners, road users and people viewing the site from across the Waikato River will experience periods of disruption. Given the size of the site and the staged nature of the subdivision, construction can also reasonably be anticipated to occur over an extended period.

120) However, the appropriate test is not whether construction will have no effect. Earthworks and infrastructure installation are anticipated components of developing land within the RLZ and elsewhere. The relevant question is whether the scale, duration and intensity of the effects are reasonable and whether they can be appropriately avoided, remedied or mitigated.

121) My view is that the 73% reduction in earthworks materially changes that assessment from the position reached at notification. In particular, the removal of extensive Stage 3 landform modification significantly reduces the intensity of construction activity and the potential for sustained disruption. While the application does not quantify the total construction programme or the duration of earthworks within each stage, the effects will be temporary and will move through the site as the development progresses.

122) SWDC's Development Engineer considers that the engineering requirements can generally be addressed through detailed design and consent conditions. In order to ensure effects are managed appropriately, I consider that conditions should be imposed that require each stage to be managed as a discrete earthworks operation and should address:

- the timing and sequencing of works;
- construction hours;

- noise and vibration;
- dust suppression;
- erosion and sediment controls;
- stabilisation of completed areas;
- construction access and vehicle movements;
- stockpile location and management;
- complaints and incident procedures; and
- rehabilitation if works within a stage are delayed.

123) Subject to those controls, I consider that the earthworks and construction effects of the amended proposal will be no more than minor and acceptable. This differs from the conclusion reached at notification because the scale and nature of the earthworks, particularly within Stage 3, have materially changed. Although submitters will still experience periods of construction-related disruption, the remaining effects are understood, temporary and capable of being managed through staging, good construction practice and enforceable conditions.

6.3.3 Landscape, natural character and visual effects

124) Submitters raised concerns about the permanent change to the Horahora ONL, modification of the natural terraces and gullies, and the visibility of future buildings, roads, lighting and earthworks from Horahora Road, the Waikato River, the Waikato River Trail and properties across the River. Several submitters considered that the proposal would introduce an urban or suburban appearance that could not be adequately mitigated through planting and building controls.

125) The Bates Family Trust remains concerned about the linear form of the amended development, the need for greater clustering and open breaks, and the long-term establishment and protection of mitigation planting. Its landscape architect considers that further targeted redesign could better retain views and connections between Horahora Road, the river terraces and the Waikato River.

126) The proposal will result in a substantial and permanent change. Land that is presently experienced as open pasture will contain 73 dwellings, accessory buildings, roads, infrastructure, lighting and domestic planting. Those changes will be visible and will alter the character of part of the Horahora ONL. The RLZ anticipates some form of rural-lifestyle development, but that does not remove the effects or the need to determine whether the particular development is appropriate within the ONL.

127) Boffa Miskell has assessed the landscape, natural character and visual effects in its updated Landscape and Visual Effects Assessment and Landscape Masterplan. The assessment considers the existing landscape and ONL values, the sensitivity of different viewing audiences, the changes arising from the amended design and the effectiveness of the proposed mitigation.

128) That assessment has been subject to a detailed independent peer review by Dave Mansergh of Mansergh Graham Landscape Architects on behalf of Council. Mr Mansergh considers that the methodology is consistent with accepted best practice and that the assessment provides an adequate basis for understanding the nature and scale of the effects. I rely on those specialist assessments in reaching my findings and do not substitute my own assessment for that expert evidence.

129) The amended proposal includes several important changes from the notified design. The reduction from 81 to 73 residential lots decreases the concentration of future built development. The substantial reduction in earthworks, particularly within Stage 3, retains more of the existing gullies, terraces and natural landform. Additional indigenous planting strengthens the landscape framework and assists in integrating the development with the retained gullies and Waikato River margin. Mansergh Graham Landscape Architects considers that the amended proposal represents an improvement on the notified design.

130) The mitigation package also includes a 25 m setback from the River, an 800 m² building platform for each lot, a maximum building height of 6 m, recessive colour and reflectivity controls, restrictions on the location of water tanks and accessory buildings, fencing controls and site-wide and on-lot planting. These measures will reduce the prominence of development when viewed from surrounding roads, the Waikato River, the Waikato River Trail and neighbouring properties.

131) Boffa Miskell assesses natural-character effects as low-moderate adverse. Landscape character effects are assessed as moderate adverse within the site and low-moderate adverse at the wider landscape scale. Visual effects are generally greatest during construction and for nearby residents and road users with close or open views. Those effects reduce following the establishment of mitigation planting and are generally assessed as low or very low for more distant audiences. The NZILA's Te Tangi a te Manu guidelines indicate that low to low-moderate landscape effects may be minor in RMA terms, while moderate or higher effects may be more than minor. The comparison is indicative; the significance of an effect also depends on its context.

132) Mr Mansergh agrees with the natural character and landscape character ratings. He considers that some of the visual effect ratings underestimate the likely effect, although he describes that as a difference in professional judgement rather than a flaw in the methodology. His review also confirms that parts of the proposal retain a linear relationship with Horahora Road and the river corridor. The planting framework and design controls will soften that linearity, but will not remove it completely.

133) The mitigation package must be implemented as a whole. Its effectiveness depends on the preparation and certification of an LVAMPP for each stage, implementation of the required planting before certification under s224(c) of the RMA, controls secured through consent notices, replacement of failed planting and ongoing maintenance. If material elements are omitted, weakened or not maintained, the development will be less successfully integrated into the Waikato River and Lake Karapiro landscape.

134) Having considered the submissions, the LVEA and Council's independent peer review, I accept that the proposal will create localised moderate adverse landscape and visual effects and permanently change part of the Horahora ONL. Effects will generally reduce at the wider landscape scale and over time as the mitigation planting becomes established.

135) I also accept Mr Mansergh's conclusion that, from a landscape perspective, there is no reason why consent cannot be granted, provided the complete mitigation package is secured, implemented and maintained. On that basis, I consider the residual landscape, natural-character and visual effects to be acceptable, although they are not uniformly no more than minor and acceptable.

136) This conclusion is limited to the physical, perceptual and visual landscape matters assessed by the landscape specialists. The tension between the RLZ and ONL provisions will be considered in the objectives and policies assessment, while effects on tangata whenua cultural and spiritual relationships with the landscape are addressed separately under cultural effects.

6.3.4 Ecological effects

137) Submitters raised concerns about effects on indigenous vegetation, gullies, wetlands, river-margin habitat and indigenous fauna, particularly long-tailed bats. Concerns included vegetation clearance, artificial lighting, increased residential activity and whether the proposed restoration and protection measures would be effective over the long term.

138) The site does not contain any areas identified as an SNA in the SWDP. However, the applicant's ecological assessments identify areas that meet the WRPS significance criteria, including large exotic trees that may provide significant roosting, foraging and commuting habitat for long-tailed bats. One natural inland wetland has also been identified within the site.

139) The ecological effects of the proposal were assessed by Bluewattle Ecology and independently reviewed by Wildland Consultants on behalf of Council. The Notification Report concluded that the adverse ecological effects would be less than minor, provided the identified avoidance, mitigation and protection measures were implemented.

140) The amended proposal reduces the number of residential lots from 81 to 73 and retains more of the existing gully habitat and natural landform. It also provides additional indigenous planting and habitat restoration. Wildlands has reviewed the updated Ecological Impact Assessment, EMP and scheme plans and confirms that the amended proposal will result in improved ecological outcomes compared with the notified design. This is largely due to the greater extent of indigenous planting made possible by the reduced lot density.

141) The proposal will retain and protect the identified wetland, with no earthworks proposed within the applicable setback. Existing and proposed habitat areas will also provide improved ecological connections between the site's gullies, the river margin and the wider landscape.

142) The long-term ecological benefits are not automatic, however, Wildland Consultants reviewed the updated EMP dated 17 September 2026 and found that some earlier recommendations have been addressed, while important protection and management measures remain outstanding.

143) The updated EMP still proposes consent notices, rather than covenants, for areas intended to be protected and managed in perpetuity. The 25 m bat-habitat setback has also not been extended around planting intended to become high-value bat habitat. Wildland Consultants identifies Area D, part of Area AI, and Areas BA, BB and BC as areas where the setback is not currently shown. These matters must be resolved in the EMP, scheme plans and legal protection arrangements.

144) The updated EMP now requires pest-animal control within the site by suitably qualified professionals in perpetuity, but does not make the same ongoing commitment for pest-plant control. It also does not provide for the long-term pest-animal control along the Waikato River margin offered in the Ecological Impact Assessment. The EMP must identify the river-margin control area, indicative pest-control device locations and spacing, who will be responsible, the duration of the work and the legal mechanism securing it.

145) Lighting controls are also important because artificial light may affect bat commuting and foraging. The requirements to limit light spill adjacent to habitat areas and use warm-coloured lighting should be imposed through a separate consent condition rather than left within the background sections of the EMP.

146) The EMP must also be updated to:

- require predator-exclusion banding on trees containing bat boxes and installation in accordance with the New Zealand Bat Recovery Group's advice note for artificial bat roosts; and
- include the poplar planting commitment in the EMP's planting schedule and table, consistently with the main text.

147) The pre-works lizard assessment is particularly important given the staged nature of the proposal. Habitat conditions may change between consent being granted and works commencing, including through the development of rank grass or debris piles that could provide suitable skink habitat. The updated EMP now provides for a pre-works habitat assessment and survey where works will affect habitat other than grazed pasture.

148) These matters relate principally to how the ecological mitigation and enhancement measures will be implemented, protected and maintained. Wildlands has not identified a fundamental ecological reason why consent cannot be granted, but the updated EMP and scheme plans cannot yet be relied on as the complete ecological management framework. Covenant protection, future bat-habitat setbacks, ongoing pest-plant control and river-margin pest-animal management remain unresolved.

149) Having considered the ecological assessments, the matters raised in submissions and Wildlands' independent review, I accept that the amended proposal will improve ecological outcomes compared

with the notified proposal. It will retain more existing habitat, protect the identified wetland and provide additional indigenous planting and ecological connectivity.

150) Subject to the outstanding matters identified in Wildland Consultants' review dated 24 September 2026 review being resolved in the EMP and scheme plans, and the resulting protection and management requirements being secured through enforceable conditions and covenants, I consider that the adverse ecological effects will be less than minor. The proposed restoration planting and long-term habitat protection will also generate positive ecological effects as the planting becomes established.

6.3.5 Stormwater effects

151) Submitters raised concerns about increased stormwater runoff, erosion, flooding, wastewater discharges and the cumulative effects of the development on groundwater, surface water, the Waikato River and its mauri. These concerns are understandable given the number of additional lots proposed and the proximity of the site to the river.

152) The original Stormwater Management Plan (SMP), prepared by TMW, assesses the development as a whole and models the 2-, 10- and 100-year ARI rainfall events. The proposed system combines on-lot rainwater detention and soakage with vegetated swales, culverts and defined overland-flow paths. Primary flows are intended to be managed through detention and soakage, while the secondary system provides for the safe conveyance of larger events. Erosion protection and water-quality treatment are also incorporated into the design.

153) The amended proposal includes consequential changes to the Stage 3 stormwater design, including changes to Swale 13 and a new culvert beneath Road 1. The information provided indicates that the revised system can accommodate the relevant design events and will not materially increase stormwater effects compared with the notified proposal. The reduction in the number of lots and earthworks, together with greater retention of the existing gully and natural landform, should also reduce the potential for runoff, sediment generation and erosion compared with the original design.

154) The stormwater information has been reviewed by SWDC and has also formed part of the regional consenting process undertaken by WRC. SWDC's Development Engineer considers that the engineering requirements can generally be addressed through detailed design and consent conditions. No technical evidence has been provided that causes me to depart from those assessments. I am therefore satisfied that the proposed stormwater treatment, detention and conveyance measures provide an appropriate basis for managing runoff and the potential cumulative effects of the subdivision.

155) However, the ownership and long-term maintenance of the stormwater system must be resolved. The addendum proposed a change to the ownership arrangements, and the revised plans show drainage easements in gross in favour of SWDC over several private lots. SWDC has confirmed that it will not own or maintain isolated stormwater assets serving a rural subdivision. The final plans and legal instruments must therefore establish private ownership, access and maintenance arrangements consistent with that position.

156) This is an important effects-management matter, rather than simply an administrative detail. The effectiveness of the system will depend on the swales, culverts, detention devices and overland-flow paths continuing to operate as designed. An enforceable private management arrangement is therefore required, identifying responsibility for ownership, access, inspection, maintenance, costs and any necessary resource consents. The draft conditions require these responsibilities to be recorded in a certified subdivision-wide SMP, secured through consent notices on affected titles and supported by private access and drainage easements where required.

157) The proposed private easement provides a means of securing access to the stormwater infrastructure, but the final instrument must identify the relevant assets and provide for the necessary access and maintenance rights. Subject to that easement being registered, the SMP being certified, and ownership and ongoing maintenance obligations being secured through consent notices, I consider that stormwater effects, including cumulative effects on downstream receiving environments, will be appropriately managed and will be no more than minor.

6.3.6 Wastewater effects

158) The amended proposal does not change the proposed wastewater-servicing approach. Each residential lot will use an individual secondary-treatment wastewater system and land-disposal field. Secondary treatment provides a higher level of treatment than a conventional septic tank and will reduce the concentration of contaminants discharged to land.

159) The reduction from 81 to 73 residential lots also reduces the overall number of wastewater systems compared with the notified proposal. Nevertheless, each lot must be capable of accommodating both a compliant primary disposal area and a reserve disposal area outside the required setbacks and any land constrained by slope, groundwater, stormwater infrastructure or proximity to the Waikato River. Confirmation is required that each residential lot can accommodate compliant primary and reserve wastewater-disposal areas.

160) Discharges from the individual systems are expected to comply with the permitted-activity provisions of the Waikato Regional Plan. Where those standards cannot be met, the relevant lot owner will need to obtain any necessary resource consent from WRC. Compliance with the regional requirements, together with appropriate design, installation and ongoing servicing of the secondary-treatment systems, provides the principal means of managing both individual and cumulative wastewater effects.

161) I do not consider that the number of proposed systems, by itself, demonstrates that unacceptable cumulative effects will arise. The relevant consideration is whether each lot can accommodate a compliant system and whether the treatment and disposal requirements will be maintained over time. The draft conditions require confirmation from a suitably qualified wastewater professional, before s224(c) certification for each stage, that every lot in that stage can accommodate a compliant system with primary and reserve disposal areas. Consent notices would retain those areas and record the ongoing treatment requirements. Subject to those requirements being met, I consider that wastewater

effects, including cumulative effects, will be appropriately managed and will be no more than minor and acceptable.

6.3.7 Traffic and road safety effects

162) Submitters raised concerns about the increase in traffic on Horahora Road, the safety and number of new vehicle crossings, available sight distances, construction traffic, the existing reverse curves, the Pokaiwhenua Stream bridge and the intersection with SH1. Some submitters also sought a lower speed limit and wider network upgrades. Concerns were raised about the effect of new accesses and intersections on users of the Waikato River Trail.

163) The transport effects were assessed by CKL and independently reviewed by Gray Matter on behalf of Council. Gray Matter also visited and drove the surrounding road network. The post-notification amendments do not materially alter the proposed access or internal road arrangements. Although no updated trip-generation assessment has been prepared for the 73-lot proposal, the earlier assessment was based on a larger number of residential lots. It therefore provides a conservative basis for assessing the traffic generated by the amended proposal.

164) The ITA estimated approximately 706 additional daily vehicle movements and 91 movements during the peak hour. This would approximately double the traffic using Horahora Road. Gray Matter accepts that the increase will be noticeable to existing road users but confirms that Horahora Road, as a Secondary Collector, has sufficient capacity to accommodate the additional traffic without compromising its overall function.

165) The more important issue is whether the proposed intersections and vehicle crossings can operate safely within the existing high-speed rural-road environment. Gray Matter's initial review identified concerns about operating speeds, sight distances, access gradients, the number of conflict points and the existing reverse curves near the site.

166) Following further information from the applicant, Gray Matter accepted the proposed safety improvements at the reverse curves. These include upgraded curve-warning signs, edge-marker posts, reflective pavement markers and chevron boards designed and installed in accordance with the applicable standards. These works respond directly to the concern that the development will increase traffic through an existing area of elevated safety risk.

167) Two access locations were identified as having sight-distance shortfalls. At the access serving Lots 1 and 2, compliant sight distance can be achieved by cutting and regrading the roadside embankment. At the access serving Lots 13 to 15, Gray Matter accepted the relocation of the access and the proposed vegetation removal in principle, subject to a defined sight envelope, controls on vegetation height and appropriately located screening to manage vehicle headlights.

168) Gray Matter recommends that sight distances be confirmed through the Engineering Plan Approval process. If they cannot be confirmed from the detailed design, they must be verified on site during

construction before the relevant access is used. Where roadside earthworks are required, existing drainage must be maintained, and the Waikato River Trail must be appropriately lowered or regraded.

169) The two proposed intersections with Horahora Road also require basic left- and right-turn widening. The specialist assessments conclude that dedicated turning lanes are not required and that the existing road reserve is wide enough to accommodate the necessary widening, drainage and trail works. The final intersection designs must nevertheless be approved through the Engineering Plan Approval process and comply with the relevant Austroads standards.

170) The proposed roads, rights of way and vehicle crossings must also meet the relevant RITS and SWDP requirements. Conditions should address carriageway and legal widths, including formed carriageway widths of 4.5 m where a right of way serves one residential lot and 6 m where it serves two to six residential lots. SWDC's Development Engineer has accepted a 6 m legal width for Lot 104, provided it serves only Lots 43 and 47; the draft conditions require a minimum 7 m legal width for other shared rights of way. Conditions should also address gradients, gate setbacks, heavy-vehicle and emergency-vehicle tracking, roadside drainage and restrictions on additional access points. The proposed access locations and visibility splays should be secured so that later fencing, planting or additional crossings do not compromise safety.

171) Gray Matter's final review concludes that the outstanding sight-distance, intersection-widening, drainage, access-gradient and trail-reinstatement matters can be appropriately managed through Engineering Plan Approval and conditions of consent. I rely on that independent technical advice in reaching my finding on traffic and road safety effects.

172) Submitters also raised concerns about the Pokaiwhenua Stream bridge, the SH1 intersection and the posted speed limit on Horahora Road. No specialist evidence has identified a capacity or safety upgrade to the bridge or SH1 intersection as necessary to accommodate the traffic generated by this proposal. Changes to the posted speed limit also require a separate statutory process and cannot be determined through this resource consent. Those wider improvements should therefore not be imposed on the applicant unless they are shown to be necessary to address an effect directly attributable to the subdivision.

173) Temporary construction traffic is addressed in the earthworks and construction-effects assessment. The substantial reduction in earthworks and the removal of material transfers between stages will reduce the number of heavy-vehicle movements compared with the notified proposal. A construction traffic management plan should nevertheless be required to manage construction access, hours, routes, site signage, road cleanliness and interaction with users of Horahora Road and the Waikato River Trail.

174) The existing Waikato River Trail runs within the Horahora Road corridor along the site frontage. Under the amended proposal, the trail will remain in that location and will be crossed by the proposed vehicle accesses and two new road intersections. The proposal will therefore increase the number of potential conflict points between vehicles and trail users.

175) The transport design responds by pairing or consolidating vehicle crossings, protecting visibility between drivers and trail users, restricting vegetation and fencing within visibility splays, and requiring affected sections of the trail to be reinstated or locally regraded following access or intersection works. Gray Matter considers that these measures can maintain the safety and continuity of the existing trail, subject to detailed design and approval by SWDC and the Waikato River Trail Manager.

176) The amended proposal also includes a 10 m-wide esplanade strip along the Waikato River frontage. SWDC previously asked the applicant to investigate relocating the trail from Horahora Road into that area. Although relocation could provide traffic-safety and recreational benefits by separating trail users from the new vehicle crossings and road intersections and establishing a closer relationship with the River, it has not formed part of the transport assessment or the final proposal.

177) Relocation of the trail is therefore not required by, or relied upon as mitigation for, these consents. The recommended conditions instead require the existing trail to remain safe and continuously available for public use and provide for its temporary management, local regrading and reinstatement where affected by subdivision works. The proposed esplanade strip would not prevent Council from investigating or undertaking a future relocation of the trail as a separate project.

178) Subject to detailed design of the affected crossings and intersections, protection of visibility and implementation of the recommended conditions, I consider that the effects of the subdivision on the safety and continuity of the Waikato River Trail can be appropriately managed.

179) Overall, the proposal will result in a noticeable increase in traffic on Horahora Road, and the concerns raised by submitters about road safety and interaction with the Waikato River Trail are legitimate. However, the independent transport review confirms that the road has sufficient capacity and that the identified safety issues can be addressed through physical improvements, detailed design and enforceable conditions.

180) Subject to the recommended curve improvements, compliant sight distances and access gradients, intersection widening, access controls, trail protection and Engineering Plan Approval, I consider the operational traffic and road-safety effects to be less than minor.

6.3.8 Cultural effects

181) Submissions from Raukawa and Ngaati Koroki Kahukura raise concerns about the effects of the proposal on the Waikato River, its margins and the wider cultural landscape. Both iwi oppose the proposal and seek that consent be declined or, alternatively, that it be redesigned and subject to conditions that better recognise and provide for their relationship with the awa.

182) The submissions describe the site as part of a connected cultural landscape rather than an isolated parcel of rural land. Ngaati Koroki Kahukura identifies relationships between the awa, adjoining whenua, ancestral pā across the River and sightlines to Maungatautari. It considers that development of the site would fragment those relationships and affect the integrity and mana of the cultural landscape.

183) Raukawa is concerned about the cumulative pattern of rural-lifestyle development along the Waikato River. In particular, it considers that a linear arrangement of private residential lots may reduce opportunities for tangata whenua to be present beside the awa, maintain cultural and spiritual connections, gain access and exercise kaitiakitanga. Both iwi also raise concerns about the effects of earthworks, stormwater and on-site wastewater disposal on the health and mauri of the River.

184) Ngaati Koroki Kahukura's submission refers to the notified proposal as potentially enabling up to 162 dwellings. For clarity, the application seeks consent for one dwelling and one accessory building on each residential lot. Subsequent dwellings, including minor residential units under the NES-MRU are restricted by the SWDP and would not be enabled by this consent. The amended proposal must therefore be assessed on the basis of 73 potential dwellings, together with the associated buildings, roads, infrastructure and residential activity.

185) Raukawa also questions the process through which the land was originally zoned for rural-residential development. That history provides context for its concerns, but this consent process cannot reconsider the operative zoning. Council must assess the application on the basis that the site is within the RLZ and that rural-lifestyle development is anticipated in principle. The zoning does not, however, establish that every layout or density is appropriate or remove the need to assess effects on tangata whenua values.

186) The amended proposal provides a materially better response to several of the physical matters raised. The reduction from 81 to 73 residential lots decreases the development intensity and brings the proposal into compliance with the applicable average-lot-size standard. The revised layout retains more of the existing gullies, terraces and natural landform, while the additional indigenous planting and ecological restoration provide greater protection for sensitive areas.

187) Earthworks have also been reduced from approximately 270,000 m^3 to approximately 72,000 m^3. In particular, the substantial reduction in Stage 3 earthworks avoids much of the cutting and filling previously proposed across the terraces and central valley. This reduces permanent landform modification, construction disturbance and the risk of sediment entering the Waikato River.

188) Together with the proposed stormwater and wastewater controls, building and lighting controls and increased setbacks, these amendments reduce the proposal's physical effects on the whenua and awa. They do not necessarily resolve the effects identified by tangata whenua on cultural and spiritual relationships.

189) No specific assessment has been provided of the cultural sightlines identified by Ngaati Koroki Kahukura. The landscape assessment considers physical, perceptual and associative values, but it is not a tangata whenua assessment of the relationship between the whenua, awa, ancestral pā and Maungatautari. Planting and building controls may reduce the visibility of development, but do not necessarily preserve those relationships.

190) The amended layout also retains a generally linear pattern of development along the River. Although the reduced density and greater landform retention lessen its contribution to cumulative effects, no

comprehensive assessment has been provided of the cumulative effect of rural-lifestyle development on the relationship of tangata whenua with the wider river corridor.

191) The proposed 10 m-wide esplanade strip is a significant improvement over the notified proposal and responds directly to Raukawa's access concerns. However, meaningful access will depend on its final alignment, gradients, formation, connections, legal protection and long-term maintenance. If the strip is located largely on steep or inaccessible land, it would not provide the safe, practical and continuous access sought by Raukawa. The effectiveness of this response therefore remains subject to those details being resolved.

192) The applicant initiated engagement with iwi, and Ngaati Koroki Kahukura acknowledges that its representatives attended a site visit in good faith. It explains that further participation was constrained by resourcing and the need to coordinate with other iwi. The available information therefore does not indicate that the applicant failed to make reasonable efforts to engage. Equally, incomplete engagement cannot be treated as agreement with the proposal or evidence that cultural effects do not exist.

193) No final CIA or equivalent tangata whenua-led assessment has been provided. Council is not, however, without cultural information. The submissions identify the relevant relationships, the effects that each iwi considers will arise and the outcomes sought. Council must assess that information alongside the amended proposal and other evidence.

194) If consent is granted, conditions could provide opportunities for both iwi to comment on detailed landscape, ecological, stormwater and access plans and could require cultural induction, cultural monitoring and accidental-discovery procedures. Such conditions must remain workable if either iwi elects not to participate, and Council must retain responsibility for certification and enforcement. They may assist with implementation but would not, by themselves, resolve the broader cultural landscape concerns.

195) Overall, the amended proposal provides a substantially better physical response to the Waikato River and its margins than the notified proposal. It addresses several matters raised by Raukawa and Ngaati Koroki Kahukura through reduced density and earthworks, greater landform retention, restoration planting and the proposed esplanade strip.

196) However, concerns relating to cultural landscape relationships and sightlines, the linear and cumulative pattern of development, and meaningful access along the awa remain only partly addressed. I therefore do not consider that the cultural effects have been fully avoided, remedied or mitigated. They remain a material adverse effect to be weighed in the overall assessment under s104 of the RMA and in determining the proposal's consistency with Te Ture Whaimana and the relevant SWDP provisions.

6.3.9 Natural hazard effects

197) The National Policy Statement for Natural Hazards 2025 (NPS-NH) came into force after the application was lodged. In response, the applicant provided an assessment by Cogswell Surveys Limited dated 9 July 2026, supported by a supplementary natural-hazard assessment prepared by GWE Consulting Engineers. The assessment draws on the earlier preliminary geotechnical investigation, together with the WRC Hazards Portal and the SWDP.

198) GWE considered flooding, landslips, coastal erosion, coastal inundation, active faults, liquefaction and tsunami using the risk-based approach required by the NPS-NH. It assessed the residual risk associated with each hazard as low.

199) Coastal erosion, coastal inundation and tsunami present negligible risks because of the site's inland location. The site is approximately 14 km from the nearest active fault, while the potential for liquefaction is limited by the consolidated soils and absence of groundwater within the upper 8 m investigated. GWE identifies the possibility of approximately 10–50 mm of seismic settlement during an ultimate limit state event, but considers the resulting risk to be low. Future buildings will also be required to comply with the Building Code and relevant engineering standards.

200) The site is not identified as being within a mapped flood-hazard area, and GWE assesses the flooding risk as low. The proposed stormwater system and retention of defined overland-flow paths will also assist in ensuring that the development does not increase flood risk within the site or on surrounding properties.

201) The principal site-specific issue is slope stability near the Waikato River bank and other steep slopes. GWE assesses the residual landslip risk as low, provided that a 25 m building restriction line is maintained from the top of the riverbank and an additional setback, based on a 1V:2H projection from the toe of slopes exceeding 25 degrees, is applied. These restrictions should be shown on the approved plans and secured through consent notices applying to the affected lots. Site-specific geotechnical investigation and foundation-design recommendations should also be required before buildings are constructed where appropriate.

202) The applicant states that climate-change effects have been considered, although the supplementary assessment provides limited explanation of how changes over the next 100 years have influenced its conclusions regarding flooding and riverbank stability. On balance, given the low assessed risks, the proposed setbacks and the ability to require further site-specific investigation, I do not consider that this limitation prevents a conclusion being reached.

203) No technical evidence has been provided that contradicts GWE's findings. Subject to the recommended setbacks, consent notices and engineering requirements, I consider that the natural-hazard risks can be appropriately managed, will not be transferred or increased on other properties and are acceptable for the proposed subdivision. The resulting natural-hazard effects are therefore assessed as no more than minor.

6.3.10 Positive effects

204) The proposal will provide additional rural-lifestyle housing within land zoned RLZ and therefore identified by the SWDP as suitable for that form of development, subject to the applicable standards and effects being appropriately addressed.

205) The clearest positive effects arise from the proposed 10 m esplanade strip along the Waikato River and the ecological restoration proposed across the site. The esplanade strip will secure public access along the river frontage and may support improved walking and cycling connections, depending on its final form.

206) The proposal will also protect and enhance existing gullies, wetlands and habitat through indigenous planting, restoration and legal protection. These measures will provide ecological benefits over time, provided the planting, protection and maintenance requirements are appropriately secured.

207) The development will generate some construction-related employment and economic activity. However, these benefits are relatively general and temporary, and I place limited weight on them.

208) Overall, I consider that the proposal will produce modest positive effects, principally through permanent public access along the Waikato River and the protection and restoration of ecological features.

6.3.11 Conclusion as to effects

209) The amended proposal represents a substantial improvement over the notified proposal. In particular, it now complies with the SWDP provisions governing average lot size and the distribution of undersized and oversized lots. The reduced lot yield, reduced earthworks and greater retention of the existing landform also address many of the density, construction, landscape and ecological concerns raised in submissions.

210) The development will result in a considerable and permanent change from an open rural property to a 73-lot rural-lifestyle subdivision. That change will be clearly visible and will occur progressively over a lengthy construction period. However, the scale of the change does not, by itself, make its effects unreasonable or unanticipated. The site is zoned RLZ, and subdivision and rural-lifestyle development are anticipated where the relevant standards are met and adverse effects are appropriately managed.

211) The landscape, ecological, transport, servicing, construction and natural-hazard assessments provide an adequate basis for understanding the likely effects. Subject to the full mitigation package, enforceable consent conditions and resolution of the outstanding infrastructure and implementation matters, I consider that these effects can be appropriately avoided, remedied or mitigated. Although the proposal will permanently alter part of the Horahora ONL, Council's landscape reviewer has identified no landscape reason for declining consent where the recommended mitigation is implemented.

212) The cultural effects assessment requires a more cautious conclusion. Council has considered the AEE, the consultation record and the submissions from Raukawa and Ngaati Koroki Kahukura. Some of the

matters raised have been addressed through the amended design and proposed mitigation, while others remain unresolved. The applicant has made repeated efforts to engage directly with iwi, but limited further information has been received. In those circumstances, the full nature and significance of the effects on tangata whenua values cannot be confirmed. I therefore consider it appropriate to retain a conservative assessment that the adverse cultural effects are at least minor.

213) Taking the proposal as a whole, I do not consider that the physical scale of the development equates to an unacceptable level of environmental effect. Most adverse effects are assessed as no more than minor and can be managed through the amended design and conditions. Cultural effects remain less certain and are conservatively assessed as at least minor. That finding does not, in itself, prevent consent from being granted, particularly given that the application has been publicly notified and those effects can be considered alongside the positive effects, relevant planning provisions and other matters under section 104 of the RMA.

214) Overall, subject to the outstanding matters being satisfactorily resolved and the recommended conditions being imposed, I consider the effects of the proposal to be understood, appropriately mitigated and acceptable in the context of the RLZ.

7. STATUTORY ASSESSMENT s104(1)(b)

215) The applicant assessed the original proposal against the national, regional and district planning provisions identified in the AEE. The following assessment applies the relevant provisions to the amended 73-lot proposal, taking into account the addendum dated 19 June 2026, subsequent technical information and submissions.

216) Several national instruments were also introduced or amended after the application was lodged. The applicant provided a supplementary assessment of those instruments dated 9 July 2026. They are addressed below where relevant.

7.1 Higher Order Documents

217) Section 104(1)(b) of the RMA requires that a decision maker have regard to any relevant provisions of:

7.1.1 National Environmental Standard (NES)

218) The National Environmental Standard for Freshwater is addressed below, and no other NESs are relevant.

7.1.2 Other Regulations

219) **Te Ture Whaimana o Te Awa o Waikato** provides the overarching direction for the restoration and protection of the health and wellbeing of the Waikato River. It requires consideration of the River as an integrated whole, including its physical, ecological, cultural and spiritual health and the relationship of tangata whenua with the River.

220) The amended proposal provides a stronger response to Te Ture Whaimana than the notified proposal. The reduction from 81 to 73 residential lots, substantially reduced earthworks, greater retention of the existing landform and gullies, stormwater and wastewater controls, increased building setbacks, ecological restoration and proposed 10 m esplanade strip will reduce the potential for sediment, contaminants and physical disturbance affecting the River and its margins. Restoration planting and protection of gullies, wetlands and riparian areas will also support habitat connectivity and the ecological health of the wider river environment.

221) These measures address many of the proposal's potential physical effects. However, Te Ture Whaimana is not limited to physical water-quality or ecological outcomes. Raukawa and Ngaati Koroki Kahukura have raised concerns about cumulative development, kaitiakitanga, cultural and spiritual values and the relationship between tangata whenua, the Waikato River and the surrounding landscape. Physical mitigation does not necessarily resolve those concerns.

222) The applicant has undertaken engagement with iwi, both before and after lodgement, and some matters raised in the submissions have been addressed through the amended design. However, limited further information has been received and the full nature and significance of the remaining cultural and spiritual effects cannot be confirmed.

223) On balance, I consider that the amended proposal provides meaningful support for the restoration and protection of the physical and ecological health of the Waikato River. Its consistency with the cultural and spiritual components of Te Ture Whaimana remains qualified on the information available.

7.1.3 National Policy Statement (NPS)

224) **The National Policy Statement for Freshwater Management and National Environmental Standard for Freshwater** are relevant to the proposal.

225) The amended layout retains more of the existing gullies, wetlands and riparian margins and substantially reduces the Stage 3 earthworks. No loss or drainage of a natural inland wetland is proposed.

226) Potential effects on freshwater are addressed through setbacks, stormwater treatment and detention, erosion and sediment controls, ecological restoration and the conditions applying to the associated regional resource consent. These measures are also expected to maintain existing drainage pathways and improve the condition and connectivity of riparian and gully habitat.

227) The January 2026 amendments to the National Policy Statement for Freshwater Management 2020 and the National Environmental Standards for Freshwater do not introduce any additional consent requirement or materially change the assessment of the amended proposal.

228) **The National Policy Statement for Indigenous Biodiversity** came into effect in 2023 and directs councils to protect, maintain and restore indigenous biodiversity while ensuring that nationally, there is no further reduction in indigenous biodiversity.

229) The site contains indigenous vegetation and habitat used by indigenous fauna, including long-tailed bats. The amended proposal retains more existing vegetation and gully habitat and provides additional indigenous planting, habitat enhancement and legal protection.

230) Council's ecological reviewer considers that the amended proposal provides improved ecological outcomes, subject to the EMP and scheme plans being updated to address the matters identified in the peer review. Appropriate conditions are also required to secure planting, legal protection, pest and weed control, lighting controls and long-term maintenance.

231) Subject to those requirements, I consider that the proposal is generally consistent with the relevant direction of the National Policy Statement for Indigenous Biodiversity.

232) **The National Policy Statement for Natural Hazards** (NPS-NH) came into force on 15 January 2026. It requires natural-hazard risks associated with subdivision, use and development to be assessed and managed through an approach proportionate to the level of risk.

233) The applicant supplied a supplementary natural-hazard assessment prepared by GWE Consulting Engineers. As discussed in the effects assessment, GWE assessed the residual risks from flooding, landslips, coastal erosion, coastal inundation, active faults, liquefaction and tsunami as low. The assessment does not identify the proposal as having a very high natural-hazard risk or as transferring significant risk to other properties.

234) The low-risk conclusion relies on maintaining a 25 m building restriction line from the top of the Waikato River bank, applying an additional setback from slopes exceeding 25 degrees and undertaking further site-specific geotechnical investigation where appropriate. These requirements should be shown on the approved plans and secured through consent notices.

235) The supplementary assessment provides limited explanation of how the effects of climate change over at least 100 years informed its flooding and riverbank-stability conclusions. However, no additional climate-specific mitigation has been identified as necessary, and the proposed setbacks and stormwater controls provide a precautionary response. Subject to the recommended requirements, I consider the proposal generally consistent with the objective and relevant policies of the NPS-NH.

236) **The National Policy Statement for Infrastructure 2025** (NPS-I) came into force on 15 January 2026. It provides for the efficient development, operation, maintenance and upgrading of infrastructure while requiring associated adverse effects and reverse-sensitivity effects to be managed.

237) The proposal includes the roads, accessways and stormwater infrastructure necessary to service the subdivision. That infrastructure can be delivered progressively through the staged subdivision and engineering-plan approval process. Conditions will be required to ensure that each stage is appropriately accessed and serviced and that the design, construction, ownership and maintenance responsibilities are clearly established.

238) In particular, SWDC will not accept ownership or maintenance responsibility for isolated rural stormwater assets outside the road reserve. The privately owned stormwater system will therefore

require an enforceable and enduring ownership and maintenance structure. The draft conditions require a certified subdivision-wide Stormwater Management Plan to identify responsibility for each asset, including access, inspection, repair, replacement and shared costs. Ongoing obligations would be secured through consent notices, with private access and drainage easements where needed. These arrangements must be finalised before s224(c) certification for the relevant stage.

239) The site also adjoins hydro-electric power operating easements. The subdivision layout, earthworks and legal instruments must preserve access to, and the continued operation, maintenance and upgrading of, that infrastructure.

240) Subject to those matters being secured, I consider the proposal generally consistent with the relevant direction of the NPS-I.

7.1.4 Waikato Regional Policy Statement 2016 (WRPS)

241) The applicant assessed the proposal against the Waikato Regional Policy Statement (WRPS) provisions then in force. Since the AEE and addendum were prepared, Change 1 became operative on 15 July 2026.

242) Change 1 primarily addresses urban development and the Future Proof Strategy, but it also amended provisions concerning the built environment and planned and coordinated development. The following assessment applies the current operative provisions to the amended proposal.

WRPS provisions	Council's assessment
SRMR-I4, UFD-O1 and UFD-P1 – Managing the built environment and planned and coordinated development	The proposal is for rural-lifestyle development within land zoned for that purpose. The amended design now complies with the SWDP lot-averaging requirements and provides for the roads, accessways, stormwater and wastewater infrastructure needed to service the subdivision. The development will be staged, allowing the necessary infrastructure and mitigation to be delivered alongside each stage. Subject to the outstanding servicing and ownership arrangements being resolved, the proposal represents planned and coordinated development consistent with the intended use of the RLZ.
IM-O9 and IM-P5 – Amenity	The subdivision will permanently change the character of the site from predominantly open pastoral land to rural-lifestyle development. That change is anticipated in principle by the zoning, but its design and appearance must still respond to the surrounding environment. The reduced density and earthworks, retention of existing landform, landscape planting, building setbacks and controls over building

	location, colour and materials will assist in integrating the development and managing effects on rural amenity over time.
NATC-O1 and NATC-P1 – Natural character	The proposal avoids works within the Waikato River and retains a greater proportion of the existing terraces, gullies and river-margin landform than the notified proposal. Increased setbacks, ecological restoration and the proposed 10 m esplanade strip will further protect and enhance the immediate river margin. Council's landscape reviewer accepts the applicant's assessment of low-moderate natural-character effects. On that basis, the proposal appropriately manages effects on the natural character of the Waikato River and its margins.
NFL-O1 and NFL-P1 – Outstanding natural features and landscapes	The subdivision will permanently alter part of the Horahora ONL. However, the amended layout materially reduces the extent of earthworks and landform modification and provides increased setbacks, indigenous planting and controls over future buildings. Council's landscape reviewer has undertaken an independent and detailed review and has identified no landscape reason for declining consent, provided the full mitigation package is implemented. The proposal therefore responds appropriately to the ONL's identified physical, perceptual and visual values. Its response to associative and tangata whenua values is addressed separately below.
ECO-O1, ECO-P1 and ECO-P2 – Ecological integrity and indigenous biodiversity	The amended proposal retains more gully and vegetation habitat and provides additional indigenous planting, pest control, habitat enhancement and legal protection. These measures are expected to improve habitat extent, condition and connectivity, including along the Waikato River margin. This conclusion depends on the EMP and scheme plans being updated in accordance with Council's ecological peer review and the protection and maintenance measures being secured through conditions.
IM-O4 and LF-P5 – Health and wellbeing of the Waikato River and its catchment	Stormwater treatment and detention, secondary wastewater treatment, river setbacks, reduced earthworks and ecological restoration will assist in managing effects on water quality, habitat and natural character. The proposed esplanade strip will also secure a public-access corridor along the river frontage. These measures provide a materially stronger response to the Waikato River than the notified proposal. However, the assessment of the River's health and wellbeing

	must also include its cultural and spiritual dimensions, which remain less certain.
IM-O7, IM-P3 and HCV-P2 – Relationship of tangata whenua with the environment and taonga	The submissions from Raukawa and Ngaati Koroki Kahukura identify concerns about cumulative development, kaitiakitanga, cultural and spiritual values and the relationship between tangata whenua, the Waikato River and the surrounding landscape. Some of those concerns are addressed through the amended layout, increased setbacks, reduced earthworks, restoration planting and protection of the river margin. The applicant also made repeated efforts to engage directly with iwi. However, the available information does not fully establish the nature and significance of the remaining cultural effects or how all identified cultural relationships will be recognised. An unqualified finding of consistency with these provisions cannot therefore be made.

243) Overall, the amended proposal is generally consistent with the WRPS provisions concerning planned development, amenity, natural character, outstanding natural landscapes, indigenous biodiversity and the physical and ecological health of the Waikato River.

244) The proposal also responds to some of the matters raised by tangata whenua, particularly through greater retention of the existing landform and gullies, ecological restoration and protection of the river margin. However, the available information does not support an unqualified finding that the provisions concerning tangata whenua relationships and the cultural and spiritual health of the Waikato River have been fully achieved. The proposal's alignment with those provisions therefore remains qualified.

7.1.5 Operative South Waikato District Plan (SWDP)

245) The South Waikato District Plan was made operative in 2015 and provides the most directly relevant policy framework for the application. It identifies the site as part of the RLZ and therefore anticipates rural-lifestyle subdivision and development in this location. However, that zoning does not predetermine the outcome of the application. The proposal must still respond appropriately to the site's landscape, ecological, cultural, infrastructure and Waikato River values.

246) The relevant objectives and policies are assessed below.

Rural Lifestyle Zone

SWDP provisions	Assessment
	The proposal is for rural-lifestyle development within land specifically zoned for that purpose. It will not displace land zoned primarily for rural production. Potential reverse-sensitivity effects at the interface with

RLZ-O2 – Activities requiring a rural location	adjoining rural land can be managed through setbacks, planting and consent notices advising future owners of the surrounding rural environment.
RLZ-O3 – Health and wellbeing of the Waikato River	The amended proposal reduces the number of lots and extent of earthworks, retains more of the existing gullies and landform and provides for stormwater treatment, secondary wastewater treatment, increased river setbacks and ecological restoration. These measures provide a stronger response to the Waikato River than the notified proposal. The conclusion remains dependent on an acceptable private ownership and maintenance structure being established for the stormwater system.
RLZ-P3 – Rural-lifestyle development in specifically zoned locations	The site is zoned RLZ, and subdivision for rural-lifestyle purposes is anticipated in principle. Importantly, the amended proposal now complies with the provisions controlling average lot size and the distribution of undersized and oversized lots. It therefore better reflects the density and development pattern anticipated for the RLZ.
RLZ-P4 – Effects at zone interfaces	The internal road layout, building setbacks, boundary planting and proposed consent notices will assist in managing amenity and reverse-sensitivity effects where the RLZ adjoins the GRUZ. Most lots within Stages 2 and 3 will obtain access from the internal road network, reducing direct interaction with Horahora Road and adjoining rural properties.
RLZ-P5 – Clustered development and protection of environmental values	The proposal adopts a clustered rural-lifestyle layout supported by internal roads and shared infrastructure. The revised design concentrates development away from the most sensitive gullies, river margins and landforms. Reduced earthworks, indigenous planting, building controls and ecological protection will assist in safeguarding landscape, biodiversity and Waikato River values.

Ecology, natural character and outstanding landscapes

SWDP provisions	Assessment
ECO-O1–ECO-O5 – Ecological values and indigenous biodiversity	The amended proposal retains more existing gully and vegetation habitat and provides approximately 1.437 ha of additional restoration planting. Council's ecological reviewer considers that the proposal can provide an improved ecological outcome, subject to the EMP and scheme plans being

	updated and the planting, pest control, habitat protection and maintenance requirements being secured through conditions and legal instruments.
NATC-O2 and NATC-O3 – Natural character and the Waikato River	The development will change the character of the wider site, but avoids works within the Waikato River and provides increased setbacks, greater retention of gullies and terraces, reduced earthworks and restoration planting. Stormwater and wastewater controls will also assist in managing effects on the River and its catchment. These measures protect the most sensitive river-margin and gully areas and provide opportunities for their enhancement.
NFL-P3 and NFL-P4 – Outstanding landscape values and landform modification	The proposal will permanently alter part of the Horahora ONL. The amended design nevertheless substantially reduces the Stage 3 earthworks, retains more natural landform and provides additional setbacks and planting. Controls over the location, height, colour and materials of future buildings will further reduce their prominence. Council's landscape reviewer has identified no landscape reason for declining consent where the full mitigation package is implemented.
NFL-P5 – Tangata whenua relationships with outstanding landscapes	Raukawa and Ngaati Koroki Kahukura identify cultural and spiritual relationships between the whenua, the Waikato River, pā sites, Maungatautari and the wider Horahora landscape. The reduced density and earthworks, retention of gullies and landform, indigenous planting and increased river setbacks respond to some of the concerns raised. However, those measures principally address the proposal's physical, ecological and visual effects. The available information does not support an unqualified finding that the cultural and spiritual relationships identified by tangata whenua have been fully recognised and provided for. The proposal's alignment with NFL-P5 therefore remains uncertain.
NFL-P6 – Te Ture Whaimana and the Waikato River ONL	The amended proposal provides a materially better response to the landscape and natural-character values of the Waikato River than the notified proposal. In particular, it reduces landform modification and protects and restores more of the river margin and associated gullies. However, the cultural and spiritual dimensions of Te Ture Whaimana remain less certain for the reasons identified above. The proposal provides some support for NFL-P6, but an unqualified finding of consistency cannot be made.

Public access

SWDP provisions	Assessment
PA-O1–PA-O4 – Public access to the Waikato River	The proposed 10 m esplanade strip will secure a permanent legal public-access corridor along the Waikato River frontage. This is a significant improvement over the notified proposal. However, practical access will depend on the final formation, connections and staging, as well as appropriate management of ecological, cultural and recreational values.
PA-P1–PA-P3 – Esplanade provision, ecological linkages and water quality	The provision of the required 10 m esplanade area supports the public-access, riparian-protection, ecological-linkage and water-quality outcomes sought by these policies. The land should be legally secured as part of the subdivision. A formed trail is not required to be constructed within the esplanade area under these consents, and the existing Waikato River Trail will remain within the Horahora Road corridor. The proposal therefore secures the required esplanade corridor while maintaining the existing public trail.

Subdivision

SWDP provisions	Assessment
SUB-O3 – Safe and integrated transport connections	The subdivision will primarily be served by an internal road network, with Stage 1 lots obtaining direct access from Horahora Road. Council's transport reviewer considers that the traffic effects can be appropriately managed through detailed design and engineering conditions.
SUB-O4 and SUB-O5 – Outstanding landscapes and natural character	The amended layout retains more of the existing landform, gullies and river margin and substantially reduces the Stage 3 earthworks. Restoration planting, building controls and increased setbacks will assist in integrating the subdivision into the Horahora ONL and protecting the natural character of the Waikato River margin. The development will still result in a permanent landscape change, but the specialist assessment and peer review support the conclusion that its effects can be appropriately mitigated.
SUB-P6 and SUB-P7 – Location of rural and rural-lifestyle subdivision	The site is specifically zoned RLZ and is therefore an identified location for rural-lifestyle subdivision. The amended proposal now complies with the applicable density provisions, including the average lot-size requirements. It therefore reflects the location and general form of development contemplated by these policies.

UB-P13 – Rural subdivision within the Waikato River catchment	The amended proposal responds to the matters identified in this policy through its RLZ location, river and building setbacks, reduced earthworks, stormwater treatment, secondary wastewater systems, biodiversity protection and esplanade provision. Some implementation details remain outstanding, particularly stormwater ownership and maintenance and the final public-access arrangements, but these do not undermine the overall direction of the amended design.

247) The amended proposal is generally consistent with the objectives and policies that provide for rural-lifestyle subdivision within the RLZ. In particular, it now complies with the density provisions intended to shape development in the zone and provides a coordinated response to infrastructure, landscape, natural-character, ecological and Waikato River values.

248) The proposal will still produce a substantial and permanent change to the site and the Horahora ONL. However, the relevant objectives and policies do not require the site to remain as open pastoral land. Rather, they anticipate rural-lifestyle development while requiring its effects to be appropriately managed. The amended layout and mitigation package provide a substantially better response to that direction than the notified proposal.

249) The proposal's alignment with NFL-P5, NFL-P6 and the cultural and spiritual components of the Waikato River provisions remains qualified because the full nature and significance of the effects identified by tangata whenua have not been confirmed.

250) Subject to those qualifications, resolution of the outstanding infrastructure matters and implementation of the recommended conditions, I consider the proposal generally consistent with the relevant objectives and policies of the SWDP.

7.1.6 Proposed Plan Change 4 (PC4)

251) Plan Change 4 is proposed to ensure that there is adequate residential, commercial and industrial land available in the district out until 2054.

252) Plan Change 4 was notified on 22 July 2026 with submissions closing on 2 September 2026. The further submission period has not been notified at the time of writing this report.

253) PC4 proposes the following new or amended objectives and policies relevant to the subdivision and associated earthworks. These provisions are assessed separately from the operative provisions above. These include:

PC4 provision	Assessment
SUB-O7 and amended SUB-P2	These provisions require adequate assessment of natural-hazard risk and seek safe, flood-free and stable building platforms without creating or worsening hazards elsewhere. GWE assesses

	the residual flood and landslip risks as low, subject to the proposed building restrictions and engineering requirements. The proposal is generally consistent with this direction, provided the restrictions are shown on the final plans and secured for the affected lots.
NH-P4 and NH-P5	NH-P4 addresses flood levels and river setbacks. NH-P5 requires an appropriate professional assessment where land may be prone to liquefaction. GWE has assessed flooding and liquefaction and identified a low residual risk. The proposed riverbank and steep-slope building restrictions also respond to the risks identified for this site.
EW-O5, EW-P5 and EW-P6	These provisions seek safe earthworks that manage sediment, dust, landform modification and the potential to create or worsen natural hazards. The substantial reduction in earthworks, particularly in Stage 3, retains more of the existing gullies and terraces. Subject to staged erosion, sediment and construction controls, the proposal generally aligns with this direction.

254) Overall, the proposed subdivision and land use consents remain consistent with the outcomes sought by PC4 with respect to the changes to objectives and policies; however, limited weight would apply to these given where Council is in the plan change process.

7.1.7 Conclusions as to Statutory Framework s104(1)(b)

255) I have considered the specific provisions of the relevant policy statements and plans.

256) I consider the proposed subdivision and land use activities are not contrary to the objectives and policies of the District Plan or the direction of the relevant higher order documents.

8. STATUTORY ASSESSMENT s104(1)(c)

257) In addition to the effects and planning provisions assessed under s104(1)(a) and (b), I consider the matters raised directly by Raukawa and Ngaati Koroki Kahukura relevant to determining this application under s104(1)(c). Their submissions explain the importance of the Waikato River and its margins as a living cultural landscape, including opportunities to access the awa, exercise kaitiakitanga and maintain relationships between the awa, surrounding whenua, pā sites and Maungatautari. Raukawa also refers to Te Rautaki Taiao a Raukawa, its iwi environmental management plan. These matters provide site-specific context for considering the subdivision that is not captured solely by the technical assessments of water quality, ecology and visual effects.

258) Raukawa is concerned about cumulative rural-lifestyle development along the river, the linear arrangement of private lots and whether access along the awa will be safe and meaningful. It also raises concerns about its opportunity to participate when the land was rezoned. Ngaati Koroki Kahukura is concerned about the integrity of the wider cultural landscape, cultural sightlines, the mauri of the Waikato River and its ability to participate in the design and management of the development. Both seek that consent be declined or, if granted, that the subdivision and conditions better address these matters.

259) The amended proposal responds to some of those concerns. It reduces the number of residential lots and the extent of earthworks, retains more gullies and natural landform, provides additional restoration planting and includes a 10 m esplanade strip. Those changes reduce some physical effects and provide a legal corridor along the river. They do not, by themselves, establish that the strip will provide the practical access sought by Raukawa or that effects on cultural landscape relationships and sightlines have been resolved.

260) No final Cultural Impact Assessment has been provided. The applicant's engagement record and the submissions provide a basis for considering the identified concerns, but neither iwi submitter has confirmed that the amendments address its submission. I therefore do not treat the absence of further feedback as support for the proposal. The limits of the available information remain relevant when weighing cultural effects and the proposed mitigation.

261) No recorded archaeological sites have been identified within the development area. An accidental-discovery protocol should nevertheless be imposed, requiring works to stop and the relevant iwi authorities and Heritage New Zealand Pouhere Taonga to be contacted if archaeological material, kōiwi or taonga are discovered.

262) I give weight to the matters identified in the iwi submissions when considering whether the amended layout, esplanade provision and recommended conditions adequately respond to the site's cultural context. The amendments improve the proposal, but the available information does not support a finding that all concerns about access, cumulative development and cultural or spiritual relationships have been resolved. That qualification is carried into my overall s104 assessment. My conclusion on Te Ture Whaimana itself is set out with the Waikato Regional Policy Statement assessment under s104(1)(b).

9. STATUTORY ASSESSMENT s106

263) Section 106 of the RMA allows consent authorities to refuse to grant subdivision consents or grant them subject to conditions if there is considered to be a significant risk from natural hazards, or sufficient provisions has not been made for legal and physical access to each proposed allotment.

264) Section 106 enables Council to refuse subdivision consent, or grant it subject to conditions, where there is a significant risk from natural hazards or where sufficient provision has not been made for legal and physical access to each allotment.

265) The applicant has provided preliminary geotechnical information and a supplementary natural-hazard assessment. That information assesses the residual risks from flooding, landslips, liquefaction and other relevant hazards as low, provided the recommended engineering controls are implemented.

266) A 25 m building restriction line is recommended from the top of the Waikato River bank, together with an additional setback based on a 1V:2H projection from the toe of slopes exceeding 25 degrees. Further site-specific geotechnical investigation and foundation-design recommendations should also be required where appropriate.

267) Legal and physical access is proposed for each residential lot. Council's transport reviewer considers that the outstanding design matters can generally be addressed through detailed design, Engineering Plan Approval and consent conditions.

268) Subject to the recommended building restrictions, geotechnical requirements and access conditions, I do not consider that the proposal presents a significant natural-hazard risk or that access considerations provide a reason to decline subdivision consent under section 106.

10. ASSESSMENT UNDER PART 2 OF THE RMA 1991

269) The relevant planning instruments provide a detailed framework for assessing the proposal and are addressed in Section 7. The following assessment considers the proposal against Part 2 of the RMA as a whole. It is not intended to replace or override the more specific direction contained in those instruments.

Section 5

270) Section 5 establishes the purpose of the RMA: promoting the sustainable management of natural and physical resources.

271) The proposal will enable rural-lifestyle development on land zoned for that purpose. The amended design now complies with the SWDP density provisions and represents a substantially improved environmental response compared with the notified proposal. It reduces the number of lots and extent of earthworks, retains more existing landform and gully habitat and provides additional ecological restoration, landscape mitigation and public access.

272) Most adverse effects can be appropriately managed through the amended design, technical controls and enforceable conditions. Cultural effects remain less certain and have conservatively been assessed as at least minor. That uncertainty must be weighed alongside the matters that have been addressed, the applicant's engagement efforts, the proposal's positive effects and the environmental safeguards capable of being secured.

273) Subject to the outstanding matters being resolved and the recommended conditions being imposed, I consider that the proposal will enable the use and development of the site while appropriately managing its effects on people and the environment. It therefore promotes the sustainable-management purpose of section 5.

Section 6

274) The following matters of national importance are particularly relevant:

- preservation of the natural character of the Waikato River and its margins, and their protection from inappropriate subdivision, use and development, under section 6(a);
- protection of the Horahora ONL from inappropriate subdivision, use and development, under section 6(b);
- protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna under section 6(c);
- maintenance and enhancement of public access to and along the Waikato River under section 6(d);
- recognition and provision for the relationship of Māori and their culture and traditions with ancestral lands, water, sites, wāhi tapu and other taonga under section 6(e); and
- management of significant risks from natural hazards under section 6(h).

275) The proposal responds to sections 6(a)–(d) through reduced earthworks, greater retention of the existing landform and gullies, ecological restoration, increased setbacks, building controls and the proposed esplanade strip. Although it will permanently alter part of the Horahora ONL, Council's landscape reviewer has identified no landscape reason for declining consent where the full mitigation package is implemented.

276) In relation to section 6(e), the amended design responds to some of the concerns identified by Raukawa and Ngaati Koroki Kahukura. However, the available information does not confirm that all effects on tangata whenua cultural and spiritual relationships have been resolved. The assessment under section 6(e) therefore remains qualified.

277) The supplementary natural-hazard assessment identifies low residual risk, provided the recommended building restriction lines, slope setbacks and geotechnical requirements are implemented. Those measures provide an appropriate response to section 6(h).

278) Overall, I consider that the relevant section 6 matters have been recognised and provided for to the extent demonstrated by the information available, subject to the identified cultural qualification and recommended conditions.

Section 7

279) The section 7 matters of particular relevance include:

- kaitiakitanga;
- the efficient use and development of natural and physical resources;
- the maintenance and enhancement of amenity values;

- the intrinsic values of ecosystems;
- the maintenance and enhancement of the quality of the environment; and
- the effects of climate change.

280) The proposal makes efficient use of land specifically zoned for rural-lifestyle development. Reduced earthworks, retention of gullies and existing landform, ecological restoration, landscape planting, setbacks and building controls will assist in maintaining amenity and environmental quality and recognising the intrinsic value of the site's ecosystems.

281) Kaitiakitanga has been considered through the information provided by the applicant and the submissions from Raukawa and Ngaati Koroki Kahukura. While that information does not resolve every cultural concern, those matters have been expressly considered rather than treated as absent.

282) Climate-change effects have been considered through the stormwater and natural-hazard assessments. Although the supplementary hazard assessment provides limited detail about its 100-year climate-change assumptions, the proposed stormwater controls, riverbank setback and slope restrictions provide a precautionary response.

283) I consider that appropriate regard has been given to the relevant section 7 matters.

Section 8

284) Section 8 requires the principles of Te Tiriti o Waitangi to be taken into account.

285) Council has considered the iwi submissions as direct cultural evidence and has assessed the proposal against Te Ture Whaimana and the relevant tangata whenua provisions of the WRPS and SWDP. The assessment recognises the importance of partnership, active protection, kaitiakitanga and the relationship between tangata whenua, the Waikato River and the surrounding landscape.

286) The applicant has made repeated efforts to engage with iwi and has amended the proposal in ways that respond to some of the concerns raised. The absence of further feedback has not been treated as meaning that cultural effects do not exist, and the unresolved uncertainty is expressly acknowledged in the assessment and recommendation.

287) On that basis, I consider that the principles of Te Tiriti o Waitangi have been appropriately taken into account.

Part 2 Conclusion

288) The proposal will result in a substantial and permanent change to the site, but it represents a form of development anticipated within the RLZ. The amended design provides a materially better response to the site and receiving environment than the notified proposal, and most adverse effects can be appropriately managed through conditions.

289) The remaining uncertainty regarding cultural effects qualifies, but does not displace, the overall conclusion. Subject to resolution of the outstanding matters and imposition of the recommended conditions, I consider that the proposal achieves the purpose and principles of the RMA.

11. SUMMARY

290) The application seeks subdivision and land use consent for a staged rural lifestyle development of the approximately 45.6 ha site. The amended proposal will create 73 residential lots, together with roads, accessways, earthworks, privately managed stormwater infrastructure, ecological restoration, landscape mitigation and a proposed 10 m esplanade strip along the Waikato River. Land use consent is also sought to enable one dwelling and an accessory building on each residential lot within the Horahora ONL and SNA Buffer overlays.

291) The proposal is a discretionary activity overall. Under section 104B of the RMA, Council may grant or decline consent and, if granted, may impose conditions under sections 108 and 220.

292) The amended proposal addresses several important concerns associated with the notified proposal. In particular, it:

- reduces the number of residential lots from 81 to 73 and now complies with the SWDP density provisions;
- substantially reduces earthworks and retains more of the existing landform and gullies;
- provides additional indigenous planting, ecological restoration and habitat protection;
- increases building setbacks and strengthens landscape mitigation;
- provides for stormwater treatment and secondary wastewater treatment; and
- includes a proposed 10 m esplanade strip along the Waikato River.

293) The proposal will nevertheless result in a significant and permanent physical change from predominantly open pastoral land to rural-lifestyle development. That change is anticipated in principle by the RLZ but remains subject to appropriate management of its environmental effects.

294) The landscape, ecological, transport, servicing, construction and natural-hazard effects are considered acceptable overall, subject to the amended design, technical mitigation and recommended conditions. This includes localised moderate landscape and visual effects, which are addressed in section 6.3.3. Cultural effects remain less certain and are conservatively assessed as at least minor. It is therefore not possible to conclude that every category of adverse effect will be no more than minor. However, that finding does not preclude consent from being granted following a publicly notified process.

295) The proposal is generally consistent with the provisions that enable rural-lifestyle subdivision and address infrastructure, amenity, landscape, natural character, ecological values and the physical and

ecological health of the Waikato River. Its alignment with provisions concerning tangata whenua relationships and the cultural and spiritual health of the River remains qualified.

296) Before consent is granted, or through sufficiently certain conditions and legal instruments, the following matters must be resolved:

- private ownership, access, operation and long-term maintenance of the stormwater system;
- confirmation that every residential lot can accommodate compliant primary and reserve wastewater-disposal areas;
- the updates to the EMP and scheme plans identified by Council's ecological reviewer; and
- the detailed road, access and infrastructure requirements identified by Council's engineering and transport reviewers.

297) Subject to satisfactory resolution of those matters and finalisation of an appropriate suite of conditions, I consider that the proposal's adverse effects will be appropriately managed and that the proposal will achieve the purpose of the RMA.

12. RECOMMENDATION

298) That Commissioners acting under delegated authority from the South Waikato District Council and pursuant to sections 104 and 104B of the Resource Management Act 1991, **grant** consent to undertake a 73-lot rural lifestyle subdivision with two roads to vest and associated land use consent for earthworks and the future construction of a dwelling and an accessory building on each of the resulting rural lifestyle allotments at 597 Horahora Road, Tirau (being Lot 1 DPS 21946).

299) I have therefore recommended conditions to be imposed in Appendix A, should the Commissioners be of a mind to grant consent.

APPENDIX A

RECOMMENDED CONDITIONS

Recommended Conditions:

1. The subdivision and associated land-use activities must be undertaken in general accordance with the following plans approved on XX November 2026 and documents, except where modified by another condition of these consents:

    a. [final scheme plan title, author, drawing number, revision and date];

    b. [the addendum prepared by author, titled, dated;

    c. [approved staging plan title, author, drawing number, revision and date];

    d. [approved Landscape Master Plan title, author, drawing number, revision and date];

    e. [approved Landscape and Visual Assessment title, author and date];

    f. [approved Ecological Management Plan title, author, revision and date];

    g. [approved civil-engineering plans and reports, identified individually by title, author, reference, revision and date];

    h. [approved transportation assessment and subsequent responses, identified individually by title, author and date]; and

    i. [any other approved documents].

2. Where there is any inconsistency between an approved plan or document and a condition of these consents, the condition must prevail.

3. The consent holder shall ensure that the Land Transfer Plan submitted for certification under s223 of the Resource Management Act 1991 is in general accordance with the plans approved under Condition 1(a) and (c).

4. The consent holder shall ensure that Lots 203 and 204 are shown on the Land Transfer Plan submitted for s223 certification as road to vest in Council.

5. The consent holder shall ensure that the Land Transfer Plan submitted for s223 certification for each applicable stage of the subdivision is endorsed with the following amalgamation conditions:

    a. Stage 1:

        That Lot 101 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 13, 14 and 15 hereon as tenants in common in the said shares and that individual Records of Title be issued in accordance herewith. (LINZ reference 1997610);

    b. Stage 2:

        That Lot 107 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 63, 64 & 65 as tenants in common in the said shares and that individual Records of Title be issued in accordance herewith.

        That Lot 108 hereon (legal access) be held as to 4 undivided one-fourth shares by the owners of Lots 67, 68, 69 & 70 as tenants in common in the said shares and that individual Records of Title be issued in accordance herewith. (LINZ reference 1997612);

    c. Stage 3:

        That Lot 102 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 20, 21 & 22 hereon as tenants in common in the said shares and that individual Records of Title be issued in accordance therewith.

DRAFT

That Lot 103 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 32, 34 & 36 hereon as tenants in common in the said shares and that individual Records of Title be issued in accordance therewith. (LINZ reference 1997613).

6. The consent holder shall ensure that the section 224(c) certification application for each stage lists and details how each condition has been met.

Staging

7. The subdivision may be undertaken in three stages, in general accordance with the approved staging plan, subject to the following requirements:

    a. unless a condition expressly provides otherwise, every condition of this consent applies separately to each stage;

    b. any requirement that must be satisfied before physical works commence applies before physical works commence within each stage;

    c. any requirement that must be satisfied before certification under section 223 or section 224(c) of the Resource Management Act 1991 applies before that certification is sought for each stage;

    d. each stage must be designed, constructed and serviced so that it can operate independently until the subsequent stages are completed;

    e. all works, services, mitigation, certifications, consent notices, covenants and other legal instruments required for a stage must be completed or secured before section 224(c) certification is sought for that stage;

    f. physical works associated with a subsequent stage must not commence until Council has issued the 224(c) certificate for the preceding stage; and

    g. any ongoing monitoring, maintenance, replacement or protection obligation continues to apply notwithstanding the completion of that stage or commencement of a subsequent stage.

Lapse

8. Pursuant to section 125 of the Resource Management Act 1991, these consents will lapse five years after the date on which they commence unless:

    a. the relevant consent has been given effect to before that date; or

    b. Council grants an extension under section 125 of the Resource Management Act 1991.

Engineering plans

9. No less than 20 working days before physical works commence within each stage, the consent holder must submit detailed engineering plans for that stage to Council for certification.

10. The engineering plans must be prepared by a suitably qualified and experienced professional or professionals with experience relevant to the works being designed.

11. The purpose of the engineering-plan certification is to confirm that the detailed design for the relevant stage is consistent with:

    a. the approved plans and documents;

    b. the applicable requirements of the Regional Infrastructure Technical Specifications;

    c. the certified subdivision-wide Stormwater Management Plan;

    d. the performance standards and other requirements of these conditions; and

DRAFT

e. any departure from the Regional Infrastructure Technical Specifications or approved plans expressly authorised by these consents.

12. The engineering plans must, where relevant to the stage, include:

    a. the 25 m building restriction line measured from the top of the bank of the Waikato River;

    b. the building setback determined by a 1V:2H projection from the toe of any slope exceeding 25 degrees;

    c. the boundaries of all approved building areas, primary and reserve wastewater-disposal areas, ecological protection areas and bat-habitat setbacks;

    d. earthworks, proposed finished contours and final landforms;

    e. erosion and sediment-control measures;

    f. the design of roads, intersections, rights of way and vehicle crossings, including carriageway widths, gradients and sight distances;

    g. stormwater collection, conveyance, treatment, detention, soakage and discharge, including roadside swales, culverts, discharge points, overland-flow paths and erosion protection;

    h. how the stormwater design for the stage implements the certified Stormwater Management Plan;

    i. electricity and telecommunications infrastructure;

    j. the existing Waikato River Trail where it is affected by roads, intersections, vehicle crossings, drainage works or sightline improvements, including any temporary diversion, local regrading or local realignment required during construction;

    k. utility, access, drainage and maintenance easements;

    l. the ownership and maintenance responsibility for each infrastructure asset; and

    m. connections to infrastructure established or to be established through another stage.

13. Any material change to a certified engineering plan must be submitted to Council for further certification before the change is implemented. Council may certify the change only where it remains consistent with the matters identified in conditions 11 and 12.

14. Physical works associated with a stage must not commence until Council has certified in writing that the engineering plans for that stage satisfy conditions 9–12.

Construction management

15. No less than 20 working days before physical works commence within each stage, the consent holder must submit a Construction Management Plan for that stage to Council for certification.

16. The purpose of the Construction Management Plan is to set out the procedures and measures that will be implemented to avoid or minimise adverse construction effects on neighbouring properties, the road network, the Waikato River, ecological areas, public infrastructure and public access.

17. The Construction Management Plan must include.

    a. the name and contact details of the contractor and site manager;

    b. the anticipated construction programme;

c. construction hours;

d. site access and construction-traffic arrangements;

e. contractor parking and loading areas;

f. the location of construction compounds, material-storage areas, equipment-storage areas and stockpiles, together with any screening measures;

g. dust, noise and vibration controls;

h. erosion and sediment controls;

i. temporary stormwater-management measures;

j. earthworks and stockpile management;

k. measures applying near the Waikato River, gullies and ecological areas;

l. measures for maintaining safe public use of the existing Waikato River Trail, including any temporary closure, diversion or local alteration required during construction;

m. procedures for receiving, recording and responding complaints;

n. procedures for preventing damage to public infrastructure; and

o. procedures for restoring any public or private property affected by the works.

18. Council may certify a Construction Management Plan only where it demonstrates that the purpose in condition 16 will be achieved and includes the information required by condition 17.

19. Physical works within a stage must not commence until Council has certified the Construction Management Plan for that stage in writing.

20. All construction activities must be undertaken in accordance with the certified Construction Management Plan. A copy of the certified plan must be held on site and made available to Council on request.

Earthworks and geotechnical requirements

21. Earthworks must be undertaken in general accordance with the approved earthworks plans, the certified engineering plans and the approved geotechnical recommendations.

22. Earthworks must be supervised by a suitably qualified and experienced geotechnical professional to the extent required by the approved geotechnical recommendations.

23. Any uncontrolled or unsuitable fill encountered during construction must be removed or remediated in accordance with the written recommendations of the supervising geotechnical professional.

24. Fill supporting a building area, road or other structure must be placed and compacted as engineered fill and certified by a suitably qualified and experienced geotechnical professional.

25. Earthworks must be undertaken so that runoff, sediment, dust or debris does not:

a. cause damage or nuisance beyond the area of works; or

b. enter the Waikato River, a wetland, gully or other waterbody.

26. Before earthworks commence within each stage, the erosion, sediment and dust-control measures required by the certified Construction Management Plan must be installed and made available for Council inspection.

DRAFT

27. Erosion and sediment-control measures must remain in place and be maintained in effective operating condition until the affected land has been stabilised against erosion.

28. The consent holder shall ensure that the following areas as confirmed by a suitably qualified and experienced geotechnical professional are identified using a unique identifier on the Land Transfer Plan submitted for s223 certification:

    a. the 25 m building restriction line measured from the top of the bank of the Waikato River;

    b. for any lot containing slopes steeper than 25 degrees, the building setback determined by a 1V:2H projection from the toe of the relevant slope;

    c. the relationship of those restrictions to the proposed lot boundaries and approved building areas;

    d. any additional geotechnical restriction applying to an approved building area; and

    e. the building restriction areas described in (a) and (b), and any additional area in which building is prohibited under (d), must be accurately shown and uniquely identified on the Land Transfer Plan submitted for certification under section 223.

29. No approved building area may be located within a building restriction or geotechnical setback identified under condition 28.

30. Before certification under section 224(c) of the Resource Management Act 1991 is sought for each stage, the consent holder must provide a geotechnical-completion report prepared by a suitably qualified and experienced geotechnical professional confirming:

    a. the nature, extent and depth of fill placed;

    b. the compaction standards achieved;

    c. the suitability of each approved building area;

    d. any limitations applying to future buildings or foundations;

    e. that the 25 m building restriction line and the setback determined by a 1V:2H projection from the toe of slopes exceeding 25 degrees have been accurately identified;

    f. that the identified building restrictions and slope setbacks remain appropriate following completion of the earthworks; and

    g. any geotechnical limitation or recommendation that must be secured through a consent notice.

Roads and access

31. The roads to vest in Council, intersections, rights of way and vehicle crossings must be designed and constructed in accordance with:

    a. the approved scheme plans;

    b. the certified engineering plans;

    c. the applicable Regional Infrastructure Technical Specifications; and

    d. the transportation mitigation identified in Council's transportation-review documents dated 1 July 2025 and 14 August 2025.

32. The detailed engineering plans for each intersection with Horahora Road must:

    a. provide basic left-turn and right-turn widening as per Austroads;

DRAFT

b. be prepared in accordance with Parts 4 and 4A of the Austroads Guide to Road Design;

c. demonstrate that all widening, entry and exit tapers, drainage infrastructure, roadside regrading and local alterations to the existing Waikato River Trail can be accommodated within the road reserve, unless an alternative legal arrangement has been secured;

d. maintain effective roadside drainage, including through culverts or equivalent measures where required; and

e. provide for the safe regrading, local realignment and reinstatement of the existing Waikato River Trail where it is affected by the intersection works.

33. Before section 224(c) certification is sought for the first stage relying on an intersection with Horahora Road, the consent holder must provide certification from a suitably qualified and experienced transportation engineer confirming that the intersection has been constructed in accordance with the certified engineering plans and condition 32.

34. Each vehicle crossing must:

a. be located generally in accordance with the approved scheme and transportation plans;

b. be formed in accordance with the applicable Regional Infrastructure Technical Specifications rural-residential vehicle-crossing standard;

c. have a gradient no steeper than 1 vertical in 12 horizontal within the vehicle-crossing formation;

d. be at or above the level of Horahora Road for at least the first 6 m measured from the edge of the road carriageway, unless an alternative design is certified under conditions 9-12 as providing the required sight distance;

e. provide the sight distance required by condition 35;

f. be designed so that stormwater does not discharge onto Horahora Road; and

g. provide for the safe crossing and continuity of the Waikato River Trail.

35. For the purpose of detailed intersection and vehicle-crossing design, sight distance must be assessed using the legal speed limit of the road along the development frontage and must provide:

a. at least 160 m sight distance at each vehicle crossing, measured in accordance with RTS 6; and

b. at least 248 m sight distance at each subdivision intersection, measured in accordance with the applicable Austroads requirements.

36. The sight distance available at every intersection and vehicle crossing created within a stage must be demonstrated through the engineering-plan certification required by conditions 9-12. The assessment must take account of:

a. the final intersection or vehicle-crossing location and level;

b. the driver-eye position prescribed by RTS 6;

c. the final road and vehicle-crossing gradients;

d. roadside vegetation;

e. roadside berms and embankments; and

f. the alignment and level of the Waikato River Trail.

DRAFT

37. Where the required sight distance cannot be conclusively demonstrated before construction, it must be verified on site following formation of the intersection or vehicle crossing. Before section 224(c) certification is sought for the relevant stage, the consent holder must provide certification from a suitably qualified and experienced transportation engineer confirming that the sight distance required by condition 35 has been achieved.

38. Where excavation or regrading of a roadside berm or embankment is necessary to provide the required sight distance or intersection widening, the consent holder must:

    a. maintain effective roadside drainage;

    b. safely regrade or locally realign the existing Waikato River Trail where necessary;

    c. reinstate the affected section of the trail in accordance with the certified engineering plans and to a standard consistent with the adjoining trail; and

    d. before section 224(c) certification is sought for the relevant stage, provide certification from a suitably qualified and experienced engineer confirming that the drainage and trail-reinstatement works have been completed in accordance with the certified engineering plans.

Access serving Lots 1 and 2

39. Before section 224(c) certification is sought for the stage containing Lots 1 and 2, the roadside embankment north of the shared access serving those lots must be cut down and regraded to provide the sight distance shown on the approved transportation plans.

40. Where the works required by condition 39 affect the Waikato River Trail, the affected section of the trail must be safely realigned, regraded and reinstated in accordance with the certified engineering plans before the shared access is brought into use.

Access serving Lots 13–15

41. The shared access serving Lots 13–15 must:

    a. be located approximately 35 m north of the location originally assessed, as shown on the approved scheme and transportation plans;

    b. include the removal of vegetation on the western side of the curve where it intrudes into the required sight envelope;

    c. provide a sight envelope extending from the outside edge of the Horahora Road carriageway to a point 2 m behind the driver-eye position at the shared access;

    d. maintain the sight envelope free of buildings, structures and vegetation that would obstruct visibility; and

    e. provide headlight screening no more than 1 m high, located close to the eastern edge of the access carriageway and extending to the boundary with Lot 15, or for such other distance shown on the approved transportation plans.

42. Before section 224(c) certification is sought for the stage containing Lots 13–15:

    a. the sight-envelope works, vegetation removal and headlight screening required by condition 41 must be completed;

    b. a suitably qualified and experienced transportation engineer must certify that the completed works provide the visibility and headlight mitigation shown on the approved transportation plans; and

DRAFT

c. a consent notice must be prepared in registrable form against each lot containing or relying on the sight envelope or headlight screening, requiring those measures to be retained and maintained on an ongoing basis.

Rights of way and gates

43. All shared rights of way must be designed and constructed in accordance with the certified engineering plans and the applicable Regional Infrastructure Technical Specifications and must meet the following minimum standards:

    a. where serving one residential lot, a formed carriageway width of 4.5 m;

    b. where serving between two and six residential lots, a formed carriageway width of 6 m;

    c. Lot 104 may have a minimum legal width of 6 m where it serves only Lots 43 and 47; and

    d. all other shared rights of way must have a minimum legal width of 7 m.

44. Where a lot boundary is less than 8 m from the edge of the Horahora Road carriageway, any gate providing vehicle access from Horahora Road must be recessed at least 8 m from the edge of the carriageway.

45. No gate may be installed across the entrance of a shared right of way where it connects with Horahora Road.

Horahora Road curve-safety improvements

46. Before section 224(c) certification is sought for the first residential stage, the consent holder must complete the following safety improvements to the reverse curves adjoining the site:

    a. install or reinstate edge-marker posts at the spacing required by the Traffic Control Devices Manual, including at approximately 15 m centres through the reverse curves where applicable;

    b. install white raised reflective pavement markers at 20 m centres along the centreline and at 10 m centres along the solid centreline through the reverse curves;

    c. install red raised reflective pavement markers at 10 m centres along the left-hand edge lines through the reverse curves;

    d. install compliant advance curve-warning and advisory-speed signage;

    e. install four-bar chevron sight boards on both approaches to the reverse curves; and

    f. confirm that the existing chevron curve-indicator signs are located in accordance with the Traffic Control Devices Manual and relocate any non-compliant sign.

Waikato River Trail

47. Safe and continuous public use of the Waikato River Trail must be maintained throughout construction, except during a temporary closure or diversion undertaken in accordance with condition 48.

48. Before temporarily closing or diverting any part of the Waikato River Trail, the consent holder must:

    a. obtain the prior written agreement of Council's trail manager;

    b. provide a safe and clearly marked temporary route, where practicable;

    c. install appropriate warning and directional signage;

DRAFT

d. provide barriers or other public-safety measures appropriate to the nature of the works; and

e. notify trail users through the method and within the timeframe agreed with Council's trail manager.

49. Any part of the Waikato River Trail damaged or disturbed by construction must be:

a. safely regraded or locally realigned where necessary to accommodate an approved intersection, vehicle crossing, roadside-drainage work or sightline improvement;

b. reinstated in accordance with the certified engineering plans;

c. reinstated to a formation width, surface and standard consistent with the adjoining trail; and

d. available for safe public use before section 224(c) certification is sought for the relevant stage.

Stormwater

50. Before or at the same time as the detailed engineering plans for the first stage are submitted under condition 9, the consent holder must submit an updated subdivision-wide Stormwater Management Plan to Council for certification.

51. The purpose of the Stormwater Management Plan is to:

a. identify the stormwater infrastructure and treatment measures required to service the subdivision;

b. ensure that stormwater runoff is collected, conveyed, treated and discharged in accordance with the approved stormwater design;

c. protect the Waikato River, gullies, wetlands and other receiving environments from scour, erosion, sediment and contaminants; and

d. establish clear and enforceable requirements for the operation, inspection, maintenance, repair and replacement of all private and communal stormwater infrastructure.

52. The Stormwater Management Plan must be prepared by a suitably qualified and experienced stormwater professional and must include:

a. plans identifying all communal and on-lot stormwater infrastructure;

b. the stormwater collection, conveyance, treatment, detention, soakage and discharge measures applying to roads, accessways, common areas and residential lots;

c. the design and performance requirements for roadside swales, culverts, treatment devices, detention and soakage devices, discharge points and overland-flow paths;

d. erosion and scour protection at discharge points;

e. the stormwater-treatment measures required before discharge;

f. the ownership and maintenance responsibility for each stormwater asset;

g. the inspection, servicing, maintenance, repair and replacement requirements for each type of stormwater asset;

h. the required frequency of inspections and maintenance;

i. the allocation of maintenance, repair and replacement costs for any stormwater asset serving more than one lot;

j. any access arrangements required to inspect, maintain, repair or replace communal stormwater infrastructure;

DRAFT

k. the records that must be retained to demonstrate inspection and maintenance;

l. procedures for responding to blockages, failures, erosion, flooding or other stormwater-related incidents; and

m. the ongoing obligations to be imposed on the owners of the residential lots through consent notices.

53. Council may certify the Stormwater Management Plan only where it demonstrates consistency with:

a. the approved stormwater design;

b. the applicable requirements of the Regional Infrastructure Technical Specifications;

c. the conditions of these consents;

d. any Waikato Regional Council consent held in relation to the land, or Waikato Regional Council Guideline for stormwater; and

e. the stormwater treatment, detention, soakage and discharge outcomes relied upon in the application and decision.

54. The detailed engineering plans for the first stage must not be certified until Council has certified the Stormwater Management Plan. The stormwater system for each stage must subsequently be designed and constructed in accordance with:

a. the certified Stormwater Management Plan;

b. the certified engineering plans; and

c. the conditions of these consents.

55. Any material amendment to the certified Stormwater Management Plan must be submitted to Council for further certification before it is implemented. Council may certify an amendment only where it achieves the purpose in condition 51 and remains consistent with the matters identified in condition 53.

56. Before section 224(c) certification is sought for each stage, the consent holder must provide Council with:

a. as-built plans identifying all stormwater infrastructure established within that stage;

b. certification from a suitably qualified and experienced stormwater professional confirming that the stormwater system has been constructed in accordance with the certified engineering plans and Stormwater Management Plan;

c. confirmation of the ownership and ongoing maintenance responsibility for every stormwater asset established within that stage; and

d. final version of the Stormwater Management Plan incorporating the as-built stormwater system for that stage.

57. Before section 224(c) certification is sought for each stage, the consent holder must prepare in registrable form a consent notice under section 221 of the Resource Management Act 1991 against every residential title created by that stage.

58. The consent notice required by condition 57 must:

a. identify the applicable Stormwater Management Plan by title, author, reference, revision and date;

b. identify the stormwater assets located on or serving the lot, state who owns each asset, and specify the lot owner's responsibilities for any shared

asset, including access, inspection, maintenance, repair, replacement and costs require;

c. require the owner to inspect, operate, maintain, repair and replace all private stormwater devices located within the lot in accordance with the Stormwater Management Plan;

d. require the owner to comply with the responsibilities allocated to the lot for any communal stormwater infrastructure serving that lot;

e. require the owner to meet the lot's allocated share of the reasonable inspection, maintenance, repair and replacement costs for any communal stormwater infrastructure;

f. prohibit any building, structure, earthwork, planting or storage that would obstruct stormwater infrastructure, prevent access for maintenance or impede an identified overland-flow path; and

g. prohibit the modification, removal or obstruction of a stormwater device or overland-flow path except in accordance with a design prepared or certified by a suitably qualified and experienced stormwater professional and any required statutory authorisation.

59. Where the certified Stormwater Management Plan identifies that stormwater infrastructure serving one lot is located on another lot, or that access across another lot is required for its inspection, operation, maintenance, repair or replacement, the consent holder must, before section 224(c) certification is sought for the relevant stage, provide registrable private drainage and access easement instruments. The instruments must identify the burdened and benefited land, the stormwater assets and drainage rights, and the rights of entry and maintenance. They must be consistent with the ownership and cost responsibilities in the certified Stormwater Management Plan.

Wastewater

60. Each residential lot must be capable of accommodating an on-site treatment and land-disposal system providing, as a minimum, secondary treatment of domestic wastewater.

a. the design and performance of these systems must be compliant with Waikato Regional Council Regional Plan Rule 36.5.7.6 which governs effluent disposal loadings;

b. The disposal areas be planted with water-tolerant vegetation to assist with further treatment and environmental integration;

61. Each residential lot must contain both a primary land-disposal area and a reserve land-disposal area that:

g. are suitable for the proposed on-site wastewater system;

h. comply with the required setbacks from boundaries, buildings, waterbodies, wetlands and the Waikato River;

i. are located outside any area subject to inundation or geotechnical instability;

j. are located outside any identified overland-flow path, ecological protection area or building restriction; and

k. are shown on the certified engineering plans.

62. Before section 224(c) certification is sought for each stage, a suitably qualified and experienced wastewater professional must provide written confirmation that each residential lot created by that stage can accommodate a compliant on-site

wastewater-treatment and land-disposal system within the areas identified under condition 61.

63. The consent holder shall ensure that the s224(c) certification application for each stage is accompanied by a consent notice in a registrable form under section 221 of the Resource Management Act 1991 against every residential title created by that stage recording that:

    a. wastewater must be treated through an on-site wastewater system providing, as a minimum, secondary treatment;

    b. the wastewater system must be designed by a suitably qualified and experienced wastewater professional;

    c. the primary and reserve land-disposal areas shown on the certified engineering plans must be retained and kept free of buildings, accessways and impermeable surfaces; and

    d. where the wastewater discharge does not comply with the applicable permitted-activity requirements, the necessary regional resource consent must be obtained before the system is installed or operated.

Water

64. Before section 224(c) certification is sought for each stage, the consent holder must prepare in registrable form a consent notice under section 221 of the RMA against every residential title created by that stage. The consent notice must require the owner, before occupying a dwelling on the lot, to provide:

    a. a potable-water supply and storage of sufficient quality and capacity for the residential use; and
    b. firefighting-water storage and access in accordance with SNZ PAS 4509:2008, New Zealand Fire Service Firefighting Water Supplies Code of Practice.

    The design of these facilities must be provided with the building consent application, and the facilities must be installed before the dwelling is occupied.

Electricity and telecommunications

65. The consent holder must provide an electric power connection to the boundary of each residential lot created by that stage. Written confirmation from the network utility provider that a connection is completed to their satisfaction shall be submitted to Council prior to section 224(c) RMA certification

66. That either:

    a. The consent holder must provide evidence to prior to 224c that each residential lot created in the relevant stage, as shown on the approved scheme plan has been provided a wired telecommunications connection, OR
    b. The consent holder must ensure that pursuant to section 221 of the Act the following consent notice conditions is imposed on the titles of each residential lot created in the relevant stage, as shown on the approved scheme plan stating; "Future owners of a lot to which this consent notice relates are advised that a wired telecommunications connection to the allotment has not been installed at the time of subdivision. Future owners are advised to investigate wired or wireless connections at their own expense."

Landscape mitigation

67. No less than 20 working days before physical works commence within each stage, the consent holder must submit a Landscape, Visual Amenity and Mitigation Planting Plan for that stage to Council for certification.

68. Each Landscape, Visual Amenity and Mitigation Planting Plan must:

    a. be prepared by a suitably qualified and experienced landscape architect;

    b. be in general accordance with the approved Landscape Master Plan;

    c. integrate the requirements of the certified Ecological Management Plan; and

    d. demonstrate how the landscape mitigation required for the relevant stage will be established, protected and maintained.

69. Each Landscape, Visual Amenity and Mitigation Planting Plan must include:

    a. the location and extent of vegetation to be retained;

    b. the location and extent of proposed planting;

    c. the planting required along the Waikato River frontage, gullies, roads, accessways, ecological restoration areas and external site boundaries;

    d. the planting required within or adjoining individual residential lots;

    e. plant species, numbers, spacing and grades;

    f. anticipated plant heights at establishment, 10 years after establishment and maturity;

    g. site preparation, soil, staking, irrigation and mulching requirements;

    h. planting-season requirements;

    i. plant-maintenance and replacement requirements;

    j. pest-plant and animal-pest control measures;

    k. monitoring requirements and measurable performance targets;

    l. the location and design of any fencing required to protect planting or retained vegetation; and

    m. the person or entity responsible for implementing, monitoring and maintaining each planting area.

70. Council may certify a Landscape, Visual Amenity and Mitigation Planting Plan only where it demonstrates consistency with:

    a. the approved Landscape Master Plan;

    b. the approved Landscape and Visual Assessment;

    c. the certified Ecological Management Plan;

    d. the conditions of these consents; and

    e. the landscape and visual mitigation relied upon in the application and decision.

71. All landscape planting required for each stage must be completed before section 224(c) certification is sought for that stage, unless:

    a. planting during that period would be inconsistent with the planting season specified in the certified Landscape, Visual Amenity and Mitigation Planting Plan;

    b. the consent holder has submitted an alternative implementation programme requiring the planting to be completed during the next specified planting season;

    c. Council has certified that implementation programme; and

DRAFT

d. the consent holder has provided a bond under section 108(2)(b) of the Resource Management Act 1991 sufficient to cover the reasonable cost of completing and maintaining the deferred planting.

72. Where planting is deferred under condition 71:

a. the planting must be completed during the next planting season specified in the certified Landscape, Visual Amenity and Mitigation Planting Plan;

b. a suitably qualified and experienced landscape architect must provide Council with written certification that the planting has been completed in accordance with the certified plan; and

c. the bond must not be released until Council has received the certification required by clause (b).

73. All landscape and visual mitigation planting must be maintained for:

a. a minimum of five years following completion of the planting; and

b. thereafter until at least 80% canopy cover and the other performance targets specified in the certified Landscape, Visual Amenity and Mitigation Planting Plan have been achieved,

c. provided that the active maintenance period required by this condition need not exceed 15 years.

74. During the maintenance period required by condition 73:

a. dead, diseased, damaged or failed plants must be replaced during the next appropriate planting season;

b. replacement planting must use the same species or an alternative species specified in the certified Landscape, Visual Amenity and Mitigation Planting Plan;

c. pest plants and animal pests must be controlled in accordance with the certified plan; and

d. fences, stakes, guards, irrigation and other measures required to protect the planting must be maintained in effective condition.

75. At the end of the maintenance period, the consent holder must provide Council with written certification from a suitably qualified and experienced landscape architect confirming that:

a. the required canopy cover has been achieved;

b. the other performance targets in the certified Landscape, Visual Amenity and Mitigation Planting Plan have been achieved; and

c. the planting is established and is likely to remain viable without active establishment maintenance.

76. Completion of the maintenance period does not authorise the removal or material reduction of planting required as landscape or visual mitigation. That planting must be retained thereafter, except where an individual plant is dead, diseased or presents a demonstrable safety risk, in which case replacement planting must be undertaken during the next appropriate planting season.

77. Before approval of the survey plan under section 223 of the Resource Management Act 1991 for each stage, the consent holder must ensure that any landscape or visual mitigation planting areas required ongoing retention within privately owned lots are identified on the survey/LT plan for that stage. The areas shown must be consistent with the certified Landscape, Visual Amenity and Mitigation Planting Plan and must be identified in the consent notice registered against each affected lot.

DRAFT

78. Before section 224(c) certification is sought for each stage the obligations in conditions 73–76, and condition 72 where planting has been deferred under condition 71 must be included, insofar as they apply to the lot concerned, in consent notices registered against the titles containing that planting.

Ecology

79. Before physical works commence within the first stage, the consent holder must submit a final subdivision-wide Ecological Management Plan to Council for certification.

80. The Ecological Management Plan must be prepared by a suitably qualified and experienced ecologist and must:

    a. incorporate the recommendations of Council's ecological reviewer dated 10 August 2026;

    b. identify all existing and proposed ecological protection and restoration areas;

    c. identify the bat-habitat setbacks applying to existing and proposed bat habitat;

    d. specify the protocols applying to the inspection and removal of potential bat-roost trees;

    e. specify the measures applying to potential lizard habitat;

    f. set out the indigenous restoration and enhancement planting requirements;

    g. set out the pest-plant and animal-pest control programme;

    h. establish measurable planting, canopy-closure, habitat and pest-control performance targets;

    i. specify the monitoring and reporting required to demonstrate that the performance targets are being achieved; and

    j. identify the person or entity responsible for implementing, monitoring and maintaining each ecological protection or restoration area.

81. Council may certify the Ecological Management Plan only where it demonstrates consistency with:

    a. the approved ecological assessment and plans;

    b. the recommendations of Council's ecological reviewer dated 10 August 2026;

    c. the approved Landscape Master Plan;

    d. the conditions of these consents; and

    e. the ecological mitigation and enhancement relied upon in the application and decision.

82. Physical works must not commence within any stage until Council has certified the Ecological Management Plan in writing.

83. Before physical works commence within each stage, the consent holder must provide Council with written confirmation from a suitably qualified and experienced ecologist that:

    a. a. the ecological protection and restoration areas within or adjoining that stage have been clearly marked or fenced;

    b. the required bat-habitat setbacks have been identified and clearly marked;

DRAFT

c. contractors have been inducted into the ecological requirements applying to the stage; and

d. the pre-works ecological inspections and surveys required by the certified Ecological Management Plan have been completed.

84. No building, structure, earthwork, accessway, construction compound, storage area or other construction or domestic activity may occur within an ecological protection area or bat-habitat setback, except where expressly shown on an approved plan and provided for in the certified Ecological Management Plan.

85. A 25 m-wide bat-habitat setback must be maintained around the outer edge of the existing and proposed bat habitat identified on the approved ecological plans and in the certified Ecological Management Plan, including the relevant parts of Areas D and AI and Areas BA, BB and BC.

86. A potential bat-roost tree must not be removed except:

a. in accordance with the Department of Conservation bat-roost protocols identified in the certified Ecological Management Plan; and

b. under the supervision of a suitably qualified and experienced bat ecologist.

c. Where a confirmed bat roost is removed, the consent holder must install:

d. at least four suitable bat-roost boxes for each confirmed roost removed; or

e. any higher replacement ratio specified in the certified Ecological Management Plan.

87. Trees supporting bat-roost boxes must be fitted with appropriate predator-exclusion devices. The boxes and predator-exclusion devices must be inspected and maintained in accordance with the certified Ecological Management Plan.

88. Before potential lizard habitat is cleared or disturbed, a suitably qualified and experienced herpetologist must:

a. assess the affected habitat;

b. undertake any survey required by the certified Ecological Management Plan; and

c. prepare and implement any salvage, relocation or habitat-protection measures required by the certified Ecological Management Plan.

89. Ecological restoration and enhancement planting must:

a. use indigenous species appropriate to the site and habitat type;

b. include supplementary canopy species at the time of initial planting;

c. include enhancement planting within gaps in the existing poplar areas;

d. include the restoration and enhancement planting required within Areas BA–BH;

e. achieve the planting densities and spacing specified for wetland and dryland areas; and

f. achieve the establishment and canopy-closure targets specified in the certified Ecological Management Plan.

90. Pest-plant and animal-pest control must be undertaken within all ecological protection and restoration areas in accordance with the certified Ecological Management Plan.

91. The pest-control programme contained in the Ecological Management Plan must identify:

a. the target pest-plant and animal-pest species;

b. the control methods;

c. indicative device locations and spacings;

d. inspection and servicing frequencies;

e. measurable performance targets;

f. monitoring and reporting requirements; and

g. the person or entity responsible for implementing the programme on an ongoing basis.

92. Before section 224(c) certification is sought for each stage, all ecological protection and restoration areas located within that stage must be legally protected in perpetuity through:

a. a registered conservation covenant; and

b. a consent notice under section 221 of the Resource Management Act 1991.

93. The legal protection required by condition 92 must:

a. prohibit buildings, structures, earthworks, vegetation clearance, dumping, storage and domestic activities within the protected area, except where expressly authorised by the certified Ecological Management Plan;

b. require the indigenous vegetation, restoration planting and habitat values to be retained and protected;

c. require the pest-plant and animal-pest control programme to be implemented on an ongoing basis;

d. require continued compliance with the applicable monitoring, maintenance and replacement requirements of the certified Ecological Management Plan; and

e. identify the person or entity responsible for those obligations.

Lighting

94. Exterior lighting must be designed, located and operated to minimise light spill onto the Waikato River margin, gullies, ecological protection areas and identified bat habitat.

95. Exterior lighting within or adjoining a bat-habitat setback must:

a. be directed downward;

b. be shielded away from the Waikato River, gullies and vegetation;

c. use luminaires with a correlated colour temperature not exceeding 2700 Kelvin;

d. ensure that artificial light spill does not exceed 0.3 lux at the outer edge of the 25 m bat-habitat setback; and

e. be extinguished when not required for safety or essential access.

Accidental discovery

96. If any archaeological material, kōiwi or taonga is discovered during earthworks:

a. all works within 20 m of the discovery must cease immediately;

b. the discovery area must be secured against further disturbance;

c. Council, Heritage New Zealand Pouhere Taonga, Raukawa Charitable Trust and Ngāti Koroki Kahukura must be notified as soon as practicable;

d. the New Zealand Police must also be notified if the discovery includes kōiwi;

e. the discovery must be managed in accordance with the requirements of the Heritage New Zealand Pouhere Taonga Act 2014 and any applicable tikanga agreed with tangata whenua; and

f. works must not recommence within the affected area until any necessary statutory authority has been obtained and Council has received written confirmation that the applicable archaeological and cultural requirements have been addressed.

Esplanade strip

97. Before section 224(c) certification is sought for each stage, the consent holder must, in relation to the part of the Waikato River frontage contained within that stage:

a. create a 10 m-wide esplanade strip along the full extent of that frontage in accordance with sections 232 and 233 and Schedule 10 of the RMA;

b. identify the location and width of that part of the esplanade strip on the relevant survey plan;

c. submit the proposed esplanade-strip instrument to Council for certification;

d. register the certified instrument against each Record of Title containing part of the esplanade strip;

e. ensure that the esplanade strip established through that stage connects continuously with any adjoining part of the strip previously established or required to be established through another stage;

f. ensure that the registered instrument:

i. secures public access along the Waikato River frontage;

ii. binds the registered proprietors of the affected land and their successors in title; and

iii. specifies the applicable rights, restrictions and ongoing landowner responsibilities relating to the use and management of the strip; and

g. complete the fencing, planting, weed control, erosion protection and other works within or adjoining that part of the esplanade strip required by the approved plans, certified Landscape, Visual Amenity and Mitigation Planting Plan or certified Ecological Management Plan.

Advice note: *These consents do not require the Waikato River Trail to be permanently relocated into the esplanade strip. Any future relocation of the trail by Council would be undertaken separately. Any part of the existing trail disturbed by the subdivision works must be protected, temporarily managed and reinstated in accordance with the applicable conditions of this consent.*

Recreation reserve

98. The consent holder shall ensure that Lot 37 is shown on the Land Transfer Plan submitted for s223 certification as Local Purpose Reserve (Recreation) to vest in Council.

Easements and legal instruments

99. The consent holder shall ensure that for each stage, as part of the s223 certification application, all easements required to provide legal access, services, drainage, sightlines or rights of inspection and maintenance for the lots or infrastructure created by that stage must:

a. be duly granted or reserved;

DRAFT

b. be shown in the memorandum of easements on the relevant survey plan; and

c. be registered against the relevant Records of Title.

100. Public infrastructure located within private land must be protected by an easement in gross in favour of Council, except where these conditions expressly provide for the infrastructure to remain privately owned and managed in accordance with a certified management plan and consent notice.

101. Private infrastructure serving more than one lot must be protected by appropriate easements in favour of every lot relying on that infrastructure. The easements must provide sufficient rights of access for inspection, operation, maintenance, repair and replacement of the infrastructure.

102. The consent holder must, at its expense:

a. prepare all easement, covenant and consent-notice instruments required by these conditions;

b. submit the instruments to Council for certification before registration; and

c. register the certified instruments before section 224(c) certification is issued for the relevant stage.

Financial contributions

103. Pursuant to Rule FC-R2(1) and FC-R2(4) of the South Waikato Operative District Plan and section 108(2)(a) of the Resource Management Act 1991, the consent holder shall pay financial contributions totalling $6,529.00 per additional allotment (GST inclusive). The consent holder shall pay the applicable contributions for each stage, prior to the release of the section 224(c) certificate for that stage.

The contribution is made up of $4,632.00 for roading and $1,897.00 for reserves with the total amount payable for each stage and the additional 72 allotments being created shown on the staging plan approved under Condition 1 being:

Stage	Additional Allotments Created	Total Contributions Payable per Stage
1	15	$97,935.00
2	21	$137,109.00
3	36	$235,044.00

Consent notices

104. The consent holder must submit to Council as part of the s224(c) certification application for each stage, and subsequently register under section 221 of the RMA, a consent notice against every residential title created by that stage.

105. For each balance lot created by Stage 1 or Stage 2, the section 224(c) application must identify any ongoing obligation under these conditions that will apply to that lot after the survey plan for that stage is deposited, including obligations relating to infrastructure, planting or ecological protection. The consent holder must submit the consent notice or other legal instrument required by these conditions to secure that obligation against the balance lot. An obligation that arises only upon commencement or completion of a subsequent stage need not be secured as part of the earlier stage.

106. Condition 104 applies to the following residential lots shown on the approved Cogswell Surveys Limited Scheme Plan, reference 5237, Revision I, dated 18 June 2026:

a. Lots 1–36;

b. Lot 38; and

c. Lots 44–83.

107. Each consent notice must include the requirements of conditions 115-137 that are applicable to the lot concerned, together with:

a. the applicable obligations contained in the certified Stormwater Management Plan;

b. the applicable on-site wastewater requirements;

c. the potable-water and firefighting-water requirements;

d. any landscape, ecological protection, planting, fencing, lighting or pest-control obligations applying to the lot;

e. for each lot containing a building restriction area identified under condition 28, the consent notice must identify that area by reference to its designation on the Land Transfer Plan and prohibit buildings and other structures, other than fencing, within it; the notice must also include any other geotechnical or natural-hazard restriction applying to the lot;

f. any reverse-sensitivity acknowledgment applying to the lot; and

g. any other ongoing obligation that these conditions expressly require to be secured through a consent notice.

108. Before section 224(c) certification is issued for a stage, the consent holder must provide Council with:

a. copies of all consent notices and land covenants registered in relation to that stage; and

b. updated Records of Title confirming that the instruments have been registered against every title to which they apply.

LAXON FAMILY LAND COVENANT

109. Before section 224(c) certification is sought for the stage containing the relevant riverside residential lots, the consent holder must register a land covenant against each riverside residential title identified on the approved plans as being subject to the Laxon Family covenant.

110. The covenant required by condition 109 must:

a. burden the relevant riverside residential titles;

b. be for the benefit of the land at 104 and 1/104 Finlay Road, Maungatautari, legally described as Lot 1 DP 597929, Record of Title 1158714, and Lot 1 DP 427392, Record of Title 508005, or such updated legal descriptions as apply at the date of registration;

c. be enforceable by the registered proprietors of the benefited land and their successors in title;

d. incorporate, in materially the same terms as the corresponding consent notices, the applicable building-location, building-design, colour, reflectivity, landscaping and vegetation-retention requirements imposed by these conditions;

e. provide that those obligations bind the registered proprietors of the burdened titles and their successors in title; and

f. not be varied, surrendered or extinguished without the prior written agreement of the registered proprietors of the benefited land.

111. Where a proposed variation, surrender or extinguishment of the covenant required by condition 109 would be inconsistent with a condition or consent notice imposed under this consent, the corresponding condition or consent-notice requirement must first be varied or cancelled in accordance with the RMA.

TAKAPOTO ESTATE LAND COVENANT AND CONSENT NOTICE

112. Before section 224(c) certification is sought for a stage, the consent holder must register the land covenant agreed between the applicant and Profile Farms Limited against every residential title created by that stage to which that agreement applies.

113. The covenant required by condition 112 must:

    a. be in materially the same terms as the covenant agreed between the applicant and Profile Farms Limited and attached to the Profile Farms Limited submission;

    b. identify the relevant Takapoto Estate land, including:

        i. Takapoto North at 43 and 81 Finlay Road, Maungatautari, also referred to as 37 Plantation Road, legally described as Lot 2 DPS 35212, Record of Title SA440/890; and

        ii. Takapoto South at 80 Finlay Road, Maungatautari, legally described as Lot 2 DP 597929, Record of Title 868472;

    c. acknowledge the existing and lawfully established activities and events undertaken at Takapoto Estate and the noise, traffic, lighting, visual and amenity effects that may arise from those activities;

    d. include the agreed restriction relating to complaints concerning lawfully established activities and events at Takapoto Estate;

    e. prohibit the discharge of firearms and setting off of fireworks on the burdened residential lots;

    f. bind the registered proprietors and occupiers of the burdened titles and their successors in title; and

    g. not be varied, surrendered or extinguished without the prior written agreement of Profile Farms Limited or the registered proprietor of the benefited land.

114. The acknowledgment of Takapoto Estate's existing activities and the prohibition on the discharge of firearms and setting off of fireworks must also be included in the consent notices registered against the residential lots to which those requirements apply.

BUILDING USE, LOCATION AND COVERAGE

115. No more than one dwelling may be constructed or used on each residential lot.

116. An accessory building may be established on a residential lot but must not be designed, constructed or used as a separate dwelling, minor residential unit, secondary dwelling or independent residential unit.

117. The combined building footprint of all buildings on a residential lot must not exceed:

    a. 500 m²; or

    b. 10% of the net site area,

    whichever is the lesser.

DRAFT

118. Every dwelling and accessory building must be located wholly within the approved 800 m² building area shown for the lot on the approved plans, unless otherwise authorised by a subsequent resource consent.

119. No building or structure, except fencing along a boundary, may be located within:

    a. the approved 25 m building restriction line measured from the top of the Waikato Riverbank;

    b. the setback defined by a 1 vertical to 2 horizontal projection from the toe of a slope exceeding 25 degrees; or

    c. any other geotechnical or natural-hazard building restriction area shown on the approved plans.

BUILDING DESIGN

120. All buildings must comply with the following requirements:

    a. building height must not exceed 6 m above final ground level;

    b. roof colours and materials must have a Light Reflectance Value of less than 20%;

    c. wall colours and materials must have a Light Reflectance Value of less than 30%;

    d. exterior materials must have a recessive appearance and must not be highly reflective; and

    e. detached accessory buildings, water tanks and other vertical infrastructure must, where practicable, be located beside or behind the dwelling when viewed from the Waikato River.

121. The finished-floor level of every dwelling constructed on Lots 1–36, Lot 38 and Lots 44–83 must be no lower than 56.8 m RL in terms of New Zealand Vertical Datum 2016.

GEOTECHNICAL CONFIRMATION

122. Before an application for building consent is lodged for a dwelling or accessory building, a suitably qualified and experienced geotechnical professional must:

    a. confirm that the proposed building location is geotechnically suitable;

    b. confirm that the building is located outside the building restriction areas shown on the approved plans;

    c. identify any site-specific earthworks, foundation-design or slope-stability requirements; and

    d. provide the resulting written assessment and recommendations with the building-consent application.

ON-LOT LANDSCAPING

123. The owner of each residential lot must establish all on-lot planting shown for that lot in the certified Landscape, Visual Amenity and Mitigation Planting Plan before the principal dwelling is occupied.

124. The planting required by condition 123 must be retained and maintained for the life of the development. Any dead, diseased, damaged or failed plant must be replaced during the next appropriate planting season with a plant of the same species or an alternative species specified in the certified Landscape, Visual Amenity and Mitigation Planting Plan.

125. Existing vegetation identified for retention on an approved plan or certified management plan must not be removed unless:

DRAFT

a. the vegetation is dead, diseased or presents a demonstrable risk to people or property;

b. its removal is supervised or approved by a suitably qualified and experienced arborist, ecologist or landscape architect, as appropriate; and

c. replacement planting is undertaken in accordance with the applicable certified management plan.

STORMWATER

126. All development of a residential lot must comply with the certified Stormwater Management Plan, including the on-lot detention, soakage, conveyance, treatment and discharge measures specified for that lot.

127. The owner of each residential lot is responsible for inspecting, operating, maintaining, repairing and, when necessary, replacing every private stormwater device located within or serving the lot, in accordance with the certified Stormwater Management Plan.

128. No building, structure, earthwork, planting or other activity may:

a. obstruct or divert an overland-flow path identified in the certified Stormwater Management Plan;

b. reduce the effectiveness of an approved stormwater device; or

c. prevent reasonable access to a stormwater device for inspection, maintenance, repair or replacement.

129. No owner or occupier may modify or remove an approved stormwater device or depart from the certified Stormwater Management Plan unless the change has first been certified by Council in accordance with the stormwater conditions of this consent and any necessary regulatory approvals have been obtained.

WASTEWATER

130. Wastewater generated on a residential lot must be treated and discharged through an on-site wastewater-treatment and land-disposal system:

a. designed by a suitably qualified and experienced wastewater professional;

b. providing at least secondary treatment;

c. located within the approved primary land-disposal area;

d. provided with an approved reserve land-disposal area; and

e. installed and operated in accordance with the designer's requirements and all applicable regional requirements.

131. No building, structure, accessway, impermeable surface or activity that may compromise wastewater disposal may be established within an approved primary or reserve wastewater-disposal area.

132. Where an on-site wastewater discharge does not comply with the applicable permitted-activity requirements, the necessary regional consent must be obtained before the system is installed or operated.

WATER SUPPLY

133. The owner must provide with the building consent for any dwelling, information to demonstrate that the following requirements for water supply are met:

a. a potable-water supply of sufficient quality and capacity for the intended residential use; and

b. a firefighting water supply that meets the requirements of the New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS

4509:2008 storage and Fire and Emergency New Zealand access that comply with the applicable firefighting-water requirements.

ECOLOGICAL, FENCING AND LIGHTING CONTROLS

134. No building, structure, earthwork, storage area or domestic activity may be established or undertaken within an ecological protection area or bat-habitat setback, except where expressly authorised by the certified Ecological Management Plan.

135. Fencing adjoining the Waikato River, an esplanade strip, or gully area must:

    a. comprise rural-style post-and-rail, post-and-wire, or post-and-wire-netting fencing;

    b. not exceed 1.2 m in height; and

    c. not comprise solid panels or close-boarded fencing.

136. Exterior lighting on a residential lot must comply with the lighting conditions of this consent, including the applicable restrictions on the direction, shielding, colour temperature, hours of operation and maximum light spill of exterior lighting.

137. No domestic cat may be kept or permitted to remain on a residential lot.

RURAL REVERSE SENSITIVITY

138. Each consent notice must advise future owners and occupiers that the residential lot is located within a rural environment in which lawfully established farming and rural-production activities may generate noise, dust, odour, agrichemical spray, vibration, traffic, machinery movements, stock movements and other effects that are characteristic of the rural environment.

RIGHTS OF WAY AND GATES

139. The consent notice registered against each residential lot served by a shared right of way must include the requirement in condition 45 that no gate may be installed across the entrance to that of a right of way of way where it connects with Horahora Road.

ADVICE NOTES

a. Plans required to be submitted to Council for certification shall be submitted electronically via planningteam@southwaikato.govt.nz
b. The consent holder shall pay to the South Waikato District Council the actual and reasonable costs associated with the monitoring of conditions (or review of consent conditions), or supervision of the resource consent as set in accordance with Section 36 of the Resource Management Act 1991. These costs* may include site visits, correspondence and the actual costs of materials or services which may have to be obtained.
   *Please refer to South Waikato District Council's current schedule of Resource Management fees for guidance on the current hourly rate chargeable for Council's staff.
c. The consent holder shall notify the Council's Environmental Monitoring and Compliance Officer of the start and completion dates of the works in writing at least three working days before the works are carried out. The consent holder shall fill out and return (by email to the Environmental Monitoring and Compliance Officer at planningteam@southwaikato.govt.nz, or by post to Private Bag 7, Tokoroa 3444) the form that is attached to this decision.
d. It is the consent holder's responsibility to comply with any conditions imposed on this resource consent prior to and during (as applicable) exercising this resource consent.
e. If you disagree with any of the above conditions or disagree with the additional charges relating to the processing of the application, you have a right of objection pursuant to sections 357A or 357B of the Resource Management Act 1991. Any

objection must be made in writing to the Council's Resource Consents Manager within 15 working days of notification of the decision.

f. The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety in Employment Act 1992), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.

g. Additional fees will be required by the Council with the application(s) for the Section 223 and 224 certificates. The section 224 certificate will be issued following compliance with all conditions of consent set out above, and payment of any applicable financial contribution.

h. Applications for sections 223 and 224(c) certifications shall be submitted electronically via planningteam@southwaikato.govt.nz

DRAFT

NOTICE OF COMMENCEMENT OF WORKS/OPERATION

PLEASE POST OR EMAIL THIS COMPLETED PAGE AT LEAST 3 WORKING DAYS BEFORE COMMENCING ONSITE WORKS/OPERATION

To: South Waikato District Council
Private Bag 7
TOKOROA 3444

Or

Email: planningteam@southwaikato.govt.nz

Attention: Environmental Monitoring and Compliance Officer

Resource Consent	RM240115
Address	597 Horahora Road, Tirau
Proposal	Undertake a 73-lot rural lifestyle subdivision with two roads to vest and associated land use consent for earthworks and the future construction of a dwelling and an accessory building on each of the resulting rural lifestyle allotments
Date works will commence onsite	

Owner's contact details	
Name	
Phone number	
Postal address	
Email address	
Signature	

Contractor's contact details (e.g., building, earthmover)	
Name	
Phone number	
Email address	

DRAFT

APPENDIX B

SCHEME PLANS, DATED 18 JUNE 2026, REV 1



Proposed Subdivision of Lot 1 DPS 21946

Horahora Road, Arapuni, Putaruru

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
www.cogswell.co.nz

REF: 5237

PREPARED FOR: Tylee, Kevin & Lynn

SCALE: AS SHOWN | ORIGINAL PLAN SIZE: A3 | SHEET: 1 of 6

DRAWN: JM | DESIGNED: RS | CHECKED: RS

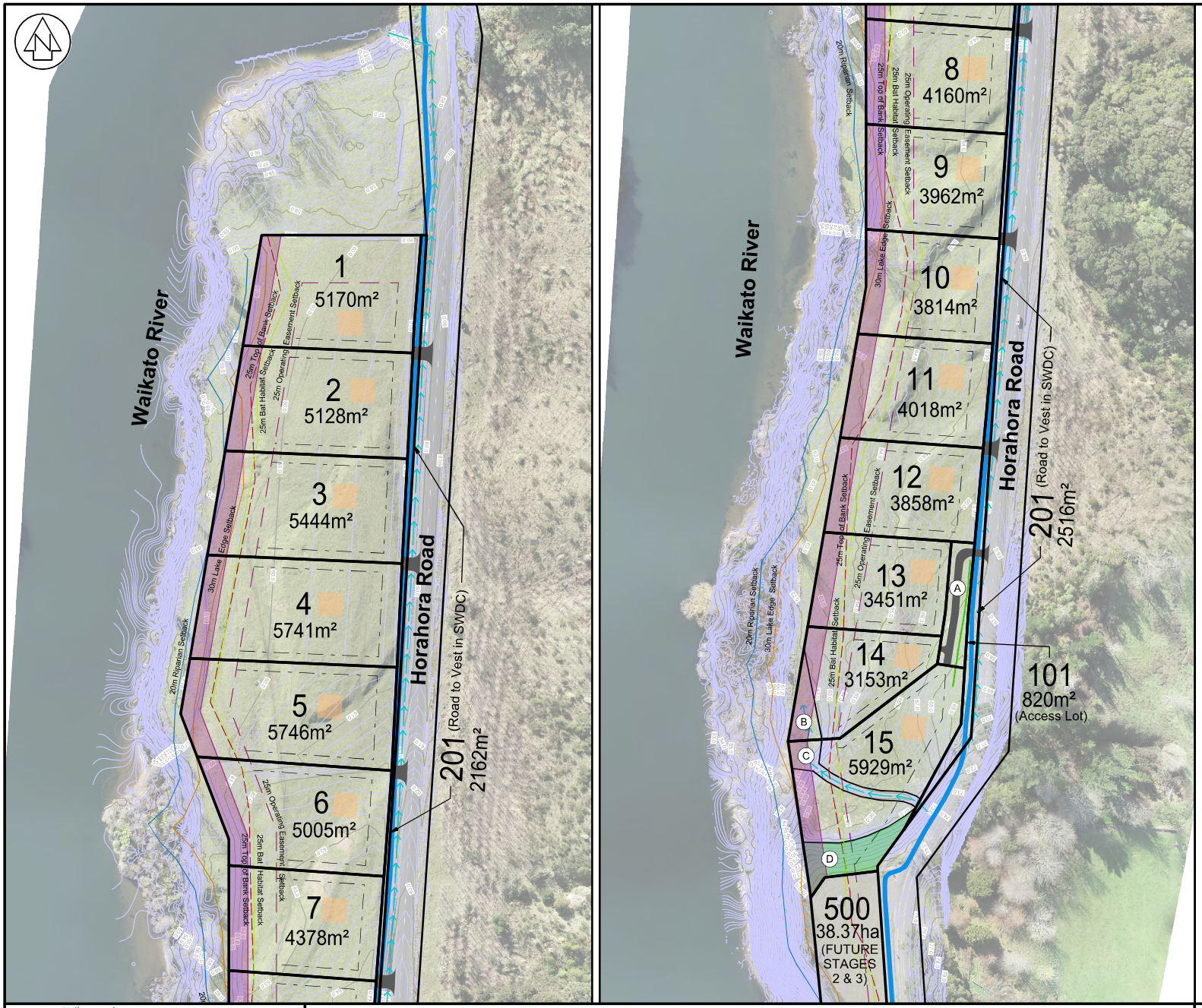
DATE: 18/06/26

NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 (AGLE) RL=66.729m.

REV:1

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE Stages PLOTTED: Thu Jun 18 15:02:50 2026



Property Details:

Address:	Horahora Road, Arapuni, Putaruru
Parcel:	Lot 1 DPS 21946
Record of Title:	SA22C/92
Area:	45.612Ha
Zone:	Rural Residential
Policy Overlays:	Significant Natural Areas & Outstanding Landscape

Stage 1 Details:

Lots:	1 – 15 (15 lots)
Access Lots:	Lot 101
Road to Vest:	Lot 201

Amalgamation Conditions:

That Lot 101 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 13, 14 & 15 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

Memorandum of Easements			
Purpose/Interest	**Shown**	**Burdened Land**	**Benefited Land**
Right of Way, Right to Convey Water, Electricity, Telecommunications	A	Lot 101	Lots 13, 14 & 15

Memorandum of Easements in Gross			
Purpose/Interest	**Shown**	**Burdened Land**	**Grantee**
Right to Drain Water	B	Lot 14	South Waikato District Council
	C	Lot 15	

Proposed Covenant / Consent Notice Areas		
Purpose	**Shown**	**Burdened Land**
Planting & Natural Feature Protection	D	Lot 15

Notes:

1) All lots can suitably accommodate the 160m² (12.65m x 12.65m) Building Shape Factor, as shown.
2) All road boundary setbacks shown are 10m.
3) All side and rear boundary setbacks shown are 5m, except where the 25m Top of Bank and Operating Easement setbacks are shown.
4) 10m wide Esplanade Strip located adjacent to the Waikato River boundary, as shown.

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
REF: 5237
www.cogswell.co.nz

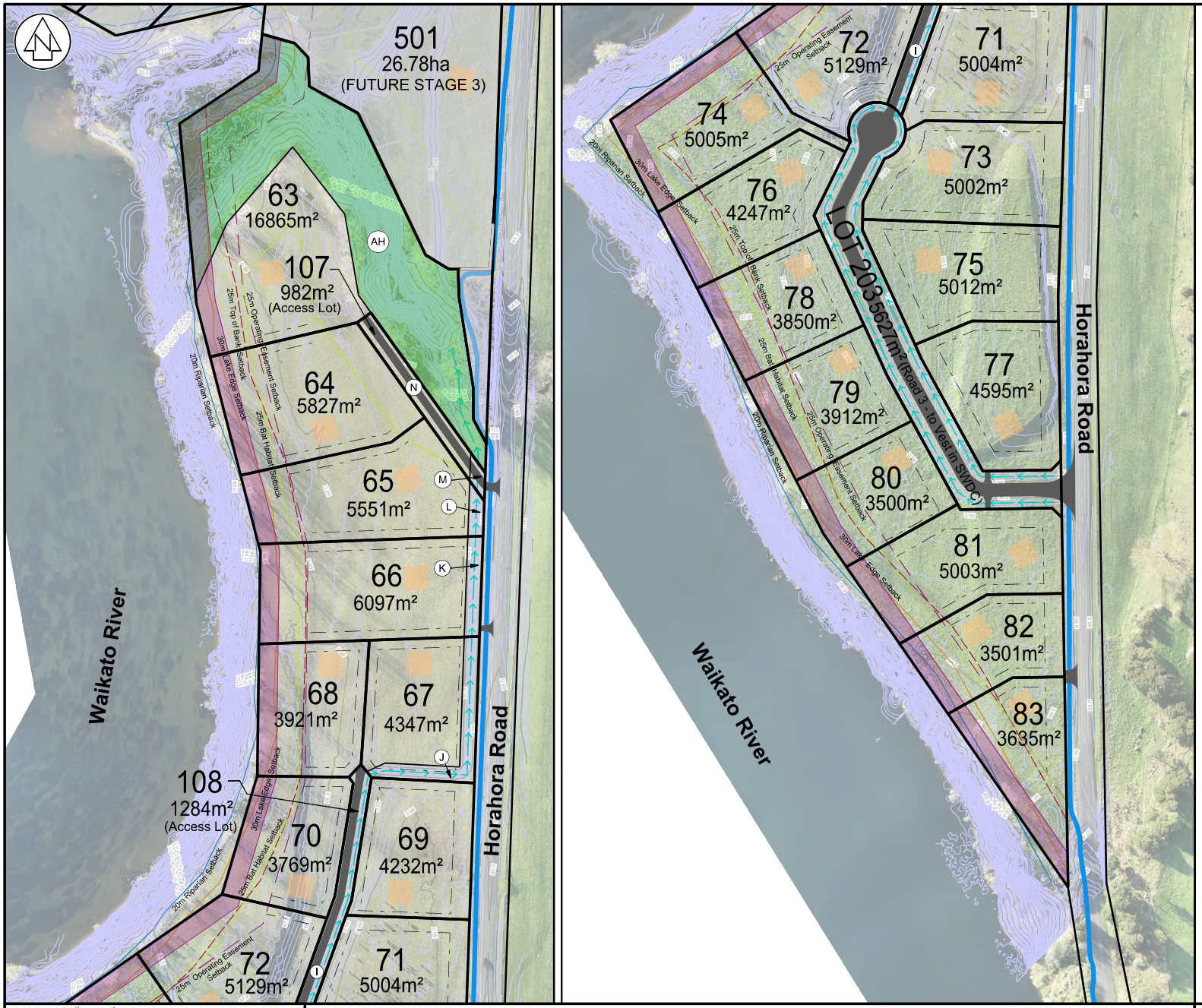
Proposed Subdivision of Lot 1 DPS 21946
STAGE 1
Horahora Road, Arapuni, Putaruru

PREPARED FOR: Tylee, Kevin & Lynn

SCALE: 1:2000
ORIGINAL PLAN SIZE: A3
SHEET: 2 of 6
DRAWN: JM
DESIGNED: RS
CHECKED: RS
DATE: 18/06/26
NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 (AGLE) RL=66.729m.
REV: I

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE: STAGE 1 PLOTTED: Thu Jun 18 15:03:05 2026



Property Details:

Address:	Horahora Road, Arapuni, Putaruru
Parcel:	Lot 1 DPS 21946
Record of Title:	SA22C/92
Area:	45.612Ha
Zone:	Rural Residential
Policy Overlays:	Significant Natural Areas & Outstanding Landscape

Stage 2 Details:

Lots:	63 – 83 (21 lots)
Access Lots:	107 & 108 (2 lots)
Road to Vest:	Lot 203

Amalgamation Conditions:

That Lot 107 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 63, 64 & 65 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

That Lot 108 hereon (legal access) be held as to 4 undivided one-fourth shares by the owners of Lots 67, 68, 69 & 70 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith. See s220(1)(b)(iv) RMA 1991.

Memorandum of Easements			
Purpose/Interest	**Shown**	**Burdened Land**	**Benefited Land**
Right of Way, Right to Convey Water, Electricity, Telecommunications, Right to Drain Water	M, N	Lot 107	Lots 63, 64 & 65
Right of Way, Right to Convey Water, Electricity, Telecommunications	I	Lot 108	Lots 67, 68, 69 & 70

Memorandum of Easements in Gross			
Purpose/Interest	**Shown**	**Burdened Land**	**Grantee**
Right to Drain Water	I	Lot 108	South Waikato District Council
	J	Lot 67	
	K	Lot 66	
	L	Lot 65	
	M	Lot 107	
	AH	Lot 63	

Proposed Covenant / Consent Notice Areas		
Purpose	**Shown**	**Burdened Land**
Planting & Natural Feature Protection	AH	Lot 63

Notes:

1) All lots can suitably accommodate the 160m² (12.65m x 12.65m) Building Shape Factor, as shown.
2) All road boundary setbacks shown are 10m.
3) All side and rear boundary setbacks shown are 5m, except where the 25m Top of Bank and Operating Easement setbacks are shown.
4) 10m wide Esplanade Strip located adjacent to the Waikato River boundary, as shown.

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
www.cogswell.co.nz

REF: 5237

Proposed Subdivision of Lot 1 DPS 21946
STAGE 2
Horahora Road, Arapuni, Putaruru

PREPARED FOR: Tylee, Kevin & Lynn

SCALE: 1:2000

ORIGINAL PLAN SIZE: A3
SHEET: 3 of 6

DRAWN: JM
DESIGNED: RS
CHECKED: RS

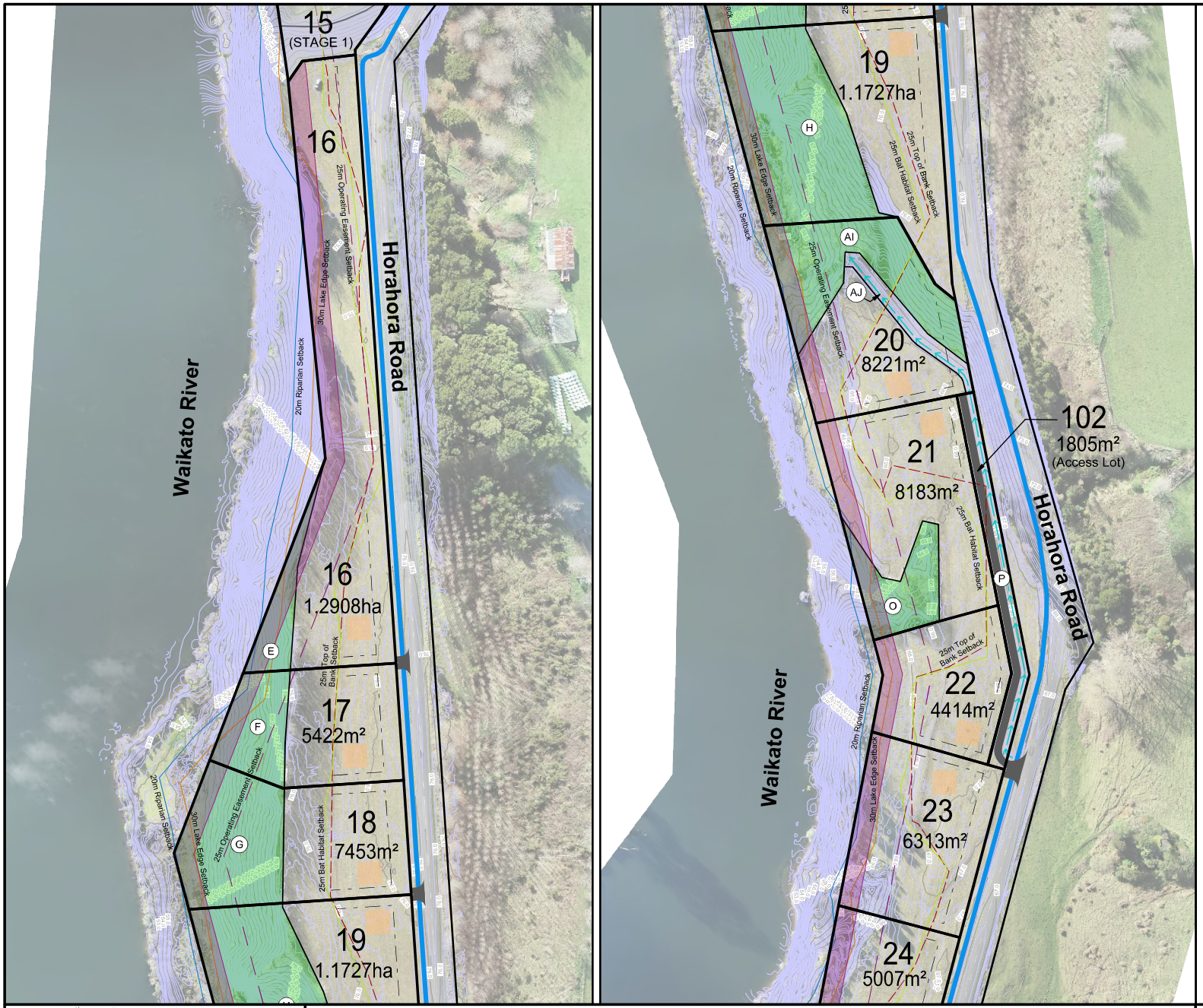
DATE: 18/06/26

NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 (AGLE) RL=66.729m.

REV: I

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE: STAGE 2 PLOTTED: Thu Jun 18 15:03:10 2026



Property Details:

Address:	Horahora Road, Arapuni, Putaruru
Parcel:	Lot 1 DPS 21946
Record of Title:	SA22C/92
Area:	45.612Ha
Zone:	Rural Residential
Policy Overlays:	Significant Natural Areas & Outstanding Landscape

Stage 3 Details:

Lots:	16 – 38 & 44 - 58 (37 lots)
Access Lots:	102, 103 (2 lots)
Road to Vest:	Lot 202 & Lot 204 (2 Lots)

Amalgamation Conditions:

That Lot 102 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 20, 21 & 22 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

That Lot 103 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 32, 34 & 36 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

Memorandum of Easements

Purpose/Interest	Shown	Burdened Land	Benefited Land
Right of Way, Right to Convey Water, Electricity, Telecommunications, Right to Drain Water	P	Lot 102	Lots 20, 21 & 22
Right of Way, Right to Convey Water, Electricity, Telecommunications	U	Lot 103	Lots 32, 34 & 36
Right to Drain Water	U	Lot 103	Lots 31, 33, 34 & 35
	T	Lot 32	Lots 30, 31, 33, 34, 35 & 103
	AJ	Lot 20	Lot 102, 22 & 21

Memorandum of Easements in Gross

Purpose/Interest	Shown	Burdened Land	Grantee
Right to Drain Water	AB	Lot 58	South Waikato District Council
	X		
	Y	Lot 47	
	Z	Lot 44	
	R	Lot 27	
	Q	Lot 29	
	P	Lot 102	
	AJ	Lot 20	
	AI		
	BA	Lot 58	
	BB	Lot 48	
	S		
	BC	Lot 29	

Details continue on Sheet 6.

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
www.cogswell.co.nz

REF: 5237

Proposed Subdivision of Lot 1 DPS 21946
STAGE 3
Horahora Road, Arapuni, Putaruru

PREPARED FOR: Tylee, Kevin & Lynn

SCALE: 1:2000

ORIGINAL PLAN SIZE: A3
SHEET: 4 of 6

DRAWN: JM
DESIGNED: RS
CHECKED: RS

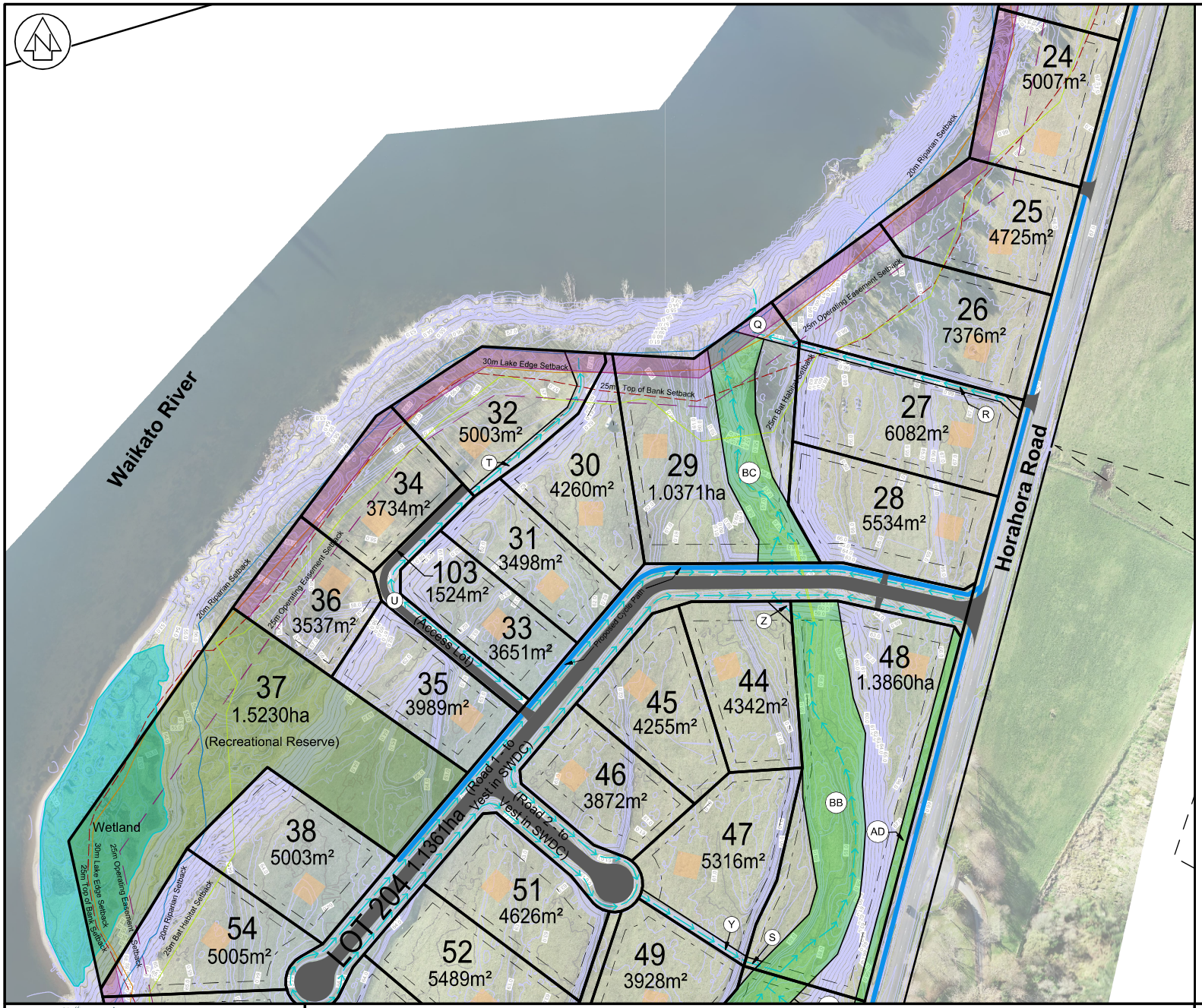
DATE: 18/06/26

NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 [AGLE] RL=66.729m.

REV: I

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE: STAGE 3 SHT A. PLOTTED: Thu Jun 18 15:03:14 2026



Property Details:

Address:	Horahora Road, Arapuni, Putaruru
Parcel:	Lot 1 DPS 21946
Record of Title:	SA22C/92
Area:	45.612Ha
Zone:	Rural Residential
Policy Overlays:	Significant Natural Areas & Outstanding Landscape

Stage 3 Details:

Lots:	16 – 38 & 44 - 58 (37 lots)
Access Lots:	102, 103 (2 lots)
Road to Vest:	Lot 202 & Lot 204 (2 Lots)

Amalgamation Conditions:

That Lot 102 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 20, 21 & 22 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

That Lot 103 hereon (legal access) be held as to 3 undivided one-third shares by the owners of Lots 32, 34 & 36 hereon as tenants in common in the said shares and that individual Record of Titles be issued in accordance therewith.
See s220(1)(b)(iv) RMA 1991.

Memorandum of Easements

Purpose/Interest	Shown	Burdened Land	Benefited Land
Right of Way, Right to Convey Water, Electricity, Telecommunications, Right to Drain Water	P	Lot 102	Lots 20, 21 & 22
Right of Way, Right to Convey Water, Electricity, Telecommunications	U	Lot 103	Lots 32, 34 & 36
Right to Drain Water	U	Lot 103	Lots 31, 33, 34 & 35
	T	Lot 32	Lots 30, 31, 33, 34, 35 & 103
	AJ	Lot 20	Lot 102, 22 & 21

Memorandum of Easements in Gross

Purpose/Interest	Shown	Burdened Land	Grantee
Right to Drain Water	AB	Lot 58	South Waikato District Council
	X		
	Y	Lot 47	
	Z	Lot 44	
	R	Lot 27	
	Q	Lot 29	
	P	Lot 102	
	AJ	Lot 20	
	AI		
	BA	Lot 58	
	BB	Lot 48	
	S		
	BC	Lot 29	

Details continue on Sheet 6.

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
www.cogswell.co.nz

REF: 5237

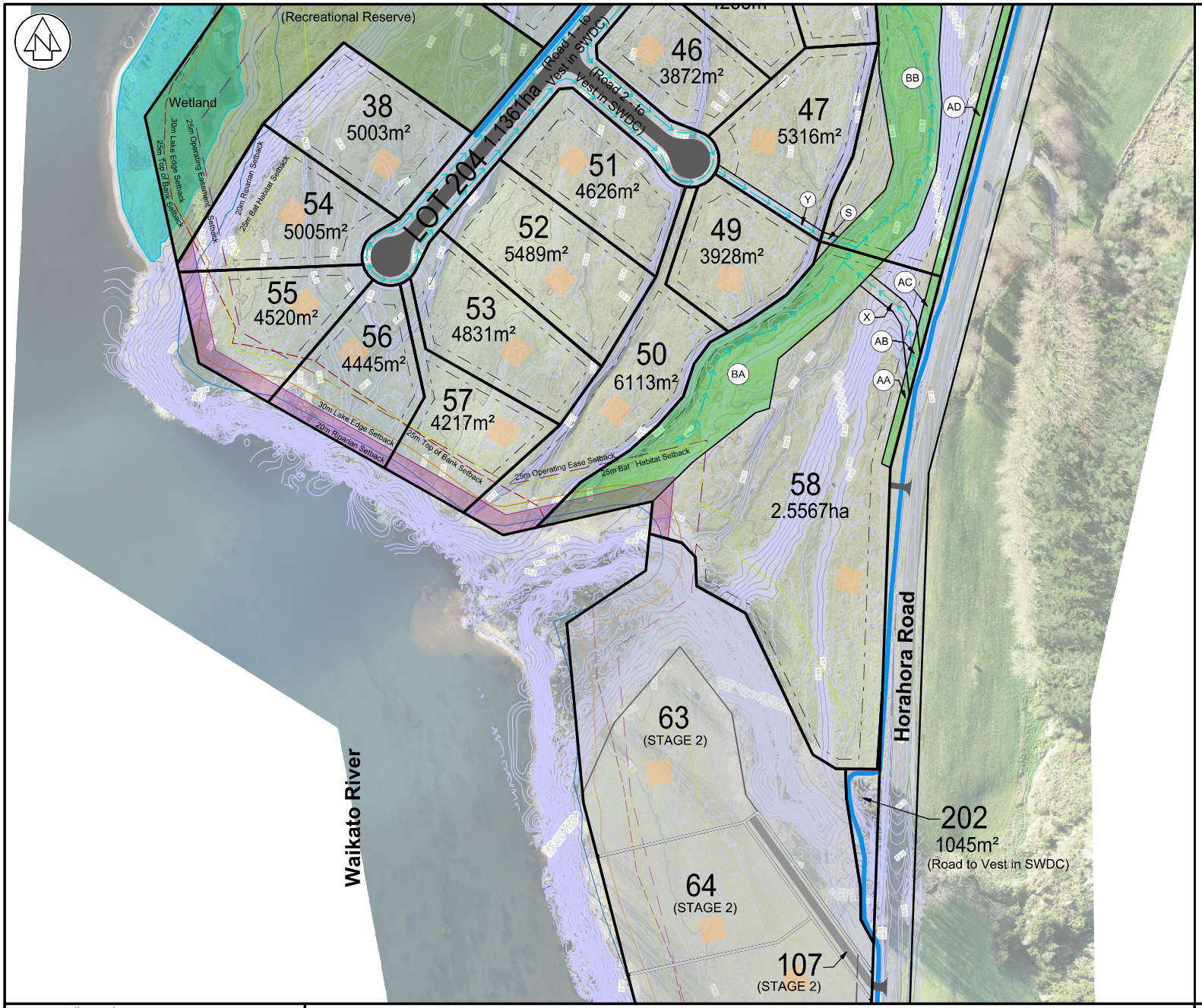
Proposed Subdivision of Lot 1 DPS 21946
STAGE 3
Horahora Road, Arapuni, Putaruru

PREPARED FOR: Tylee, Kevin & Lynn

SCALE: 1:2000
ORIGINAL PLAN SIZE: A3
SHEET: 5 of 6
DRAWN: JM
DESIGNED: RS
CHECKED: RS
DATE: 18/06/26
NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 (AGLE) RL=66.729m.
REV: I

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE: STAGE 3 SHT 5, PLOTTED: Thu Jun 18 15:03:19 2026



Proposed Covenant / Consent Notice Areas		
Purpose	**Shown**	**Burdened Land**
Planting & Natural Feature Protection	E	Lot 16
	F	Lot 17
	G	Lot 18
	H	Lot 19
	AI	Lot 20
	O	Lot 21
	AD	Lot 48
	AA, AB, AC, BA	Lot 58
	BB	Lot 48
	BC	Lot 29

Notes:

1) All lots can suitably accommodate the 160m² (12.65m x 12.65m) Building Shape Factor, as shown.
2) All road boundary setbacks shown are 10m.
3) All side and rear boundary setbacks shown are 5m, except where the 25m Top of Bank and Operating Easement setbacks are shown.
4) 10m wide Esplanade Strip located adjacent to the Waikato River boundary, as shown.

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz
www.cogswell.co.nz

REF: 5237

Proposed Subdivision of Lot 1 DPS 21946
STAGE 3
Horahora Road, Arapuni, Putaruru

PREPARED FOR: Tylee, Kevin & Lynn

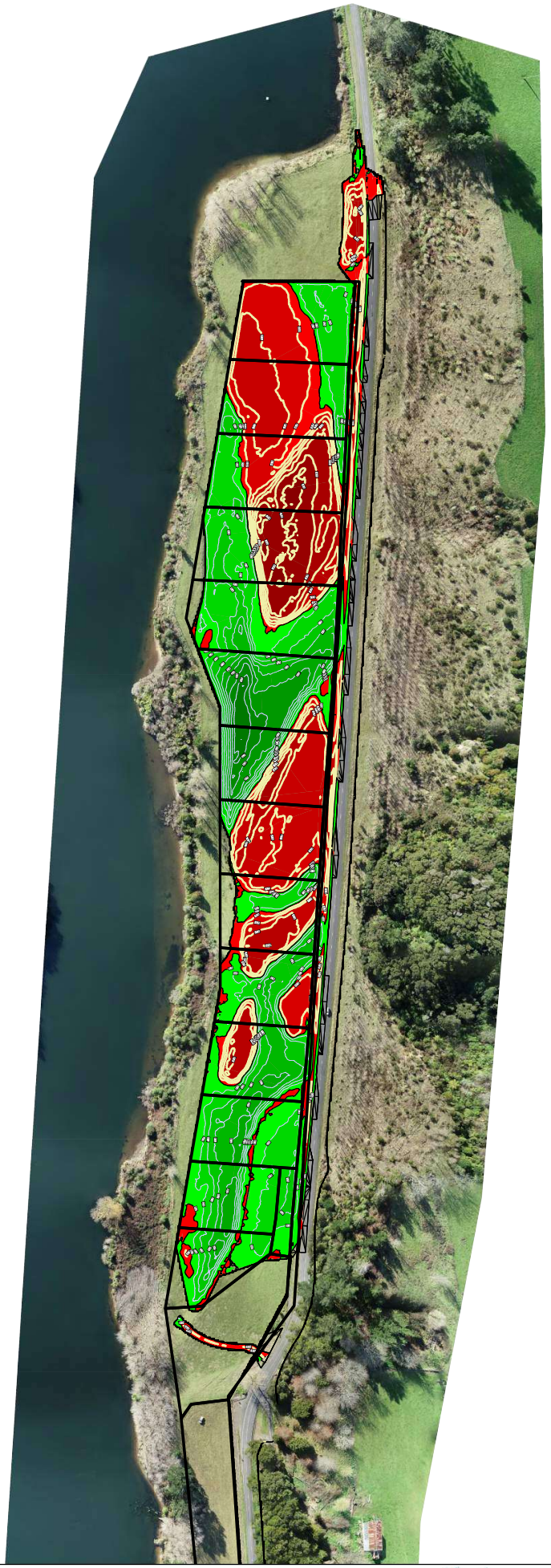
SCALE: 1:2000
ORIGINAL PLAN SIZE: A3
SHEET: 6 of 6
DRAWN: JM
DESIGNED: RS
CHECKED: RS
DATE: 18/06/26
NOTE: BOUNDARIES AND DIMENSIONS AND AREAS ARE APPROXIMATE AND SUBJECT TO ALTERATION BY APPROVAL OR SURVEY.
LEVELS ARE IN TERMS OF NZVD 2016.
ORIGIN OF LEVELS - AV17 (AGLE) RL=66.729m.
REV: I

THIS DRAWING OR DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED, WITHOUT THE WRITTEN PERMISSION OF COGSWELL SURVEYS LTD

PLOT FILE: STAGE 3 SHT 6, PLOTTED: Thu Jun 18 15:03:24 2026

APPENDIX C

EARTHWORKS PLANS, DATED 18 JUNE 2026



-10.0	-9.5	orange_13
-9.5	-9.0	orange_22
-9.0	-8.5	orange_31
-8.5	-8.0	orange_40
-8.0	-7.5	orange_50
-7.5	-7.0	vis stone1
-7.0	-6.5	vis stone2
-6.5	-6.0	vis stone3
-6.0	-5.5	vis stone4
-5.5	-5.0	vis stone5
-5.0	-4.5	vis dirt4
-4.5	-4.0	red 104
-4.0	-3.5	red 120
-3.5	-3.0	red 136
-3.0	-2.5	red 152
-2.5	-2.0	red 168
-2.0	-1.5	red 184
-1.5	-1.0	red 200
-1.0	-0.5	red 216
-0.5	-0.01	red 248
0.01	0.5	green 248
0.5	1.0	green 216
1.0	1.5	green 200
1.5	2.0	green 184
2.0	2.5	green 168
2.5	3.0	green 152
3.0	3.5	green 136
3.5	4.0	green 120
4.0	4.5	green 104
4.5	5.0	green 088
5.0	5.5	blue 248
5.5	6.0	blue 216
6.0	6.5	blue 200
6.5	7.0	blue 184
7.0	7.5	blue 168
7.5	8.0	blue 152
8.0	8.5	blue 136
8.5	9.0	blue 120
9.0	9.5	blue 104
9.5	10.0	blue 088

5237 Tylee - Horohora Road

Earthworks Depths - Stage 1 Rev I

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz

12d Model

Scale 1:3000

Thu Jun 18 12:31:34 2026



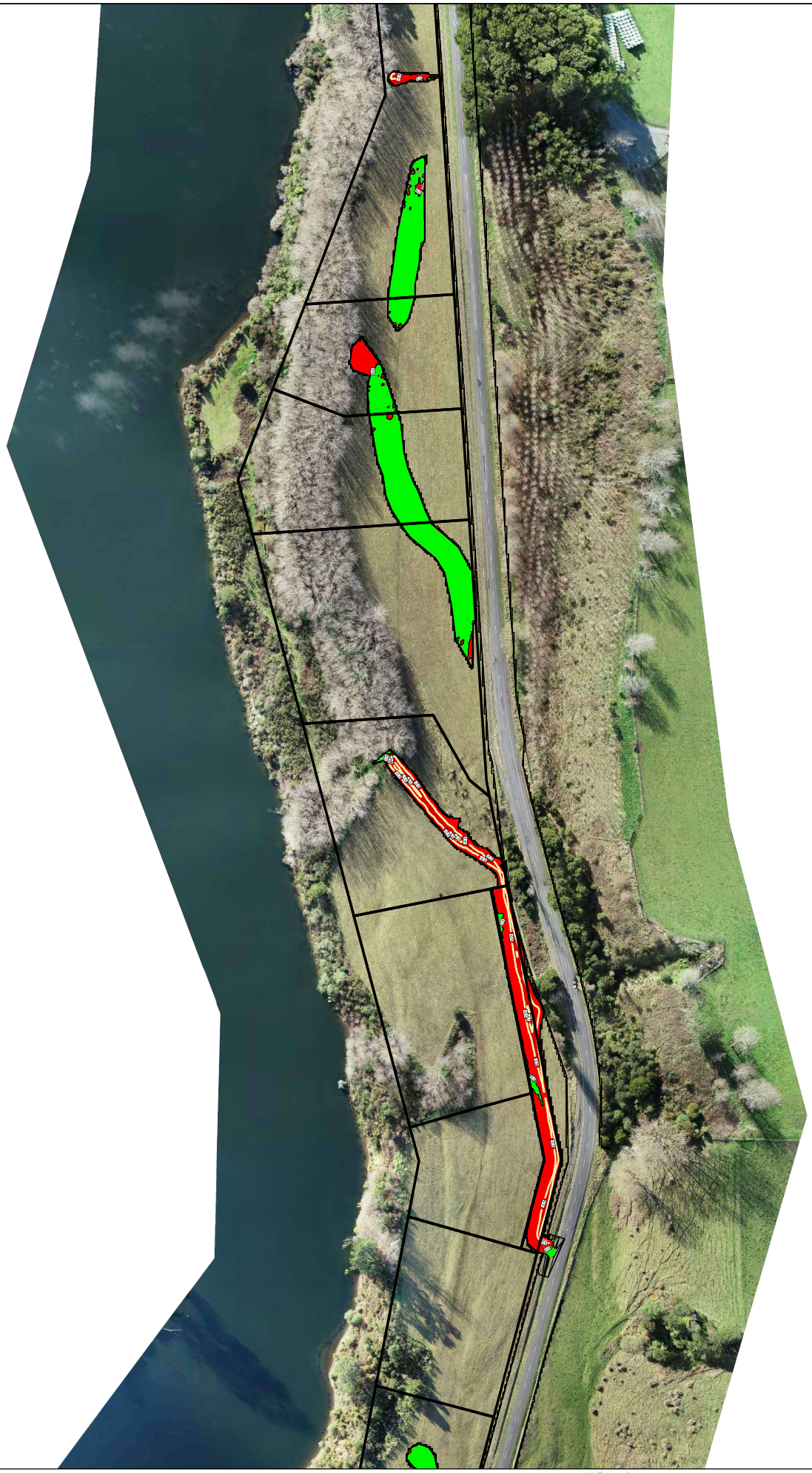
-10.0	-9.5	orange_13
-9.5	-9.0	orange_22
-9.0	-8.5	orange_31
-8.5	-8.0	orange_40
-8.0	-7.5	orange_50
-7.5	-7.0	vis stone1
-7.0	-6.5	vis stone2
-6.5	-6.0	vis stone3
-6.0	-5.5	vis stone4
-5.5	-5.0	vis stone5
-5.0	-4.5	vis dirt4
-4.5	-4.0	red 104
-4.0	-3.5	red 120
-3.5	-3.0	red 136
-3.0	-2.5	red 152
-2.5	-2.0	red 168
-2.0	-1.5	red 184
-1.5	-1.0	red 200
-1.0	-0.5	red 216
-0.5	-0.01	red 248
0.01	0.5	green 248
0.5	1.0	green 216
1.0	1.5	green 200
1.5	2.0	green 184
2.0	2.5	green 168
2.5	3.0	green 152
3.0	3.5	green 136
3.5	4.0	green 120
4.0	4.5	green 104
4.5	5.0	green 088
5.0	5.5	blue 248
5.5	6.0	blue 216
6.0	6.5	blue 200
6.5	7.0	blue 184
7.0	7.5	blue 168
7.5	8.0	blue 152
8.0	8.5	blue 136
8.5	9.0	blue 120
9.0	9.5	blue 104
9.5	10.0	blue 088

5237 Tylee - Horohora Road

Earthworks Depths - Stage 2 Rev I

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz

12d Model
Scale 1:3000
Thu Jun 18 12:33:41 2026



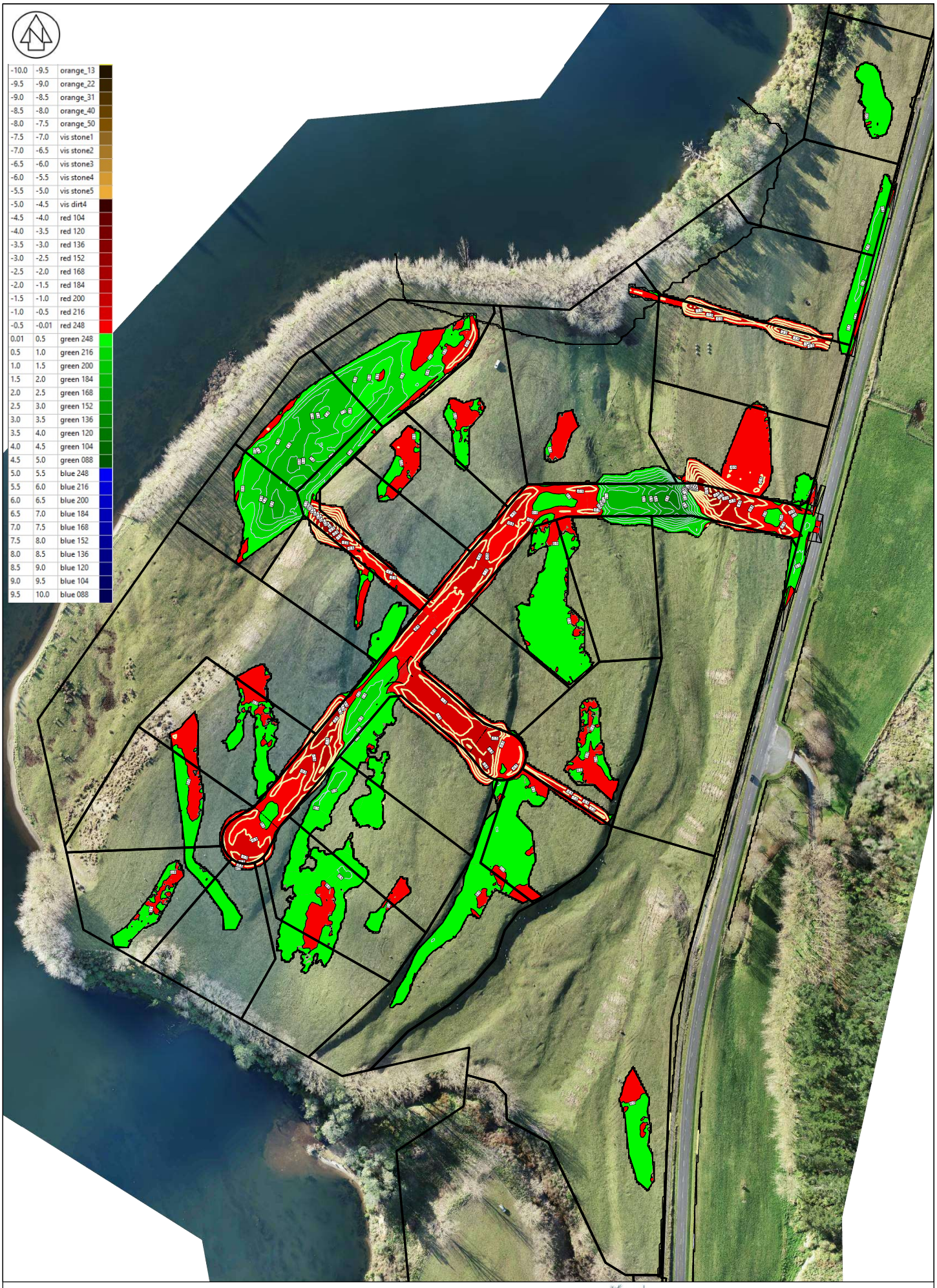
-10.0	-9.5	orange_13
-9.5	-9.0	orange_22
-9.0	-8.5	orange_31
-8.5	-8.0	orange_40
-8.0	-7.5	orange_50
-7.5	-7.0	vis stone1
-7.0	-6.5	vis stone2
-6.5	-6.0	vis stone3
-6.0	-5.5	vis stone4
-5.5	-5.0	vis stone5
-5.0	-4.5	vis dirt4
-4.5	-4.0	red 104
-4.0	-3.5	red 120
-3.5	-3.0	red 136
-3.0	-2.5	red 152
-2.5	-2.0	red 168
-2.0	-1.5	red 184
-1.5	-1.0	red 200
-1.0	-0.5	red 216
-0.5	-0.01	red 248
0.01	0.5	green 248
0.5	1.0	green 216
1.0	1.5	green 200
1.5	2.0	green 184
2.0	2.5	green 168
2.5	3.0	green 152
3.0	3.5	green 136
3.5	4.0	green 120
4.0	4.5	green 104
4.5	5.0	green 088
5.0	5.5	blue 248
5.5	6.0	blue 216
6.0	6.5	blue 200
6.5	7.0	blue 184
7.0	7.5	blue 168
7.5	8.0	blue 152
8.0	8.5	blue 136
8.5	9.0	blue 120
9.0	9.5	blue 104
9.5	10.0	blue 088

5237 Tylee - Horohora Road

Earthworks Depths - Stage 3 (North) Rev I

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz

12d Model
Scale 1:2000
Thu Jun 18 12:41:22 2026



5237 Tylee - Horohora Road

Earthworks Depths - Stage 3 (South) Rev I

COGSWELL
SURVEYING | ENGINEERING | PLANNING
5 MILICICH PLACE, CAMBRIDGE
P: (07)8275071 E: office@cogswell.co.nz

12d Model
Scale 1:2000
Thu Jun 18 12:38:20 2026

APPENDIX D

ECOLOGICAL MANAGEMENT PLAN, 17 SEP 2026, FINAL VERSION 4

L & K Tylee

Ecological Management Plan
Horahora Subdivision



Bluewattle Ecology
ecological assessment + restoration

TABLE OF CONTENTS

1 Introduction 4

1.1 Background & Scope 4

1.2 Purpose and objectives 5

1.3 Site description 6

2 Bat Management Plan requirements 8

2.1 Summary of findings from previous surveyS – bats and potential roost trees 8

2.2 bat mitigation overview 8

2.3 Definition of a bat ecologist 9

2.4 Prefelling potential roost tree surveys 10

2.4.1 Potential Bat Roost Trees 10

2.4.2 Bioacoustic survey method 11

2.5 Vegetation Removal Protocols during construction 12

2.5.1 Summary of application of tree felling protocols 12

2.5.2 Quality Assurance Check List for Vegetation Removal in Relation to Bats 12

2.5.3 Protection of active roosts and Accidental discovery of a bat 13

2.5.4 Reporting 14

2.6 Minimising Disturbance from Construction Activities 15

2.6.1 Site induction and toolbox meetings 15

2.6.2 Specific construction bat habitat protection standards 15

3 Minimising Harm to native birds and lizards 16

3.1 Lizards 16

3.2 Native birds (avifauna) 16

4 Ecological Restoration and Management Plan Requirements 18

4.1 Habitat creation and enhancement planting 18

4.2 Animal Pest Control 21

4.2.1 Rat and possum control 21

4.2.2 Chemical control 21

4.2.3 Manual control 22

4.2.4 Mustelid control 22

4.2.5 Feral cats 22

4.3 Pest Plants 23

4.3.1 Priority plant pests 23

4.3.2 Herbicide use 23

4.4 Planting requirements 26

4.4.1 Restoration planting and species selection 26

4.4.2 Planting Techniques 29

4.4.3 Planting Maintenance 30

Appendix I Tree Felling Protocols 31

Appendix II – Potential bat roost trees Inventory 42

Appendix III Examples of Natural and Artificial Bat Roosts 46

© Bluewattle Ecology

Prepared by: Gerry Kessels & Brenda Bartels

Reviewed by: Rebecca Steenstra (Cogswell)

Version: Final4 170926

PWF Ref: LKT.00680

Except for the purposes of individual study or fair review, for which the authors must be acknowledged, no part of this report may be copied, scanned, stored in any type of electronic file or retrieval system or published in any other form without the express written permission of Kessels & Associates Ltd (trading as Bluewattle Ecology).

Bluewattle Ecology has prepared this report on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. Bluewattle Ecology does not accept any liability or responsibility in relation to the use of this report contrary to the above, or to any person other than the Client. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate, without independent verification, unless otherwise indicated. Bluewattle Ecology accepts no liability or responsibility for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source

© Kessels & Associates Ltd 2026

Contents page photo: Long-tailed bat in flight – with permission from the Department of Conservation

1 INTRODUCTION

1.1 BACKGROUND & SCOPE

L & K Tylee have applied for resource consents to develop a rural-residential subdivision of their c. 45.61 ha riverside property at 597 Horahora Road, Arapuni (Figure 1). The site is a long strip of land, with a flat to gently rolling contour and situated on an elevated terrace along the banks of the Waikato Awa. The eastern extent of the property is bordered by Horahora Road. Bluewattle Ecology was commissioned by L & K Tylee to complete an assessment of ecological effects report to accompany the proposed 73 lot subdivision of their riverside property (Figure 1). Refer to the document "*L & K Tylee - Assessment of Ecological Effects*" [1] (the 'AEE').

This document, being the Ecological Management Plan (EMP), provides the management requirements to mitigate any effects from the subdivision and as recommended by the AEE.

All potential adverse ecological effects can be adequately addressed by applying a number of specific avoidance, remediation, mitigation and compensation measures summarised as follows:

a) Any vegetation removal of mature trees within the construction areas should take place outside of the peak bird breeding season (August to December inclusive) and the period when bats are in torpor (1 May to 1 October). If tree removal cannot be achieved outside of the bird nesting dates, then those areas should be assessed by an appropriately qualified ecologist for nesting birds immediately prior to vegetation removal (this can be undertaken at the same time as the bat pre-felling checks).

b) All housing will be set back from the edge of the Waikato Awa and the associated vegetation to buffer the adverse effects of the development on bats. Creation of 'bat buffer zones' adjacent to key bat habitats with a 20 m width, with an additional 5 m setback to buildings, will be applied to protect foraging and commuting habitats.

c) Any tall vegetation clearance will be minor and will be limited to trees near the road to achieve sight distances or construct access/rights of way. The tree loss will be mitigated by the restoration planting that will be undertaken in the onsite wetland (c.0.75 ha) and the stream link bat corridor (1.05 ha). An additional gully area of 1.437 ha, linking the edge of the Waikato Awa riparian zone and the stream link bat corridor will also be restored. Waikato Awa Details of this restoration and management are contained in section 4.4.

d) The existing vegetation within Lots 15, 63, 16, 17, 18, 19, Lot 20 and 21, will be protected by way of consent notice or covenant. To protect restored habitat in the additional gully area a consent notice will be required for Lots 58, 48 and 29.

e) Pest plant and animal control will be undertaken across the subdivision.

f) Minimising the effects of artificial lights along the edge of the Waikato Awa through low light design with a 0.3 lux and where possible, 2700 Kelvin limit through a consent condition, will prevent light spillover effects from the development.

[1] Bartels, B & Kessels, G. Assessment of Ecological Effects for a subdivision at 597 Horahora Road. For L&K Tylee, Kessels & Associates Ltd (trading as Bluewattle Ecology) – dated 13 August 2026.

© Bluewattle Ecology

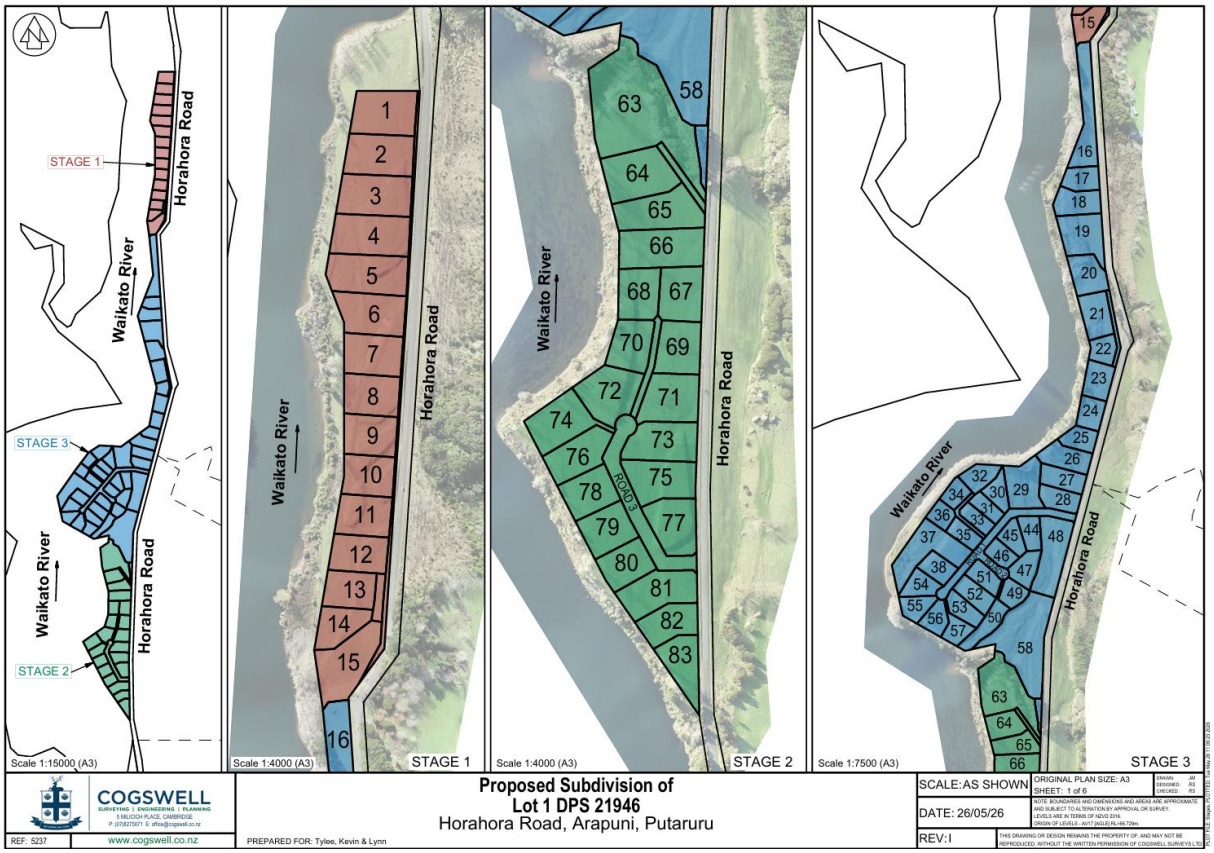


Figure 1: Proposed Subdivision Concept Plan for 597 Horahora Road (supplied by Cogswell Surveys).

1.2 PURPOSE AND OBJECTIVES

The EMP is divided into two parts, the first part includes the details required for a Bat Management Plan (BMP – section 2) and the second part details Ecological Restoration and Management Requirements (ERMR – section 3). Both parts cover the construction, operational, restoration and management activities associated with the Horahora housing development.

Figure 1 defines the area where this EMP shall be applied. The objective of the EMP is to:

I. Apply potential roost tree protocols if potential bat roost trees are found within the earthworks area to minimise the risk of injury or mortality of native birds, bats and lizards (sections 2 and 3);

II. Detail planting specifications and maintenance to enhance long tailed bat, stream and wetland habitat within the site, including maintenance specifications necessary to ensure successful establishment of enhancement plantings (section 4.4); and

III. Identify priority pest plant and pest animal species and measures to control these species sections 4.2 and 4.3).

In addition, restoration planting of the stream link bat corridor, the wetland mosaic and the gully linking the stream link bat corridor gully and the Waikato Awa shall be undertaken with a combined area of c. 3.067 ha (see Figure 2 and section 4.4).

The development will be completed in three Stages (Stages 1-3) as shown in Figure 2. Restoration of the stream link bat corridor and the wetland mosaic shall occur when Stage 1 is developed, to ensure

© Bluewattle Ecology

that the new bat foraging and commuting vegetation in the protected areas, is established well ahead of the development affecting bat habitat in High Value habitats and restoration areas in Stages 2 and 3.

1.3 SITE DESCRIPTION

The site is situated on the banks of the Waikato Awa, on an alluvial terrace, and is bordered to the east by Horahora Road. Outside of the property boundary, the landform drops steeply to the edge of the Waikato Awa. An unnamed tributary stream flows beneath Horahora Road, through the site and discharges directly to the awa. This stream was clear and swift flowing, with substrates dominated by sand and gravel.

Vegetation onsite is predominantly short, grazed grasses and herbs, comprising mostly of rye grass, though other exotic grasses and herbs, particularly yarrow, are present. The land is undulating and generally slopes down toward the Waikato Awa. Clusters of mature exotic trees and shrubs are present along the river edge (mostly outside the property boundary), and these areas were dominated by poplar with some pines. The understorey in these areas is comprised mainly of exotic weedy species, rank grass, and the occasional indigenous species. These patches of exotic trees may provide habitat for several indigenous birds, as well as long-tailed bats and lizards, such as copper skink.

© Bluewattle Ecology

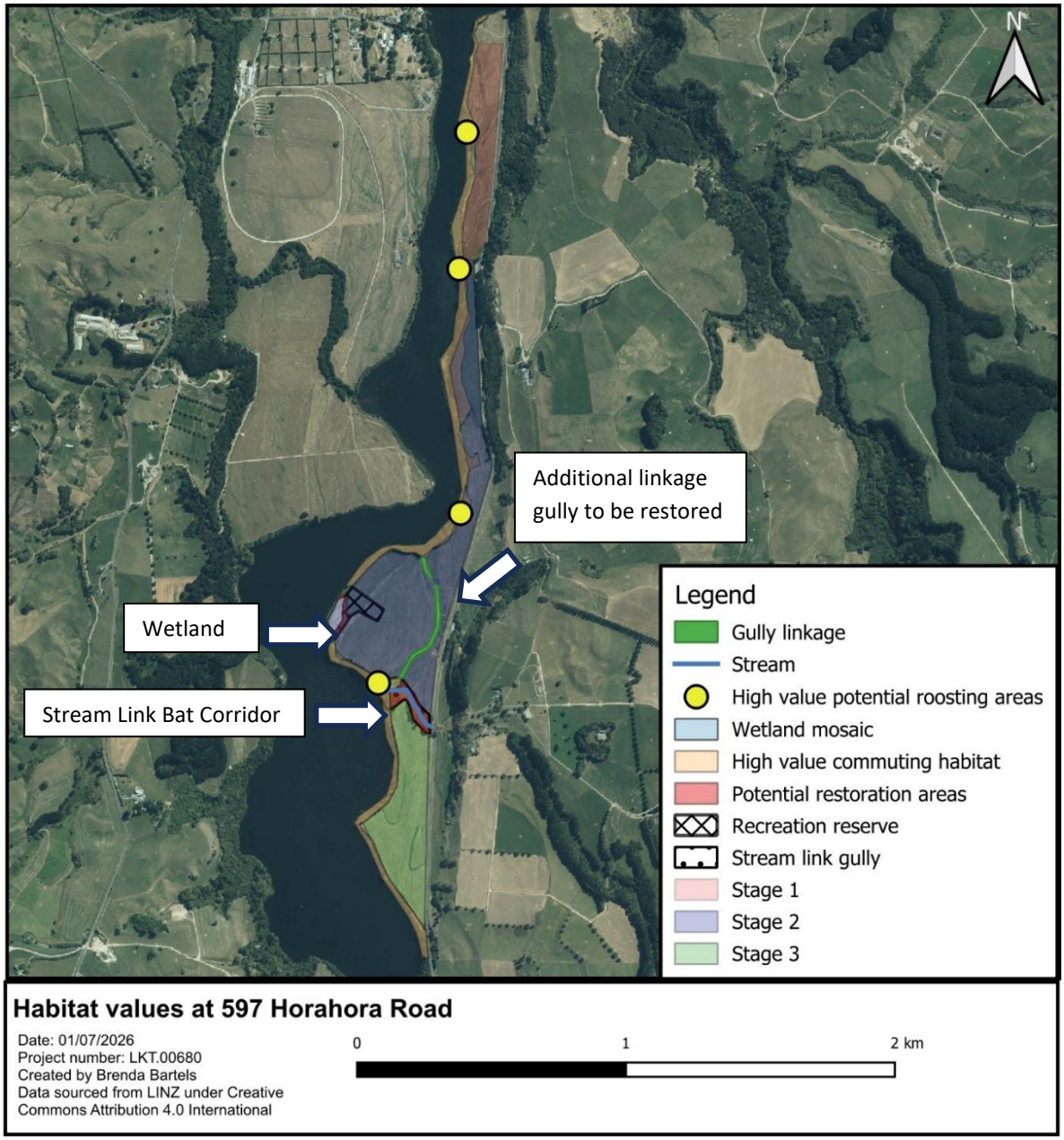


Figure 2: Habitat Values at 597 Horahora Road, which shows the three areas requiring management as part of this EMP, as well as the Stages of development.

© Bluewattle Ecology

2 BAT MANAGEMENT PLAN REQUIREMENTS

2.1 SUMMARY OF FINDINGS FROM PREVIOUS SURVEYS – BATS AND POTENTIAL ROOST TREES

Pekapeka-tou-roa surveys were undertaken in spring 2022 across the proposed site, using four fixed automated bioacoustic bat detectors. The survey highlighted a moderate to high presence of bats across the proposed site, within the vegetated margins of the Waikato Awa, and in mature exotic trees throughout the site.

A total of 4684 bat passes were recorded over 18 nights of surveying, averaging 65 bat passes per ABM per night at three locations. The survey results suggest that the Horahora housing development site is an important area for long tail bats for commuting, roosting and foraging. The areas bats use as habitat are:

1. Waikato River margin habitat adjacent to 597 Horahora Road (predominantly outside of the boundary of the site): Primarily used for commuting and foraging habitat and contains several high and moderate value roost trees. See yellow circles in Figure 8.
2. Stream link bat corridor which is primarily used as foraging and corridor habitat.
3. Potential restoration areas which are primarily used as foraging habitat.
4. Pasture area: bats likely to be flying over the pasture while commuting between habitats and opportunistic foraging. All other areas within the scheme boundaries

A preliminary bat roost survey was undertaken in March 2022, which shows potential bat roost trees within and adjacent to the development site. Seven of those were within the property boundary. Three of those seven trees require a detailed survey to be completed, in accordance with best practice prior to any tree clearance. Refer to section 3.1.1 of the Ecological Assessment for further information.

2.2 BAT MITIGATION OVERVIEW

The approach to bat management on site includes avoiding adverse effects on commuting, foraging and roosting habitat for long-tailed bats. The specific requirements to be implemented in order to minimise adverse effects of the subdivision on bats, throughout the EMP are:

- Implementation of the Department of Conservation's (DOC) tree felling protocols for felling potential bat roost trees.
- Establishment of bat boxes on remaining trees if occupied roosts are found in any of the felled trees (four artificial bat boxes will be installed per occupied roost felled).
- Establishment of the high value bat habitat along the property boundary with the Awa, which includes exotic poplar forest with exotic understorey and areas of exotic shrubland. Refer to the green hatched area on the scheme plan. The proposed Bat buffer zone is located adjacent to high value bat habitats (Figure 2), and is a minimum width of 20 m, with an additional 5 m setback to buildings, to protect foraging and commuting habitat for bats. This area currently comprises pasture. Refer to the 25 m bat habitat setback shown on the subdivision scheme plans. This includes 20 m buffer plus the 5 m setback to buildings. The buffer area does not need to be vegetated/planted, provided the below lighting standards are met (refer to section 3 below).

© Bluewattle Ecology

- Requirement for an artificial light spill from housing lights, outdoor lights and streetlights to be at or below 0.3 lux at the outer edge of the 20m bat buffer zone (refer to Figure 1 and Figure 2).
- Protection of the consent notice areas as shown on the scheme plan – refer to areas on Lots 15 to 21 and 63.
- Early planting of new bat foraging and commuting vegetation in the protected areas (Lots 15 to 21 and 63), ahead of development phases
- Design and implement long-term animal pest control within the subdivision and along the river margin; and
- In addition, and outside of the requirements of this EMP, legal measures over each new title will be required which bans the keeping of domestic cats entirely.
- A site induction for all employees and contractors is required to inform them of the specific bat behaviour constraints and habitat use and requirements of the site.

Restoration planting of the stream link bat corridor, the wetland mosaic (within Lot 37 on scheme plan) and the additional gully linking existing habitat shall be undertaken with a combined area of c. 3.067 ha (see Figure 2).

The development will be completed in three Stages (Stages 1-3) as shown in Figure 2. Restoration of the stream link bat corridor and the wetland mosaic shall occur when Stage 1 is developed, to ensure that the new bat foraging and commuting vegetation in the protected areas, is established well ahead of the development affecting bat habitat in High Value habitats and restoration areas in Stages 2 and 3.

2.3 DEFINITION OF A BAT ECOLOGIST

A suitably qualified and experienced bat ecologist (defined as a person who has met the required ethical standards to be registered as a competent, authorised bat worker by the New Zealand Bat Recovery Group for the work which they are undertaking), has prepared this EMP and will be required to provide guidance and ensure compliance with this BMP during the construction and operational; phases of the development.

Only bat ecologists certified by the Department of Conservation as 'authorised competent bat workers' are able to implement the monitoring, roost tree inspection protocols and handling requirements of this EMP – hereafter referred to as the project 'bat ecologist'. A set of competencies has been developed by the NZ Bat Recovery Group to ensure that anyone working with bats is competent to do so.

The competencies referred to in this document which a bat ecologist must have are:

2.1 Bagging storage, handling, measuring, weighing, sexing, aging, temporary marking and releasing appropriately: For long-tailed bats: 50 individuals; For short-tailed bats: 50 individuals.

3. High risk activities – Roost felling (all of these competencies include the understanding of what to do when bats are found during tree felling as per Appendix 6 of 'Initial veterinary care for NewZealandBats': https://cdn.ymaws.com/www.nzva.org.nz/resource/resmgr/docs/other_resources/Initial_Vet_Care_NZ_Bats. pdf)

© Bluewattle Ecology

3.1 Assessing roost tree use using Automatic Bat Monitors - Demonstrate correct timing, placement, and interpretation of data for 10+ times according to DOC's Tree Felling Protocols.

3.2 Undertake roost watches/emergence counts at 10+ occupied roosts where the entrance is visible.

3.3 In at least two different forest/habitat types, including the forest/habitat type where trees are going to be assessed: evaluate 10+ potential roost features in trees (e.g., cavities, peeling bark, epiphytes).

2.4 PREFELLING POTENTIAL ROOST TREE SURVEYS

The sections below outline the requirements for potential roost tree surveys, which shall be undertaken before earthworks commence in accordance with best practice in terms of timing, but only if potential roost trees are to be felled during construction of the subdivision.

2.4.1 POTENTIAL BAT ROOST TREES

2.4.1.1 IDENTIFICATION PROTOCOLS FOR ROOST TREES

All trees on site planned to be removed or limbed as part of the construction of the subdivision (exotic or native) with a diameter at breast height (DBH)[2] greater than 15 cm were assessed to confirm if they are either high, moderate or low risk potential bat roost trees before any vegetation clearance occurs within the earthworks and vegetation clearance areas.

2.4.1.2 HIGH-RISK TREES

Trees deemed to pose a high risk as potential bat roosts are those with a DBH greater than 15 cm and exhibiting one or more of the following features:

- Cracks, crevices, cavities, or fractured limbs of sufficient size to accommodate roosting bat(s).
- Sections of loose flaking bark large enough to provide roosting space for bats.
- A hollow trunk, stem, or branches.
- Deadwood within the canopy or stem that is of suitable size to support roost cavities or hollows.
- Presence of bat droppings, grease marks, or urine staining around cavities or ground.

2.4.1.3 MODERATE-RISK TREES

Trees deemed to pose a moderate risk as potential bat roosts are those with a DBH greater than 15 cm and exhibiting one or more of the following features:

- Single trees or small 2-3 clusters of trees that are isolated within an exposed environment surrounded by pasture, lawn or paved surfaces.

[2] Diameter at breast height, or DBH, is a standard method of expressing the diameter of the trunk or bole of a standing tree. DBH is one of the most common dendrometric measurements. DBH is measured at approximately 1.3 m above ground measures form the base of the tree trunk in question.

© Bluewattle Ecology

- Trees that exhibit some, but few and smaller cracks, crevices, cavities, or fractured limbs of sufficient size to accommodate up to 2 roosting bat(s).
- Sections of loose flaking bark large enough to provide roosting space for up to 2 bats.

2.4.1.4 LOW-RISK TREES

All trees with a DBH less than 15 cm, as well as trees with a DBH greater than 15 cm lacking the characteristic features of a high-risk bat roost, are categorised as low-risk trees. These trees can be felled at any time without the need for further assessment or monitoring. However, it is important to note that regardless of trunk diameter, any vegetation demonstrating evidence of roosting bats (e.g., roost features, droppings, grease marks, urine staining) can be treated as a potential roost tree and can be classified accordingly by the bat ecologist on a case-by-case basis.

2.4.2 BIOACOUSTIC SURVEY METHOD

The following outlines the survey methodology to be used for a pre-felling bioacoustic survey before felling of potential roost trees occurs:

- At least one bioacoustic Automated Bat Monitor (ABMs – for example DOC model 'AR4' or other widely accepted bioacoustic bat detection device) shall be deployed at each potential bat roost tree, or when in clustered stands of potential bat roost trees, within 50 m of each tree, for no less than two valid survey nights[3] immediately before felling is scheduled.
- All detectors shall be calibrated to have the same time and date settings (NZST) and pre-set to start monitoring one hour before sunset until one hour after sunrise.
- The distance between detectors of distinct monitoring locations shall be no less than 50 m apart to increase the chance of independent bat monitoring.
- The recorders shall be suspended at least 2 m above the ground to reduce superfluous detections caused by terrestrial insects (usually cicada species).
- The locations of the ABMs shall be tagged and mapped.

A valid survey night is one when weather conditions allow bats to be most likely to be detected: avoiding heavy rain (>10mm/h), and windy (>5.6m/s) or cold (<8°C, ideally >10°C) nights.

[3] See standards to achieve a valid survey night in section 4(b) of the prefelling protocols – Appendix 1

© Bluewattle Ecology

2.5 VEGETATION REMOVAL PROTOCOLS DURING CONSTRUCTION

Before any vegetation clearance occurs within the earthworks and vegetation clearance areas all trees (exotic or native) with a diameter at breath height greater than 15 cm assessed as a high or moderate risk potential bat roost trees will be required to follow the tree felling protocols. The protocols to be followed for investigating removal or limbing of potential bat roost trees are prescribed by the latest version of the New Zealand Department of Conservation's Bat Recovery Group Protocols for minimising the risk of felling bat roosts (Bat Roost Protocols -Version 4: October 2024 is attached as Appendix I).

2.5.1 SUMMARY OF APPLICATION OF TREE FELLING PROTOCOLS

I. ***If High or Moderate Risk potential trees are proposed to be removed, this shall be undertaken in accordance with the protocols outlined in Appendix I.***

II. ***High or Moderate Risk potential bat roost trees can only be felled using these protocols between the 1st of October to the 30th of April in any one calendar year.***

III. ***These protocols shall not be required if only Low Risk potential roost trees are found on site. Low Risk trees can be felled at any time with no further input form a bat ecologist.***

IV. ***The pre-felling vegetation assessments, utilising either acoustic and/or visual methods (refer to tree felling protocols in Appendix I for specific details), must be carried out exclusively by a bat ecologist who holds appropriate certification from DOC and possesses demonstrated competence in the chosen method.***

V. ***No trees or vegetation identified as potential roosts can be felled or cleared without obtaining explicit prior approval from the bat ecologist.***

2.5.2 QUALITY ASSURANCE CHECK LIST FOR VEGETATION REMOVAL IN RELATION TO BATS

Quality Assurance and Seasonal Restrictions Check List as summarised in Figure 3):

a) The felling of potential roost trees can only be undertaken between the 1st of October to the 30th of April in any one calendar year.

b) The tree removal protocols will apply to all trees, tree ferns and other vegetation ≥15 cm DBH[4], that meet the criteria for a potential bat roost defined as a tree which provides features that are able to be used for bat roosting proposed to be removed anywhere on the development site – exotic or native (see section 2.5.1).

c) No trees or associated vegetation identified as potential roosts can be felled or cleared without the approval of the bat ecologist.

d) Prior to the commencement of pre-felling surveys, all ABMs shall be tested to ensure they are not faulty. This can be achieved using DOC Bat recorder tester v0.1 application or at a site where bat activity is known to be high. Faulty or suspect ABMs are not to be deployed;

e) Roost habitat assessments can be undertaken at any time of year; and

[4] Diameter at breast height (DBH) is the standard measurement of a tree trunk's width taken at 1.3 metres (or 1.4 metres in some regions like New Zealand) above ground level.

© Bluewattle Ecology

f) Once the results of the visual surveys and ABM data have been reviewed by the bat ecologist the following communication procedures shall be implemented:

i. If no bats are sighted or detected, the affected tree(s) and/or vegetation to be removed under direct supervision of the bat ecologist in accordance with relevant protocols set out in Appendix I of this EMP.

ii. If bats are sighted or detected within and/or emerging or entering a tree, the bat ecologist shall call the vegetation clearance supervisor to inform them that the affected tree(s) cannot be cleared. The bat ecologist will advise on the requirements for the next steps in accordance with the relevant protocols set out in Appendix I.

2.5.3 PROTECTION OF ACTIVE ROOSTS AND ACCIDENTAL DISCOVERY OF A BAT

If during the implementation of the EMP or an accidental discovery of a roost active/occupied roost is confirmed, the following actions shall be undertaken:

a) The immediate area shall be cordoned off with safety fencing and signage erected in a 25 m radius around the roost, alerting any person approaching the area that a bat roost is present and to stay clear.

a) The existence of the roost will be publicised to all works staff and work instructions for the immediate area will be updated to reflect the presence of the roost and the measures to minimise disturbance.

b) No work will take place within 25 m of the occupied roost from one hour before dusk to one hour after dawn until a specific site roost disturbance minimisation plan is devised by the bat ecologist.

c) The bat ecologist shall keep a written record (including photos) of any vegetation containing bat roosts detailing the date; size, location and species of tree or other vegetation; roost type, e.g., cavity, peeling bark, broken branch; detail outlining how presence of bats was confirmed; then number of bats present; and

d) Re-consider again whether the tree must be felled and design and implement appropriate additional mitigation measures required to offset or compensate for the loss of the occupied roost tree if it is required to be removed.

Where the tree requires felling and before the tree can be felled, evidence that bats have vacated the roost shall be confirmed by (as a minimum):

a) ABM surveys must continue until no bat activity is recorded for at least two consecutive valid survey nights; and

b) Visual inspections (including thermal imagery) and roost watch methodologies described in Appendix 1 shall be carried out to confirm the non-occupancy of the roost.

Appendix 1 of the BMP outlines the notification and harm minimisation processes which must be adhered to in the event of a disabled, injured or dead bat found during any vegetation clearance occurring on site, irrespective of whether the clearance is in accordance the BMP or not.

© Bluewattle Ecology

2.5.4 REPORTING

The results of the bat roost protocol implementation will be reported in a completion/compliance report in the form of a letter or memorandum, submitted within 15 working days following the completion of vegetation clearance. The report will include details of the potential bat roost trees monitored including the size, location and type of potential roost trees or vegetation as well as weather data during bat roost protocol implementation. The results of all pre- and post-clearance survey effort shall be submitted to DOC for inclusion to the national bat distribution database.

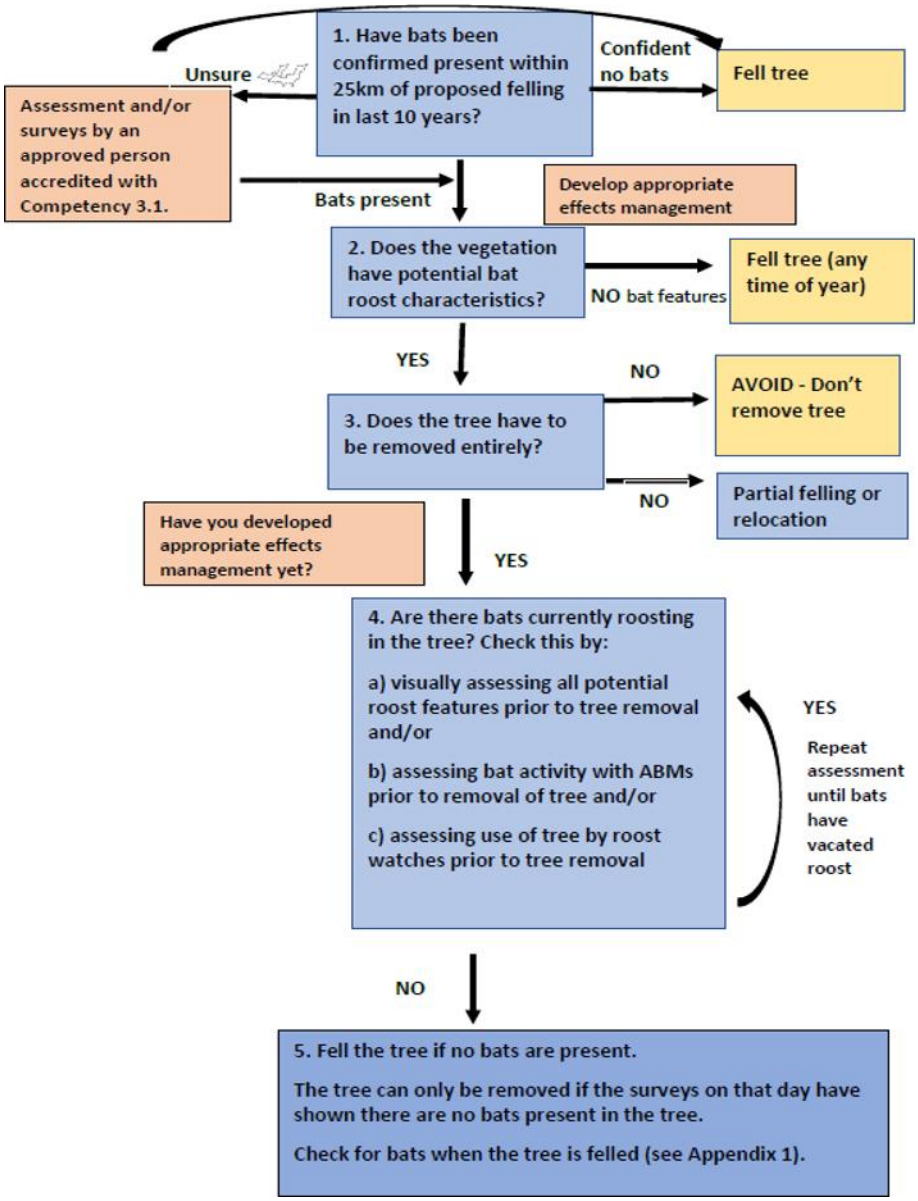


Figure 3. Steps for tree removal when applying the potential bat roost tree protocols

© Bluewattle Ecology

2.6 MINIMISING DISTURBANCE FROM CONSTRUCTION ACTIVITIES

2.6.1 SITE INDUCTION AND TOOLBOX MEETINGS

A site induction for all employees and contractors is required to inform them of the specific bat behaviour constraints and habitat use and requirements of the site. This should be completed prior to works commencing on the site and a record of inductions kept. This induction can either be stand-alone or integrated into the typical health and safety induction process. This induction should include, at a minimum:

- Vegetation removal and accidental bat discovery protocols.
- Procedures for the accidental discovery of long-tailed bats inside work areas.
- The importance of compliance with the protocols and the reporting processes for observed breaches of required potential bat roost tree removal protocols.
- Contact details for the bat ecologist, environmental compliance staff, and emergency numbers for any identified issues observed onsite.

2.6.2 SPECIFIC CONSTRUCTION BAT HABITAT PROTECTION STANDARDS

2.6.2.1 SPECIFIC ENABLING AND CONSTRUCTION WORK RESTRICTIONS

a) Enabling Works and Construction Works shall be actively managed to avoid or otherwise remedy or mitigate any off-site nuisance effects caused by dust, debris, silt laden runoff, light or vibration adjacent to the Waikato Awa.

b) Security lighting associated with Construction Works shall not be located within 40 m of the Waikato Awa and shall be located to avoid spill of light exceeding 0.1 lux above the natural ambient illuminance between Civil Dusk and Civil Dawn measured in a vertical plane within 3 m of the boundary within this 40 m boundary.

2.6.2.2 TIMING

Should an occupied bat roost site be discovered on site, there will be a need to schedule construction activities to avoid sensitive periods for bat activity, such as breeding seasons when the pups are non-volant (November-December) or during torpor periods (March-October), and/or create a 25 m works exclusion buffer zone.

© Bluewattle Ecology

3 MINIMISING HARM TO NATIVE BIRDS AND LIZARDS

3.1 LIZARDS

Native lizards are absolutely protected under the Wildlife Act 1953.

Previous surveys across the site did not discover copper skinks. Due to the land use, active grazing management and expected presence of a healthy predator population, copper skinks are unlikely to be discovered easily.

As a precautionary measure, a pre-works habitat assessment and survey should be undertaken where considered necessary. Given that the majority of the site comprises heavily grazed pasture, this is anticipated to be required only where works may disturb habitat outside the pasture areas.

However, the following accidental discovery protocols shall apply should lizards be discovered during construction.

Should any lizards be detected incidentally within cleared vegetation an exclusion area (10 m radius) with clear signage will be established around the area an ecologist contacted to further search the area. Any further vegetation clearance works will cease within the exclusion area until the area has been cleared for vegetation removal by a qualified ecologist.

All injured lizards, if found, shall be transported by a qualified ecologist to the nearest suitable veterinarian experienced in indigenous wildlife rehabilitation. Contact details of a DOC approved vet are to be confirmed before the start of any vegetation removal works. If no DOC approved vet is available, the lizard is to be taken immediately to Hamilton Zoo for examination: Hamilton Zoo, 183 Brymer Road, Hamilton 3289; phone 07 838 6720.

Vets must euthanise lizards whose injuries are causing suffering and are not likely to heal sufficiently to allow rehabilitation and return to the wild.

3.2 NATIVE BIRDS (AVIFAUNA)

Vegetation clearance between October to April conflicts with the need to minimise the risk of harming native birds. All vegetation clearance should follow the protocols outlined below to minimize harm to nesting native birds during this time.

All adult avifauna are expected to disperse from the area during vegetation clearance activities, and therefore are unlikely to be harmed. However, during breeding season, there is a potential that vegetation clearance may have a direct impact on nests, eggs, and chicks. To avoid potential impacts on any active nesting native avifauna from the development, all areas to be impacted by proposed vegetation clearance will be searched for nesting birds by a suitably qualified ecologist.

Following the demarcation of vegetation to be cleared the following survey steps should be employed to survey for nesting native birds:

- Visually survey (with the use of binoculars where appropriate) the location of clearance directly for the presence of nests including any areas of vegetation be retained but within 10m of the boundary of vegetation clearance.
  - Observe location for adult birds showing either site fidelity or returning to specific locations within vegetation.
  - Listen for adult birds or fledglings in vegetation.

© Bluewattle Ecology

Once this survey is complete the ecologist onsite should communicate with the construction team onsite and confirm either:

- no nests have been found and vegetation clearance should proceed immediately under ecologist supervision. If nesting birds are discovered during clearance the protocols outlined in Section 3.3 should be followed; or
- a nest has been observed and the protocols outlined below should be followed.

An exclusion zone of 10 m radius will be established around any active native bird nesting sites with clear signage established to alert all personnel in the vicinity of nesting sites. Vegetation clearance and any other construction related activities will cease within the exclusion area. Works can commence once nesting is complete (i.e. chicks are fledged and have left the nest permanently) or nests are naturally abandoned. Nesting completion will be determined by periodic survey by the site ecologist. This should be, if possible, from a distance.

If a nest of an At-Risk or Threatened species is discovered the ecologist onsite must consider whether 10 m exclusion radius is likely to be sufficient to avoid nest abandonment and should have the ability to decide upon an appropriate exclusion zone where 10 m is not sufficient.

During the nesting period no personnel or machinery may enter the 10 m exclusion zone. In the event where this exclusion zone covers a required access route for other work areas the ecologist should determine the risk of the allowance of personnel and/or machinery in the exclusion zone and determine necessary controls for movement in the exclusion zone if appropriate. These controls may include but not be limited to limitations on the time of day activity may occur, number of movements, and/or types of equipment able to transit the zone.

Injured native birds, if encountered during construction works should be immediately taken to a vet approved by DOC. Contact details of a DOC approved vet are to be confirmed before the start of any bird nesting surveys and vegetation removal works. If no DOC approved vet is available, the birds are to be taken immediately to Hamilton Zoo for examination: Hamilton Zoo 183 Brymer Road, Hamilton 3289; phone 07 838 6720.

Injured birds are to be transported in a clean, cool, dark, ventilated, material-lined bag/box. The transportation environment should be quite (avoid loud noises, conservations etc). If more than one injured bird is encountered at the same time, the birds shall be transported in separate boxes. All holding containers should be closed to stop birds escaping, and of appropriate size to prevent the bird from moving too much (e.g. flapping wings) and potentially injuring itself further. Implementing these measures should minimise stress, overheating and additional injury of the birds . Vets must euthanise birds whose injuries are causing suffering and are not likely to heal sufficiently to allow rehabilitation and return to the wild.

Any injured or dead native bird encountered (or euthanised by the vet) should be reported to DOC on 0800 DOC HOT (0800 362 468).

© Bluewattle Ecology

4 ECOLOGICAL RESTORATION AND MANAGEMENT PLAN REQUIREMENTS

4.1 HABITAT CREATION AND ENHANCEMENT PLANTING

Several natural features on the property that are proposed for restoration and management, to manage and offset the potential adverse effects of the proposed subdivision. These areas include the creation of 'bat buffer zones' adjacent to key bat habitats, at least 20 m in width, with a 5 m setback to buildings, to be implemented to protect foraging and commuting habitats. In addition to this the proposal includes consent notice areas. Figures 4, 5, 6, 7 and 8 below shows the location of these consent notice areas and the extent of the 20m wide bat buffer and 5 m building set back (25 m total illustrated). The restoration planting of the stream link bat corridor, the wetland mosaic and the additional linkage gully have a combined area of c. 3.067 ha.

This ERMP outlines the objectives and implementation methods required to restore and manage the overall ecological condition of the natural features, to achieve this, the following key management measures are required:

I. Areas 'AH', 'BA-BH', 'D', 'E', 'F', 'G', 'H', 'AI', 'O' to be protected with a consent notice.

II. *Planting within the site to enhance long tailed bat, stream and wetland habitat within the site.*

III. Maintenance shall continue until plantings have reached sufficient maturity to be largely self-sustaining and have reached 80% canopy closure for all ecosystem types. The survival rate shall ensure a minimum 90% of the original density and species.

IV. *Identify pest plant and animal species to be controlled and maintenance specifications necessary to ensure successful establishment of enhancement plantings.*

A successful restoration project requires a sequence of actions to be carried out. The site needs to be prepared properly, and the plants need to be put into the ground at a time of year when they are able to get maximum root growth before the weather becomes hotter and drier and the soils start to dry out. The planted site needs to be managed over subsequent years to enable the planted native species to overcome early competition from environmental weeds. Good weed management in the first few years of a planting project, combined with a planting designed to rapidly establish a closed canopy, is an essential ingredient for a successful project.

© Bluewattle Ecology

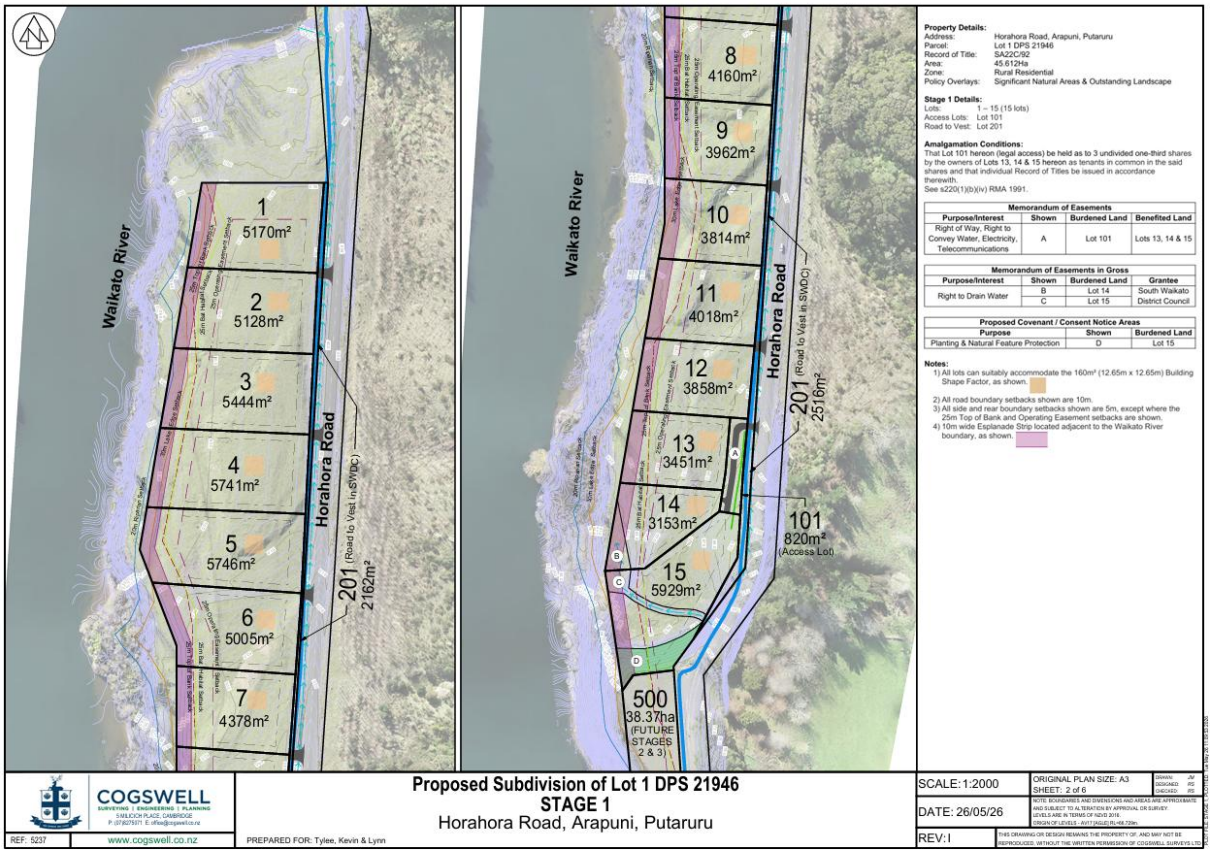


Figure 4. Stage 1 Scheme Plan

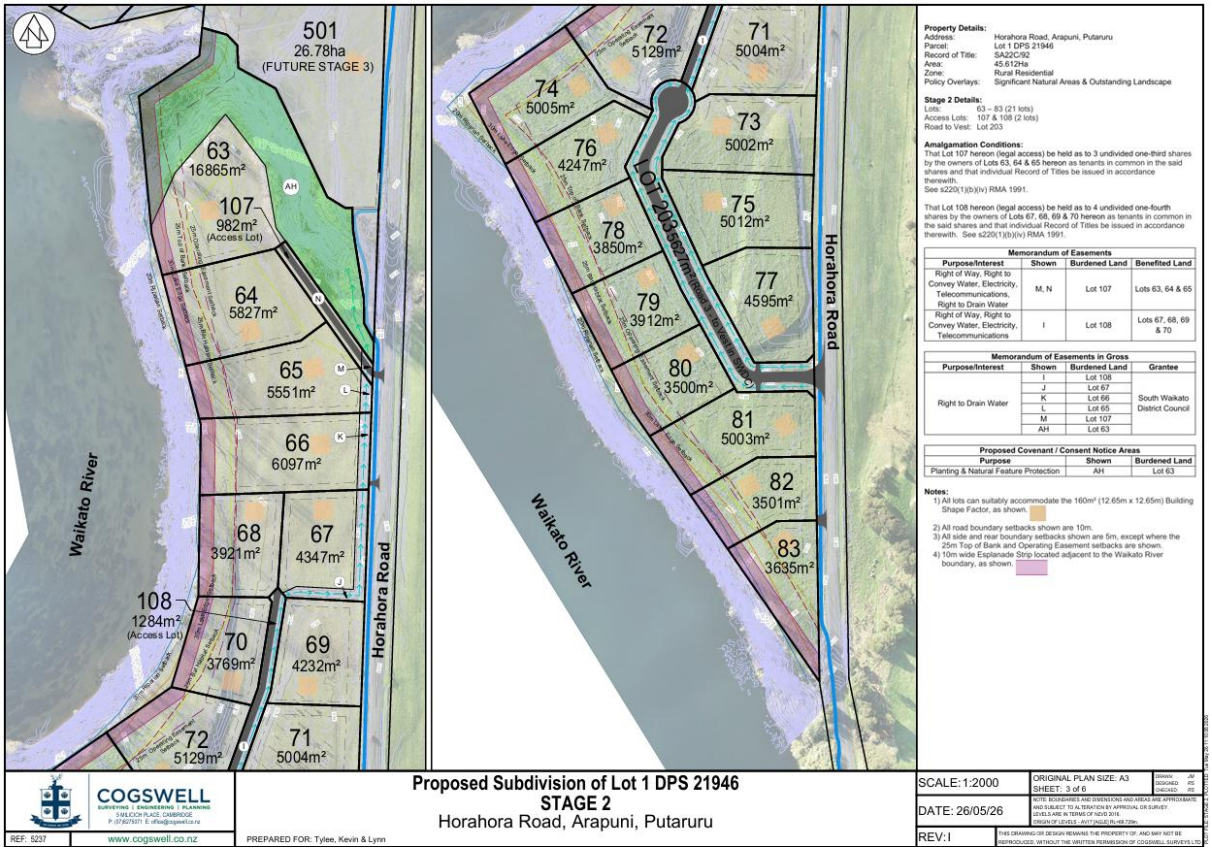


Figure 5. Stage 2 Scheme Plan.

© Bluewattle Ecology

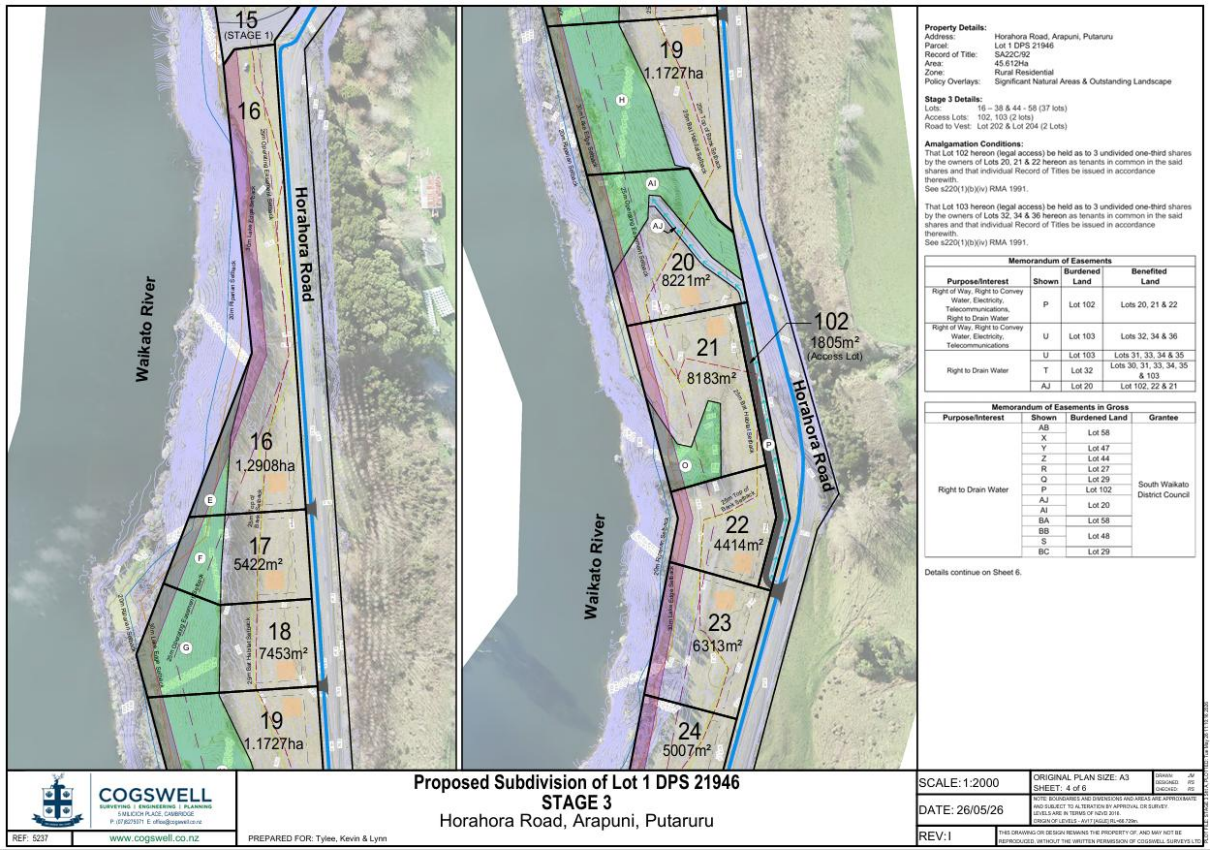


Figure 6. Stage 3 Scheme Plan.

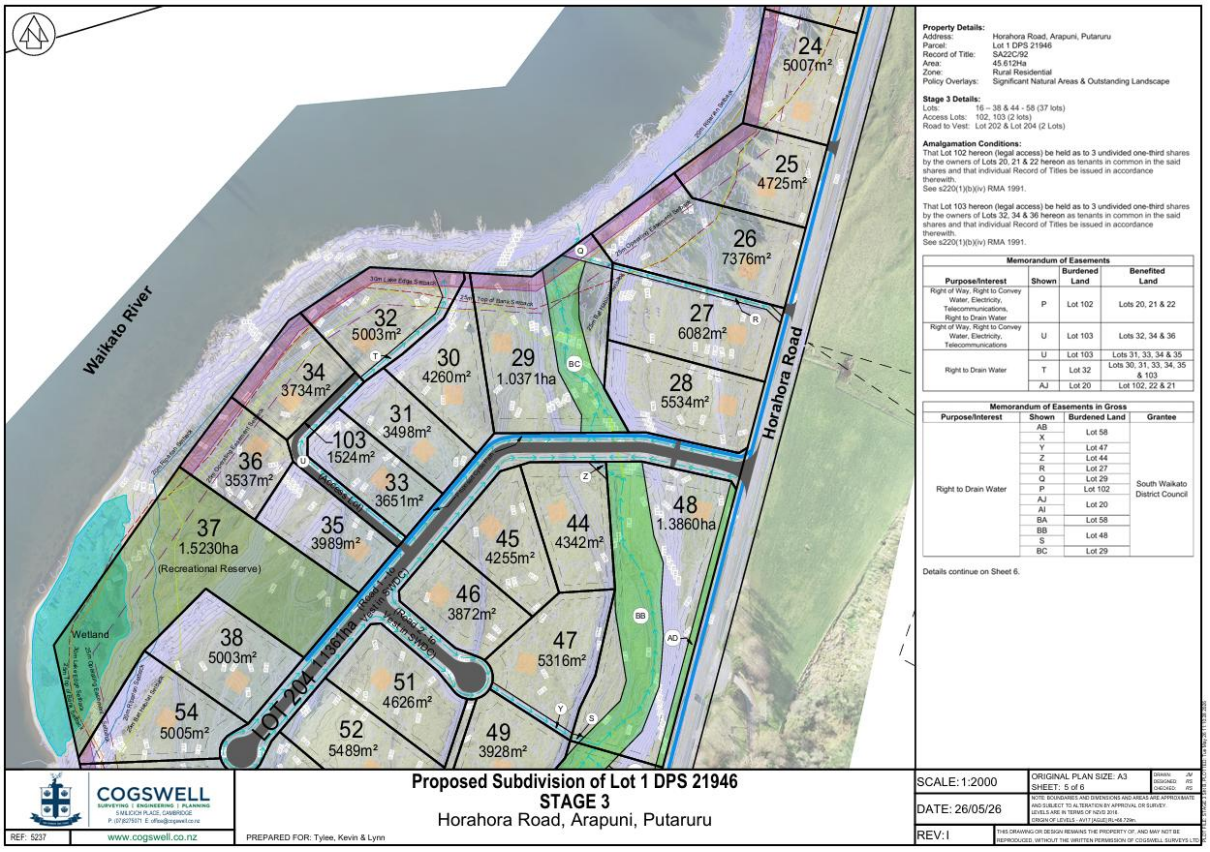


Figure 7. Stage 3 Scheme Plan continued.

© Bluewattle Ecology

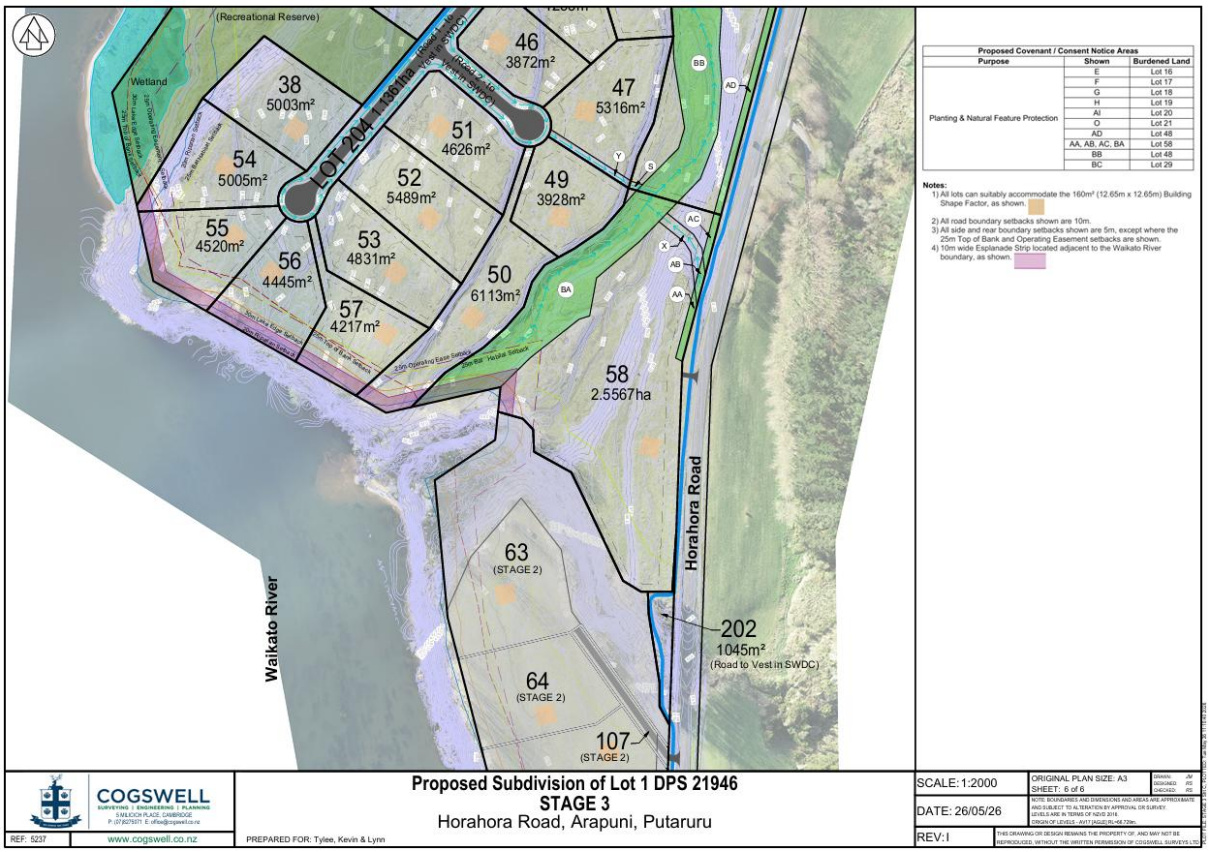


Figure 8. Stage 3 Scheme Plan additional.

4.2 ANIMAL PEST CONTROL

The aim of pest animal control is to reduce the numbers of both predatory and browsing animal pests. Reducing numbers of browsing pests within the vicinity of the site will prevent browse of palatable newly planted species during early establishment, increase survival, and reduce the threat of successional disruption and the introduction of pest plants and pathogens. Control of predatory pests will improve the survival of long tailed bats potentially using the Awa and its margins for roosting.

All pest animal control activities will be undertaken by suitably experienced and qualified professionals in perpetuity. Animal pests will be managed via a combination of kill trapping and poison in contained 'bait stations'.

4.2.1 RAT AND POSSUM CONTROL

An animal pest control plan shall be implemented to keep rats and possums at low levels. This may comprise chemical (e.g. bait stations) and/or manual control (e.g. traps and shooting) as detailed below. Note that these requirements cover all restoration areas.

4.2.2 CHEMICAL CONTROL

Rats and possums can be controlled with bait stations containing pindone, brodifacoum (Pestoff®) or cholecalciferol. The Philproof® bait station is suitable for possums and rats. Place bait stations around natural area margins and through the centre of the larger areas to ensure they are spaced 50 m apart. Fill stations with suitable/safe toxin once and refill four weeks later. This is called 'pulse feeding' – because these baits are slow-acting, possums will consume more than is necessary if stations are refilled more often. Baiting can be done throughout the year, but possums are hungrier in winter.

© Bluewattle Ecology

Four pulses per year are recommended (Aug, Nov, Jan and April). These can be deployed on the inside of posts along the fence line.

'Pulsing' bait fill in stations will maximise bait take and lower pest animal densities enough for birds and other fauna to thrive. This means filling them 3-4 times over a 4-6 week period (depending on bait take). Pulsing before and after winter, when other food sources in the environment are low, is key to restricting opportunities for pests to breed. Take extra care using poisons if you have pet or working dogs free-ranging on the property.

4.2.3 MANUAL CONTROL

Kill traps can be used to control pest mammals but require more regular checking and re-setting than bait stations. Single set traps will need to be checked and rebaited weekly at first (especially for rats) until the catch rate comes down significantly. Following this initial blitz, trapping intervals can be extended to fortnightly during the spring and summer months and at least monthly for the rest of the year. An increase in catch rates indicates the need for more frequent trapping.

Rat traps shall be placed at a density of two per hectare, spaced at 50 m intervals. Possum traps shall be placed at a density of one per hectare, spaced at 100 m intervals. Bait for manual traps should be species-specific and replaced regularly. Rat traps can be baited with peanut butter while possum traps are most effective when baited with a mix of cinnamon, icing sugar and flour. Goodnature® (A12s and A24s) or NZ Auto Traps (AT220s) self-resetting traps can be used to minimise the effort required. The AT220's work very well however their initial set-up cost is higher than bait stations and other types of kill trap.

4.2.4 MUSTELID CONTROL

The best time to trap mustelids is during late spring and summer. Mustelids often follow pre-existing tracks or natural linear features with low vegetation, such as stock tracks, or along stream banks. Mustelids will investigate any tunnels and burrows encountered while hunting, and trap tunnels or covers should be used to cover the set traps. This will also prevent the capture of non-target birds and animals.

The DOC 150® and DOC 200® series traps are well proven in trapping small mustelids and rats. The larger DOC 250® is also able to trap larger ferrets. A self-setting alternative for trapping small mustelids (stoats and weasels) is the Goodnature A24® rat and stoat trap. Allow a minimum of one mustelid trap per hectare (Table 1). Setting appropriately spaced bait lines that run through the area of indigenous vegetation is another alternative setup. Bait traps with fresh fish, poultry, rabbit or an egg for mustelids. Never wash traps after they have caught a mustelid, as the scent left by the captured animal will attract others, acting as a natural lure. Check and re-bait traps fortnightly during summer and monthly during winter.

4.2.5 FERAL CATS

Cats are cautious by nature and not easily trapped. Where feral cats appear to be frequenting these areas live capture box traps may be used to capture feral cats these need to be checked daily for legal purposes. Any captured cats should be humanly euthanised as soon as possible. Baits such as fresh fish, poultry, rabbit, or simply cat food may be used to lure feral cats into the live capture trap. Live capture traps are legally required to be checked no more than 12 hours after sunrise each day.

© Bluewattle Ecology

4.3 PEST PLANTS

4.3.1 PRIORITY PLANT PESTS

Pest plants can outcompete, smother, and inhibit the growth of native species, typically by competing for space and resources. Table 2 presents information on priorities for control of plant pests. The Waikato Regional Pest Management Plan (WRPMP) 2022 - 2032[5] outlines the regional council's priorities and strategies in managing invasive, exotic plant species. Those plant species listed in the WRPMP have been classified based on their actual or potential adverse impacts on the environment.

The priority for pest plant control is to remove those species that have the potential to alter or disturb natural processes in established native vegetation or prevent establishment of native vegetation. Priorities for weed control have been provided in Table 1. Control methodologies described in Table 1 and are based on general best practice for minimal ecological impact. The control method depends on the species and the extent of infestation, with spraying limited to the control of dense and large infestations only. Chemical and manual weed control should be carried out in accordance with NZS8409:2004 Management of Agrichemicals as stated in Section 19 Rule 19.4.2.4(c) of the Waipa District Plan. For further information on control methodologies see weedbusters.org.nz. Control practices shall aim to reduce weed species to low levels. Weed control is far more effective during summer months and should be carried out when no significant rainfall is predicted for the following days. Once pest plant control is started it is important that regular checks are made (every 3-6 months) to monitor the effectiveness of the control and to look for new invasions.

4.3.2 HERBICIDE USE

When working with herbicides always follow manufacturer's instructions regarding mixing and application and ensure that any additives are compatible with the herbicide used. Note that only herbicides certified for use over water should be used near stream or wetland habitat. Note that residual herbicides containing metsulfuron-methyl, picloram or aminopyralid (i.e. Tordon Brushkiller XT) should be avoided close to desirable plant species. Care will need to be taken to protect new plantings or naturally regenerating plants from herbicides.

[5] Waikato Regional Council 2022: Waikato Regional Pest Management Plan 2022-2032, Hamilton, 203 p.

© Bluewattle Ecology

Table 1: Pest plant species and priorities and methods for control. Cell colour shows the priority for control: red is high, orange is medium and yellow is low.

Common name	Botanical name	RPMS Designation	Location & notes	Control method
Privet	*Ligustrum lucidium L.sinense*	Site-led (Wetlands) – Chinese privet only	Scattered in stream link bat corridor gully.	Small seedlings and saplings can be hand pulled. For larger specimens cut and paint stump or drill and poison with metsulfuron-methyl 600g/kg (1g/L) or 25% 360g/L glyphosate solution.
Blackberry	*Rubus fruticosus agg.*	Site-led – Wetland Prevent spread and minimise impacts on high biodiversity sites	Blackberry was observed in most areas, with small fragments also observed within pasture.	Small patches (year round): Either dig out root crowns and rhizomes, or cut stems and apply glyphosate (400 ml/L) to stumps. Dispose of plant material appropriately. Large patches (summer - autumn): Spray with metsulfuron-methyl (7.5 g/15 L) or triclopyr (60 ml/15 L). Be aware that spraying is only effective before leaves become brittle. Spray at least six months before planting to allow adequate time for the residual herbicide to break down.
Bindweed	*Convolvulus*	Not listed in WRPMP	Observed in poplar forest, control portions on the property.	Physical removal: Hand pull, dig out roots (all year round). Dispose of plant material at a landfill or refuse transfer station. Cut and paste: Cut the stem/trunk as close to the ground as possible and cover the entire stump with herbicide as soon as possible after cutting. Apply metsulfuron gel (10g/L strength). Foliar spray - Apply metsulfuron herbicide at a rate of 0.5g/L using a hand held sprayer/knapsack. Use the recommended adjuvant shown on the label.
Pampas	*Cortaderia sp.*	Sustained control – Production and Environmental pest	Few plants in the stream link bat corridor gully.	Hand pull or dig out the plant to ensure all of the plant crown is removed. Foliar spray early spring to mid-summer when plants are actively growing (and before the plants produce flowers in autumn). Apply Glyphosate (360 g/L active ingredient) herbicide at 10ml/L plus organosilicone penetrant 2ml/L to cover entire plant. Note: Glyphosate overspray will kill other (desirable) plants.
Himalayan honeysuckle	*Leycesteria formosa*	Not listed in WRPMP	Scattered in stream link bat corridor gully.	Small plants can be hand pulled and disposed of at a refuse centre, burned or deeply buried. Larger plants climbing up on desired species shall be cut and the stumps painted immediately after cutting with metsulfuron-methyl 600g/kg (5 g /L) or a product containing 100g picloram+300g triclopyr/L (200ml/L) (e.g. Tordon Brushkiller XT®) or picloram gel. Leave cut vines in trees to die. Regrowth can be sprayed with metsulfuron-methyl 600g/kg (2g/10L + penetrant).

© Bluewattle Ecology

Common name	Botanical name	RPMS Designation	Location & notes	Control method
Barberry	*Berberis glaucocarpa*	Not listed in WRPMP	Scattered along the Waikato Awa, control plants within the property.	Spray spring-autumn with glyphosate (10ml/L). Cut or frill and saturate immediately with glyphosate (200ml/L) or metsulfuron-methyl 600g/kg (5g/L + penetrant)
Buddleia	*Buddleja davidii*	Not listed in WRPMP	Scattered in stream link bat corridor gully and along the Waikato Awa edge, control plants on property.	Handpull seedlings and small plants. Cut and paste - Cut the stem/trunk as close to the ground as possible and cover the entire stump with herbicide as soon as possible after cutting. Apply glyphosate gel (120g/L strength). Foliar spray - Apply herbicide using a handheld sprayer/knapsack to plants <1m tall or gun and hose for larger infestations. Use the label recommended adjuvant. Apply glyphosate (360 g/L active ingredient) herbicide at 20ml/L plus organosilicone penetrant (2ml/L) to cover entire plant.
Cherry tree	*Prunus sp.*	Not listed in WRPMP	Scattered along the Waikato Awa, control plants in property boundary.	Handpull seedlings and small plants. Cut or frill and saturate immediately with glyphosate (200ml/L) or metsulfuron-methyl 600g/kg (5g/L + penetrant)
Inkweed	*Phytolacca octandra*	Not listed in WRPMP	Scattered in stream link bat corridor gully.	Pull small plants or cut stems at ground level and paint the stumps with metsulfuron-methyl 600g/kg (1g/L)
Gorse	*Ulex europaeus*	Progressive Containment (occupier control): controlled within 20 m of a boundary	Occasional plant. The occasional gorse does not usually hinder restoration efforts.	Handpull seedlings and small plants. Spray spring-autumn with glyphosate (10ml/L). Cut or frill and saturate immediately with glyphosate (200ml/L) or metsulfuron-methyl 600g/kg (5g/L + penetrant)
Broom	*Cytisus scoparius*	Sustained control – Production and Environmental pest	Scattered in stream link bat corridor gully and along the Waikato Awa edge, control plants in the property boundary.	Handpull seedlings and small plants. Cut and paste - Apply picloram gel (43g/l strength) or metsulfuron gel (10g/L strength) to the entire cut stem. Do not use near desirable plants or overwater or wetlands. Foliar spray (Late Spring to late Autumn) - Apply herbicide using a knapsack to small areas and plants <1m tall, or gun and hose for larger infestations. Use the adjuvant recommended on the label. Apply glyphosate (360 g/L active ingredient) herbicide at 20ml/L plus organosilicone penetrant (2ml/L) to cover entire plant. Note: Glyphosate overspray will kill other (desirable) plants.

© Bluewattle Ecology

4.4 PLANTING REQUIREMENTS

All planting requirements are within the following Consent Notice Areas:

- Area 'AH' within Lot 63 (Stream Link Bat Corridor);
- Additional gully planting linkage between the Waikato Awa and the Stream Link Bat Corridor areas BA-BH within Lots 58, 48 and 29; and
- Wetland Area in the Recreational Reserve - Lot 37.

The detailed plant species list for each of the two restoration areas is provided in Table 3 (overleaf). Species type and numbers can be exchanged but only with prior written approval of a suitably qualified and experienced ecologist).

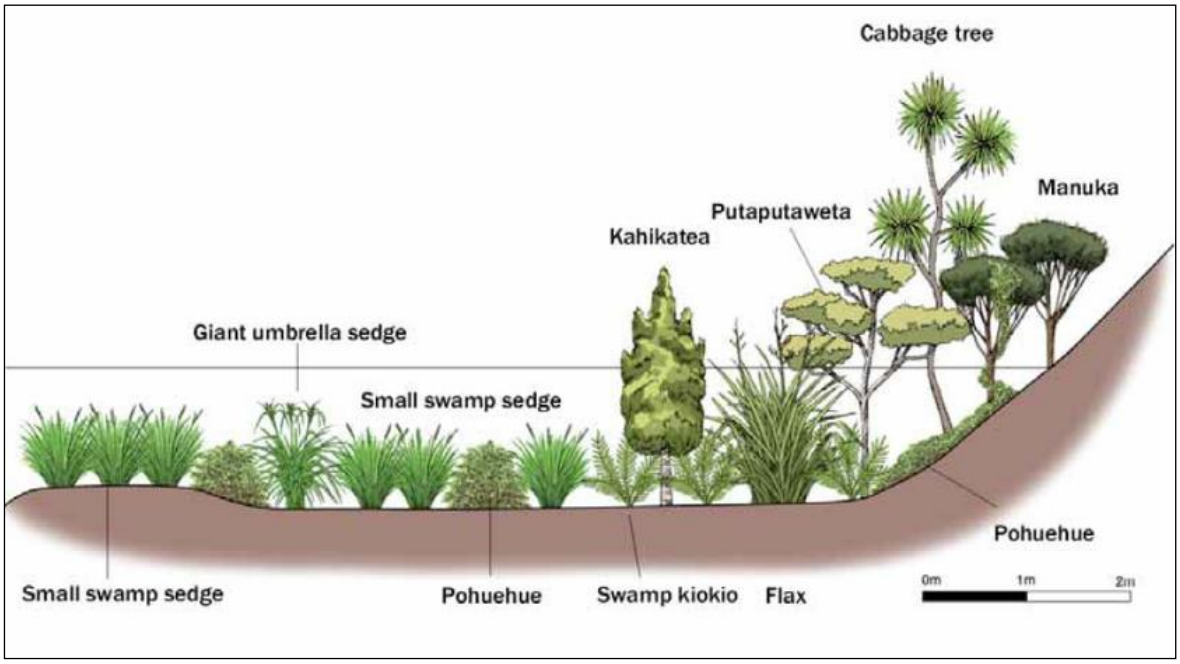


Figure 9: Generalised riparian planting cross-section.

4.4.1 RESTORATION PLANTING AND SPECIES SELECTION

Table 3 shows the two restoration areas and plant density performance standard requirements for restoration. Table 4 shows the species to be planted and appropriate numbers and plant container specifications.

The Stream Link Bat Corridor (Area AH in Lot 63) is dominated by exotic vegetation, with large areas of rank exotic grassland. Large poplar trees are present at the top of the gully and several of these trees are considered high value potential bat roost trees. These trees will remain. Other weed species listed in section 4.3 will need to be controlled before planting can begin. The area for revegetation is 1.05 ha.

The Wetland Area in the Recreational Reserve (Lot 37) measures c.0.71 ha and includes areas of undulating terrain, with many small depressions, where hydrophytic vegetation is present. It is estimated that approximately 15% of this area supports wetland hydrology, the remainder of the vegetation to be planted here should be suited to being inundated on occasion as this area likely floods during high river levels.

© Bluewattle Ecology

The additional gully to be vegetated will link the Waikato Awa riparian zone and the Stream Link Bat Corridor. This area is located in lots 58, 48 and 29 within areas BA-BH. This area is a well-drained shallow gully which is part of the river terrace formation, and a range of damp-dry species will be planted here.

Additional planting will occur under the poplar areas. This additional planting will be determined onsite, and plants should be spaced between 1.5 and 4 m apart, depending on the canopy density.

Table 2: Plant densities required for replanting in each of the restoration areas.

Vegetation Area	Planting zones	Total planting area (m^2)	Average plant spacing (m)
Stream Link Bat Corridor	Predominantly dry with some damp	10,500	1.5
Wetland mosaic	Predominantly damp/dry with c. 20% wetland	7,100	0.75 (wetland) 1.5 (dry/damp)
Additional gully to be vegetated	Predominantly dry, some damp in the base of the gully	14,370	1.5
Total		31,970	

© Bluewattle Ecology

Table 3: Species to be planted in the restoration areas & estimated numbers (species type and numbers can be exchanged but only with prior written approval of a suitably qualified and experienced ecologist).

Botanical Name	Common name	Stream Gully Link (consent notice area)				Wetland Mosaic (consent notice Lot 37)				Additional gully (consent notice BA-BH)		Total	Plant grade (pot size)
		Dry hillslopes		Damp stream edge		Damp/dry		Wetland		Damp/dry			
		% of mix	No. required	% of mix	No. required	% of mix	No. required	% of mix	No. required	% of mix	No. required		
Alectryon excelsus	titoki	3%	136							2%	146	283	1L, PB2
Aristotelia serrata	wineberry	5%	227	8%	64	10%	318			10%	732	1342	1L, PB2
Carex geminata	rautahi			15%	120			35%	760			880	Root trainer
Carex secta	purei			15%	120			35%	760			880	Root trainer
Coprosma robusta	karamu	10%	455			10%	318			10%	732	1505	1L, PB2
Cordyline australis	cabbage tree			20%	160	10%	318	9%	195	10%	732	1405	1L, PB2
Dacrycarpus dacrydioides	kahikatea			2%	16	2%	64	1%	22			101	1L
Dacrydium cupressinum	rimu	1%	45									45	1.5L, PB3
Dodonaea viscosa	Akeake	8%	364							2%	146	510	1L, PB2
Knightia excelsa	rewarewa	3%	136									136	1L, PB2
Kunzea robusta	kanuka	25%	1137									1137	1L, PB2
Hoheria populnea	Lacebark	5%	227			5%	159			5%	366	752	1L, PB2
Leptospermum scoparium	manuka			10%	80	30%	955			22%	1610	2645	1L, PB2
Melicytus ramiflorus	mahoe	12%	546			10%	318			10%	732	1596	1L, PB2
Myrsine australis	mapou	12%	546			10%	318			10%	732	1596	1L, PB2
Phormium tenax	harakeke			30%	240	10%	318	20%	434	10%	732	1724	Root trainer
Pittosporum eugenioides	lemonwood	5%	227									227	1L, PB2
Podocarpus totara	totara	5%	227							1%	73	301	1.5L, PB3
Sophora microphylla	Small-leaved kowhai	3%	136			3%	95			4%	293	525	1L, PB2
Veronica stricta	koromiko	3%	136							4%	293	429	1L, PB2
Total		**100%**	**4,548**	**100%**	**800**	**100%**	**3,182**	**100%**	**2,170**	**100%**	**7,319**	**10,700**	

© Bluewattle Ecology

4.4.2 PLANTING TECHNIQUES

Site preparation for planting will be completed as part of the pest plant strategy. Non-invasive grasses/groundcovers are not recommended for control and should be left uncontrolled where possible with the intention of providing a living mulch effect whereby native plants are somewhat protected from drought, frost and wind damage.

Planting should ideally be done in autumn when there is sufficient soil moisture and soil temperatures are still high enough to promote root growth. Planting can be done right through winter until around September.

Plants should be bought from a reputable grower, should be from a local seed source (ideally Atiamuri Ecological Districts), and should be healthy and robust.

Plant quality is to be checked upon delivery by the nursery / supplier. The foliage and roots of the supplied plants must be in good health. Plant quality will be tested by the contractor with visual inspections, and by lifting no less than 10 supplied plants by the stem to confirm whether the planter bag / root trainer of each plant is supported (i.e. the plant doesn't pull out of bag). Plants considered by the contractor to be of poor quality will be rejected and will need to be replaced by the nursery.

Plants grown from natural populations in neighbouring districts are preferred to non-eco-sourced plants. If planting any myrtle species, such as kānuka and rātā (*Metrosideros* spp.), nursery stock shall be checked for signs of myrtle rust prior to planting. Identifying features of myrtle rust can be found on the Department of Conservation website[6].

It is recommended that experienced professional ecological restoration contractors undertake this planting work in order to define the quantity of plants needed and be afforded the opportunity to make appropriate changes to species selection, site preparation and timing based on-site specific conditions, when deemed necessary.

In the open restoration areas, plants are to be planted at a density of one plant every 0.75 m for wetlands and 1.5 m for terrestrial areas (approximately 20,000/ha to 5,000/ha) in groups of three or more. Large canopy forming trees should be spaced approximately 3-4 m apart. Smaller trees and shrubs can be scattered throughout. Spot-spraying with a glyphosate herbicide should be carried out to control weed and grass growth 28 to 14 days prior to planting. Spots should be approximately 0.3 x 0.3 m in area and spaced according to the required planting density (e.g. 1.5 m centre to centre).

If specified plants are not available, it is preferable to increase the proportion of another plant in the list rather than substitute another species which may not be suitable for the site.

In areas where soil has been compacted as the result of previous land uses, the soil can be loosened to a depth of 0.5 m using a crowbar or trenching spade. After planting, the soil level against the stem should be the same as before planting. Staking is recommended so that plants are more easily located.

The plant is to be secured in the ground by filling the space surrounding the roots with soil and lightly compressing it. Soil compression will fill any voids that might be present around the roots avoiding damage caused by water accumulation.

Optimal plant stock will be used in the planting which has the following attributes:

[6] https://www.doc.govt.nz/nature/pests-and-threats/diseases/myrtle-rust/, accessed 16/10/2019

© Bluewattle Ecology

- Healthy, vigorous, and free from obvious signs of disease and pests;
- Planter bag or pot size RRTT, PB3 - PB5;
- Of at least average size for the specified pot/planter bag size;
- Well-developed root system with high amount of new root growth; and
- Not root bound.

4.4.3 PLANTING MAINTENANCE

Planted areas should be regularly maintained to keep them weed-free and plants should be released at least three times in the first year after planting and one or two times in the subsequent four years. This involves clearing competing vegetation from around each plant, which gives them the best chance of survival and maximises growth rates. Releasing can be done with a non-residual herbicide such as glyphosate, with a brush-cutter, or manually.

It is normal to expect a mortality rate of at least 10%. Additional plants should be planted in the spaces where other plants died.

The habitat creation and enhancement plantings outlined above are to be maintained and monitored annually for five years, and measured against the following performance criteria:

· Trees reach an average height of four metres.

· An average of 80 % canopy closure is attained.

· A 90 % survival rate of plants is achieved.

Establishment monitoring will be undertaken no more than two weeks after planting completion to ensure nothing is adversely affecting early plant performance. Ongoing, longer-term monitoring will be undertaken annually during the growing season. Should any dead or dying plants be recorded appropriate replacement planting will be undertaken during the following planting season. If the above performance criteria are not met within five years of establishment, appropriate management measures (e.g., treatment of competing exotic vegetation, replacement or infill planting etc) will be implemented. Monitoring will continue annually until the newly planted areas achieve the performance criteria set out above.

Monitoring of planting performance will be undertaken by suitably qualified and experienced ecological restoration contractors, capable of measuring tree height, canopy closure, assessing plant survival, calculating the average of these measures across the planting easements, and performing infill plantings where required.

© Bluewattle Ecology

APPENDIX I TREE FELLING PROTOCOLS

Protocols for minimising the risk of felling occupied bat roosts

(Bat Roost Protocols)

Version 4: October 2024 approved by the New Zealand Department of Conservation's Bat Recovery Group

The use of these protocols is only one step in the RMA effects management hierarchy i.e., avoid, remedy, mitigate. Avoidance of felling bat roost trees should be the first step in any project. Using this protocol only reduces the likelihood of killing or injuring bats present in roosts at the time of felling. It does not avoid, remedy or mitigate any other effects.

Purposes of this document:

1. To outline why protection of roosts is important for the persistence of New Zealand bats and why removal of known and potential roosts should be avoided.
2. Where tree removal cannot be avoided, to set out the minimum requirements and protocols for removing trees in areas where bats are present, to minimise the risk of killing bats.

This protocol does not eliminate the risk to bats of death or injury because bats or active bat roosts can be missed. The best way to eliminate risk of felling an active roost is to **avoid** felling any known or potential roosts.

Context

Bat roost protocols and the Wildlife Act 1953

Aotearoa New Zealand bats are absolutely protected species under the Wildlife Act 1953. It is an offence to catch alive or kill, hunt, possess, molest, or disturb bats under the Act. Any projects where tree or vegetation removal overlaps with the occurrence of bats, there is a risk of killing or injuring bats that may be present. Following the bat roost protocol reduces the likelihood of killing or injuring bats.

Bat roost protocols and the RMA

The occurrence of bats and bat habitat is a matter of 'significance' under Section 6(c) of the Resource Management Act (RMA). Bat roost protocols have become a standard part of bat management plans that may be required under RMA consents. Where developments require consents, and bats (a threatened species) are present, the developments should 'Avoid' impacting bats and bat habitat. Where this is not possible, the effects management hierarchy must be followed with attempts made to "remedy, mitigate, offset, and compensate" for impacts on bats and bat habitat.

Bat roost protocols are not considered an appropriate management measure to address bat roost habitat loss, as they only attempt to reduce the risk of bats being killed by tree felling. Therefore, implementing bat roost protocols where bats are present should be considered a last resort after following the RMA effects management hierarchy.

This protocol has therefore been framed following the RMA effects management hierarchy by first focusing on the avoidance of effects, helping to identify and avoid the removal of roost trees, and to minimise the risk to bats of death or injury if avoidance is not possible. This approach is usually informed by gathering data on bats in the local areas and seeking advice from someone who has been certified as competent by DOC to assess roost use by bats using bat detectors, identify potential roost features, and undertake emergence watches.

Identifying and protecting *both active and inactive (*i.e., trees used by bats at other times of year) roosts by avoiding their removal is an important step in supporting the survival and persistence of bats.

1

© Bluewattle Ecology

Effects management/compensation

If trees are felled and habitat lost, then compensation measures should be considered to address the adverse effects. What these measures should be is beyond the scope of this document. Provision of artificial roosts in the short-term and planting for the long-term are some of the methods commonly used in development projects, but their effectiveness is untested and understanding this is future research needed.

The status of Aotearoa New Zealand bats

Aotearoa New Zealand's two extant bat species (pekapeka) are classified as threatened.

Long-tailed bats are classified as 'Nationally Critical' because the species is likely to have a 70% decline in numbers within three generations.

Lesser short-tailed bats have three subspecies. The northern subspecies is classified as 'Nationally Vulnerable' because there are 1000-5000 mature individuals and the predicted decline in numbers is 10-50% within three generations. The central subspecies is 'Declining' because there are 20 000-100 000 mature individuals, and the predicted decline is 10-50% within three generations. The southern subspecies is 'Recovering' because there are 1000-5000 individuals, and the predicted increase is >10% within three generations.

Threats to bats

This document deals specifically with roost protection; however, roost protection is only part of the wider issue of habitat loss. Habitat loss through land clearance, habitat degradation, fragmentation and disturbance and loss of roosts reduces roosting, foraging and socialising areas. Individual bats and colonies are also threatened by the local felling of individual trees.

Bats have large home ranges which can include unprotected peri-urban habitat. Protecting habitat and maintaining connectivity of vegetation are crucial for bats being able to persist and flourish in the environment.

Predation and competition by introduced predators: mustelids, rats, cats, and possums have all been implicated in the decline of bats[1].

Roosts are critical to the survival of bats

Roosts are where bats gather to shelter during the day and at night. They are used to socialise, mate, give birth, and raise young. Bats have very specific requirements when they are choosing roosts and are not just choosing any tree. The specialised features of roosts make them rare and almost irreplaceable in any landscape or habitat type except over very long-time frames. People sometimes falsely suggest that "bats can just move to another tree". This is not the case, particularly where trees suitable as roosts are limited[2].

Bats demonstrate high site fidelity to existing roosts and their specific roosting areas, and they move on a rotation among these. Because roost trees are likely to be rare, and bats choose which of their roosts to occupy to fulfil specialised requirements, felling roost trees even when bats are absent will have a significant negative effect. If the number of suitable roosts and their surrounding habitat is reduced in the landscape, bats are forced to use roosts that are less thermally efficient. This means they will use more energy to survive, resulting in reductions in survival and lower reproductive success. In this way, roost removal is likely to result in higher risk of local extinction.

[1] O'Donnell CFJ; Christie JE; Hitchmough RA; Lloyd B; Parsons S 2010. The conservation status of New Zealand bats, 2009. New Zealand Journal of Zoology 37: 297– 311.

[2] Many references available, for example, Borkin KM; Parsons S. 2011. Sex-specific roost selection by bats in clear-fell harvested plantation forest: improved knowledge advises management. Acta Chiropterologica 13(2): 373-383; Borkin KM; O'Donnell CFJ; Parsons S. 2011. Bat colony size reduction coincides with clear-fell harvest operations and high rates of roost loss in plantation forest. Biodiversity and Conservation 30; Sedgeley JA; O'Donnell CFJ 1999b. Roost selection by the long-tailed bat, *Chalinolobus tuberculatus*, in temperate New Zealand rainforest and its implications for the conservation of bats in managed forests. Biological Conservation 88:261–276; Sedgeley JA; O'Donnell CFJ 2004. Roost use by long-tailed bats in South Canterbury: Testing predictions of roost site selection in a highly fragmented landscape. New Zealand Journal of Ecology 28:1-18.

© Bluewattle Ecology

Bats can roost in native or exotic vegetation – therefore it should not be presumed that exotic species such as pine trees will not support bats. Roosts, including maternity roosts, have been found in many exotic species including, but not limited to, pine, poplar, oak, and acacia species, black locust, willow, eucalyptus and Tasmanian blackwood.

Bats are at risk of being injured or killed when trees are felled

If a tree is felled with a bat in it, it is highly likely that the bat will be injured or killed, although this may not be apparent at the time because injuries, such as bruises and fractures, which would hinder bats' ability to fly well, may take time to be obvious.

The highest risk of injuring or killing bats or trapping them within their roosts is when they are heavily pregnant, when young are still dependent on the roost (late November – February) and when bats are more likely to be in torpor (a type of hibernation in May – September). Heavily pregnant bats are slower and less agile, and young bats cannot fly, and when they are new to flying are not very agile, so their chances to escape are reduced when roost trees are felled. Also, it is possible that if the larger female-dominated maternity roosts are cut down when females are raising their young to independence (October-March), a whole colony of bats could be destroyed at one time.

If trees are cut down when bats are in torpor, bats may be unable to rouse from torpor and to fly away in time to escape. Additionally, it is significantly harder, sometimes impossible, to detect bats roosting in trees during torpor. For these reasons, trees with potential bat roost features must not be cut down in winter. Bats also use torpor for short periods during summer, for example, if the weather gets cold, so the risk of killing or injuring bats that cannot escape falling trees exists at any time of the year.

Bat roost protocol

When and how to use the protocol

Whenever vegetation removal is proposed in areas where bats are potentially present and where their habitat may be impacted, follow the decision tree (Figure 1) below as a guide to what sort of action should be undertaken. The decision tree is designed firstly to avoid felling bat roost trees, secondarily aimed at moving roost trees, and only if unavoidable, felling roost trees (but only once vacated).

None of the methods of inspecting roosts described below eliminates the risk of failing to identify bats when they are present. Therefore, techniques such as filling in cavities with expandable foam are not supported as a tool. This is because there is a risk of trapping bats that have not been detected within cavities.

Definitions

Competencies: a set of competencies developed by the NZ Bat Recovery Group[3] to ensure that anyone working with bats is competent to do so. Contact bathandler@doc.govt.nz for a list of competencies and requirements to become an authorised competent bat worker.

Competencies referred to in this document:

2.1 Bagging, storage, handling, measuring, weighing, sexing, aging, temporary marking and releasing appropriately:
For long-tailed bats: 50 individuals
For short-tailed bats: 50 individuals

3. High risk activities – Roost felling (all of these competencies include the understanding of what to do when bats are found during tree felling as per Appendix 6 of 'Initial veterinary care for New Zealand Bats'[4])

- 3.1 Assessing roost tree use using Automatic Bat Monitors - Demonstrate correct timing, placement, and interpretation of data for 10+ times according to DOC's Tree Felling Protocols.
- 3.2 Undertake roost watches/emergence counts at 10+ occupied roosts where the entrance is visible.
- 3.3 In at least two different forest/habitat types, including the forest/habitat type where trees are going to be assessed: evaluate 10+ potential roost features in trees (e.g., cavities, peeling bark, epiphytes).

[3] A group of bat specialists that advise on bat issues and assess bat competencies
[4] Available at www.doc.govt.nz/bat-worker-resources

Bluewattle Ecology
© Bluewattle Ecology

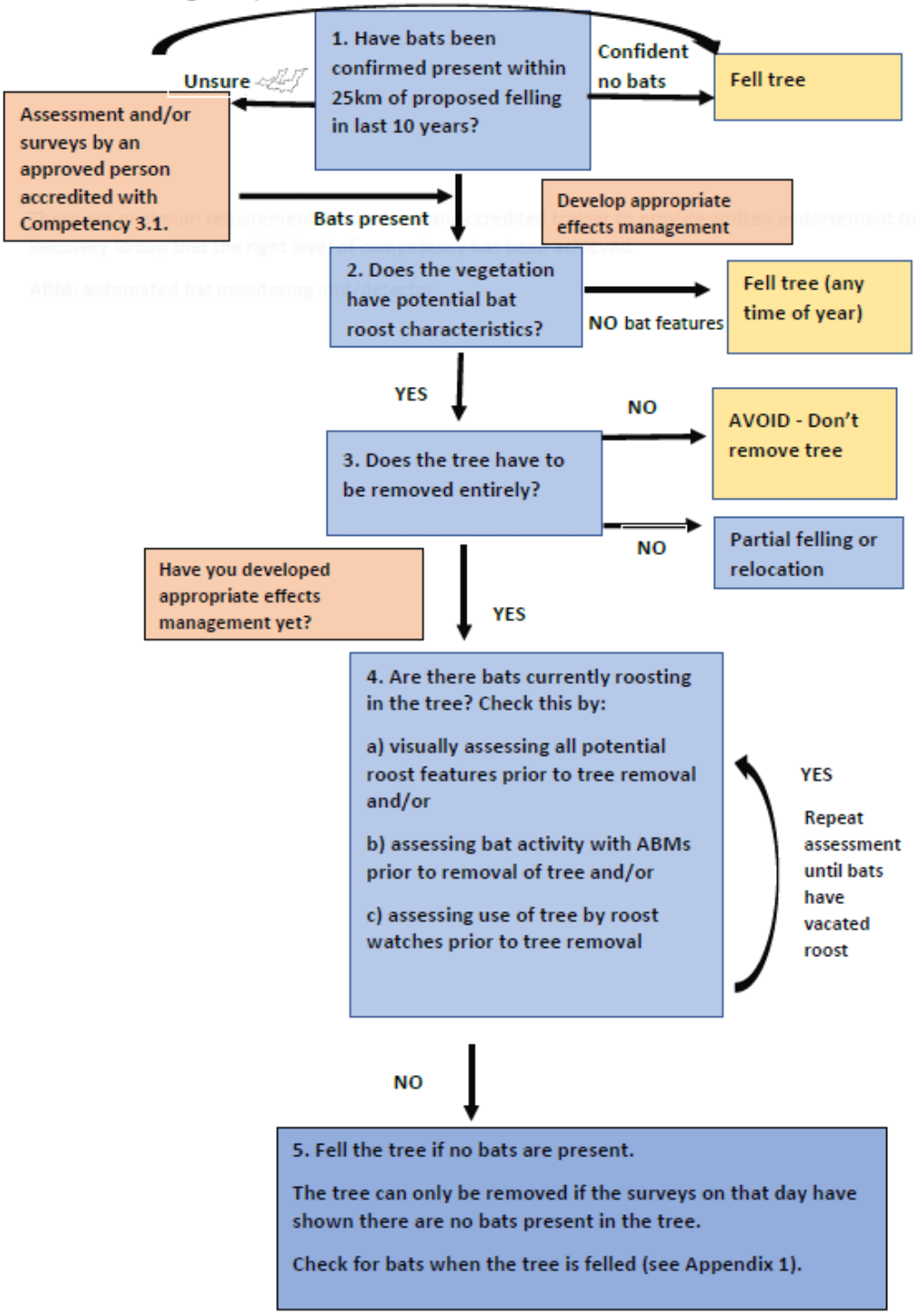
These are minimum requirements and rely on an accredited trainer to provide written endorsement to the Bat Recovery Group that the right level of competency has been achieved.

ABM: automated bat monitoring unit/detector

© Bluewattle Ecology

Figure 1. Tree removal in bat areas flow chart

Each numbered step relates to a step in the Decision Tool for Tree Removal. Follow each step fully in the text to work through the process.



5

© Bluewattle Ecology

Step by step decision tool for tree removal in bat areas (to be used in conjunction with Figure 1).

Step 1. Does the bat roost protocol apply to my project?	Response	Who can make this assessment?	When?
a) Is there known bat activity within a radius of 25 km of the vegetation to be removed (see [5] and [6] notes below)?	a) If Yes, proceed to b If No, consider whether survey work needs to be done.	Evidence can come from on-the-ground surveys and reports from the national DOC database if within the last 10 years, consultants, and/or other credible sources. Evidence should be interpreted by an experienced bat ecologist.	Any time
b) Are bats present in the Project Area i.e. where trees are planned to be felled?	b) If Yes, go to step c If unknown, undertake comprehensive survey if bats are likely to be present. If no bats are present after comprehensive survey, you do not need to follow protocol.	If surveys are required to support the assessment, then these will need to be designed by approved person accredited with Competency 3.1. to determine presence around trees due to be felled.	Acoustic surveys to determine presence should be undertaken when bats are most active and environmental conditions are suitable (October 1st to April 30th)[7]. Surveys undertaken at other times of year are considered less reliable for determining absence.
c) Is the tree known to provide a roost location for bats? (Previous knowledge).	c) If yes, go to step 3 If no (but bats are present in the project area), go to step 2.		

Notes for Step 1

1a) Bats are a highly mobile species. Long-tailed bats can have home ranges (the areas that they regularly use) as wide as 19km, and short-tailed bats about 24km. Three colonies of long-tailed bats in the Eglinton Valley collectively had a home range of 100km².

When assessing whether bats might be present at a site you have to consider any surveys that have been done in the wider area, how long ago the surveys were done and whether more surveys are required.

[5] The largest home range span for the long-tailed bat in the Eglinton Valley was 19 km (O'Donnell 2001. J. Zool., Lond. 253, 253-264).
[6] The largest home range span for the lesser short-tailed bat in the Eglinton Valley was 23.6 km (O'Donnell et al. 1999. New Zealand Journal of Ecology 23(1): 21-30).
[7] Borkin K.M. 2010. Ecology of New Zealand's Long-tailed bat (*Chalinolobus tuberculatus*) in exotic plantation forest. Unpublished PhD thesis, University of Auckland.

1b) If you are doing a new survey then you should design the survey to cover the project area. Examples of surveys are shown in the Bat Inventory and Monitoring Toolbox (https://www.doc.govt.nz/our-work/biodiversity-inventory-and-monitoring/bats/). See 'Bats: Counting away from bat roosts: bat detectors on line transects' and 'Counting away from bat roosts: automatic bat detectors'.

Send bat data (processed csv files and GPS locations) to batdatabase@doc.govt.nz on a standard spreadsheet available by emailing this address.

Step 2. Does the vegetation proposed to be removed have potential bat roost characteristics?	Response	Who can make this assessment?	When?
a) Is the tree ≥15 cm DBH (Diameter at Breast Height)[8]?	If yes, further assessment is required (2b). If no, the vegetation can be removed at any time. There may be roosts that have smaller DBH. If any vegetation is suspected to have a bat roost present, removal shall be halted immediately, and protocols reviewed.	Anyone who can measure a tree DBH.	Any time
b) On visual inspection, does the tree (dead or alive) have features that indicate roost potential (Potential Roost Features/PRFs)? These features include: • hollows • cavities • knot holes • cracks • flaking, peeling, and decorticating bark • epiphytes • broken or dead branches or trunk • cavities/hollows/shelter formed by double leaders • Artificial roost boxes	If yes go to step 3 If unsure i.e. cannot assess due to foliage or limited access, further assessment is required. This may include climbing inspection of the tree. If no potential roost features are present, the vegetation can be removed at any time[9], but if upon felling you find a bat follow section 5.	Approved person accredited with Competency 3.3.	Visual inspections can occur at any time of the year, but within 6 months of final felling dates. This accounts for any changes in trees that may occur over time. If there are **NO** potential roost features, felling can occur at any time of year.
Step 3. Does the tree have to be removed entirely?	**Response**	**Who can make this assessment?**	**When?**

[8] This diameter at breast height is based on dimensions of roosts used by south Hamilton long-tailed bats that were identified by Dekrout (2009, Unpublished PhD thesis, University of Auckland) - the smallest roosts were 15.5 cm DBH; but note that in South Canterbury Sedgeley and O'Donnell (2004, New Zealand Journal of Ecology 28(1): 1-18) found that 25% of long-tailed bat roosts were smaller than 18.8 cm DBH.
[9] All surveys to assess whether trees are potential roosts shall take place within 6 months of final felling dates. If felling does not take place within this time, then assessments must be repeated. This is intended to account for any changes in trees which may occur over time.

Bluewattle Ecology
© Bluewattle Ecology

a) Is the only option to remove the tree entirely?	If yes, continue to step 4 If no, consider leaving the tree in place, cutting off specific limbs only or relocating the tree. If any felling, partial felling (where the part to be felled has potential bat roost features) or tree relocation takes place you **MUST** proceed to step 4. If a roost (active/inactive) is confirmed, then advice should be obtained at a project level in writing from DOC before proceeding.	Project leader (i.e. the accountable decision-maker for the project)	Any time

Notes for Step 3

Trees must only be relocated when bats are absent and when standard automated bat monitoring unit (ABM) weather conditions are met (see notes section 4b for appropriate weather conditions), and in consultation with an ecologist with all competencies of level 3: 'High risk activities – Roost felling'.

Advice in writing can be given on behalf of the Operations Manager of the DOC District you are working in. If you do not know the contact details for this office, you can phone 0800 ASK DOC (0800 275 362) or email info@doc.govt.nz . In emergencies, phone 0800 DOC HOT (0800 362 468).

Step 4. Are there bats currently roosting in the tree? (Follow a or b or c or a combination)	**Response**	**Who can make this assessment?**	**When**
a) Are potential features being used by roosting bats? A tree climber may be required to check all features (see notes for 4a below). If roost is occupied repeat 4a another day until roost is vacated.	If yes, **THE TREE MUST NOT BE FELLED UNTIL BATS HAVE VACATED IT**. If no, the tree can be removed on the day of the tree inspection following step 5. If bats continue to use the roost, then the tree must not be cut down until the bats leave the roost. At this point reconsider whether this tree must be felled.	An approved person accredited with Competency 3.3 or an experienced tree-climber (e.g., an arborist) working with an approved person accredited with Competency 3.3. If the latter, the tree climber must provide information along with photographs or video footage, to the	October 1st to April 30th when the temperature is 7°C or greater at official sunset in the South Island or 8°C or greater in the North Island.

	Advice must be obtained at a project level in writing from DOC prior to felling the tree. If you do not know the contact details for the office, you can phone 0800 ASK DOC (0800 275 362) or email info@doc.govt.nz.	approved person accredited with Competency 3.3 who assesses and decides whether the tree can be removed. If roosts are known or confirmed through this process, then this information must be communicated to the nominated DOC or Council bat ecologist for this project.	
b) Is bat activity recorded at any time during two consecutive, valid survey nights preceding tree felling[10]? At least two nights are required as it is possible for bats to enter or leave a roost without echolocating, or to not leave the roost for a night.	If yes (bats are detected), survey must continue until no bat activity is recorded for two consecutive nights (to indicate bats have left the area) prior to felling **OR** roost features of each tree must be visually assessed via climbing. If bat activity is consistent in the area and 2 nights with zero bat passes cannot be obtained, Go to 4c or 4a. If no bats are detected for two consecutive nights, the vegetation can be removed on the day immediately following the survey nights using the method in 5.	An approved person accredited with Competency 3.1	October 1st to April 30th and when conditions meet the requirements for standard ABM weather conditions (see 4b notes).
c) Are bats observed emerging or re-entering the tree? This involves watching roost features to identify bats returning to or exiting potential roost features. It should only be used in combination with previous ABM monitoring (4b) (see notes 4c	If yes (bats are seen at either watch), it is a confirmed roost.	An approved person accredited with Competency 3.2.	Between October 1st and April 30th only **AND** when weather parameters meet

[10] Le Roux et al (2013) found that in and around Hamilton "The longest consecutive monitoring period without bat detections at each site was three nights during winter." Le Roux et al 2013. New Zealand Journal of Zoology (2013): Spatial and temporal variation in long-tailed bat echolocation activity in a New Zealand city, New Zealand Journal of Zoology, DOI: 10.1080/03014223.2013.827125.

Bluewattle Ecology

© Bluewattle Ecology

for method). At least two consecutive emergence and re-entry watches should occur at dusk and dawn immediately preceding the felling as it is possible for bats to enter or leave a roost without being detected, or to not leave the roost for a night. It is strongly recommended that a night vision aid is used for emergence watches to reduce the risk of missing bats if they leave after it becomes too dark to see.	Removal of a roost should not occur. If no bats are observed entering or exiting for two consecutive dusk and dawn watches, the vegetation can be removed on the day immediately following the final dawn watch using the method in 5.	If more than one person is required for a roost watch at a tree, a minimum of one approved person accredited with Competency 3.2 must be present on site for the duration of the roost watch to supervise.	the roost watch requirements.

Notes for Step 4.

4a) Tree climbing and inspection

Care must be taken while climbing trees to avoid disturbing, removing or destroying tree features with bat roost potential such as sections of loose bark or cavities in dead wood. Using mobile elevated platforms can be a good option. Bats are less likely to be active over colder periods, so climbing to check whether bats are present in potential roost features must take place between October 1st to April 30th when the temperature is 7 °C [11] (South Island) or 8°C (North Island) or greater at official sunset on the night before inspection.

A tree climber may be required to check all potential bat roost features.

- Can bats be seen? An endoscopic camera should be available for this step and every possible corner of each potential roosting feature inspected, i.e., cavity/crack etc. Cracks, holes, and splits may lead to cavities or may be superficial. A cavity may be wet indicating no/low potential as a bat roost. Ensure that the tree climber is provided guidance from the competent bat worker about bat identification and care required when probing endoscopes into potential roosting features which may disturb bats.
- Can bats be heard? Search of tree features should be accompanied by use of a hand-held bat detector. If bats are present and not in torpor, then detection of presence listening at 25 kHz (for social calls) and 40 kHz (for echolocation calls) may help to determine if long-tailed bats are present. Short-tailed bat social calls are often audible or detected at 25-27 kHz.
- Is guano present or urine staining? See Appendix 1.

4b) ABM survey work

ABMs are to be used to record bat calls. Location of ABMs must provide sufficient coverage to be able to determine if bat roosts are present in one or more of the trees. Department of Conservation-manufactured AR4 bat detectors are considered likely to detect long-tailed bats only over short distances i.e., up to 30-60 m distant from the

[11] O'Donnell CFJ 2000. Influence of season, habitat, temperature and invertebrate availability on nocturnal activity of the New Zealand long-tailed bat (*Chalinolobus tuberculatus*). New Zealand Journal of Ecology 207-221.

detector (S. Cockburn, Department of Conservation, pers. comm.). This is similar detection distances of other detector types. Ensure the survey design Note that rain and wind can affect detectability because the sounds can have the same frequencies as bat calls. These sounds are picked up by bat detectors, potentially obscuring bat calls.

'Valid' survey nights must have the following features:

- Begin one hour before official sunset and end one hour after official sunrise.
- Temperature 8°C or greater for the first four hours after official sunset time for the North Island and 7°C for the South Island[12].
- Ideally no to very little precipitation within the first 4 hours after official sunset, although a light mist or occasional drizzle may be acceptable as assessed by an ecologist accredited with Competency 3.1.
- No to light wind within the first four hours after official sunset.

Prior to the commencement of surveys, ABMs must be checked for correct operation at a site where bat activity is known to be regular, or by using the DOC – Bat Recorder Tester (Tussock Innovation Ltd) phone app made for this and available from Google Play Store. Faulty or suspect ABMs must not be deployed, and ABMs must be redeployed if faults occur.

4c) Roost watches

The following weather conditions define a valid night for roost watches:

- Temperature greater than 8°C all night between official sunset and sunrise for the North Island and 7 °C for the South Island.
- Ideally no to very little precipitation within the first 4 hours after official sunset, although a light mist or occasional drizzle may be acceptable as assessed by an ecologist accredited with Competency 3.1.

Roost watches should include the deployment of ABMs and analysis of data for the night of the roost watch.

Emergence watches

- Each tree must be watched from at least 1 hour prior to sunset in the South Island and from ½ hour prior to sunset in the North Island until it becomes too dark to see by sufficient people to observe all potential exit points. This must be supported using handheld detectors, and consider the use of night vision aids which can detect bats once it becomes too dark to see. The aim of emergence watches is to identify potential roost locations within the vegetation. Infra-red and thermal imaging cameras will be useful in this process.

Roost re-entry watches

[12] South Island temperatures are based upon O'Donnell (2000) as above. North Island temperatures are based on Borkin et al. 2023. Influence of weather on long-tailed bat detection in a North Island exotic forest. New Zealand Journal of Ecology, Vol. 47, No. 1.

© Bluewattle Ecology

The time when bats return to roosts can vary based on temperature and time of year.[13,14]

- Observers must then return the next morning and watch the tree to determine whether bats return to the vegetation.
- Roost re-entry watch timing should be based on patterns of activity recorded onsite with ABMs, i.e., as a guide, watches should begin two hours prior to when the last passes were recorded on the ABMs on previous nights and finish one hour after official sunrise time. Where this information is not available and at minimum, watches shall begin two hours prior to official sunrise until one hour after sunrise. Infra-red and/or thermal imaging cameras may be useful as a supplementary tool in this process.

The methods above (Climbing and inspecting; ABM use and roost watches) can be implemented as in steps 4.

If bats are sighted, or sign detected, or a roost (active/inactive) is confirmed, the approved person with the appropriate competencies, as soon as possible, shall:

- Call the tree felling supervisor to inform them which affected tree(s) cannot be felled due to detection of bat sign.
- Send an email to the site manager, and the local DOC office if an active roost is found, detailing the results of the survey and outlining the measures for protection or relocating the roost tree. Advice must be obtained at a project level in writing from DOC prior to felling the tree. If you do not know the contact details for the office, you can phone 0800 ASK DOC (0800 275 362) or email info@doc.govt.nz.
- A record (including photos) of any vegetation containing bat roosts shall be kept detailing the date; size, location and species of tree or other vegetation; roost type, e.g., cavity, peeling bark, broken branch; detail outlining how presence of bats was confirmed; the number of bats present; and species present, if known.

Step 5. Fell the tree if no bats present	**Response**	**Who can make this assessment?**	**When**
NB: Vegetation removal must take place on the day of tree inspection or the day immediately following two consecutive emergence/re-entry surveys that confirm that there are no bats present.			
a) If you have undertaken a visual inspection of the vegetation (following step 4a, then the vegetation can be removed **ONLY ON THE DAY OF INSPECTION** and meets the valid weather conditions (defined in notes 4c) at official sunset the day prior to inspection. If you have undertaken ABM surveys or roost watches 4b or 4c the vegetation can be removed **ONLY ON THE DAY IMMEDIATELY**		An approved person accredited with the relevant competency (based on method used) who are familiar with the 'Bat First Aid and veterinary care' documents shown in footnote[15], and physically able to	When the inspection method chosen allows.

[13] Dekrout AS. 2009. Unpublished PhD thesis. University of Auckland, New Zealand Pp 168.
[14] Griffiths R. 2007. Activity patterns of long-tailed bats (Chalinolobus tuberculatus) in a rural landscape, South Canterbury, New Zealand. New Zealand Journal of Zoology, 34:3, 247-258, DOI: 10.1080/03014220709510083.

[15] Initial Veterinary Care for NZ Bats UPDATED 2023.pdf (doc.govt.nz) and Bat Care Advice for first responders 2023.pdf (doc.govt.nz) available at www.doc.govt.nz/bat-worker-resources

FOLLOWING SURVEY COMPLETION (i.e., if the survey ends in morning the tree can be felled the same day only). Trees must be inspected for signs of bats once felled and before removing from the site, if safe to do so. Follow Appendix 2 if bats are detected during vegetation removal.		check/inspect tree for signs of bats once felled.	

Bluewattle Ecology
© Bluewattle Ecology

Appendix 1. Identification of guano.

Bat droppings ('guano') will superficially look like rodent droppings, being dark in colour and a similar size and shape to a large grain of rice. Bat droppings will easily crush under pressure (e.g., when squeezed between fingers) and will disintegrate into a dusty/crumbly substance in comparison to smearing (rodents). Where beetles form part of the bat's diet, crushed droppings can look shiny/glittery due to the presence of elytra. Larger colonies may leave piles of guano at the bottom of the roosting feature (Figure 1). Where individuals or small colonies are present, it is likely that only individual pieces of guano may be found, therefore careful inspection is needed.



Figure 1: Guano at the base of communal long-tailed bat roost. Photo: M. Choromanski

Appendix 2. If bats are detected during tree relocation or removal

NB: Vegetation removal must take place on the day of tree inspection, or the day roost watches have been completed or two consecutive nights of ABM data have confirmed that there are no bats present at that time. If practical, trees are to be inspected for signs of bats once felled and before removing from site. People inspecting trees should be familiar with the Bat Care Advice document shown in footnote[16] and able to check/inspect tree for signs of bats once felled.

If during the felling of a tree bats are detected, felling of that tree must stop immediately if safe to do so, and DOC and an approved person accredited with Competency 2.1 must be consulted.

If bats do not fly away or are potentially injured/found on the ground, felling can only re-start once permission has been obtained from DOC after consultation with an approved person accredited with Competency 2.1.

If bats are detected once the tree has been felled, all further work must stop, and DOC and an approved person accredited with Competency 2.1 must be contacted. The felled tree must be thoroughly inspected by them for further bats.

If any bats are found on the ground or in the tree once felled, place the bat in a cloth bag in a dark, quiet place at ambient (or slightly warmer) temperature and take to a veterinarian for assessment as soon as possible i.e. that day. A maximum of two bats should be kept in one bag. After delivering the bat to the vet, contact an approved person accredited with Competency 2.1 in consultation with the vet and DOC (0800 DOC HOT; 0800 362 468).

[16] Initial Veterinary Care for NZ Bats UPDATED 2023.pdf (doc.govt.nz) and Bat Care Advice for first responders 2023.pdf (doc.govt.nz) available at www.doc.govt.nz/bat-worker-resources

Bluewattle Ecology

© Bluewattle Ecology

Bats must be kept for three days under observation and must be kept out of torpor for this time. Additional detail is found at the links provided in this footnote[17]. Vets must euthanise bats whose injuries are causing suffering and are not likely to heal sufficiently to allow rehabilitation and return to the wild. The approved person accredited with Competency 2.1 and the vet must consult with DOC to consider appropriate rehabilitation options where suffering is minimal and chances of return to the wild are high.

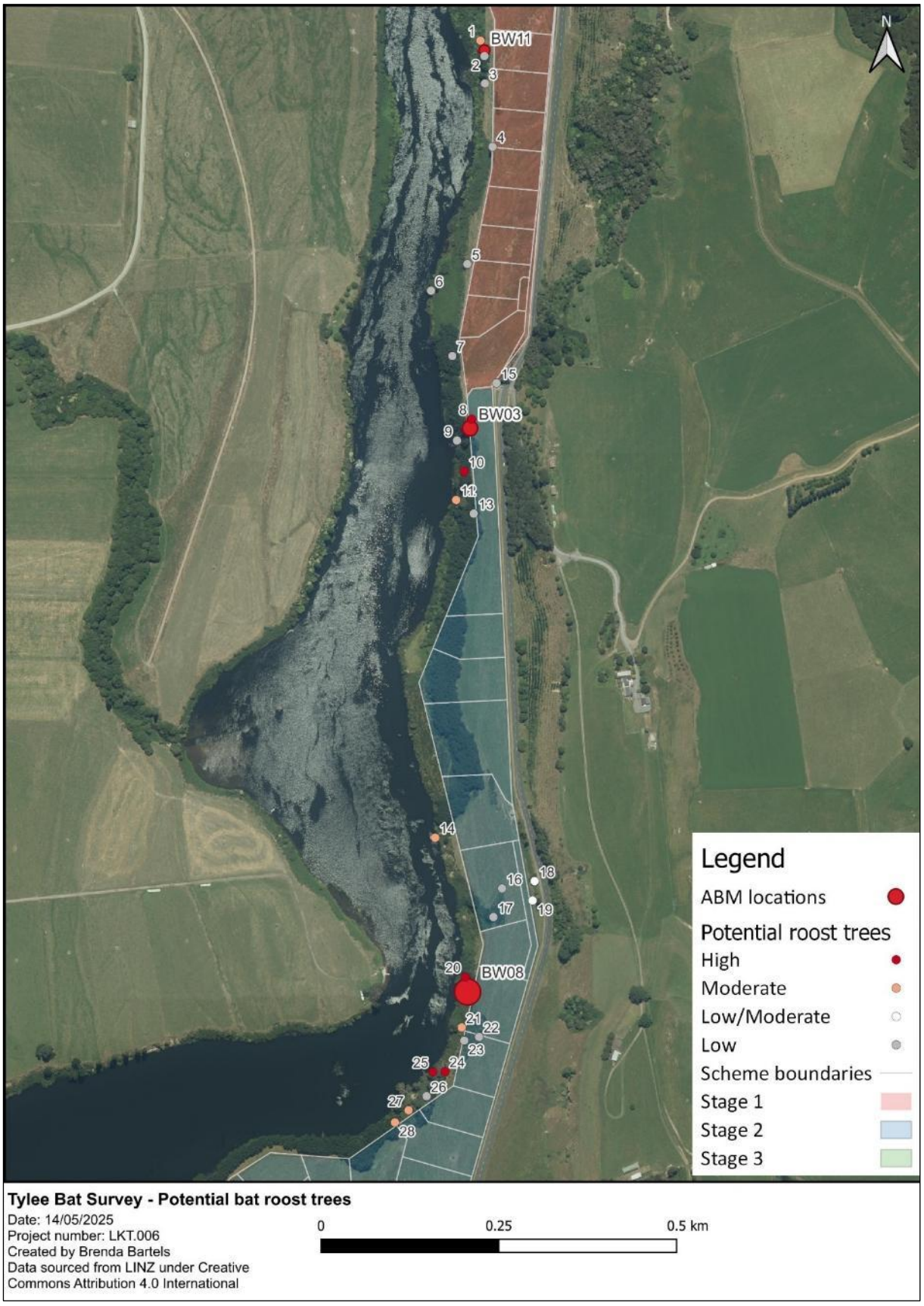
Euthanised bats or any dead bats (or bat parts) found must be handed to DOC and is a legal requirement under the Wildlife Act. If the bat is held for longer than 12 hours, store it in a food grade safe glass jar in the freezer to preserve the bat's smell for the potential use of training conservation dogs.

[17] Initial Veterinary Care for NZ Bats UPDATED 2023.pdf (doc.govt.nz) and Bat Care Advice for first responders 2023.pdf (doc.govt.nz) available at www.doc.govt.nz/bat-worker-resources

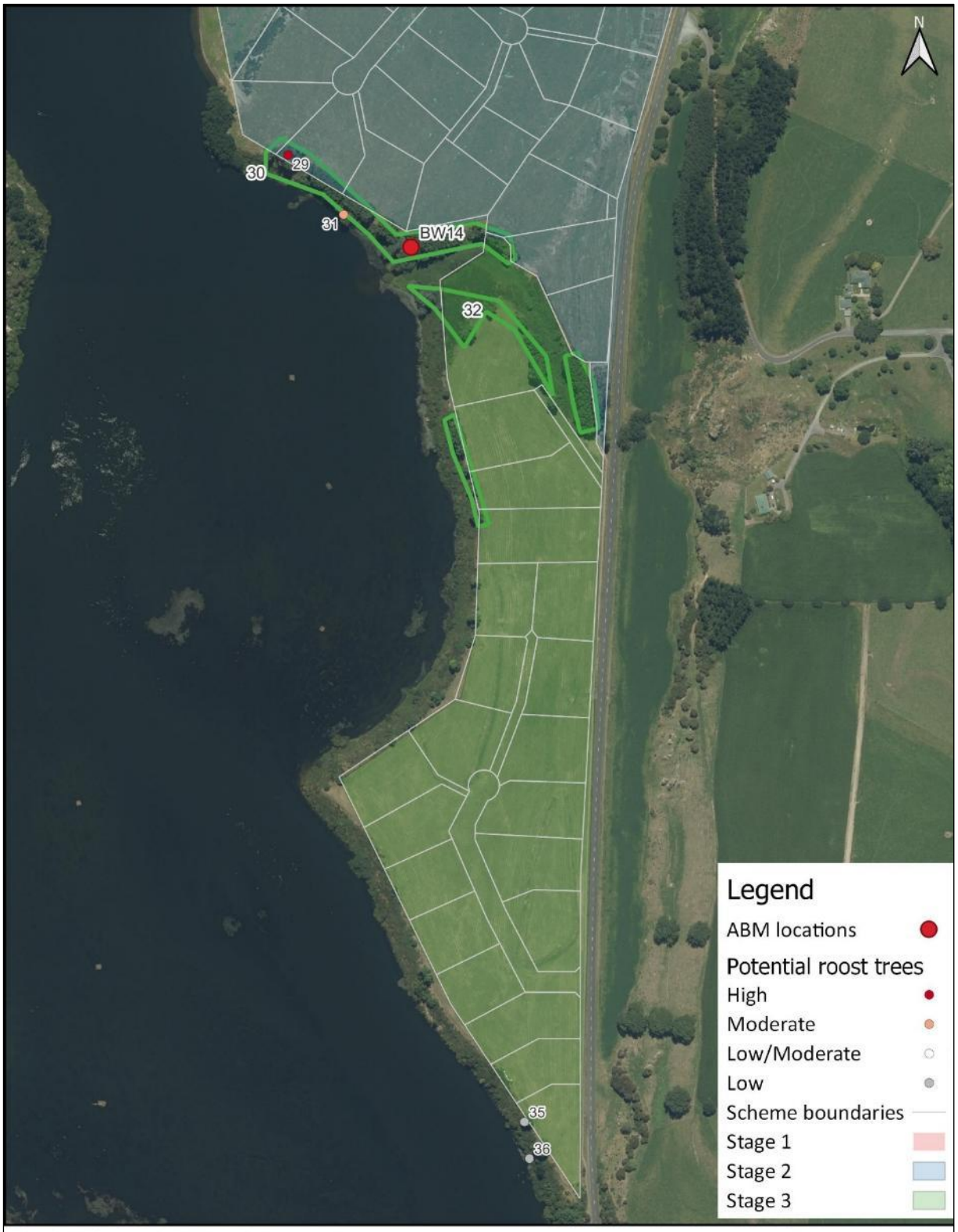
© Bluewattle Ecology

APPENDIX II – POTENTIAL BAT ROOST TREES INVENTORY

Summary of potential bat roost tree assessment at Hopuhopu.



© Bluewattle Ecology



© Bluewattle Ecology

ID	Tree Species	DBH (cm)	Description	Potential Bat Roost suitability	Pre-felling survey required
1	Pine	70	Pine with DHB of 70cm next to dead, fallen down pine	Moderate	N/A
2	Poplar	30-60	Cluster of 5 Poplars with a DBH between 30 and 60cm	Low	No
3	Pine	60	Standalone pine	Low	No
4	Poplar	50	Standalone poplar	Low	No
5	Poplar	20-60	Standalone poplar, multi trunks	Low	No
6	?	80-110	Multi trunk	Low	No
7	Poplar	15-40	x 20 poplars, 80% of poplars in this area have a DHB >15cm	Low	No
8	Pine	70	Standalone pine with broken branches	High	No
9	Pine	40	Standalone pine near water	Low	No
10	Pine	80	Standalone pine with broken branches	High	N/A
11	Pine	70		Moderate	N/A
12	Pine	70		Moderate	N/A
13	Poplar	15-50	5% of poplars in this area have a DHB >40cm	Low	No
14	Pine	50		Moderate	N/A
15	Poplar	60-80	x 2 near road	Low	No
16	Pine	30-60	x2 corner open paddock	Low	No
17	Poplar	60		Low	No
18	Australian blackwood	70	x 3 with one fallen down	Low/Moderate (road)	N/A
19	*Populus nigra 'Italica'*	15-80	Cluster of 2 multi trunk poplars, possible cavities but near road	Low/Moderate	N/A
20	Pine	90	Standalone pine with broken branches near water	High	N/A
21	Pine	60	x3 pines near water	Moderate	N/A
22	Pine	40-60	x2	Low	No
23	Pine	60	Pine surrounded by shrubs	Low	No
24	Pine	80	x2 pines (14/15) close together with broken branches, near the water	High	No
25	Pine	50	x2 pines (14/15) close together with broken branches, near the water	High	N/A
26	Pine	70	Standalone pine	Low	No

© Bluewattle Ecology

ID	Tree Species	DBH (cm)	Description	Potential Bat Roost suitability	Pre-felling survey required
27	Pine	80	Standalone pine next to dead tree with peeling bark	Moderate	N/A
28	Pine	70	Near the water surrounded by poplars	Moderate	N/A
29	Pine	80	Dead Pine	High	Yes
30	Poplar	80-120	x30 Poplars in this area with every single one being	Low/Moderate	N/A
31	Pine	40-70	x3 pines with 10m apart, all M	Moderate	N/A
32	Poplar	30-40	x10 plus dead pop in favourable gully location	Low/Moderate	Yes
33	Poplar	80-120	x10 poplars with 40m apart	Low/Moderate	Yes
34	Poplar	60-80	x10 poplars with 10m apart	Low	No
35	Poplar	60	Standalone poplar with young poplar shrubs	Low	No
36	Pine	>60	Standalone pine at the end of the property (no pic)	Low	No

© Bluewattle Ecology

APPENDIX III EXAMPLES OF NATURAL AND ARTIFICIAL BAT ROOSTS

TREES FOR HABITATS

the living tree company

Habitat creation in trees for the New Zealand environment.

Hollows occur naturally in the old grove forests, mature exotics and native trees around New Zealand, and provide an opportunity to encourage biodiversity in our environments.

Natural hollows are a direct result of physiological stress to the tree, when the heartwood is exposed to the environment. This can be caused by environmental factors, fungi, bacteria, insects, natural canopy reduction and age.

Pruning for Biodiversity

Hollows for habitat creation can also be encouraged by human intervention. Pruning for biodiversity is commonly done in Europe, America and Australia and is called habitat pruning, eco-pruning or fracture pruning.

These types of pruning involve simulating natural break-outs in the tree to leave natural-looking stumps and branch tear-outs.

The Oak below has been left in Auckland Domain and is a great example of how declining trees can be an asset in speeding up the senescence in a tree and encouraging decaying wood to harbour a bigger biodiversity.



Auckland Domain, Oak.



Natural hollow in a Kauri

FACTORS TO CONSIDER WHEN CREATING HABITATS:

- **Various entrance hole and cavity sizes which will determine the different types of wildlife that might use them**
- **Protection from predators and pests**
- **Light minimisation for nocturnal wildlife**
- **Drainage**
- **Association with food crops**
- **Introduction of guano to encourage roosting sites**
- **Use of a vegetable oil as lubrication for your chainsaw bar**
- **Protection against prevailing wind and weather**

© Bluewattle Ecology

TREES FOR HABITATS

the living tree company

Habitat Creation in Trunk Wood

By chainsawing into the heartwood, habitats can be customised for numerous wildlife species. Here is an example of habitats we created for the long-tailed bat in standing trunks. (This requires good chainsaw knowledge as many of the cuts use the tip of the bar and can promote dangerous kickback.)

LONG-TAILED BAT HABITAT:







1. Cut into the trunk horizontally with two cuts at the desired height. Bore cut the face plate out.

2. Bore into the wood and make the chosen number of chambers. Cut the chambers into a fork-shaped pattern with the horizontal cut meeting the entrance hole (as shown in the picture). The entrance needs to be on a slope so it works as drainage. The size of the sloping entrance should be 17–21mm for long-tailed bats. Make sure the chambers are smaller than the face plate so that the hollow will be sealed.

3. Drill into the face plate and then screw the face plate back on to the wood.

Pest Proofing

Pest proofing the tree is important. On the trunk of the tree, below where the habitat is to be created, it is a good idea to mound around the tree's circumference a metal, aluminium or plastic sheath that predators cannot climb above. We tend to use polycarbonate joined with aluminium as it does not visually degrade the integrity of the tree as much. Make sure to prune neighbouring trees well clear of the host tree as possums can easily jump from one tree to another. For living trees, the pest guard needs to be revisited and checked to allow the expansion of the trunk.


Pest Guard

PEST GUARD EXAMPLE

1. Measure the tree and cut out the polycarbonate (60mm wide) with a 20mm overlap for joining with the aluminium bracket.

2. Drill into the aluminium and make three holes. Match up the middle hole with the plastic and drill into the plastic.

3. Tape the plastic tight to the tree and insert the aluminium bracket underneath the plastic.

4. Pop rivet the middle hole through the aluminium bracket and plastic.

5. Pull the plastic together and match up the top and bottom drill holes in the plastic and the aluminium bracket. A piece of wood could come handy to make sure there is no drilling into the tree.

6. If the tree has a natural taper, the guard can be moved downwards to get it as tight as possible.

Human-made constructions

Human-made constructions are also an alternative. Here is a bat house made for long-tailed bats; there are endless ways to make them and numerous materials that might be used. These constructions could harbour any type of wildlife depending on construction type.



© Bluewattle Ecology

TREES FOR HABITATS

the living tree company

Relocation of Habitats

Relocation of habitats is sometimes required. For example, relocation would be needed in tree failures or trees that are condemned for removal. The tree wood containing the habitat can be safely lowered to the ground by rigging and can be re-erected onto living trees. With the help of familiar pheromones, the wildlife could have a better chance of finding their way to the new roosting site. This has been shown to be successful for bats in the UK and we are now making trials in New Zealand and are excitedly awaiting results.

Many trees are being removed to ground level in urban environments due to factors such as:

- Changes in RMA
- Urban development
- Diseases and pests, such as Kauri Dieback, Dutch Elm and Cypress canker
- Declining and dying trees for public and structural safety
- Landscaping trends and poor knowledge.

By using some of the techniques discussed in this text, we could enhance biodiversity by leaving trunks as new habitats and still ensure safety for the public.

"We should always remember that the description 'dead wood' implies a static state, without consideration for the process of decay and the diversity of lifeforms involved." *(Andrew Cowan)*.

the living tree company
ENVIRONMENTAL, CLIMBING AND TREE CARE SERVICES

REFERENCES

Bat Conservation Trust. (n.d.) Retrieved from http://www.bats.org.uk/
Cowan, Andrew. (n.d.) Decaying wood recycling within arboreal ecosystems. EssentialARB, Issue 8, Spring 2003.
Fay, Neville. (April 2003.) Natural Fracture Pruning Techniques. Retrieved from http://www.treeworks.co.uk/downloads/8%20-%20Coronet%20cuts%20&%20retrenchment%20pruning%2017%20April%202003.pdf
Gibbons, Phillip & Lindenmayer, David. (2002). Tree Hollows and Wildlife Conservation in Australia. Vic, Australia: CSIRO Publishing. ISBN 0-643-06705-1.
VTIO Victorian Tree Industry Organisation Habitat Creation Paper-13/09/2010. Retrieved October 15, 2014 from http://vtio.org.au/downloads/

With thanks to:
Gerard Kelly, ProjectEcho | Gerry Kessels, Kessels Ecology
Hannah Mueller, Waikato University | Josh Guilbert, Auckland University
Scott Forest, Contract climber.

ALL PHOTOS © FREDRIK HJELM, THE LIVING TREE COMPANY.

Revegetation

For revegetation we could also apply some of these techniques to use in existing exotic trees. We might also use fast-growing exotic trees that could be transformed into desirable nesting spots to harbour many species essential to our ecosystem before the native trees reach their maturity.
As one tree species might be a problematic weed in Auckland but considered a specimen tree in the Waikato, it pays to talk to local Arborists, council, DOC or environmental organisations.

Some Factors to consider are:

- Will these trees become a weed infestation?
- What would you like to attract—invertebrates, birds or bats?
- Could the temporary exotic tree be easily be killed off after a desired period of time?
- Heavy fruiting and flowering could work as a food crop for birds but also pests.
- Will they naturally be good species to create hollows?
- What has been used in other projects around your area?

ABOUT THE LIVING TREE COMPANY

The Living Tree Company is an Auckland-based environmental arborist company with a passion for maintaining and improving New Zealand's unique natural environment. We are currently taking part in various trials for habitat creation and other ecological and arboreal projects. We believe the more work we do together the bigger and stronger the impact we can have. Please contact us with any enquiries or to share information.

This is an introduction to habitat creation in trees for the New Zealand environment. The text is prepared from an arboricultural standpoint and is to be used as an introductory discussion for ecologists.

CONTACT:
Fredrik Hjelm | 027 726 7382
info@thelivingtreecompany.co.nz
www.thelivingtreecompany.co.nz

APPENDIX E

LANDSCAPE MASTER PLAN, DATED JUNE 2026



Boffa Miskell

HORAHORA ROAD SUBDIVISION

LANDSCAPE MASTERPLAN

JUNE 2026

TOITŪ CARBON ZERO ISO 14064-1 ORGANISATION

Boffa Miskell is proudly a
Toitū carbonzero® consultancy

DOCUMENT QUALITY ASSURANCE

BIBLIOGRAPHIC REFERENCE FOR CITATION:

Boffa Miskell, 2026. Horahora Road Subdivision Landscape Masterplan. Report by Boffa Miskell Limited for Kevin and Lynn Tylee.

PREPARED BY:		
	Yeseul Kang Landscape Architect, Graduate Boffa Miskell Ltd	
	Tim Utteridge Landscape Architect, Senior Professional Boffa Miskell Ltd	
REVIEWED BY:	Rebecca Ryder Landscape Architect, Senior Principal Boffa Miskell Ltd	
STATUS: FINAL	Revision: E	Issue date: June 2026

File ref: BM221166_Horahora_Road_Subdivision_Landscape_Masterplan_20260618

Cover photograph: Site © Jo Soanes, 2023

CONTENTS

LANDSCAPE DESIGN INTENT	**4**
INTRODUCTION	4
SCOPE	4
CONTEXT - BROAD	**5**
CONTEXT - SITE SPECIFIC	**6**
LANDSCAPE MASTERPLAN	**7**
STAGE 1	8
STAGE 2	9
STAGE 3	10
LOOK AND FEEL	**11**
CONNECTIVITY	**12**
OPEN SPACE	**13**
LANDSCAPE PLANTING STRATEGY	**14**
LANDSCAPE PLANTING ZONES	**17**
LOT DESIGN - BUILT FORM	**19**
LOT DESIGN - COLOUR + MATERIAL	**20**
LOT DESIGN - SITE	**21**
LOT DESIGN - DESIGN GUIDELINES APPROVAL PROCESS	**22**

LANDSCAPE DESIGN INTENT

INTRODUCTION

The Landscape Masterplan (LMP) applies to the 83 lot subdivision of Lot 1 DPS 21946 Horahora Road, Arapuni, Putāruru.

This LMP responds to the unique characteristics of the site and the wider environmental overlays in order to ensure effects of the subdivision layout, future building design and mitigation planting are less than minor.

The LMP provides building design guidelines, and the methods for implementation and maintenance of mitigation works. Managing the development of each house site and planting is critical to the integration of the development with the natural and surrounding environment. Mitigation planting will take several years of implementation and intensive maintenance before it provides the full extent of its intended mitigation.

SCOPE

The landscape design concept includes:

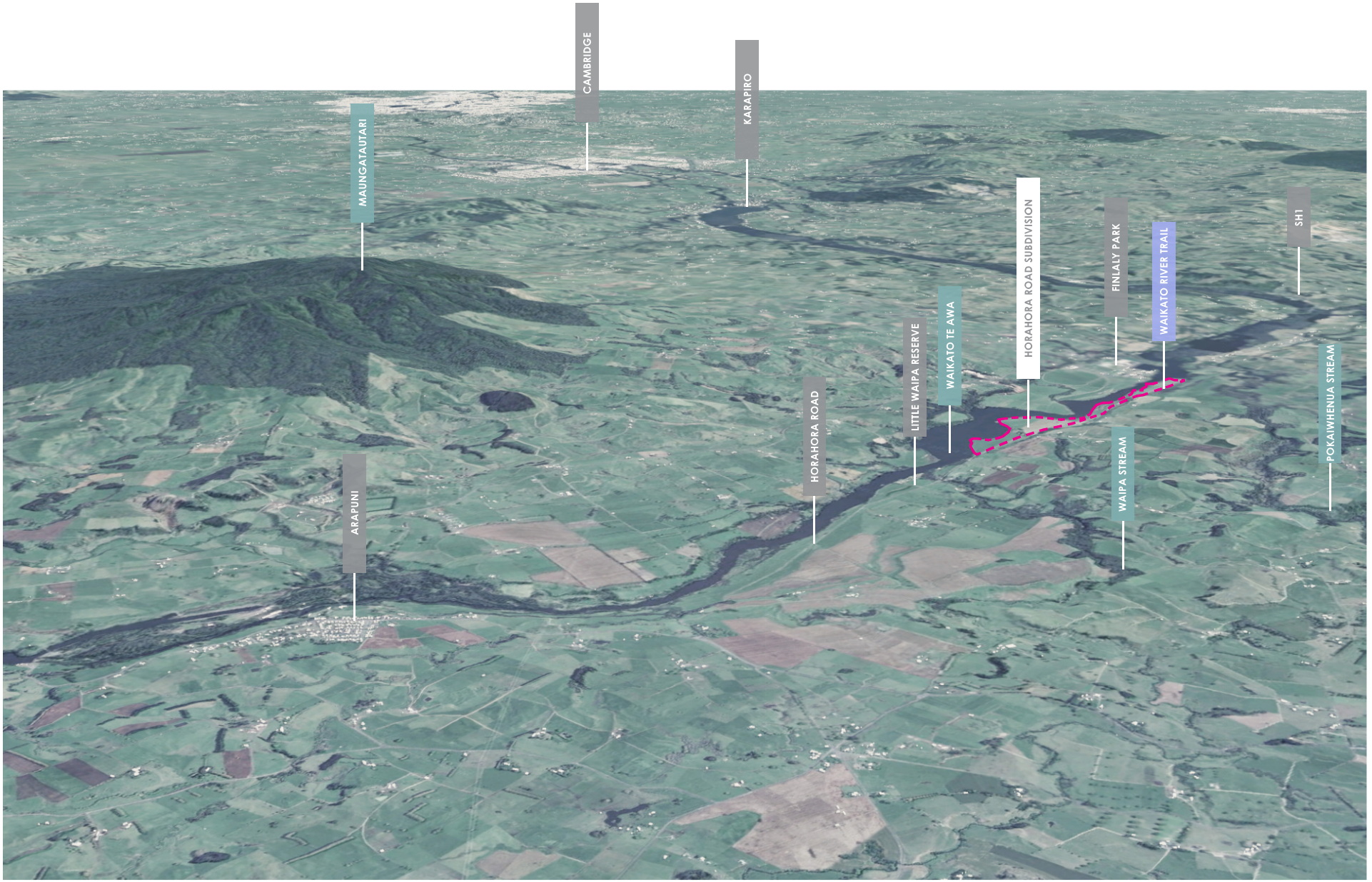
- Site Context
- Landscape Masterplan - Stage 1, Stage 2, and Stage 3
- Look and Feel
- Connectivity
- Open Space
- Landscape Planting Strategy
- Lot Design

The preparation of the Landscape Masterplan has been the result of collaboration with the wider design team including the disciplines of Planning, Landscape Planning, Ecology, Stormwater, Transport, and Civil Engineering.

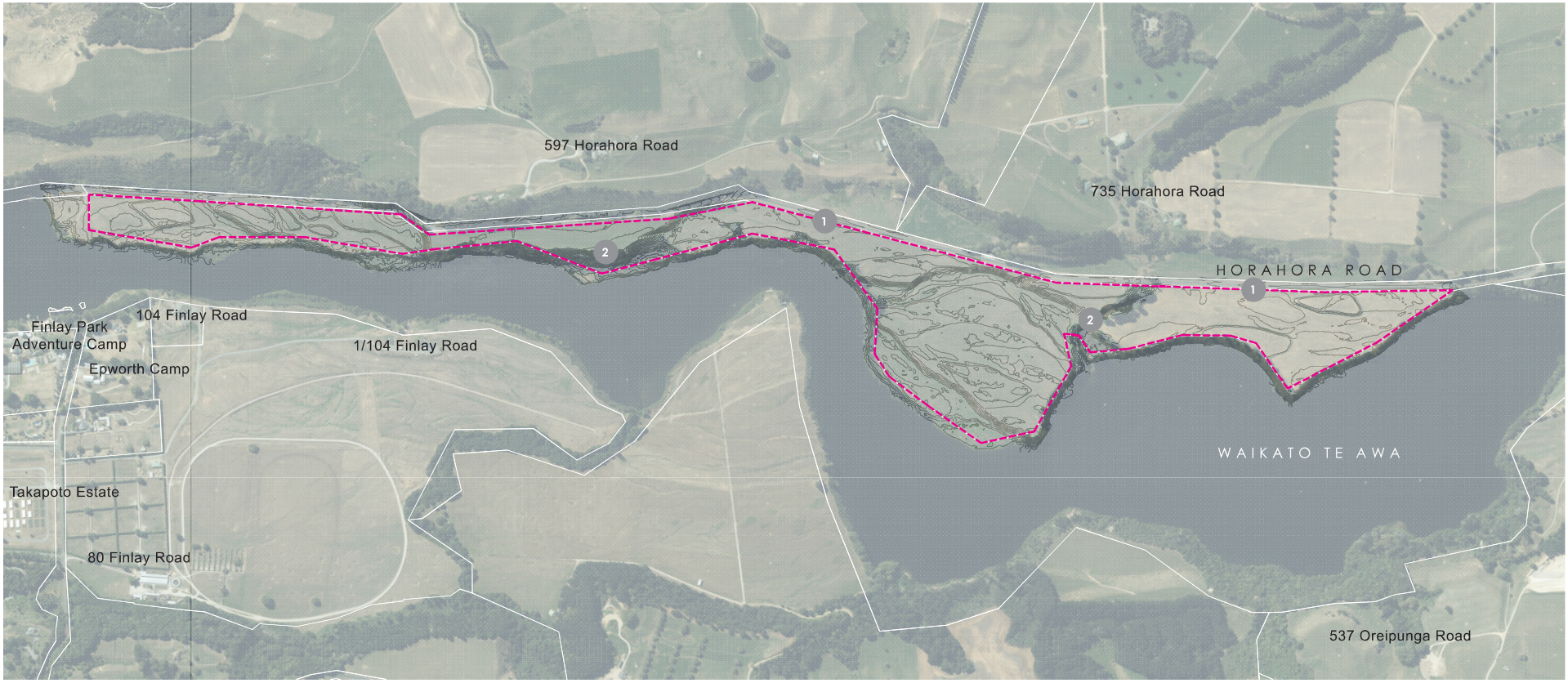
The report is to be read in conjunction with the Landscape and Visual Effects Assessment, and other specialist reports including Earthworks, Stormwater for swale and wetland design requirements, and Ecological Impact Assessment for specific ecological mitigation such as bats and gully restoration.



CONTEXT - BROAD



CONTEXT - SITE SPECIFIC



KEY

- Site Boundary
1. Existing Accessways
2. Existing Gully

SCALE 1:10,000 @ A3

LANDSCAPE MASTERPLAN



KEY

- Site Boundary
- 10m Esplanade Strip

SCALE 1:10,000 @ A3

LANDSCAPE MASTERPLAN

STAGE 1



KEY

- Stage Boundary
- 10m Esplanade Strip

Landscape Planting

- Horahora Road Boundary Interface Planting
- Site-wide Mitigation Planting
- Clusters of Native Trees
- On-lot Planting

1. Proposed Accessways
2. Existing Gully

Planting & Natural Feature Protection

3. Planting & Natural Feature Protection Areas
4. Ecological Reserve
   Planting in accordance with the Ecological Management Plan (EMP)
5. Existing Wetland

Connectivity

6. Waikato River Trail
7. Proposed Cycleway
8. Proposed Walkway

Open Space

9. Recreational Reserve

SCALE 1:5,000 @ A3

LANDSCAPE MASTERPLAN

STAGE 2



KEY

Stage Boundary

10m Esplanade Strip

Landscape Planting

Horahora Road Boundary Interface Planting

Site-wide Mitigation Planting

Clusters of Native Trees

On-lot Planting

1. Proposed Accessways
2. Existing Gully

Planting & Natural Feature Protection

3. Planting & Natural Feature Protection Areas
4. Ecological Reserve
   Planting in accordance with the Ecological Management Plan (EMP)
5. Existing Wetland

Connectivity

6. Waikato River Trail
7. Proposed Cycleway
8. Proposed Walkway

Open Space

9. Recreational Reserve

SCALE 1:5,000 @ A3

LANDSCAPE MASTERPLAN

STAGE 3



KEY

Stage Boundary

10m Esplanade Strip

Landscape Planting

Horahora Road Boundary Interface Planting

Site-wide Mitigation Planting

Clusters of Native Trees

On-lot Planting

1. Proposed Accessways
2. Existing Gully

Planting & Natural Feature Protection

3. Planting & Natural Feature Protection Areas
4. Ecological Reserve
   Planting in accordance with the Ecological Management Plan (EMP)
5. Existing Wetland

Connectivity

6. Waikato River Trail
7. Proposed Cycleway
8. Proposed Walkway

Open Space

9. Recreational Reserve

SCALE 1:5,000 @ A3

LOOK AND FEEL

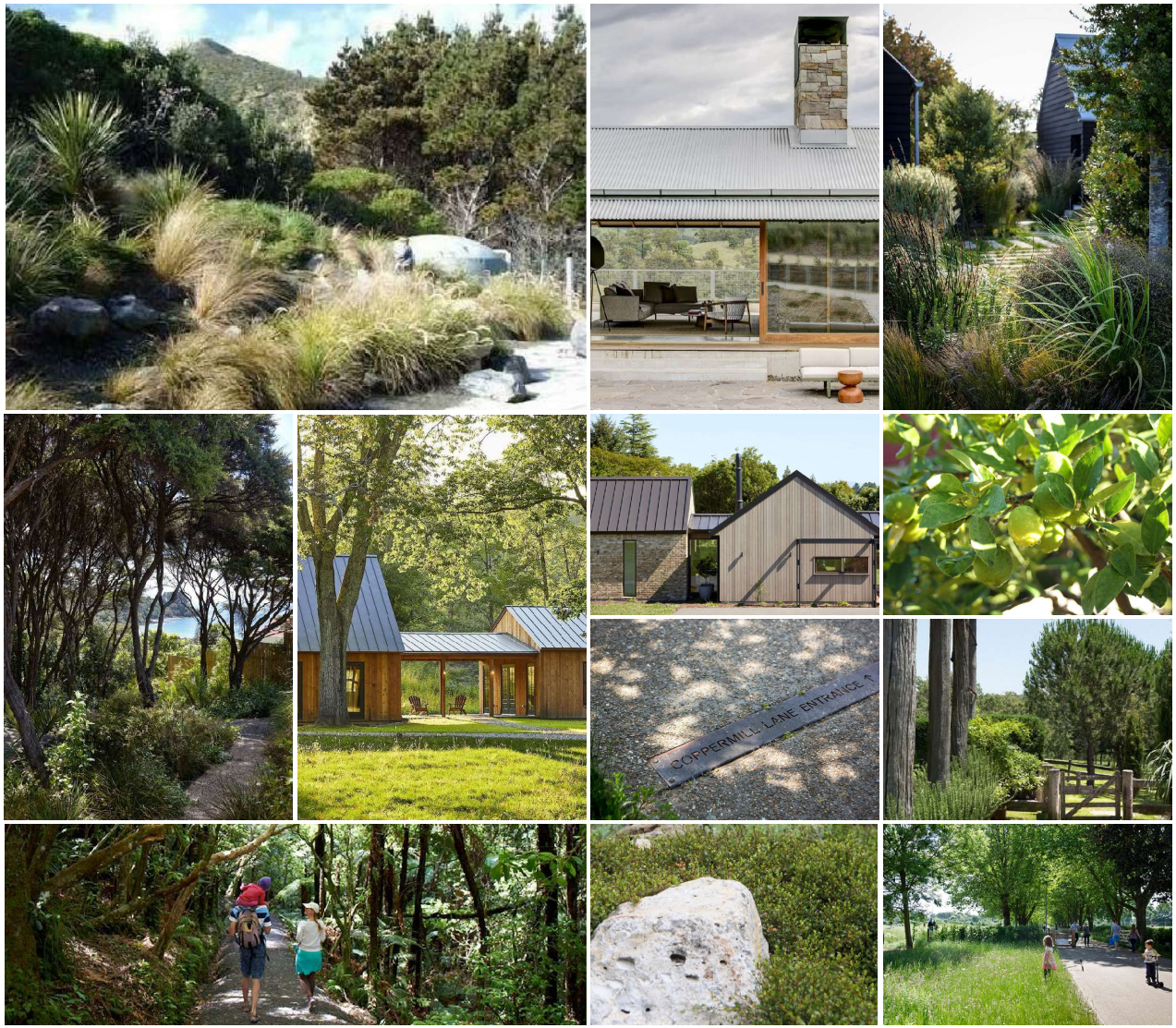
The look and feel of the subdivision is characterised by a natural palette of materials with recessive tones, architectural form drawing inspiration from modest vernacular forms complementary to the rural riverside setting and a native plant palette endemic to the river terraces.

The development celebrates nature and local context through considered design of both built form and landscape mitigation measures embodying the patterns and look and feel of the surrounding rural landscape. Planting has been carefully placed to maintain the beautiful views to the surrounding river, farmland and Maungatautari Mountain beyond.

The native vegetation cover is required to be managed in perpetuity and encouraged to grow to its natural height and form. Planting should be organic in shape and form and avoid straight unnatural lines within the landscape.

Quality materials should be used in the construction of all facets of the houses, fences, walls, and landscape features to ensure durability and functionality. Retaining walls and cut banks should be sympathetic to the land, stepped and follow the natural landform and contours. Retaining walls should be made from natural earth, timber, or local stone materials.

Point Wells Garden by Andy Hamilton Studio



Precedent Projects

CONNECTIVITY

WALKING AND CYCLING

A series of interconnected trails and way-finding are proposed for recreational access for walking and cycling and will link to the Te Awa River Ride.

The multi-purpose Waikato River Trail stretches more than 60 kilometres along the Waikato River, from Ngaruawahia in the north to Karapiro, Horahora and Arapuni in the south.

MITIGATION AND ECOLOGICAL PLANTING

Existing vegetation and habitats should be protected and connected across the subdivision with ecological and site-wide mitigation planting. A native plant palette has been carefully selected to re-establish local biodiversity, identity and connection to place. The planting will provide a strong visual and ecological connection to Maungatautari.

RURAL CHARACTER AND AMENITY VALUES

To maintain rural character and countryside living amenity values pathways should be a combination of compacted gravel, mown meadow, board-walk and natural stone steppers. Non-permeable surfaces should be kept to a minimum.

Infrastructure, services and facilities should be shared wherever possible to reduce unnecessary duplication or development. For example shared driveways, lanes and wastewater treatment systems.

Kerb and channel can be considered to be an urbanising element and is therefore not preferable in rural developments. Wherever possible grassed swales should be used for stormwater management.

Property boundaries should be demarcated by visually permeable post and rail fences or wire and batten fences allowing views across the open countryside.

Entrance ways should be low key so that they integrate with the visually permeable fence lines and allow views across the open countryside. The size, form and style of the entrance way should be carefully considered. Entrance ways should be designed and constructed in a more traditional manner and of traditional materials such as timber or stone.





Precedent Projects

OPEN SPACE

STRATEGY
Open spaces contribute to communities, enhance people's quality of life and access and engagement with nature, and preserve and protect the natural environment. The masterplan ensures that amenity values associated with countryside living are maintained through the protection of open space, views and existing landscape patterns.

RECREATIONAL RESERVE
The location of the Recreational Reserve along the river allows for people to connect with the river and wider landscape. The reserve is characterised by large open fields for informal play and access to the river, framed by tracts of native vegetation and rural amenity planting. Picnic areas under the shade of tree canopies provide spaces for neighbours and visitors to gather and supervise children's play.

ECOLOGICAL ENHANCEMENT RESERVES
Connecting these areas to each other helps build the wider ecological network and allows indigenous fauna to move more easily between habitat areas.



Open Space
13. Recreational Reserve



Precedent Projects

LANDSCAPE PLANTING STRATEGY

STRATEGY

The landscape planting strategy guides native restoration and enhancement planting in areas that need it most and ensures that existing ecological systems, including areas of native bush, waterways and their riparian margins are protected, ecological links are enhanced or created and steep or eroding slopes are stabilised and planted.

Mitigation planting around building sites will provide screening and softening of structures and create shelter and private space. Planting should follow the contours and be responsive to the shape of the land. This helps avoid the creation of sudden changes in patterns along property boundaries that do not fit in with the natural landscape patterns.

The native plant palette has been selected to re-establish local biodiversity, identity and connection to place. Multiple vegetation 'tiers' are proposed from herbaceous plants, shrubs, canopy, and emergent trees to form diverse habitat niches. Flowering and fruiting species will extend the food supply for native fauna across the seasons.

LANDSCAPE PLANTING ZONES

The planting consists of six planting zones: Planting & Natural Feature Protection Areas; Ecological Reserve Planting; Horahora Road Boundary Interface Planting; Site-wide Mitigation Planting, On-Lot Amenity Planting and Clusters of Native Trees.

Each Planting & Natural Feature Protection Area is important in contributing to the landscape identity and ecological diversity of the site and wider region and should be protected in perpetuity.

Planting in the Ecological Reserves should be in accordance with the Ecological Management Plan (EMP).

IMPLEMENTATION AND LONG TERM MAINTENANCE AND MANAGEMENT PLAN

As part of the consent conditions a detailed Landscape, Visual Amenity and Mitigation Planting Plan (LVAMPP) will be developed. This be developed in consultation with Ecologist's and Mana Whenua.

The objectives of this plan are to ensure the appropriate integration of the proposed subdivision into the receiving environment. This involves the appropriate design, implementation and management of built form and mitigation planting in order to ensure adverse effects upon the receiving environment are minimised and appropriate.

The LVAMPP will include the following:

- Plant Propagation and Supply
- Site Preparation
- Planting, Quality Control, Inspections, and Reporting
- Maintenance and Monitoring





Precedent Projects

LANDSCAPE PLANTING ZONES

HORAHORA ROAD BOUNDARY INTERFACE PLANTING



Precedent Project

Shrubs - Over 2.0m

1. Coprosma propinqua (mingimingi)
2. Coprosma robusta (karamū)
3. Olearia rani (heketara)
4. Pittosporum tenuifolium (kōhūhū)
5. Pseudopanax arboreus (puahou)
6. Schefflera digitata (patete)

Shrubs - Under 2.0m

7. Brachyglottis repanda (rangiora)
8. Coprosma rhamnoides (twiggy Coprosma)

Herbs and Grasses

9. Austroderia fulvida (toetoe)
10. Phormium cookianum (whaririki)

LANDSCAPE PLANTING ZONES

SITE-WIDE MITIGATION PLANTING AND ON-LOT PLANTING



Precedent Project

Trees

1. Alectryon excelsus (tītoki)
2. Aristotelia serrata (makomako)
3. Beilschmiedia tawa (tawa)
4. Cordyline australis (tī kouka)
5. Elaeocarpus dentatus (hīnau)
6. Hoheria sexstylosa (houhere)
7. Knightia excelsa (rewarewa)
8. Kunzea robusta (kānuka)
9. Leptospermum scoparium (mānuka)
10. Plagianthus regius (mānatu)
11. Sophora microphylla (kōwhai)

Shrubs - Under 2.0m

12. Brachyglottis repanda (rangiora)
13. Coprosma rhamnoides (twiggy Coprosma)

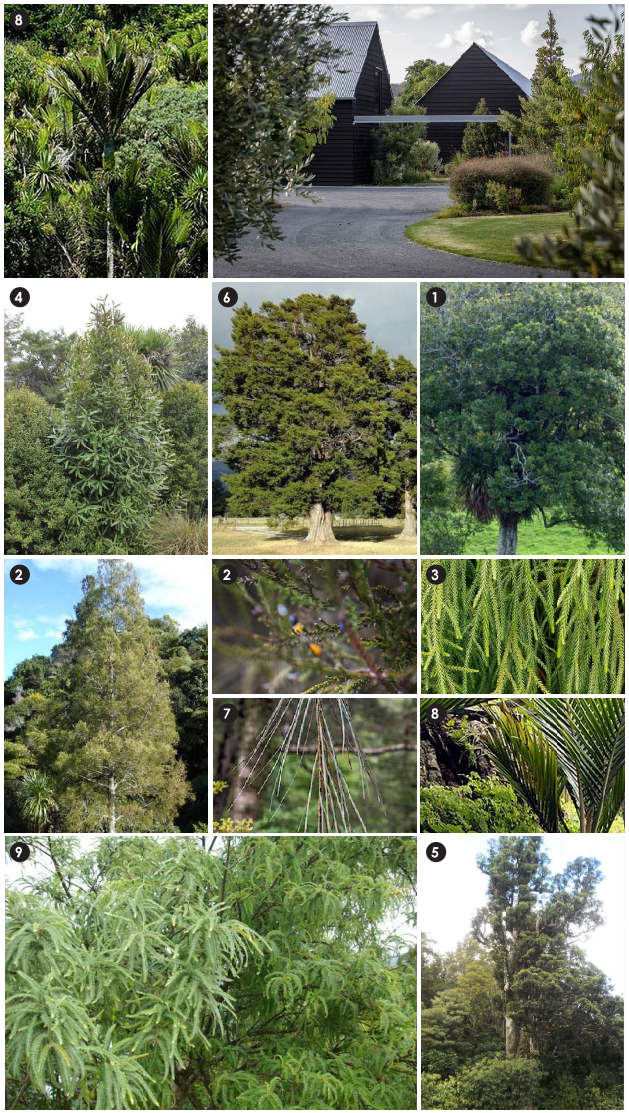
Shrubs - Over 2.0m

14. Coprosma propinqua (mingimingi)
15. Coprosma robusta (karamū)
16. Olearia rani (heketara)
17. Piper excelsum (kawakawa)
18. Pittosporum tenuifolium (kōhūhū)
19. Pseudopanax arboreus (puahou)
20. Schefflera digitata (patete)
21. Veronica stricta (koromiko)

LANDSCAPE PLANTING ZONES

CLUSTERS OF NATIVE TREES

Point Wells Garden by Andy Hamilton Studio



Precedent Project

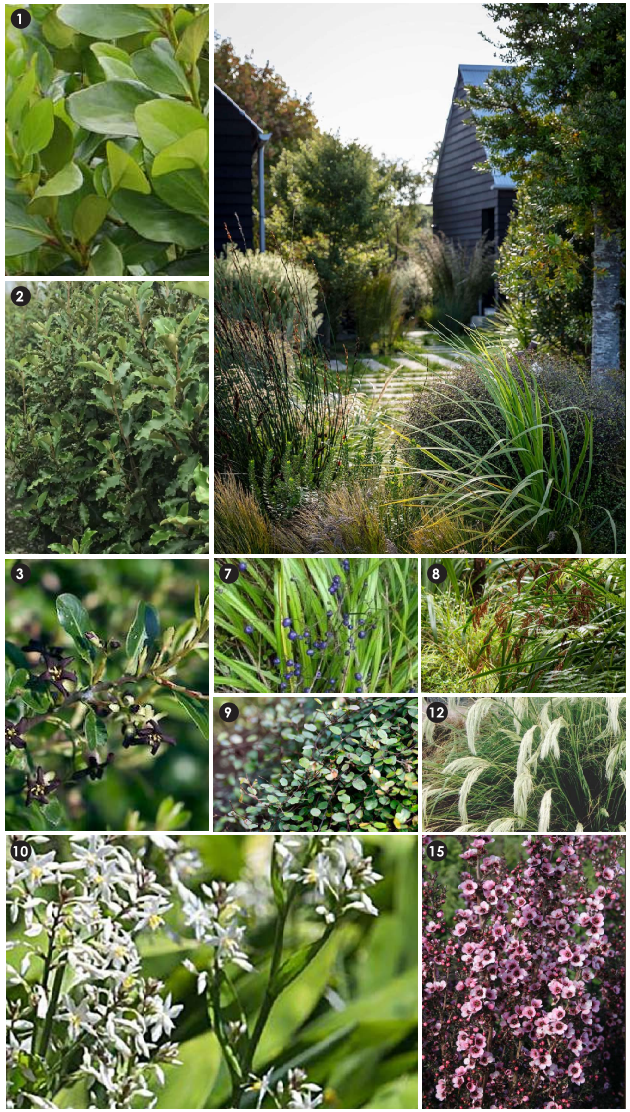
Trees

1. Alectryon excelsus (tītoki)
2. Dacrycarpus dacrydioides (kahikatea)
3. Dacrydium cupressinum (rimu)
4. Knightia excelsa (rewarewa)
5. Laurelia novae-zelandiae (pukatea)
6. Podocarpus totara (tōtara)
7. Pseudopanax crassifolius (horoeka)
8. Rhopalostylis sapida (nīkau)
9. Sophora microphylla (kōwhai)

LANDSCAPE PLANTING ZONES

AMENITY PLANTING

Point Wells Garden by Andy Hamilton Studio



Hedge planting

1. Griselinia littoralis (kāpuka)
2. Olearia paniculata (akiraho)
3. Pittosporum tenuifolium (kōhūhū)

Amenity planting (Mix 1)

4. Austroderia fulvida (toetoe)
5. Cordyline australis (tī kouka)
6. Phormium cookianum (whaarikī)

Amenity planting (Mix 2)

7. Dianella nigra (tūrutu)
8. Machaerina sinclairii (pēpepe)
9. Muehlenbeckia axillaris (pōhuehue)

Amenity planting (Mix 3)

10. Arthropodium cirratum (rengarenga)
11. Carex virgata (pūkio)
12. Chionochloa flavicans (tussock)
13. Lobelia angulata (pānakenake)

Amenity planting (Mix 4)

14. Leptospermum scoparium ‘Wiri Donna’ (mānuka cultivar)
15. Leptospermum scoparium ‘Wiri Sandra’ (mānuka cultivar)
16. Muehlenbeckia astonii (tororaro)
17. Pseudowintera colorata (horopito)

LOT DESIGN - BUILT FORM

OBJECTIVE

To design the buildings to reduce the visual prominence they may have within the landscape, and to review the landforms surrounding the site, and design buildings that respond to the natural and cultural patterns of the landscape.

The design, visual quality, and character of the interface between the house and the site's river frontage is of key importance.

OUTCOMES

Design Controls

Houses shall be designed to positively address the street, front doors and indoor living areas shall have a relationship with the street. Windows from living areas shall be included in the front of each house and shall face the street.

Relationship Between Adjoining Buildings

When designing a new house, there should be a consideration of the relationship with any existing neighbouring houses (if applicable). The relationship between the living area, windows, doorways, and house frontages should be taken into account.

This holistic design approach will ensure that potential negative design outcomes will be avoided.

Impact on neighbouring properties shall be reduced by incorporating design techniques such as modulating mass and scale.

All buildings shall be single storey or split level buildings that are no more than 6.0m above the subdivision development ground level.

River and Gully Frontages

The Waikato River and gully network within the subdivision is a key natural feature, which are to be protected and enhanced as part of the subdivision lot development.

- No garages, water tanks, or other vertical infrastructure shall be located or visible from the river or gully frontages.
- There is a preference for open frontages facing the river and gully spaces, however where fencing is required a maximum 1.2m high post and rail or post and wire/netting fence is to be used.
- Use of dark-tinted glass is required. Mirror glazing is not permitted.

Architectural Design

Roof Form

The following roof designs are permitted:

- Gable end roofs.
- Combination gable and hip roofs.
- Mono-pitch roofs.
- Full hip roofs are permitted, but must incorporate roof feature elements or height variations on key frontages.

The following roof designs are not permitted:

- Flat roofs.
- Full hip roofs with no feature or height variation.

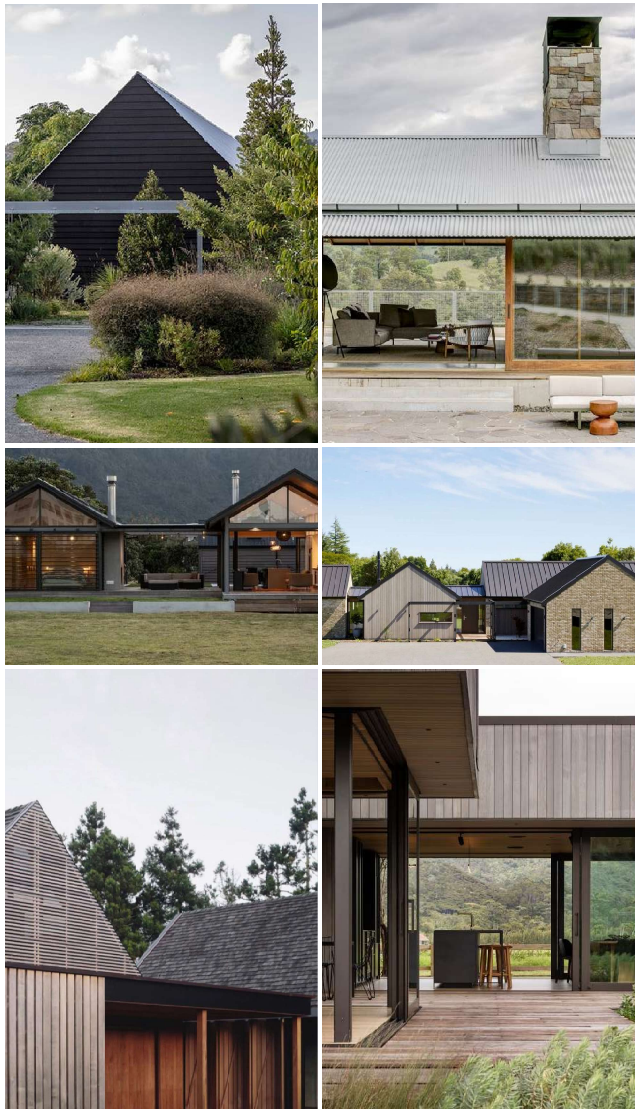
Roof Materials

The following roof materials are permitted:

- Corrugated profile pre-painted steel roofing (e.g., Colorsteel®, Metalcraft Roofing, or similar).
- Tray and trapezoidal profile pre-painted steel roofing (e.g., Colorsteel®, Metalcraft Roofing, or similar).
- Selected pre-formed steel roof tiles (flat profile only).
- Flat profile concrete roof tiles (Monier Horizon™ or similar).
- Natural quarried slate roof tiles.
- Cedar shingles.
- Fibre-cement roof tiles.

The following roof materials are not permitted:

- All scalloped profile concrete or clay roof tiles.
- Decramastic roof tiles.



LOT DESIGN - COLOUR + MATERIAL

Wall Cladding Materials

The following materials are permitted:

- Smooth plastered, concrete panel systems (e.g., Celcrete®, or similar) or brick only.
- Traditional-style pointed and painted brick.
- Painted timber or Linea® weatherboard.
- Vertical natural cedar timber.
- Board and batten (must be stained or painted in approved colours).
- Natural stone.
- Large format, light coloured, straight-edged brick (e.g., Premier™ Country Brick, or similar).
- Tray and trapezoidal profile pre-painted steel.

The following materials are not permitted:

- All other brick cladding.
- All corrugated profile metal wall cladding.
- Flat panel cladding systems (e.g., Axon™, Stria™, Titan™ or similar).

Natural timber or pre-coloured aluminium doors and windows are to be used. The following aluminium joinery and door colours are permitted:

- Matt Black.
- Dark Grey / Charcoal / Ironsand.
- Light Grey / Ghost Grey / Sandstone Grey.
- Karaka.
- Titania.

Material Combinations

Two to three complementary cladding materials are to be used per house. The front façade cladding shall be applied in a ratio of 1:3, however brick cladding is not to exceed 50 percent of any publicly visible frontage.

OBJECTIVE

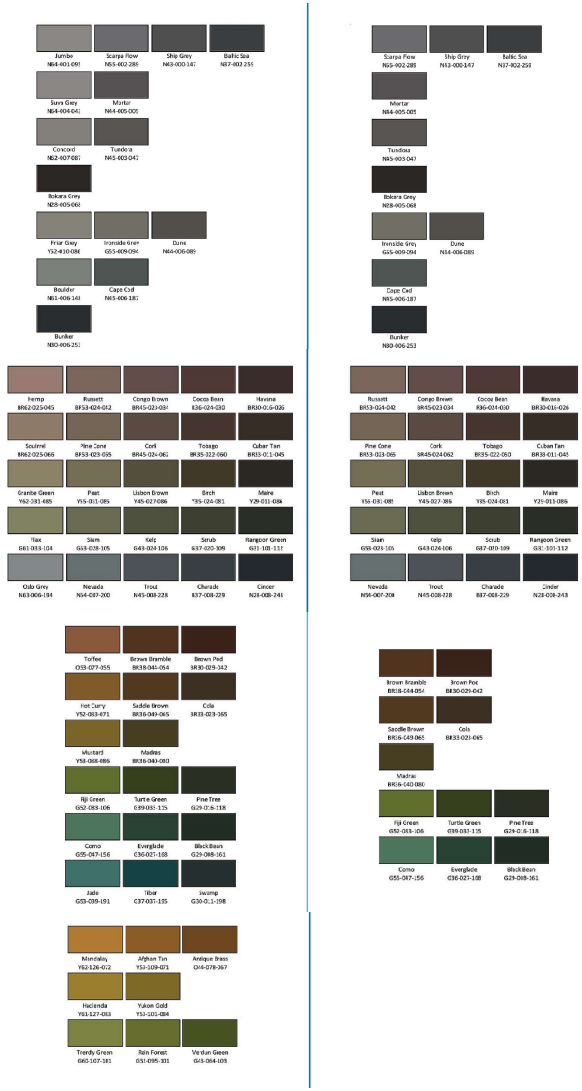
To design the building to reduce the visual prominence it may have within the landscape through the use of recessive building colours and materials sympathetic to the colours of the surrounding landscape.

OUTCOMES

- Select materials that respond to the natural landscape and native vegetation.
- Roofing materials shall be a recessive colour with a reflectance value of no greater than 20%.
- Design buildings that use natural materials including natural stone, timber, concrete, and cladding that has a reflectance value of less than 30% for walls, and less than 20% for roofs.
- Select colour palettes that have a reflectance value of less than 20% for roofs, and less than 30% for walls (Refer to the Resene British Standard 5252 Range as a guide only. All colours and materials must be approved).
- Use natural material finishes such as stone and timber which will weather naturally.
- Apply dark oxide colouring to concrete materials to reduce the reflectivity of the material.
- Timber cladding and other natural elements (stone) naturally weathered or stained dark.
- Painted timber, block-work, or other materials may be used and must contribute to receding the building into the landscape.
- The reflectance value of surfaces, including joinery, gutters, downpipes, cladding, and roofing materials shall be no greater than 30% for walls, and no greater than 25% for roofs.

Avoid

- Materials that are smooth and create a high level of reflectivity.
- Extensive use of materials that are dominant in the urban environment (e.g., brick and tile, plastered finishes). Some use is suitable but balanced with the selection of materials and colours that are responsive to the natural environment.



LOT DESIGN - SITE

OBJECTIVE

To design the site in such a way that adverse effects are mitigated through ecological enhancement, retention of broad natural landform, nestling and screening of built form, and preservation of view-shafts framed by vegetation.

OUTCOMES

Earthworks

- No earthworks or grading other than the minimum required for driveways or underground services is permitted outside the house site area.

Placement

- All buildings shall be located within the Defined Building Areas and a 800m^2 building area, including ancillary buildings, garden sheds, pools, and above ground water tanks.
- A maximum building height of 6 metres (above finished ground level).

Retaining Walls

- Not permitted.

Hard Surfaces

- Driveways with flush kerbs and either grass or planted swales for stormwater management.
- Asphaltic concrete, exposed aggregate concrete driveways, or gravel driveways.
- Impervious outdoor areas, including patios, outdoor entertainment areas, and turning areas within the driveway, shall all be located within the Defined Building Areas.

Fencing

- 1.2m high timber post and rail fencing (stained in approved colours or left to weather naturally).
- All fencing within the development is required to be stained using an environmentally friendly exterior water-borne timber stain (Resene® Sheer Black (WW0801) Water-borne Woodsman, or similar approved).
- 1.2m high post and wire fencing.
- Front gates and fencing shall be visually permeable (e.g., post and rail, or stone pillars and wrought iron).

Lighting + Utilities

- All exterior lighting shall be contained within the Defined Building Area, and shall be down lights only. Flood lighting is not permitted within the sites.
- All utilities and services shall be located below ground. No above ground wiring is permitted. Aerials, satellite dishes, and other utilities shall be contained within the 6.0m building height plane.
- Downward facing bollard lighting is acceptable to demarcate driveway entrances.

Water Tanks

- All water tanks shall be screened from view (from the river and gullies) and buried a minimum of 2/3. Materials and colours shall be harmonious with the dwelling. Water tanks shall be installed on each respective lot within the corresponding Defined Building Area.

Vegetation

- Native vegetation, as detailed in the Landscape Mitigation Plan shall be implemented prior to Section 224(c) final approval and sign-off.
- Vegetation cover shall be managed in perpetuity and shall be allowed to grow to its natural height and form.

AVOID

- Plain white concrete driveways.
- Vertical cut embankments, and retaining walls.
- Closed board fences, and gates.
- Earthworks that visually scar the landscape and are in-congruent with the natural landform.











LOT DESIGN - DESIGN GUIDELINES APPROVAL PROCESS

The Landscape Masterplan provides recommendations for futre building and design guidelines.

To make sure that intended design outcome is achieved, a level of supervision and control is required to protect the landscape values within the site and surrounding environment, as well as the interests of all future residents in relation to the nature and type of construction and planting that is permitted within the development.

This required level of control will be achieved in the form of design guidelines and private covenants. The owners of each new title will need to comply with those requirements when building within the development.

It is proposed the guidelines will be used by: by property owners, Architects and Architectural Designers, Builders, Landscape Architects and Landscapers.

Exact details of the approval process are to be confirmed but the intent is for plans and drawings to be submitted to a Design Review Panel prior to submitting plans for building consent approval to Council. The Design Review Panel will be able to approve or decline any submitted design at their discretion, if it is not determined to be keeping with the intent of the Design Guidelines. This will be a process managed by the developer.

There is also proposed to be a consent notice registered to each title which will require a sign off letter from the developers' urban design panel stating that they have met the requirements of the design intent. The basic requirements (e.g maximum height, colours, landscaping) can be stated within the consent notice also.

It is intended that the design review process for the architectural and landscape architectural designs for each lot will be a condition of consent (via a consent notice) to ensure that the design outcomes of this application are achieved. The implementation of the Design Review Panel is discussed further in 6.0 Recommendations in Landscape and Visual Effects Assessment.

Drawings and information requirements provided to the Design Review Panel shall include the following details:

- All plans and drawings should be legible and to scale, with north arrow, Lot / DP, street name, applicant name and correct details.
- The site plan must include the proposed house and garage location, setbacks, contours, driveways, ancillary structures and service locations.
- Floor Plans and Elevations – A full set of floor plans and elevations are required for the house and garage.
- Landscape Plan must include the proposed On-Lot Planting, Horahora Road Boundary Interface Plan and Clusters of Native Trees. Fencing types and heights, washing lines, bin and service areas, swimming pool and spa pool, garden sheds, pergola and trellis structures and lawn areas.
- Landscape Management and Maintenance for maintaining planting.
- Materials, Colours and Finishes Schedule – A materials, colours and finishes schedule is required for all external building materials including roofing, walls, doors, windows, garage doors, structures and fencing.
- List of all Non-Compliances – It will be the designer's responsibility to provide a list of all non-compliance issues with the Rules and Design Guidelines.

Any subsequent variations to approved plans will be required to be reissued for review and approval by the Design Review Panel.



Development Control Approval Form

Lot Number:

Client Name:

Submission Date:

Plans Referenced for approval

Submitted Plan meets Development Control Guidelines - **APPROVAL** ☑

Submitted Plan **DOES NOT** Meet Development Control Guidelines ☐

Submitted Plan **COMPLIES** with street tree, light post and storm-water drain locations ☐

Colour & material palette **HAS BEEN** submitted ☑ Colour & material palette **HAS NOT BEEN** submitted ☐

Landscaping plan **HAS BEEN** submitted ☑ Landscaping plan **HAS NOT BEEN** submitted ☐

Development Controller Comments:

Approval for layout of home, Materials, Landscaping plan and key architectural features has been granted.

Approved by:

Name: Tim Utteridge Date: 18/11/2024 Signature:

Submitted plans that DO NOT meet Development Control Guidelines are to be resubmitted for approval following consideration of the Development Controller's comments. Colour and material palette must be submitted for Development Controller approval prior to any ordering of materials or construction works commencing on site. No plans are to be submitted to the Waikato Regional Council for Building Consent prior to Development Control Approval. Development Control Approval does not in any way imply compliance with Building Code, Resource Consent or District Plan requirements. The property owner / builder is responsible for checking with the relevant parties or authorities regarding statutory requirements and co-ordination with subdivision services, trees and infrastructure. Please ensure site & driveway layout meets on-site manoeuvring requirements.

Boffa Miskell



About Boffa Miskell

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

---

www.boffamiskell.co.nz

Auckland	Hamilton	Tauranga	Wellington	Christchurch	Queenstown	Dunedin
09 358 2526	07 960 0006	07 571 5511	04 385 9315	03 366 8891	03 441 1670	03 470 0460

APPENDIX F

INTERNAL COUNCIL REVIEW MEMOS, DATED SEPTEMBER 2026

MEMO

South Waikato District Council

Memo To:	Eloise Lonnberg-Shaw
Author:	Phil Parker
Author Title:	Parks and Reserves Manager
Memo Date:	28/09/2026
ECM Reference:	
Subject:	Tylee subdivision -RM240115

Purpose

The purpose of this memo is to outline anticipated impacts of the proposal on the areas/functions administered by the Parks and Reserves Department of Council.

Context

Under Crown Agreement Council is the Manager of the Waikato River Trail and engages Waikato River Trail Trust (WRTT) to maintain under a ground maintenance contract at Council's cost.

Impact

In regard to the Waikato River Trail component, the current effects assessment is that *"safety can be maintained through shared crossings, visibility and suitable gradients, and therefore a riverside trail has not been assessed".*
At this stage Council is satisfied with the status quo, whereby the river trail remains situated within the Horahora Road road reserve.

However, in regard to the proposed cycle trail to be constructed within the new roads to be created under the subdivision and any upgrades along Horahora Road, while understanding the benefits, operationally Council must consider the long-term cost of maintenance and other responsibilities such as the incoming rates capping. An additional $12,190 per annum on current costs (which would increase every year), is not presently available for this and the current location of the current pedestrian/cycle trail is considered sufficient given its location along the road in terms of actual river views. Council is also cognisant that the WRTT has recently downsized the number of working hours of their Managing Director to reduce operational costs.

In regard to the now proposed ten-metre width esplanade strip, Council agrees that the provision of an esplanade strip would be beneficial to the community and supports conditions requiring relevant landowners being responsible to maintain and to provide unfenced perpetual accessibility for community use.

Long term, Council also recognises that a riverside-located trail would better improve safety by separating trail users from vehicle crossings and road intersections, particularly when the full three-staged development has been completed which will likely see increased traffic movement along this section of Horahora Road affecting the current roadside river trail.

Obviously views of the Waikato River by trail users is an important part of the experience, and a closer proximity to the river would no doubt be preferred by users if possible. Retaining the river trail alongside the roadside will reduce views of trail users from the road as the development of housing progresses. To that end, while satisfied with the status quo, as part of the 2030-2040 Long Term Plan Council may decide to reassess progress of the subdivision development and the subsequent trail use situation and consider the option of relocating the river trail into the esplanade strip and discontinue use of the trail along the roadside. This will naturally mean consideration of effects on esplanade strip ownership, landowner's legal responsibilities, construction of infrastructure, accessibility to maintain the land, and capital and operational costs to do so.

In regard to the proposed recreation reserve, initial discussions appeared to indicate a boat ramp would be viable; however, this now appears to be unviable due to the terrain with a twelve-metre height difference. Regardless, an additional recreation reserve will provide an alternative recreation space to the nearby Little Waipa Reserve that gets busy over the summer period.



Phil Parker
Parks and Reserves Manager

.

MEMO

To	Planning Manager
Author	Andrew Pascoe
Author Title	Manager – Assets and Engineering Services
Memo date	25 September 2026
Subject	RM 240115 – 597 Horahora Road – K Tylee

Introduction

This statement has been prepared in support of the proposed subdivision and development at 597 Horahora Road, specifically addressing infrastructure servicing matters, including wastewater, water supply, roading, and stormwater. The following outlines the technical assessments undertaken and how the proposed development addresses the relevant statutory and regional requirements.

Wastewater

The resource consent application proposes that wastewater will be managed through individual septic tank and effluent disposal systems within each lot, with a minimum setback of at least 30 metres from the edge of the river for all wastewater disposal systems.

In lieu of a specific wastewater effects assessment, consent notices are proposed to be registered on the titles to mitigate the potential effects of wastewater discharges from future dwellings. The following requirements will apply:

- Wastewater treatment must be provided using a secondary treatment system, which provides enhanced treatment compared with conventional septic tank systems.
- The design and performance of these systems must comply with Waikato Regional Council Regional Plan Rule 3.5.7.6, which governs effluent disposal loadings.
- Effluent disposal areas must be planted with water-tolerant vegetation to assist with further treatment and environmental integration.
- These requirements must be formalised through consent notices registered on the relevant property titles, ensuring ongoing compliance with the approved wastewater management requirements.

Water

There is no Council reticulated water supply available to the site. Therefore:

- Rainwater harvesting will be required for each dwelling to provide the domestic water supply, with the specific systems to be implemented as part of the building consent process.
- Compliance with SNZ PAS 4509:2008 – New Zealand Fire Service Firefighting Water Supplies Code of Practice is required for all dwellings, as required by the Operative District Plan.
- A consent notice will be registered on each lot to ensure the provision of an appropriate firefighting water supply and associated access.

Roading

An Integrated Transportation Assessment has been prepared by CKL Consultants and reviewed by Gray Matter Engineering Consultants on behalf of Council. Gray Matter Engineering recommended further safety measures, which will be incorporated into the final engineering design, such as combine entrances to reduce the number of conflict points along Horahora road.

Internal roading will be designed and constructed in accordance with the Regional Infrastructure Technical Specifications (RITS). Compliance with these requirements will be secured through conditions of the resource consent.

Stormwater

Te Miro Water, a specialist stormwater consultancy, was engaged to prepare the stormwater design and assist with obtaining the relevant comprehensive stormwater consent from Waikato Regional Council. The stormwater design and associated consent requirements have been prepared in accordance with the Waikato Regional Council Stormwater Guidelines, the requirements of the WRC stormwater discharge consent, and the applicable RITS standards. Stormwater runoff from roads will require treatment prior to discharge.

The stormwater system will include:

- A primary system capable of managing a 1-in-10-year ARI rainfall event.
- A secondary system designed to safely manage a 1-in-100-year ARI rainfall event.

On-lot stormwater will be managed separately at the building consent stage, ensuring that each lot is able to appropriately detain and dispose of stormwater runoff without adversely affecting neighbouring properties or infrastructure.

Geotech and Natural Hazards

Mitchell Geocon Geotechnical Consulting Geotechnical Engineers have prepared a Preliminary Geotechnical Investigation Report for the proposed development.

The site is generally suitable for residential subdivision, provided the report's earthworks, foundation, drainage, slope-setback, inspection and certification requirements are followed. The ground principally comprises variable Hinuera Formation alluvial sands, gravels and silts. Former river channels, sand bars and local depressions create uneven ground, but the available sandy material should allow building platforms to be formed relatively easily through controlled cutting and filling.

Liquefaction is not identified as a major development constraint:
The predicted effects for 25-year and 100-year earthquake events are negligible.
During the modelled 500-year earthquake event, approximately 10–50 mm of settlement may occur.
Lateral displacement and surface expression are expected to be low to minor.
The site is assessed as having an L1–L2 mild-to-moderate liquefaction performance level.
The report concludes that no special construction detailing is required solely to address the assessed liquefaction effects.

Slope stability is the principal geotechnical constraint. A general 25-metre building setback from the top of the riverbank slope is recommended for adjoining lots. For other steep slopes, the report recommends a setback based on one vertical to two horizontal, measured from the slope toe.
Any proposed development within these setback areas will require a site-specific slope stability assessment.

The site is reported to be outside the mapped Waikato River flood zone.

Building areas and engineered fill must be inspected and tested under the direction of a Chartered Engineer.
Final building-platform suitability and setback requirements should be confirmed through geotechnical completion reporting as each development stage is constructed.
Overall: The proposed subdivision is geotechnically feasible, but approval and development should place particular emphasis on slope setbacks, controlled earthworks, lot-specific stormwater design, and engineering inspection and certification.

Conclusion

The essential infrastructure requirements for the proposed subdivision, including wastewater treatment and disposal, water supply, roading, and stormwater management, have been addressed through appropriate design, compliance with relevant standards, and enforceable resource consent conditions, including consent notices registered on the relevant property titles.

The proposed infrastructure servicing arrangements are therefore considered appropriate for the development, and there are no identified infrastructure constraints that would preclude the granting of the resource consent.

The identified geotechnical and natural hazard matters can be appropriately addressed through the subdivision development process and, where applicable, at the building consent stage. This includes compliance with the recommended slope setbacks, controlled earthworks, engineering inspection and certification, and site-specific geotechnical requirements where development is proposed within identified setback areas.

Andrew Pascoe
Manager – Assets and Engineering Services