# Proposed Plan Change: Ongaroto Road, Whakamaru

## Landscape, Natural Character and Visual Assessment Report

This Landscape and Visual Assessment Report has been prepared as part of the application by Precision Built Ltd to Rezone 1861 Ongaroto Road.

All work has been undertaken and/or reviewed by a Registered NZILA Landscape Architect.

Report prepared by:


Dave Mansergh
Dip. P&R (Dist), BLA (Hons), MLA
Registered NZILA Landscape Architect
Director

And

Lisa Burge
BLA (Hons)


Registered Member
of the
New Zealand Institute of Landscape Architects.

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mansergh graham
LANDSCAPE ARCHITECTS
Level One, The Greys Building, Cnr Cook & Grey Street
PO Box 542, Hamilton . Phone 07 858 4959 . Fax 07 858 4929

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# 1 INTRODUCTION

Precision Built Ltd has applied to the South Waikato District Council to rezone the property at 1861 Ongaroto Road (1/1, Lot 9 Deposited Plan 425239 and Part Lot 1 Deposited Plan 24479) from *Rural* to *Rural Residential.* Based on the land area and proposed rules, this would enable the creation of approximately 66 rural residential lots.

Mansergh Graham Landscape Architects Ltd ("MGLA") has been engaged to assess the effects of rezoning the site on the landscape, natural character, and visual amenity values.

The following assessment examines the potential effects of the proposal on the existing landscape and visual amenity values of the surrounding rural environment, within the context of the relevant planning provisions.

# 2 METHODOLOGY

A standard assessment approach has been used to identify the existing landscape character of the site and its surroundings and to assess the potential effect of the proposed development on landscape and visual amenity.

In broad terms, the assessment consists of the:

a. Identification of the key elements or attributes of the development potentially enabled by the proposed plan change.
b. Identification of the landscape values, natural character, key attributes, and social preferences within the context of biophysical, associative, and visual landscape interpretation; and
c. Identification of key considerations within the context of the relevant statutory framework.

A proxy development has been used to test the suitability of the application site for rezoning and a combination of mapping analysis and field assessment has been undertaken to identify the potential effect of the proxy on the existing character and amenity values of the surrounding area. By considering the above, the likely effects of the proposal can be identified and rated.

The approach undertaken is consistent with the *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Draft 2021)*[1]. The definition of the rating system used, and a methodological flow chart is contained in appendix three.

For this assessment, the area subject to the proposed zone change is referred to as "the site" or "the application site".

[1] The *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Draft 2021)* were adopted by the NZILA in May 2021, replacing the NZILA Best Practice Note: Landscape Assessment and Sustainable Management 10.1 (NZILA BPN 10.1).

# 3 SITE LOCATION & PROJECT DESCRIPTION

Precision Built Ltd is proposing to rezone the property at 1861 Ongaroto Road (1/1, Lot 9 Deposited Plan 425239 and Part Lot 1 Deposited Plan 24479) from *Rural* to *Rural Residential* (with additional site-specific rules) which would enable the creation of approximately 66-lots.

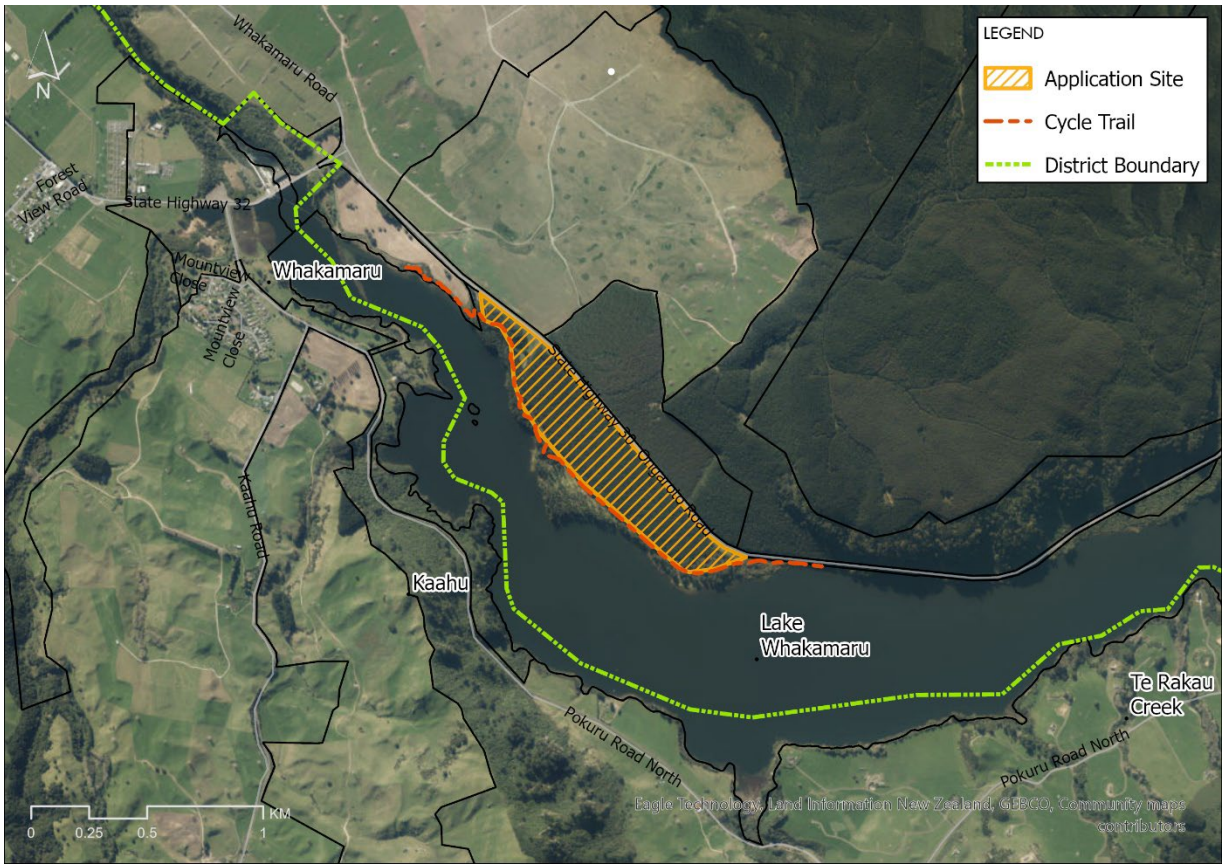



**Figure 1: Site Location**

The application site is located within the rural zone under the Operative South Waikato District Plan (OSWDP). The proposed plan change area is located within an Outstanding Natural Landscape (ONL 5) and is partially covered by the Waikato River Significant Natural Areas (SNA).

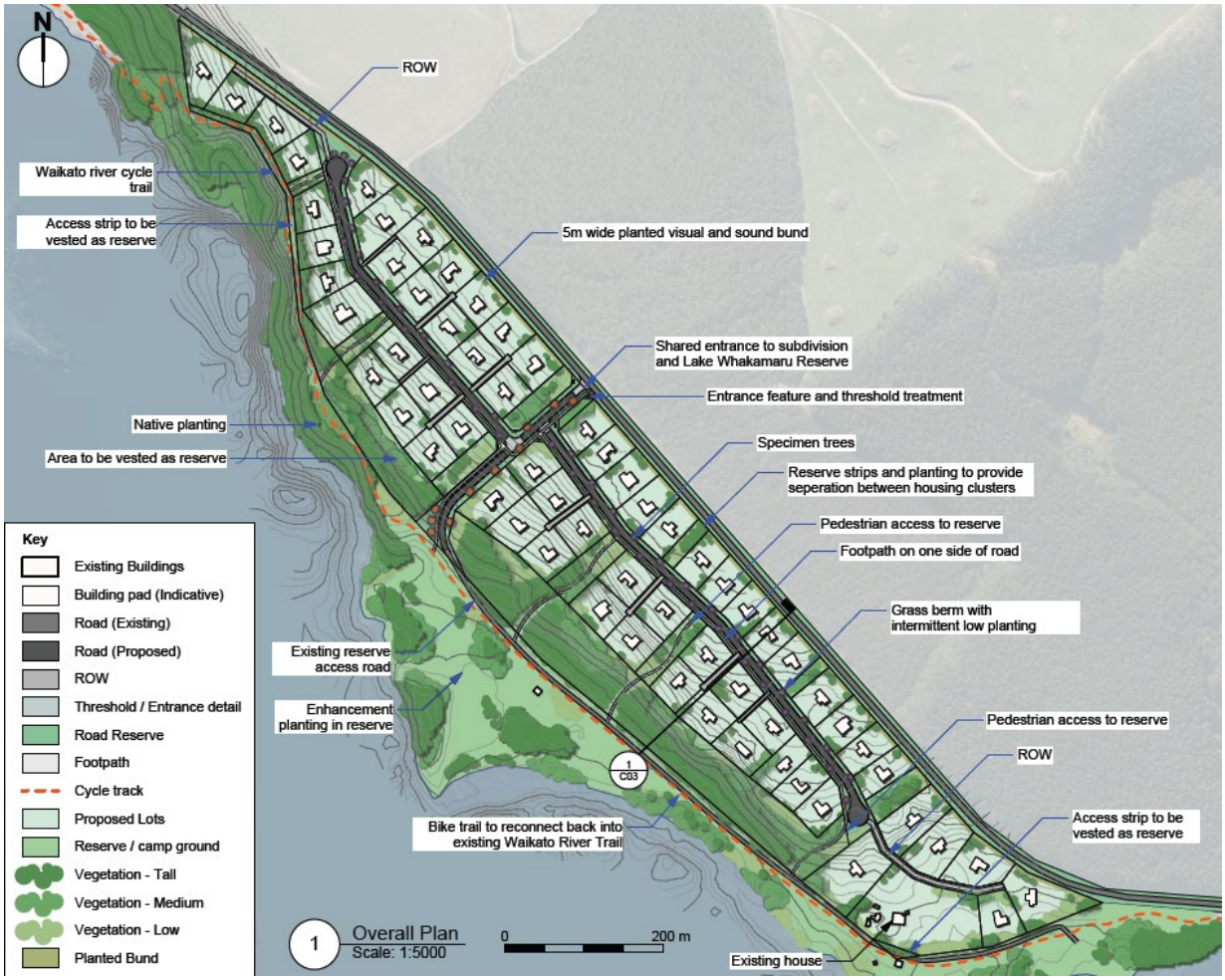



**Figure 2: Illustrative concept plan.**

The proposed plan change would enable to following to occur:

a. The subdivision of the site to up to 66 rural residential lots, ranging in size between approximately 2500m$^2$ and 12660m$^2$ (excluding RoWs).
b. The creation of 7.56ha of reserve and local purpose reserves for pedestrian access.
c. The formation of a new access road between Ongaroto Road and the Whakamaru Reserve (with improved sightlines).
d. The establishment of a planted reserve buffer between the lakeside reserve and the proposed development.
e. The separation of the Waikato River Trail Cycleway from the vehicle access track road to the lakeside reserve.

The Illustrative Concept Plan (figure 2 above) shows what could be achieved under the proposed provisions and is the basis for the proposed structure plan and the assessment of effects in this report.

A more detailed version of the above plan is contained in appendix one.

## 3.1 Integrated Mitigation Measures

In addition to the relevant performance standards contained in the Operative District Plan, the following recommendations are made to reduce the effects of development enabled by the proposed plan change on existing landscape character, natural character and visual amenity values (including effects on ONL5):

a. **Structure Plan:** That subdivision is undertaken in general accordance with the proposed structure plan for the site (refer to appendix two).

b. **Planted Buffer**: A planted buffer should be established in the locations and depths indicated in the proposed structure plan, between the existing recreation reserve and any development on the elevated terrain to the north of the reserve, to screen views of the development from the adjacent reserve and to aid in visually integrating it into the surrounding landscape. The planted buffer should consist of native species endemic to the area and may include the following species planted at an average spacing of 1 plant per every 1.2m$^2$:

| Botanical Name | Common Name |
|---|---|
| *Alectryon excelsus* | Titoki |
| *Astelia chathamica* | Chatham Island Astelia |
| *Aristotelia serrata* | Wineberry/makomako |
| *Brachyglottis repanda* | Rangiora |
| *Coprosma robusta* | Glossy karamu |
| *Cordyline australis* | Ti kouka/cabbage tree |
| *Cyathea medullaris* | Mamaku, Black ponga, Black tree fern |
| *Dacrydium cupressinum* | Rimu |
| *Fuchsia excorticata* | Kotukutuku, Tree fuchsia |
| *Griselinia littoralis* | Kapuka, NZ broadleaf |
| *Hebe stricta* | Koromiko |
| *Knightia excelsa* | Rewarewa |
| *Kunzea robusta* | Kanuka |
| *Leptospermum scoparium* | Manuka |
| *Myrsine australis* | Red Mapou |
| *Phormium tenax* | Harakeke/ NZ Flax |
| *Phyllocladus trichromanoides* | Tanekaha, Celery Pine |
| *Podocarpus totara* | Totara |
| *Prumnopitys taxifolia* | Matai, Black pine |
| *Pseudopanax arboreus* | Whauwhaupaku, five finger |

**c.** **Local Purpose Reserves:** That Local Purpose Reserves are created between clusters of residential lots for the purpose of visual separation of built structures, for public access between roads and the reserve, and for stormwater management.

d. **Visual Mitigation Bund:** That a 5m wide x 2m high earth bund is established along the Ongaroto Road frontage within the site, to screen the site from view and help maintain the existing rural character.

e. **Building Design:** All buildings (dwelling and ancillary) are designed to visually integrate with the surrounding landscape by placing controls on their height, location, and appearance. Buildings shall comply with the following standards:
   i. Maximum height: 6m
   ii. Exterior cladding materials: Natural timber (oiled or stained), painted timber or panel (subject to iv below), concrete (off the form finish, plaster finish or exposed aggregate

(subject to iv below), colour steel (subject to iv below), natural stone and/or brick, and weathering steel.

iii. Exterior Colours and Reflectivity: Recessive colours that integrate with the colours and tones found in the surrounding landscape should be used on all exterior surfaces. Colours that are visually dominant or have a high contrast value should be avoided. Suitable colours include:

- Colours from the BS 5252 range (or equivalent) identified in figure 3 below, subject to the following Light Reflectance Value (LRV) restrictions:
  (1) Roof colours with an LRV between 5 – 13%
  (2) Wall colours with an LRV between 5 – 23%.
  (3) Trim colours with an LRV between 5 – 46% with a careful selection of natural colours.

iv. Wall colours with a reflectance value of more than 46% are not acceptable.

f. **Earthworks:** The earthworks within each lot are restricted to the formation of the building pad and easing the associated cut and fill batters to integrate with existing contours. The use of retaining walls (visible from outside of the lot) should be avoided.

g. **Fencing and Boundary Treatment:** Where possible; boundaries should be unfenced or demarcated by hedging or informal planting. Urban and Close boarded fencing is not acceptable. If fencing is proposed, it shall be visually permeable and designed to maintain rural character. Suitable fencing types and boundary treatments include:

- Horizontal timber post and rail.
- Post and wire (farm fencing).

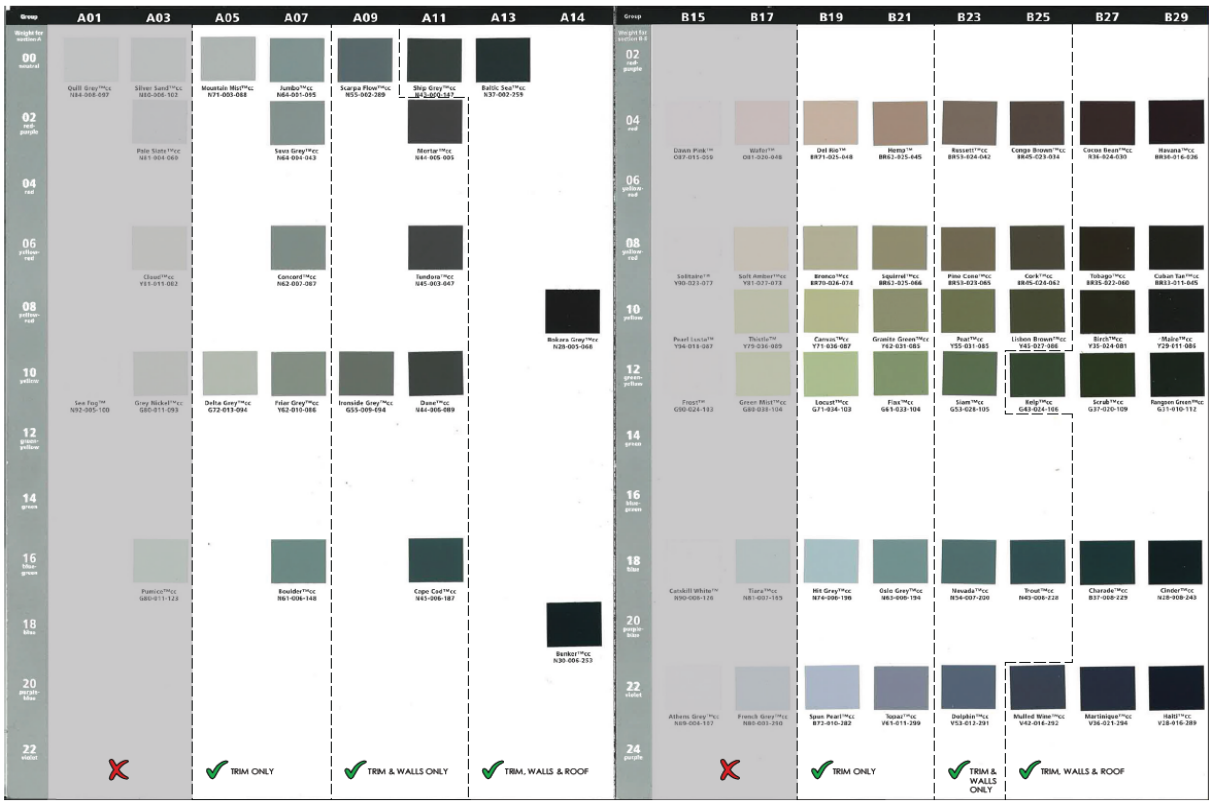



**Figure 3** BS 5252 Suitable building colours

The implementation recommendations have been considered and factored into the following assessment of landscape, natural character, and visual effects.

# 4 EXISTING LANDSCAPE CONTEXT AND VALUES

The following section of this report describes the existing site and the surrounding landscape within which it is experienced using the current best practice approach outlined in Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines, which conceptualises landscape in terms of the following overlapping dimensions:

- Physical (the physical environment – its collective natural and built components and processes).
- Perceptual (how we perceive and experience places); and
- Associative (the meanings and values we associate with places).

## 4.1 The Wider Surrounding Landscape Context

The application site is located adjacent to Lake Whakamaru, a hydro-electrical generation lake formed behind the Whakamaru Dam, as part of the Waikato River Hydro Electrical Generation scheme in 1956.

The wider surrounding area is characterised by the surrounding rural environment and a variety of complex topographical features and land uses. The key features and attributes that contribute to the characteristics of the wider surrounding landscape include:

a. The Waikato River, Lake Whakamaru and the underlying volcanic topographical features associated with the wider Whakamaru Caldera.
b. Pastoral grazing (dairy and dry stock farms).
c. Production forestry (pine and eucalypt).
d. Hydro-electric generation (Whakamaru Dam, substation, and lake).
e. Riverside and recreation reserves (Whakamaru recreation reserve and campsite); and
f. Nodes of urban development (Whakamaru Village and rural residential development (within Taupo District).

The wider landscape surrounding the site has been subject to significant change over the past century, with large tracts of land developed as plantation forestry, and more recently recontoured and converted to pastoral farmland. Historic modification has also occurred through flooding of the natural river channels to form the hydro lake. Subsequently, many of the more subtle landscape features that revealed the formative processes of this landscape have been lost.

## 4.2 Physical Factors

### 4.2.1 Underlying Geology and Topography

The topography of the wider landscape has been influenced by the formative processes associated with volcanic extrusion and deposition, and fluvial erosion and deposition. The wider landscape is located within the North Island's Taupo Volcanic Zone (TVZ) and is contained within the Whakamaru caldera, to the north of Lake Taupo. The Whakamaru eruption, one the largest known eruptions in the TVZ around 340 thousand years ago, was responsible for the formation of the Whakamaru group of ignimbrites, a widespread group of welded, crystal-rich ignimbrites forming the outcrops along the edge of the TVZ. The extent of the Whakamaru caldera is shown in the figure below.

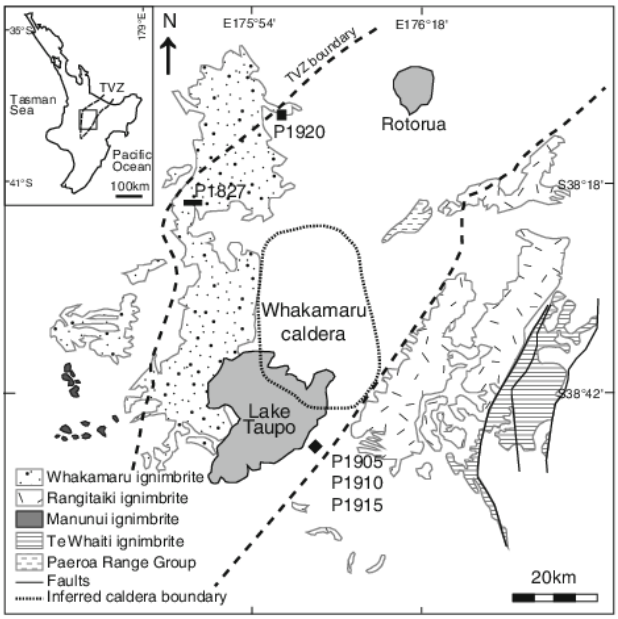



**Figure 4** Location of the Whakamaru caldera [2]

The site is located on a pumice, sand, and silt alluvium from the late Pleistocene, with interbedded peat layers. Rhyolitic lavas and domes underlie steep hill country running from the to the southeast of the site. To the south, the topography is underlaid by the steep land and escarpments associated with the Pakaumanu Group rhyolites and the gentler Marshall formation ignimbrites. These give way to undifferentiated ignimbrite to the west, which presents as gently rolling terrain. The underlying geology can be seen in the following figure and photographs.

[2] *Quartz Zoning and the Pre-eruptive Evolution of the ~340 ka Whakamaru Magma Systems, New Zealand.* January 2011Contributions to Mineralogy and Petrology 163(1):87-107

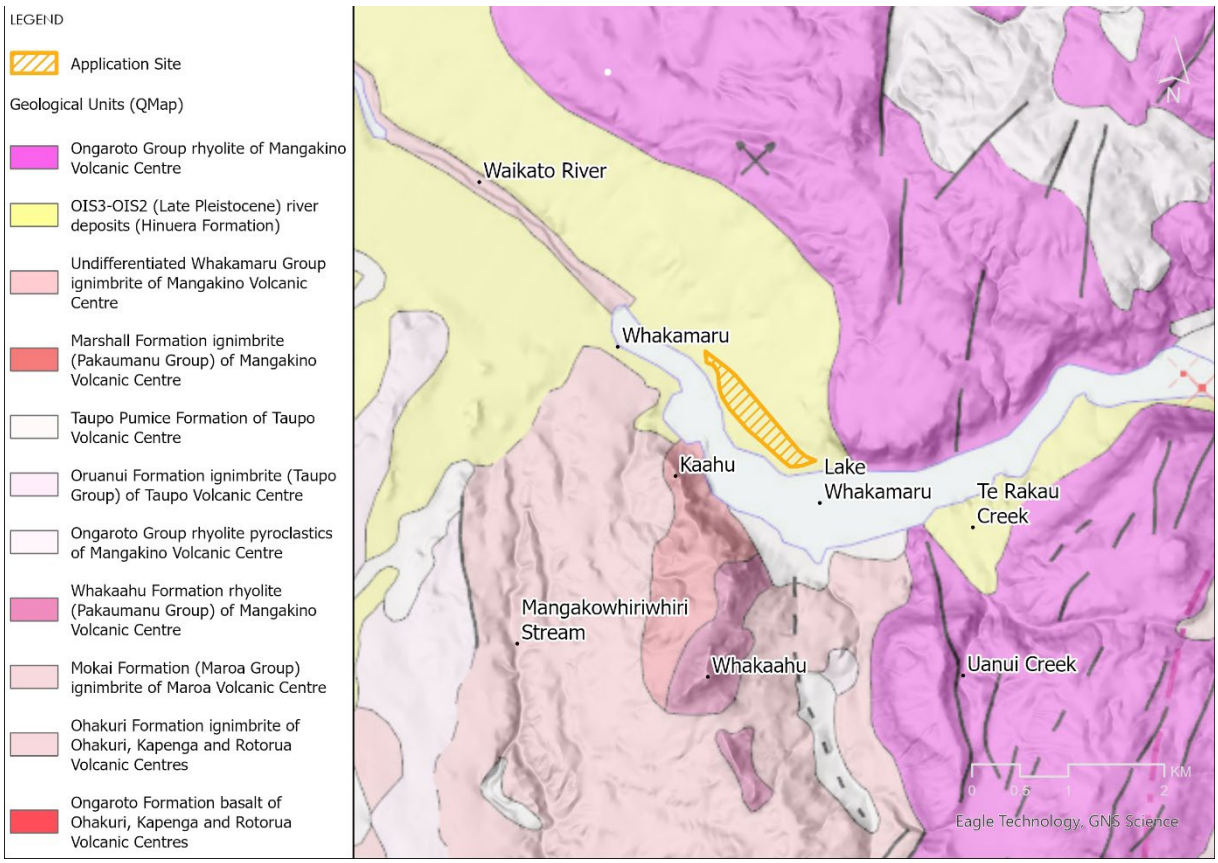



**Figure 5** Underlying Geology

**Figure 6** Rhyolitic lava and dome topography to the southeast of the site (background). Pumice, sand, and silt alluvium within the site (foreground).

**Figure 7:** Steep land and escarpments associated with the Pakaumanu Group rhyolites (left) and the gentler Marshall formation ignimbrites (right)

The Waikato River has cut down through the volcanic landform, forming gorges, channels, river terraces, flow paths and deposition plains. The natural formative processes associated with this process are no longer manifest, with some of the more subtle features difficult to discern or modified by forestry, rural land management practices or the works associated with the formation of the hydro lake.

### 4.2.2 Land Use and Land Cover

Rural land use and development patterns influence the character and visual amenity of the wider area, with the open spatial character of the wider landscape compartmentalised by a combination of large tracts of production forestry, rural plantings, hedgerows, and, in some locations, pockets of remnant native vegetation.

Land use within the site and to the north comprises production forestry. Between the site and Lake Whakamaru, existing Crown land has been developed as a recreation reserve and campsite. To the south and west, existing land use patterns are primarily comprised of contiguous areas of pastoral grazing, dissected by the Waikato River, Whakamaru Village, the hydro generation dam, and associated infrastructure. Vegetation patterns within the area are dominated by production pine and eucalypts, with pockets of native bush and scrublands found along the river and in areas that are not easily farmed (such as the deeply incised gullies and on the steep ignimbrite slopes and escarpments).

While these restrict continuous views over the farmland in some locations and create a sense of containment, in other places, the lack of vegetation allows views of the wider landscape beyond. Areas to the west and south of the Waikato River contain more specimen trees and mature native plantings than the rural land to the northwest (excluding the existing tracts of production pine and

eucalypt plantation). This is because of the recent forestry-to-farm conversion, meaning that trees within the area have not had time to establish.

Buildings are relatively common in the landscape on the southern side of the river (within Taupo District) and comprise dwellings, holiday homes, rural implement sheds, and a small area of retail and light industrial buildings within Whakamaru. Except for development along Pokuru Road North, development density is generally greater adjacent to the road network than internally within each rural block. Occasionally, dwellings are set back from the road and/or located on elevated land to take advantage of views over the landscape or towards the lake.

Other existing infrastructure that influences the character of the surrounding landscape includes the Whakamaru dam, the substation, power transmission lines, Whakamaru Village, Whakamaru service centre (the shops located approximately 800m to the west and separated from the residential part of the village by rural land), the Waikato River Cycle Trail, and Lake Whakamaru ski club.

Existing land use patterns can be seen in the following figure:

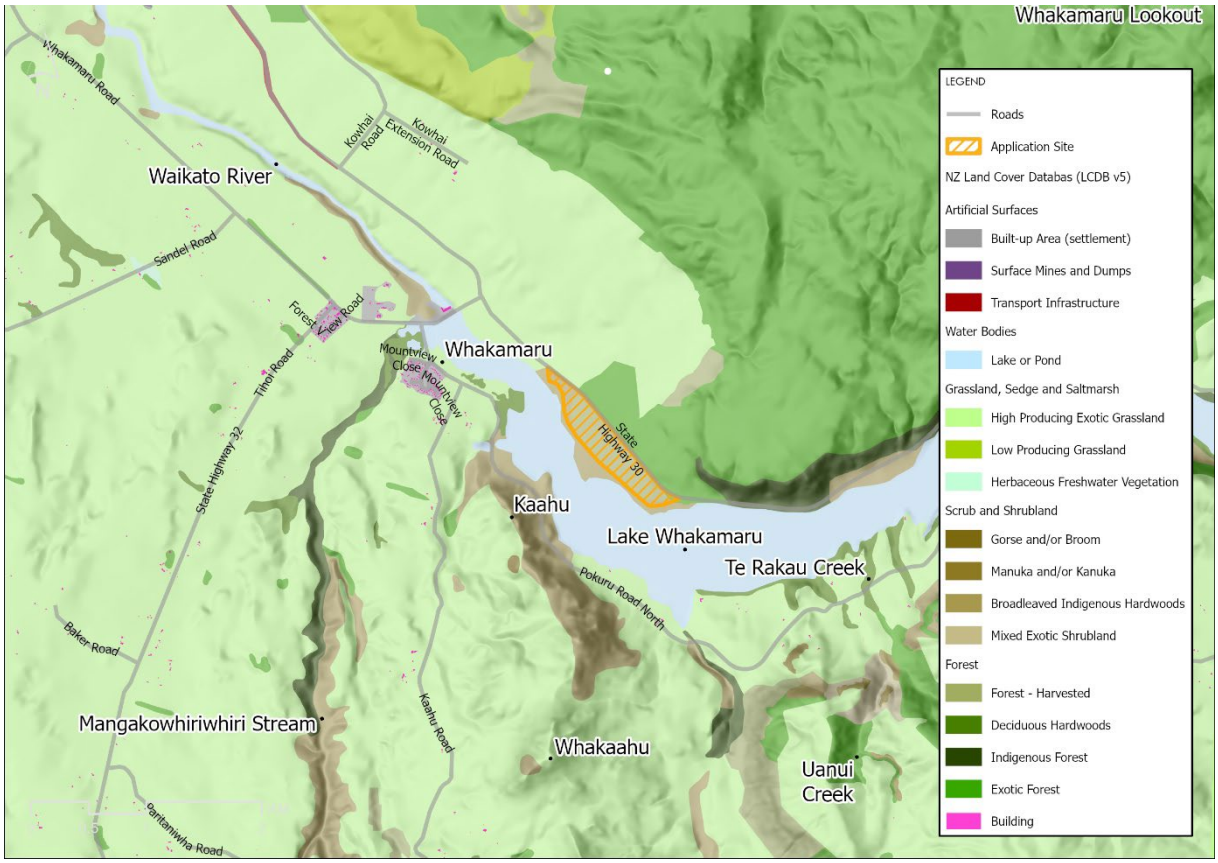



**Figure 8** Existing Land Use Patterns


**Figure 9** Land Use Capability (LUC). From *Land Use Capability Report*. Titus Consulting Engineers. 22 November 2022.

Existing development density, which influences how the landscape is perceived and the sense of remoteness, can be seen in the following figure:

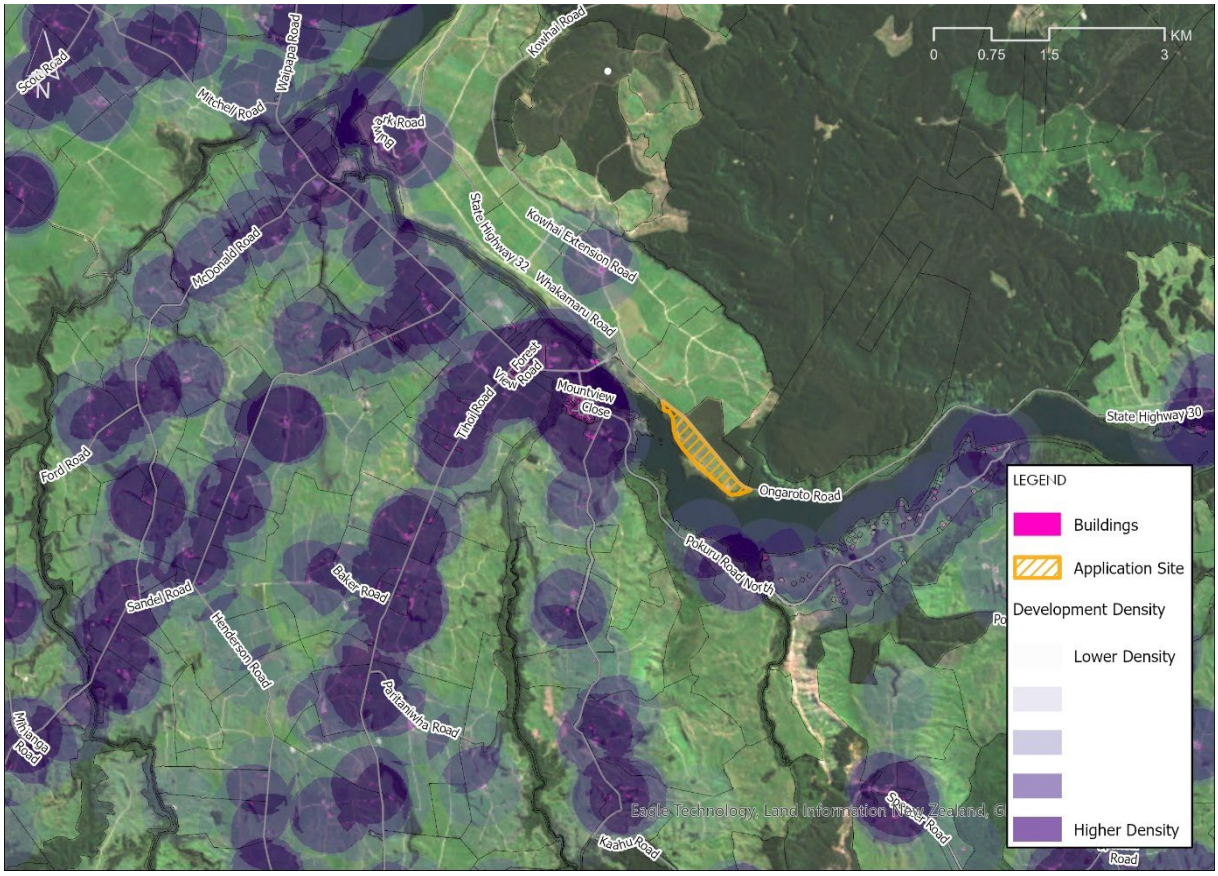



**Figure 10** Development Density

## 4.3 Perceived and Experienced Factors

The key landscape features that influence the characteristics of the wider landscape, and contribute to existing landscape (and rural) amenity values include:

a. Lake Whakamaru and its associated riparian and wetland fringes and margins.
b. The Waikato River and its associated riparian margins.
c. The steep topography associated with the ignimbrite and rhyolitic outcrops and domes on the southern side of Lake Whakamaru act as a focal attraction and create a sense of containment and enclosure for the lake.
d. The gently rolling rural landscape to the north, west and south of the site.

The landscape's character is further influenced by land use, land management and development patterns including:

a. Extensive pastoral development and agrarian land-use patterns.
b. Clusters of rural residential and rural utility buildings along public roads punctuate the productive farmland (pasture and mixed cropping).
c. Large tracts of production pine and eucalyptus.

These features provide the context within which the application site is interpreted and, at a wider scale, are unlikely to be affected by the proposed plan change.

The various characteristics of the wider landscape can be seen in the following photographs:

**Figure 11** Gently rolling rural landscape to the northwest of the site.

**Figure 12** Production pine and eucalypt forest to the north of the site.

**Figure 13** Rocky bluffs and outcrops associated with the Kaahu escarpment.

**Figure 14** Lake Whakamaru (from the dam)

## 4.4 Associative Factors

Shared and recognised values within and surrounding the site include:

a. Amenity/aesthetic values associated with Whakamaru, the Waikato River and surrounding topographical features.
b. Amenity/aesthetic values associated with the surrounding land use and development patterns.
c. Recreational activities, including scenic vistas, walking, river trail (cycling), and water activities (water skiing, fishing, kayaking, swimming, etc). Access to the riverside trails. Access to the riverside reserves, including the Lake Whakamaru Reserve (camping, BBQ etc).
d. Sites of significance to Maaori, including the Waikato River.
e. The identified SNAs and ONLs adjacent to Lake Whakamaru/the Waikato River are aimed at protecting the key attributes and characteristics of the surrounding landscape.

The South Waikato District Plan identifies that Raukawa exercise mana whenua and the rights and responsibilities of kaitiakitanga within their rohe, which covers the entire District. Key issues identified in the plan relevant to Raukawa (landscape matters) include:

a. The health and well-being of the Waikato River. The Waikato River is identified as a source of spiritual, cultural, social, and physical sustenance for Raukawa, and in turn, the Raukawa role as kaitiaki embraces respect and an inter-generational responsibility for the river.
b. The loss of wetlands – Wetlands are important for water quality, biodiversity, flood protection and indigenous biodiversity. They are also a traditional source of food and material (such as for building, weaving and medicines) for Raukawa.
c. Loss of indigenous biodiversity. In addition to having intrinsic values, native species were and continue to be important resources to Raukawa. Plants and animals were harvested as kai, rongoa (medicine), building materials, and as dye and weaving materials for clothing and decoration.
d. Loss of cultural heritage – Including cultural landscapes, wāhi tapu and other sites of significance, access to places and resources (such as rongoa and mahinga kai), and loss of traditional names.

While there are no identified archaeological sites within the proposed plan change area, it is recognised that the river system is highly valued by Raukawa (and other iwi).

Minutes from a meeting between the applicant and Raukawa representatives (17/10/2022) indicated that Raukawa were concerned about:

a. The effects of stormwater discharge into the lake (including visual)
b. The effects of additional boats within the ONL; and
c. The visual effects of the buildings and dwellings (sought the consideration of design controls over buildings and dwellings (use of excessive colours etc)).

## 4.5 Existing Landscape Character and Values

When considered within the context of the landscape's biophysical, perceptual, and associative attributes, the existing landscape character and values of the site and its surroundings are influenced by its rural location, Lake Whakamaru, and the Waikato River, including riparian and wetland fringe vegetation (around the lake edge), the hill country backdrop, including the peaks of Kaahu and Whakaahu, and past and present land management.

The key attributes that contribute to the existing landscape value and visual amenity of the site and its surroundings include:

a. The spatial relationship between the natural areas, including Lake Whakamaru and the Waikato River, the rural development within the surrounding rural landscape, and the urban settlements of Whakamaru and Mangakino.
b. The aesthetic values associated with the juxtaposition between the surface of the water and surrounding topographical features that provide the backdrop to the application site.
c. The aesthetic and natural values associated with the Waikato River ONL, SNAs alongside the Waikato River.
d. The aesthetic values associated with the wider surrounding open pastoral landscape.
e. Modification to the existing site and surrounding landscape, both historically (formation of Lake Whakamaru through construction of the dam and flooding of the Waikato River, and conversion to pastoral farmland and forestry) and more recently with rural-residential development, concentrated along Pokuru Road North).
f. Maaori and Pakeha values are associated with past and present occupation and use of the wider surrounding landscape (there are no physical signs of occupation having occurred within the site itself).

Overall, the wider rural landscape containing the application site is of ***moderate-high*** landscape and amenity value. This value is heavily influenced by the presence of the more natural appearing features associated with Lake Whakamaru, the Waikato River (ONL5), and the vegetated volcanic landforms to the south. While it is located adjacent to several valued landscape features, the application site itself does not have any notable landscape value, other than providing the immediate context for the wider landscape experienced from the lake and adjacent areas. In other words, while the site itself is not of value (from a landscape character perspective), it forms part of the context within which the more valued features are juxtaposed.

# 5 EXISTING NATURAL CHARACTER

Section 6(a) of the RMA requires, amongst other things, the preservation of the natural character of wetlands, lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development. Because the application site is located adjacent to Lake Whakamaru and the Waikato River, the effects of the proposed plan change on the natural character of these lakes and wetlands need to be considered.

For this analysis, natural character is defined as the distinct combination of an area's natural characteristics and qualities, including the degree of naturalness.

The *Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines* state:

> *Current best practice is to integrate natural science and experiential aspects. The context and purpose of the assessment influences whether the focus is on naturalness (degree of natural character) informed by attention to natural characteristics and qualities or on the specific characteristics and qualities themselves.*[3]

Natural character is described in terms of its biotic, abiotic, and experiential characteristics and is rated from *very low* to *very high* using a 7-point scale.

The following description is precis of the natural character values associated with the site and how these are interpreted in the context of the wider study area.

The existing natural characteristics of the site and surrounding environment are influenced by the following factors and are described in terms of:

- *Physical natural elements and processes including abiotic aspects (e.g., landform and water, hydrological processes, geomorphology, climate) and biota aspects (flora and fauna, ecology).*
- *How they are perceived and experienced including how natural the area appears (how apparent or dominant the human structures or activities are), and how the area's natural aspects are experienced and appreciated (e.g., exposure to the sound of water, feel of coastal wind, smell of the sea, its aesthetic qualities such as areas that are wild and scenic).*[4]

## 5.1 Existing Natural Character Values

The key attributes and characteristics of the surrounding rural environment that contribute to existing natural character values include:

### 5.1.1 Physical Natural Elements and Processes (Abiotic and Biotic factors)

a. Lake Whakamaru, along the Waikato River, is a hydroelectric lake created as part of the Waikato River hydro generation scheme in 1956. The natural formative patterns associated with the river (terraces, gorges, and channels) have been highly modified because of historic vegetation clearance and earthworks associated with the construction of the hydro scheme, the introduction of indigenous and exotic riparian and wetland vegetation (including pastoral grassland and plantation forestry), and farm development.
b. Marginal vegetation is dominated by exotic species and weeds, with tracts of regenerating native bush within the reserve areas and along the lake margins to the east and south.

[3] Para 9.57 *Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines*

[4] Para 9.21. *Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines*

### 5.1.2 How the Natural Elements and Processes are Perceived and Experienced

a. The formative process associated with The Waikato River is no longer evident, drowned by the hydro lake and/or modified by earthworks associated with the creation of the lake (refer to the figure below).
b. Although contained within an SNA, the ecological patterns and processes associated with the lake margin are not highly evident and are restricted to naturally regenerating native and exotic plant species along the lake edge, with some amenity planting undertaken within adjacent reserves. The ecological report[5] identifies nine broad vegetation types present within the site and that the site was planted in pine (production forest) until 2018.
c. While the site is near the Waikato River/Lake Whakamaru, the site itself does not contain any freshwater streams or wetland areas. In and around the application site (including the adjacent reserve) vegetation cover comprises a mix of pine, exotic grassland, broom, sedges and cypress native scrublands and regenerating native bush.
d. The transient presence of vehicles within the reserve (including caravans and campervans and cyclists using the Waikato River Trail) reduces the sense of remoteness associated with this area.
e. Vessels (recreational and fishing vessels) on Lake Whakamaru will be visual and audible and further reduce the sense of remoteness associated with the area.
f. The site and its surroundings have memorable scenic qualities.
g. The aesthetic coherence is diminished where the more natural-appearing landscape adjoins a more highly developed/modified landscape (Whakamaru dam, substation, Whakamaru Village, and pastoral farmland with rural development).

A review of the historic aerial photography indicates that the site and surrounding landscape was dramatically modified as part of the Waikato River Hydro development in the 1950s and more recently by production forestry.

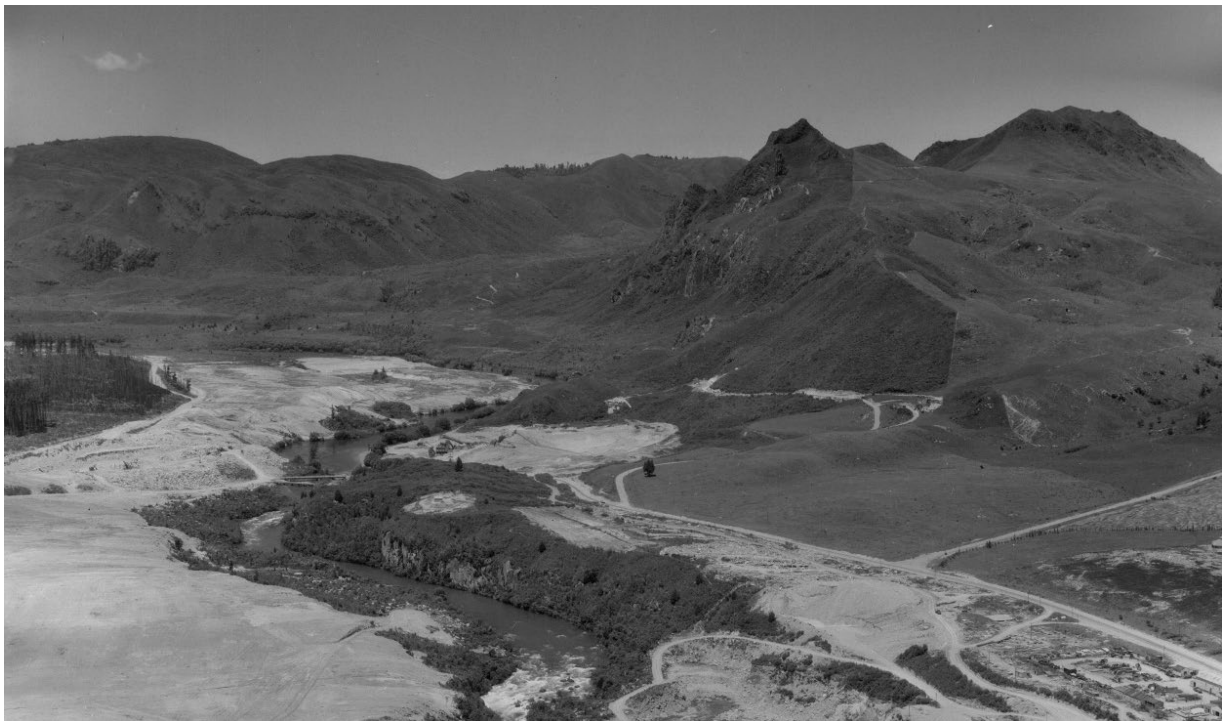


**Figure 15** Earthworks and vegetation clearance during the construction of the Whakamaru Dam (2 December 1955)

[5] *Assessment of Ecological Effects for Private Plan Change Ongaroto Road, Whakamaru.* 2 Awa Ecology 2022.

### 5.1.3 Cumulative Natural Character Value

The study area for natural character effects comprises the landscape bounded by the skyline ridge to the north, south and east of the application site, and the Whakamaru Dam to the west. Activities that occur within this catchment have the potential to affect the existing natural character values of the areas of SNA and ONF contained within the catchment.

While highly scenic, the landscape surrounding the site has been highly modified by the Waikato River Hydro Scheme (stripping, earthworks, and the formation of the hydro lake), rural development (pastoral), the built environment (Whakamaru township and associated generation facilities), and forestry.

When considered collectively, the existing natural character value of the study area is ***moderate***, with the greater natural character value occurring within Lake Whakamaru and the bush-covered slopes of Kaahu Peak on the southern side of the lake.

## 5.2 Summary of Landscape and Natural Character Values

The following table summarises the existing natural character and landscape values of and surrounding the application site.

| TYPE | RELEVANT RMA PROVISION | EXISTING VALUE |
|---|---|---|
| Landscape & Visual Character | 6b & 7c | *Moderate-high* |
| Natural Character | 6a | *moderate* |

# 6 RELEVANT BACKGROUND STUDIES

## 6.1 South Waikato District Landscape Assessment

The *South Waikato District Landscape Assessment* (SWDLA), undertaken by Isthmus Ltd in 2012, identifies that the site is located within the Whakamaru Domes Landscape Character Unit and identifies it as part of the Waikato River Outstanding Natural Landscape.

Key landscape values associated with the character areas are identified in the SWDLA as including:

- *Waikato River and its tributaries as a dynamic waterform of significance to tangata whenua and as a multifunctional recreational resource particularly associated with Lake Whakamaru, the recently established River Trail walkways and the units close proximity to Lake Maraetai*
- *elements, patterns and processes that are linked with hydroelectric power generation at Whakamaru as they represent a 'continuing cultural' landuse with valued historical and recreational associations*
- *Rhyolitic domes Ngautuku, Maungaiti and Whakamaru as landmarks that also define narrow gateways in and out of the District through which important transport routes have been aligned…*
- *traditions of plantation forestry in this unit and the contribution this makes to perceptions of 'wilderness' along the Waikato River*
- *• coherent and uniform appearance or aesthetic of the plantation forests particularly as they are viewed from Whakamaru Rd.*[6]

[6] Page 34. *South Waikato District Landscape Assessment*, Isthmus Ltd. 2012.

The application site is located within the Whakamaru Lake section of the Waikato River (ONL5) and is described as follows:

> *This section of the river straddles the boundary between South Waikato and Taupo Districts forming an important gateway to the District and linking route between SH1 and SH30. Picturesque qualities result from cliffs on both sides of the river enclosing its serpentine path and borrowed views of Whakaahu, Pohaturoa and the Whakamaru cliffs. Riparian vegetation, tributary and eddy wetlands contribute to the areas natural character and recreation opportunities on the river trail walkways. The Ngaroto marae area marks important historical events and continued settlement. There are also significant historical associations with the area around tram road as a river crossing of significance to both Maori and early forestry activity.*[7]

The ONL is identified as having the following ratings:

| ASSESSMENT FACTORS | RATING |
|---|---|
| Natural Science Factors | High |
| Aesthetic values including memorability and naturalness | Very High |
| Expressiveness | High |
| Transient values | High |
| Values that are shared and recognised | Very High |
| Value to tangata whenua | Very High |
| Historical association | Very High |

## 6.2 Waikato Regional Landscape Assessment

The Waikato Regional Landscape Assessment (WRLA) provides a high-level assessment of the landscapes within the region. Most relevant to the plan change application is the analysis of the characteristics of the *Waikato River at Waikato River and Reservoirs (HVANFL 11)* which includes the following statement:

> *The river has been dammed in eight places forming lakes, along approximately half its length, that serve hydro electric stations. These lakes, particularly Lake Karapiro are very popular for recreational pursuits including canoeing, kayaking, water skiing, and motor boating. Fishing is also a regular activity. The lake is an international rowing venue. The Waikato River is used for fishing, waterskiing, wake boarding, boating and swimming, picnicking.*
>
> *The Waikato River was an important trade and access route for Maori and early Pakeha settlers; it has very strong historical and tangata whenua values, which are shared and recognised.*
>
> *It has high natural character values in places. The main factors contributing to its identification as a high value amenity landscape are its length, its width, its importance to the Waikato region, and in places its drama as it passes through rocky gorges, and the expansive man-made lakes along its length.*
>
> *Activities that could threaten those values could include additional hydroelectric schemes and transmission lines, visual access being cut off by buildings or forestry, and the reduction in water flow.*[8]

## 6.3 New Zealand Geopreservation Index

The application site is not located in or near any features identified in the New Zealand Geopreservation Index.

[7] Page 49. IBID

[8] *Page 73. Waikato Regional Landscape Assessment.* Mar Buckland, Chow Hill, GHD, Oconnor Planning. 2010.

# 7 ASSESSMENT OF EFFECTS ON LANDSCAPE, NATURAL CHARACTER, AND VISUAL AMENITY

## 7.1 Ratings

The rating system used is consistent with the recommended 7-point scale contained within *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines*[9].

| Document | Effect Rating | | | | | | |
|---|---|---|---|---|---|---|---|
| Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines | Very Low | Low | Low - Moderate | Moderate | Moderate -High | High | Very High |
| **Act/Policy** | **Threshold** | | | | | | |
| RMA | Less than Minor | | Minor | More than Minor | | Significant | |

# 8 EFFECTS ON NATURAL CHARACTER

The site is located within an ONL and is partially covered by an SNA.

The Ecological report states:

> *For most of the plan change area the ecological value of the vegetation and habitat is low.*
> *Vegetation in the indigenous understory of vegetation type 6 is assessed as low to moderate.*[10]

The formative processes and patterns associated with the Waikato River and its margins were significantly modified by Waikato Hydro Scheme and subsequent forestry. This changed the natural contours and vegetation patterns within the site. While the proposed rezoning will enable further modifications to the existing contour, the effects of these changes will generally follow what remains of the old river terraces, with the further disturbance balanced by the establishment of restoration and mitigation (buffer) planting within the site As such there will be no observable changes (that affect natural character) to the key physical values and attributes that give rise to existing natural character values of the lake/river and its margins (due to the setback of the site from the edge of the lake), meaning that the effects are experiential, with the level of effects being determined by the perceptions and expectations of those experiencing the site.

For most people, the existing environment is experienced from the following permanent and/or transient locations within approximately 1.5km of the application site. These include:

| Location | User Type | Experience Type | User Sensitivity |
|---|---|---|---|
| Ongaroto Road | Motorists | Transient | Very Low |
| Pokuru Road North | Motorists/Residents | Transient/Permanent | Low/ Low-Moderate |
| Whakamaru Village | Residents | Permanent | Low-Moderate |
| Lakeside Reserves | Visitors | Transient | Low-Moderate |

A change in the zoning of the application site will enable large lot residential and holiday home development to occur along the northern side of Lake Whakamaru. While this will change the appearance of the site, by increasing the density of buildings and associated supporting infrastructure experienced, when considered within the context of development in the surrounding landscape (Whakamaru Village, the hydro dam, the Whakamaru Reserve, forestry, scattered rural residential/holiday home development along Pokuru Road North), development enabled by the

[9] Final version set for release 26 August 2022.

[10] Page 24. *Assessment of Ecological Effects for Private Plan Change Ongaroto Road, Whakamaru.* 2 Awa Ecology 2022.

proposed plan change not result in a notable change in the perceptions of existing natural character associated with Lake Whakamaru or its margins. This is because:

a. The site is physically separated from the lake and its margins by the Whakamaru Reserve. Development within this reserve (associated with the formation of the hydro lake in the 1950s and more recently the campground/picnic area) has already resulted in a significant loss of natural character values by altering the natural landform and a loss of indigenous marginal vegetation.
b. The key features that contribute to perceptions of existing natural character values of the visual catchment containing the application site, are generally located outside of the site and include the lake, the more dramatic landforms associated with the rhyolite dome landforms to the north and south of the site, and areas of regenerating native bush around the edge of the lake (south and east) and within the Kaahu Reserve.
c. The site and its surrounding are not perceived as being remote or wild.
d. The site and its surroundings are experienced within the context of other activities that, while natural in appearance, have altered the natural formative processes associated with the landscape. Such "natural" appearing activities include surrounding farming activities and forestry but exclude roads, houses and the dam. This paradigm is termed "cultured nature"[11].

The proposed restoration planting along the edge of the lake (outside of the site) will enhance existing natural character values by restoring ecological values and habitat within the adjacent reserve. This, together with the requirement for native planting (screen and amenity/restoration) within the plan change area, means that on balance, further loss of natural character will be avoided.

## 8.1 Section Conclusion (Natural Character)

Adverse effects on natural character associated with development within the site will be balanced by the positive effects associated with the restoration and buffer planting between the reserve and areas to be developed. The proposed rezoning will have a ***neutral*** effect on the natural character values of the adjacent lake edge.

[11] *Public Perceptions of Natural Character in New Zealand: Wild Nature Versus Cultured Nature.* New Zealand Geographer. B. Newton, J. Fairweather & S. Swaffield. 2002.

# 9 LANDSCAPE EFFECTS

This section of the report considers the effects of the proposed development on the existing landscape attributes and characteristics identified within the existing landscape context and values section of this report.

## 9.1 General Effects of a Change in Zoning on Landscape Character

It should be noted that change in landscape character always occurs when a zone that allows greater levels of development (intensification) or different types is introduced.

In general, the effects of a change in zoning that allows greater levels of the same type of development that is already permitted within the existing zone will be less than the effects of a zone change that allows a new or different type of development (i.e., intensification of existing character vs a change in character). Depending on the relative difference in intensity, a development that is similar to that found in the surrounding landscape is more easily integrated into that landscape. This is because both the existing and new zones will share a common element that contributes to the existing landscape character.

Correspondingly, a change in zoning that allows a type of development not currently experienced in the existing landscape, is likely to have a greater effect on existing landscape character values, particularly if it is undesirable or of lower aesthetic quality. This is more likely to occur where viewer sensitivity to change is high.

The extent to which the zone change affects wider landscape character values is influenced by several factors including:

a. The transition between development densities/types of zones (instant/gradual).
b. The influence of the plan change area on wider landscape character (character type, threshold triggers).
c. Scale and relative scale (large, small).
d. How the landscape is experienced (visual, experiential, perceptual)

The transition between different types and intensities of development within a landscape is commonly referred to as the urban-rural transect, where adjacent zones represent a small transition in character type from one to the next, as illustrated in the following figure. Within the context of this proposed plan change within the application site, the *Rural-Residential* zone is adjacent to *Rural*, meaning that the shift between zones is not unexpected and will not represent an inappropriate change in character.

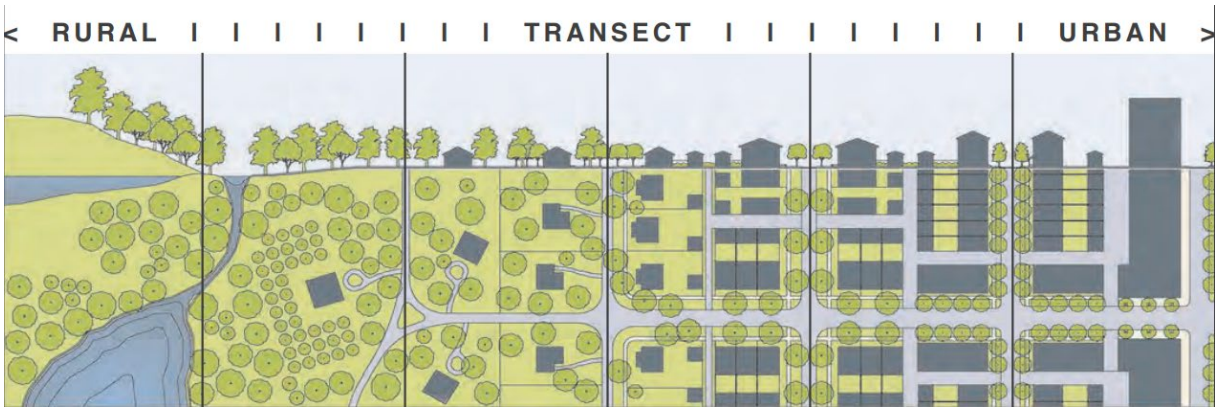



**Figure 16** Rural to Urban Transect

## 9.2 Effects on Landscape Character

When effects on landscape character are considered collectively, the proposal will have a ***low-moderate*** adverse effect on the key features and the overall characteristics of the landscape within and immediately surrounding the application site. The development enabled by the proposed plan change will have negligible to no effect on the existing landscape character outside the visual catchment within which it is contained. Because this is well below the minor effects threshold of the RMA, these effects are not discussed in this report.

While the rezoning of the land is expected to result in alterations to the existing topography associated with the formation of roads and building pads, these changes will occur within an area that has already been modified by forestry and will follow the broader topographic patterns of the site. With regard to the physical attributes that contribute to wider landscape character and value, the proposed plan change will not affect the larger existing topographical features that are located outside the site. The proposal will not result in a loss or degradation of ecologically sensitive areas or existing pockets of vegetation that contributes to the existing characteristics of the site (other than Pinus sp. seedlings and weed species).

The proposed plan change will enable more intensive development of the site by allowing rural-residential subdivision down to 2500m$^2$. This will affect the appearance of the site and its immediate surroundings, and consequently its existing rural characteristics. However, due to its proximity to Whakamaru Village to the west, and development within the Rural Environment (Zone) Taupo District to the south, development within the site will not:

a) Affect wider rural land-use patterns.
b) Affect the key values, attributes, and characteristics of the outstanding natural landscape (Waikato River).
c) Affect wider perceptions of rural amenity and character.

Enhancement planting within the road reserves and access reserves will enhance the appearance of the site, helping development within the site to integrate with the wider surrounding landscape.

Development enabled by the proposed plan change will have a more dramatic and notable effect on the existing landscape character of the area to be rezoned, than on the characteristics of the wider surrounding landscape. This is partly due to the site being a relatively small component of the wider landscape, and while visually prominent, it does not contribute significantly to existing character or values. The change will be predominantly visual, with the visual changes to the land use patterns within the site having a greater effect on perceptions of the site than the changes likely to occur to the physical attributes associated with the underlying topography and vegetation cover, the sites formative processes, or its associative values.

Where the proposed plan change area is experienced from closer locations, such as adjacent to the site (the lake reserve) and the rural development along Pokuru Road North, on the southern side of the river, existing (undeveloped) open spatial characteristics of the site will be replaced by rural residential development and an extensive vegetative framework. This will impart the site with a more highly developed and enclosed character. The proposed vegetation framework will help to integrate development within the site with the surrounding rural landscape. The contained nature of the site, with limited opportunities for expansion due to surrounding land tenure, means that rural sprawl will be avoided. The relatively low development density proposed by the plan change (lots greater than 2500m$^2$) and the separation of housing clusters by planted reserve and access strips will prevent the development from appearing out of character with other nearby settlements.

While the proposed plan change will have a ***moderate-high*** effect on the existing landscape character within the plan change area (due to the dramatic change in character within the site from existing open spatial to intensification through rural residential development), the effect on wider landscape character and values within the broader catchment that the surrounding landscape is experienced and perceived will be ***low-moderate***. This is due to the extent to which the plan change area influences wider landscape character, and factors associated with its visual prominence, existing land use patterns, and the presence of other pockets of development along the river corridor (Whakamaru Village, Mangakino Village, and development within Waipamu Station (Pokuru Road North)). Development enabled by the proposed plan change will be subservient to the more dramatic features associated with the river, lake, and volcanic topography to the south and west, within the wider surrounding landscape.

## 9.3 Effects on ONL5

The plan change site is located within the Waikato River Outstanding Natural Landscape (ONL5), which forms part of a contiguous series of ONLs containing the Waikato River and adjacent topographic and landscape features. While development enabled by the proposed plan change is likely to have a cumulative effect on the physical, associative, and perceptual attributes and values of the ONL, the scale at which this will occur is confined to a small part of the feature and will not be experienced within the context of other areas of disturbance, such as the Atiamuri Sand and Pumice Quarry approximately 14km to the east.
It is noted that similar zoning can be found within the ONL overlay at Horahora, where rural-residential development is found within ONL10.

Effects on the ONL5 will be mitigated by a combination of building height restrictions and control over exterior building materials and colour. Restricting the height of the buildings within the site to 6m will help the development enabled by the plan change to integrate into the wider ONL by ensuring a height-to-width ratio that will assist future dwellings to appear "grounded" within the site (both individually and cumulatively). This will reduce the building's visual prominence and the chances of cumulative effects associated with multiple buildings visually aligning without interruption (stacking) when seen from the south. The proposed design restrictions will also reduce the timeframe within which planting (restoration and mitigation) within the proposed structure plan area will become effective, and also means that the bunding along the northern side of the site can be constructed to a lower level than would be necessary if the buildings were higher (8m).

The use of visually recessive cladding material and colours and tones that are already found in the surrounding natural environment (as identified in section 3.1 above) will assist the future development to integrate with the ONL by reducing the visual contrast between the development and surrounding natural areas.

Restoration planting and mitigation planting, using the same indigenous species found in other parts of the ONL, will enhance the natural character values within the site, helping to balance the effects of the development.

Overall, due to the relative scale of the development within the context of the much larger ONL, the adverse effects of the proposal on the key values and attributes of the Waikato River ONL will be ***low***.

## 9.4 Effects On Visual Amenity

The *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Draft 2021)*[12] states:

> *Visual matters are integral to landscape rather than a separate category or factor. Physical, associative, and perceptual dimensions are each experienced visually (as well as through other senses).*[13]

The visual effects of the proposed development have been assessed from ten representative view locations surrounding the site and rated using a standardised rating system (appended to this report as appendix four).

While development enabled by the plan change will be visible from all identified view locations, the effects will vary depending on the context in which they are seen, and the screening that is provided by several factors including topography, vegetation, existing buildings, and distance. Due to a combination of existing vegetation surrounding the site, and intervening topography, there are relatively few transient locations surrounding the site, where uninterrupted or continuous views of the site can be obtained.

### 9.4.1 Visual Catchment

As part of the initial investigation into the potential visibility of the proposed plan change site, a zone of theoretical visibility (ZTV) analysis was carried out. Using an envelope approach[14], the ZTV analysis used the national 8m digital elevation model[15] (DEM) to identify locations in the surrounding landscape from where the development would be potentially visible.

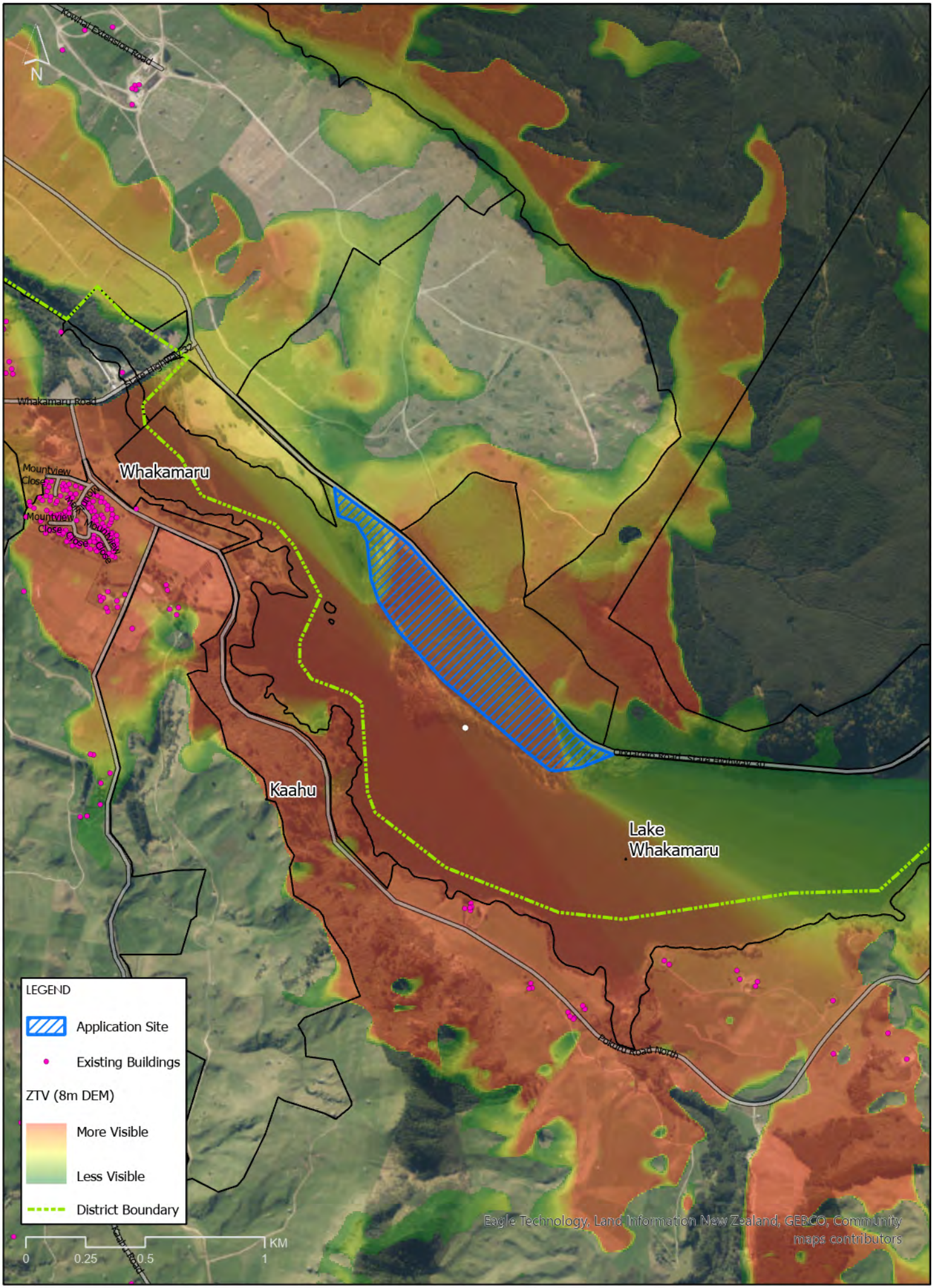
A ZTV map has been produced to identify the visual catchment within which changes enabled by the proposed plan change would be potentially visible. This allows potentially affected viewing audiences to be identified and the effects on them assessed. It also allows a comparative analysis of how much of the site will be visible from any location and helps to identify where mitigation (such as additional screening) may be required and the effectiveness of this mitigation.

[12] The *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Draft 2021)* were adopted by the NZILA in May 2021, replacing the NZILA Best Practice Note: Landscape Assessment and Sustainable Management 10.1 (NZILA BPN 10.1).

[13] Para 4.30. Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Final Draft)

[14] An envelope approach assesses the visibility of an envelope that encompasses the proposed development.

[15] Higher resolution Lidar data which would have enabled are more refined analysis is not available for the visual catchment potentially affected by the application.




# Zone of Theoretical Visibility (ZTV)

Ongaroto Road Plan Change

Scale 1:20,000 at A4 | November 2022 | Map No-1 | R0

mansergh graham LANDSCAPE ARCHITECTS

Key findings from the ZTV analysis and site investigation are:

a. Due to its relatively remote location and the enclosing hill country topography to the north, south and east, the proposed plan change site will be seen from within a limited visual catchment, adjacent to the Waikato River.
b. The site is visible from a short section of State Highway 32 to the west, Ongaroto Road to the north and west, Whakamaru Village and from elevated land to the South of Lake Whakamaru (with views from the south partially screened from the road by intervening topography and vegetation in places).
c. The site is visible from Lake Whakamaru between the dam and Te Rakau Creek to the east.
d. Field verification found that existing vegetation (shelterbelts, hedges, specimen trees and wetland margin vegetation), as well as intervening topography, restrict views into the subject site from surrounding public (and private) locations.
e. The nearest publicly accessible viewing opportunities are located along Ongaroto Road, within the adjacent reserve and from the lake.
f. The nearest dwelling (from which views of the site are potentially afforded) is located to the east of Whakamaru Village, approximately 745m from the closest part of the site (on Kaahu Road). The nearest public boat ramp on the northern side of the lake is immediately adjacent to the site at its western end. On the southern side of the lake, the closest public boat ramp is at the Whakamaru Water Skiing Club, approximately 630m from the nearest part of the site.
g. Site inspection identified the clearest views of the site would be from Lake Whakamaru, around the intersection of Pokuru Road North and Kaahu Road (approximately 1km from the site), and from along Kaahu Road North (approximately 750m to the south of the site).

### 9.4.3 View Locations and Viewing Audience

Several potential view locations were investigated as part of the assessment, from which four view location (VL) groups were selected as being representative of the range and types of views available. View locations were selected based on the availability of existing views from public or private property, viewing frequency, viewer types, viewer distance and the viewing time and framework available at the time of the study. View locations, where potential existed for higher levels of adverse effects, were also investigated.

The potential viewing audience comprises:

a. Transient viewers travelling along Ongaroto Road (motorists and cyclists).
b. People using the Whakamaru Reserve (campers, day visitors, etc).
c. Residents of Whakamaru Village and the recent rural subdivision and development along Pokuru Road North.
d. Lake users (boat users, water skiers, fishers etc).

All selected view locations are identified on the view location map below. Photographs from each VL identified and assessed are included in appendix six. Potential visual, landscape and amenity effects, arising from the development, are described in the following sections of this report.

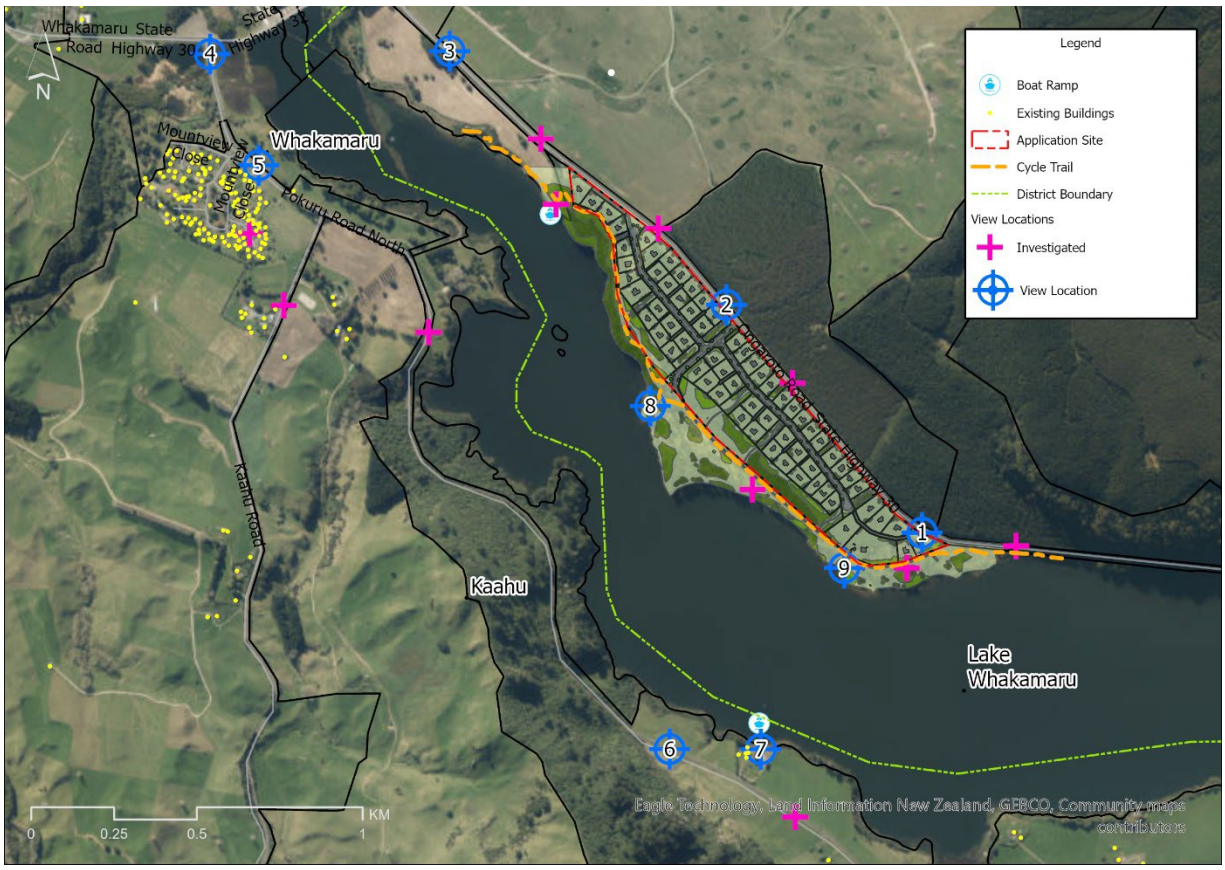



**Figure 17** View Location Map

### 9.4.4 Visual Absorption Capability

One of the main factors that will influence a development's visual effect is the visual absorption capability of the surrounding landscape. This is the ability of the landscape to integrate a development or feature into its existing visual character without significant change.

Each view location has been rated in terms of its visual absorption capability (VAC). Factors considered in determining the sites VAC rating include:

a. The extent to which development within the site will be visible.
b. Visual and physical links with other similar elements or activities in the landscape (e.g., other buildings and subdivisions).
c. The level of modification to the surrounding landscape (short and long term).
d. Appropriateness of scale.
e. Viewing distance.
f. Backdrop; and (in some instances); and
g. Atmospheric conditions.

Notable views of the site are generally restricted to within 1km. Views of the site from further away are generally less frequent due to intervening topography and vegetation.

The site's ability to absorb the proposed development ranges from *Poor* to *Good*. The definitions for the ratings are attached in appendix five of this report.

The *Good* ratings are in locations that are of some distance from the site, where vegetation within the landscape and topographic variation provides screening and backdrop to the site, and the context of other buildings (such as Whakamaru Village and development along Pokuru Road

North/Waipamu Station), will help development enabled by the proposed plan change to integrate with the surrounding landscape.

The *Poor* ratings occur from locations where direct views are available, with very little screening provided by intervening topography, vegetation, or existing buildings. From these locations it is recommended that screen planting is established (as shown in the Illustrative Concept Plan in appendix one), to help reduce the potential visual prominence of development within the site, allowing it to better integrate into the wider rural landscape.

### 9.4.5 Investigated View Locations

Several potential view locations were investigated but not included in this assessment for the following reasons:

a. While visible, the effect of the development enabled by the proposed plan change on landscape character, natural character and/or visual amenity would be well below the minor threshold of the RMA) (i.e., have no or negligible effect); and
b. The potential view location was like another view location. These are shown as "investigated" in the above figure.

While view locations on the lake have not been identified or investigated, the effects experienced on the lake are likely to be like those experience within the recreation reserve and boat ramp to the south of the site.

Photographs from each VL identified and assessed are included in the appendices.

### 9.4.6 Existing Visual Amenity

The key landscape features and factors that contribute to existing visual amenity (positively & negatively) within the visual catchment containing the application site include:

a. Lake Whakamaru and shorelines.
b. The bush and rocky escarpments associated with the elevated topography associated with Kaahu Peak (to the south) and the steep lands, escarpments, and rhyolite domes (to the east).
c. The sense of containment created the steep hill country associated with the rhyolite dome landscape that backdrops the site.
d. The sense of mystery and intrigue created by views of the serpentine river/lake disappearing around bends in the channel.
e. The complex mosaic of the different land uses that are visible, including pastoral grazing, forestry, lifestyle blocks, holiday homes, Whakamaru Village and power generation facilities (Whakamaru Dam and substation); and
f. Whakamaru Village and scattered lifestyle/residential/holiday home-built development visible on the southern side of the lake.

The existing visual amenity of the landscape containing the site ranges from ***moderate*** to ***moderate-high.***

## 9.4.7 Analysis of Visual Effects from Identified View Locations

### *View Locations 1, 2 & 3*

View Locations (VL) 1-3 are representative of views of motorists travelling along Ongaroto Road. VL1 represents the first clear view of the site from the eastern approach and VL 3 the first clear view of the site from the western approach. The views are transitory, meaning that drivers and passengers will only experience the site for a relatively short duration as they travel along the road. Viewer sensitivity from these locations is therefore expected to be low.

The views from these locations are characterised by the surrounding rural land use patterns and topography. To the east of the site, views across the landscape are contained by the steep volcanic landscape and extensive tracts of production forest, which help to focus views over the site towards the more open farmland associated with rhyolite dome country to the east and the rocky outcrops and bush covered slopes of Kaahu to the west. From the road, the site, and much of the lake is hidden from view by the foreground topography and low scrub (broom and other exotic weed species), with limited views of the lake and recreation reserve available over the crest of the remnant river terrace landform in the foreground. Existing visual amenity values from these locations are ***moderate-high*** (across the lake and towards Kaahu Peak), dropping to ***moderate*** when the lake and Kaahu are largely screened form view.

The implementation of a planted bund along the only Ongaroto Road boundary means that only a small part of the overall site area (and the reserve beyond) will be visible from any one location along the It should be noted that existing views of Lake Whakamaru from this section of road were only exposed in 2018 when the pine trees within the site were harvested. The block has since been replanted meaning that, if allowed to grow, most views across the site would be lost again within the next 5-10 years.

From the eastern end of the visual catchment (VL1) the landform opens to allow glimpses of the lake, the recreation reserve, and an existing holiday home within the application site.

The proposed plan change will change the landscape characteristics of the site from rural to rural-residential. The vegetated noise bund along the state highway will prevent views into much of the site and the lake beyond. Some development will likely be visible above the bund from the eastern end of the site, where the terrain rises to the north, and at the entranceway to the site and reserve.

Views of the bund will be relatively brief, with the speed limit along the road set at 100mh.

While development associated with the rezoning will be noticeable to road users, this group of viewers are likely to be less sensitive to the change and will experience the site as a small area of development along an everchanging road corridor. The type of development that will be enabled by the plan change will be like other areas experienced in the wider surrounding rural landscape and is not likely to draw undue attention.

While the development (and bund) will screen views of the lake from this part of Ongaroto Road, views of the key topographical features (such as Kaahu Peak to the west, and the rhyolitic domes to the east) that contribute to existing visual amenity will remain visible. Planting on the bund will help screen any development on the upper part of the site. It will also extend the existing visual characteristics of the road corridor to the east, helping any development associated with the proposed plan change to integrate with the wider landscape from these locations.

The effects from these locations are representative of transient viewer types and are likely to be ***low*** reducing to ***very low*** with the implementation of the earth bunding.

### *View Locations 4 & 5*

View locations 4 and 5 represent views attainable from Whakamaru Village near the dam, lakeside reserve and residential area. VL4 represents the first clear view of the site from the dam and VL 5 is the view from the lakeside reserve and dwellings on the northern side of the village. Viewer types in these locations will be transitory (road users) and permanent (residents). Viewer sensitivity from these locations is expected to be moderate as the site forms the backdrop to views to the east across the lake.

Amenity from these view locations is derived from views across Lake Whakamaru to the enclosing landforms beyond. Mature exotic trees along the southern side of the lake frame the views towards the proposed plan change area, partially screening its eastern end from view. Visually complex, the mosaic of different land use patterns visible from this location is rural and includes pasture, forestry, and the lake. A few buildings can be seen in the distance on the southern side of the lake, scattered across the pastoral landscape. To the south of the lake, Kaahu rises abruptly, its jagged rocky outcrops and steep slopes providing a secondary point of focus, enhancing the visual amenity of the area. Existing visual amenity values from these locations are ***moderate-high***.

From these locations, only the western end of the proposed plan change area is visible, partially screened by topography and vegetation along the southern part of the lake. From the dam, more of the site is visible.

The development enabled by the proposed plan change will alter the landscape characteristics of the site from rural to rural-residential. The screen and mitigation planting along the southern boundary of the site will integrate with enhancement planting within the lakeside reserve to partially screen development from view. This will allow the increased development densities to integrate with the wider rural character surrounding the site. While the introduction of more buildings into the backdrop of the view will change its composition, the proposed structure plan/provisions which control the development density, building materials and colours, as well as the proposed restoration/mitigation planting will ensure that the key attributes that give rise to existing visual amenity will not be affected.

Change in the characteristics of the site will be more noticeable from VL4 than from VL5 (and the houses within Whakamaru Village that this VL represents) due to the added screening afforded between VL5 and the site by the mature trees growing along the southern shores of the lake and within the Village. Distance to the site means that any change within it will be experienced within the context of the wider rural landscape and the adjacent dam and village.

The effect of development enabled by the plan change from these locations will be ***low-moderate*** reducing to ***low*** once the restoration and enhancement planting within the site and the adjacent reserve becomes established.

### *View Locations 6 & 7*

View locations 6 and 7 represent views attainable from along Pokuru Road North and the Whakamaru Ski Club & boat ramp on the southern side of the lake opposite the site. VL6 represents the first clear view of the site from Pokuru Road North, after exiting the bush, and provides an elevated perspective of the site from approximately 800m. VP7 is similar in orientation but is located

at the boat ramp on the lake edge. These view locations represent views from private property on the southern side of the lake (including within the Waipamu Station gated subdivision). Pokuru Road North is a no-exit road. Viewer types in these locations will be transitory (road users and visitors to the ski club/boat ramp/residents) and permanent (residents). Viewer sensitivity from these locations is expected to be moderate as the site forms the backdrop to views to the north and west across the lake.

Amenity from these view locations is derived from views across Lake Whakamaru to the enclosing landforms beyond. From the southern side of the lake, the site is seen at a transition point in the landscape, where the more enclosed steep land topography and rhyolite cliffs and outcrops to the east begin to ease and open out to a gentler rolling terrain to the west. Like VL4 & VL5, views from the southern side of the lake are visually complex, with the mosaic of different land use patterns and topographic features enhancing the visual amenity from these locations. While few buildings can be seen on the northern side of the lake, development associated with recent rural subdivision and development along the southern side of the lake is manifest. Existing visual amenity values from these locations are ***moderate-high***.

From these locations, development enabled by the proposed plan change would be more prominent.

The development enabled by the proposed plan change development will alter the existing open spatial characteristics of the site, introducing a much greater density of development and changing the character of the site form rural to rural residential. While the recommended screen and mitigation planting along the southern boundary of the site will help to integrate development within the site and surrounding landscape (by grounding, softening, and partially screening it), from the more elevated locations along the southern side of the lake, development within the site will still be evident. While the plan change will enable a greater density of development to occur with the site than is currently enabled by the rural zoning, development densities will be lower than in Whakamaru Village and nearby Mangakino. This will allow development within the site to integrate with the wider surrounding rural character. Again, while the introduction of more buildings into the view will change its composition, the proposed development densities and restoration and mitigation planting that will be required as part of the structure plan/provisions will mean that the key attributes that give rise to existing visual amenity will not be affected.

Due to a combination of proximity, orientation, and elevation, change in the characteristics of the site will be more evident from these viewer locations than from locations to the north, west and south. As such, any change enabled by the proposed plan change within the site will be experienced within the context of the wider landscape. While the key attributes that contribute to existing visual amenity and value will not be affected, mitigation and integration planting are recommended to ensure that the expected development within the site does not become the focus of attention or contribute to a wholesale change in the wider landscape character values.

The effect of development (roads and houses) enabled by the plan change from these locations will be ***moderate*** (more than minor) reducing to ***low-moderate*** (minor) once the recommended restoration and enhancement planting within the site and the adjacent reserve becomes established.

The following images show the existing site and a photo simulation depicting changes to the site if the Illustrative Concept Plan contained in appendix one was to be implemented. Enlargements of these images can be found in appendix six.

**Figure 18** Existing View from VL6 on Pokuru Road North.

**Figure 19** Photomontage depicting changes to the site from VL6 if the Illustrative Concept Plan contained in appendix one was to be implemented.

### *View Locations 8 & 9*

View locations 8 and 9 represent views attainable from the Recreation Reserve, adjacent to the site. VL8 represents the view of the site from the western end of the campground within the reserve and VL9 from the eastern end. These view locations represent views for campers, cyclists (using the Waikato River Trail) and visitors. Viewer types in these locations will be transitory or short-term. Viewer sensitivity from these locations is expected to be moderate as the site forms the backdrop to a popular recreation reserve.

Visual amenity from these view locations is mainly derived from views across Lake Whakamaru to the south, away from the proposed plan change area. Existing visual amenity values from these locations are ***moderate-high*** (across the lake), dropping to ***low-moderate*** when looking across the plan change area.

While the plan change area is visible from within the reserve, the recommended vegetated buffer (refer to the structure plan) between the reserve boundary and the proposed development area (on the upper terrace above the reserve) will screen most views of the development within the site and will enhance the natural character and landscape values of the reserve itself.

Visitors to the reserve will only experience the development along the reserve entry road, which will be aligned with the recommended development access to Ongaroto Road. The wide road reserve and screen planting will ensure that reserve users do not feel like they are driving through an urban area to get to the lake.

The buffer planting will restore a sense of enclosure and containment to the reserve that existed before the pine trees within the application site were felled, with the major difference being that the recommended native plantings will be significantly lower and will not create shading issues within the reserve.

Again, any change enabled by the proposed plan change within the site will be experienced within the context of the wider landscape. While the key attributes that contribute to existing visual amenity and value will not be affected, mitigation and integration planting are recommended to ensure that the expected development within the site does not become the focus of, draw attention to, or contribute to a wholesale change in wider landscape character values from within the reserve.

The effect of development (roads and houses) enabled by the plan change from these locations will be ***moderate-high*** (more than minor) reducing to ***low*** (less than minor) once the recommended restoration and enhancement planting within the site and the adjacent reserve becomes established, screening most of the development that is likely to occur from view and integrating it with the surrounding landscape.

## 9.5 Conclusion (Landscape and Visual Effects)

While the change in character associated with the development enabled by the proposed plan change will be more pronounced within the plan change area itself, the adverse effects on the landscape and visual amenity values on the wider surrounding rural landscape character will be ***low-moderate***.

The effect of development enabled by the plan change on visual amenity values ranges between ***very low*** and ***moderate-high***. These will reduce to between ***very low*** and ***low-moderate*** (less than minor

and minor) once the restoration and enhancement planting required by the structure plan becomes established.

Views from the southern side of the lake will be affected to a greater extent than views from the northern side of the lake.

### 9.5.1 Summary of Effects Ratings

Existing landscape, natural character and visual amenity values and effect ratings are summarised in the following table.

| TYPE | EXISTING VALUE | EFFECT RATING* | RMA THRESHOLD |
|---|---|---|---|
| **Landscape** | | | |
| Landscape character (including rural character) | *moderate - high* | *Low-moderate* | |
| Visual Amenity | | | |
| • VL 1, VL 2 & VL 3 | *moderate* | *Very low* | less than minor |
| • VL 4 & VL 5 | *moderate-high* | *low* | less than minor |
| • VL 6 & VL 7 | *moderate-high* | *low-moderate* | minor |
| • VL 8 & VL 9 | *Low-moderate* to *moderate-high* | *low* | less than minor |
| **Natural Character** | | | |
| Effects on Natural Character | *low-moderate* | *No effect (Neutral)* | |
| | | | |
| *With the recommended mitigation/restoration measures identified in the proposed provisions and structure plan | | | |

# 10 RELEVANT STATUTORY AND NON-STATUTORY PROVISIONS

Landscape management (including the management of existing rural character, natural character and visual amenity values) is influenced by the relevant statutory and non-statutory provisions contained in the following documents:

a. Resource Management Act and subsequent amendments (RMA),
b. The Waikato Regional Policy Statement (RPS); and
c. The Operative South Waikato District Plan (OWDP).

The requirements of these documents influence expectations around landscape character and amenity values, through the identification of objectives, policies, and rules applicable to each zone.

The following section evaluates how the proposed change in zoning is likely to affect the existing landscape, natural character and visual amenity expectations associated with the existing zoning.

## 10.1 Resource Management Act 1991

The proposal must meet the requirements of the Resource Management Act (RMA), and it is therefore important that the assessment of visual, landscape and amenity effects address the requirements of Part 2, of the Act. The key sections relevant to this application are S6(a), S6(b), and S7(c).

Concerning s6(a), the effects on the existing natural character values of Lake Whakamaru will be ***neutral*** due to the setback of the site from the lake and its margins. The proposed rezoning will not result in any physical modification to the shoreline of the lake/Waikato River.

Concerning s 6(b), while the application site is contained within an identified outstanding natural landscape, the proposal will not affect the key attributes that contribute to the identified landscape. The effects on the ONLs identified in the District Plan will be ***low***.

Concerning Section 7(c), the adverse effects of the proposed rezoning on the existing visual amenity values will range from ***very low*** to ***moderate-high***. Once the recommended restoration and mitigation planting becomes established, effect levels will reduce to ***very low*** to ***low-moderate*** (less than minor to minor).

## 10.2 Regional Policy Statement

Regarding Objective 3.20 Outstanding natural features and landscapes, as previously identified, the application site is not located within an ONFL identified within the RPS. It is located within ONL5, identified in the OSWDP. The proposed rezoning will not affect the key values and attributes that contribute to the ONL (as discussed in the landscape and natural character sections of this report).

Regarding *Objective 3.21 Amenity*, the effects of the proposed plan change on visual amenity are assessed in the visual effects section of this report.

Regarding *Objective 3.22 Natural character*, the effects of the proposal on natural character are assessed in the Landscape and Natural Character section of this report.

Regarding *Policy 11.2 Protect Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna*, the proposed plan change area is partially located within the SNA surrounding Lake Whakamaru. The effects of the proposed rezoning on the SNA are identified in the ecological report prepared by 2 Awa Ecology Ltd.

Regarding *Policy 12.1 Outstanding natural features and landscapes*, there are no regionally significant ONFLs within the subject site and surrounding landscape.

In terms of *Policy 12.2 Preserve natural character*:

The site is not located within a pristine area or of high or outstanding natural character (Policy 12.2(a)); and

While visible, the proposed site will not be a dominant element when considered within the context of Policy 12.2(c), if the recommended restoration planting and mitigation approach is adopted.

## 10.3 Operative South Waikato District Plan

The site is currently zoned *Rural* under the OSWDP, which contains a suite of objectives and policies for the protection of rural character and landscape amenity. The objective, policies and standards relevant to this assessment are addressed as follows:

### 10.3.1 5.2 Objectives for the District's Rural Areas

*5.2.4 To provide for the maintenance of the ecological values in the rural area and protection of its outstanding landscape values, and to conserve the cultural and heritage values of sites, while enabling primary production and other activities in a rural location.*

*5.3 Policies:*

*5.3.2 Promote land management practices that are consistent with:*

- *The productive capabilities of the soil/land resource,*
- *The natural character of wetlands, lakes and rivers and their margins,*
- *The protection of significant natural areas, outstanding natural features and landscapes, and*
- *The maintenance or enhancement of indigenous biodiversity.*

*5.3.9 Provide for the subdivision, use and development of land for rural residential activities in specifically zoned locations.*

*5.3.14 Promote rural residential development only in zoned locations which:*

- *Achieve cluster development, and avoids the layout of lots in a lineal pattern along roads*
- *Separates access and through-traffic functions in an effective manner*
- *Requires adequate separation distance from the Waikato River and hydroelectric power*
- *operating easements*
- *…*
- *Safeguards the landscape character, visual amenity and biodiversity values of the Waikato*
- *River valley by encouraging development to be sited and designed to be sympathetic with the landform and landscape, and existing vegetation, and the building materials and cladding of structures do not dominate the outlook visually or physically from or to the locality.*
- *…*

*5.3.18 To minimise the potential for adverse effects of rural residential subdivision, use and development at the interface of the Rural and Rural Residential zones with other zones.*

*5.3.20 Manage the adverse effects of land use change or intensification, upon wetlands, waterways and indigenous biodiversity.*

*5.3.21 To achieve the Objectives of the Vision and Strategy for the Waikato River by managing subdivision and land use within rural areas located within the River catchment in a way that restores and protects the health and wellbeing of the Waikato River, including by;*
*a) Limiting rural residential development to specific zoned areas*
*b) …*
*c) requiring setbacks from waterways*
*d) including standards for vegetation disturbance, earthworks, silt and stormwater control*
*e) managing the effects of large-scale land use change*
*f) maintaining significant indigenous biodiversity associated with the River*
*g) …*
*h) creation of new esplanade reserves or strips.*

Existing ecological values will be enhanced through a requirement to undertake restoration planting within a landscape buffer area within the site. This, and the proposed mitigation recommendations, to be integrated into the proposed provisions and structure plan, will ensure that existing ecological values in the rural areas and the values associated with the outstanding natural landscape are maintained and enhanced (Consistent with the requirements of OBJ 5.2.4/POL 5.3.2).

The rezoning will allow better management of the rural resource by providing for development within an appropriate area, helping to reduce ad-hoc rural subdivision and rural sprawl. Access to Lake Whakamaru and the adjacent recreation reserve will be enhanced. (Consistent with the requirements of POL 5.3.9). The proposed structure plan promotes the clustering of lots within the site, separated by local purpose reserves and planting. It provides appropriate separation of through traffic (to the reserve) from the rural-residential lots by providing wide reserve buffer areas. The site is set back from the Waikato River. The proposed structure plan and associated provisions will ensure that the development will integrate with the surrounding landscape character without unacceptable effects on visual amenity values and will ensure development within the site is sympathetic to the landform and landscape, and existing vegetation patterns. The controls on building materials and cladding of structures will ensure that the proposed plan change development will not dominate the outlook visually or physically from or to the locality. (Consistent with the requirements of POL 5.3.14).

Bunding along Ongaroto Road will minimise the potential for adverse effects of rural residential subdivision, use and development at the interface of the *Rural Residential* zone with the *Rural* zone. (Consistent with the requirements of POL 5.3.18).

The proposed plan change development meets the requirements of the Vision and Strategy for the Waikato River by providing for controlled development within the proposed zone, which will be set back from the edge of the lake/river, places further controls over earthworks and stormwater management within the site, enhances the biodiversity of the river corridor and will enlarge the existing esplanade reserve area (Consistent with the requirements of POL 5.3.21).

### 10.3.2 6.2 Objective for the Districts Landscape and Natural Values

*6.2.1 To recognise the outstanding natural features and landscapes in the district and protect the landscape values within these areas from inappropriate subdivision, use and development.*

*6.2.4 To preserve the natural character of wetlands, lakes and rivers (and their margins) in the district, and protect them from inappropriate subdivision, use and development.*

*6.2.5 To identify and maintain or enhance the values of the district's indigenous biodiversity including by protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna.*

*6.2.6 To maintain and enhance public access to lakes and rivers in the district, particularly those locations identified as being of high priority due to their ecological or recreational values, where public access is compatible with protecting ecological values.*

*6.2.7 To maintain and enhance amenity values within outstanding natural landscapes and features, and significant amenity landscapes.*

*6.3 Policies*

*6.3.1 Identification of outstanding natural features and landscapes, and active management to ensure that the landscape values are recognised and protected from the adverse effects of inappropriate subdivision, use and development.*

*6.3.2 Subdivision, use, and development should avoid, remedy or mitigate adverse effects on the values that contribute to an area being an outstanding natural feature or landscape, in particular by avoiding, remedying or mitigating the adverse effects of activities such as indigenous vegetation clearance, wetland drainage, large-scale landform modification, and construction of large or otherwise visually prominent structures, buildings and earthworks that will adversely affect those values identified.*

*6.3.5 Ensuring that earthworks and buildings within identified significant amenity landscapes are of a compatible scale that maintains the attributes that contribute to the landscape values of these areas.*

*6.3.7 Subdivision use and development shall avoid the loss or degradation of areas of indigenous vegetation and habitats of indigenous fauna, whether these areas and habitats are significant or not, in preference to remedying or mitigating adverse effects on those areas or habitats.*

The proposed rezoning will enable development within the ONL at a scale or intensity that will not adversely affect its key attributes and values. (Consistent with the requirements of OBJ 6.2.1/POL 6.3.1 & 6.3.2). It is noted that the Horahora Rural Residential area is also located within the Waikato River ONL, which provides development context for the proposal within the ONL.

As discussed in the landscape and natural character sections of this report, the margins of Lake Whakamaru/Waikato River will not be physically affected by the proposed rezoning. The natural character values associated with this part of the landscape are ***low-moderate***. The restoration planting associated with the buffer reserve will have a ***no effect*** on existing natural character (i.e., While the appearance of the site will change, existing natural character values will remain unchanged) (OBJ 6.2.4 & 6.2.5 & POL).

Public access to the lake will be enhanced through improvement in the access to the reserve (Consistent with the requirements of OBJ 5.2.6).

Existing amenity values associated with the outstanding natural landscapes (ONL5) will be maintained and enhanced through the implementation of restoration planting and the proposed design and mitigation requirements identified in the proposed provisions and structure plan (Consistent with the requirements of OBJ 5.2.7 & POL 6.3.2, 6.3.5 & 6.3.7).

### 10.3.3 10. Standards - Rural Zones

*10.6.1 Subdivision of Sites of 30ha or larger*

*a) Site Area (this rule does not apply to subdivision under Rule 10.3.1a) v))*

- *i) Minimum – 2500m2 net site area*
- *ii) Average site area per subdivision – At least 10ha including the balance area*
- *iii) The maximum number of sites per subdivision application created (including the balance area) under this rule shall be 3 (i.e. 2 additional). The minimum area required for a subdivision under this rule is 30ha.*

Under the existing zoning (rural) the site could be subdivided into three lots (permitted activity).

### 10.3.4 10.7 Standards – Rural Residential Zone

10.7.1 *Minimum* and Average Lot Size

*a) Minimum site area prior to subdivision - 1ha*

*b) Minimum lot size shall be 2500m2 net site area*

*c) Average lot size – at least 5000m2 net site area*

*d) For every lot created below the average lot size of 5000m2, another lot with an equal, or greater, area above the average lot size of 5000m2 shall be created. Except that if an odd number of lots is proposed, then one lot may be excluded from this rule.*

*e) Rules a) to d) above do not apply to a subdivision under Rule 10.3.1a) v).*

Under the Rural Residential zone (as per the OSWDP) the site could potentially be subdivided into approximately 56 residential lots under the above provisions (allowing for road reserve & access requirements). Potentially, these lots could directly adjoin the existing reserve and result in dwellings being located much closer to the reserve boundary and internal reserve access road than if the proposed separation buffer (local purpose reserve) was established. The existing provisions do not require the smaller lots to be set back from the reserve or clustered (as does the proposed structure plan), meaning that they could be located along the reserve boundary, increasing the apparent density and effects on visual amenity and natural character from within the reserve. The effects of this type of subdivision (unmitigated) on existing landscape character and visual amenity are likely to be greater than the effects of the proposed rezoning under the requirements of the amended provisions and structure plan.

### 10.3.5 14.3.1 Activities within an Outstanding Natural Feature or an Outstanding Natural Landscape Area

*These Standards only apply to permitted and controlled activities within the Outstanding Natural Features or the Outstanding Natural Landscape areas identified in Appendix C.*

*(a) Earthworks must not:*

- *(i) exceed a 3-metre vertical ground alteration in a new face or cut and/or fill*
- *(ii) disturb or move greater than 1,000m³ within a site per calendar year*
- *(iii) exceed 250m² in area*
- *(iv) involve cut and batter faces or filled areas and must be revegetated to achieve 80% ground cover within 12 months of the earthworks being commenced.*

*(b) Despite (a), earthworks are permitted if they:*

- *(i) are part of an approved subdivision*
- *(ii) are associated with building works authorised by a building consent and the area of earthworks is no greater than twice the area of those building works, and occurs on land with an average gradient no greater than 1:8.*

The requirements of the proposed structure plan will meet or exceed the requirements of 14.3.1 (above).

## 10.4 Section Conclusion (Relevant Provisions)

It is therefore concluded that, while the proposed plan change will enable higher densities of development than is currently allowed under the *Rural Zone* and potentially achievable under the *Rural Residential Zone*, the proposed provisions and structure plan will achieve outcomes that are consistent with the objective and policies of OSWDP and will result in a better landscape, natural character and visual amenity outcome than if the site was rezoned Rural Residential (as per the wording of the OSWDP).

# 11 FINDINGS & OVERALL CONCLUSIONS

The existing landscape in and around the application site and the various features and land uses within it, influence how the proposed plan change area will integrate with its surroundings and the effects it will have on existing landscape character (including rural character), natural character, and visual amenity values. Analysis of the proposal found that:

a. The landscapes' ability to absorb the proposed development ranges from ***poor*** to ***good***. This is because the proposed plan change area is located within a relatively small visual catchment, contained by enclosing topography to the north, west and south, and is partially screened by vegetation to the east.

b. Existing natural character values associated with this part of Lake Whakamaru & the Waikato River are ***low-moderate***, with the existing landscape having been modified by works associated with the Waikato River Hydro Scheme (earthworks and vegetation removal). The proposed plan change, through the implementation of the proposed structure plan, will enhance existing natural character values within the site and mitigate the adverse effects of increased development from the adjacent lakeside reserve. Overall, the change will have ***no effect*** on natural character values associated with the Waikato River/Lake Whakamaru and its margins.

c. Within the context of the surrounding rural landscape, the proposed plan change area will have a ***low-moderate*** (minor under the RMA) adverse effect on existing landscape character values (Rural character). While there will be a change in the existing appearance of the site and its surroundings at the local level, the introduction of the proposed plan change area will not affect the rural characteristics of the wider landscape.

d. Adverse effects of the proposed plan change area development on visual amenity values associated with existing landscape character will range between ***very low*** and ***moderate-high***. These will reduce to between ***very low*** and ***low-moderate*** (less than minor and minor) once the restoration and enhancement planting required by the structure plan becomes established.

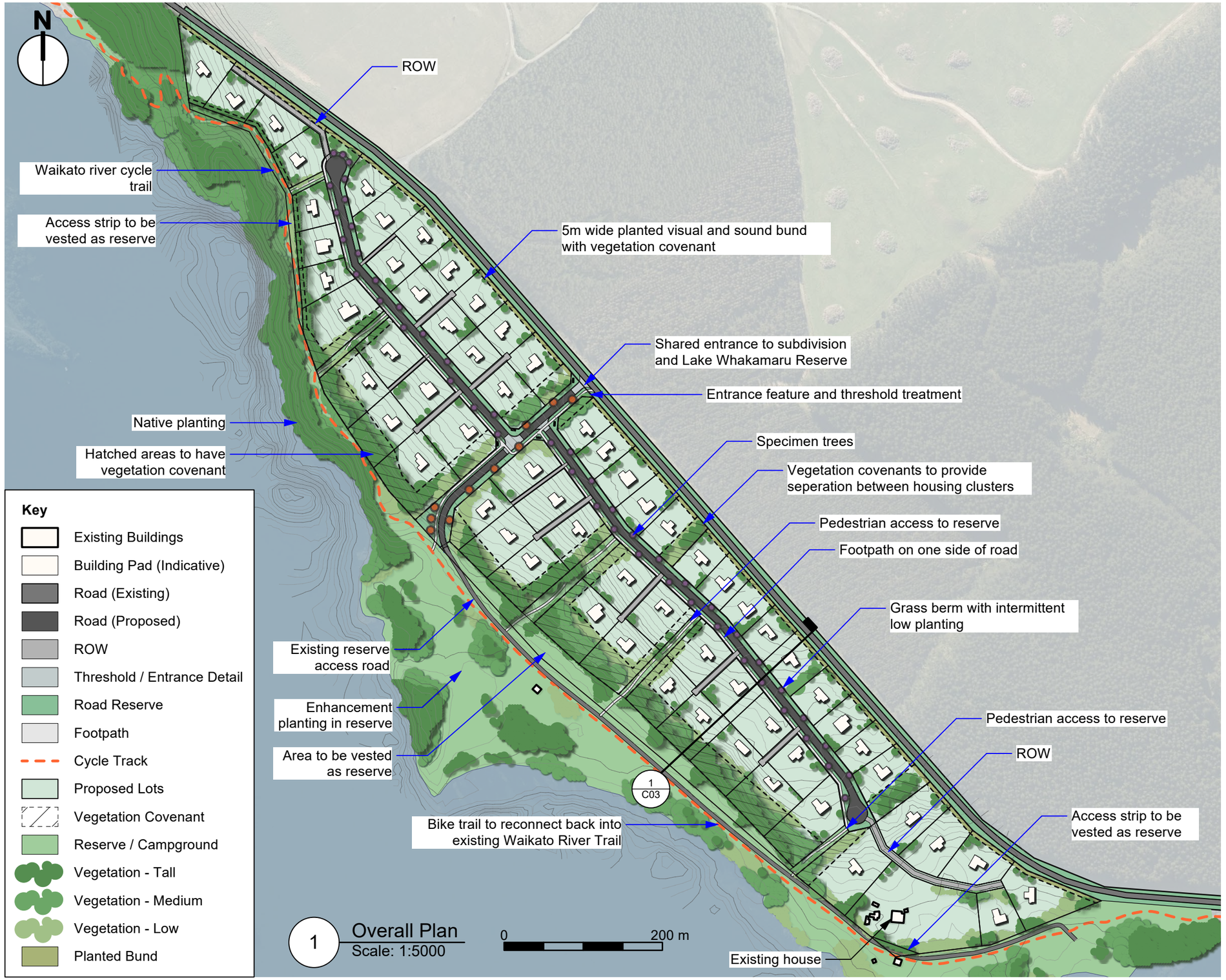
e. From most locations, the proposed plan change area will be visible or partially visible and will form part of the backdrop to the view over the wider landscape.

   From locations to the west of Lake Whakamaru, the lake itself will remain the focus of attention. Where visible, the presence of the plan change area in the backdrop to the view over the lake will not result in an unacceptable loss of visual amenity.

f. The proposed development is consistent with the requirements and direction of the relevant landscape, natural character, and amenity provisions of the RMA, WRPS and OSWDP.

Overall, from a landscape, natural character and visual amenity perspective, the effects of the proposed plan change will be no more than minor.

# 12 APPENDIX ONE: ILLUSTRATIVE CONCEPT PLAN




## Subdivision Concept

The proposed design works with the existing natural contours of the site to create a high-quality subdivision that integrates and enhances the natural and landscape attributes of the surrounding environment.

Key design components will include:

– 66 residential lots, ranging in size between 2500m$^2$ and 12661m$^2$. Excluding lot 62, the average lot size will be 3764m$^2$.

– New, modern homes will provide a better standard of living and more housing options for local families.

– Easy access to the Lake Whakamaru Reserve, with the relocation of the existing reserve access road to the main subdivision entrance road. Easy access to the boat ramp.

– The use of native bush to separate the public reserve from private lots and on steeper slopes which are less suited to development.

– The use of colours and materials, that enhance the appearance and amenity value of the subdivision and allow it to integrate with the surrounding landscape.

– The use of native plants of varying heights, and specimen trees, to link the proposed subdivision with the surrounding rural and lake reserve landscape. Plant species to be endemic to the Atiamuri Ecological District.

– The planting of taller plant species on the lower parts of the steeper slopes to retain lake views from the house sites above.

– The creation of links between the subdivision and the lakeside reserve to allow ease of pedestrian/cycle access and circulation around the subdivision.

– The creation of access lots, to enable the safe rerouting of the cycle trail between the subdivision and the reserve.

– The intermit use of low native planting within the road berm to visually soften and integrate the streets with their surroundings.

– A continuation of the 5m wide planted visual and sound bund along Ongaroto Road boundary.

– The use of swales for stormwater management within the road reserve. Stormwater and wastewater will be dealt with on-site.

– The application of CPTED principles.

– Creation of additional reserve.

*The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan is not intended as a construction drawing and should not be used as such.*

mansergh graham
LANDSCAPE ARCHITECTS

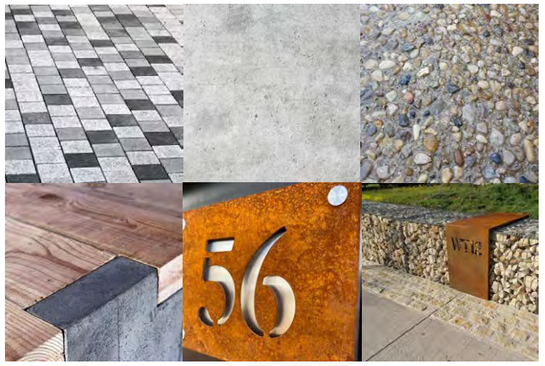
# Ongaroto Road Plan Change: Illustrative Concept Plan

Project No. **2022-032** | Client **Precision Built Ltd.** | Phase **Concept** | Scale **shown @ A3** | Revision No. **R9** | Date **22/02/2023** | Drawn **SW** | Approved **DM**

Plan No.
C01


## Material Pallet

| Area | Material Options |
|---|---|
| Road | Asphalt |
| Shared path | Concrete |
| Thresholds / Entrance | Exposed aggregate<br>Concrete<br>Unit pavers<br>Stone gabion<br>Weathering steel |
| Access track | Gravel<br>Concrete<br>Timber boardwalk |




Note: Images shown are examples of materials and plant theming and do not necessarily depict what will be constructed.

Site Total: 316891m$^2$
Lots Total Area: 257350m$^2$
Vegetation covenants: 55846m$^2$
Road Reserve: 31865m$^2$
ROW Total: 7834m$^2$
Reserve Total:19842m$^2$
Total area of ecological planting: 63312m$^2$
(Reserves (excluding F & H) + Vegetation covenants)

Reserve A: 474m$^2$
Reserve B: 910m$^2$
Reserve C: 1159m$^2$
Reserve D: 2632m$^2$
Reserve E: 1408m$^2$
Reserve F: 11923m$^2$
Reserve G: 883m$^2$
Reserve H: 453m$^2$

Note:Areas are rounded to the nearest meter

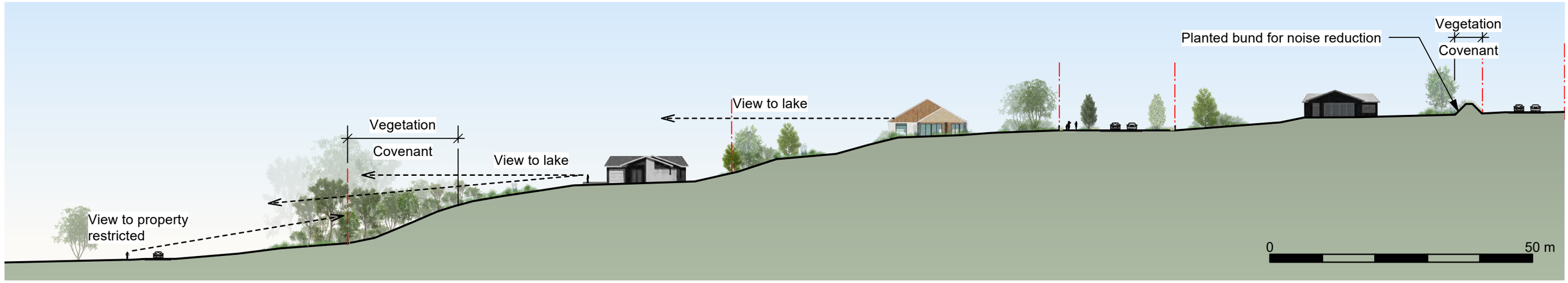
*The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan is not intended as a construction drawing and should not be used as such.*

mansergh graham
LANDSCAPE ARCHITECTS

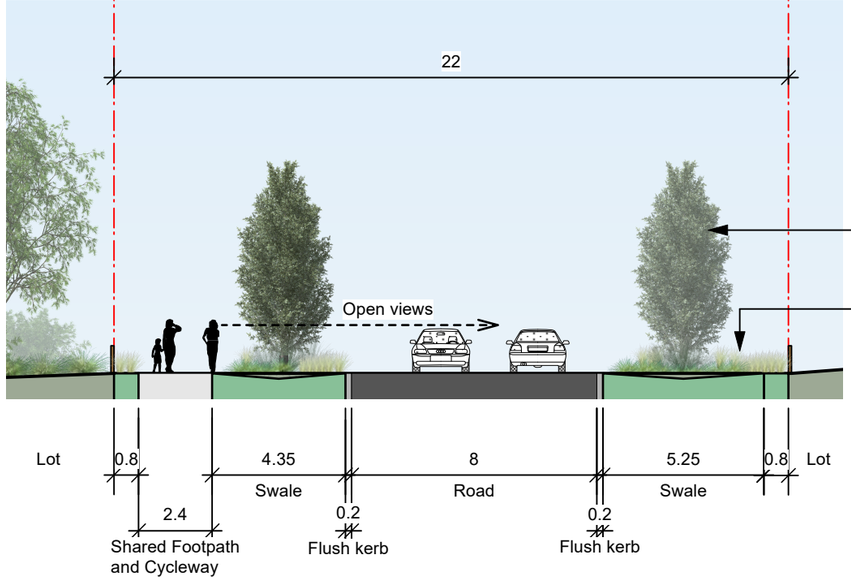
Ongaroto Road Plan Change: Illustrative Concept Plan

Project No. **2022-032** | Client **Precision Built Ltd.** | Phase **Concept** | Scale **shown @ A3** | Revision No. **R10**| Date **22/02/2023** | Drawn **SW** | Approved **DM**

Plan No.
C02




1 **Typical Section**
Scale: 1:750




2 **Typical Road Section**
Scale: 1:200

**Indicative Plant List (Plants suited to this area)**

| Botanical Name | Common Name |
|---|---|
| **Street Trees and Berm Planting (Road Reserve)** | |
| *Astelia chathamica* | Chatham Island Astelia |
| *Carex secta* | Purei, Pukio |
| *Coprosma Hawera* | Low growing coprosma |
| *Hebe sp* | Hebe |
| *Hoheria angustifolia* | Hungere/ Narrow-leaved Lacebark |
| *Muehlenbeckia sp* | Small leaved pohuehue |
| *Phormium sp* | Dwarf Flax |
| *Poa cita* | Silver tussock |
| *Sophora tetraptera* | Large-leaved kowhai |
| **Revegetation & Enhancement Planting (Steep Slopes & Reserve Areas)** | |
| *Alectryon excelsus* | Titoki |
| *Aristotelia serrata* | Wineberry/makomako |
| *Brachyglottis repanda* | Rangiora |
| *Coprosma robusta* | Glossy karamu |
| *Cordyline australis* | Ti kouka/cabbage tree |
| *Cyathea medullaris* | Mamaku, Black ponga, Black tree fern |
| *Dacrydium cupressinum* | Rimu |
| *Fuchsia excorticata* | Kotukutuku, Tree fuchsia |
| *Griselinia littoralis* | Kapuka, NZ broadleaf |
| *Hebe stricta* | Koromiko |
| *Knightia excelsa* | Rewarewa |
| *Kunzea robusta* | Kanuka |
| *Leptospermum scoparium* | Manuka |
| *Myrsine australis* | Red Mapou |
| *Phormium tenax* | Harakeke/ NZ Flax |
| *Phyllocladus trichromanoides* | Tanekaha, Celery Pine |
| *Podocarpus totara* | Totara |
| *Prumnopitys taxifolia* | Matai, Black pine |
| *Pseudopanax arboreus* | Whauwhaupaku, five finger |

Note: Selected species are suggestions / examples of planting only.
Final plant list may vary.
All plants used for ecological planting to be eco-sourced from the Central Volcanic Plateau Ecological Region and the Atiamuri Ecological District.



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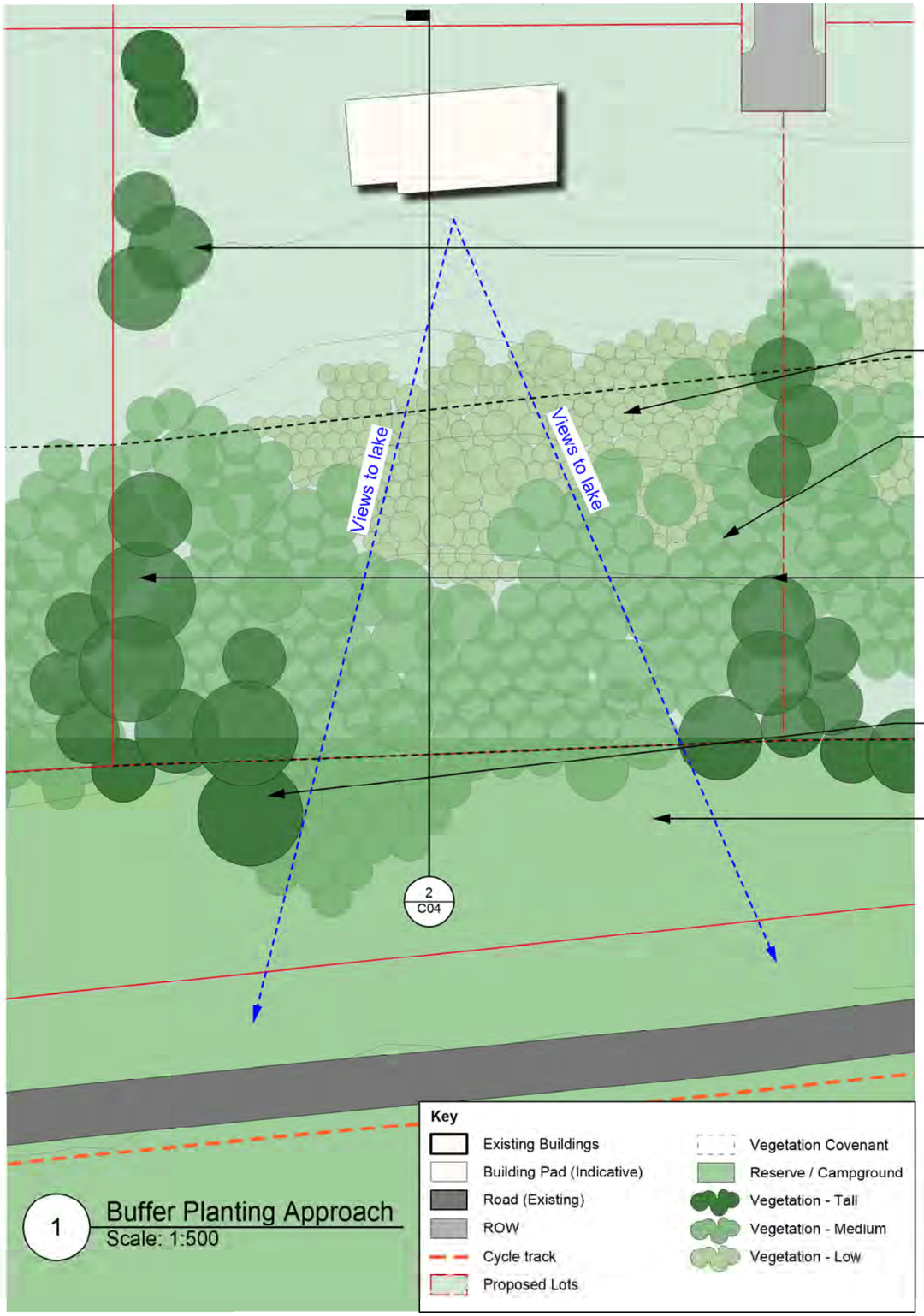
Ongaroto Road Plan Change: Illustrative Sections and Plant Spec

Project No. **2022-032** | Client **Precision Built Ltd.** | Phase **Concept** | Scale **shown @ A3** | Revision No. **R8** | Date **22/02/2023** | Drawn **SW** | Approved **DM**

Plan No. **C03**




Occasional clusters of taller vegetation provide privacy between neighbouring properties and frame views towards the lake.

Upper slopes consist of low planting such as flax and small shrubs.

Medium height vegetation consisting of small trees and shrubs are planted as ground level increases in height, manintaining views across.

Tall vegetation is restricted to lower ground where additional height adds ecological and amenity value to the camp ground but does not impeed the views from private residence.

Occasional extensions of taller vegetation are used to create bays in the camp ground.

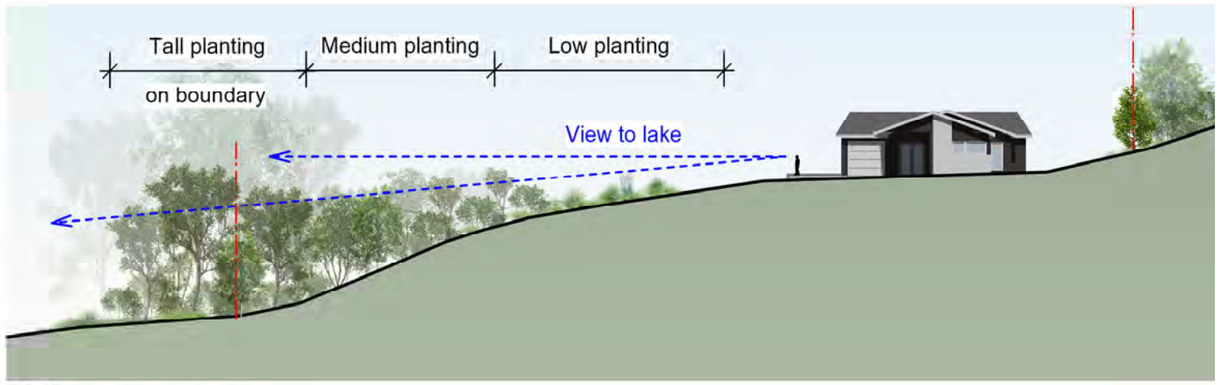
Reserve / Campground

1 Buffer Planting Approach
Scale: 1:500

| Indicative Plant List (Plants suited to this area) | | | |
|---|---|---|---|
| **Botanical Name** | **Common Name** | **Phase planted** | |
| | | Initial establishment | Enhancement planting |
| **Low planting** | | | |
| *Astelia chathamica* | Chatham Island Astelia | x | |
| *Cordyline australis* | Ti kouka/cabbage tree | x | |
| *Hebe stricta* | Koromiko | x | |
| *Myrsine australis* | Red Mapou | x | |
| *Phormium tenax* | Harakeke/ NZ Flax | x | |
| **Medium planting** | | | |
| *Alectryon excelsus* | Titoki | x | |
| *Aristotelia serrata* | Wineberry/makomako | x | |
| *Brachyglottis repanda* | Rangiora | x | |
| *Coprosma robusta* | Glossy karamu | x | |
| *Cordyline australis* | Ti kouka/cabbage tree | x | |
| *Cyathea medullaris* | Mamaku, Black ponga, Black tree fern | x | |
| *Fuchsia excorticata* | Kotukutuku, Tree fuchsia | x | |
| *Griselinia littoralis* | Kapuka, NZ broadleaf | x | |
| *Kunzea robusta* | Kanuka | x | |
| *Leptospermum scoparium* | Manuka | x | |
| *Myrsine australis* | Red Mapou | x | |
| *Pseudopanax arboreus* | Whauwhaupaku, five finger | x | |
| **Tall planting** | | | |
| *Dacrydium cupressinum* | Rimu | | x |
| *Knightia excelsa* | Rewarewa | x | x |
| *Phyllocladus trichromanoides* | Tanekaha, Celery Pine | x | x |
| *Podocarpus totara* | Totara | x | x |
| *Prumnopitys taxifolia* | Matai, Black pine | | x |

Note: Selected species are suggestions / examples of planting only. Final plant list may vary. All plants used for ecological planting to be eco-sourced from the Central Volcanic Plateau Ecological Region and the Atiamuri Ecological District.

Initial establishment = planted in first year
Enhancement planting - Planted in 5th year. Trees to be placed in clusters that align with final property boundaries to avoid obstructing views to lake.




2 Typical Section
Scale: 1:500



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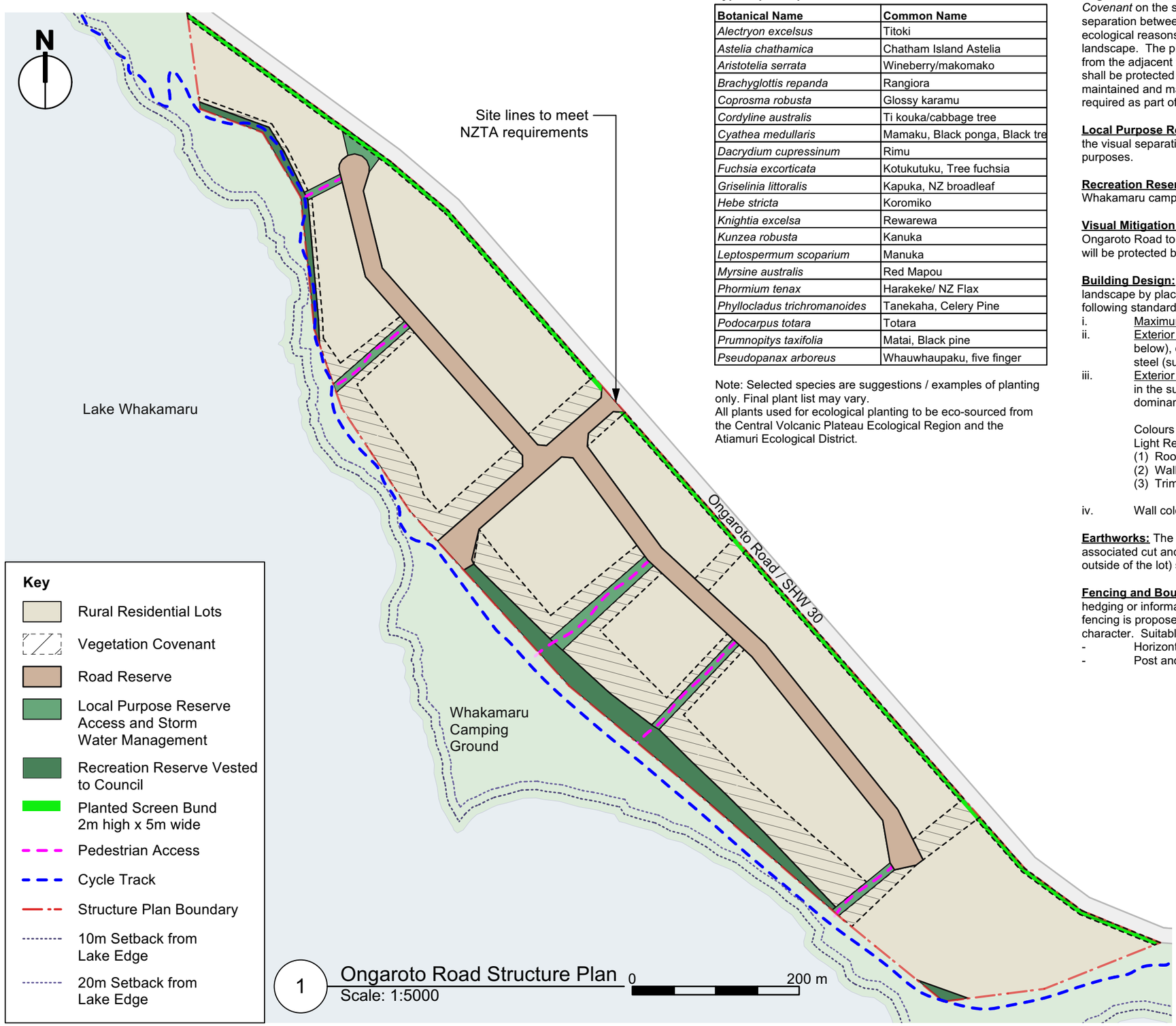
Ongaroto Road Plan Change: Illustrative Planting Plan

Project No. **2022-032** | Client **Precision Built Ltd.** | Phase **Concept** | Scale **shown @ A3** | Revision No. **R1** | Date **22/02/2023** | Drawn **SW** | Approved **DM**

Plan No.
C04

# 13 APPENDIX TWO: PROPOSED STRUCTURE PLAN




**Typical plant species found in this area**

| Botanical Name | Common Name |
|---|---|
| *Alectryon excelsus* | Titoki |
| *Astelia chathamica* | Chatham Island Astelia |
| *Aristotelia serrata* | Wineberry/makomako |
| *Brachyglottis repanda* | Rangiora |
| *Coprosma robusta* | Glossy karamu |
| *Cordyline australis* | Ti kouka/cabbage tree |
| *Cyathea medullaris* | Mamaku, Black ponga, Black tre |
| *Dacrydium cupressinum* | Rimu |
| *Fuchsia excorticata* | Kotukutuku, Tree fuchsia |
| *Griselinia littoralis* | Kapuka, NZ broadleaf |
| *Hebe stricta* | Koromiko |
| *Knightia excelsa* | Rewarewa |
| *Kunzea robusta* | Kanuka |
| *Leptospermum scoparium* | Manuka |
| *Myrsine australis* | Red Mapou |
| *Phormium tenax* | Harakeke/ NZ Flax |
| *Phyllocladus trichromanoides* | Tanekaha, Celery Pine |
| *Podocarpus totara* | Totara |
| *Prumnopitys taxifolia* | Matai, Black pine |
| *Pseudopanax arboreus* | Whauwhaupaku, five finger |

Note: Selected species are suggestions / examples of planting only. Final plant list may vary.
All plants used for ecological planting to be eco-sourced from the Central Volcanic Plateau Ecological Region and the Atiamuri Ecological District.

**Vegetation Covenant:** A planted buffer shall be established within all areas identified as a *Vegetation Covenant* on the structure plan. The purpose of this planting is to provide partial screening and visual separation between the reserve and dwellings and living court areas within the site, for privacy reasons, for ecological reasons, and to help the development within the zone to integrate with the wider surrounding landscape. The planted buffer shall consist of native species endemic to the areas and may include species from the adjacent table planted at an average spacing of 1 plant every 1.2m$^2$. The planting within these areas shall be protected by a covenant or consent order against the title of each lot to ensure that all planting is maintained and managed consistently. A landscape management and long-term maintenance plan will be required as part of the conditions of consent for any subdivision within the zone.

**Local Purpose Reserves:** *Local Purpose Reserves* shall be created between clusters of residential lots for the visual separation of buildings, public access between roads and the reserve, and stormwater management purposes.

**Recreation Reserve:** *Recreation Reserve* areas shall be vested to Council to enable the extension of the Whakamaru camping ground.

**Visual Mitigation Bund:** A 5m wide x 2m high earth bund is established along the frontage of the site with Ongaroto Road to screen the site from view to help maintain the existing rural character. Planting on the bund will be protected by the *Vegetation Covenant.*

**Building Design:** All buildings (dwelling and ancillary) are designed to visually integrate with the surrounding landscape by placing controls on their height location and appearance. Buildings shall comply with the following standards:

i. Maximum height: 6m

ii. Exterior cladding materials: Natural timber (oiled or stained), painted timber or panel (subject to iv below), concrete (off the form finish, plaster finish or exposed aggregate (subject to iv below), colour steel (subject to iii below), natural stone and/or brick, and weathering steel.

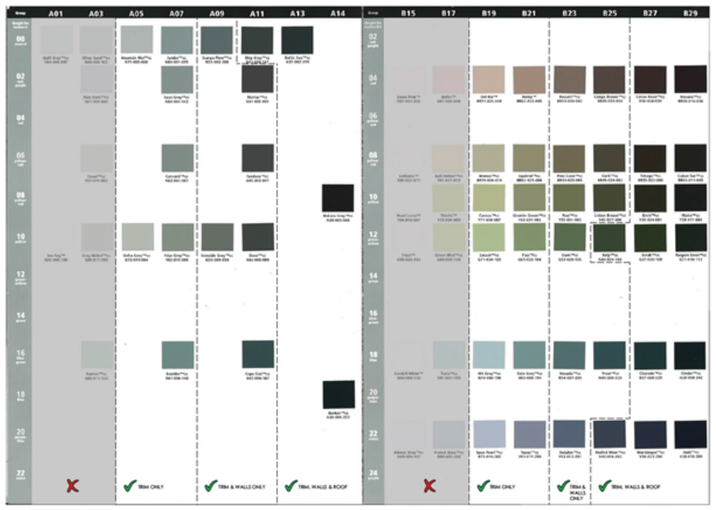
iii. Exterior Colours and Reflectivity: Recessive colours that integrate with the colours and tones found in the surrounding landscape should be used on all exterior surfaces. Colours that are visually dominant or have a high contrast value should be avoided. Suitable colours include:

Colours from the BS 5252 range (or equivalent) identified in figure 3 below, subject to the following Light Reflectance Value (LRV) restrictions:
(1) Roof colours with an LRV between 5 - 13%
(2) Wall colours with an LRV between 5 - 23%.
(3) Trim colours with an LRV between 5 - 46% with a careful selection of natural colours.

iv. Wall colours with a reflectance value of more than 46% are not acceptable.

**Earthworks:** The earthworks within each lot are restricted to the formation of the building pad and easing the associated cut and fill batters to integrate with existing contours. The use of retaining walls (visible from outside of the lot) shall be avoided.

**Fencing and Boundary Treatment:** Where possible, boundaries should be unfenced or demarcated by hedging or informal planting. Urban and Close boarded fencing is not acceptable on street frontages. If fencing is proposed the majority must be visually permeable and of the same design to maintain rural character. Suitable fencing types and boundary treatments include:
- Horizontal timber post and rail.
- Post and wire (farm fencing).




**BS 5252 Suitable building colours**

*The purpose of this plan is to show the general intent of the design and may not be complete in every detail.*

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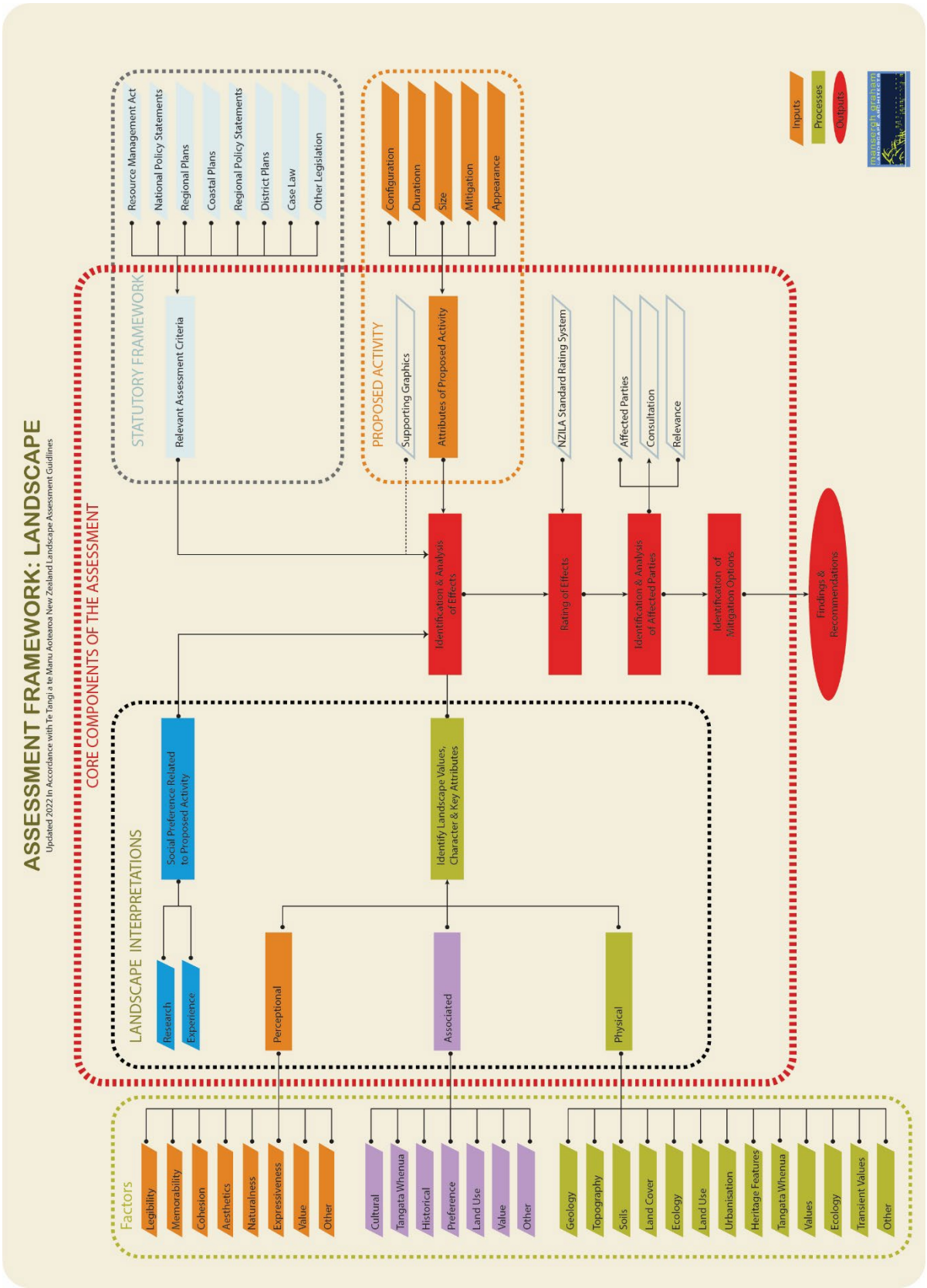
Proposed Ongaroto Road Structure Plan

Scale **shown @ A3** I Revision No. **R9** I Date **9/03/2023**

# 14 APPENDIX THREE: METHODOLOGICAL FLOW CHART



# 15 APPENDIX FOUR: LANDSCAPE AND VISUAL AMENITY EFFECT - RATING SYSTEM

*The following standardised rating system has been developed by Mansergh Graham Landscape Architects Ltd and is consistent with the recommended rating system identified in the Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines.*

| LANDSCAPE AND VISUAL AMENITY EFFECT - RATING SYSTEM | | |
|---|---|---|
| **Effects Rating** | | **Use and Definition** |
| **Very High** | ***Significant*** (RMA/NZCPS) | *Use*<br>The development/activity would:<br>a. Have a very high level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a very high level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Very: adverb 1 in a high degree. 2 with superlative or own without qualification: the very best quality.<br>High: adjective 1 extending above the normal level. 2 great in amount, value, size, or intensity. 3 great in rank or status. 4 morally or culturally superior. |
| **High** | | *Use*<br>The development/activity would:<br>a. Have a high level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a high level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>High: adjective 1 extending above the normal level. 2 great in amount, value, size, or intensity. 3 great in rank or status. 4 morally or culturally superior. |
| **Moderate-High** | ***More than Minor*** (RMA) | *Use*<br>The development/activity would:<br>a. Have a moderate-high level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a moderate-high level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Moderate: adjective 1 average in amount, intensity, or degree.<br>High: adjective 1 extending above the normal level. 2 great in amount, value, size, or intensity. 3 great in rank or status. 4 morally or culturally superior. |
| **Moderate** | | *Use*<br>The development/activity would:<br>a. Have a moderate level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a moderate level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Moderate: adjective 1 average in amount, intensity, or degree. |
| **Low-Moderate** | ***Minor*** (RMA) | *Use*<br>The development/activity would:<br>a. Have a low-moderate level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a low-moderate level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Low: adjective 1 below average in amount, extent, or intensity. 2 lacking importance, prestige, or quality; inferior.<br>Moderate: adjective 1 average in amount, intensity, or degree. |
| **Low** | | *)Use*<br>The development/activity would:<br>a. Have a low level of effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>*b.* Have a low level of effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Low: adjective 1 below average in amount, extent, or intensity. 2 lacking importance, prestige, or quality; inferior. |
| **Very Low** | ***Less Than Minor*** (RMA) | *Use*<br>The development/activity would:<br>a. Have a very low effect on the character or key attributes of the receiving environment and/or the vista within which it is seen; and/or<br>b. Have a very low effect on the perceived amenity derived from it.<br>*Oxford English Dictionary Definition*<br>Very: adverb 1 in a high degree. 2 with superlative or own without qualification: the very best quality.<br>Low: adjective 1 below average in amount, extent, or intensity. 2 lacking importance, prestige, or quality; inferior. |
| | | Detectable Effect Threshold |
| No Effect | | The development/activity would have no detectable effect on the receiving environment. |
| | | Note: Ratings may be positive (e.g. high level of enhancement) or negative (e.g. high adverse effect). |

# 16 APPENDIX FIVE: VISUAL ABSORPTION CAPABILITY RATINGS

The following standardised rating system has been developed by Mansergh Graham Landscape Architects Ltd and is consistent with the recommendations of *Te Tangi a te Manu - Aotearoa New Zealand Landscape Assessment Guidelines (Draft 2021).*

| **Visual Absorption Capability Definition Ratings** | |
|---|---|
| **VAC Rating** | **Use** |
| **Very Good** | The proposed development/activity would be completely screened, almost completely screened, or completely absorbed by existing landscape features. Any views of the development would be either unidentifiable or at a great distance, and/or;<br>The development/activity would not affect the existing character of the surrounding landscape or view in which it is seen, and/or;<br>The development/activity would introduce a visual element into the landscape or view which may be viewed very frequently or continuously in that or similar landscape types. |
| **Good** | The proposed development/activity would be mostly screened or visually absorbed by existing landscape features, but still be identifiable. The development/activity may act as a tertiary focal attraction within the landscape or view in which it is seen, and/or;<br>The development/activity would not affect the existing character of the surrounding landscape or view in which it is seen, and/or;<br>The development/activity may introduce a visual element into the landscape or view which may be viewed frequently in that or similar landscape types. |
| **Neutral** | The proposed development/activity would neither be screened nor become a visual intrusion or focal attraction within the landscape or view in which it is seen. The proposed development/activity may act as a minor focal attraction from some locations, and/or;<br>The development/activity would alter the existing character of the surrounding landscape or view in which it is seen, and/or;<br>The development/activity would introduce a visual element into the landscape or view which may be viewed occasionally in that or similar landscape types. |
| **Poor** | The proposed development/activity would be clearly visible but would not act as a primary focal attraction, and/or;<br>It would be expected that the proposed development/activity would alter the existing character of the surrounding landscape or view in which it is seen, and/or;<br>The development/activity may introduce a new visual element into the landscape or view. The development/activity may be viewed infrequently in that or similar landscape types. |
| **Very Poor** | The proposed development/activity will be highly visible and may act as a primary focal attraction or feature. It would also be expected that the proposed development/activity will significantly alter the existing character of the surrounding landscape or view in which it is seen, and/or;<br>The development/activity will introduce a new visual element into the landscape or view, which will be significantly different in appearance, or scale from the landscape elements surrounding it, and/or;<br>The development/activity would be found very rarely in that or similar landscape types. |

# 17 APPENDIX SIX: VIEW LOCATION PHOTOGRAPHS AND PHOTOMONTAGE


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1847085E |
| NZTM Northing: | 5742311N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

# VL 1 - Photograph From SH 32 Ongaroto Road (Looking WEST)


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1846495E |
| NZTM Northing: | 5742997N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

# VL 2 - Photograph SH 32 Ongaroto Road (Looking SOUTHEAST)


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1845660E |
| NZTM Northing: | 5743763N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

## VL 3 - Photograph From SH32 Ongaroto Road (Looking EAST)


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1844937E |
| NZTM Northing: | 5743754N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

# VL 4 - Photograph From Pokuru Road North (Looking East)

ONGAROTO ROAD PLAN CHANGE. November 2022. RD

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**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1845084E |
| NZTM Northing: | 5743419N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

# VL 5 - Photograph From From Pokuru Road North (Looking North East)


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1846324E |
| NZTM Northing: | 5741659N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1846324E |
| NZTM Northing: | 5741659N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1,937,346E |
| NZTM Northing: | 5,791,425N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

# VL 7 - Photograph From the Whakamaru Ski Club Boatramp (Looking Northeast Towards the Site)



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**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1846276E |
| NZTM Northing: | 5742683S |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 22nd November 2022 |

## VL 8 - Photograph From the western end of the Whakamaru Reserve (Looking Northeast Towards the Site)


**View Location Data**

| | |
|---|---|
| NZTM Easting: | 1846848E |
| NZTM Northing: | 5742200N |
| Focal length: | 50mm |
| Photographer: | D. Mansergh |
| Camera: | Canon EOS D5 MK.4 Full Frame Digital with EF 50mm F/1.4 USM (Prime) |
| Date: | 16th September 2022 |

## VL 9 - Photograph From View Road (Looking Northeast Towards the Site)