

APPENDIX I: Landscape Assessment Consultants) and Visual Miskell

Te Kowhai Airpark

Landscape and Visual Effects Assessment
Prepared for Te Kowhai Airfield Limited

9 April 2018



Document Quality Assurance

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Abbreviations and Definitions

BML – Boffa Miskell Limited

TKAL – Te Kowhai Airfield Limited

RMA – Resource Management Act, 1991

WRPS – Operative Waikato Regional Policy Statement, 2016

WDP – Operative Waikato District Plan, 2013

ONL – Outstanding Natural Landscapes

ONF – Outstanding Natural Features

Site – The geographical area which relates specifically to this proposal. Legally described as Lot 1-4 DP 434641, Lot 5 DP387354 and Lot 1 DPS 88922.

Assessment Area – The broadest geographical area assessed within this report, and selected on the basis of it being the area within which effects are likely to occur.

1.0 Introduction

1.1 Development

TKAL is seeking the addition of provisions through the Waikato District Plan review process to enable the development of their land holding in Te Kowhai, Waikato. That development involves utilising the existing airfield infrastructure within the site to establish a residential 'airpark'. The airpark will enable residents to live adjacent to – and to house and operate their aircraft from – a shared airfield facility.

1.2 Purpose and Method

The purpose of this report is to provide an assessment of the potential landscape and visual amenity effects which may result from the proposal. As the proposal relates to the planning framework (rather than a resource consent application, for example), judgements have been made based upon a potential development in accordance with the proposed provisions. As such this assessment does not account for any specific architectural proposal, but rather the effects which would result from the maximum extent, intensity and type of activities which will be enabled under the proposed provisions, regardless of site ownership.

This assessment has been undertaken by a NZILA Registered Landscape Architect with reference to the Quality Planning Landscape Guidance Note¹ and its signposts to best practice methodologies, which include: *Best Practice Note 10.1, Landscape Assessment and Sustainable Management*, New Zealand Institute of Landscape Architects (2010).

This assessment provides ratings based upon a combination of quantitative information where available, and qualitative professional judgements by the author. The ratings are based upon a seven-point scale which includes: very low; low; moderate-low; moderate; moderate-high; high and very high ratings. These are used within this assessment to describe the level (and significance) of the potential landscape and visual amenity effects that would result from the proposal.

In combination with assessing the significance of effects, this assessment also explains the likely nature of the effects: being a positive (beneficial) or negative (adverse) effect in the context within which it occurs. Benign (neutral) effects are also identified where landscape or visual change is considered to be benign in the context of where it occurs.

1.3 Scope of this Report

This report provides an assessment of the likely landscape and visual amenity effects of the proposed provisions. In summary, this report provides:

- a. A summary of the legislative and policy framework relevant to the assessment of landscape/visual effects of the proposal.

¹ <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape/landscape-assessment>

- b. A description of the landscape character context of the site, and an appraisal of the site area in terms of its existing elements, character and values.
- c. A description of the key public and likely private viewing audiences of the site and the proposed development.
- d. An outline of the proposal including a summary of the input provided by BML in terms of the spatial aspects (i.e. planning maps) and written aspects (i.e. planning rules).
- e. A description of the actual (where they are known) and potential landscape and visual effects of the proposal, and including an overall conclusion.

2.0 Legislation, Policy and Guidance

2.1 Introduction

This section identifies and describes the legislation and policy of relevance to the assessment of potential landscape and visual effects associated with the proposal.

2.2 Resource Management Act (1991)

Part 2 of the RMA sets out its purpose and principles. Section 5 states that the purpose is to promote the sustainable management of natural and physical resources. Section 6 sets out the matters of importance that must be recognised and provided for in achieving the purpose of the RMA. Section 7 contains other matters that must be given particular regard to, and section 8 states that the principles of the Treaty of Waitangi must be taken into account in achieving the purpose of the RMA.

The protection of ONFs and ONLs from inappropriate subdivision, use and development is identified as a matter of national importance in section 6(b). There are no ONLs or ONFs identified on, adjacent to, or in the immediate vicinity of the site.

Another matter of national importance is the preservation of the natural character of the coastal environment, wetlands, lakes and rivers and their margins and its protection from inappropriate subdivision, use and development as identified in section 6(a). This is not directly relevant to this assessment, as there are no waterbodies on or immediately adjacent to the site, and it is not within the coastal environment.

Section 7 identifies a range of matters that shall be given particular regard to in achieving the purpose of the RMA. Of relevance to this proposal are sections 7(c) the maintenance and enhancement of amenity values, and 7(f) the maintenance and enhancement of the quality of the environment. Section 7(c) is considered in this report in relation to potential effects on views and visual amenity. Section 7(f) is considered in relation to potential effects on the landscape as a resource.

2.3 Waikato Regional Policy Statement (2016)

The WRPS, establishes the framework for managing the use, development and protection of the region's natural and physical resources. The WRPS identifies the significant resource management issues of the region and sets out the objectives, policies and methods to address these issues.

There are a range of objectives and policies in the WRPS that are relevant to the proposal, and this assessment in particular. These include Objective 3.21 and Policy 12.3 (*Maintain and Enhance Areas of Amenity Value*) which seek to identify areas of amenity value to regional or district communities and then maintain or enhance the qualities and characteristics of these areas that contribute to amenity value.

Also of relevance is Objective 3.12 (*Built Environment*) and Policy 6.1 (*Planned and Coordinated Subdivision, Use and Development*) which seek to ensure that development occurs in an integrated sustainable and planned manner, which enables integrated land use and infrastructure planning and infrastructure delivery.

2.4 Waikato District Plan (2013)

The site is currently zoned *Rural* in the WDP. An *Obstacle Limitation Surface* and an *Air Noise Boundary* overlay are the only indicators of the site's underlying use as an airfield. While the zoning is proposed to be changed, it is appropriate to acknowledge the type of development which is currently provided for by the WDP.

In summary, the Rural Zone provisions are not supportive of airpark or aviation-related industrial development. The key relevant permitted activities are currently limited to:

- a) Construction of a single dwelling on each Certificate of Title, or two dwellings on Certificates of Title which are over 40 hectares (none of the titles on the subject site are 40 hectares or over); and
- b) Construction or alteration of a non-residential building up to 400m², or 250m² on sites comprising less than 2 hectares.

Whilst the objectives and policies of the WDP may change through the current district plan review process, it remains appropriate to acknowledge those which currently relate to the consideration of proposed landscape and visual changes within the district.

Objective 3.4.1 seeks for landscape and visual amenity values to be retained and enhanced where viewed from public locations. The associated policy, specifically 3.4.2, outlines that general visual amenity values are to be protected; including by:

- b) ensuring that the visual effects of buildings can be absorbed without significant adverse effects on the landscape
- c) locating buildings and development so as to integrate them with the surrounding landscape and backdrops, to avoid dominating the landscape
- d) designing subdivision so that potential development, including building platforms, fences and vehicle accesses, are located sympathetically in the landscape

Objective 13.2.1, which seeks for the adverse amenity effects of activities to be managed in a manner that does not "unreasonably compromise" the character of the surrounding environment. Policy 13.2.4 outlines such effects are to be "remedied or mitigated" if they are not contained within the site.

Objective 13.2.6 seeks for the amenity values of localities (e.g. Te Kowhai) to be "maintained and enhanced". Of importance are Policies 13.2.7 and 13.2.8. The former outlines that the "scale, intensity, timing and duration of effects of activities" are to be managed in a way that is compatible with the "amenity and character of the locality". Policy 13.2.8 outlines that activities are to be located together where they have "similar effects or a similar expectation of amenity".

Objective 13.6.1 seeks that "rural character is preserved". And Policy 13.6.2 states that "rural subdivision and development should be of a density, scale, intensity and location to retain or enhance rural character". The policy provides a list of characteristics, which usefully serve to define key aspects of *rural character*:

- a) a predominance of natural features over built features;
- b) a very high ratio of open space in relation to areas covered by buildings;

- c) open space areas in pasture, trees, crops or indigenous vegetation;
- d) tracts of unmodified natural features, indigenous vegetation, streams, rivers, wetlands and ponds;
- e) large numbers of farm animals and wildlife;
- f) noises, smells and sights of farming, horticultural and forestry uses;
- g) post and wire fences, purpose-built farm buildings, and scattered dwellings;
- h) low population density;
- i) generally narrow carriageways within wide road reserves, often unsealed with open drains, low-speed geometry and low traffic volumes;
- j) a general absence of urban-scale and urban-type infrastructure such as roads with kerb and channel, footpaths, mown berms, street lights, advertising signs, sealed and demarcated parking areas, decorative fences and gateways; and
- k) a diversity of lot sizes and shapes, related to the character and pattern of the landscape.

2.5 Plan Change 17 (2016)

Plan Change 17 (Ngaruawahia and Surrounding Villages) to the WDP, recently rezoned 41.6 hectares across two discrete areas of land to the north and immediately north-east of the Te Kowhai settlement, from Rural Zone to Country Living Zone. This included an additional area (at No. 689 Te Kowhai Road), which was also rezoned alongside the two notified areas.

A key matter acknowledged within Plan Change 17, with respect to the land at Te Kowhai, was the lack of reticulated services within the village – and the lack of any plans to provide such services in the future. Nevertheless, Te Kowhai was selected as the most appropriate location to accommodate the demand for lifestyle development, due to its "close proximity to Hamilton as the area has good transport networks and connectivity and is able to be accessed by a number of connections (Ngaruawahia Rd, Horotiu Rd, Te Kowhai Rd, SH39, SH 23) .²

2.6 Ngaruawahia Structure Plan (March 2017)

The Ngaruawahia Structure Plan is a non-statutory document that provides a long term planning framework for the future development and redevelopment of the wider Ngaruawahia area. It provides "a strategic and spatial framework for future land uses, open space, transport and utility networks" for six settlements, including Te Kowhai. And was informed by a process of consulting with the local community, iwi and key stakeholders.

Te Kowhai is described in the Structure Plan as follows³:

² Decision Report On Submissions to The Waikato District Plan– Plan Change 17 – Ngaruawahia and Surrounding Villages.

³ Ngaruawahia, Hopuhopu, Taupiri, Horotiu, Te Kowhai & Glen Massey Structure Plan, March 2017.

Te Kowhai is located approximately 17 minutes' drive north-west of Hamilton City and about 10 minutes drive south west of Ngaruawahia. It presently has a country village identity and comprises a full primary school, fruit and vegetable store, dairy and takeaways, vehicle repair workshop, retirement village, and a large recreation park with a skate park and playground (see photographs and Figure 10 below). Te Kowhai Airfield is situated on the southern periphery of the village. There are no reticulated water or waste water services available in Te Kowhai resulting in recent and current residential development being restricted to Country Living which has an on-site wastewater disposal requirement.

The plan titled *Te Kowhai – Local Context and Key Features* within the Structure Plan document identifies the Te Kowhai Airfield as a key feature of the village alongside others such as the Rugby Fields and Community Hall. The Structure Plan [Page 23] acknowledges that "The township is surrounded by a large expanse of land zoned 'Rural' on all sides. When development occurs in Hamilton in the currently undeveloped Rotokauri Structure Plan greenfield area, the village will be closer to urban development".

The *Key Moves and Development Objectives* of the Structure Plan are listed as follows (with the relevant action policies shown):

a) **Identity and Legibility:**

- i. Have clear gateways to mark outside edge of each settlement on main roads;
- ii. Have defensible boundaries that clearly distinguish settlements nodes from surrounding rural areas; and,
- iii. Use landmarks and features to help build each settlement's unique identity and sense of place.

b) **Integrated and Connected:**

- i. Develop a footpath network that enables people to walk between the various parts of each settlement ie schools to homes and homes to shops and parks; and

c) **Diversity and Flexibility:**

- i. Use the road network and framework of land use zones to provide for a range of land uses and variety of housing options; and
- ii. Ensure that new residential areas have a more regular road layout to give each settlement greater flexibility to provide for a variety of development options over time.

d) **Resilience and Sustainability:**

- i. Maintaining a regular road layout will support a compact and sustainable urban form and enable the efficient reticulation of utility services;
- ii. Integrating stormwater management spaces in the gullies with the parks will provide an interconnected network of open space and corridors for improving urban biodiversity for each settlement; and
- iii. Amenity will be improved through improved access to public open space and playgrounds at a neighbourhood level.

e) **Managed Growth:**

- i. New development is to be staged to enable better coordination of development and provision of services; and
- ii. Staged land release will enable a more sequenced and synchronised process of designing, consenting, constructing and landscaping new development areas.

The Key Moves Plan for Te Kowhai is shown in Plate 1, below.

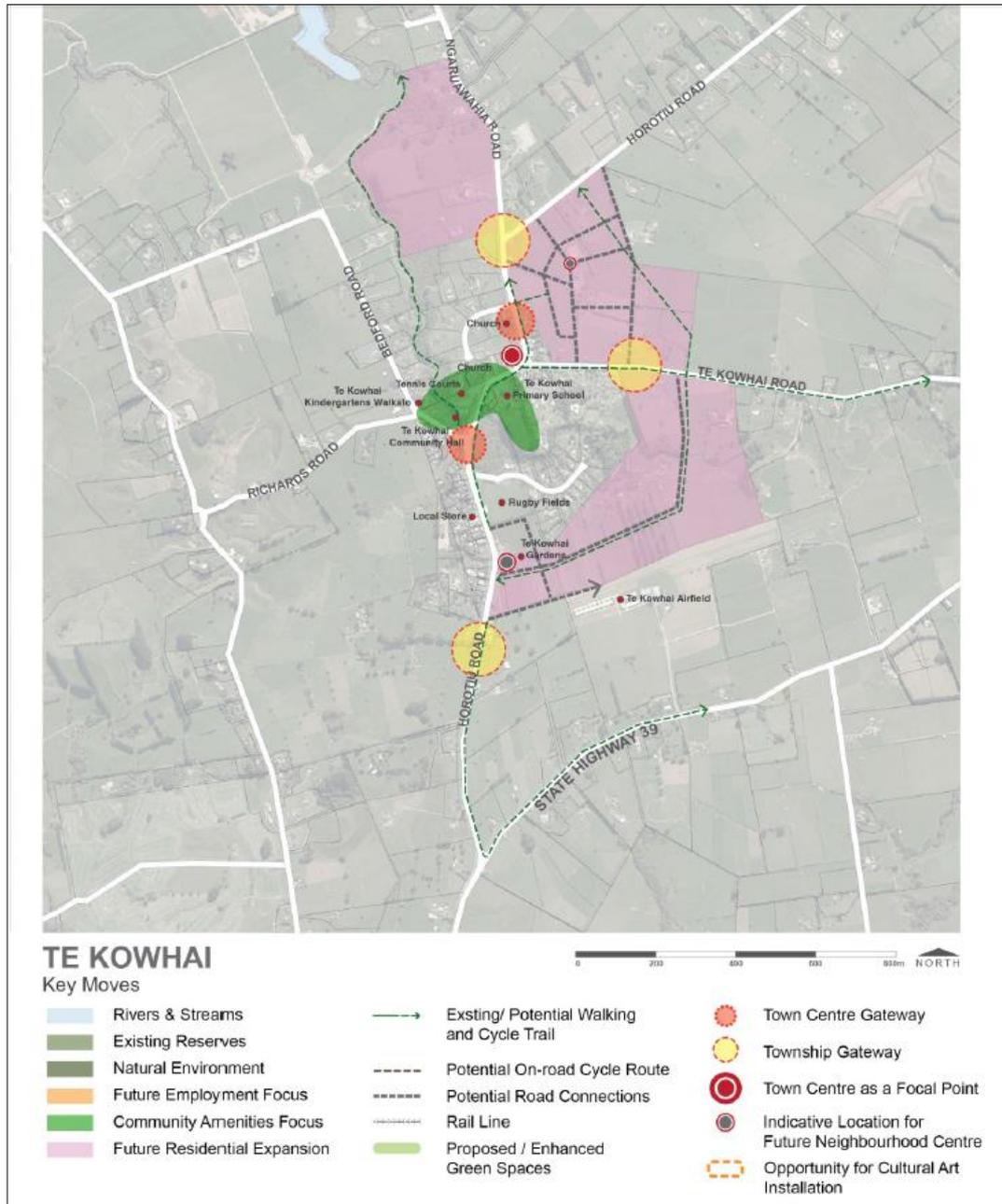


Plate 1: Te Kowhai Key Moves Plan

In summary the key – and relevant – moves listed for Te Kowhai comprise:

- a) Retain the village 'look' within new developments and keep the identity of the village;
- b) Where possible link development to the Te Otamanui Walkway;
- c) Cycleway to Hamilton;
- d) New developments to have an emphasis on 'avenue type' roads incorporating Kowhai trees;
- e) New developments to ensure connections and linkages to the village;
- f) Walkway around the village to follow gas pipe line;
- g) Minimise the utilisation of ancillary buildings;
- h) Mark all entrance ways to the village;
- i) Extend the business area to promote growth;
- j) Road names to reflect the area's heritage;
- k) Country Living development to be 3000m²;
- l) Future country living residential areas could be to the north, east and a small area to the south; and
- m) Extend the Village Green to provide a larger reserve for sports activities.

The proposed zoning and staging plan for the future expansion of Te Kowhai, as per the Structure Plan, is shown in Plate 2 below.

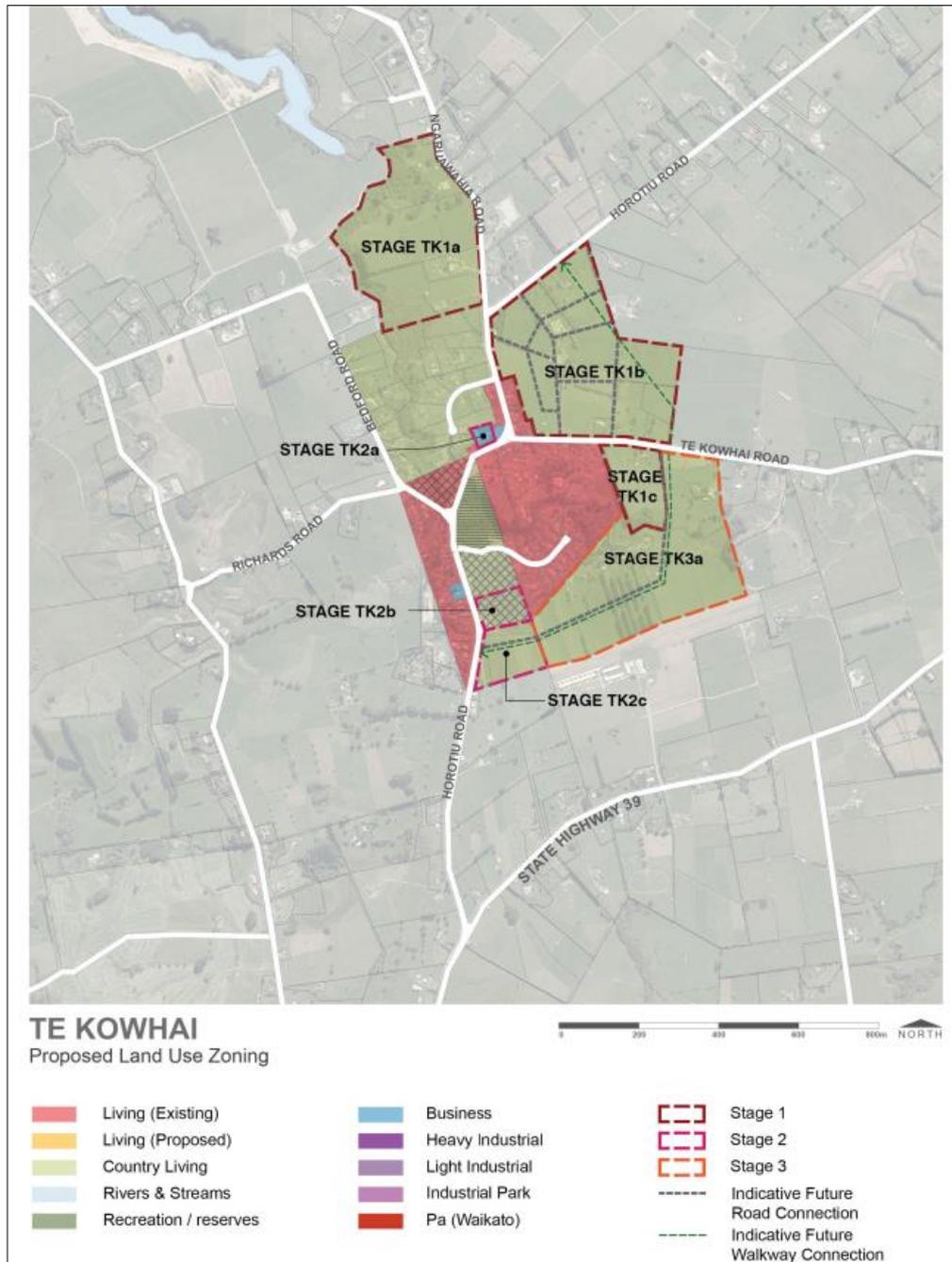


Plate 2: Development Staging Map for Te Kowhai

2.7 Summary of Legislative and Policy Framework

In summary, national legislation and operative regional and district level policy, support the following key and relevant approaches to development:

- a) Amenity values are maintained and enhanced, in relation to managing the use, development and protection of natural and physical resources within the region and the district.

- b) Development across the region occurs in an integrated, sustainable and planned manner which enables integrated land use and infrastructure delivery.
- c) Landscape and visual amenity values are to be retained and enhanced where viewed from public locations.
- d) Adverse amenity effects are to be remedied or mitigated if they are not contained within the site.
- e) Development should be compatible with the amenity and character of the locality, and located with activities which have similar effects or a similar expectation of amenity.
- f) Rural character is sought to be protected across the District.
- g) Plan Change 17 has recently increased land zoned for residential lifestyle purposes around Te Kowhai to the north of the village.

In addition to the above statutory documents the below non-statutory documents that are relevant to this proposal:

- a) The Ngaruawahia Structure Plan, a non-statutory document, provides a number of key development moves for the Te Kowhai settlement, which are understood to have been informed by consultation with the local community, iwi, and other key consultants/stakeholders. These include further residential development to the south of the village, immediately to the north of the site.
- b) Te Kowhai Community Plan, 2011-2021, Te Kowhai Community Group Committee is also a non -statutory document however the existing airfield is considered a community asset which is to be supported.

3.0 Existing Environment

3.1 Site Location and Assessment Area

Refer to **Figure 1: Site Location and Assessment Area**.

The site is located directly south-east of Te Kowhai village and approximately 10km from Hamilton's city centre. Access to the airfield is directly from Limmer Road (State Highway 39) via an approximately 400m long gravel driveway, the entry to which is sealed.

The site covers approximately 44 hectares. It is bound by a mixture of agricultural land and lifestyle blocks held in private titles. An approximately 300m section of the site's southern boundary adjoins SH39 (Limmer Road).

The Assessment Area covers an approximately 10km by 6km area. This is the area in which the assessment of effects, as contained in this report, is focused. It is delimited by: open farmland to the north; Laxon/Rotokauri/Blackett Roads to the south; rising land around the Waipa River to the west; and SH1 and the Rotokauri Structure Plan area to the east.

3.2 Published Landscape Assessments

The *Waikato Regional Landscape Assessment (2010)* is a non-statutory document that identifies a number of broad landscape types within the region. The Assessment Area covers parts of the *Western Hill Country* type, but the majority – and including the site – falls within the *Waikato Lowlands*. The description of this type includes the following relevant points:

The Waikato Lowlands are flat and low lying in contrast with the surrounding hill country. They comprise pasture, hedges, groups of both exotic and indigenous trees, and has a well maintained and developed landscape character.

In general the land use comprises market gardening, fruit growing, arable farming, cattle and dairy farms, stud farms and racing stables.

The main pressure on this area is the demand for residential homes in a rural setting – i.e. rural residential development, particularly given the large nearby populations of Auckland and Hamilton.

Also identified within the Landscape Assessment are areas of *Significant Indigenous Forest* and this includes the hill country to the west of Te Kowhai (SIFA4_1).

3.3 Topography and Hydrology

Refer to **Figure 2: Topography**.

The assessment area is largely flat to gently undulating. The most notable changes in elevation occur within the western fringes of the assessment area. These changes are associated with the rising land/foothills of the hill country which extends along the

coast from north to south through the Waikato region. This hill country forms an extension of the Hakarimata Range (which lies immediately west of Ngaruawahia).

Elsewhere, variations in topography are typically limited to stream courses and their gully systems, most notably those of, and associated with, the Waipa River. This river travels in a north-south alignment through the western part of the assessment area. It is a major tributary to the Waikato River; which it joins at Ngaruawahia.

A tributary of the Waipa flows to the north of the site, partly through an area of swampland and northwards through a gully system around the Te Otamanui Stream, which connects into the Te Otamanui Lagoon before discharging into the Waipa River. Lake Rotokauri lies approximately 2.5km to the south east of the site.

3.4 Land Cover (Vegetation)

Refer to **Figure 3: Land Cover**.

The vast majority of land within the Assessment Area is *High Producing Exotic Grassland* (or simply pasture). And this includes the majority of the site (the exception to this are the existing hangars). Any notable swathes of indigenous vegetation are typically confined to stream corridors and notably the margins of Lake Rotokauri. The hill country to the west of Te Kowhai includes a mixture of commercial plantation forestry and areas of indigenous forest, which as identified above, have been identified in the *Regional Landscape Assessment* as an area of *Significant Indigenous Forest* (SIFA4_1).

Other vegetation consists mostly of the forms and species typical of a Waikato landscape, with a mixture of exotic and indigenous species used for boundary planting, hedgerows, shade trees, shelter belts and small wood lots.

3.5 Land Use and Public Amenities

Te Kowhai is the main settlement within the assessment area. Development elsewhere is typically low density, and comprised of large lot 'lifestyle' properties located alongside existing roads. There is a variety of lot sizes within the Assessment Area, but the majority are of a large size: typical of an agricultural area.

As is evident in Figure 1, future intensification is likely to occur within the eastern parts of the Assessment Area as a result of Hamilton's growth – including via the Rotokauri Structure Plan.

A gas pipeline bisects the Assessment Area in an approximate north-south alignment, and also crosses the site. The pipeline together with a nearby quarry, the Waikato Expressway, the Main Trunk Line Railway (to the east of the site) and a transmission line (primarily west of the Waipa River) contributes the key infrastructural elements within the Assessment Area.

In terms of relevant public amenities, a reserve is located to the north-west of the site, between Horotiu Road and Willow Brook Lane, and the Te Kowhai Tennis Club (reserve) is located further north along Horotiu Road.

The Te Otamanui Walkway, which is under construction, is a key public footpath/amenity within the Assessment Area, and in close proximity to the site. Once

complete, this walkway will extend approximately 8km from Te Kowhai (Horotiu Road/Bedford Road) and connect to the Te Otamanui Lagoon.

3.6 Drivers for Future Change

Hamilton is currently experiencing a period of significant growth. Much of this future growth will be facilitated by four structure plan areas within the Hamilton City District Plan. These include the Rotokauri, Rototuna, Ruakura and Peacocke Structure Plans. The Rotokauri Structure Plan area begins approximately 1.5km east of the site. This area includes approximately 1,000 hectares and will be developed to supplement the Te Rapa industrial area with approximately 280 hectares zoned for additional industrial land, employment areas, and a neighbourhood/suburban centre – in addition to residential growth.

Additional growth is forecast, provided for and planned for (in the non-statutory Ngaruawahia Structure Plan) as outlined in the above chapter. This growth primarily relates to the provision of additional lifestyle living sections, to the north of the site.

3.7 Key Characteristics of the Assessment Area

The following list provides the key characteristics of the assessment area, including the areas immediately surrounding the site:

- a) Growth, anticipated within the western parts of Hamilton City (eastern parts of the Assessment Area) and additional 'lifestyle/countryside living' properties around Te Kowhai village.
- b) Infrastructure, including the Waikato Expressway, the Main Trunk Line railway, gas pipelines and electricity transmission corridors.
- c) Areas of open agricultural fields, typically used for dairy pasture with scattered amenity/shade trees, shelterbelts and occasional vegetated gullies.
- d) The Waipa River is the key natural feature within the Assessment Area.
- e) The River is framed by elevated hill country, which forms a noticeable ridgeline in views to the west within the Assessment Area and alongside visibility of the more distant Pirongia Range to the south.

3.8 Existing Elements and Characteristics of the Site

The site comprises the following elements:

- a) The current operational runway is approximately 984m long.
- b) The runway has a sand base and is suitable for microlights and light aircraft.
- c) Six permanent hangars all of which are occupied (by lease) for plane storage and workshop/maintenance purposes. These hangars are approximately 3.5 m in height. The largest hanger measures at approximately 130m long by 10m wide.
- d) Aircraft using the runway.

- e) Approximately 2500m² of car parking associated with the main cluster of buildings. This excludes the parking associated with the existing hangers.
- f) Small grassy parking area for aircraft.
- g) An Avgas refuelling facility.
- h) Access to the airfield is directly from Limmer Road (State Highway 39) via a gravel entrance, the entry to which is sealed.
- i) A predominance of open fields used predominantly for stock grazing, with some for arable use. There is a high ratio of open space to buildings overall.
- j) A relatively flat landform and very few trees or other vegetation.
- k) There are three existing homes which have direct taxi access to the runway - one on site and the two located off Limmer Rd.

Overall the site is characterised by its use as an airfield. This character is formed in part by the visible presence of the aforementioned elements; but also the sensory elements (including aircraft noise); and the historical and current associations of the site with its airfield use.

3.9 Landscape Values (Assessment Area and Site)

There are no ONL, ONF or areas of high/outstanding natural character within the site or the Assessment Area.

In the absence of any identified (scheduled) high value landscape areas at a national, regional or district level, a summary is provided of the likely local values. These are based upon the site appraisal above and a desktop review, including of published literature. The values are structured under three broad categories below (Biogeographical; Sensory and Perceptual; and Associative).⁴

3.9.1 Biogeographical Values

These typically relate to the physical condition (intactness) of the landscape, including its natural science (geological and ecological) values, and the state of the natural elements, patterns and processes – and the rarity and representativeness of these.

Within the Assessment Area, the western hill range and its indigenous forest cover, the Waipa River corridor and Rotokauri Lake (albeit with a relatively poor water quality), provide the key natural elements; though these are all geographically discrete from the site.

The site does not contain any elements which are deemed to be notably rare or particularly representative of a natural (or particularly intact) landscape. This assessment therefore finds no significant biogeographical values within the site.

⁴ These categories are based upon case law and the NZILA Best Practice Note Landscape Assessment and Sustainable Management 10.1.

3.9.2 Sensory and Perceptual Values

These typically relate to the memorability of the landscape, its expressiveness (legibility), vividness, cohesion, any includes the perceptions of tranquillity, remoteness and/or perceived naturalness.

Views towards the distant ranges in the Hakarimata Range to the north, and the Pirongia Range to the south, provide a sense of legibility, and contribute some scenic value to the wider landscape. Pirongia Mountain is identified within the outstanding natural features and landscapes of regional significance within the operative Waikato Regional Policy Statement.⁵

The open, undeveloped and largely agricultural character of the wider Assessment Area is likely valued by the people that live within and around it, particularly for the sense of an undeveloped/rural tranquillity which is appreciable in certain parts. Much of the site is retained in pasture, divided between paddocks by post and wire fencing. It therefore contributes – visually, particularly from SH39 – to the openness of the wider landscape and its perceived agricultural character.

3.9.3 Associative Values (Including Recreational Values)

These typically relate to cultural and spiritual considerations, including the values derived from the landscape by tangata whenua and more generally from its historical associations. Of the highest value are those which are widely shared and recognised. These values also include the known use of the landscape for recreational purposes (i.e. where the characteristics or elements of the landscape are important for the enjoyment of that use).

The community of Te Kowhai have prepared a Te Kowhai Community Plan.⁶ This plan identifies the village green and the community hall as focal points for the community. It also identifies existing walkways, kowhai trees and the Te Otamanui Lagoon and gully as community assets: which are understood to be highly valued locally with the village. Te Kowhai airfield is identified also as being needed to be "supported and encouraged to grow".⁷

The values associated with this area by Tangata whenua are beyond the expertise of the author. However, it is understood that the Waikato River overall, has many historical associations including with early settlement and trade. And it holds important cultural values for Waikato iwi. The Waipa River and the other tributaries throughout the Assessment Area, form part of the whole of the Waikato River catchment (ki uta ki tai), and are therefore understood to have significant associative value to local iwi.

Lastly, and specific to the site, is the associative values that stem from the recreational use of the airfield, its history and its former owner Max Clear. Mr Clear established the airfield in the early 1960s and then subsequently a company specialising in the construction of micro light aircraft (Micro Aviation). It is understood to have won many awards, and constructed over 350 planes at the Te Kowhai Airfield.

The airfield has been utilised for air shows to interest groups such as the Air Scouts, Royal Aeronautical Society and the Fleet Air Arm Association and is currently used as

⁵ Map 12-8: ONFL 7 – Mount Pirongia.

⁶ Te Kowhai Community Plan, 2011-2021, Te Kowhai Community Group Committee.

⁷ At [Page 13].

a base for two full time, and one-part time, training organisations. The site is understood to hold high recreational values to those that use it for their aircraft hobby.

3.10 Summary of Existing Environment

The character of the Assessment Area is typical of the wider productive parts of the Waikato. It consists of a largely rural landscape, featuring a high overall ratio of open space to human land use, and with much of the open space being used for agricultural activities: primarily grazing pasture, with farm tracks/races and typically low density, linear large lot residential development alongside existing roads. Vegetation is typical of an agricultural landscape, with shelterbelts (particularly within the eastern parts of the assessment area) and exotic amenity/shade trees scattered throughout pastoral fields. Any notable connected tracts of native vegetation are typically limited to within stream gullies (i.e. areas historically deemed unsuitable for agricultural purposes).

The Waipa River is the most notable landscape feature within the Assessment Area, and forms a major tributary to the Waikato River. The Waipa is framed along its western side by an area of hill country which connects into the Hakarimata Range to the north and the Kapamahunga Range to the south – the ridgelines of which are visible from within the Assessment Area. Beyond the Assessment Area to the south, and of general relevance to the proposal site, is the Pirongia Range – which like the Hakarimata Range in the north, is visible in the distance; with the distant peak of Pirongia Mountain visible on the horizon in certain areas.

Whilst the main urban parts of Hamilton are not shown within the Assessment Area, the city's influence is an important driver for change within it. Hamilton's population growth has had a knock-on demand for land within the Waikato District, particularly in relation to an increasing demand for lifestyle properties – where people can live within a rural setting, but commute to the city as needed. Further development, included within Hamilton City, will be facilitated by the Rotokauri Structure Plan.

The most notable human settlement locally is Te Kowhai. This village features a relatively small and well-ordered residential area, with two reserves and an attractive walkway, which connects the town with the Te Otamanui Lagoon. Like Hamilton, Te Kowhai is also experiencing growth, with further subdivision anticipated following Plan Change 17 of the WDP – which rezoned 'Rural Zone' land along Ngaruawahia Road and between Horotiu Road and Te Kowhai Road to 'Country Living Zone'. Further intensification is understood to have been limited by the lack of water and wastewater services.

Overall, it is considered that the landscape of the Assessment Area, including the site, generally has values which are primarily recognised and appreciated at a local level (e.g. by the local population). There are no nationally or regionally scheduled landscapes (e.g. ONL or ONFs) within the Assessment Area, and the site – whilst having some important associative value – is not particularly noteworthy relative to its biogeographical elements. Overall it is characterised by its airfield infrastructure and use and the open fields, which reflect the predominance of pastoral fields within the wider landscape.

4.0 Viewing Context and Viewing Audiences

A site visit was undertaken on 1 May 2017 by Mr John Jeffcock who was the original assessor for this proposal. A site visit was then undertaken by the author of this assessment (Thomas Lines) on the 27 February 2018. The purpose of these site visits was to determine the likely views and viewing audiences of the site, in addition to ground truthing the above character descriptions. The site visit included walking within the site, the surrounding footpaths and driving the surrounding roads – thereby complementing a prior desk survey of aerial mapping, land use and contour information.

4.1 Key Findings

The site is located within a roughly triangular-shaped tract of land, bound by three roads: Limmer Road (SH39); Te Kowhai Road; and Horotiu Road. It is from these roads where the site can be viewed with the greatest ease. However, the site is not visible along all parts of these roads, as existing intervening vegetation and buildings/structures filter or screen many viewing opportunities.

Based upon the desk survey and site visits, the key areas (and viewing audiences) which have, or are understood to have views of the site, comprise:

- a) People travelling along parts of SH39 (Limmer Road), to the south of the site, particularly when travelling along the sections which are directly adjacent to the site; as well as people travelling along (short) sections of Te Kowhai and Horotiu Roads.
- b) Residents within a number of properties and some dwellings accessed from the aforementioned roads.
- c) People – and potentially farm workers – within the fields surrounding the site.

4.2 Visual Assessment Viewpoints

Ten viewing locations have been selected and used to photograph the site (and views from within it, looking out). These were selected in accordance with the following factors, and where the location:

- a) offers a representative view of the viewing audiences identified above;
- b) has the clearest views of the site;
- c) is publicly accessible (for the external viewpoints);
- d) has a reasonably high number of potential viewers;
- e) provides, in addition to the others, a suitable range of viewing distances and types; and
- f) from within the site, offers the opportunity to identify which external properties have views of the site.

A description of these viewpoints is provided in Table 1 below; and they are used for the basis of the visual assessment within chapter 7.0 of this report.

Refer to **Figure 4: Viewpoint Location Plan**, and **Figures 5–9** for the corresponding viewpoint photographs.

Table 1: Assessment Viewpoints

VP No(s)	Location	Direction of View	Approximate Distance to Site	Reason for Selection
1	Te Kowhai Road	Looking South	370m	Representative of road users and broadly representative of nearby residential audiences.
2	North Eastern Corner of Site	Looking North	-	To identify and illustrate the neighbouring private properties with a view towards the site.
3	Northern Part of Site (Runway)	North	-	To identify and illustrate the neighbouring private properties with a view towards the site.
4	Horotiu Road	East	260m	Representative of road users and broadly representative of nearby residential audiences.
5	North Western Corner of Site	West	-	To identify and illustrate the neighbouring private properties with a view towards the site.
6	Limmer Road 'West' (SH39)	North East	55m	Representative of road users and broadly representative of nearby residential audiences.
7	South Western Site	South	-	To identify and illustrate the neighbouring private properties with a view towards the site.
8	Limmer Road 'Middle' (SH39)	North East	5m	Representative of road users and broadly representative of nearby residential audiences.
9	Limmer Road 'East' (SH39)	West	550m	Representative of road users (at a distance).
10	Eastern Site Boundary	East	-	To identify and illustrate the neighbouring private properties with a view towards the site.

5.0 Summary of Proposal

5.1 Airpark Overview

TKAL are seeking enabling provisions within the Proposed District Plan to develop an airpark. The airpark concept is long-established overseas and has been more recently adopted in other parts of New Zealand (e.g. *Dairy Flat Aeropark*). Such developments enable people to live adjacent to, and operate from, a shared airfield facility.

Infrastructure within the airpark is typically in communal ownership, including taxi ways to and from individual allotments. A key distinguishing feature of an airpark is the ability to taxi aircraft directly to a private residential dwelling, which typically includes a hangar. Due to the infrastructure requirements of airparks they are typically located beyond cities and towns to avoid potential conflict with other urban activities.

The proposal will introduce a new airpark precinct (and sub precincts) into the WDP, which will be implemented via a Framework Plan and a set of new airpark specific rules. The Framework Plan – shown in Plate 3 for ease of reference – divides the site into four precincts:

- **Precinct A:** Runway and Operations
- **Precinct B:** Commercial Precinct
- **Precinct C:** Medium Density Residential
- **Precinct D:** Residential Precinct



Plate 3: Proposed Framework Plan (Adapt Studio)

In addition to the above, the airpark is seeking to future proof to comply with the Obstacle Limitation Surface (OLS) requirements. This necessitates existing objects both within and outside of the site to be managed and restricted to a certain height to allow for a clear approach or take of surfaces. This would require the management and pruning of some trees outside of the site boundary as outlined on the Bloxam Burnett & Oliver Drawings (Drawing 144310_08_0101 to 144380_08_0401).

5.2 Relevant Proposed Provisions

A complete set of the proposed provisions are included within the plan change request prepared by *Bloxam, Burnett & Olliver*. A summary of the rules which are most relevant to this assessment are set out below in relation to the subdivision and land use provisions.

5.2.1 Subdivision

Subdivision will be a non complying activity in Precinct A and a restricted discretionary activity within precinct B. Subdivision will be a restricted discretionary activity in Precincts C and D. Relevant provisions in relation to potential landscape and visual effects are:

- a) It is in general accordance with the Te Kowhai Airpark Framework Plan, and
- b) Every allotment within Precinct C, other than a utility allotment, has a net site area of at least 450m² if connected to the Te Kowhai Airpark reticulated wastewater network and not bordering the perimeter 25m building setback, or 1000m² if bordering the perimeter 25m building setback and connected to the Te Kowhai Airpark reticulated wastewater network, or 2500m² in the case of any allotment not connected to the Te Kowhai Airpark reticulated wastewater network. Every allotment within the 'Airsides Overlay' of Precinct D has a net site area of at least 800m² and is connected to the Te Kowhai Airpark reticulated wastewater network. Every allotment within Precinct D outside of the 'Airsides Overlay' has a net site area of at least 2500m², except: The net site area may be reduced to 1000m² providing it is connected to a reticulated wastewater network and is not bordering the perimeter 25m building setback.
- c) A utility allotment does not exceed 50m².
- d) The Te Kowhai airpark also proposes to incorporate shelterbelt planting in the approximate locations shown on the Te Kowhai Airpark Framework Plan. This shelterbelt planting is to be planted at 2.5m centre to centre spacing at a initial height of 2.0m. It is noted however that spacing allowances can be made for aircraft access.

5.2.2 Land Use Performance Standards (Precincts A & B)

The construction of buildings (and other relevant works) will be a Permitted Activity subject to the compliance with a series of rules, including the following:

- a) **Glare and Lighting** -This is similar to the current WDC living zone rules with the exception of also including vehicles or equipment used in aviation activities. Lighting is permitted if it does not exceed 10 lux measured vertically at any other site.
- b) **Earthworks** – these are a replication of the current WDP Industrial Zone rules. Notably, earthworks are permitted if they take place within 5m of the site boundary, are revegetated to achieve 80% ground cover within 12months of the start of earthworks.
- c) **Signage** - 10m high and 3m² area set back 5m from the boundary of Precincts D or E and 25m from the airpark boundary. Signs may be illuminated but not flashing.
- d) **Outdoor Storage** – these are similar to the current WDP Industrial zone which state that any activity is a permitted activity if outdoor stacks or stockpiles of goods or materials do not exceed a height of 9m, and do not exceed 30% site coverage, and are screened from view from a public road or reserve, or an adjoining site in another zone or Precinct.
- e) **Heights of Buildings** – this rule provides for buildings up to 10m in height. Additionally, it states that no building, mast, tree or other object protrudes through the obstacle limitation surfaces.
- f) **Building Coverage and Impervious Area** - Construction or alteration of a building is a permitted activity in Precinct B if the total building coverage does not exceed 70% and the impervious area does not exceed 90%.
- g) **Building Setbacks** - Construction or alteration of a building is a permitted activity if the building is set back: 5m from all road boundaries (private or vested roads), 5m from precinct boundaries except: A nil setback is applicable between Precincts A and B.

5.2.3 Land Use Performance Standards (Precincts C & D)

The construction of buildings (and other relevant works) will be a Permitted Activity subject to the compliance with a series of rules, including the following:

- a) **Glare and Lighting** - This is the same as the current WDP living zone where Any activity is a permitted activity if light spill from artificial lighting, other than a streetlight, navigation light or traffic signal, does not exceed 10 lux measured vertically at any other site.
- b) **Earthworks** – Earthworks are permitted activity if the earthworks are not located within:1.5m either side of a public sewer, open drain, overland flow path or other service pipe, and: the earthworks do not disturb more than 100m³ within a site in a single calendar year, and the earthworks do not disturb more than 1,000m² within a site in a single calendar year, and the height of the resulting cut or batter face does not exceed 1.5m with a maximum slope of 1:2 (1m vertical to 2m horizontal), and areas exposed by the earthworks are re-vegetated to achieve 80% ground cover within 6 months of the commencement of the earthworks, and sediment is retained on the site through implementation and maintenance of erosion and sediment controls, and the earthworks do not divert or change natural water flows or established drainage paths.

- c) **Building Coverage** - For lots <1500m² the total building coverage does not exceed 60% site area, up to a maximum of 600m², and for lots between 1500m² and 2500m² the total building coverage does not exceed 40% site area, up to a maximum of 750m², and for lots >2500m² the total building coverage does not exceed 30% site area, up to a maximum of 900m².
- d) **Impervious Surfaces** - For lots <1500m² it does not result in more than 90% of the site having an impervious surface up to a maximum 1200m² impermeability, and for lots between 1500m² and 2500m² it does not result in more than 80% of the site having an impervious surface up to a maximum 1500m² impermeability, and for lots >2500m² it does not result in more than 60% of the site having an impervious surface up to a maximum 1800m² impermeability
- e) **Building Setbacks** - A 5m setback is required 5m from all boundaries except taxiway for lots 1500m² or over; and 3m from all boundaries except taxiways for lots between 600 and 1500m². A 3m setback is required from front and rear boundaries and 1.5m from side yard boundaries for lots 600m² or less. A nil setback from internal boundaries is applicable where development is of a semi-detached nature and / or where written approvals have been obtained from the adjoining landowner.
 - a. Additionally, a 3m setback is allowed from a taxiway;
 - b. a 25m setback from an Airpark Zone boundary; and
 - c. a 15m setback from a State Highway
- f) **Maximum Building Height** - Buildings, structures and objects are a permitted activity if:
 - a. their height does not exceed 7.5m, and
 - b. no building, mast, tree or other object protrudes through the obstacle limitation surfaces
 - c. It is also noted that

In addition to the above, for the purposes of reducing adverse landscape and visual amenity effects it is recommended that hangers should be finished in recessive colours.

6.0 Landscape Effects

6.1 Introduction

An assessment of landscape effects deals with the effects of change and development on landscape as a resource; which includes:

- a) The geophysical elements and features which make up the site (e.g. vegetation), and in particular any that contribute to a site's values; and
- b) The overall character of the wider landscape, in this case within the Assessment Area.

In determining the landscape effects of the proposal, judgements concerning the sensitivity of the resource to the type of change sought, have been considered against the level of change that is likely to occur. The sensitivity relates to the values associated with or derived from the landscape (i.e. its geophysical, sensory and associative values), and the susceptibility of these to change. The level of change, with regard to this proposal, accounts for the maximum extent and intensity which would be achievable via the provisions proposed, the increased activity of aircraft, and the likely timeframe for which it would take to implement the development.

6.2 The Site

Development of the site, in line with the proposed provisions, cannot occur without a change to its existing character. This will always be the case where development is proposed within a greenfield site, or one which has been utilised (historically) for a different use to that of the proposed future activity.

Having understood that there will be a significant change to the existing character of the site (from earthworks, a change and intensification in land use) – and having identified that there are no notable geophysical elements of value within the site – further effects depend upon the ability of the provisions to integrate the development into its landscape context: such to avoid adversely affecting the wider character of the area.

6.3 Effects on Wider Landscape Character

Landscape character is the distinct and recognisable pattern of elements that occur consistently in a particular landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement.

As described in chapter 3.0, the character of the Assessment Area is synonymous with that of a 'Waikato landscape'. It is dominated by open pastureland and arable fields, defined by post and wire fencing and with characteristic shelterbelt, hedgerow and shade tree vegetation. Buildings include those which are utilised for agricultural purposes, and are often associated with a residential dwelling on a large site. Villages are relatively well-defined, and countryside lifestyle blocks are typically confined to road corridors.

While part of the site is currently used as an airfield with attendant hangars and other infrastructure, the majority of the land holding remains in use for stock grazing or crop cultivation. As such, it has an overall character which is largely consistent with that of the wider rural landscape. In this regard, the site contributes to the sensory and perceptual values – relating to a rural amenity – of its surroundings, as appreciated by those living within the wider rural area (refer chapter 3.0).

The proposal will represent an intensification of the site's current use; and will result in it having a more urbanised character overall. This will occur as its characteristic open fields are replaced with new roads, dwellings, hangars and hardstanding; and an overall reduction in the ratio of open space to development.

The susceptibility of the wider landscape to change is based upon its ability to accommodate the changes proposed without significant adverse effects on the area's overall character. The site is generally flat and forms part of a – network of open fields. This indicates that it is generally more conducive to absorbing change. Indeed, the existing, substantially-sized hangars within the site, are well integrated into the wider landscape, such that they are not especially prominent or noticeable from any public location. In addition, the site is largely contained visually from any distant (and certainly public) locations beyond the three roads (Horotiu, Te Kowhai and Limmer) which surround it. This is primarily due to: the level topography of the surrounding area; the screening provided by above ground features such as trees, hedges and buildings; and, the distance of separation from the site. As such it is acknowledged that overall, the wider landscape has a relatively low susceptibility to change.

Limmer Road (SH39) is where the susceptibility of the landscape to change is at its greatest due to the proximity of the site to this road where it borders part of SH39. As described in chapter 7.0, this road features a number of viewing opportunities towards the site, and it adjoins approximately 300m of the site's southern boundary. At present, its road users experience the site as part of a combination of a wider open agricultural landscape and smaller rural residential allotments. The site's change into an airpark with additional 3,000m² to + 4,000m² rural residential lots along the boundary will alter the characteristics of (this part of) the road. At the Assessment Area scale, the level of this change is relatively insignificant. But when considering this change at a scale comprising the area around Horotiu, Te Kowhai and Limmer Roads, and the Te Kowhai Village it will present an increase in the density of housing within the area.

A key implication of changes within the setting of Te Kowhai, concerns the impact on the village's legibility. At present the village has a relatively well-defined form. The node of Te Kowhai is clearly centred around the confluence of Te Kowhai Road and Horotiu Road, and it is geographically discrete from the State Highway. As per the *Key Moves and Objectives of the Ngaruawahia Structure Plan*, having "clearly distinguished settlement nodes from surrounding rural areas" has been identified as a priority.⁸ It is however important to note that the 'development staging map' (refer Plate 2), under the Te Kowhai structure plan also shows the future extension of the town to the northern boundary of the site. This would further integrate the Airpark into the extent of the village's future development.

Furthermore, the proposal includes controls which will ensure that the largest residential lots are positioned around the site's periphery, including in the southern parts of Precinct's C and D, which will be visible along Limmer Road. This will present

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Page 32, Ngaruawahia, Hopuhopu, Taupiri, Horotiu, Te Kowhai & Glen Massey Structure Plan, March 2017.

a residential form to the SH39 interface, that is of a similar character to the lifestyle blocks, found elsewhere within the local environs. These lots will also be of a size which is approximately at, or similar to, the 3000m² size identified in the *Structure Plan*, as being the preference for Country Living development at Te Kowhai.⁹ The proposed periphery vegetation is also intended to serve as a reference to the agricultural planting forms (i.e. boundary hedgerows and shelterbelt trees) that are commonly found throughout the Assessment Area. These measures will assist with sensitively integrating the future development into the wider agricultural landscape; and prevent the distinctions in the grain of the development sought with that which currently exists within the village, particularly in respect of the densities along Willow Brook Lane; which is the nearest part of the village to the site. In relation to the latter point, higher density development has largely been internalised within the site and as such will not be perceived unless arriving by air, passing through the site, or from land to the north of the site (which is likely to be developed for residential purposes in the future).

But the measures outlined will not prevent the more urban residential character of the village being perceived as extending to the south. The effect of these changes, on the landscape character within the Te Kowhai Limmer and Horotiu Road triangle will result in a moderately adverse change to the current attributes of the area. However, when considered within the broader pattern of landscape surrounding the Te Kowhai village this change will not significantly affect the relationship between the village and the wider rural landscape.

In relation to the landscape to the north and west of the site, and as discussed in chapter 7.0 below, its visibility from Te Kowhai Road and Horotiu Road, is generally limited to snap-shot, fleeting views. And unlike Limmer Road, these road corridors are separated from the site by areas of mostly open fields (used for lifestyle and agricultural purposes). These uses will continue irrespective of the proposal, thereby ensuring that Te Kowhai Road and Horotiu Road, retain an immediate interface with (mostly) open fields before entering the village proper. This will serve to 'buffer' the potential effects of the proposal on the character of these areas. Importantly, this existing buffer of open space, together with the screening provided by intervening vegetation and the planting proposed around the site's periphery, will restrict the impact of the proposal. This will mean that the proposal does not significantly detract from the legibility of a sense of arrival into the village from either Horotiu and Te Kowhai Roads. Which is an important matter, as having "clear gateways to mark [the] outside edge of each settlement on main roads" is identified as a key objective within the *Ngaruawahia Structure Plan*. People accessing the village from the south and east, do not ordinarily need to use SH39, and will therefore not experience the same effects as identified above.

Notwithstanding these considerations, it is understood that the airfield is valued by the local community in and around Te Kowhai. Its importance has been raised within the *Structure Plan* community workshops.¹⁰ The proposal, which will enable new hangars, taxiways and infrastructure, and the knock on increase in the airfield use by aircraft, will serve to strengthen the association of the village with aviation, and positively bolster its sense of identity and character in that regard. It is likely that for certain people within the village, the airfield's development will be welcomed for the security it offers for the ongoing and future use of the runway; and its associative values:

⁹ Page 39, Ngaaruawaahia, Hopuhopu, Taupiri, Horotiu, Te Kowhai & Glen Massey Structure Plan, March 2017.

¹⁰ Page 58, Ngaaruawaahia, Hopuhopu, Taupiri, Horotiu, Te Kowhai & Glen Massey Structure Plan, March 2017.

including those of its productive past, and that of Max Clear. The ability to continue hosting events, and indeed having the ability to accommodate larger and more organised events, will no doubt also serve to increase the vitality of the site and by association, the local village. It will offer a greater community resource, in that regard, and contribute additional points of interest through its connection with the village via a new walkway, a public park and café as additional community assets along with an overall increase in aircraft movements/activity.

It is important that the development functions as part of the village, and does not compete with it, or function as a 'satellite' privatised community. To prevent this, the proposal includes scope for connecting the site with the village (rugby fields) via a new public footpath: which will in turn connect into an aviation-themed public park within the site. The provision of a new footpath is consistent with the general objectives for improving walking opportunities at Te Kowhai, as identified in the *Ngaruawahia Structure Plan* and the *Te Kowhai Community Plan*. And the proposed alignment is consistent with that shown in the *Te Kowhai Key Moves Plan* (refer Plate 1). These aspects of the proposal, in addition to the significant advancements in the opportunities for flying aircraft (as a hobby or sport) as a result of the proposal, will provide a moderate beneficial effect on the recreational values of the site and the wider landscape.

7.0 Visual Effects

7.1 Introduction

An assessment of visual effects deals with changes within the views available to people and how those changes affect their visual amenity.

In determining the rating of effect, judgements concerning the sensitivity of the viewing audience (to the type of change sought), have been considered against the level of visual change that is expected to occur. The sensitivity may be influenced by a number of factors which include, but are not limited to: the number of people who may see the proposal; the reason for a viewing audience being at the viewpoint or looking at the view (e.g. if they are residents or motorists); the existing character and values of the view, the viewing distance and the duration for which the proposal may be viewed.

The proposed Framework Plan provides an outline of where different types of development are likely to occur, and the proposed provisions add parameters including the maximum density of dwellings, the general form and layout of buildings (e.g. coverage, heights and setbacks) and the requirements for landscaping. However, given that this proposal concerns the provisions of a District Plan, such details as the architectural design and treatments of buildings and gardens is unknown.

For the purposes of this assessment, visual effects are addressed by geographical location, and include:

- a) Changes to views from publicly accessible areas (as represented by the assessment viewpoints); and
- b) Changes to views from neighbouring private properties (as represented by the viewpoints from publicly accessible locations and within the site, looking out).

7.1.1 Views from the North (Refer Viewpoints 1, 2 & 3)

Te Kowhai Road is the only notable publicly-accessible viewing location to the north of the site. Views along much of the road, towards the site, are screened by intervening vegetation and residential dwellings, sheds and ancillary structures. Where views are available, they tend to be fleeting, as they are viewed at speed whilst moving in a vehicle. Such views are also at a distance of approximately 370m, from the site, and are generally perpendicular to the direction of travel. The sensitivity of such audiences is considered to be low.

One location where a view is attainable, is at Viewpoint 1 (Refer **Figure 5**). From this location, viewers are afforded views towards the north-eastern corner of the site (and runway); looking across intervening pasture land and lifestyle properties (e.g. No. 621 Te Kowhai Road). At this location, the audience would receive views towards the development of the runway and, in particular, the airside lots in Precinct D: which are likely to form a linear row of dwellings with hangars lining the southern side of the runway.

The effect of these changes to the visual amenity of road users in general, along Te Kowhai Road, will be low adverse during construction (as a result of the added

movement, colours and disturbance created by construction machinery), reducing to very low adverse once the mitigation is established.

Viewpoint 2 (refer **Figure 5**) assists in understanding the views attainable from neighbouring private properties to the north-east of the site. Viewpoint 2 identifies a number of residential dwellings which have an outlook or view towards the site's north-eastern parts. This includes dwellings at No's. 639, 653, 645, 625 and 621 Te Kowhai Road. These audiences are likely to experience similar changes to their views, as those described in relation to road users. However, certain residents (e.g. No. 639) are likely to have a greater breadth of outlook across the site. And will be able to see a greater amount of the subsequent development, from a closer position, compared to the road users.

Residential audiences also have a greater sensitivity to changes within their outlooks, particularly to the north where they generally locate their outdoor living areas. This is partly due to the duration at which views can be appreciated, but also because the enjoyment of their outlooks depends largely upon the character of the landscape (view). The character of outlooks from the aforementioned dwellings to the south is likely to be agricultural at present: with few buildings and a high ratio of open space and grass (the grass of the runway being visually consistent with agricultural pastureland elsewhere in the view). The proposal will alter this character. It will greatly increase the number of visible buildings over time and the intensity of activity; transforming at least parts of their outlook to a more urbanised character.

The adverse effects on these audiences, could be moderate-high from certain specific locations on their property during and immediately following construction. However, from many of these properties existing intervening vegetation obscures or filters views, and over time it is likely that future residential which is earmarked for the western area north of the site will be developed changing the context of views further. In addition, the existing airfield is located between these residential properties and the proposed development and it is possible that certain residents may enjoy the amenity of the airfield, and have chosen to live next to it. Such audiences may see the intensification of the airfield as a positive change, and welcome the increase in aircraft movements; with such activity received as an additional point of interest. However, allowing for those who would see the increase in buildings and activity in a more negative light, the long term effects of the development could be moderate for some of these nearby residential audiences.

Viewpoint 3 (refer **Figure 6**) assists in understanding the views attainable from neighbouring private properties to the north of the site. Only one dwelling (at No. 703B Te Kowhai Road) could be clearly identified to the north. It is understood that the residents within this dwelling currently have direct access to the runway for aviation purposes. Residents in this dwelling will experience changes to their south-facing outlooks. Though unlike the properties described above, these residents would experience a lower level of change, given that their south-facing views are already likely to be characterised (in part) by the current hangars on site: which are understood will be retained. Based on this it is expected that the level of adverse effect for this audience would be low to moderate.

Views towards the suburban properties along Willow Brook Lane are largely obscured by existing intervening vegetation: including as a result of that which exists along the rear boundaries of these properties. It is understood that the majority of the dwellings along the southern parts of Willow Brook Lane are single storey, and as such are unlikely to afford views towards the site.

As outlined in chapter 2.0, the Ngaruawahia Structure Plan delimits the land immediately to the north of the site (and Viewpoint 3) for future residential development ("Stage TK3A"). If this proposal is successful, then the future rezoning and development of the Stage TK3A land may encounter potential reverse sensitivity challenges. Particularly, as it will not be practicable to plant along the northern site boundary, due to its proximity to the runway. The Structure Plan is non-statutory, and it is unclear at this time as to what form or layout such development would take; but it is expected to occur.

7.1.2 Views from the West (Refer Viewpoints 4 & 5)

Horotiu Road is the only notable publicly-accessible viewing location to the west of the site. Views along much of the road, towards the site, are screened by intervening vegetation and residential dwellings. Where views are available, they tend to be fleeting, as they are viewed at speed whilst moving in a vehicle. Such views are also at a distance of approximately 260m from the site, and are generally perpendicular to the direction of travel. The sensitivity of such audiences is considered to be low.

One location where a view is attainable, is at Viewpoint 4 (Refer **Figure 6**). From this location, viewers are afforded views towards the north-western corner of the site: which is identifiable by the existing hangars visible above the intervening hedgerows. It is estimated that the existing hangars on the site are approximately 3.5m in height (to the apex of the roof). At this location, the audience may notice an intensification in development around the existing hangars in Precinct B. Though development in Precinct C, to the south of the hangars, is unlikely to be noticeable, given the requirement for the establishment and maintenance of a planted buffer along the site's western boundary.

The effect of these changes to the visual amenity of road users in general, along Horotiu Road, will be very low during construction and following development with the boundary vegetation established.

Viewpoint 5 (refer **Figure 7**) (and Viewpoint 3) assist with an understanding of the views attainable from neighbouring private properties to the west of the site. A number of residential dwellings are identified in Viewpoints 3 and 5, which have an outlook towards the site's north-western parts. These include dwellings at No's. 688, 691, 693 and 699 Horotiu Road.

These audiences, particularly at No. 693 (and No's 212 and 214 Limmer Road, both of which have dwellings some 100m from the boundary), will receive a more expansive outlook across the site, to that which is received by road users. The views from No. 693 east are likely to already include the existing hangar buildings. As such the appearance and character of the site around the hangars – in relation to this viewing audience's outlooks – is unlikely to change significantly as a result of this proposal. These audiences are however likely to experience a general increase in activity during the construction works, and notice an increase in the intensity of the site's use: from a greater number of aircraft movements. And those audiences at No's. 212 and 214 are likely to experience a significant change in their outlooks

The provision of a perimeter planted buffer will assist in filtering views towards new buildings in Precinct's C and D.

The effects on these residential audiences, in general, is expected to range (relative to the different outlooks available from the different dwellings) from moderate-high during

construction; reducing to a moderate to low adverse level following the completion of the works and the successful establishment of the boundary planting.

7.1.3 Views from the South (Refer Viewpoints 6, 7 & 8)

Limmer Road (SH39) offers the greatest publicly-accessible viewing opportunity of the site; due primarily to its proximity to the site's southern boundary: which it adjoins for approximately 300m.

Like the other road-based viewpoints above, views from Limmer Road are viewed at speed and (from the south) perpendicular to the direction of travel. However, a greater area of the site is visible and for a longer length along the Limmer Road corridor, which allows its users to gain a greater overall 'picture' of the site sequentially (compared with that which is attained from the snap-shot views along Te Kowhai and Horotiu Roads). While the sensitivity of this audience is considered to be low; the Limmer Road viewing location is a State Highway and has a greater number of vehicle movements than Te Kowhai or Horotiu Roads, and therefore potential viewers, also. It should be noted however that the speed of travel is also higher on this road than the others surrounding the site.

Views from the south-western parts of Limmer Road, towards the site are typically obscured by a combination of intervening vegetation and buildings. At Viewpoint 6 (Refer **Figure 7**), the site becomes more easily visible; where it is viewed to the north of No.176 Limmer Road, at approximately 55m away. The existing hangars are visible in the background of the view.

From this location, audiences are afforded views towards the south-western corner of the site. This area is proposed to feature *Medium Density Residential* development (Precinct C); and will feature a grassed taxiway between the boundary and the residential dwellings. Importantly, the proposal has been organised to ensure that the largest lots are located around the periphery of the development, and this will include lots no less than 1000m² (if connected to the reticulated waste water network), or 2500m². The development which will result from these generously sized lots, and the restrictions over building coverage, will appear visually consistent with the lifestyle properties elsewhere along the road corridor. And the proposed boundary planting, will also help to soften views towards the future dwellings and any aircraft activity.

The effect of these changes to the visual amenity of road users along this part of Limmer Road, is expected to be low adverse during construction, reducing to a low to very low adverse level once the development is complete.

Viewpoint 7 (refer **Figure 8**) assists in understanding the views attainable from neighbouring private properties to the south of the site. These properties include No's. 161, 158 and 176 Limmer Road; with the latter two expected to have the clearest outlooks across the site to the north. No. 176 directly adjoins the site, and features a dwelling within approximately 35m of the site's boundary. It is considered that the effects upon the amenity values of this audience are likely to be high. No. 161 (like No's 195, 185, 173 and 145 Limmer Road), is located on the southern side of the road corridor and features enclosing and established amenity vegetation. People within No.161 specifically, together with those in No. 158 and No. 176 will experience a considerable change in the character of their views when looking north from their dwellings.

As with the views available from the road, the proposal to locate the largest allotments around the periphery of the development, together with a generously planted boundary, will assist in softening and integrating the development. The deliberate positioning of the main access road within the development, along the southern boundary also provides an additional distance of separation (between the viewer and the proposed buildings) and is proposed to feature street trees, to assist with its integration. But the changes will nevertheless result in an effect to the amenity of these residential outlooks: which – particularly in the case of No. 158 and No. 176 – currently benefit from an agricultural context. The effects on other residents in this location could be up to a moderate adverse level during construction at the aforementioned property; reducing to a moderate-low level following the completion of the works and the successful establishment of the boundary planting.

Viewpoint 8 (refer **Figure 8**) is also located to the south of the site, approximately 5m from the site boundary. It offers a representative view of road users (particularly those driving east). And is also very broadly representative of the views attainable from parts of Hawksgrip Road. The site's function as part of the wider landscape of open agricultural fields, that are common along the SH39 road corridor, is evident from this location.

From here, road users will be afforded views towards the southern edge of Precinct D, which will feature residential dwellings and hangars set back at least 25m from sites southern boundary. This set back will be provided by the grassy taxiway. And as outlined above, this southern periphery will feature the largest lots within the site; to be integrated with boundary planting. The new buildings, which will likely form a row parallel to this part of the southern boundary, and the movement of aircraft, will be visible, at least until the boundary planting has established.

The effect of these changes to the visual amenity of road users along this part of Limmer Road, will be moderate-low adverse during construction, reducing to a low to adverse level once the development is complete. It is also acknowledged that the visibility of aircraft could serve as an additional point of interest along the road, strengthening the legibility of the site's airfield use for passing motorists.

7.1.4 Views from the East (Refer Viewpoints 9 & 10)

Limmer Road (SH39) provides the most notable publicly-accessible viewing opportunity, of the site, to the east. Like Viewpoints 6 and 8 above, it represents passing motorists. But in this location at Viewpoint 9 (Refer **Figure 9**), views towards the site are directly ahead.

From this location, viewers are afforded views towards the site's eastern boundary, at a distance of approximately 550m away. Views towards the site, are over intervening pasture land, and are filtered, in part, by existing boundary tree planting. From here, road users will be afforded views towards the eastern edge of Precinct D, which will feature residential dwellings and hangars set back at least 25m from the site boundary. Helpfully, the dwelling at No. 98B (which is identified in the viewpoint photograph, in Figure 9) provides a point of reference, as to the distance at which the development will take place; and more generally, its apparent scale. Owners of 98B as well as 98A both currently have access to the runway.

The proposed boundary planting will assist in softening the visibility of the future development, by filtering views towards the new buildings. Though it is likely that

some visibility and sense of the development will remain. The effect of these changes to the visual amenity of road users along this part of Limmer Road, will be low adverse during construction, reducing to a low to very low adverse level once the development is complete.

Viewpoint 10 (refer **Figure 9**) helps to illustrate the lack of residential development to the east of the site. The only notable properties, that feature dwellings with a clear view towards the site, are those at No's. 98A and 98B. From this location, audiences are afforded views towards the south-eastern corner of the site. This area would feature the proposed Residential development within Precinct D. A 3m wide shelterbelt will be present along the entire eastern length of the site, except the runway (Precinct A) in addition to a 25m grassed taxiway. Every allotment within Precinct D (outside of the 'Airside Overlay') would have a net site area of at least 2,500m², however the net site area may be reduced to 1000m², providing it is not bordering the 25m building setback and that it is connected to a reticulated wastewater network. The building setbacks, together with the perimeter shelterbelt planting, the large lot sizes and restrictions over building coverage will ensure that they remain in keeping with the developments along Limmer road and that views are filtered toward the proposal.

With the above in consideration, the effects during construction are expected to be low adverse. These effects would reduce to very low once the mitigation measures have been established.

7.2 Summary of Visual Effects

A summary of the visual effects rated in this report is provided in Table 2 below.

Table 2: Summary of Visual Effects

Viewing Audience	Viewpoint Number	Effects During Construction	Effects Following Completion (Including Establishment of Boundary Planting)
Road users Te Kowhai Road	1	Low Adverse	Very Low Adverse
Residents to the north east of the site	2	Up to Moderate-High Adverse	Up to Moderate Adverse
Residents to the north of the site (No. 703B Te Kowhai Road)	3	Moderate Adverse	Low to Moderate Adverse
Road users Horotiu road	4	Very Low Adverse	Very Low Benign
Residents to the west of the site	5	Up to Moderate-High Adverse	Moderate-Low Adverse
Road users Limmer Road 'west' (SH39)	6	Low Adverse	Low to Very Low Adverse

Residents to the south of the site	7	Up to Moderate Adverse	Up to Moderate-Low Adverse
Road users Limmer Road 'middle' (SH39)	8	Moderate-Low Adverse	Low Adverse
Road users Limmer Road 'east' (SH39)	9	Low Adverse	Low to Very Low Adverse
Residents to the east of the site	10	Low Adverse	Low to Very Low Adverse

8.0 Conclusion

The proposal overall is considered to be appropriate for its location and, in the context of the Waikato District as a whole, Te Kowhai is a logical location for an airpark development. This is primarily due to its existing runway and associated aviation infrastructure (e.g. hangars and refuelling facility). Together with the (large) scale of the wider agricultural landscape and its lack of scheduled areas or sensitive viewing audiences.

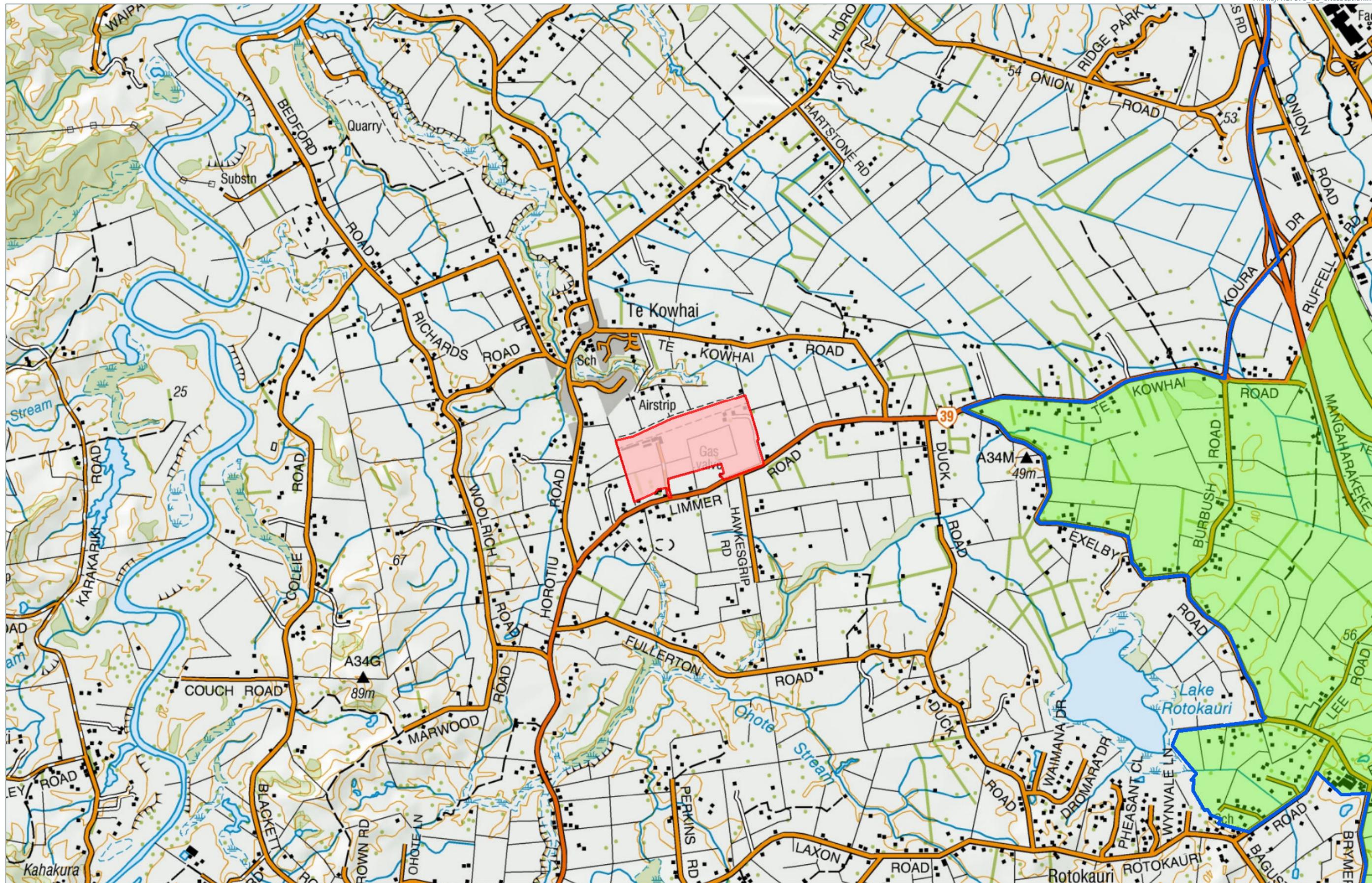
The audiences which would be most affected by the proposal, are the residents immediately to the north-east, west and south of the site; who could experience up to moderate-high adverse effects on the amenity values of their current outlooks during construction. For some, these effects will be experienced both during construction and for a time following the development's completion. This would however reduce following establishment of the perimeter vegetation (required at time of subdivision) and other likely future residential development to the north of the site. For others, such as residents to the east of the site, the airpark (and aviation facilities and activity) may be a welcomed additional point of interest.

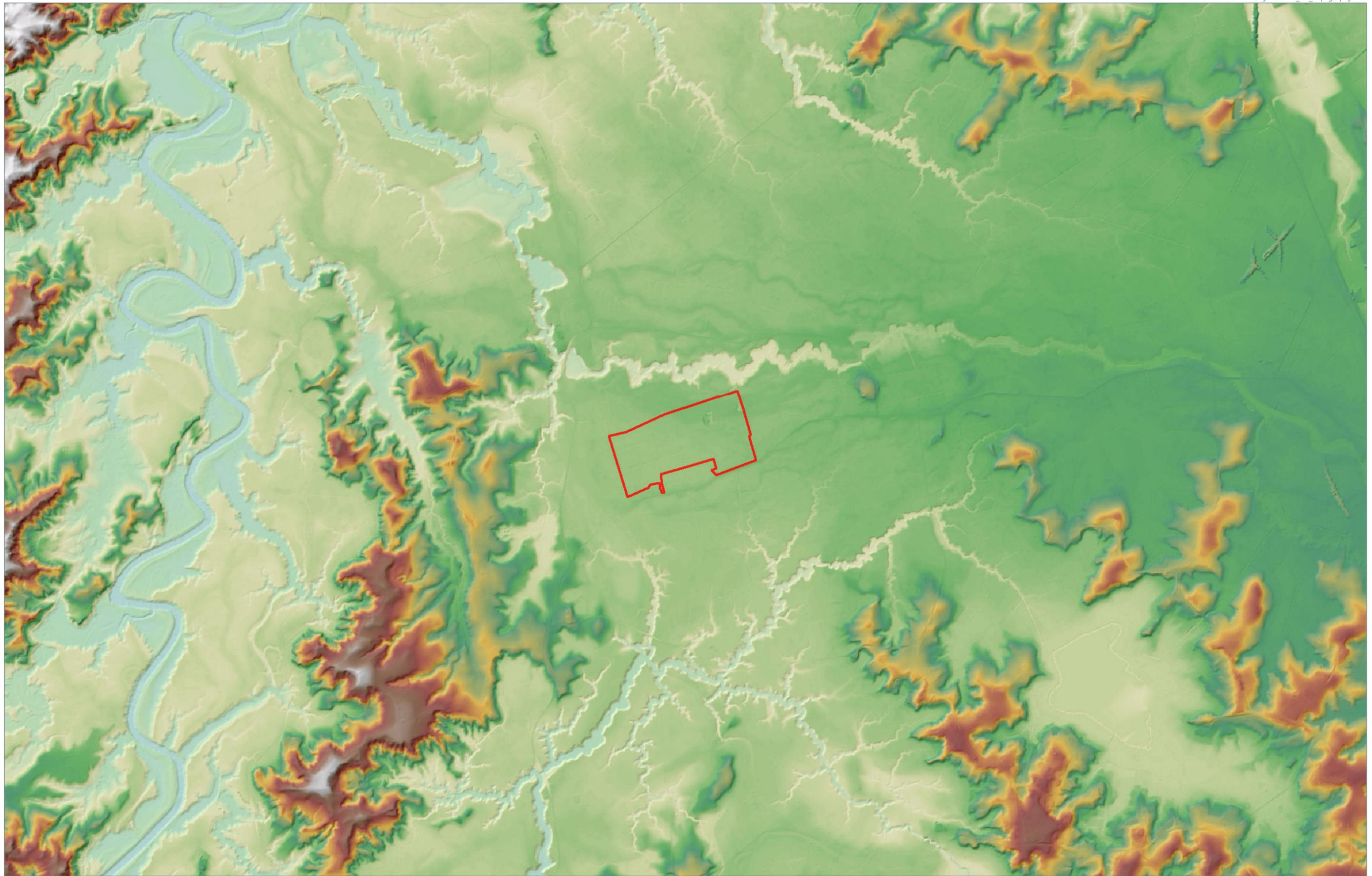
The effects on public views, in general, will be limited. This is due to the distance of separation between the site and any notable public viewing areas which as identified in this report, are primarily confined to three roads (Te Kowhai, Horotiu and Limmer). The organisation of larger residential lots around the periphery of the development, and the provision for boundary planting, will assist in visually integrating the development in a manner, which is broadly consistent with the character of rural lifestyle uses found elsewhere within the Assessment Area. As a result of this, and the lack of viewing opportunities more generally, the effects on public amenity values will be no greater than moderate-low adverse during construction and low adverse following the development's completion.

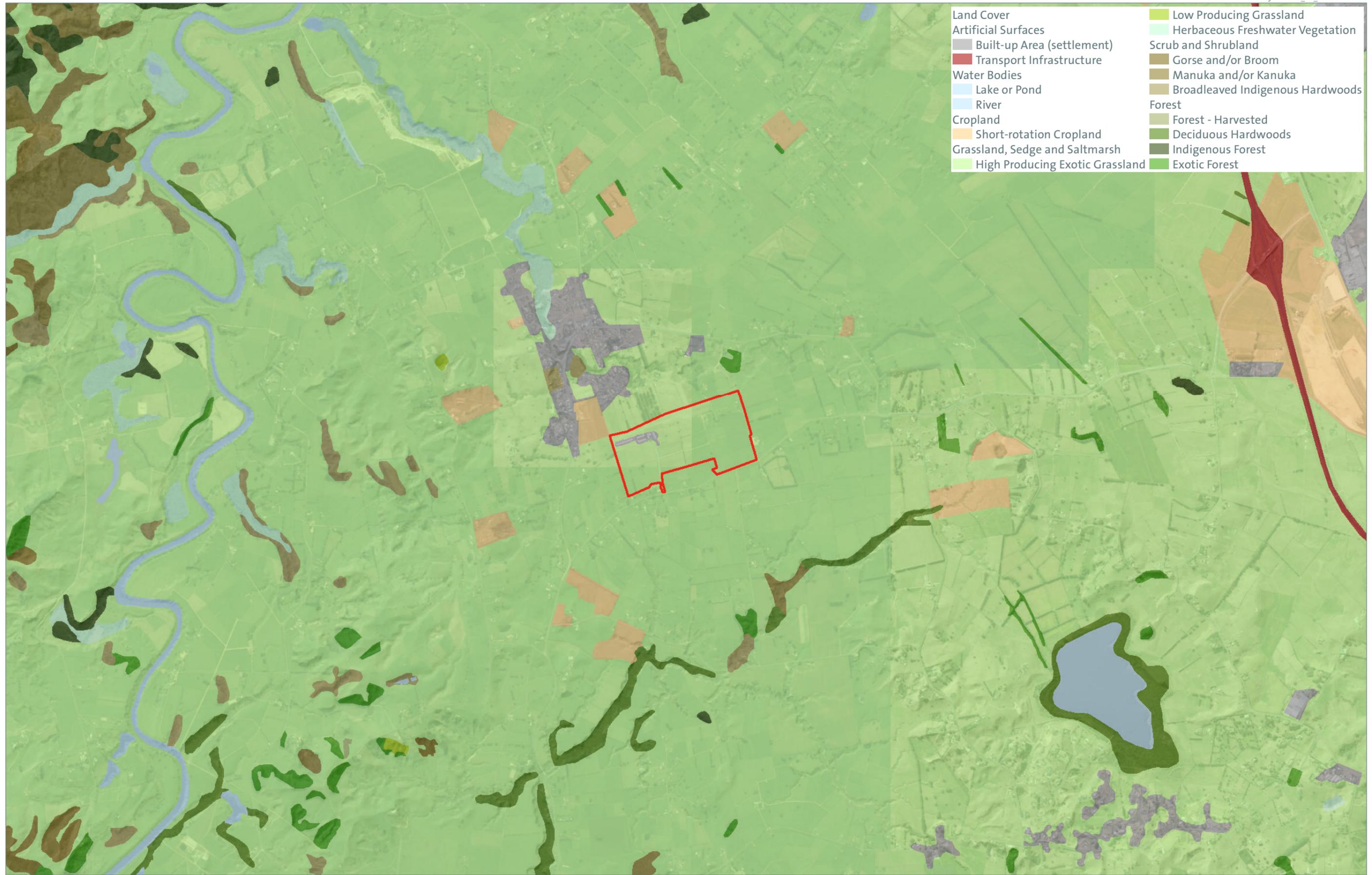
In respect to the landscape resource, the provisions will enable a development that has the potential to adversely impact upon the immediate landscape character, and the legibility of the Te Kowhai settlement. Despite this, the development will secure the future of the airfield and maintain it as a public amenity for future generations: meeting a key objective for the local community in Te Kowhai. It's development, in accordance with the provisions will both add to the vitality of the airfield's community and strengthen the existing relationship between the village and its association with aviation. As such both moderate beneficial and adverse impacts will result from the proposed provisions, in relation to the landscape resource at and surrounding Te Kowhai.

Boffa Miskell

Appendix 1: Figures 1-9







- | | |
|---------------------------------|----------------------------------|
| Land Cover | Low Producing Grassland |
| Artificial Surfaces | Herbaceous Freshwater Vegetation |
| Built-up Area (settlement) | Scrub and Shrubland |
| Transport Infrastructure | Gorse and/or Broom |
| Water Bodies | Manuka and/or Kanuka |
| Lake or Pond | Broadleaved Indigenous Hardwoods |
| River | Forest |
| Cropland | Forest - Harvested |
| Short-rotation Cropland | Deciduous Hardwoods |
| Grassland, Sedge and Saltmarsh | Indigenous Forest |
| High Producing Exotic Grassland | Exotic Forest |





Viewpoint 1: Te Kowhai Road Looking South Towards the Site



Viewpoint 2: Within the Site Looking North Towards Neighbouring Properties Along Te Kowhai Road



Viewpoint 3: Within the Site Looking North Towards the Southern Limits of Te Kowhai Village



Viewpoint 4: Horotiu Road Looking East Towards the Site



Viewpoint 5: Within the Site Looking West Towards Neighbouring Properties Along Horotiu Road



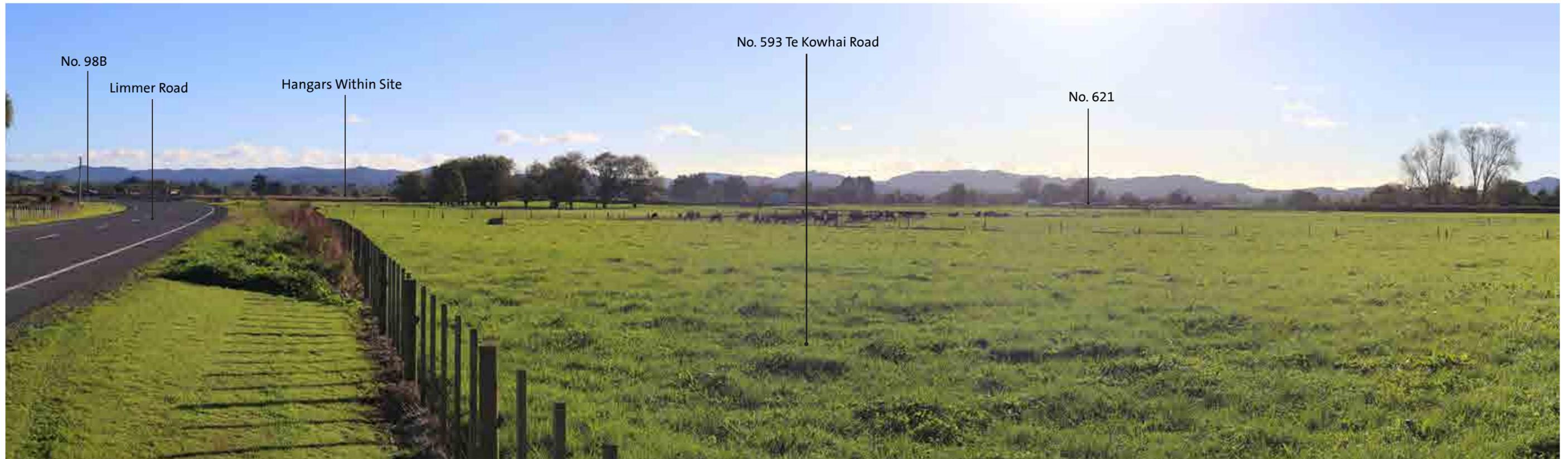
Viewpoint 6: Limmer Road (SH39) Looking North East Towards the Site



Viewpoint 7: Within the Site Looking South Towards Neighbouring Properties Along Limmer Road



Viewpoint 8: Limmer Road (SH39) Looking North East Towards the Site



Viewpoint 9: Limmer Road (SH39) Looking West Towards the Site



Viewpoint 10: Within the Site Looking Towards Neighbouring Properties to the East