

Te Kauwhata

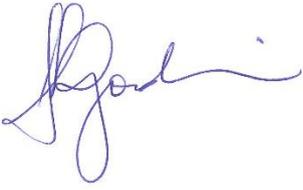
Landscape and Visual Amenity Effects Assessment
Prepared for Lakeside Developments 2017 Limited

20 June 2017



Boffa Miskell

Document Quality Assurance

Bibliographic reference for citation: Boffa Miskell Limited 2017. <i>Te Kauwhata: Landscape and Visual Amenity Effects Assessment</i> . Report prepared by Boffa Miskell Limited for Lakeside Developments 2017 Limited.		
Prepared by:	Tom Lines Landscape Architect Boffa Miskell Limited	
Reviewed by:	John Goodwin Partner / Registered Landscape Architect Boffa Miskell Limited	
Status: FINAL	Revision / version: 9	Issue date: 20 June 2017
Use and Reliance This report has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. Boffa Miskell does not accept any liability or responsibility in relation to the use of this report contrary to the above, or to any person other than the Client. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate, without independent verification, unless otherwise indicated. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.		

Template revision: 20150331 0000

File ref: A16241_001_LVA_FINAL_V8.docx

Cover photograph: The site, © Al Newsome, 2016

CONTENTS

1.0	Introduction	1
2.0	Methodology	1
3.0	Background & Proposal	1
	Site Location, Context and Character	2
	Site	4
4.0	Statutory Context	8
	Landscape Assessment Context	8
	Outstanding Natural Features	9
5.0	Visual Catchment and Viewing Audiences	9
	Visual Catchment	9
	Viewing Audiences	10
6.0	Recommended landscape and visual outcomes	12
7.0	Natural Character Effects	13
	Biophysical Values	13
	Perceived Values	13
8.0	Landscape Character Effects	13
9.0	Visual Amenity Effects	16
10.0	Conclusion	20

Appendices

Appendix 1: Assessment Rating Table

Appendix 2: Zone Plan

Appendix 3: Graphic Supplement

Figures

Figure 1: Drone photo over Te Kauwhata towards the site	3
Figure 2: Drone Photo of the site looking south.....	4
Figure 3: Photo of the western ridgeline vegetation	5
Figure 4: Drone photo of southern hill landform vegetation.....	6
Figure 5: Photo of lakeside vegetation	6
Figure 6: Photo of cluster of trees located within the south eastern portion of the site	7

1.0 Introduction

This assessment of potential landscape and visual amenity effects has been prepared by Boffa Miskell Limited (“**BML**”) for Lakeside Developments 2017 Limited (“**the applicant**”) as part of a proposed plan change for the Lakeside development at Te Kauwhata. The assessment will review the likely landscape and visual amenity effects from development as a result of the proposed plan change.

In summary, the proposed plan change would enable the development of up to 1,600 residential household allotments and units. For the purpose of this assessment, an indicative zone plan (refer **Appendix 2**) has been reviewed within the context of the existing Te Kauwhata township and area. Although it is recognised that the layout of the development within the site may evolve over time, it is considered that for the purpose of this assessment, the indicative zone plan illustrates a possible scenario that determines the distribution and density of development likely to arise under the proposed plan change.

This report will provide an overview of the existing environment, a description of the change proposed, and identify how such change will affect the landscape, natural character and/or visual amenity values of the site and surrounding area.

2.0 Methodology

This assessment has been undertaken with reference to the Quality Planning Landscape Guidance Note (Boffa Miskell Limited)¹ and its signposts to examples of best practice, including: the UK guidelines for landscape and visual impact assessment² and the New Zealand Landscape Institute Guidelines for Landscape Assessment³.

An outline of the effects ratings used in this assessment is provided in **Appendix 1**. In summary, the effects ratings are based upon a seven-point scale which ranges from very low to very high.

3.0 Background & Proposal

The plan change relates to 194 hectares of land (“**the site**”). The applicant has undertaken a structure planning process to understand how the site may be most appropriately developed. This process engaged Baxter Design to undertake preparation of a zone plan (refer **Appendix 2**).

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

² Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, 2013

³ Best Practice Note Landscape Assessment and Sustainable Management 10.1, NZILA

The outcome of the structure planning process is proposed change to the Waikato District Plan ('WDP') to enable clustered medium-density and low density residential development whilst allowing for the creation of areas of public open space, enhancement of the lakeside margin and provision for public access and enjoyment of Lake Waikare. The zone plan illustrates a likely outcome of the proposed plan change. By way of summary, the outcomes sought comprise:

- The proposal intends to develop approximately 132.5 hectares of the site for housing which is proposed to be zoned as "Living: Te Kauwhata Lakeside". The remaining land within the floodplain would be retained for open space which is proposed to be zoned as "Recreation". The southern boundary of the proposal intends to remain as farming which is proposed to be zoned "Rural".
- A small Community Hub of approximately 1.1 hectares (to be zoned "Business") is also proposed, providing local facilities would be positioned at the gateway to the site along Scott Road.
- The new residential housing will likely accommodate up to 1,600 allotments and household units, serviced by a number of new roads.
- Neighbourhood pocket parks will feature within the development, whilst a managed reserve would feature along the lakeside, and accommodate a recreation ground, walkways and a jetty.
- An allotment along Scott Road containing the existing farm homestead, is proposed to be retained as a residential dwelling.
- Ecological corridors and water management areas would feature along the site's small gullies.

There would be two setbacks from the main trunk line. The first set back would be a 5m buffer, known as a 'no access zone' (due to the main trunk line). This area would be fenced off along the entire western boundary of the site for safety reasons. Any existing vegetation and pasture within this area would be retained. This fence line would become the rear boundary of any new residential lots. The second set back would be the buildings. Non-habitable buildings such as sheds may be located along the rear boundaries of the lots adjoining the no access zone, however habitable buildings would be required to be offset further to ensure they are at least 10m from the main trunk line.

Site Location, Context and Character

The subject site is located on pastoral farmland on the southern fringes of the Te Kauwhata township (refer **Appendix 3 - LV01**), in the Waikato District. Te Kauwhata's land use includes a diverse range of agricultural and horticultural activities, including dairy and dry stock as well as fruit orchards, market gardens and viticulture.

Te Kauwhata is located to the east of the North Island main railway trunk line and State Highway 1 (SH1), which is currently undergoing major upgrading as part of the Waikato Expressway Project. The town is situated approximately 77km south along SH1 from Auckland's CBD and similarly 53km north of Hamilton. A number of other towns are located in the vicinity of the township including Huntly 22km to the south via SH1 and Pokeno, 24km to the north via SH1.



Figure 1: Drone photo over Te Kauwhata towards the site

Te Kauwhata Road is the key approach road to the town from the west, however the main road through the village centre is Waerenga Road which runs east to west, with Mahi Road being a second, parallel route through the town. Waerenga Road contains typical local amenity shopping in addition to residential housing which continues to expand to the north and south along a loose grid of local roads. The southern eastern edge of the township features the majority of the light industry land uses which includes engineering businesses and a waste treatment works. Te Kauwhata also features schools and various sporting and leisure facilities. These include a bowling club and golf course to the north of the town, and a squash club and domain on the southern edge of the town, which contain the local rugby club (refer **Appendix 3 - LV02**).

In recent years, Te Kauwhata has undergone growth in residential development projects which include the following:

- Rosalyn Boulevard to the northwest of Te Kauwhata town centre. 30-60 lots, currently under construction within the 'Glenvale' development.
- Blunt Road to the northeast of the town centre, adjacent to the golf club. 73 lots anticipated.
- Swan Road (Residential Zoning) to the northeast of the town centre, adjacent to golf club, 95 lots total, 51 sold.
- Swan Road (Rural Residential Zoning) to the northeast of the town centre, adjacent to the golf club. Capacity to develop 56 lots under current District Plan. 6 lots (approximately 1.0ha each) have been developed on this site.
- Matua Close & Waerenga Road to the east of the town centre 37 lots anticipated within the 'Waerenga Estate' development.

Lake Waikare is the most notable feature within Te Kauwhata's immediate vicinity and is listed as an Outstanding Natural Feature (“**ONF**”) in the WDP. Lake Waikare is located south east of the town, and adjoins the eastern boundary of the site. It is the largest Lake in the lower Waikato catchment, with 3,442 hectares of open water, with very poor water quality. Between

Lake Waikare and SH1 is a densely vegetated area encompassing Lake Kopuera which is privately owned and accessible by fishermen by prior consent. North of Te Kauwhata lies Whangamarino which is also an ONF. Whangamarino is the second largest wetland in the North Island and supports a wide diversity of waterfowl.

Further afield is the area of Waiterimu, visible across Lake Waikare from Te Kauwhata and characterised by areas of remnant vegetation and steep sided hills.

Site

Located at Scott Road, the site is approximately 194 ha. The site is accessed by Scott Road which runs off Te Kauwhata Road to the west of the existing town. The site is bordered to the north by the southern extent of Te Kauwhata township, to the east by Lake Waikare, to the south by open farmland and to the west by the main trunk line.

The site is designated Rural in the WDP. This character is evident throughout the site and surrounding area with a working agricultural landscape, associated buildings and infrastructure being prominent features. This includes rolling hills punctuated by clusters of mature exotic vegetation, open fields and lakeside/wetland vegetation.



Figure 2: Drone Photo of the site looking south

Topography

The site is topographically characterised by a number of rolling ridges and small gullies leading down to lowlands and floodplains to the east, along the shores of Lake Waikare (refer **Appendix 3 - LV03**).

The topography of the site contains references to the present agricultural land use and includes grassed swales and drainage trenches, particularly within the floodplains to the east.

Along the western side of the site is a long, undulating ridgeline (“western ridgeline”) forming part of the Scott Road access and is characterised by a steep, eastern facing slope. The

highest point of this ridge is at the Scott Road entrance to the site. This ridgeline offers views through the site, across Lake Waikare and surrounding areas and forms one of several high points within the site. On the western side of this ridge the land slopes towards the edge of the site, bordered by the railway which defines a physical boundary between the site and the rural landscape to the west.

At the southern end of the site is an elevated landform (“southern hill landform”) offering views within the site and its surrounding context. This landform is characterised by gently rising northern slopes and steep southern facing slopes which are vegetated with exotic trees. The east of the site consists of a gently sloping landform which forms a floodplain leading down to the western edge of Lake Waikare and is enclosed by irrigation trenches.

Vegetation

Vegetative cover within the site consists mainly of open grass fields for the purpose of grazing livestock and some mature vegetation in distinct pockets (refer **Appendix 3 - LV04**). Key areas of vegetation include the following

- The western ridgeline near the Scott Road access point, which consists predominantly of exotic species including macrocarpa and eucalyptus on its eastern slopes (**figure 3**).
- The southern hill landform, which features a number of shelter belts in addition to an area of macrocarpa, among other species (**figure 4**).
- The floodplain to the east, which consist of flax, cabbage trees and wetland species along the western edge of Lake Waikare (**figure 5**).
- A cluster of trees in the south-east portion of the site (**figure 6**).



Figure 3: Photo of the western ridgeline vegetation



Figure 4: Drone photo of southern hill landform vegetation



Figure 5: Photo of lakeside vegetation



Figure 6: Photo of cluster of trees located within the south eastern portion of the site

In addition to these areas the site is characterised by some sections of low hedgerows bordering agricultural fields and crossing points.

Built Form

The site contains a number of buildings and built structures. Many of these relate to the agricultural use of the site which include farm buildings and milking sheds, in addition to post and wire fences and gates dividing the fields. A number of residential properties also exist within the site at No. 67, 94A and 98 Scott Road. It is anticipated that the majority of these dwellings in addition to the structures associated with the farm would be removed for the development of the site.

Natural Character of the site

Natural character is a part of landscape and varies within each area (on a naturalness continuum). It is the result of the combined levels of indigenous nature (i.e. biophysical values) and perceived nature (i.e. sensory values), which are typically defined by the extent to which natural elements, patterns and processes occur and are legible and the nature and extent of existing human modifications. As such the highest degrees of natural character occur where there is the least modification within an area and its context.

The natural character is therefore a product of the combination of natural elements, natural processes and natural patterns. The major natural elements associated with the site are the waters of Lake Waikare, and areas of native vegetation along its north western embankments. The natural patterns and processes which are most notable, stem primarily from the relationship Lake Waikare has with this vegetation. In combination, these elements and processes, result in a context which in places retains some degree of both indigenous and perceived naturalness.

In general, the level of indigenous or perceived naturalness derivable from the site has been reduced to a very low level by the historic and ongoing agricultural practices. Despite this there are natural character values which should be maintained and where possible enhanced, particularly around the edge of Lake Waikare.

4.0 Statutory Context

The majority of the site (179ha) is currently zoned as Rural (W) with the remainder of the site to the north (15ha) zoned as Country Living under the WDP. It is noted that the District Plan identifies a number of Outstanding Natural Features and Landscapes in Schedule 3A. These include the Whangamarino Wetland, Waikato River, Lake Waikare, and Lake Whangape. However, Lake Waikare is not identified as an Outstanding Natural Feature or Landscape in the Waikato Regional Policy Statement. Therefore, Lake Waikare is considered locally significant but not regionally significant.

Landscape Assessment Context

The landscape of Te Kauwhata, and the proposal site has been assessed as part of a number of previous landscape and natural character assessments. These range from high level regional character assessments, to assessments focussing on identifying ONL and Natural Character areas. These are described below in chronological order.

Waikato District Landscape Evaluation (1992)

This study was one of the first territorial landscape and visual assessments undertaken following the introduction of the Resource Management Act 1991. The study was undertaken by Boffa Miskell and tailored to assist Waikato District Council to generate objectives, policies, rules and implementation methods to manage the landscape resource. The study delineated landscape types, landscape units, a visual quality evaluation, visual absorption capability, and ascertain areas of higher visibility to the public.

Waikato District Landscape Review (2003)

Also undertaken by Boffa Miskell, this report contained a review and re-evaluation of the Waikato District's landscape resource. It was prepared for the Waikato District Council as part of the review of the operative District Plan. The review included inspecting a representative sample of the landscape units identified in 1992 and considering evidence of recent aerial photography. A number of recommendations were also made with respect to the ongoing management of the landscape resource.

Proposed Waikato District Plan – Landscape Policy Areas (2006)

This report was prepared for the Waikato District Council. It outlined the process and work undertaken with respect to the Landscape Policy Area provisions and mapped areas. This report recommended changes to both the maps and provisions to better reflect Section 6(b) of the Resource Management Act relating to Outstanding Natural Landscapes.

Waikato Regional Landscape Assessment (2010)

The overall objective of the Waikato Regional Landscape Assessment was to provide the information and policy guidance required to develop a robust framework to bring about consistent and integrated management of landscapes and landscape values within the region while also providing an understanding of regional landscapes and identifying key elements of special landscapes so they are able to be appropriately managed and protected.

Ongoing Landscape Assessments

Boffa Miskell is currently working with the Waikato District Council to assist with characterising and defining their landscapes to include ONL or ONF and areas of Natural character. The review will assist Waikato District Council in their review of the District Plan and form part of the Section 32 analysis. The District Plan review will bring together the Waikato Section and Franklin Section of the operative District Plan into a single District Plan.

Outstanding Natural Features

Lake Waikare is an ONF in the WDP, however it is not recognised as an outstanding natural landscape or feature in the Waikato Regional Plan. Part 1 Section 3.2.1 of the WDP, outlines the objectives and policies for Outstanding Natural Features and Landscapes, which are as follows.

Objective

3.2.1: Outstanding natural features and landscapes are recognised and protected

Policies

3.2.2: Outstanding Natural features and landscapes, identified in Schedule 3A and on the planning map as Landscape Policy Areas, should be recognised and protected from the adverse effects of inappropriate subdivision, use and development

3.2.3: Cultural and spiritual relationships of Maori with outstanding natural features and landscapes should be recognised and provided for in the course of subdivision, use and development

3.2.4: Subdivision, use, and development (including roads and tracks) should avoid adverse effects on outstanding natural features and landscapes (including ridgelines within those landscapes).

3.2.5: Deleted

3.2.6: Views of outstanding natural features and landscapes from public places should be protected from the adverse effects of inappropriate subdivision, use and development.

Part 1 (3A.4) of the WDP refers to the 2006 Waikato Landscape Study by Boffa Miskell Ltd which outlines the criteria for ONF's. The proposal is assessed against these criteria in **Section 8** of this report.

5.0 Visual Catchment and Viewing Audiences

Visual Catchment

As a result of its location, context and topography the site has a wide visual catchment encompassing a large area (refer **Appendix 3 - LV01**). It is set within gently rolling hills with the township of Te Kauwhata to the north, Lake Waikare to the east, SH1 as well as the railway to the west, and open farmland to the south. Therefore, the visual catchment contains parts of the

township of Te Kauwhata including the Domain and its associated playing fields. The visual catchment to the east is expansive due to the lakeside location of the site and the absence of intervening landforms. The visual catchment therefore extends beyond the eastern shoreline of Lake Waikare (approximately 5km away) to the adjoining hillside slopes. To the south, the visual catchment reaches toward Ohinewai and the eastern extent of the Taupiri Range. To the west, the catchment extends over the forested area around Lake Kopuera, toward the pastoral lands of Rangiriri West, and beyond toward Glen Murray.

Viewing Audiences

Boffa Miskell visited the site on 12th October 2016 and on 9th June 2017, the purpose of which was to determine the likely views and viewing audiences of a development within the site. The initial site visit also included walking over the site and driving the surrounding roads.

Based upon these site visits and an analysis of a development proposal in relation to the surrounding topography and land use, it is considered that the primary public and private viewing audiences comprise:

Public Viewing Audiences

- Road users and pedestrians along local roads within Te Kauwhata including Te Kauwhata Road, Waerenga Road and Mahi Road as well as Wira Street, Amo Street, Rata Street, Rimu Street, Roto Street, Kowhai Place and Merlot Place.
- Road users along Scott Road (particularly travelling south).
- Distant views from road users along SH1 (particularly traveling north).
- Distant views from road users along Waerenga Road outside of the village, Waikare Road to the east along Lake Waikare and Tahuna Road to the south.
- Visitors to the Domain.
- Members of the public taking part in other recreational activities in the immediate area including hunting for waterfowl around Lake Waikare.

Private Viewing Audiences

- Residents of Te Kauwhata particularly those with elevated positions and those located towards the southern edge of the township.
- Residents along Scott Road.
- Residents along the southern side of Te Kauwhata Road.
- Residents along Te Onetea Road.
- Distant views from residents along Waerenga Road, Waikare Road to the east (along the Lake Waikare margins), Tahuna Road to the south and Rangiriri to the south-west.
- Workers in light industry businesses along Rata Road.

The assessment viewpoints are described in Table 1 below and can be located in **Appendix 3 - LV05: Viewpoints Locations**. The photographs which represent these viewpoints are shown in **Appendix 3 - LV06 to LV16**

Table 1: Visual Assessment Viewpoints

VP No.	Location	Direction of View	Reason for Selection
1	Te Kauwhata Road	South east	Representative of south east views from road users of Te Kauwhata Road upon entry and exit to township
2	Te Kauwhata Road	South east	Representative of south east views from road users of Te Kauwhata Road upon entry and exit to township
3	Scott Road	South west	Representative of views from road users and residents of Scott Road
4	Scott Road	South east	Representative of views from road users and residents of Scott Road of north western section of site
5	Memorial Domain Car Park	South east	Representative of broadly south views of patrons and visitors from Te Kauwhata Memorial domain and sports fields
6	Rata Road	South	Representative of southern views of road users, pedestrians and residents along Rata Street (corner of Te Kauwhata Road)
7	Rimu Road	South	Representative of southern views of road users, pedestrians and residents lower Rimu Street (below Mahi Road)
8	Roto Road	South	Representative of southern views of road users, pedestrians and residents of Roto Road
9	Waerenga Road – North east	West	Representative of western views of road users and residents along Waerenga Road on approach to Te Kauwhata
10	Waerenga Road – South east	North west	Representative of north western views of road users along Waerenga Road across Lake Waikare
11	Tahuna Road	North	Representative of northern views of road users and residents of Tahuna Road across Lake Waikare

12	Outside No. 92A Te Onetea Road	North	Representative of northern views of residents along Te Onetea Road
13	Rangariri Road	North east	Representative of north east views of road users along Rangariri Road and SH1 to the site
14	Outside No. 2441 Te Kawhata Road	East	Representative of eastern views of residents along Te Kawhata Road
15	State Highway 1, proximate to Rangariri	North east	Representative of road users traveling along SH1

6.0 Recommended landscape and visual outcomes

As outlined above, the Plan Change would seek to rezone the site from Rural 'W' and Country Living to a combination of zones including Living: Te Kawhata Lakeside, Business, Rural and Recreation. A number of design outcomes have been recommended which relate to the Lakeside Precinct Plan and should be incorporated into the Plan Change. The assessment and conclusions within this report are based on the implementation of these design outcomes.

- A control on building coverage, whereby the total building coverage does not exceed 40% in the medium density area and 65% in the higher density area as identified on the Te Kawhata Lakeside Precinct Plan;
- A control over building heights, whereby a height limit of 8.0m is imposed within the Living: Te Kawhata Lakeside zone, and a height limit of 10.0m is imposed within the Business zone (consistent with WDP);
- A control over earthworks in relation to the height of any cut or batter faces not exceeding 2m; cut and fill batters are revegetated to achieve 80% ground cover within 12 months; that no more than 200m³ is disturbed within an individual site in a single calendar year except where the maximum area at any one time shall not exceed 400m²,
- A control on the setback of any garages.
- A control over fences along a road frontage, public open space and side and rear boundaries.
- A control on the size of any front yards, in addition to planting requirements.
- A control over any retaining walls, such as planting introduced in front of high walls and that no retaining walls are located along the frontage of properties.
- A control over colour and reflectivity for buildings, ancillary structures and fencing.

- A control on retaining a visual connection from the Te Kauwhata Memorial Domain to Lake Waikare.
- It is recommended that the residential lots along the western boundary are separated by natural landscape elements such as gullies, existing vegetation and or steep sided slopes in order to reduce the linearity of development along this boundary. This would assist to better integrate the development in any views from the west.

7.0 Natural Character Effects

Natural character effects relate to the degree to which a proposal alters the biophysical and / or perceived values of a landscape, within the coastal environment or lakes, rivers and wetlands and their margins.

Biophysical Values

The site is a modified environment, albeit with a number of defined areas of native plantings. The areas which retain the highest degree of naturalness i.e. the vegetation on the embankment of Lake Waikare will not be affected by the proposal, and are proposed to be physically protected (being incorporated into public reserve).

The Lake Waikare margin is proposed to form an area of new public open space with a public walkway, and will be enhanced through indigenous plantings – such change will have a significant beneficial effect on the natural character values along the Lake Waikare margin.

Perceived Values

As outlined above, the proposal will largely avoid any effects on those components of the site which retain the highest degree of naturalness. Furthermore, the site is in a modified condition, and any perception of naturalness primarily results from the undeveloped character of the Lake Waikare margin.

The level of human modification (including landscape elements such as pathways and seating areas) to the Lake Waikare margin, would likely alter some people's perception of the level of naturalness within and around Lake Waikare. This change would likely have a low adverse effect on the perception of natural character associated with the Lake Waikare margin, however the natural elements patterns and processes associated with Lake Waikare will remain unchanged, with their immediate context enhanced through replanting.

8.0 Landscape Character Effects

Landscape character is the distinct and recognisable pattern of elements that occur consistently in a particular landscape. Landscape character includes elements of geology, landform, soils, vegetation, land use and human settlement. The effects on the landscape are generated from

anticipated changes in the physical components (such as vegetation and landform) within an area, which may result in altering the characteristics of the site and potentially the surrounding landscape. Landscape character effects are most generally resultant from landform modifications and vegetation removal and enhancement, or the introduction of new structures (such as residential dwellings), facilities or activities necessary to facilitate a proposal. When assessing the significance of an effect, the value of any natural and cultural features, patterns and processes which are present within the site are considered in addition to their sensitivity to change and the scale or magnitude of the change proposed. It is noted that landscape effects can occur without being seen by a viewing audience.

The proposed development will change the existing rural character of the site from rural farmland to a structured pattern of suburban residential development, with access roads and a framework of publicly accessible open space, and therefore the magnitude of change is considered to be high. The change in the character of the site is not necessarily adverse, it is different, and needs to be considered in its wider landscape context which is undergoing change, given the increasing levels of development around the township and upgrading of State Highway 1 to the west, in addition to the Waikato District Council strategy which is encouraging development in the area. It is considered that the important consideration, in terms of landscape character is the site's open space relationship with Lake Waikare and the farmland to the south of the site which should be retained and enhanced through sensitive design.

As identified earlier in this report, the main trunk line (and designation), form the site's western boundary and physically divide the site from the area of rural land to the west, which then adjoins Te Kauwhata Road. Being already separated from this landscape, it is considered that there is more capacity for residential lots to abut this edge, as opposed to the southern boundary of the site. A development response to this edge which allows for some separation between groupings of residential lots, in addition to a building set back from the main trunk line, would result in a design that is appropriately responsive to the rural land to the west.

Although the Lake Waikare margin forms only a portion of the site, it is an important landscape feature and therefore it is desirable that the site's relationship with the Lake Waikare margin, in addition to the farmland to the south of the site, is strengthened. This would be achieved by setting back proposed lots and roads from these sensitive edges to allow for managed farmland and public reserve. The site's sensitivity to the proposed level of change is relatively low, being an area of grazed pasture, however Lake Waikare, being of ONF status, in addition to sensitive viewing audiences within Te Kauwhata, determines a higher sensitivity to change. Therefore, it is considered that the site has a moderate to high sensitivity to the type of change proposed.

Design measures have therefore been taken to ensure that a development is provided for which complements the site and its setting, whilst retaining a sense of place and providing for landscape enhancement in its most sensitive edges and areas. This includes retaining a number of natural features and reinforcing its qualities and characteristics within and around the site. The management of the Lake Waikare margin to the east, becoming a reserve, as well as the retention and management of farmland to the south, will assist in anchoring the development within its rural context.

It is acknowledged that the proposed Plan Change will enable development that results in a high magnitude of change and a fundamental change to the character of the site. The proposal will also result in a development which increases the scale of the Te Kauwhata township. However as outlined above, the majority of the site specifically has a relatively low sensitivity to change, and the Plan Change request will include a number of mechanisms to ensure effects on the site's most sensitive features are avoided, with enhancements provided for. Nevertheless, at a larger scale, the site forms part of a wider area, in which its land use and topography relate to its context, and are characteristic of the wider landscape. The changes

proposed will alter these characteristics, which in turn will alter the site's influence on the wider landscape character – from a number of viewpoints in the surrounding area, the site will introduce a significant urban expansion into a largely rural landscape.

With consideration for the wider context, and the contribution of the site's characteristics to the rural character of the area, and the rural backdrop in views from Lake Waikare, the development proposed will result in a moderate to high landscape character effect. However, it is acknowledged that the proposal will facilitate significant landscape enhancements, and will offer access to a substantial network of public open space, including to Lake Waikare.

Changes to the Outstanding Natural Feature

The proposal will affect the margins of Lake Waikare, and therefore will affect the ONF. The Waikato Landscape Study (2006) outlines the assessment criteria detailing the ONF values of Lake Waikare. These criteria are detailed in **Table 2** below.

Table 2: Assessment Against ONF Lake Waikare

Natural Science Factors	Ranking	Values / Characteristics
Representativeness – recognisably characteristic of the area	High	Representative of lowland Waikato and is located in close association with Whangamarino wetland
Representativeness – in good state of preservation	Moderate	Infestation of weeds on margins
Rarity	Moderate	Many lakes and wetlands in area but Waikare is very large
Coherence	High	Waterbody highly coherent
Vividness	High	Can be highly memorable
Naturalness	Moderate	Margins of the lake tend to be modified
Intactness	Moderate	Edges can be discordant
Expressiveness	Moderate	Part of wider wetland and lakes landscape type
Transient Values	Moderate	Water pattern changes and birdlife

In summary, the lake is not rare feature, however it is large in comparison to others within the area (i.e. Whangamarino and Lake Kopuera). The lake is representative of the local topographical lowland characteristics and due to its proximity, it has an association with Whangamarino wetland. The waterbody of the lake is clearly defined, however the lake edges are discordant in places and its margins have been modified primarily through agricultural practices and weed infestation.

The proposal would remain as a distinctly separate element within the wider landscape, and the qualities and values of the lake will become an attraction for residents and visitors of the development and Te Kauwhata. The Ecological Restoration Plan, March 2017 (appended to the AEE), outlines the key objectives to restoring and establishing a sequence of wetland and shrubland associations. This includes removing and managing weed species along the margins of the lake, retaining existing native vegetation, and integrating new areas of native vegetation into the development. These measures would improve many of the characteristics and values of the lake, and enable the feature and its margins to be enjoyed by visitors and the community.

9.0 Visual Amenity Effects

Visual effects result from changes to specific views and the visual amenity experienced by people. The magnitude (or level) of change must be considered in relation to the sensitivity of the viewing audience, when evaluating the significance of an effect. The sensitivity may be influenced by a number of factors, which include but are not limited to: the number of people who may see it; the reason for being at the viewpoint or looking at the view; the existing character of the view, the duration for which the proposal may be seen and the viewing distance.

The visual effects which are likely to result from this proposal are described below in relation to the abovementioned representative viewpoints.

Te Kauwhata Road (Viewpoints 1 & 2)

These viewpoints represent views from road users and residents of Te Kauwhata Road, looking south east towards the site. Although the entirety of the site is not visible, viewing audiences will obtain partial views of the development.

At present the site forms an open rolling landscape in the rear ground of the view, which is, utilised for rural productive uses. Distant views are afforded beyond the site towards Lake Waikare and surrounding rural landscape from these locations.

The proposal will facilitate the transformation of a rural site, to a highly urbanised suburban development – with two storey houses. This change will alter the character of the wider area. The replacement of an open, undeveloped site utilised for rural land practices, to a suburban development, which will form a noticeable change (particularly as a result of development in the northern portion of the site), and overall would likely detract from the level of visual amenity currently derived from views at this location – the effects of this change are likely to be moderate in significance.

Scott Road (Viewpoints 3 & 4)

These viewpoints represent views from road users and residents of Scott Road. These viewing audiences, although low in number are situated in close proximity to the site, and will experience a large magnitude of visual change to their current views of rolling pastoral lands and some residential dwellings on generous lots.

Views towards the east obtain open views of the landscape towards Lake Waikare and beyond. Whereas views towards the west view the pastoral land of the site climbing in elevation with some backdrop of vegetation located along the railway.

For Scott Road viewing audiences, regardless of their viewing direction, the replacement of an open, undeveloped site utilised for rural land practices, to a suburban development will form a notable change, and overall would likely detract from the level of visual amenity currently derived from views at this location – the effects of this change are likely to be high to very high in significance.

Memorial Domain Car Park (Viewpoint 5)

This viewpoint is representative of visitors to the domain and carpark looking south east across the site. The site forms a large part of these views from the domain, which currently reinforces the rural character of the site on these viewing audiences. The gently undulating pastoral landform and clusters of trees are prominent elements within the view, in addition to distant views towards Lake Waikare.

The type and scale of change proposed represents a significant change to the type of views currently attainable from this location. The development would alter the character of the wider view, by introducing a new urban development into an area otherwise characterised by rural uses. This change would likely have a high adverse effect on the visual amenity values of people associated with recreational activities in the domain. It is noted however that development focused away from the Lake Waikare margin, with open space retained along this portion of the site, in addition to a retained visual connection to Lake Waikare would be an appropriate response to the development of the site for these viewing audiences. These outcomes, including a proposed view corridor, have been adopted in the zone plan.

Te Kauwhata Township (Viewpoints 6, 7, & 8)

These viewpoints are representative of road users and residents within the Te Kauwhata Township. At present the site forms part of a wider rural landscape, with arable and pastoral land uses and forms an undeveloped backdrop for these viewing audiences– albeit with some existing dwellings visible.

The proposal to retain and enhance the Lake Waikare margin with additional planting and creation of a managed reserve will assist in softening views towards the development. However, it is acknowledged that many people within the township will anticipate a largely rural context to their views. The alteration of the rural site which is undeveloped and contains large areas of open space pastoral fields, to a development which is suburban in nature, will form a clear change in the outlook towards the site from within the township and overall the effects of this change are likely to be high in significance.

Waerenga Road – north east (Viewpoint 9)

This viewpoint is representative of road users and residents along Waerenga Road to the east of the site. These viewing audiences have distant views of approximately 1.2km towards the site. At present, views from this location include the rural landscape meeting the eastern edge of Lake Waikare and across Lake Waikare towards the site. Views are expansive and the site forms part of this rural context.

Although these views are distant, it is likely that the limited number of residents at such locations would receive uninterrupted views towards any future development within the site. Additionally, from these locations, the township of Te Kauwhata is hidden by the intervening landforms and vegetation, and therefore the development does not appear visually connected to

existing development. It is therefore acknowledged, that the magnitude of change would be moderate, and the sensitivity of the residential viewing audiences being high, would likely result in be adverse and moderate adverse visual effects – and would primarily result in the change in land use from a largely rural outlook largely absent of built structures.

Waerenga Road – south east (Viewpoint 10)

This viewpoint represents a distant view from the south eastern edge of Lake Waikare, over 5.9 km from the site – it is likely to be representative of views from road users of Waerenga Road traveling north, adjacent to Lake Waikare.

At such a distance, the development of the site would feature as a relatively confined element within a much wider view, with any clarity over the scale of the development largely unnoticed by the distance. As a result, any adverse effects on the visual amenity values of public viewing audiences from this distance would be very low.

Tahuna Road (Viewpoint 11)

This viewpoint represents road users and residents along Tahuna road, which are located over 8.7km from the site. Northerly views at present towards the site, largely feature a rural landscape containing large areas of open space, meeting the waters of Lake Waikare. The location of these viewing audiences means that Lake Waikare forms the most prominent feature of the view, which reaches to the distance some 9km away.

Similarly, to views further to the east of this location, the development of the site would difficult to discern at this distance and therefore the adverse visual amenity effects would be very low for the private and public viewing audiences.

Outside No. 92A Te Onetea Road (Viewpoint 12)

There are three residential properties within 2500m directly south of the site, and these properties are grouped together immediately east of the main trunk line. This viewpoint is representative of residents within No. 92A and 92B Te Onetea Road, although it is noted that existing vegetation, including trees, are within their northern views and are likely to obscure and filter views towards the site over 1000m away.

The outlook is rural in nature although distant dwellings towards the north west signify existing development in the area. The view features the agricultural floodplain in the foreground of the view transitioning to an open rolling landscape towards the horizon, which the site is located within. Rural elements including post and batten fences, unpaved roads, overhead power lines, shelterbelts, green pastures and the main trunk line reinforce this rural character.

Although the proposal is at some 1000m away, the south facing slopes of site will be visible due to its elevation above the surrounding floodplains. The proposal will change the land use of the site to a suburban development, and will occupy the elevated landform in closest proximity to the view. The development would therefore alter the character of the wider view for this viewing audience and signify an expansion of residential living from Te Kauwhata within this rural outlook.

It is recognised that the proposal would occupy only a portion of the wider rural view and this occupation would be seen by a small number of residents (within three residential properties). The proposed residential land use would appear contained within the elevated landform and

respond sensitively to the rural context through development controls, such as building height and colour, and to the agricultural land uses by integrating managed grazed farmland to the southern portion of the site. Overall, it is considered that adverse visual amenity effects would be moderate for these private viewing audiences.

Rangariri Road, adjacent to SH1 (Viewpoint 13)

This viewpoint is representative of road users and residents located along Rangariri Road to the south west of the site. Views of the site from these locations form an open rolling landscape, utilised for rural productive uses, which reflects the adjacent land uses visible in the foreground of the view. Some of the ridgelines of the site are visible in addition to railway site vegetation which screens parts of the site.

The proposal will transform a rural site, to a suburban development – it is considered that the provision for development along the top of the ridgelines within the site has the potential for adverse visual effects as such development would be visible against the skyline. It is acknowledged that the entirety of the site will not be visible, and that the majority of people experiencing this view would be travelling at speed at an oblique angle. The development would alter the character of the site and impact the character of the wider area, and therefore the level of significance is considered to be moderate.

Outside No. 2441 Te Kauwhata Road (Viewpoint 14) This viewpoint is representative of residential viewing audiences to the east of the site along Te Kauwhata Road, at distances of approximately 1200m. The composition of these views are similar to those in viewpoint 13, which is a distinctively rural outlook containing rural built elements, pastoral land, shelterbelts, groups of mature trees in addition to the natural feature of Lake Kopuera. Portions of the site's south western side is visible, however mature trees to the west of the main trunk line do filter views towards the site. The landform reduces in elevation towards Lake Kopuera from these western locations along Te Kauwhata Road. The rolling topography then gently rises towards the north and east, extending into the site. The horizon of the view is formed by the distant hillsides east of Waiterimu, which is intermittently broken by mature trees east of Lake Kopuera.

The proposal will alter the character of this view by introducing a residential development, most noticeable within the south western portion of the site. Some future dwellings along the western ridgeline will undoubtedly introduce elements of built form on the horizon, although a control on building heights within the Living: Te Kauwhata Lakeside zone (to 8m) and tree planting within the development will reduce these occurrences. Being over 1000m from the site, views from western locations along Te Kauwhata Road also enjoy an extensive outlook across the surrounding landscape context. This, in combination with intervening vegetation to the west of the main trunk line results in the site forming a small portion of these views.

It is therefore considered that the extensive views across the surrounding area, limited visibility of the site due to intervening vegetation and land form, coupled with development controls (including building height and colour/reflectivity), would introduce a development which is not a visually dominant feature within these views. The overall adverse visual effects brought about by the proposal would therefore be moderate for these viewing audiences.

State Highway 1, proximate to Rangariri (Viewpoint 15)

This viewpoint is representative of views gained by road users traveling north and south along SH1, proximate to Rangariri. Views of the site from such locations as these, are transitory and oblique, and at distances of at least 850m from the south western corner of the site to SH1, (not

visible from SH1 or this viewpoint). However, the elevated portions of the site, notably the western ridgeline and southern hill landform, are visible for some duration due to flat land between the road and site across the surrounding pastoral floodplains. The outlook therefore forms a relatively flat rural landscape which rises in elevation, particularly once within the site. Features within these views consist of infrastructure elements (SH1, road barriers, lighting, overhead transmission lines) in the foreground, in addition to tree groupings, shelterbelts and margin vegetation around Lake Kopuera (Manuka scrub and Swamp Coprosma) throughout the remainder of the view.

The proposal will change the site's rural characteristics, to a more urban nature. Although intermittent views are partly afforded towards the site, the development will alter the overall rural composition of these views. It is recognised that from locations along SH1, the entirety of the site will not be visible, and therefore the change in views would be limited to these elevated areas. It is also acknowledged that the majority of people experiencing this view would be travelling at speed and given the activities they are engaged in (driving), they are not considered highly sensitive to change, particularly of this nature. Overall, although the development would alter the character of the site and to a degree, impact the character of the wider area, the nature of the viewing audience and degree of the site's visibility would result in adverse visual effects considered to be low.

10.0 Conclusion

The Plan Change request would ultimately facilitate the development of up to 1,600 residential household allotments and units within a site currently utilised, and zoned for rural productive uses. The areas which retain the highest degree of naturalness both within the site and its immediate environment include the vegetation along the Lake Waikare margin in addition to Lake Waikare. Both of these areas would be protected by the proposal. Under the Plan Change, the lake margin is proposed to undergo further enhancement including the provision for a significant landscape buffer which would incorporate extensive planting and open space. The overall magnitude of change proposed would alter the way in which the character of the site and its wider context are perceived. Additionally, the further modification of the site's topographical characteristics, along with the urbanisation of its land use, would result in adverse effects of moderate significance on the character of the site and parts of the wider environment, particularly to the east toward Lake Waikare, and south toward the adjoining farmland.

Development of the site would also result in visual amenity effects, the significance of which, depends on the location and particular viewing audience affected. Viewing audiences from the north of the site, within the Te Kauwhata township and its environs are expected to experience moderate to high adverse visual effects due to a combination of their sensitivity to change, proximity to the site, and fixed expansive views of the rural landscape currently occupying the site. Viewing audiences across the lake to the south and east are expected to experience adverse visual amenity effects ranging from very low to moderate respectively, given the distance away from the site and settlement backdrop of Te Kawuhata. Viewing audiences to the west are expected to experience adverse effects ranging from low to moderate as development along elevated portions of the site will be clearly visible and occupy the visible ridgelines within the site. Moreover, visual effects from southern locations towards the site would be most adverse from residential properties located at the termination of Te Onetea Road, which would experience effects that are considered moderate.

Nevertheless, it is recognised that the Plan Change will also result in beneficial effects. Development controls influencing the landscape approach are proposed to be incorporated. These include substantial areas of land vested in Council as public reserve, the provision of a network of public access, including to and around Lake Waikare, as well as significant replanting and enhancement works within the Lake Waikare margin.

Boffa Miskell

June 2017

Appendix 1: Assessment Rating Scale

Effect Rating	Use and Definition
Very High:	Total loss to the characteristics or key attributes of the receiving environment and /or visual context amounting to a complete change of landscape character.
High:	Major change to the characteristics or key attributes of the receiving environment and /or the visual context within which it is seen; and/or a major effect on the perceived amenity derived from it. <i>Oxford English Dictionary Definition</i> <i>High: adjective- 1. Extending above the normal level. 2. Great in amount, value, size, or intensity.</i>
Moderate- High:	A moderate - high level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate - high level of effect on the perceived amenity derived from it.
Moderate:	A moderate level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a moderate level of effect on the perceived amenity derived from it. <i>Oxford English Dictionary Definition</i> <i>Moderate: adjective- average in amount, intensity, or degree</i>
Moderate - Low:	A moderate - low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have moderate - low level of effect on the perceived amenity derived from it.
Low:	A low level of effect on the character or key attributes of the receiving environment and/or the visual context within which it is seen; and/or have a low effect on the perceived amenity derived from it. <i>Oxford English Dictionary Definition</i> <i>Low: adjective- 1. Below average in amount, extent, or intensity.</i>
Very Low:	Very low or no modification to key elements/ features/ characteristics of the baseline or available views, i.e. approximating a 'no change' situation.

Appendix 2: Zone Plan

Appendix 3: Graphic Supplement

