



Urban Design and Landscape Analysis

Ballantyne Ridge

16 April 2013

INTRODUCTION

This report provides an urban design and landscape analysis as required under Section 32 of the Resource Management Act. It supports a proposed plan change to extend existing industrial development and to provide for residential development. The site of approximately 19.3 hectares is located south east of Wanaka Township between the Cardrona River and Wanaka Township.

The study approach adopted for this report also incorporates a traditional landscape planning methodology. Natural and cultural factors such as landform, vegetation and land use are considered, and the sites visibility from public viewpoints is analysed. This study approach is used to identify landscape typologies within the study area, and to assess their potential ability to absorb change.

This report is set out as follows:

SECTION A: LANDSCAPE RESOURCES

- Description of the site and surrounds
- Soils
- Ecology
- Hydrology
- Relevant statutory documents

SECTION B: LANDSCAPE ANALYSIS

- Land use
- Visual assessment
- Pigeon Bay Criteria
- Landscape category recommendation

SECTION C: STRUCTURE PLAN

- Land ownership
- Character
- Open space
- Connectivity
- Structure Plan

CONCLUSION

ATTACHMENTS

The following are attached for reference:

<i>Attachment A</i>	<i>Site Location plan</i>
<i>Attachment B</i>	<i>Photo Location plan</i>
<i>Attachment C</i>	<i>Wanaka Growth Study 2007</i>
<i>Attachment D</i>	<i>Context Plan – Landforms</i>
<i>Attachment E</i>	<i>Landscape Category QLDC Planning Map</i>
<i>Attachment F:</i>	<i>Proposed Scheme Plan – Plan Change</i>
<i>Attachment G:</i>	<i>Proposed Structure Plan</i>

A: LANDSCAPE RESOURCES

A.1 LOCATION

The study area (**refer Attachment A**) is a 19.3 hectare block of land located in Wanaka. This site is bordered to the north west by existing consented industrial land, and farm land to the south, west and east. It is located within the area bordered by Ballantyne Road, Riverbank Road, Orchard Road and Golf Course Road. The site comprises one single title and one owner. Baxter Design Group have been engaged to analyse the landscape of the site, and based on landscape and urban design parameters, its context in order to determine the appropriate location and level of development.

A.2 DESCRIPTION OF THE SITE & WIDER LANDSCAPE

A.2.1 Landscape context

The landscape context includes developed residential and lifestyle landscapes, and industrial landscapes partially surrounding remnant farmland. This landscape character covers the area between Ballantyne Road, Riverbank Road, Orchard Road, Cardrona Valley Road and Golf Course Road. This landscape character extends northwest, south and south east to the outskirts of Wanaka Township, and to the Cardrona River.

The industrial landscape occurs immediately north and north-west of the site along Ballantyne Road. A large part of this landscape is consented for industrial use but as yet undeveloped; visible infrastructure is in place to service development. The immediate vicinity of the site currently displays an immature industrial character; this is further described later in this report

Farmland that surrounds the site is not extensive, and changes to a rural lifestyle landscape character as it approaches Orchard Road, Cardrona Valley Road, Golf Course Road and the edge of the industrial zone.

A.2.2 The site

The site (**Refer Figures A and Figure D**) is part of a flat glacial and fluvially created landform between Lake Wanaka, the Cardrona River, Mt Iron and the Cardrona Range. It is within a larger fluvial terrace system and as such is flat. There are no geological or topographical elements evident.

The land is currently used for casual sheep grazing and pastoral grass production. It has a cover of pastoral grasses with a small group of trees approximately midway along the northern boundary. The open cover of pastoral grass continues to the south and west. The southeast boundary of the site is bordered by an established shelter belt.

A.2.3 Soils

The glacial and fluvial formation of the site and surrounds has resulted in moderately deep Wanaka sandy loam on silt loam over most of the site.

A.2.4 Ecology

The flat topography and soils on the site would have originally provided a single ecological niche. The existing site ecology has been greatly reduced by past farming of the site and the removal of most if not all indigenous vegetation and accompanying fauna.

The properties surrounding the site do not display any indigenous fauna and are covered in pastoral grass, exotic shelterbelts and amenity planting.

Generally the site and surrounding land has no indigenous ecology due to current and past land management, and a prevalence of monocultural plant cover.

A.2.5 Hydrology

The site does not contain any permanent water sources or courses. There are no gulleys or topographical forms indicating the concentration of water runoff.

A.2.6 Relevant Statutory Documents

A.2.6.1 Queenstown Lakes District Council District Plan

The District Plan zones the site and surrounding properties wholly as Rural General. Any development is discretionary. The District Plan seeks to protect the rural amenity of this zone and prevent over domestication. A further layer of legislative protection applies to the Rural General Zone in the form of the landscape category being Outstanding Natural Landscape (ONL), Outstanding Natural Feature (ONF), Visual Amenity Landscape (VAL) or Other Rural Landscape (ORL).

At the completion of this report the site and surrounding landscape had not been assessed and tested in environment court. As it stands, it has no landscape category, aside from an underlying assumption that the landscape between the base of the Cardrona Range, Cardrona River, Lake Wanaka and toe of Mt Iron is VAL, reflecting the Environment Court decision on C73/2002 Wakatipu Environmental Society and Lakes District Rural Landowners Inc vs. Queenstown Lakes District Council (**refer Attachment E.**)

A.2.6.2 Wanaka Structure Plan

The Wanaka Structure Plan (**refer Attachment C**) was adopted by the Council in December 2007; it is a Council document but does not have statutory status. It introduces a proposed inner and outer growth boundary over the wider Wanaka landscape.

The inner growth boundary includes the site, runs along the south western and south eastern boundary of the site and continues to zig-zag south west and north east along property boundaries. The site itself and land southwest of it was identified as being suitable for low residential development. Land northeast of the site and of the existing business/industrial sites is identified as being suitable for industrial yard development.

A.2.6.3 Relevant Environment Court Cases

The Wanaka Basin has been subject to far fewer Environment Court cases than the Wakatipu, and large areas of landscape remain uncategoryed. District Plan Appendix 8B – Map 1 shows five cases that have determined landscape categories, for separate and non continuous areas in the Wanaka basin.

One landscape boundary and category case close to the proposed plan change site is C73/2002 Wakatipu Environmental Society, Lakes District Rural Landowners vs Queenstown Lakes District Council. The ONL/VAL line resulting from this case is approximately 2.0km to the west of the site as shown on **Attachment E**. This case defined the ONL/VAL boundary between Glendhu Bay and Hillend as approximately the toe of the Cardrona Range, including a small fan at the base of the range.

B: LANDSCAPE ANALYSIS

B.1 LAND USE

The wider environment exhibits a variety of land uses, and is largely a mixture of urban, semi-rural and rural landscapes. This includes the township of Wanaka and its associated suburbs. Land uses include residential of varying densities, visitor accommodation and entertainment, commercial use, light industrial use and the water treatment ponds. These uses are largely concentrated on the lake front for approximately 2km inland between Roys Bay and Beacon Point, and along the arterial and local roads of the Cardrona Valley Road, Riverbank Road, Ballantyne Road, and Golf Course Road. Semi-rural lifestyle blocks and rural land is located between the urban edge and the Cardrona River as far as the entrance to the Cardrona Valley and the Cardrona River.

Land use in a 1.1km vicinity of the site boundaries comprises varying densities of established and new development. Land use includes rural residential, visitor services, industrial, the water treatment ponds, the landfill, the dog pound and the Three Parks Special Zone.

B.1.1 Site Context

The wider environment forms the site context. For the purposes of this report, the site context includes the land within Golf Course Road, Ballantyne Road, Cardrona Valley Road, Orchard Road and Riverbank Road, and as described previously in this report is largely rural with an urban and peri-urban edge enclosing it. The site sits within the area of land defined by these roads.

The current land use in this wider environment is mixed. It contains the following zonings:

- Industrial
- Rural Residential
- Rural Lifestyle
- Rural General

The site and surrounds display a mix of industrial, residential and rural. Activity and infrastructure reflects these underlying zones. The site surrounds can be broken down into four blocks:

- (i) South Western Wanaka residential.

This area includes the Rural Residential zoned areas along Golf Course Road. This area has been developed for some time and has an established rural lifestyle character of large houses and mature trees and gardens.

(ii) Industrial

Established industrial development occurs from the rural residential area on Golf Course Road along Ballantyne Road to the most recently consented industrial area, adjacent to the north east of the site. Neighbouring industrial workshops and retail include an agricultural machinery sales centre and a motorboat retail and workshop.

Recently constructed Enterprise Road, and the adjacent stretch of intersecting Ballantyne Road, both have footpath and kerb and channel infrastructure in place. Overhead power lines in the area, the oxidization ponds north east of the site, the landfill and the dog pound at the southern end of Ballantyne Road, also give the wider area an outer-suburban and industrial 'feel'.

(iii) Cardrona River residential.

Rural lifestyle type development occurs on both side of Riverbank Road. The northern side of Riverbank Road is zoned Rural General, but tends to display a similar landscape character and density of houses as the Rural Lifestyle zoned land on the southern side of Riverbank Road.

(iv) Rural land.

The site and surrounding properties to the west, east and south are zoned rural. The site to the north east has recently been consented industrial.

There is no predominant land use in the wider area; land use over the wider landscape is mixed and does not display a contiguous landscape character.

B.1.2 The site

The site is currently used for grazing. Casual sheep grazing maintains the pastoral appearance on the site itself. There is a small pocket of trees midway along the northern boundary of the site.

The use of grazing on the site and adjacent properties, with the exception of the industrial area, has maintained a rural character, within a larger mixed character landscape enclosing and defining this area of rural land.

The flat topography allows for easy access over the site.

B.2 VISUAL ASSESSMENT

Part of the resource gathering involved assessment of the visibility of the study area when viewed from prominent public viewpoints. The principal viewpoints where the site could potentially be viewed from were determined to be the following (**refer Attachment B**):

- Wanaka Hinterland
- Ballantyne Road
- Riverbank Road
- Orchard Road
- Golf Course road
- Cardrona Valley Road

- Enterprise Road
- Hillend Station Road

The site, as determined from the above sites, with the exception of Enterprise Road and Hillend Station Road, is not visible from the wider public road network. This is due to the larger topographical series of fluvial terraces that the site is located within and existing conifer shelterbelts within the site context. The site is visible from Enterprise Road, recently formed to service the consented industrial development adjacent to the north east of the site.

B.2.1 Riverbank Road



View 1

View 1 is from Riverbank Road, just southeast of the intersection with Ballantyne Road. Views are of Landfill associated buildings in the mid ground to the right, and of wilding pines, scrubby grassland over the visible part of the historic river terrace on the left. In the background, an existing industrial building, power lines and Ballantyne Road are visible in the centre view, and the oxidation ponds are visually screened by the treed terrace on the right. The site is behind the terrace on the left and is not visible from this location. Potential dwellings and industrial buildings would be completely screened from this location.

B.2.2 Ballantyne Road



View 2

View 2 is from Ballantyne Road adjacent to the site. Views northwest are of established industrial development directly off Ballantyne Road in the mid and background centre-right. The site is the grass land and pines behind this first building. The Pisa Range is visible in the background on the left, and views of mountains in the distance on the left. Some proposed industrial buildings and the proposed woodland and open space will be visible from this location.

B.2.3 Terrace to north of site



View 3

View 3 is from the higher ground of the terrace north of the site. Views are of industrial buildings and yards in the fore-mid ground and in the background on the left. In the distance, pines and open grass land in front of the Mount Barker and the start of the Pisa Range. The site is in the mid-ground of the photo; the trees on the right are on the northern boundary of the site. Proposed development and woodland will be visible from this location. Proposed development will not be visible from the northern side of the terrace – rather it will be screened by it.

B.2.4 Enterprise Road



View 4

View 4 is from Enterprise Road intersecting Ballantyne Road. Views are of the newly constructed road and footpath which will service the recently consented industrial development. Established industrial buildings are visible on the right in the mid and background. Open grassland and pines and some industrial activity is visible in the mid and background in the centre and left of view, the Pisa Range in the distance. The site is located in the centre-left in the background of this view.

Views of the proposed development will be of an extension of the current industrial area with a treed background provided by the proposed open green space, between the industrial area and proposed residential area. Views into the proposed residential area will be determined by future industrial scale buildings and the management of the open green space between the proposed industrial development and the proposed residential development.

Both the proposed extended industrial development and the proposed open green space and trees will provide visual cohesion to the existing landscape. The proposed residential development will be screened by natural landform and by the proposed open green space and trees. This open space is further described later on in this report.

B.3 LANDSCAPE CATEGORY *(Refer Attachment E)*

The Rural General zoning of the site anticipates certain environmental results:

- The protection of outstanding natural landscapes and features from inappropriate development.
- Retention of open space
- Development is in harmony with the natural character of the landscape
- Visual coherence
- Avoidance of urban sprawl
- Conflict with adjoining urban areas
- Rural amenity

Development that does occur in the Rural General zone needs to be in areas that have the ability to absorb change. The ability to absorb change depends on factors such as topography, visibility, ecology and existing and consented levels of development.

In order to assess sites suitability for development it is necessary to identify areas within the site that have the ability to absorb change. By overlaying the sites visibility analysis with its landscape characteristics, ecology and landscape category (ONL, VAL, ONF or ORL) an assessment can be made of the various areas ability to absorb change. A change to land use results in visible alterations to existing landscape patterns.

No landscape category has been determined for the site. The following section of this report analyses and makes a recommendation for the landscape category of the site.

B.3.1 Pigeon Bay Criteria

The first step in the analysis of the site and surrounding landscape, is the application of the Pigeon Bay Criteria: The natural science factors – the geological, topographical, ecological and dynamic components of the landscape:

(i) Geological

When assessed as part of the much larger landform that forms the alluvial plains between the Cardrona Mountain Ranges, Criffel Range, Lake Wanaka and Clutha River, the site and the surrounding landform demonstrates its glacial formation. The site is a reasonably flat remnant river terrace amongst gently rolling old alluvial landscape formed in the last glacial advance, with river terraces nested within a greater glacially formed basin.

The 'expressiveness' of its formation (i.e. visual clues) can easily be seen in its generally flat topography, sloping towards the Cardrona River and the river terrace edges. Its location within a wider 'u' shaped valley also gives a clue to its formative processes.

Human modification (roads, buildings, exotic vegetation, etc) have not hidden the larger Wanaka Basin's expressiveness. Wanaka's geological formation can be easily seen and interpreted in its larger setting, in particular in the 'u' shaped basin, mountain slopes and terrace edges.

Human modification however has affected the legibility to some extent, as it prevents views across the landscape of the smaller scale glacial and fluvial elements and their relationship to each other and

the wider landscape formation. The site itself does not contain any distinguishable remnant of its glacial history.

(ii) Topography

The topography of the site and surrounds is that of a series of relatively flat alluvial terraces dropping down to a river in a basin defined by glacially shaped mountains. The topography of the wider enclosing landform is, as a whole, memorable because of the contrast between its relative flatness and the steep sides of the surrounding mountain range. The topography of the site is not particularly memorable as the grade, and slope of the land is continuous with the landscape surrounding it. It contains no geological features of any scale, is not prominent and does not differ from the surrounds.

(iii) Ecology

Ecologically the site and surrounding area of the landform are devoid of indigenous vegetation. The vegetation that does occur on the site and surrounding landform is predominantly exotic grasses, and planted European tree species such as poplar and mixed conifers.

(iv) Summary – Natural Science Factors

The natural science factors of the site and surrounding landform are prominent and clearly expressed in the larger scale of the geological formation of the u-shaped basin. The geological formation of the site as part of the much larger landscape is clear. The topography of the site is legible but not memorable as it is flat. Ecologically the site has no evidence of its indigenous and original vegetation cover or animal communities.

(v) Aesthetic values

The aesthetic values of the site and surrounding landscape are derived from the contrast between the relatively flat valley floor and river terraces and the steep mountain sides, and its cloak of human activity in terms of its pastoral or Arcadian character. An observer's experience of this landscape is one of grazed alluvial terrace landforms, houses, groups and lines of trees, gardens, and productive land uses which are pleasantly balanced and subordinate to the greater dynamism of the geological formation of the landform, particularly the steep mountainsides which offer a contrast to the Arcadian character in their naturalness. The aesthetic values of the site itself are limited as it only contains a minor group of trees. The rest of the site is in pastoral grass.

In contrast to the natural aesthetic values the site environs display an industrial character to the east. The components of that character are:

- Established industrial buildings and yards on Ballantyne Road.
- Recently constructed Enterprise Road to service recently consented industrial development off Ballantyne Road.
- Footpath and hard kerb and channel infrastructure in place.
- Proximity of overhead power lines, the landfill, dog pound and oxidization ponds.

(vi) Transient values

Transient values are noticeable on the surrounding mountains in the form of variable light when the changes in topography are highlighted by light and shadow. Seasonal variation is only noticeable on

the mountain sides in the coming and going of snow during winter. The transient values of the valley floor are apparent in the seasonal change of leaf fall and change in leaf colour in the deciduous, exotic vegetation planted around and in the lifestyle blocks and residential areas. The site demonstrates a little transient value in the leaf colour change of the small line of deciduous trees. The larger and more dominant conifer shelterbelt on the neighbouring property to the south east does not demonstrate any transient value due to its dark, evergreen and static appearance.

(vii) Whether the values are shared and recognised

It is generally shared and recognised by observers that they are within a glacial landform due to the contrast between the flat plains and river terraces and steep sided mountains, with an absence of foothills. The pastoral or Arcadian character of the Wanaka basin is shared and recognised as cultural evidence of European human settlement because of the presence of buildings and exotic vegetation. The site is part of, and contributes to, the pastoral character.

(viii) Tangata Whenua;

There is no evidence of cultural use or significance of the site to tangata whenua.

(ix) Historical associations

The site has historical farming associations as has much of the Wanaka area from the 1850s onwards. There are no artifacts indicating settlement of the site or use other than farming.

B.4 ANALYSIS OF THE LANDSCAPE CATEGORY

The objective of the analysis of the landscape category is to assess whether the site is within the VAL or ORL.

Factors to be considered when determining the landscape category are topography vegetation pattern, vegetation cover, and existing and consented development. These factors are also applicable in determining a boundary between two landscapes. For the purposes of this report and the proposed plan change, the landscape category being considered, is of the area bordered by Ballantyne Road.

The existing topography of the site and surrounds, as described earlier, is consistent with the landform to the north and west as far as the Cardrona Range, and south and east as far as the Cardrona River. It consists of a series of gently sloping alluvial terraces sloping north towards Lake Wanaka and stepping down southeast towards the Cardrona River. There is a minor remnant of two river terraces to the northwest and north east of the site, and the remainder of the site does not appear to have any definite changes, or significant geological features that stand out as different from the rest of the landform within the terrace.

(i) Vegetation cover

The vegetation cover of the site and surrounds, as described earlier, is predominantly pasture grasses with minor stands of exotic trees.

(ii) Vegetation pattern

The pattern of vegetation generally coincides with the pattern of land use e.g. shelterbelts; which is in turn dictated by the District Plan zoning. Exotic trees are used for shelter along property boundaries and occasionally within properties for privacy.

(iii) Existing development

The site is surrounded by existing development at various densities. To the northeast immediately adjacent to the site is industrial development. To the west, north and south is established rural lifestyle development as far as the Cardrona River and toe of the Cardrona Range.

(iv) Site visibility

As shown in photographs earlier in this report, the proposed Plan Change site is 'contained' within distinct landforms, principally the river terraces to the north and south. Therefore the site is relatively well screened from wider views. To the north (refer photograph 3) the site is screened from the wider Wanaka residential areas by that landform. To the south, approaching from Riverbank Road the river terrace achieves the same visual outcome, with the site not becoming visible until one approaches the site in the vicinity of photo 2. The proposed open green and treed space will provide significant screening as well. This area is further described later in the report.

(v) Summary

Taking into account the above assessment criteria, the site consistently demonstrates a constant landscape character with its surrounds in terms of its formative processes, through topography and vegetation, and the changing cloak of human activity.

The site and its context to the Cardrona range and Cardrona River, demonstrate landscape characteristics inherent in a Visual Amenity Landscape for the following reasons:

- It is located on the district's flats and terraces.
- It has clear and distinct topographical 'edges' being the toe of the mountains and the river edge.
- It wears an obvious cloak of human activity - comprising houses and trees and greener (introduced) grasses, demonstrating amenity and functional uses.

The greater terrace landform system the site is part of, is adjacent to an ONF or ONL (Cardrona Mountain Range and Criffel Range)

However, the site itself and its immediate surrounds display a character potentially more akin to that of an ORL due to the proximity to existing industrial land, the sites lack of distinguishable topography or natural elements and lack of houses and amenity planting. It is a landscape in transition and is developing more towards an urban character.

B.5 ECOLOGICAL ASSESSMENT

The sites current native ecological state is non existent, and as such no ecological improvement is proposed.

B.6 LANDUSE AND LANDSCAPE MANAGEMENT STRATEGY

A structure plan for the proposed plan change site has been developed in accordance with this report (**refer Attachments F & G**) It recommends the land use and landscape management for the land to be re-zoned.

Key aspects of the structure plan are:

- Residential and industrial development is located in areas with the most potential to absorb change as noted in the Wanaka Structure Plan (Growth Study 2007).
- Industrial development is located adjacent to and is an extension of existing industrial activity.
- Extended industrial development and green reserve boundary emulate the adjacent proposed industrial zone (Plan Change 36)
- Acknowledgement of the immediate landscape characteristics and the ability of the site to absorb change without compromising the wider landscape values of the Wanaka area.
- Extension of public access through the residential area of the site and to future linkages.
- Green spaces, woodland and shrub areas are proposed between land uses and bounding Roads 3 and 4 as a physical and visual buffer to development. Trees will provide a visual continuum from Ballantyne Road, of the existing trees to the north of the site.
- Public access to open green, shrubbed and woodland areas is provided via pathways through these areas.

The structure plan shows the balance of the study area to be re-zoned. The development area has the potential to accommodate approximately 90-100 residential lots of approximately 750-800m² in size, and approximately 8-12 industrial lots of approximately 1250 – 1500m².

C: STRUCTURE PLAN

C.1 LAND OWNERSHIP

The site currently is a single title.

C.2 CHARACTER

It is understood that the residential site yield is estimated as approximately 90-100 residential lots. The method used to obtain this figure is based on lot sizes of approximately 800m². It is noted that the Wanaka Structure Plan does not take into account site characteristics or values such as the aspect, slope or areas of ecological or geological value. Some areas of Rural General land, included within the Growth Study, and identified for future residential use, may not have the capability to absorb residential development of this density. The industrial yield is estimated as approximately 8-12 lots. It is understood that the intentions of the Growth Study and the District Plan in general, acknowledge that there will be appropriate solutions for different blocks of land, depending on the absorption capability of that land. To that end, the study site is well contained within enclosing landform and is capable of absorbing development, albeit with appropriate controls.

The Structure Plan shows connection to the site by way of a principle road access from Ballantyne Road (**refer Attachment F**). The principle road access will connect the site to the existing Road 2 in the recently consented industrial land to the north east, and to future residential land to the north west. A secondary road continues from the principle road to the southern boundary of the site,

allowing for future connection to land to the south, and maintaining the opportunity for future connection through to Orchard Road, should this be required. The proposed open green space buffer is located on the northern side of the principle access road to provide a buffer between the two land uses.

C.3 OPEN SPACE

Three open green spaces culminating 3.3 hectares have been proposed. These contain natural open areas, woodland or parkland areas, and shrubbed areas with plants of various size and scale. The most significant of these open spaces is 2.1 hectares between residential and industrial areas.

The spaces will providing visual screening between residential and industrial development, and will provide some visual screening of development from Ballantyne Road

C.4 CONNECTIVITY

The proposed structure plan shows the site connecting from Ballantyne Road through the site to future residential development to the north-west and south-west. Ballantyne Road is a collector road in the QLDC road hierarchy; the site can be accessed without travelling through Wanaka town centre.

Road circulation within the site would be circular with residential connection to the internal road. The proposed industrial extension will be accessed off existing Roads 1 and 2 which service the existing consented industrial land.

The open green spaces will provide internal paths / green space systems for walkway and cycleway connectivity. These green linkages will connect from the existing industrial development on Enterprise Road, to Ballantyne Road and connect to future development that may occur to the west of the site.

CONCLUSION

The proposed plan change and structure plan is considered to be an appropriate response and guide to future residential and industrial development on the site. This conclusion in summary arises from the following factors:

- Site Visibility.
- Existing visible environment.
- The opportunity for public open space.
- Opportunities for connection to wider development including roading and walkway networks.
- The site is located within the inner growth boundary in the Wanaka Structure Plan.

Taking into account the above matters, it is considered that the proposed plan change represents an appropriate form of development within the Wanaka urban context.