# VISUAL ASSESSMENT OF LANDSCAPE EFFECTS

# LIFFEY SPRINGS

## LINCOLN

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## 1.0 INTRODUCTION

This report is a visual assessment of the landscape effects of the proposed residential rezoning of the property presently known as Lincoln Grange which is situated on Edward Street, Lincoln by Broadfield Estates Limited. It describes the existing site and the landscape context, outlines a conceptual subdivision layout, and describes the proposed landscape treatment for open space areas and discusses its visual impact.

## 2.0 THE LANDSCAPE CONTEXT

Much of the surrounding landscape is rural with shelter belts demarcating open grazed paddocks. This landscape character is gradually changing to smaller lifestyle farm blocks and residential areas as Lincoln Township expands.

The Landscape Qualities the context possesses are low naturalness due to a high level of modification to the original landscape and medium coherence due to land being used primarily for pastoral farming. Land form is essentially flat giving a low visual sensitivity with topographic variation occurring only where streams and rivers appear.

Evaluation of the Landscape Character and Landscape Quality attributes of the landscape context indicate that there is a high Visual Absorption capacity. This is due to the high level of human modification of the original landscape and to the landform providing little visual sensitivity.

# 3.0 THE SITE

The 28 hectare site is situated on the south side of Edward Street, Lincoln and is bound on its east by a dairy farm and on its west by the recent subdivisions of Lincoln Dale (Brian Gillman Ltd) and Market Garden (Zee Straaten). To its south there are open grazed paddocks.

While it appears, like most of the area around Lincoln, to be flat it in fact falls by up to 5 metres from the north and south-west across to the east, south and south-east to the two boundary streams. These streams are known as the L1 Creek and the LII River. The L1, also known as the Liffey, flows through from the Liffey Reserve in Lincoln; the LII flows from the springs which are located 250 metres in from Edward Street approximately 30 metres from the east boundary of the property. They merge together 100 metres beyond the southern corner of the site.

The property is surrounded by shelter belts which shelter it from the prevailing winds and screen it from the surrounding properties. Existing vegetation within the property includes poplar and willow shelter belts, orchard trees, several large and mature weeping willows, some eucalypts, Blackwoods / *Acacia melanoxylon* and various other domestic shrubs and trees in the vicinity of the pond, houses and sheds. A sparse assortment of native species including *Pittosporum*, *Sophora and Cordyline* as well as weeping willow and several other exotic species grow along the banks of the two streams. There are no trees beyond the boundaries apart from some mature willows to the south where the two streams merge. Areas not planted in orchard trees are grazed.

The present appearance of the site reflects its function as an orchard and small farm: it is contained by its shelter belts and has little visual connection to the streams or to the surrounding countryside although there are views to the Port Hills to the east. There is little habitat for wildlife and limited opportunities for recreation along the waterways although the area around the pond has for many years been maintained as a domestic / farm yard zone and includes two weirs now in disrepair. The lack of significant vegetation along the streams and stock access to the water has resulted in the banks eroding and collapsing particularly on the neighbour's side of the LII and the ecology of the stream being adversely affected. The existing shelter belts and orchard trees have not been tended for the last three to four years.

Existing structures include a house, water tower, garages and sheds and packing house all of which are located around the pond area. None of the buildings is of any architectural or historical significance. Currently the views into the property from surrounding roads and from neighbouring properties are restricted by the shelter belts.

Landscape Quality attributes of the site are similar to the wider context with low naturalness reflecting a great deal of modification to the original landscape. There is low visual sensitivity due to the visual enclosure and minimal elevation in the land form and medium coherence due to the land use. The Visual Amenity of the site is medium with landscape elements of the site adding to the character of the landscape context.

The sensitivity of the site to change is low. This is primarily due to the extent of exotic species, the nature of the land use and because of the modifications that have taken place.

#### 4.0 THE PROPOSAL

It is proposed to rezone the site into for residential purposes. The residential area will be a mix of medium density (Living YZone) and low density (Living 1Zone) development. These will be accessed from a central avenue running south from Edward Street to the proposed L1 Creek esplanade reserve and a loop road from the south end of the central avenue. Connecting roads east and west are to be provided.

The existing significant natural features of the district – the springs and streams - will become the focal point of the proposal. The areas surrounding the springs and bordering the streams will become esplanade and recreational reserves and the waterways are to be planted and enhanced. These reserves are shown on the Outline Development Plan to be included within the District Plan. The landscape treatments for these reserves are also to be included within the District Plan, with new rules to be added to the subdivision rules requiring compliance with the ODP and landscape plans.

The design incorporates suggestions from the Low Impact Urban Design and Development (LIUDD) team at Lincoln University and includes recommendations on biofiltration stormwater systems, the use of native tree species along internal streets, and the establishment of ecological corridors.

## **PLANTING**

Planting is proposed to include informal groups of native trees, shrubs and groundcovers along the stream banks and within the reserves. These will define and shelter the various walkways open spaces. The central reserve will include a tennis court and will be sheltered from the prevailing winds but will be open to view from the central avenue. The avenue and the adjoining streets will be lined with trees at regular intervals to achieve a consistent formality of vertical form and provide a visual link with the present landscape character of the site.

Under an arrangement with the neighbouring farmer, a stock-proof fence will be constructed along the east bank of the LII River approximately four metres out from the bank and the riparian zone will be planted with native species on the west bank. This will

stabilise the banks, create wildlife habitat and provide a visual buffer and shelter between the farmland and subdivision (for plant lists refer to Appendix A).

## FOOTPATH / ACCESSWAYS

A walkway adjacent to the LII and the Liffey Stream will provide access to and from the reserves with additional accessways to the surrounding open space network including the adjacent subdivision of Lincolndale. There is also an opportunity in the proposal for a possible link with the Christchurch - Little River Railtrail.

## RESERVES / SWALES

Reserve areas totalling 4.7ha will include the esplanade reserve around the springs and along the L1 Creek and LII Rive banks, as well as the central reserve and two other internal reserves. The reserves will incorporate open spaces for recreation and pedestrian access to the ponds and to sections of the stream banks.

## 5.0 VISUAL IMPACT

The proposed rezoning and ultimate subdivision will have a positive impact on the landscape. The present outward appearance will change with the removal of the shelter belts but this will be replaced by a layout and planting scheme which reflects the form and character of the surrounding landscape. It will also develop the potential of the inherent qualities of the site and in particular its spring-fed ponds and streams.

The form and planting of the central avenue and adjoining streets will reflect the landscape character of the present site and agricultural land in the vicinity of the subdivision while the planting within the reserves and along the waterways will reflect their marginal character.

This planting will improve the ecology of the streams and ultimately of Lake Ellesmere and will extend the existing Liffey Reserve beyond the Lincoln Township, with a walkway along the LI to Southfield Drive via a footbridge, and strengthen the visual link between the more established part of the town and the newer areas to the east.

The current level of Visual amenity will be increased with the enhancement of the springs and native planting to repair stream boundaries, and this will have a positive and beneficial effect on the surrounding area and particularly on Lake Ellesmere (Te Waihora).

# **Visual Impact from Adjacent Properties**

(Refer Views 1 - 5 Appendix B)

# North: Lincoln – Tai Tapu Road

The nearest dwelling to the north is over 400 metres from the entrance and currently has an obstructed view of the site. It is not anticipated that the proposed rezoning will have a visual impact on this property.

## South: Moirs Lane / Farmland

The closest dwelling to the south is 320 metres from the nearest proposed house and currently has an obstructed view of the site with the existing shelterbelt planting of Poplars dominating the view. The proposed planting to the L1 and LII waterways will provide a high level of visual screening over time.

## West: Lincoln Dale Subdivision

This area is zoned residential and there is minimal visual impact as the existing level of visual screening, primiarly a 1.8mh high fence, will be retained.

## East: Ellesmere Road / Farmland

There are four dwellings between the site and Ellesmere Road which currently have a view of the east shelterbelt planting of Poplar. The proposed planting to the LII River will provide a high level of visual screening over time.

## 6.0 EVALUATION

The proposed rezoning is of land zoned rural and until recently run as an orchard / grazing property. Poplar and other shelter belts enclosed the site and screened it from the surrounding countryside. With the proposed change to residential the visual character will be altered but it is submitted that this will have a minimal impact on the visual amenity of the area.

The combination of the site layout including the streets, ponds, streams and reserves and the planting schemes will enhance the existing and inherent landscape character and this will improve its visual amenity.

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## APPENDIX A

## **PLANT LISTS**

The following plants have been selected for their overall suitability for the site and for particular zones within the site including marginal and wetland plants in the riparian zone and amenity planting in the streets. It is intended that most of these will become established and be sustainable without irrigation or sprays and that they will require limited maintenance.

Margin plants:

Carex secta

Coprosma propinqua

Coprosma repens

Cortaderia richardii

Cyperus ustulatus

Leptospermum scoparium

Phormium tenax

Polystichum vestitum

Lower Bank:

Anemanthele lessoniana

Aristotelia serrata

Carpodetus serratus

Coprosma repens

Cordyline australis

Cortaderia richardii

Dacrycarpus dacrydioides

Griselinia littoralis

Hebe salicifolia

Hoheria angustifolia

Kunzea ericoides

Leptospermum scoparium

Phormium tenax

Pittosporum tenuifolium

Podocarpus totara

Pseudopanax arboreus

Sophora microphylla

**Upper Bank:** 

Anemanthele lessoniana

Cordyline australis

Dacrycarpus dacrydioides

Dodonaea viscosa

Elaeocarpus dentalus

Griselinia littoralis

Hoheria angustifolia

Myrsine australis

Nothofagus solandri

Olearia paniculata

Olearia x dartonii

Pittosporum tenuifolium

Plagianthus regius

Podocarpus totara

Prumnopitys ferruginea

Prumnopitys taxifolia

Pseudopanax arboreus

Pseudopanax crassifolium

Sophora microphylla

# APPENDIX B VIEWS OF SITE FROM ADJOINING PROPERTIES



View 1: View from property north of site



View 2: View from Moirs Lane to south boundary of site



View 3: View from Ellesmere Road of east boundary



View 4: View from Lincoln - Tai Tapu Road of east boundary



View 5: View from Southfields Drive of west boundary