



VINEYARD PRECINCT  
LANDSCAPE & VISUAL ASSESSMENT  
NOVEMBER 2016





**Vineyard Precinct  
Landscape & Visual Analysis Report**

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## Executive Summary

### Introduction

The visual and landscape analysis study has been prepared for the Department of Planning and Environment as a part of the preparation of an Indicative Layout Plan for the Vineyard Precinct. The Vineyard Precinct (hereafter know as the site) is part of Sydney's North West Priority Growth Area. The NSW Government initially identified the precinct of Vineyard to accommodate approximately 2,500 dwellings or in the order of 7,000 future residents. Stage 1 of the precinct proposes 2,400 homes for up to 7,400 residents. Planning for Stage 2 will proceed at a later date when the timing of services is known.

This report has been prepared in close consultation with the project master planning team and with reference to previous technical studies with regards to the significant riparian corridor that is the Killarney Chain of Ponds and associated flooding issues and the assessment of existing native vegetation (ENV).

### Structure of the Report

The Landscape and Visual Analysis report aims to set out the following:

Analysis and mapping of existing conditions;  
Visual sensitivity assessment of the site;  
Opportunities and constraints with regard to future development and possible mitigation measures or objectives to help reduce the impact of said development on the prevailing rural landscape character of the site.

### Background

The entire Vineyard Precinct is approximately 590 ha and is located within the northern portion of the North West Priority Growth Area. Vineyard is located in the Hawkesbury local government area and is bound by Commercial Road to the north, Boundary Road to the east, Windsor Road and Bandon Road to the south, Wallace Road and Railway Road South and several allotments further to the west (Figure 1). The Precinct is located approximately 8km to the south east of Windsor and approximately 10km north west of Rouse Hill Town Centre.

The cultural landscape of Vineyard has developed as a rural landscape over the past 200 years with constantly evolving pastoral practices and declining Cumberland Plain Woodland. Historically the district of Vineyard has typically been associated with farming practices with some specialisation in viticulture and grape farming thus giving Vineyard its name.

The remnant cultural landscape acts as an important reminder of our historic land use practices and the importance of farming as an economic enterprise in the history of Sydney's west.

### Areas of visual sensitivity

This study identifies and describes the sensitivity of the landscape from a selection of vantage points or viewpoints within Vineyard. Areas classified with having high to very high levels of sensitivity will require innovative measures to help mitigate the effect of future development on culturally and environmentally significant areas. Less sensitive areas would be able to be developed while following strict planning controls and guidelines.

### Woodlands and topography

The Cumberland Plain and Alluvial Woodland vegetation communities occur within some significant locations within the Precinct and provide effective landscape and visual buffers to sensitive areas that helps to provide the landscape character of the site. All efforts should be taken to retain and strengthen the woodland character of the site as it will assist in mitigating the effects of future development in and around the site and from external views into the precinct.

### Protecting the ridge line landscape

The most significant tracts of woodland vegetation are found along the ridge line that aligns with Commercial Road. This tall woodland currently provides a visual buffer and helps to define the semi rural woodland character of the eastern portion of the site. To ensure that the rural context is retained the woodlands located along this ridge line are recommended to be retained and where circumstances permit and if possible further enhanced.

### Views

The character of the site is predominantly defined by the Killarney Chain of Ponds flood plain that dissects the precinct and the predominantly cleared low lying pastoral lands to the south west of the precinct. Distant views are found along the slightly elevated pastoral lands and overlooks the vast landscape of the Eastern and South Wianamatta Creek flood plain and the greater western plains with broad sweeping views to the south west of the Blue Mountains.

The mountains can be seen looking west from the lower elevated ridge line of the site located to the north along Commercial Road as well as from an elevated knoll located to the south west of the site. A key issue with regard to these extensive views is that, in conjunction with the gentle grades, most current views may be lost once development takes place unless the following visual guidelines are adhered to.

### Riparian landscape

The Vineyard Precinct contains sections of the Killarney Chain of Ponds and its tributaries, together with a number of unnamed watercourses which drain to Killarney Chain of Ponds. Only Killarney Chain of Ponds is classified as being a 4th Order Creeks. Generally, all watercourses found within the site have been modified to some degree with discontinuous patches of native vegetation remaining along the eroded banks.

### Landscape and Visual Guidelines

On the basis of the above assessment, the following landscape and visual guidelines have been developed:

### Remnant Vegetation

The dominant Cumberland Plain and Alluvial Woodland vegetation communities occur within some significant locations within the Precinct and provide effective landscape and visual buffers to sensitive areas that helps to provide the landscape character of the site. All efforts should be taken to retain and strengthen the woodland character of the site as it will assist in mitigating the effects of future development in and around the site and from external views into the precinct.

A series of recommendations and guidelines have been devised for the conservation of significant remnant trees. Larger remnants of native trees have been proposed for retention through their incorporation into reserves, environmental living lots, parks and pedestrian / cycle shareways with smaller, narrow remnants recommended for retention within widened road reserves as avenue planting or urban development edge reserves.

### Views

For views beyond the site, guidelines have been provided to:

- Maintain and develop views from the ridge line and all points west and south west of the ridge line out towards the Blue Mountains;
- Identify and maintain views to the Blue Mountains from the Eastern and South Wianamatta Creek and Killarney Chain of Ponds floodplain;
- Facilitate the alignment of roads along the ridge lines that fall and are orientated east west towards the Blue Mountains and south west towards the flood plains, to provide focal views to the mountains and the existing rural character of the precinct; and
- Maintain and develop views looking east along streets towards the rural character of Box Hill and distant views.



## Natural Landscape

The site should have a strong natural and native focus via the retention of endemic tree species where possible without compromising development opportunities. Native species are to be utilised within the floodplain riparian corridors, open spaces, parks, bushland reserves, potential open water bodies and wetlands. The retention and new planting of native species will assist in the retention of the sites dominant landscape character that is distinct from the urban landscape through which it will be interwoven.

## Riparian Corridors

To protect the existing watercourse of the Killarney Chain of Ponds, its tributaries and associated riparian vegetation, development controls and guidelines should be implemented to preserve the integrity of the existing riparian corridor. Future development should act to create riparian corridors with fully structured native vegetation and seek to minimise the disturbance or harm to the identified riparian corridor zones.

Riparian corridors should be designed and managed as a diverse range of native communities and should be managed to be self regenerating over time. Due to the potential for close encroachment by the urban fabric on riparian corridors, asset protection zones or the inclusion of large perimeter road reserves should be provided along the riparian forest edges to manage fuel loads and reduce risk of bush fire encroachment. Other key guidelines are outlined as follows:

- All riparian vegetation areas should have a strong management edge such as a pathway or roadway that reduces weed infestation from the adjoining urban landscape areas;
- Where riparian corridors are set back from perimeter roads, substantial open views should be provided across grassed flood prone land to the riparian edge. This grassed flood plain edge is representative of the current grazing land character of the flood plain within the site;
- Street tree planting within the riparian corridor perimeter roads should comprise of native endemic species where possible and are reflective of the rural character of the site; and
- A Plan of Management should be prepared for all riparian corridors and remnant vegetation areas within the site.
- It is recommended that any future development minimise the number of crossings between any proposed development.
- Future services should also be located outside riparian corridors where possible; and
- Incorporate WSUD principles to mitigate the treatment of storm water run off before discharging into the main riparian zones and down stream watercourses.

## Urban development

With regards to the future development of the site a series of general guidelines has been provided as below:

- All new development within the site should be designed with contemporary architectural responses and is sensitive to the over-arching character of the site;
- Roof colour should be controlled throughout the site so that the roof tops are visually recessive;
- All streets should be strongly tree lined;
- Residential setbacks should be sufficient to allow for the planting of trees within the front and rear garden areas of the lots; and
- Water sensitive urban design (WSUD) methods should be encouraged to assist with the passive watering of trees with in streets and park lands. WSUD methods should also be included to help prevent urban condition storm water runoff from entering the riparian watercourses.

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**LEGEND**

- Vineyard Precinct Boundary
- R** Vineyard Rail Station
- S** Sewage Treatment Works
- E** Regional Electrical Sub - Station
- Existing Transmission Easement





## **1.0 Introduction:**

(Refer to Figure 1)

The Vineyard Precinct is one of a number of planned land release areas within the larger North West Priority Growth Area. The precinct is located approximately 50 Km to the north west of the Sydney CBD and is surrounded by the suburbs of Vineyard to the south east, Mulgrave and McGraths Hill to the north west, Oakville to the north and north east and Berkshire Park to the west. Vineyard lies within the Hawkesbury Local Government Area (LGA).

The entire Vineyard Precinct is approximately 590 ha and is located within the eastern portion of the North West Priority Growth Area. Stage 1 of the precinct proposes 2,400 homes for up to 7,400 residents. Planning for Stage 2 will proceed at a later date when the timing of services is known.

One of the precinct planning process objectives is to develop a Indicative Layout Plan or (ILP) which is to be informed by various specialist studies including this Landscape and Visual Analysis report. This report will provide the master planners of the ILP with a visual analysis of the site and provide a series of recommendations for the protection of the precincts visual, environmental, and cultural landscape.

## **1.1 Purpose of this Report:**

PLACE Design Group have been commissioned to provide a visual and landscape analysis of the Vineyard precinct. The aim of the study is to assist with the identification and assessment of the visual and landscape qualities of the precinct. This study is important in order to identify the environmental and cultural landscape character of the precinct so as to better understand and preserve these qualities during the planning process. Future development is required to consider the local and regional impact of development upon the perceived landscape character of the precinct.

The visual analysis describes the scenic qualities of the precinct which is then used to determine the visual effect, sensitivities and potential impact of any future development on the current landscape setting.

## **1.2 Visual & Landscape Analysis Objectives:**

In accordance with the project brief provided by the Department of Planning and Environment, the objectives of the visual and landscape analysis are:

- To identify and assess the visual and landscape qualities of Vineyard;
- To ensure that the potential development of the land adequately takes into consideration the local and regional impacts of any development;
- To ensure that any planning for future development considers the visual impact of the development on the rural character of the site
- To identify various areas within the precinct that would be suitable for various types of development including housing, higher density dwellings, village centres and public open space from a scenic, cultural and landscape perspective;
- To provide clear set of guidelines with recommendations for the urban development of the Vineyard precinct.

## **1.3 Methodology:**

The study identifies the scenic qualities of the site. Views, both to and from the site, are evaluated with special consideration given to the impacts of views from the ridge lines and riparian corridor of the Killarney Chain of Ponds. Significant view corridors, vantage points within the site and their potential impacts are identified. Based on these findings and related visual analysis of Vineyard, development and design recommendations are provided to guide the development through visually sensitive areas. The methodology of the study is given below with a chapter by chapter description of the reports structure and approach:

### **Chapter 1 - Introduction**

This chapter provides a summary of the background information to the report including work methodology and the structure of the document.

### **Chapter 2 - Analysis**

This chapter summarises the regional and local context, visual and landscape analysis that defines the landscape character of the precinct and sub precincts within the study area. This information is obtained through site inspections, photographic assessments, research into existing studies and from technical studies commissioned by the Department of Planning and Environment. Topography, site character, landscape features, ecology, heritage and other contributing factors inform the visual and landscape character assessment in this report.

### **Chapter 3 - Visual Analysis**

This chapter provides the important visual assessment of views and vantage points as identified in the previous chapter. Visual sensitivity, based on the natural features of the landscape and their visual qualities from certain vantage points are described in this chapter.

The visual impact is analysed in relation to the visual sensitivity and visual effect. The method is a qualitative approach and is detailed in Chapter 3.

In summary:

- The first step is to analyse the visual sensitivity and visual effect. Visual sensitivity refers to the character of a viewpoint. Visual effect is the relationship between the location and the proximity of the viewpoint. This step involves the analysis of the level of visual sensitivity and the visual effect from the important viewpoints identified.
- The second step is to identify the important viewpoints from which the landscape character is analysed.
- Finally, the last step is to analyse the potential visual impact. This include rating the visual sensitivity and visual effects from levels of 'Nil' to 'Very High.'

### **Chapter 4 - Recommendations**

Drawing upon the findings of the previous assessment process a series of landscape and visual guidelines are set out to provide a framework for a future development control plan and landscape management plan for future development application..





## **1.4 Statutory Requirements:**

The following is some of the main statutory instruments that are used to reflect the long term planning strategies at State and Local levels. These instruments provide the statutory basis for managing all future development within Vineyard Precinct.

### **State:**

***Environmental Planning & Assessment Act 1979 (EP&A Act)***

***Sydney Region Growth Centres Environmental Planning Policy or (Growth Centres SEPP) 2006***

***Growth Centres Development Code 2006***

***Threatened Species Conservation Act 1995 (TSC Act)***

### **Local:**

***Hawkesbury Local Environmental Plan 2012***

## **1.5 Biodiversity Conservation Assessment:**

Of most significance to this visual and landscape analysis report is the biodiversity certification order put in place by the Minister of the Environment under s.126G of the TSC Act.

The biodiversity report prepared by Eco Logical Australia, April 2014 outlines the impact of the certification order in the growth centres as follows:

Biodiversity certification negates the requirement for impact assessment on threatened species under s.5A of the EP&A Act thus turning off the requirements for assessments of significance (i.e. seven part tests) or species impact statements on all certified land within the North West and South West Growth Centres.

The (Draft) Growth Centres Conservation Plan 2007 assessed native vegetation across the entire Growth Centres area and identified areas of Existing Native Vegetation (ENV). Figure 2 below shows the area of mapped ENV for the Vineyard Precinct as well as the delineation of Certified and Non-Certified land.

The area of certified and non-certified land and the originally mapped ENV is shown in Figure 2. The Precinct contains 100ha of confirmed ENV with 47.7ha within certified land and 52.6ha of non-certified land.

Under the certification order, Condition 12 apply to the Vineyard Precinct. Condition 12 identifies non-certified land where validated ENV must not be cleared unless it is in accordance with a plan of management or unless the clearance has been agreed to by the OEHL (referred to in the order as the former Department of Environment and Climate Change, DECC). The land to which this condition applies comprises a very small area in the southern portion just outside the boundary of the precinct. As a result, ENV cannot be cleared within this part of the validated ENV unless it is in accordance with the requirements of Conditions 12. The area to which this condition applies is shown just outside the precinct in Figure 2.







**LEGEND**

- ..... Vineyard Precinct Boundary
- Existing native vegetation (ENV) in Certified Lands (As per Eco Logical Australia Biodiversity and Riparian Corridors Assessment April, 2014)
- Non-Certified Lands
- Non-Certified Lands (Condition 12)
- Existing Transmission Easement





## 2.0 Analysis

### 2.1 Regional Context

(Refer Figure 1)

To assist in determining the over arching visual and landscape impacts of future development within the Vineyard Precinct it is important that we have a greater understanding of the regional context and the surrounding physical and climatic environment.

For this report the broader physical and climatic context incorporates the following adjoining suburbs:

Box Hill to the east  
Oakville to the north  
Berkshire Park to the west and  
Riverstone to the south

#### 2.1.1 Location

(Refer Figure 1)

Vineyard presides in the most southern reaches of the Hawkesbury LGA and can be classified as being situated in the start of the rural fringes of Sydney's greater metropolitan area. The entire Vineyard Precinct is approximately 590ha and is also located within the eastern portion of the North West Priority Growth Area.

The area over the years has been typified by the predominance of rural farmland and scattered tracts of native Cumberland Plain Woodland. In more recent years the precinct has become one of the focus areas for future development as one of the precincts of the North West Priority Growth Area initiative.

As with most of the precincts aligned with the expansion of Windsor Road the romanticism of the city fringe rural setting is quickly being eroded as the surrounding lands are developed primarily for residential use in order to keep up with the demand

of an ever increasing Sydney population. Recent developments and growth within centres such as the neighbouring Rouse Hill and the Ponds is now becoming the norm within the district to accommodate the demand for housing and local town centres.

Future developments either under construction or planning include Box Hill to the immediate east, Riverstone East Precinct to the south east and Riverstone to the south.

#### 2.1.2 Climate

The north west of Sydney within which the Vineyard Precinct presides is generally drier and warmer than that experienced on the coast. Slightly higher temperatures with less humidity are a result of reduced air movement and lack of cooling sea breezes as felt on Sydney's east.

Historical accounts of the local conditions, as stated by Burton, 1985, recall that the endemic removal of large tracts of the native vegetation for rural pursuits has significantly contributed to an altered microclimate, and as such, has resulted in a higher incidence of frost, less precipitation, increased evaporation and greater exposure to hot winds and solar radiation.

Means temperatures ranges between 28 and 17 degrees in summer and 18 and 6 degrees in winter.

Mean precipitation ranges between 110mm in summer and 40mm in winter.

#### 2.1.3 Soil

(Refer Figure 3)

As with most of western Sydney the general geological formation of the underlying soil profile for Vineyard is that of the

Wianamatta Group Shales. The lower lying areas of the site such as found along the Killarney Chain of Ponds and South Wianamatta and Eastern Creek flood plains mainly consist of very deep sedimentary soils formed over bedrock.

The slightly elevated areas and low ridge lines consist mainly of shallow to moderately deep red and brown Podzolic soils that are consistent of the Bringelly Shales.

There is no distinct difference between the shale groups in terms of erodibility and the ability to support the dominant vegetation of the Cumberland Plain Woodland group.

#### 2.1.4 Water courses

(Refer Figure 4)

The Vineyard Precinct lies within the South Creek and Eastern Creek sub catchments of the broader Hawkesbury-Nepean Catchment (Eco Logical, 2014),

The Vineyard Precinct contains a considerable section of the Killarney Chain of Ponds, a vast majority of its flood plain and a series of connecting tributaries. A number of small unnamed watercourses from within the site drain from the north and south to form part of the Killarney Chain of Ponds Creek. This creek then flows on to the Hawkesbury-Nepean River (Eco Logical, 2014),

#### 2.1.5 Cultural Landscape

The first extensive clearing of the land for farming occurred in late 1800's and early 1900's. The subdivision of the land over this period has caused significant changes to the rural landscape character.

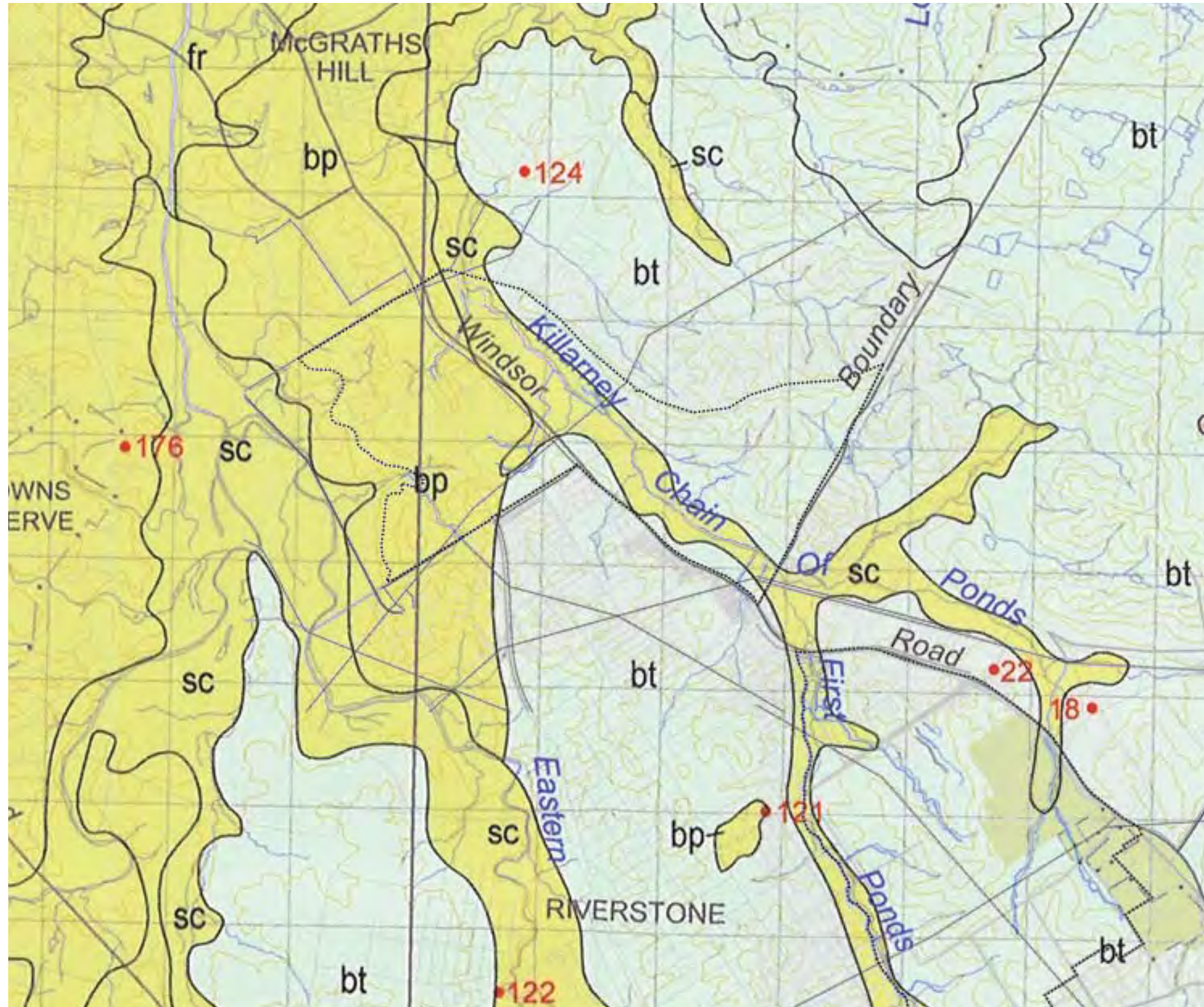
The cultural landscape of Vineyard has

developed as a typical rural setting over the past 150 years with constantly evolving pastoral and native woodland.

These cultural and physical features are important reminders of the precinct's farming and agricultural background and are therefore an important component of the Visual and Landscape Analysis of the precinct.







**LEGEND**

**bt**

Blacktown Group -  
Soils - shallow to moderately deep.  
Red & Brown Podzolic Soils on crests and slopes.

Yellow Podzolic Soils on lower slopes and drainage lines and slopes.

Limitations - moderately reactive highly plastic sub soil, low soil fertility & poor sub soil drainage

**bp**

Berkshire Park Group -  
Soils - dissected, gently undulating low rises of the Hawkesbury/Nepean River system.

Weakly pedal orange heavy clays and clayey sands.  
Red, yellow Podzolic soils, chocolate soils & structured clays are most common.

Limitations - very high wind erosion if cleared. Gully, sheet & rill erosion on dissected lands. Waterlogging, impermeable subsoils & low fertility

**SC**

South Creek Group -  
Soils - flood plains, valley flats & drainage channels of the Cumberland Plain. Very deep layered sediments.

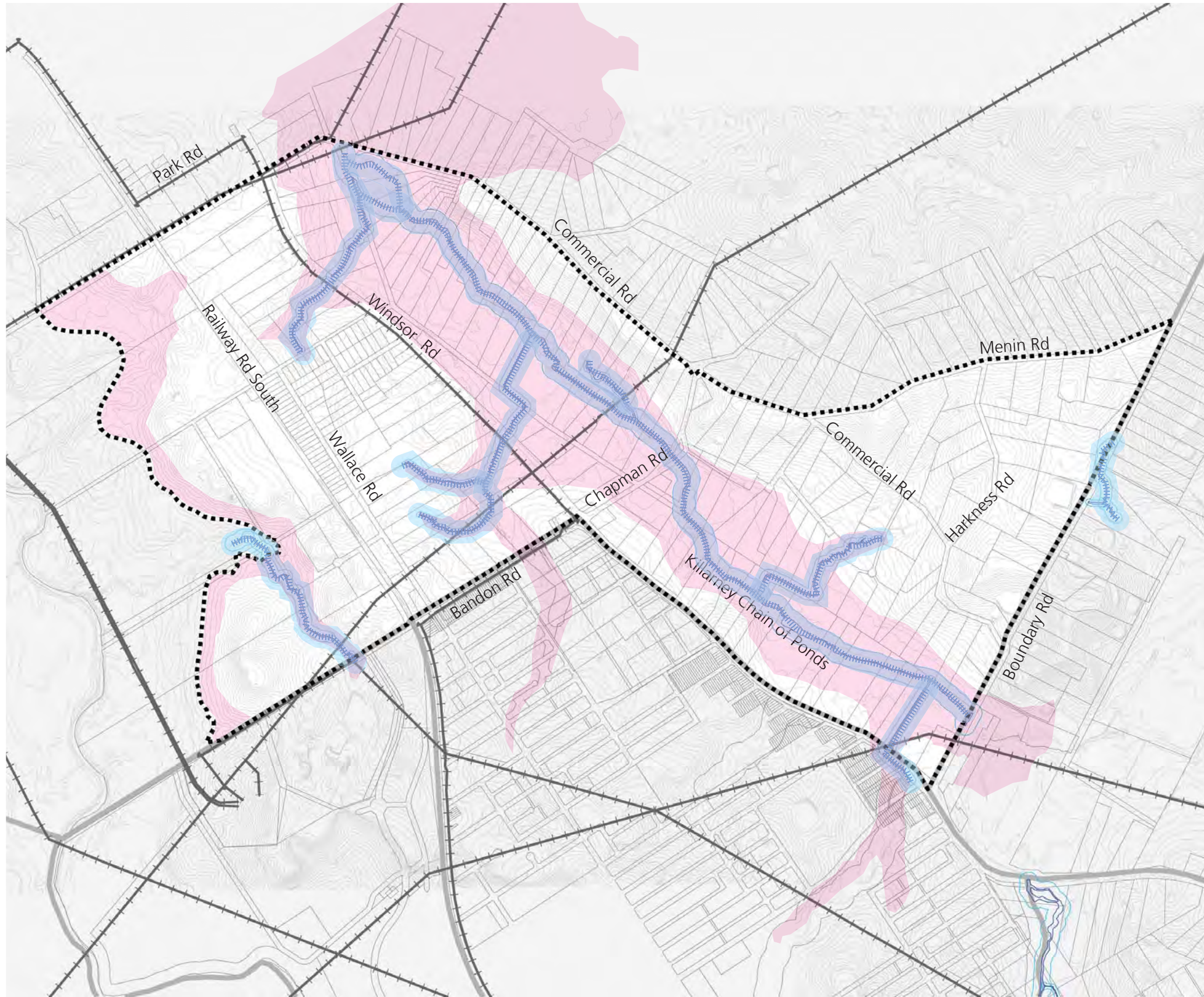
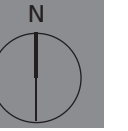
Red & yellow Podzolic Soils are most common.

Limitations - erosion hazard, dispersible and impermeable subsoils

Source: Soil Landscapes of the Penrith 1:100 000 Sheet Report, 1989. (Pam Hazelton, Sue Bannerman & Peter Tille)







**LEGEND**

- Vineyard Precinct Boundary
- ~~~~~ Creek Lines & Gullies
- 20, 40 & 80m wide Riparian Corridors
- 1:100 ARI Flood Extent
- Existing Transmission Easement





## 2.2 Local Context (Refer Figure 1)

This section of the report analyses the landscape character of the precinct which helps to enhance the cultural aspects of the area. Important views and vistas are identified and analysed from several important locations within the boundary of the Vineyard Precinct.

### 2.2.1 Vineyard (Refer Figure 1)

Windsor Rd and the flood plain of the Killarney Chain of Ponds dissects the precinct effectively creating two distinct sub precincts within the site. The northern sub precinct of the site is formed by Boundary Rd to the east while the north is contained by both Menin and Commercial Roads. The north west is formed by Brennan Dam Rd. The southern sub precinct is bound to the south east by Bandon Rd while the Wianamatta / Eastern Creek flood plain forms the physical boundary to the south west. The north west boundary of the precinct is demarcated by the south-eastern edge of Vineyard Park.

The study area currently consists of small rural holdings that are made up primarily of rural or environmental residential living and farming lands that include poultry, market gardens and nurseries and flower production. There is also a mushroom production industry located within the middle of the site and situated on relatively flat grounds and over looking neighbouring residential properties.

As a result of these activities much of the site has been cleared with much of the remnant vegetation located along the ridge line to the north and south west of the site.

Much of the vegetation is relatively young and disturbed with significant exotic and weed encroachment into the understory. However, there are areas of significant good quality remnant vegetation communities within fragmented parts of the site (Eco Logical, 2014).

Killarney Chain of Ponds and a portion of its flood plain is described by Eco Logical (2014) as being in a moderate condition and has the greatest potential for recovery. All of the tributaries flowing into the Killarney Chain of Ponds have been largely modified due to the surrounding farming practices. The remnant Alluvial woodland vegetation has been largely degraded with up to 50% of the forest having been removed and infected by exotic species.

### 2.2.2 Topography (Refer Figure 5)

*(Refer to Figures 5 & 8 through 12)*

The topography of the Vineyard Precinct is dominated by one low ridge line to the northern boundary and a shallow creek line valley formed by the Killarney Chain of Ponds that run diagonally from north west to south east dissecting the precinct into two.

The highest points of the precinct's ridge lines reaches an elevation of approximately 60m while the lowest points being generally 20m below sea level and is contained within a major flood plain.

The main ridge line runs from the north east to the west down both Menin and Commercial Roads. The main ridge line then slopes gently down to the south towards Killarney Chain of Ponds.

The shallow valley of the Killarney Chain of Ponds has formed an extensive flood plain to either side of its banks and is fragmented by farms and other mixed land usage but is mostly pastoral in its character with large open grasslands and very scattered pockets of trees contained along the creek line.

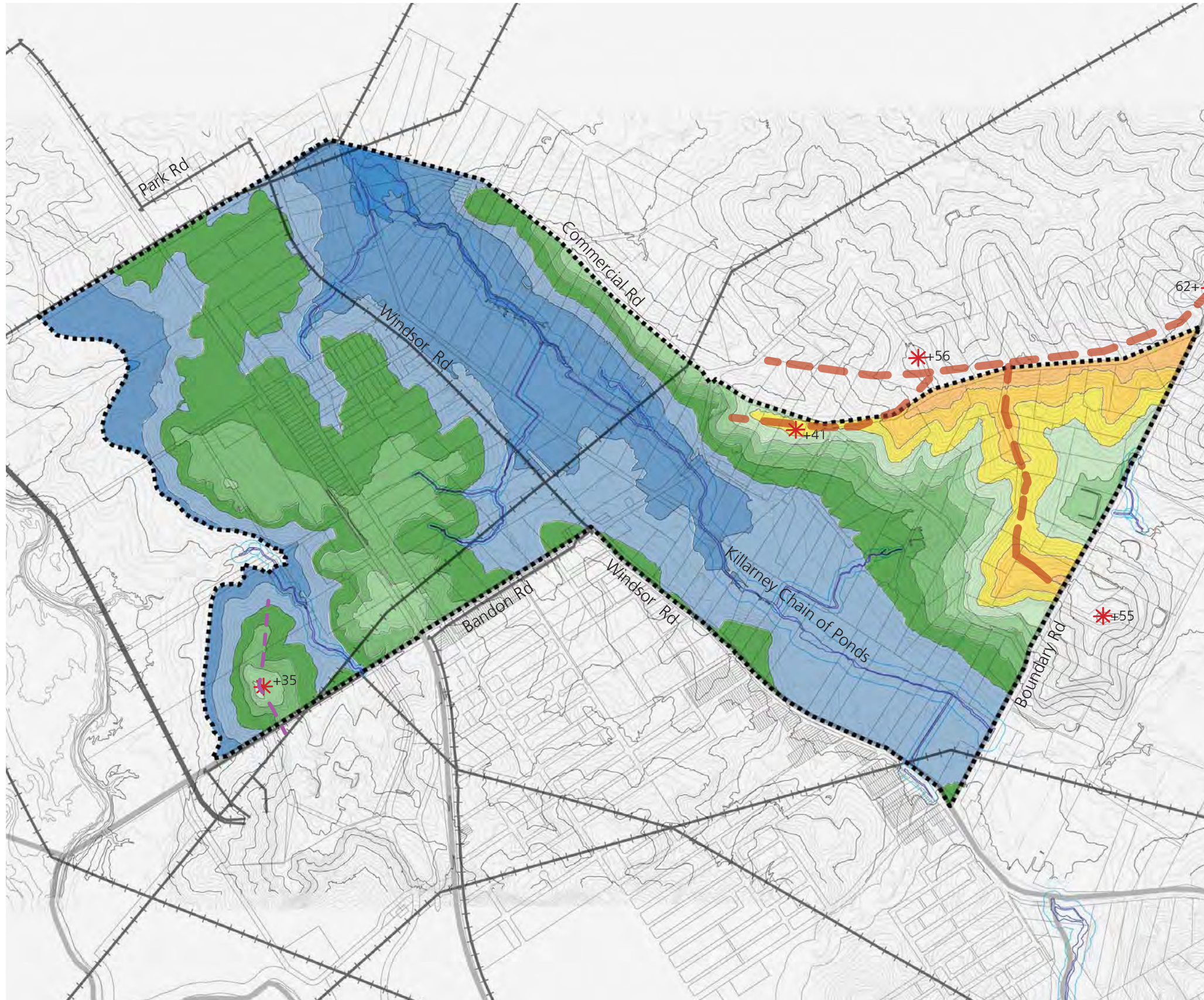
The Killarney Chain of Ponds is fed by some very disturbed minor tributaries and is mainly characterised by local farms and fragmented Alluvial Woodland.

The sub precinct to the south west of Windsor Rd is categorised as being generally flat with a slight increase in elevation occurring to the south east of the site near Bandon Rd. To the south west of the heavy rail corridor the topography slopes gently down to meet the Eastern and South Wianamatta Creeks that lie outside the precinct boundary.

















Figures 8 to 12 show cross sections taken through out the precinct to assist in understanding the topography and to provide valuable insights into the visual and landscape analysis that have assisted in developing the objectives to help visually mitigate future development within the Vineyard Precinct.





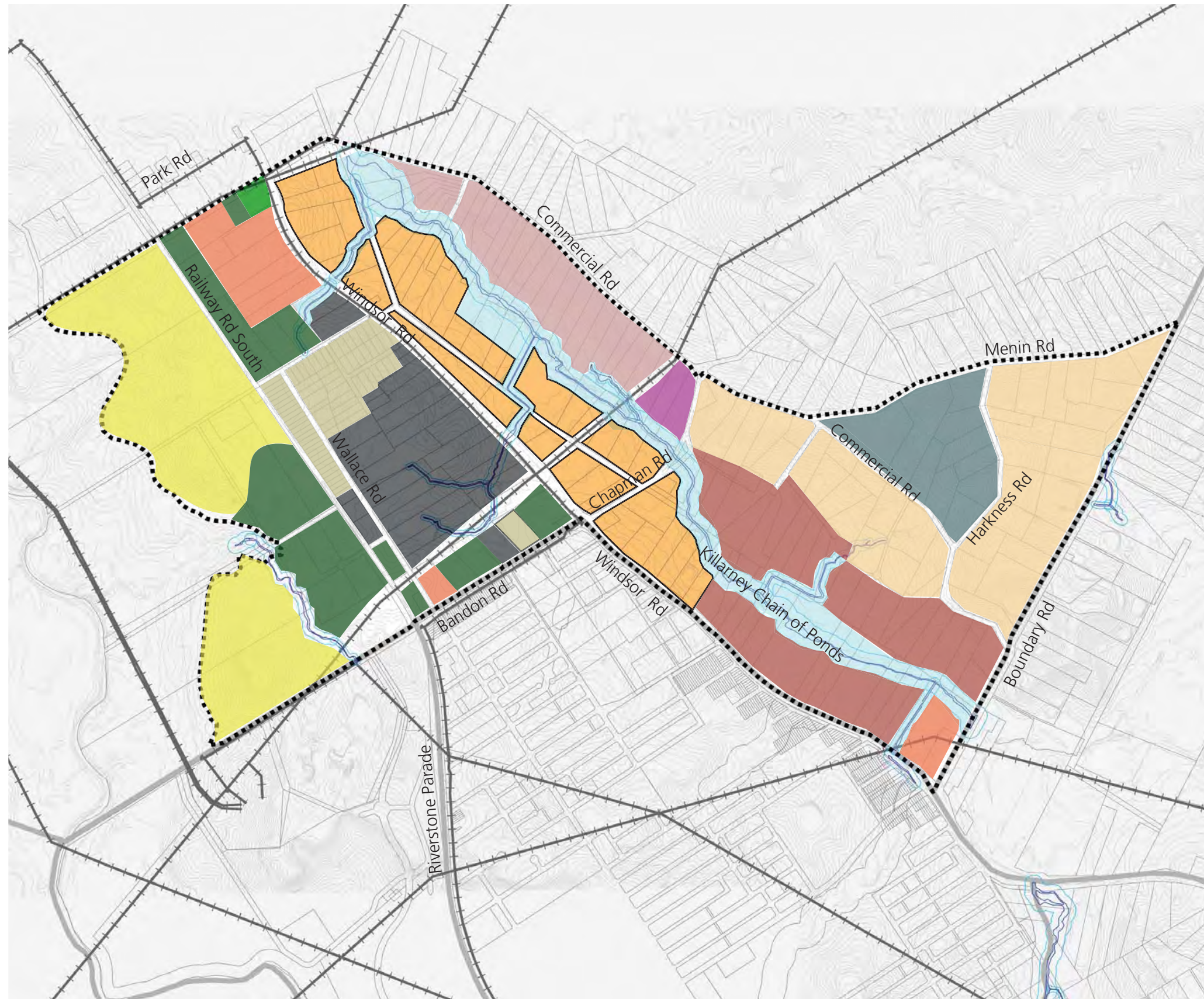


**LEGEND**

-  20 to 25m
-  25 to 30m
-  30 to 35m
-  35 to 40m
-  40 to 45m
-  45 to 50m
-  50 to 55m
-  55 to 60m
-  60 to 65m
-  65 to 70m
-  70 to 75m
-  High Points
-  High Ridgeline
-  Low Ridgeline
-  Existing Transmission Easement
-  Vineyard Precinct Boundary







**LEGEND**

- Vineyard Precinct Boundary
- Land Use - Residential / Rural  
 Character - Bush Lots / Environmental Living  
 Vegetation - Cumberland Plain Woodland  
 Clearance rate - 40-50%
- Land Use - Residential / Mixed Rural  
 Character - Small farm properties  
 Vegetation - Cumberland Plain Woodland  
 Clearance rate - 75-90%
- Land Use - Residential / Mixed Rural  
 Character - Large Flood Plain Lots  
 Vegetation - Alluvial Woodland  
 Clearance rate - 80-100%
- Land Use - Mixed Industry / Agriculture  
 Character - Large Flood Plain Lots  
 Vegetation - Alluvial Woodland  
 Clearance rate - 75-90%
- Land Use - Residential / Rural  
 Character - Large cleared Lots  
 Vegetation - Cumberland Plain Woodland / Exotic Species  
 Clearance rate - 50-90%
- Land Use - Commercial / Agriculture / Farm  
 Character - Large Lots  
 Vegetation - Mixed Native / Exotic Species  
 Clearance rate - 75-100%
- Land Use - Residential Low/Medium Density  
 Character - Suburban Lots / Retirement  
 Vegetation - Cumberland Plain Woodland / Exotic Species  
 Clearance rate - 75-90%
- Land Use - Commercial / Farms  
 Character - Large Lots  
 Vegetation - Cumberland Plain Woodland / Exotic Species  
 Clearance rate - 75-80%
- Land Use - Farmland  
 Character - Pastoral / Farm Land  
 Vegetation - Cumberland Plain Woodland  
 Clearance rate - 90%
- Significant Existing Native Vegetation
- Riparian Corridor - Fragmental Alluvial Woodland
- Industrial Business
- Vineyard Park





### 2.2.3 Landscape Character Units (Refer Figure 5)

#### **General Landscape Character:** (Refer to Figure 6)

The physical landscape character of the Vineyard precinct is dominated by a main ridge line that runs from the intersection of Boundary and Menin Roads in the north east in a south westerly direction along Commercial Rd. A smaller ridge line finger extends from the main ridge line to the south along Harkness Rd.

Windsor Rd and the riparian corridor of the Killarney Chain of Ponds bisects the precinct by running south east to north west.

To the south of Windsor Rd the precinct is generally flat with small zones of existing native vegetation surrounded by commercial farms and residential dwellings. The most southern portion of the precinct is predominately open and cleared pastoral allotments overlooking the open flood plains of the South Wianamatta and Eastern creek lines.

Generally, the Precinct comprises of large allotments of either mixed rural or environmental living within areas of dense native woodland vegetation. Large extents of cleared pastoral lands along with mixed commercial and agricultural activities gives the precinct a low density 'rural/farmland' character. Substantial pockets of remnant Cumberland Woodland and Alluvial Woodland add a sense of the bush to the dominant rural character.



#### **Woodland / Environmental living:** (Refer to Figure 6)

The woodland environmental living sub precinct is characterised by dense Cumberland Plain Woodland across the major ridge line running from the north east to south west along the northern boundary of the precinct.

The ridge line slopes gently down to the south west following Menin and Commercial roads and south towards the flood plain of the Killarney Chain of Ponds.

Large single and double rural estate type housing are nestled into the landscape dominated by the existing woodland trees bounded by Menin Rd to the north, Commercial Rd to the south and Harkness Rd to the east.

Much of this slope is dominated by large lots containing significant areas of remnant woodland. This vegetation helps strengthen the over visual character of the precinct of Vineyard while providing natural screening to the surrounding precincts.



#### **Mixed Residential / Rural Estates (Slopes):** (Refer to Figure 6)

These rural allotments are located to the north and north east of the Killarney Chain of Ponds are mainly situated on the lower slopes of the northern ridge line and is contained to the south east by Boundary Rd.

This open rural / residential / farm character is one that mainly consists of cleared woodland vegetation with scattered trees dotted throughout. Open rural allotments and scattered vegetation roll down from the ridge to meet the low lands of Killarney Chain of Ponds.

Houses and some mixed use farms dominate the interface with Commercial and Harkness Roads and are partially screened with remnants of native woodland species and a mix of exotic species.

These large lots contain mainly large areas of turf and pasture grasses and farm dams framed with dispersed fragments of Cumberland Plain Woodland which provides a significant backdrop to the largely open rural nature of this sub area.



#### **Mixed Residential / Rural Estates (Flood Plain):** (Refer to Figure 6)

These rural or open flood plain allotments are located to the south east of the precinct and are found mainly within the flood plains to the north and south of the Killarney Chain of Ponds.

This character unit is best described as having an open rural character that consists mainly of cleared open pasture grass that is devoid of any significant vegetation apart from the Alluvial Woodland located within the riparian corridor of the Killarney Chain of Ponds.

Houses and some mixed use farms are mainly located on the slightly elevated ground outside of the 1:100 ARI event flood line with the open paddocks of cleared vegetation dominating the flood plain itself. The use of these paddocks is indistinct.



#### **Industry / Farming /Creek line:** (Refer to Figure 6)

The south western edge of the Killarney Chain of Ponds that is bound to the south west by Windsor Rd is best characterised by its low lying topography and by the predominance of a mix of industries, agricultural practices and market gardens.

Much of the remnant Alluvial Woodland has been removed for various forms of farming with only scattered, disconnected areas of the riparian corridor woodland remaining along its length.

Although fragmentation of vegetation has occurred along the creek line it is important for the future development of the precinct that this riparian corridor is preserved and rehabilitated in order to improve biodiversity, hydrology and water quality of the creek.





**Mixed Residential / Rural  
(Slopes & Flood Plain):**  
(Refer to Figure 6)

These rural allotments are located to the north and north east of the Killarney Chain of Ponds are mainly situated on the lower portion of the northern ridge line and is fronted by Commercial Rd.

Houses and some mixed use rural activities are nestled in along the fragmented Cumberland Plain Woodland that occupies the setback from Commercial Rd. This street front vegetation could provide the residents with a sense of bush land living.

However, these medium to large lots contain mainly large areas of turf and pasture grasses that are located within the rear of these lots and are contained wholly within the Killarney Chain of Ponds flood zone.

Views are afforded from the elevated locations to the south over the Killarney Chain of Ponds flood plain and on occasions, glimpses of the lower Blue Mountains can be seen to the west.

**Commercial, Agriculture & Farms:**  
(Refer to Figure 6)

The north western portion of the precinct is predominately made up of commercial farming techniques that range from battery farms, market gardens, crane hire businesses and a day care centre. This gives the sub precinct a distinctive productive industry quality.

These practices have been set well back within their lots from Windsor Road and have resulted in the extensive clearance of large areas of Cumberland Plain Woodland. The grounds are generally characterised as open grass lands devoid of any other significant vegetation.

However, behind these allotments lies a significant area of the remnant Cumberland Plain Woodland which helps to screen the properties from the adjoining railway line to the west.

**Low /Medium Density Dwellings:**  
(Refer to Figure 6)

Between Windsor and Railway Road and along the length of Level Crossing Rd there can be found what would normally be characterised as a typical low density suburban sub precinct. The lots are typically equal to or slightly larger than your quarter acre block allowing for large two story slab on ground dwellings and deep back yards.

The larger lots have allowed for some retention of the existing vegetation mixed in with exotic plantings and turf. The low density dwellings extend to the south east until they are constrained by a series of battery farms and the location of a large mushroom industry.

Medium density character is provided in the form of a retirement village situated along Bandon Rd.

**Commercial, Agriculture & Farms:**  
(Refer to Figure 6)

The central portion of the precinct located between Windsor Rd and Wallace Rd is predominantly made up of commercial farming techniques that range from battery farms to a large mushroom industry, a nurseries and market gardens. This gives the sub precinct a distinctive industrial farming quality.

These practices have been set well back within their lots from Windsor Road and have resulted in the extensive clearance of large areas of Cumberland Plain Woodland. The grounds are generally characterised as open grass lands devoid of any other significant vegetation.

The south eastern portion of this character unit contains both small fragments and significant areas of Cumberland Plain Woodland. These are located to either side of a 60m wide transmission easement that cuts through the precinct from south west to north east.

**Cleared Pastoral Farmland:**  
(Refer to Figure 6)

To the west of the precinct is an area whose character is provided mainly by the presence of large rural lots that have been significantly cleared of vegetation leaving large open pasture lands and paddocks. The lower slopes of the lots are located within the South Wianamatta and Eastern Creek flood plain and are being used as turf farms due to the alluvial soil.

The slightly more elevated land offers views to the south west over the flood plain with the southern blue mountains forming the horizon.







**LEGEND**

- ..... Vineyard Precinct Boundary
- Visually sensitive
- Predominately internal views with localised visual sensitivity
- Vegetation - ENV
- Distant Views
- Middle Distance Views
- Immediate Views
- Framed Views
- High Points
- Vineyard Rail Station
- Existing Transmission Easement





## 2.2.4 Views

(Refer Figure 7)

### Distant Views

Typically, distant views are normally associated with higher elevations and ridge lines where there can be found a variety of viewsheads depending on your location.

However, within the Vineyard precinct the most expansive distant views are found at lower elevations and primarily derived from the low lying pastoral grazing lands found in the south west and west of the site. The slightly elevated land has been extensively cleared of vegetation for rural practices and transmission easements and over looks the vast landscape of the greater western Sydney plains to the south west. Distant views capture the canopies of the large tracts of Cumberland Plain Woodland held in nature reserves and beyond to the lower Blue Mountains forming the horizon to the south west.

A slightly elevated knoll located in the extreme south west of the site within the flood plain offers uninterrupted views directly west and north west to capture the escarpments of the Blue Mountains.

Other significant views are to be found to the north of the site from specific locations along the main ridge line that bounds the site along its northern boundary. Looking south west and west from Commercial Rd, periodic views between the stands of the woodland vegetation that runs along the ridge line road reserve, provide glimpses of the distant Blue Mountains over canopies of the surrounding districts CPW Nature Reserves.

Distant views of rural landscapes and the lower reaches of the greater Hornsby Plateau can also be found looking directly east from Harkness Rd over the cleared paddocks of the rural properties found in this area.

The topographic high point of the northern ridge line only affords periodic middle distance views and narrow internal views due to the density of the vegetation that dominates this part of the site.

### Middle Distance

Middle distance views are considered to be generally views seen up to 1km from a stated viewing point.

These views are mostly internal in nature and are from slightly elevated locations. These views are either outward looking over low topography or back into the site where, the otherwise distant view is obscured by either vegetation, built forms or significant level change. To the north and east middle distance views are offered from the relative high points along Boundary and Commercial Roads. Both views are into the low lying areas of the Killarney Chain of Ponds only to be terminated by the Alluvial Woodland vegetation. To the west of the site, middle distance views look externally from Park Rd through fragmented vegetation down over the Eastern and South Wianamatta Creeks. To the south west the elevated knoll allows for internal views back towards the significant stand of CPW to the south west of Wallace Rd.

### Immediate Views

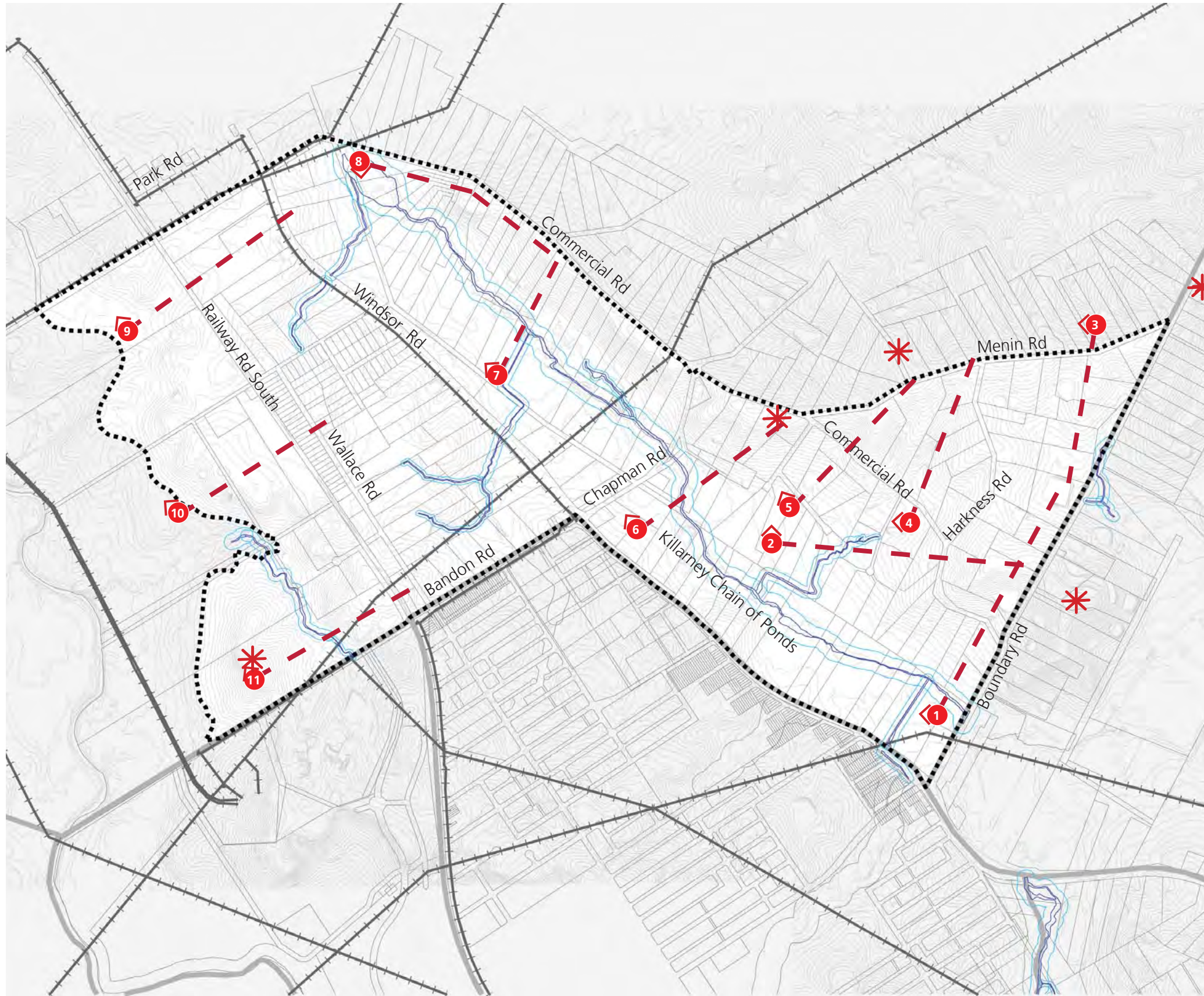
Immediate views are local views and are views that are in close proximity to the view point. These views can also be fragmented and restricted by the pockets of woodland vegetation found on site. Local views are mainly concentrated along Windsor Rd into the flood plain of the Killarney Chain of Ponds.

### Framed Views

The local road network that cuts its way through the remnant stands of existing native vegetation, leaving trees to both sides of the road reserves or by the retention of existing native vegetation within the rural allotments. The close proximity of this vegetation to the road side helps to frame the road, allowing for very linear, narrow views of the road ahead.





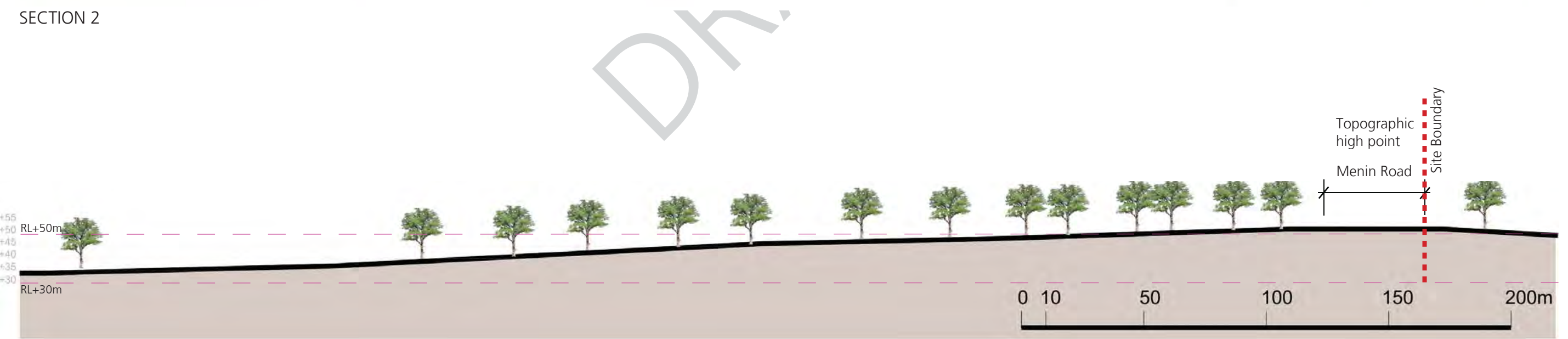
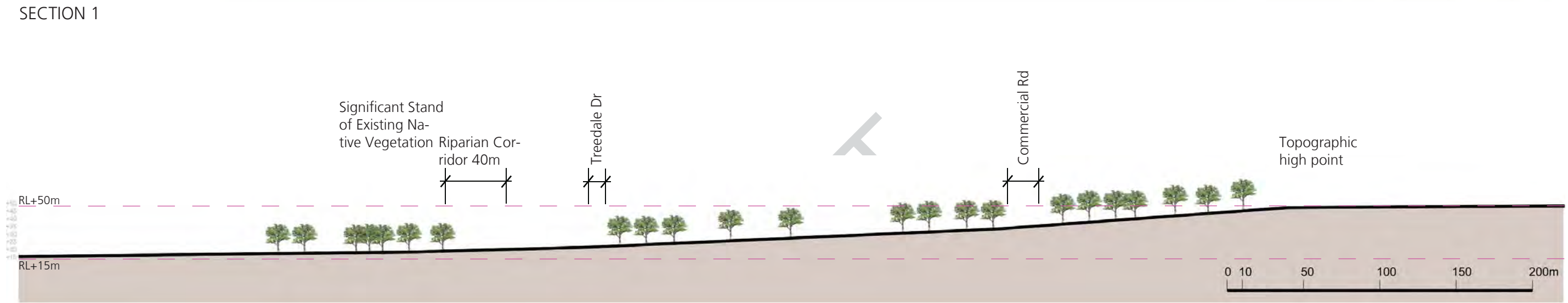
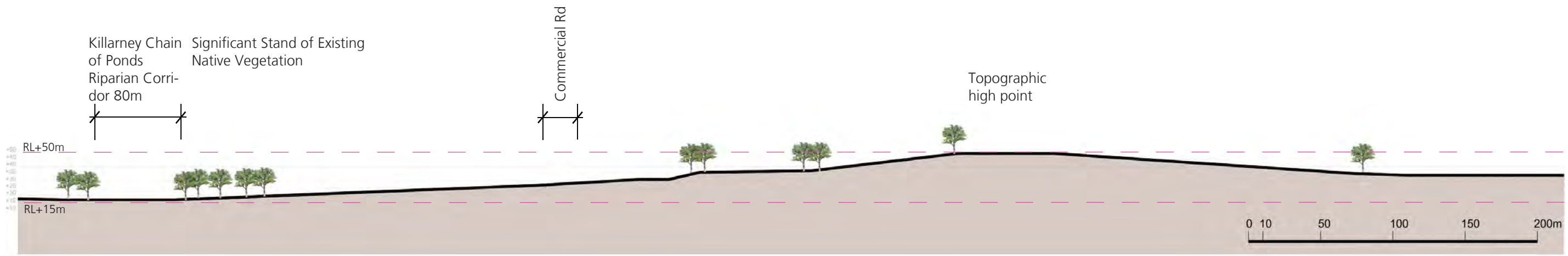


**LEGEND**

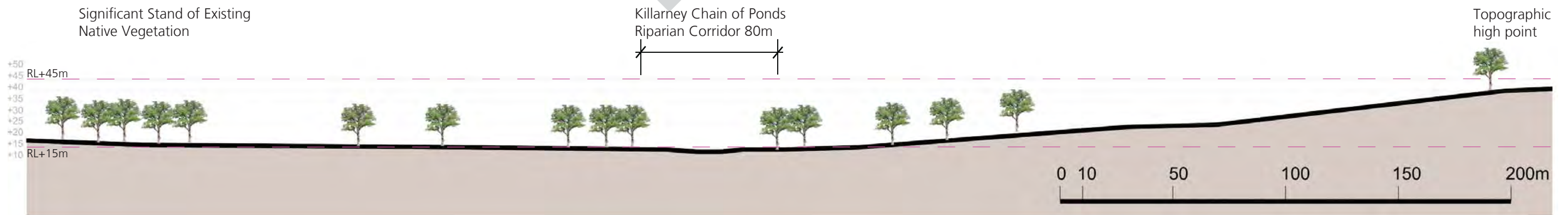
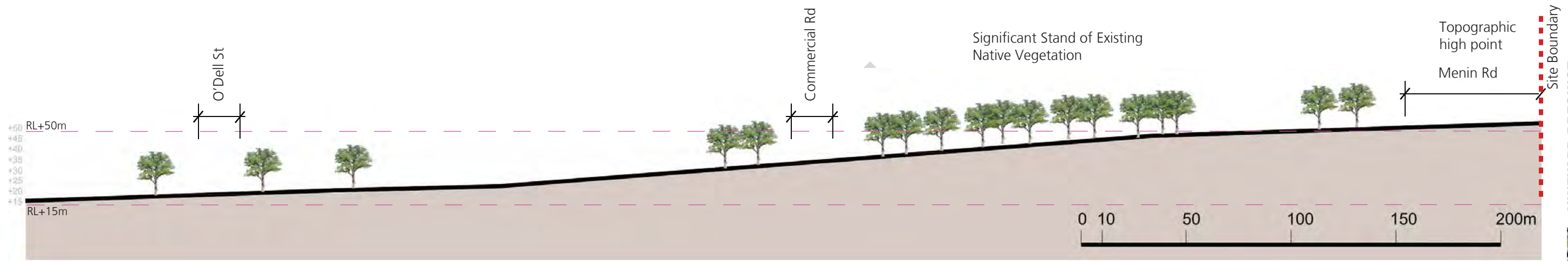
- Vineyard Precinct Boundary
- ① Section Number
- - - Section Line
- \* Topographic High Point









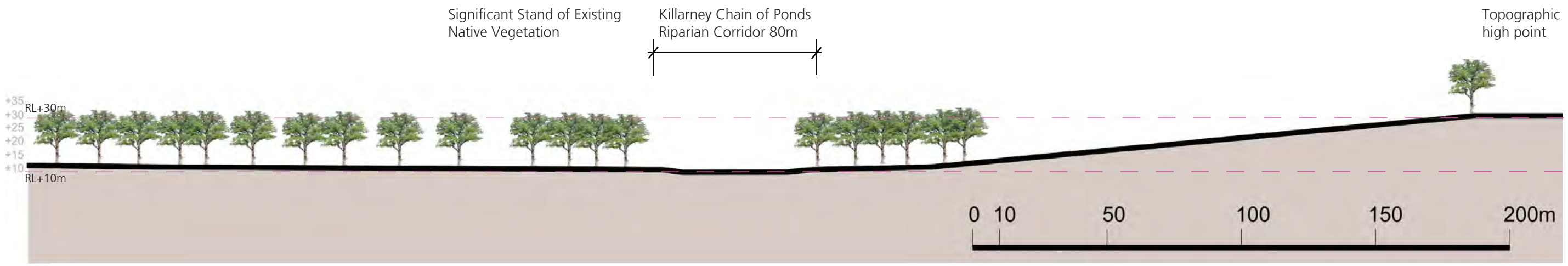


VINEYARD PRECINCT LANDSCAPE & VISUAL ASSESSMENT

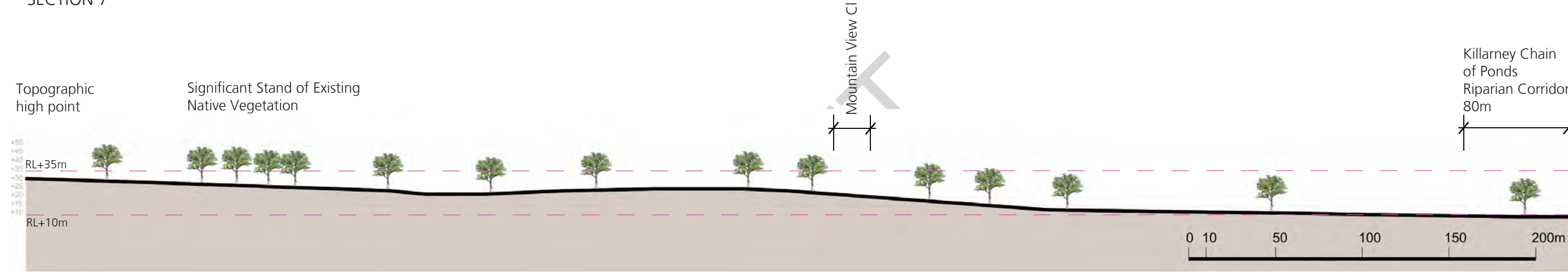
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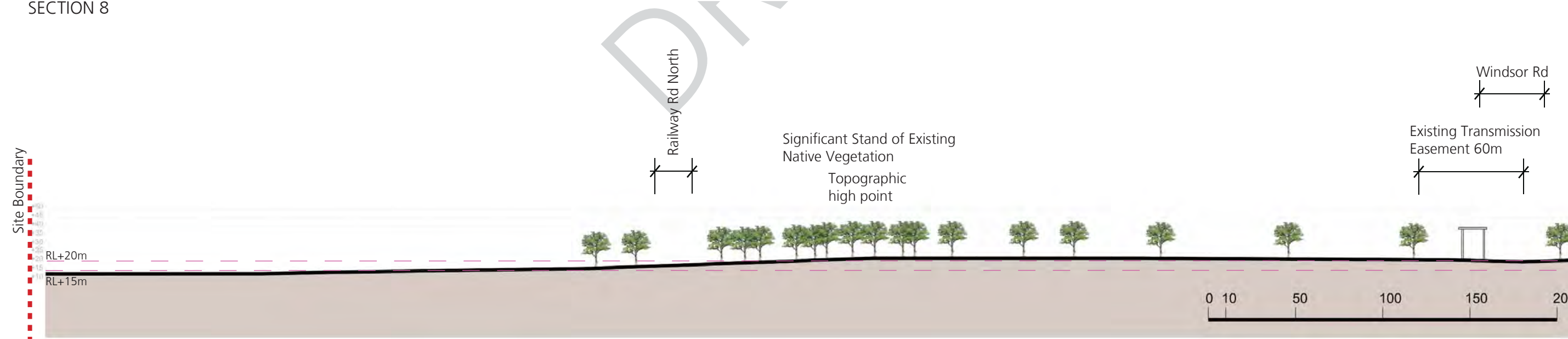




SECTION 7



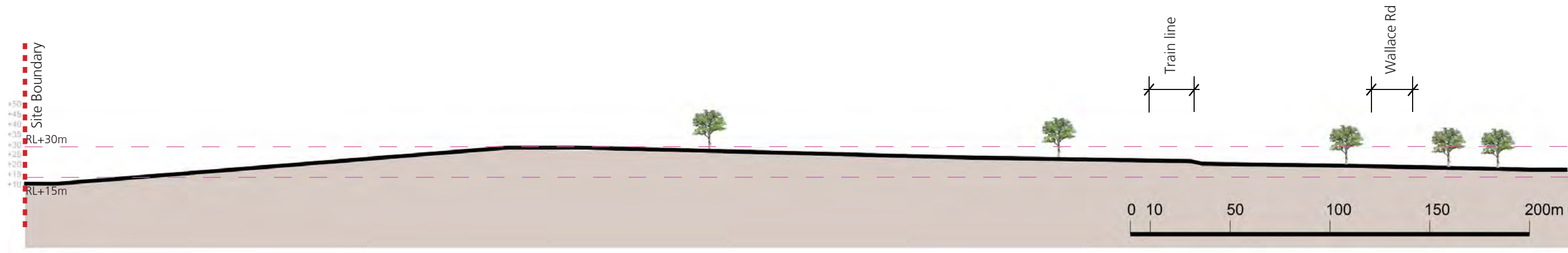
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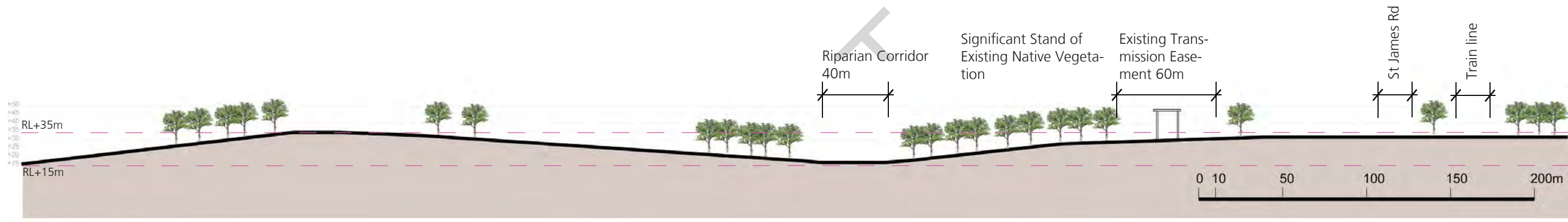
SECTION 9







SECTION 10



SECTION 11

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### 3.0 Visual Analysis Methodology

This Chapter provides the detailed visual analysis of the Vineyard Precinct. This analysis is based on information from previous reports, technical studies of the precinct, extensive site visits and observations.

#### 3.1 Methodology, Terminology and Process

For the purpose of this study the main method developing the visual analysis is to firstly identify the important vantage points from within the Precinct. These view locations are selected based on the potential for future development to affect sensitive areas within the site such as the existing native vegetation, flood zones, threatened or endangered vegetation communities, cultural significance and landscape character.

Following site visits, site analysis and desk top studies of previous reports, this report identified a series of significant vantage points or view points. From this we identified 20 important views that are representative of all the major character units discussed in section 2.2.3. These views were also selected based on the visual qualities of the topography, vegetation, hydrology, the cultural landscape and the surrounding areas.

Descriptions of the view points are generally categorised as having either distant, middle or immediate views and are defined as follows:

#### Distant Views.

Distant views are regional views and extend beyond the subject precinct by over 5km.

#### Middle Views.

Middle views are within a radius of 1km from the view point and are generally within the study area.

#### Immediate Views.

Immediate views are internal views that are within close proximity to the view point.

The second method to developing the visual analytical data is an assessment of the visual sensitivity and the visual effect of future change from the specified viewpoints. This analysis also considers the potential for future development within the study area and its potential impact on the culturally sensitive areas. Analysing the existing conditions is the key component of the visual analysis in order to maintain or preserve the rural character of the precinct and its subsequent relationship with the character of surrounding precincts. Through holistically looking at the visual sensitivity and visual effect we can better identify the potential for visual impacts on the study area from any given view point.

Visual sensitivity refers to the character of a viewpoint, and is a measure of a viewpoint's sensitivity to possible change. In the following viewpoint analysis tables there is a category titled 'Visual Sensitivity' which provides an analysis of the level of visual sensitivity and the reasoning for this rating. When determining the visual sensitivity of a view point the following factors should be considered:

- Existing conditions
- Regional context
- Visually significant locations
- Visibility from other locations
- Perception of the viewer; and
- Potential for future change.

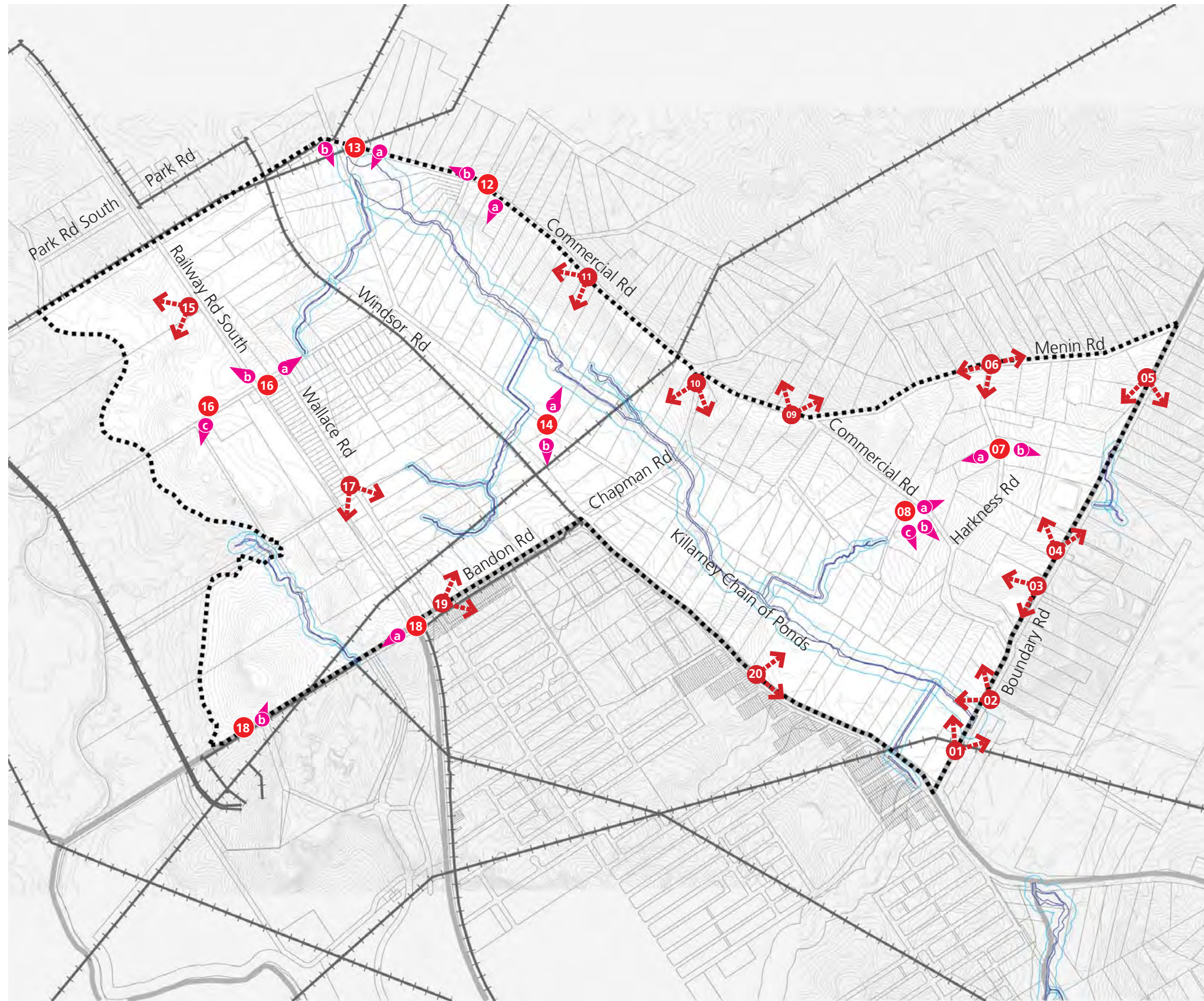
Once visual sensitivity has been established, the visual effect of potential future development upon each of the view points is then determined.

Visual effect is an expression of the visual relationship between the specific viewpoint location and its proximity to the surrounding existing visual environment or context. The visual effect is then expressed as a sliding scale rating from Nil to Very High with nil having no effect and Very High excluding any development without significant mitigation measures.

In the following viewpoint analysis tables there is a category titled 'Visual Effect' which provides an analysis of the level of visual effect and the reasoning for this rating.







### LEGEND

- Vineyard Precinct Boundary
  - Photo Location, number and view direction
  - Photo location
  - View direction at one photo location
- 01 Boundary Rd looking north east
  - 02 Boundary Rd looking west
  - 03 Boundary Rd looking south west & north east
  - 04 Boundary Rd looking north
  - 05 Boundary Rd looking south to south west
  - 06 Menin Rd looking north east, south west & west
  - 07 Harkness Rd looking east & west
  - 08 Commercial Rd looking east & south
  - 09 Commercial Rd looking north
  - 10 Chapman Rd looking south to south west
  - 11 Commercial Rd looking south west to west
  - 12 Commercial Rd looking south & west
  - 13 Commercial Rd looking south & south east
  - 14 Old Hawkesbury Rd looking north & south west
  - 15 Railway Rd South looking south west
  - 16 Railway Rd South looking north east, west & south
  - 17 Wallace Rd looking east to south east
  - 18 Bandon Rd looking south west & north
  - 19 Bandon Rd looking north east
  - 20 Windsor Rd looking north east to east





## PHOTO LOCATION 1

Killarney Chain of Ponds  
Riparian Corridor

View looking North East to  
adjoining precinct Ridge line

Killarney Chain of Ponds  
Riparian Corridor east



Photo No: 5012

### **Description of Views:**

Photo 1 is taken from within the Killarney Chain of Ponds flood plain and looks north east along the road reserve of Boundary Rd up to one of the small ridge lines within the site with a high point located in the adjoining precinct.

The ridge line forms the middle distance back drop and strengthens the rural / bush land character of the precinct.

The immediate view is created by the flood plain and riparian corridor formed by Killarney Chain of Ponds and associated alluvial woodland vegetation.

### **Visual Sensitivity:**

From an ecological stand point the sensitivity of this viewshed is considered to be Medium High. Due to the creeks classification as a 4th order creek and as such it is required to have a 80m riparian corridor and is in need of rehabilitation.

Improved conditions and the requirement for riparian rehabilitation will make Killarney Chain of Ponds a highly visually sensitive area in the future.

### **Visual Effect:**

It is unlikely that any future development will occur within this location due to the flood prone land and requirement for a 80m riparian corridor from top of channel banks. Visual effect is assessed as being Medium. Preservation of the existing alluvial woodlands is necessary to maintain this assessment. The corridor will provide a visual buffer to future development in the adjoining areas of the Precinct.

### **Development potential of Area:**

- Given the sensitivity of the ecological and environmental significance of the riparian corridor of Killarney Chain of Ponds, any development along this corridor of land fronting Boundary Road between Windsor Road and Killarney Chain of Ponds require that a visual assessment is undertaken for all future development applications.
- The location does not lend itself to future development and would be better suited as an ecological and landscape buffer to any development outside the riparian corridor easement. There presents the opportunity for either public open space, trails and cycle ways along with environmental living to the fringes.

### **Visual Mitigation:**

- Possible impacts could be minimised with the retention of Alluvial woodland vegetation along the creek line and rehabilitation and revegetation.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the riparian character.





## PHOTO LOCATION 2

View looking West to Killarney Chain of Ponds Riparian Corridor & flood plain



Photo No: 5014

### **Description of Views:**

View is looking west along the Killarney Chain of Ponds riparian corridor and flood plain. The immediate views are typically of the alluvial woodland vegetation dotted along the creek line and ponds. The adjoining flood plain extends into the distance offering glimpses of the Blue Mountains that form the horizon.

### **Visual Sensitivity:**

From an ecological stand point the sensitivity of this viewshed is considered to be Medium High. Due to the creeks classification as a 4th order creek and as such it is required to have a 80m riparian corridor from creek banks and is in need of rehabilitation.

Improved conditions and the requirement for riparian rehabilitation will make Killarney Chain of Ponds a highly visually sensitive area in the future.

### **Visual Effect:**

It is unlikely that any future development will occur within this location due to the flood prone land and requirement for a 80m riparian corridor. Visual effect is assessed as being Medium. Preservation of the existing alluvial woodlands is necessary to maintain this assessment. The corridor will provide a visual buffer to future development in the adjoining areas of the Precinct.

### **Development potential of Area:**

- Given the sensitivity of the ecological and environmental significance of the riparian corridor of Killarney Chain of Ponds, any development along the northern flood plain corridor of the Killarney Chain of Ponds will require that a visual assessment is undertaken for all future development applications.
- The location does not lend itself future development and would be better suited as an ecological and landscape buffer to any development outside the riparian corridor easement. There presents the opportunity for either public open space, trails and cycle ways along with environmental living to the fringes.

### **Visual Mitigation:**

- Possible impacts could be minimised with the retention of Alluvial woodland vegetation along the creek line and rehabilitation and revegetation.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the riparian character.





### PHOTO LOCATION 3



Photo No 3a: 5082

View looking south west into Killarney Chain of Ponds Riparian Corridor & flood plain

#### **Description of Views:**

View is taken from the lower slopes of the Boundary Rd ridge line looking down towards the south west. Views to the south west provide middle distance vistas into the relatively dense remnants of Alluvial Woodland. The vegetation generally follows the alignment of the Killarney Chain of Ponds. Rural allotments with open rural pasture and paddocks dominate the foreground.

#### **Visual Sensitivity:**

The area within this viewshead should be considered as having a Medium Level of visual sensitivity due to its slightly elevated location and potential for medium density development along the Boundary Rd road reserve.

#### **Visual Effect:**

Any future development at this location has been assessed as having a Medium High level visual effect due to its elevated position and open rural character.

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#### **Development potential of Area:**

- The Boundary Rd and Commercial Rd intersection provides the opportunity as an ideal entry point linking all future development within the elevated lands of the northern ridge line.
- The location lends itself suitable for controlled residential development with the opportunity for a village centre with some medium density residential development in the lower regions of the site situated outside the 1:100 ARI flood levels

#### **Visual Mitigation:**

- Possible impacts to the south west are minimised by the incorporating large scale recreational open space or sports fields along with appropriate alluvial woodland buffer planting to the flood plain.
- Possible impacts to the south west could be minimised with the strategic retention and revegetation of woodland vegetation along the riparian corridor.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, tree preservation, roofing material and finishes would be required in order to protect and enhance the rural character of the site.





## PHOTO LOCATION 4

View looking North to  
Wooded Ridge line

Site Boundary



Photo No 3b: 5080

### **Description of Views:**

View is looking down from a small ridge line on Boundary Rd towards the northern ridge line that is heavily vegetated with significant stands of remnant Cumberland Plain Woodland forming the back drop to the precinct boundary.

The foreground view consists of rural farmland with a large farm dam occupying the low point at the bottom of the slope.

All views are either framed or middle distance.

### **Visual Sensitivity:**

The area within this viewshead should be considered as having a Medium Level of visual sensitivity due to its location within a small valley and potential for low density residential development along the Boundary Rd road reserve and lower slopes of the surrounding rural farm land.

### **Visual Effect:**

Any future development at this location has been assessed as having a Medium level visual effect due to its elevated position and open rural character.

Preservation of the existing woodlands along the ridge is necessary to maintain this assessment. The ridge line vegetation will provide a visual buffer to future development in the adjoining Oakville Precinct and maintain the rural / bush land character of the site.

### **Development potential of Area:**

- The location lends itself suitable for controlled low density residential development to the maximum height of 9m.

### **Visual Mitigation:**

- Possible impacts to the north could be minimised with the strategic retention of woodland vegetation along the lower slopes of the ridge line.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, tree preservation, roofing material and finishes would be required in order to protect and enhance the rural character of the site.





## PHOTO LOCATION 5

Site Boundary

View looking South West  
along Road Boundary

West



Photo No: 5077

### **Description of Views:**

View 5 is looking south west along Boundary Rd. The photo is taken from the eastern slopes of the main northern ridge line. The immediate views are of cleared rural pasture lands with fragments of Cumberland Plain Woodland scattered within the rural landscape.

Significant trees along the site boundary provide framed views along the road reserve to the middle distance.

### **Visual Sensitivity:**

The area within this viewshed should be considered as having a Medium High Level of visual sensitivity due to its location within a small catchment and potential for low density residential development along Boundary Rd.

The lower slopes of the surrounding rural farm land are typical examples of the sites rural / bush land character.

### **Visual Effect:**

Any future development at this location has been assessed as having a Medium level visual effect due to its lower position compared to its surroundings and open rural character.

Preservation of the existing woodlands along the adjoining ridges is necessary to maintain this assessment. The ridge line vegetation is essential in order to provide a visual buffer to any future development in and around the ridge line and to maintain the rural / bush land character of the site.

### **Development potential of Area:**

- The location lends itself suitable for controlled low density residential development with some options for deep set backs to allow for water sensitive urban design interventions along the lower slopes of the ridge line and existing small creek line crossing into the adjoining site.

### **Visual Mitigation:**

- Possible impacts to the west could be minimised with the strategic retention of woodland vegetation along the lower slopes of the ridge line.
- Connection of significant stands of ridge line vegetation via habitat corridors and small parks.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, tree preservation, roofing material and finishes would be required in order to protect and enhance the rural character of the site.





## PHOTO LOCATION 6



Photo No 6a: 5025



Photo No 6b: 5075



Photo No 6c: 5072

### Description of Views:

Photo location 6 is taken from the junction of Menin and Harkness Roads as this intersection is a significant high point on the major ridge.

Photo 6a: The view to the south along Harkness Rd is of rural properties with areas containing wide open pastures framed by the scattered remnant native vegetation. Immediate views are framed to one side by scattered road side vegetation. Quintessential rural character.

Photo 6b: This view is looking to the north east back along Menin Rd to the highest point of the site. The views are framed by scattered road side vegetation with open pastures in behind the road reserve. This combination provides a deep sense of the rural / bush land character of the precinct.

Photo 6c: Looks west along the ridge line followed by Menin Rd. The view is framed by the road side vegetation to the south of the road reserve and provides a illusion of a dense stand of woodland vegetation. The location of telegraph poles to the north and along the site boundary have cleared the vegetation and provides a sense of openness to the rural properties of Oakville.

### Visual Sensitivity:

The area contained within this viewhead is determined to be as having a Medium High Level of visual sensitivity due to its location along one of the higher points of the ridge line.

The vegetation that is located along the ridge lines is regarded as important so as to provide a visual buffer and to strengthen the rural / bush land character of the site.

### Visual Effect:

Any future development at this location has been assessed as having a High visual effect due to its relatively high elevation following a ridge line and dense woodland vegetation dotted throughout the rural and environmental living properties clustered along the ridge line and slopes.

### Development potential of Area:

- Given the sensitivity of the ridge line setting any development within this area should require a concise visual assessment is undertaken for all future development applications.
- Although located on a reasonable high point, the location lends itself to low density residential to the maximum of 9m or smaller environmental living development in and around the intersecting roads.

### Visual Mitigation:

- Possible impacts could be minimised with the strategic retention of woodland vegetation along the ridge line, road reserve corridor separation distances to encourage retention of road side vegetation, habitat corridors and small neighbourhood parks.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the rural character of the precinct.





## PHOTO LOCATION 7

View West into Rural / Environmental living lots

View North along Harkness Road



Photo No 7a: 5020

View looking East over Rural properties to Wooded vista's



Photo No 7b: 5023

### **Description of Views:**

Photo location 7 is taken approximately half-way along Harkness Road from the Menin Rd intersection to the north.

Photo 7a: This view looks west into rural / environmental living properties and provides the opportunity for only internal and framed views. The view to the west traverse a series of gentle slopes falling away from the ridge line to the north. The views are of scattered woodland trees with cleared understory and pasture grass. Glimpses of residential properties can be seen through the trees.

Photo 7b: This location offers distant views to the south east back towards Box Hill and Riverstone East precincts. The canopies of woodland vegetation forms the distant horizon. The immediate views are dominated with cleared farmland and pasture grass which strengthens the rural character of the site.

### **Visual Sensitivity:**

The area contained within these viewsheads is deemed as having a Medium High Level of visual sensitivity.

The vegetation that is located to the north and the west up into the ridge lines is regarded as significant so as to provide a visual buffer and maintain the rural landscape character.

### **Visual Effect:**

Any future development at this location has been assessed as having a Medium High visual effect due to its prominent location when viewed from both Boundary Rd and Windsor Rd.

### **Development potential of Area:**

- Given the sensitivity of the ridge line setting any development within this area should require a concise visual assessment is undertaken for all future development applications.
- Although located on the higher slopes of the ridge line, the location lends itself to low density residential to the maximum of 9m or smaller environmental living development.

### **Visual Mitigation:**

- Possible impacts could be minimised with the strategic retention of existing woodland within habitat corridors or small parks and along the ridge line and road reserve corridors.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the rural character of the precinct.





PHOTO LOCATION 8



View looking North East into Rural Environmental living lots Commercial Road

Photo No 8a: 5060



View South East along Commercial Road

Photo No 8b: 5062



View looking South into Killarney Chain of Ponds. Riparian Corridor

Photo No 8c: 5055





**Description of Views:**

Photo location 8 is taken at the intersection of Commercial Rd and Treedale Rd.

Photo 8a: This view is looking north east into a rural residential property that is typical of the land use to the mid slopes leading up to northern ridge line. Large set backs allow for retention of large woodland trees within cleared understory strengthening the rural character of the precinct.

Photo 8b: Looks south east directly along the road reserve of Commercial Rd. The scattered vegetation throughout the road reserve and adjoining properties gives the impression that the road reserve is reasonably heavily vegetated. Open pasture with a backdrop of vegetation in the middle distance further enhances the rural character.

Photo 8c: Is taken from Commercial Rd about 50m east of the intersection with Treedale Rd. The view is approximately mid slope and has middle distance views into the Alluvial woodland vegetation and flood

**Visual Sensitivity:**

The area contained within this viewshead has been determined as having a Medium level of visual sensitivity.

**Visual Effect:**

Any future development at this location has been assessed as having a Medium visual effect due to its relatively concealed location from the visual catchment of Boundary Rd and Windsor Rd. However, the visual effect will increase slightly with the proposed primary school and further medium density residential suited to this location.

**Development potential of Area:**

- The location lends itself suitable for controlled residential development with the opportunity for medium density residential development and potential location for a primary school, associated sports fields and possible location for ENV offsets which will result in the retention of trees.

**Visual Mitigation:**

- Possible impacts could be minimised with the strategic retention of both the Alluvial woodlands along Killarney Chain of Ponds to the south and existing woodland vegetation to the north east of the 2nd order creek line that feeds into the Killarney Chain of ponds. Further mitigation could be via the establishment of a vegetated link or habitat corridor linking the two woodland communities.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the rural character of the precinct.

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## PHOTO LOCATION 9



Photo No: 5028

### **Description of Views:**

Photo location 9 is taken approximately half way along Commercial Rd after the intersection with Menin Rd and towards the intersection of Chapman Road. This area is mid way along the ridge line and is looking north into the rural estates of the precinct of Oakville. The view is defined by rural properties with scattered stands of Cumberland Plain Woodland.

### **Visual Sensitivity:**

The area contained within this viewshead has been determined as having a High Level of visual sensitivity.

This view is located on the back slope of a natural high point along Commercial Rd to the north. Its location resides behind this ridge line separates this location from the direct view from Windsor Rd. The vegetation that is located along the ridge lines is regarded as important so as to provide a visual buffer when looking up into the site from Windsor Rd and the lower slopes of Killarney Chain of Ponds looking northwards into the site.

### **Visual Effect:**

Any future development at this location has been assessed as having a High visual effect due to its prominent location near a high point and scattered stands of native vegetation. The woodland vegetation along this ridge line is important as it helps form the rural back ground to the site and adjoining precincts.

### **Development potential of Area:**

- The location lends itself suitable for controlled low density residential development following the ridge line with controls on building heights to the maximum of 9m so that they do not exceed the height of the vegetation on the ridge line.

### **Visual Mitigation:**

- Possible impacts could be minimised with the strategic retention of woodland vegetation along the ridge line and road reserves. Further mitigation could be via the establishment of a vegetated links, habitat corridors or small parks to preserve the woodland communities around the ridge line.
- Appropriate land use zoning with adequate planning controls on building heights, setbacks, materials and finishes would be required in order to protect and enhance the rural character of the precinct.





## PHOTO LOCATION 10



Photo No: 5030

View looking South down along Chapman Road from Commercial Road Ridge line

### **Description of Views:**

Photo location 10 is taken from the intersection of Commercial Rd and Chapman Rd looking south along the cleared vegetation of the road reserve. The view is framed by the proximity of Cumberland Plain Woodland on either side of the road inter mixed with exotic species. The Alluvial vegetation of the Killarney Chain of Ponds forms the back drop and middle distance view. This gives the perception of heavily wooded vegetation to the Killarney Chain of Ponds riparian corridor.

### **Visual Sensitivity:**

The area contained within this viewshead has been determined as having a Medium Level of visual sensitivity.

This view is deceiving as both areas to the east and west of the view are predominately cleared for either pasture or industrial use.

The view from the ridge line down into the riparian Corridor of the Killarney Chain of Ponds however, is regarded as vitally important as it provides a natural screen to potential development further to the south of the site and also from Windsor Rd.

### **Visual Effect:**

Any future development at this location has been assessed as having a Medium High visual effect due to its prominent location near a high point and as a potential major intersection. The woodland vegetation along this ridge line is important as it helps form the rural backdrop to the site.

### **Development potential of Area:**

- The location lends itself suitable for controlled low density residential development following the ridge line with controls on building heights to the maximum of 9m so that they do not exceed the height of the vegetation on the ridge line.

### **Visual Mitigation:**

- Possible impacts could be minimised with the strategic retention of woodland vegetation along the ridge line and road reserves. Further mitigation could be via the establishment of a vegetated links, habitat corridors or small parks to preserve the woodland communities around the ridge line.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the rural character of the precinct.





## PHOTO LOCATION 11

Expansive views to the West to Blue Mountains over Woodland canopies



Photo No: 5035

### **Description of Views:**

Photo location 11 is taken from Commercial Rd along the lower ridge line and looking to the south west through the road side vegetation.

Distant views of the lower Blue Mountains can be seen over the canopies of significant stands of Cumberland Plain Woodland. Vegetation of the Killarney Chain of Ponds make up the middle distance views.

### **Visual Sensitivity:**

The area contained within this viewshead has been determined as having a Very High Level of visual sensitivity.

This view looks to the west from northern ridge line of the precinct and overlooks woodland vegetation with vistas of the Blue Mountains forming the back ground. This vegetation is regarded as vital so as to preserve the rural / bush land character of the precinct and adjoining precincts. The retention of the woodland provides a visual landscape buffer to any future development within surrounding precincts.

It is also regarded as vitally important as it provides a natural screen to hide the stanchion towers and transmission lines that cuts its way from south to north in the middle distance.

### **Visual Effect:**

Any future development at this location has been assessed as having a Very High visual effect due to its prominent location and views over significant stands of native vegetation. The woodland vegetation along this ridge line and fore slopes to the Killarney Chain of Ponds is important as it helps form the rural / bush land Character of the precinct.





## PHOTO LOCATION 12

Views South from Commercial Road through rural / environmental living lots to Killarney Chain of Ponds.



Photo No 12a: 5037

### **Description of Views:**

Photo location 12a is taken from Commercial Rd approximately 250m south east of the intersection with Broos Rd. The view looks south through scattered native woodland vegetation in the foreground and over extensive pasture grasses of the flood plain in the middle distance. The Alluvial Woodland vegetation of the Killarney Chain of Ponds forms the back ground of the middle distance view.

### **Visual Sensitivity:**

The area contained within this viewshead has been determined as having a Medium Level of visual sensitivity due to its topographic location at the lower elevations of the ridge line and proximity to the 1:100 ARI flood plain.

### **Visual Effect:**

Any future development at this location has been assessed as having a Medium visual effect due to its location close to the flood plain of the Killarney Chain of Ponds and dense stands of Alluvial vegetation. The woodland vegetation to the flood plain is important as it helps form the rural / bush land character of the site.

### **Photo location 12b**

The view looking south west along Commercial Rd down into the Killarney Chain of Ponds flood plain and adjoining rural allotments. The significant stands of Alluvial Woodland vegetation that follows the Killarney Chain of Ponds fills the middle distance while flood plain and pasture grass paddocks dominate the foreground.

Glimpses of the Blue Mountains can also be seen in certain locations.

Views looking West along Commercial Road down into Killarney Chain of Ponds flood plain.



Commercial Road

Photo No 12b: 5038





PHOTO LOCATION 13

View looking South West into Killarney Chain of Ponds Riparian corridor



Photo No 13a: 5040

View looking South East into Killarney Chain of Ponds Flood zone

Brennans Dam Road

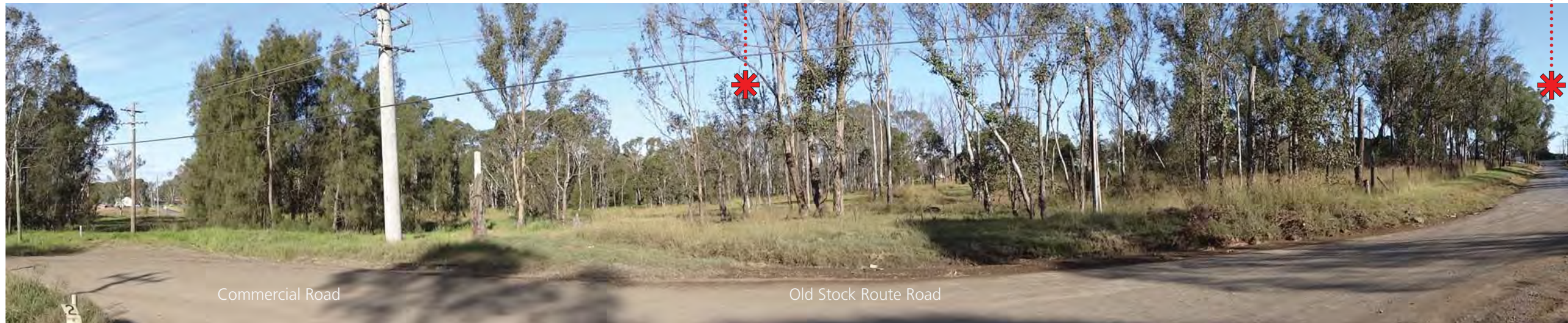


Photo No 13b: 5042





## PHOTO LOCATION 13 con't

### **Description of Views:**

Photo location 13 is taken from the intersection of Commercial Rd, Old Stock Route Rd and Brennans Dam Rd. The view looks south west back into the scattered remnants of Alluvial Woodland vegetation that dot the alluvial plains of Killarney Chain of Ponds.

The immediate views are of the sparse Alluvial Woodland vegetation with grassland and pasture under story.

In the middle distance the creek that is Killarney Chain of Ponds can be seen aligned with significant stands of Alluvial Woodland and is in need of rehabilitation due to disturbance from rural and farming practices.

### **Visual Sensitivity:**

From an ecological stand point the sensitivity of this viewshead is considered to be Medium High. Due to the creeks classification as a 4th order creek and it is required to have an 80m riparian corridor from creek banks and is in need of rehabilitation.

Improved conditions and the requirement for riparian rehabilitation will make Killarney Chain of Ponds a highly visually sensitive area in the future.

### **Visual Effect:**

Any future development in and around this location has been assessed as having a Medium High visual effect due to its ecologically sensitive requirements and 80m riparian corridor.

Preservation of the existing woodlands is necessary to maintain this assessment. The corridor will provide a visual buffer to future development in the adjoining sector of the precinct south of Windsor Rd.

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## PHOTO LOCATION 14

Views looking North from old Hawkesbury Road into Agricultural lots & Killarney Chain of Ponds flood zone.



Photo No 14a: 5052

View looking South West from Old Hawkesbury Road into industrial lots



Photo No14b: 5051





## PHOTO LOCATION 14 - con't

### **Description of Views:**

Photo location 14a is taken from approximately mid way along Old Hawkesbury Rd looking north into cleared pasture land and agricultural practices in the foreground s of Alluvial Woodland vegetation that dot the alluvial plains of Killarney Chain of Ponds.

The immediate views are of cleared pasture land and agricultural practices. The middle distance is dominated by the Alluvial Woodland vegetation and it provides a natural buffer to any future development further to the north.

The open channel that is Killarney Chain of Ponds is in need of rehabilitation due to disturbance from rural and farming practices.

Photo 14b: Is taken from approximately mid way along Old Hawkesbury Rd looking south.

The immediate views are of cleared industrial practice while the middle distance is dominated by the scattered Alluvial Woodland vegetation either side of the transmission easement and provides a natural screen to Windsor Rd.

### **Visual Sensitivity:**

The sensitivity of this viewshead is considered to be Medium due to the viewshead area being contained wholly within the 1:100 ARI flood zone.

It is unlikely that any further development will be permitted within this zone.

### **Visual Effect:**

Any future development in and around this location has been assessed as having a Medium visual effect due to its location within the 1:100 ARI flood plain.

Preservation of the existing woodlands is necessary to maintain this assessment. The vegetation will provide a visual buffer to future development in the north and to the south to Windsor Rd.

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## PHOTO LOCATION 15

Extensive views looking South from Railway Road South over Rural / pastoral properties



Photo No 15: 4982

### **Description of Views:**

Photo location 15

This view is taken approximately 130m to the south east of the corner of Park Rd South and Railway South Rd looking south along the transmission easement. It is taken from one of the higher points of the south western portion of the precinct.

The immediate view is of open pasture under the easement and dominates the foreground. Sporadic and fragmented Cumberland Plain Woodland and exotic species form the fringes.

Glimpses of the southern Blue Mountains can be seen over the fragmented vegetation of the Cumberland Plain.

### **Visual Sensitivity:**

Due to the area's dominant rural farmland character and proximity to the flood plain of Eastern and South Wianamatta Creek the sensitivity of this viewshead is considered to be Medium High.

### **Visual Effect:**

Due to the proximity of the Eastern and South Wianamatta Creek 1:100 ARI flood zone to the south of the image and presence of a transmission easement renders this location as being not particularly suitable for low to medium residential development.

Any future development in and around this location would be better suited to large lot residential or rural estates and as such has been assessed as having a Medium High visual effect.





PHOTO LOCATION 16

View looking north east along Level Crossing Rd from the intersection with Wallace Rd



Photo No 16a: 4970

Views looking west from corner of Level Crossing Road & Railway Road South over cleared pastoral lands



Photo No 16b: 4976





## PHOTO LOCATION 16 - con't



Photo No 16c: 4978

### **Description of Views:**

Photo location 16a

This view is taken from the intersection of Level Crossing Rd and Wallace Rd and is looking north east towards Windsor Rd.

The immediate view is framed to the west by significant remnants of Cumberland Plain Woodland contained within large environmental living lots. The view to the east of the road is framed by front yard plantings of exotic species and low density suburban dwellings.

Photo 16b: This view is taken from the corner of Level Crossing Rd and Railway Rd South and looks directly west over a large farm dam surrounded by cleared farmland. Due to the extensive clearing for farm practices, glimpses of the Blue Mountains can be seen over the surrounding vegetation.

Photo 16b: This view is taken from the southern end of Level Crossing Rd and has extensive views over cleared pastoral lands and the Eastern and South Wianamatta Creek flood plain. The middle to distant views are of the expansive Wianamatta plains and Cumberland Plain Woodland with glimpses of the southern Blue Mountains forming the horizon.

### **Visual Sensitivity:**

Visual Sensitivity of the area captured in photo 16a has been assessed as Medium. It is expected that development will take place in this location and that it may also be suitable for medium density dwellings. Although this location is on slightly elevated ground it is not considered as being visually obtrusive.

However, this location is prominent in the landscape and will require some visual mitigation from landscape buffer planting to road reserves and the opportunity for a vegetated neighbourhood park located along creek line corridors to keep this assessment.

The area shown in image 16b is classified as having a visual sensitivity of Medium High due to its slightly elevated setting and strong connection to the rural character and associated Eastern and South Wianamatta Creek flood plain to the south.

The area shown in image 16c is classified as having a visual sensitivity of Medium High again due to its slightly elevated setting and strong connection to the rural character and associated Eastern and South Wianamatta Creek flood plain to the south.

### **Visual Effect:**

The visual effect of any development in the area to the north along Level Crossing Rd has been classified as Medium.

The visual effect on the area shown in photo 16b and 16c is deemed to be Medium High. Due to the proximity of the Eastern and South Wianamatta Creek 1:100 ARI flood zone to the south of the image and presence of large rural properties, this location is not particularly suitable for low to medium residential development.

Any future development in and around this location would be better suited to large lot residential or rural estates to preserve the rural character of the site and as such has been assessed as having a Medium High visual effect.





## PHOTO LOCATION 17



Photo No: 4968

### **Description of Views:**

Photo location 17

This view is taken from approximately mid way along Wallace Rd looking south east along the road reserve. It is taken from one of the most level points of the precinct.

Looking to the east the immediate view is of open pasture and farms in the foreground. Significant stands of Cumberland Plain Woodland form the middle distance.

The view to the south is of large private rural properties that contain significant stands of native vegetation with cleared pasture grass understory.

### **Visual Sensitivity:**

The area contained within this viewshead has been determined as having a Medium Level of visual sensitivity.

The area is already highly disturbed with large areas, particularly to the north of Wallace Rd, already being utilised for large commercial farming practices.

### **Visual Effect:**

Any future development in and around this location has been assessed as having a Medium visual effect due to its level topography and disturbed condition.

The visual effect of any development to the north and north east along Wallace Rd has been classified as Medium.

The level topography and location of a 2nd order creek line within this location lends itself to being utilised as either enhanced riparian corridor rehabilitation, habitat corridor, sports fields and potentially, a public open space.





PHOTO LOCATION 18

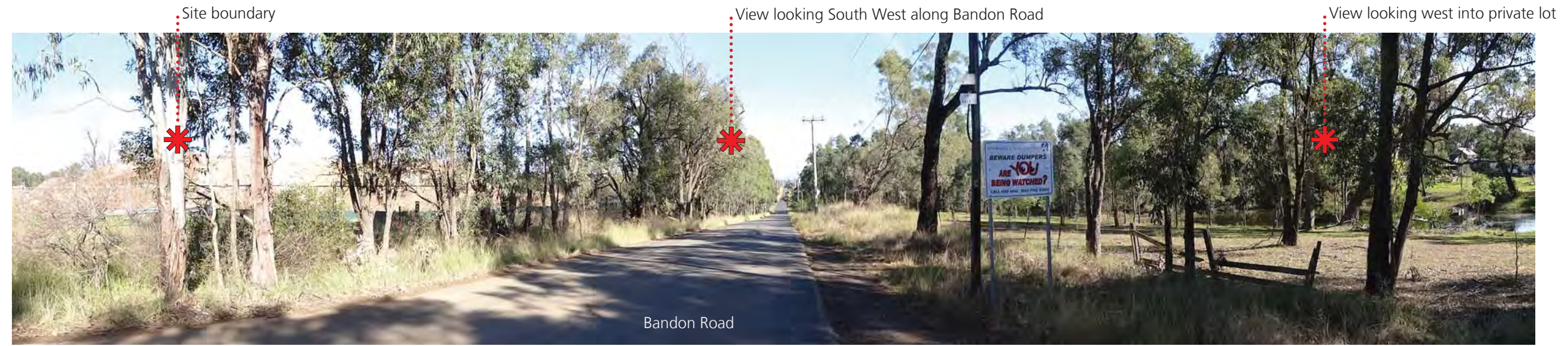


Photo No 18a: 4959



Photo No 18b: 4962





## PHOTO LOCATION 18 - con't

### Description of Views:

Photo location 18a

This view is taken from the corner of Bandon Rd and St James Rd looking south west along Bandon Rd road reserve. It is taken from a perceived high point on a low ridge.

Looking to the south west the immediate view is of fragmented woodland both along the road reserve and further into the private property located to the west.

Photo location 18b

This view is from the most southern point of the site and looks north to north east over large tracts of cleared pasture within a rural allotment. Cleared pastures dominate the foreground while significant stands of existing native vegetation can be seen in the middle distance on elevated ground.

### Visual Sensitivity:

Photo 18a the sensitivity of this viewshed is considered to be Medium High. It is likely that Bandon Rd will become a major connecting road with significant upgrades meaning that future development is likely at this location.

However, this location is prominent in the landscape and will require visual mitigation from landscape buffer planting along road reserves and possible opportunity for a vegetated corner neighbourhood park.

Photo 18b offers views to the north and north east and is regarded as having a visual sensitivity of Medium High as the views are of an elevated position dominated by significant stands of existing native vegetation that provides a natural buffer to any future development further to the north of the precinct.

### Visual Effect:

The visual effect on the area shown in photo 18a and 18b is deemed to be Medium High due to the proximity of the Eastern and South Wianamatta Creek 1:100 ARI flood zone to the west of the image and presence of both large rural properties and environmental living estates that help preserve the low ridge line vegetation and bush character. This location is deemed to be not particularly suitable for low to medium residential development.

Any future development in and around this location would be better suited to large lot residential or rural estates to preserve the rural / bush land character of the site.

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## PHOTO LOCATION 19

Views looking North East along Bandon Road from small high point.

Site boundary



Photo No 19: 4957

### **Description of Views:**

Photo location 18a

This view is taken from approximately 220m from the intersection of Bandon Rd and Wallace Rd looking north east along the Bandon Rd road reserve.

Looking to the north east the immediate view is of existing disturbed native vegetation to the eastern site boundary line with large residential allotments and retirement living housing nestled amongst sporadic and fragmented woodland frames the western view.

### **Visual Sensitivity:**

Views to the north and north east are regarded as having a visual sensitivity of Medium High as it is located on a possible future sub arterial or collector road.

### **Visual Effect:**

Any future development in and around this location has been assessed as having a Medium High visual effect.

The visual effect of any development to the north and north east along Bandon Rd will have a significant visual effect on the existing landscape character due to the opportunity to provide increased residential densities along the proposed construction of a sub arterial or collector road.





## PHOTO LOCATION 20



Photo No 20: 5007

### **Description of Views:**

This view is taken from Windsor Rd at the corner of Otago Street looking east south east over the flood plain of the Killarney Chain of Ponds.

Looking to the east the immediate view is of open pasture of the flood plain in the foreground. Sporadic and fragmented Alluvial Woodland dot the flood plain while large stands of Alluvial Woodland along the Killarney Chain of Ponds forms the middle distance.

The south east view is of the Windsor Rd corridor with a significant stand of existing native vegetation forming the back ground within the adjoining site.

### **Visual Sensitivity:**

From an ecological stand point the sensitivity of this viewshead is considered to be Medium High. Due to the creeks classification as a 4th order creek and as such it is required to have a 80m riparian corridor and is in need of rehabilitation.

Improved conditions and the requirement for riparian rehabilitation will make Killarney Chain of Ponds a highly visually sensitive area in the future.

### **Visual Effect:**

Any future development in and around the location of Killarney Chain of Ponds has been assessed as having a Medium visual effect due to its ecologically sensitive requirements and extent of the 1:100 ARI event close to Windsor Rd.

The visual effect of any development within the flood zone to the left of the image is determined not particularly suitable for large scale residential development and therefore lends itself to being utilised as either environmental living allotments or further increased riparian and habitat corridors with potential for some public open space.





### 3.2 Summary of Existing Conditions Visual Analysis.

In summary, there are three significant and visually sensitive areas within the precinct of Vineyard (Refer to Figure: 14) and they include the following:

- Cumberland Plain Woodland vegetation to the northern ridge line;
- Alluvial Woodland to Killarney Chain of Ponds and associated 1:100 ARI flood plain; and
- Present rural characteristics to the south of Railway Rd South and north of the Eastern and South Wianamatta Creek flood plain.

Based on the significance of the above visually sensitive elements a summary of the findings of this visual analysis study is as follows:

- Any development within the above mentioned visually sensitive areas is required to provide a stringent visual impact report for each stage of development that falls within this visual catchment.
- The existing Cumberland Plain Woodland on the ridge lines and Alluvial Woodland occurring along Killarney Chain of Ponds are important visual and natural buffers to any future development and should be retained as much as possible.
- The existing Cumberland Plain Woodland and rural land use characteristics to the southern boundary of the site are considered important visual and cultural drivers to any future development and should be retained as much as possible.
- Appropriate land use zoning with adequate planning controls on building heights, set backs, materials and finishes would be required in order to protect and enhance the rural character of the precinct.

## 4.0 Landscape and Visual Guidelines

### 4.1 Findings

#### 4.1.1 Remnant Vegetation

The north eastern and south western portion of the precinct is identified as containing a relatively large cover of remnant trees, including trees located along existing streets and property boundaries and provide important elements of shade and habitat. In conjunction with the substantially forested ridge line and the alluvial forest of the Killarney Chain of Ponds riparian corridor, these and other remnant stands of trees provide an opportunity to create a distinctive woodland character within this precinct.

#### 4.1.2 Riparian Corridors

The riparian corridors provide the opportunity for strong, relatively homogeneous structural landscape elements permeating through the site. This effect is proposed to be extended through the use of endemic tree species to all streets adjoining the corridor. The riparian corridors should be managed as diverse, relatively low maintenance, self-regenerating areas using bush regeneration techniques, including integrated management of asset protection zones by a qualified bush regenerator.

Overall, the site should have a strong natural focus, utilising endemic species, and comprise a system of floodplains, riparian / open space corridors, parks, woodland reserves, open water and wetlands that permeate the site. Thus creating a visually unifying element, that is distinct from the urban landscape through which it weaves.

#### 4.1.3 Views

A large portion of the site to the south west offers extensive and visually compelling views south west over the plains to the Blue Mountains, particularly from the higher areas within the grazing land to the south west of the precinct. Views of the Blue Mountains are also provided from the western slopes of the northern linear ridge line. Views are also afforded from the north eastern elevated land looking east over the rural lands towards Box Hill. Significant views beyond the site in other directions are generally screened by vegetation, either on or beyond the site boundary.

With future development the currently extensive views to the Blue Mountains may in the main be lost, as a result of the very gentle slopes of the site. Key opportunities to retain views to the Blue Mountains are from:

- The western fringe along Commercial Rd where, in conjunction with development controls on height, extensive views to the mountains can be retained;
- The elevated pastoral lands to the south west of the precinct overlooking the Eastern and South Wianamatta Creek floodplain, where observer locations allow for views above it to the mountains; and
- From new roads that could run along elevated lands that are both sloping and orientated towards the mountains, which would create tightly focussed views seen through avenue planting.

#### 4.1.4 Urban Development

All new development within the study area should comprise contemporary, sensitive urban design and architectural responses. Roof colours should be controlled throughout the site to ensure the development is visually recessive. All streets should be strongly tree-lined, providing a legacy of shade in the public realm, and residential development setbacks should be sufficient to allow for the planting of two trees within both the front and rear gardens.

Water sensitive urban design (WSUD) methods should be implemented to assist with the passive watering of trees in streets and parks, in conjunction with cleaning of road run-off prior to it entering waterways.

### 4.2 Recommendations

Drawing upon the findings of the initial assessment process, the following landscape and visual guidelines are provided as a framework to assist the creation of an Indicative Layout Plan for the Precinct and for informing future development control plans and detailed landscape management plan to be prepared at the development application stage.

On the basis of the above assessment, the following landscape and visual guidelines have been developed:

#### 4.2.1 Remnant Vegetation

Approximately two thirds of the precinct is effectively devoid of trees, most notably the Killarney Chain of Ponds flood plain, where tree cover is essentially limited to riparian corridor remnants and individual paddock trees. Exceptions comprise some substantial patches of regrowth woodland adjoining the fringes of the southern portion of the precinct, the north eastern portion of the precinct comprises of several substantial stands of native vegetation that are mainly concentrated on or around the elevated ridge line.

These remnants comprise valuable resources in terms of reflecting the previous natural communities that once covered the site, and providing immediate mature, shade giving and visually cohesive tree cover for new urban development. All efforts should be taken to retain and strengthen the woodland character of the site as it will assist in mitigating the effects of future development in and around the site and from external views into the precinct. It is recommended that the following identified remnants be conserved as follows:

It is recommended that primarily the ridge line remnants be conserved and incorporated into either parks, woodland reserves, or potentially zoned as environmental living, etc. A further large woodland remnant that lies to the west of the study area could be incorporated as a large reserve or landscape buffer to assist in mitigating the effects of any future development in and around this part of the site.







**LEGEND**

- ..... Vineyard Precinct Boundary
- ||||| Existing Transmission Easement
- Rural land looking over the Eastern & Wianamatta Creeks flood plain
- Alluvial Woodland to Killarney Chain of Ponds flood plain
- Cumberland Plain Woodland Northern Ridge Line





The south western portion of the precinct, although significantly pastoral and rural in nature, contains a substantial patch of endemic tree cover, many of which run along the rail corridor, streets and property boundaries. The precinct is distinctive within the context of the overall release area, with regard to the relative extent of remnant endemic tree stands it contains.

Retention of these trees could be affected by:

- Subdivision and associated legal processes;
- Level changes associated with roads and buildings, civil engineering (cut and fill), and associated changes in water tables;
- Driveway, services and utility crossings and routes;
- Construction methods; and
- Maintenance requirements.

These factors will need to be considered when developing strategies for the retention of the trees, especially those within private properties and on property boundary lines.

The following recommendations are made with regard to vegetation within this portion of the precinct:

- That the trees discussed above and as a minimum be considered for conservation and incorporation into the fabric of this precinct, as street trees or roadside parks / reserves within a widened road corridor;
- That other substantial endemic tree remnants within the precinct be considered for use as pocket parks or similar;
- That where trees are retained, a well considered WSUD / drainage system is implemented to facilitate passive watering of trees;
- That roads, utilities, drainage and property boundaries be offset from trees to be retained;
- That the above listed remnants be incorporated into the urban fabric of the precinct, and supplemented with further substantial endemic tree planting to create a residential / woodland precinct setting; and
- That a Plan of Management be prepared for all trees retained as outlined above.

#### 4.2.1.1 Large remnant area

Where large stands of remnant woodland are found it is recommended that these remnants (or a substantial portion of) be conserved within urban development, e.g. as a parks and pedestrian / bicycle share ways network or retention within widened road reserves as avenue planting or urban development edge reserves.

### 4.2.2 Views

For views beyond the site, guidelines have been provided to:

- Maintain and develop views from the ridge line and all points west and south west of the ridge line out towards the Blue Mountains;
- Identify and maintain views to the Blue Mountains from above the Eastern and South Wianamatta Creeks floodplain;
- Facilitate the alignment of roads along the ridge lines that fall and are east west orientated towards the Blue Mountains and north south towards the grazing farmland of the Killarney Chain of Ponds and Eastern and South Wianamatta Creeks flood plain, to provide focal views to the mountains and the existing rural character of the precinct; and
- Maintain and develop views looking east along streets towards the rural views of Box Hill.

### 4.2.3 Natural Landscapes

The site should have a strong natural areas focus, utilising endemic species, and comprising a system of floodplains, riparian / open space corridors, parks and woodland reserves. These should permeate the site, creating a visually unifying element that preserves the rural / woodland character of the site.

### 4.2.4 Riparian Corridors

Management of the riparian corridors comprises the following key recommendations:

- Riparian corridors should be designed and managed as species rich communities characteristic present on the site, that are managed to be effectively self-regenerating, by a bush regenerator using woodland management techniques;
- Asset Protection Zones within riparian forest edges should utilise low shrub and ground layer species from the riparian forest community, which are designed to provide a woodland edge buffer function, and which are managed for fuel loads by the bush regenerator in conjunction with training and auditing by a bush fire management specialist;
- All woodland areas should have a strong management edge such as a pathway or roadway that reduces weed infestation opportunities from adjoining landscaped areas;
- Where riparian corridors are set back from perimeter roads, substantial open views across grassed 'flood terraces' to the riparian corridor should be maintained, that are reflective of the previous rural character of the site;
- Street tree planting on riparian corridor perimeter roads should comprise endemic species where possible and that are reflective of the previous rural character of the site; and
- Where power line easements cross over or travel alongside and within the designated riparian corridor:

- Ground planting should be restricted to ground and shrub layer only, and be managed by a bush regenerator as required to maintain required heights,
- Minimum required clear zones should be negotiated with the electricity supplier; and

- Prepare a Plan of Management for all riparian corridors.

### 4.2.5 Urban Development

The following is recommended:

- All new development within the site should comprise contemporary, sensitive urban design and architectural responses;
- Roof colours should be controlled throughout the site to ensure the development is visually recessive, e.g. using muted colours;
- Streets within the precinct should be strongly tree-lined, providing a legacy of shade in the public realm. Plant trees along all streets to maximum intervals of 10m on both sides of the street;
- For residential development, street front setbacks should be consistent with the setback controls within the Growth Centres DCP to allow for tree planting in private properties;
- Allow for the planting of a minimum of two trees to each of the street front and rear boundary setbacks;
- Implement water sensitive urban design (WSUD) methods to assist with the passive watering of trees in streets, parks and to clean road run-off prior to it entering waterways; and
- Plant trees around the edges of playing fields to enhance visual qualities of these areas and provide shade.

