# Landscape and Visual Assessment

# Lakeside Golf Club – Camden Proposed Senior's Retirement Village Development

Prepared by



**RPS Australia East Pty Ltd** 

16/01/2018

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# I.0 Executive Summary

The visual impact assessment has been prepared by RPS on behalf of Western Suburbs League Club (Campbelltown) Ltd for a proposed senior's village development (the Proposal) at the Lakeside Golf Club - Camden in Catherine Field. The assessment process included a review of; aerial photography, contour maps, Camden Council's DCP, computer generated images (CGI) and detailed field inspections.

Six key viewpoints were identified by Camden Council and reviewed as part of the assessment for the senior's village development in relation to the existing visual and landscape character and to assess the visual impact of the Proposal within the existing landscape and visual context.

The study found that while there are opportunities to view the Proposal from the identified locations, visual impacts generally range from low to negligible due to a range of factors including existing trees, land form and distance.

The view of the proposal from the heritage listed Gledswood Homestead is one of the most critical viewpoints of the 6 assessed, and is considered to have a Moderate visual impact rating. Although the Magnitude rating of the viewpoint was considered Low, this Moderate rating is due to the high Sensitivity of the view. This rating, however, can be reduced through the implementation of mitigation measures discussed in subsequent chapters.

The proposed senior's village should be considered within the broader existing visual context which contains large scale, utility infrastructure as well as a more suburban character created by the current and future residential developments occurring at the Hermitage, Crest and Emerald Hills. Furthermore, the proposed 380 residential houses on the Camden Lakeside Golf Course itself should also be considered.

In light of the findings in this report, the anticipated visual impacts that will be created by the Proposal are considered to be acceptable for the area.

# 2.0 Acronyms and Glossary

AHD	Australian Height Datum
EP Act	Environment Protection Act 1994
Horizon Line	In perspective drawings, this is a horizontal line across the picture. It is always at eye level, & its placement determines the viewpoint position - a high place, or from close to the ground.
Landform	The shape and form of the land surface which is the result of the action and interaction of natural and/or human factors
Landscape Character	A distinct recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse
LGA	Local Government Area
LEP	Local Environmental Plan
LIIEMA	UK Landscape Institute and Institute of Environmental Management & Assessment
Magnitude	A term that combines the judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration
Photogrammetry	The use of photography in surveying and mapping to ascertain measurements between objects
RMS	New South Wales Roads and Maritime Services
Sensitivity	A term applied to visual receivers, combining judgments of the susceptibility of the receiver to the specific type of change or development proposed and the value related to that receptor
Site of Works	Refers to the geographical area where the proposed work will occur
Theodolite	A surveying instrument with a rotating telescope for measuring horizontal and vertical angles
The Proposal	In this report, refers to the proposed senior's retirement village development
Scenic amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area
Visual receiver	Individuals and/or defined groups of people who have the potential to be affected by the proposal

# 3.0 Introduction

RPS has been engaged to prepare a visual impact assessment (VIA) on behalf of the Western Suburbs League Club (Campbelltown) Ltd (WSLC) for a proposed senior's retirement village development (the Proposal) at the Lakeside Golf Club - Camden (LGCC) in Catherine Field a suburb southwest of Sydney.

The study area is located at 50 Raby Road approximately 10 kilometres southwest of Liverpool, 5 kilometres north-west of Campbelltown and 60 kilometres south-west of the Sydney CBD, Refer also Figure 1.



Figure 1 - Location Map

# 3.2 Background

The WLSC currently operates the LGCC (Lot 101 DP 1206855) and is looking to develop a Retirement Village on the site. The development is within Camden Council Local Government Area (LGA) and are subject to Council's planning controls.

### **3.3 Purpose of the Report**

This visual assessment and related Computer Generated Images (CGI) are being undertaken to assess the visual impacts from six key viewing locations. These viewpoints were identified by Camden Council and have been prepared to provide the basis for discussion regarding opportunities for modifications to existing planning conditions, provide additional planning options for consideration and mitigation measures that may assist in creating successful and agreed planning and design outcomes.

This assessment also considers the existing and expected future context of the LGCC site and surrounding areas.

### 3.4 Methodology Summary

The following is a summary of the methodology employed for the visual assessment. The primary objective of this study is to evaluate and determine the potential visual significance of the Proposals on people living, working or recreating in the surrounding areas.

The following methodology is used and involved;

- A preliminary contextual analysis involving site inspections & character study for the area
- Description and evaluation of the existing landscape character, and the visual environment to establish a baseline for the visual assessment
- Preparation of CGI imagery for 6 key viewpoint locations to assist with assessment
- Visual impact assessment considering visual sensitivity (of the viewpoint) and the magnitude of the visual change, to arrive at an overall level of effect or impact.

### 3.5 Key Terms

The following key terms and definitions are used in the in the visual assessment and are key to understanding the report.

#### Sensitivity

Visual sensitivity refers to the character of a setting, the quality of the view, and how sensitive it is to the proposed change. Combined with magnitude, sensitivity provides a measure of impact. Visual sensitivity relates to the direction of view and the composition of the view.

A judgement has been made as to the quality of the landscape, its cultural importance to the community, scenic quality, and overall composition of the place and its inhabitants. The following sensitivity judgements have been used as the basis for this assessment:

- Places with high social, recreational, and historical significance to local residents have higher sensitivity.
- Generally, water and natural environments are more highly valued than modified areas, though views
  over rolling farmland are still highly valued.
- Areas of unique scenic quality have higher sensitivity.
- A pristine environment would have greater sensitivity with less ability to absorb new elements in the landscape than modified landscapes or those areas with contrast and variety of landscape types.
- The number and frequency of viewer's effects sensitivity, with retail, residential and open space viewers generally more sensitive than workers and motorists.

#### Magnitude

The magnitude of a visual effect is the degree of change the visual landscape undergoes as a result of the proposed development. It is the measurement of the overall scale, form and character of a development proposal when compared to the existing condition. Magnitude also takes into consideration the distance between the viewer(s) and the proposal. Judging the magnitude of visual effects takes account of;

- The scale of the change within the view with respect to the addition (or loss) of elements in the view and change to its composition. This includes the proportion of the view that is taken up by the proposed development.
- The degree of change and/or integration of any new features or changes in the landscape in terms of form, scale and mass, line height, colour and texture.
- The nature of the view of the proposed development and whether the views are permanent, full, partial or glimpses.

A high magnitude results if the project is a major development or piece of road infrastructure and contrasts highly with the surrounding landscape, or entails heavy modification of the existing landscape, for example, the large scale removal of existing vegetation. A moderate magnitude rating would result if the project is moderately integrated into the landscape. A low magnitude rating would occur if the project is of a small scale and integrates well into the landscape.

The magnitude impact rating also considers whether the project has a positive or negative impact on the landscape character of the zone. For example, a project may be of a large scale but may provide beneficial outcomes such as increased open space, enhancement of the areas 'sense of place', and better connectivity and a safer road environment.

#### **Visual Absorption Capacity**

The concept of Visual Absorption Capacity (VAC) relates to an estimation of the capacity of the landscape to absorb development without creating significant visual changes resulting in a reduction in the existing scenic quality. The capacity to absorb development is primarily dependent on vegetation cover, landform and the presence of other development.

Landscapes with a low visual permeability have higher capability for visual absorption. Landscapes that are complex, such as ones that include a mix of scale, forms and lines and screening vegetation also have high visual absorption capability.

### 3.6 Visual Assessment Grading Matrix

The Visual Impact grading Matrix below has been excerpt from the Roads and Maritime Services NSW, and is used in chapter 4 in order to provide a visual impact rating by combining values for sensitivity and magnitude to establish a visual impact rating.

		High	Moderate	Low	Negligible
	High	High Impact	High-Moderate	Moderate	Negligible
וחחם	Moderate	High-Moderate	Moderate	Moderate-Low	Negligible
INIGUII	Low	Moderate	Moderate-Low	Low Impact	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Sensitivity

Figure 2 - Visual Impact grading Matrix, Roads and Maritime Services NSW (2013)

# 3.7 Scope and Limitations

This assessment is intended to be an objective report based on professional analysis of the proposed current design. It seeks to establish the anticipated visual impacts of the proposal on a wide range of viewers. The assessment has been undertaken based on information provided by others and therefore must make conclusions based on certain assumptions regarding the design. Wherever possible, these assumptions are stated in the report.

The services undertaken by RPS under the Contract in connection with preparing this report were limited to those specifically detailed in the Contract and this report and are subject to the scope limitations set out in the Contract and this report.

Other than as expressly stated in this report to the contrary, the opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. RPS has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by RPS described in this report. RPS disclaims liability arising from any of the assumptions being incorrect.

# 4.0 Proposal Overview

The following is a summary description of the Proposals noting the main features that relate to this visual assessment. This summary provides an overview of those elements that may impact on the surrounding visual environment.

### 4.1 The Proposal

The WSLC is proposing to develop a new retirement village within the existing golf course. The development is within the LGCC site. The retirement village is south of the existing LGCC lake and club house in an area currently occupied by the golf course fairways. The Proposal and surrounding key developments are shown in Figure 3.

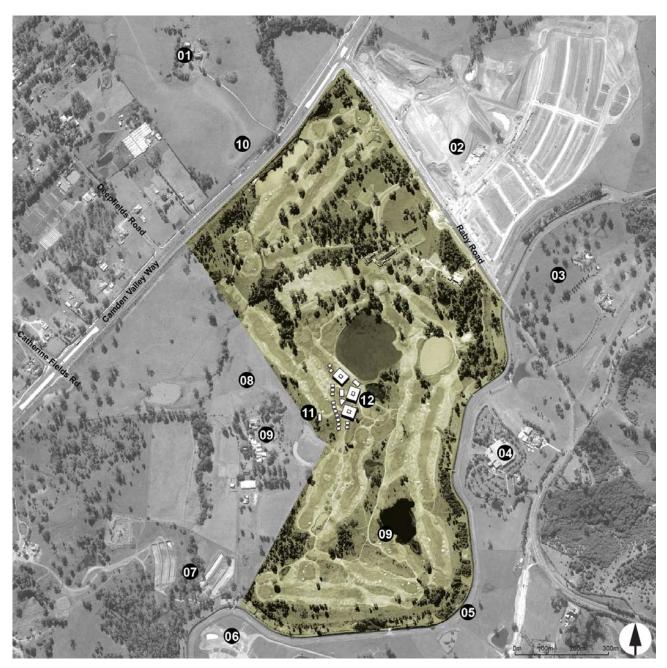


Figure 3 – Location and Context

#### KEY

1. Raby House	7. Gledswood Ponds
2. "Emerald Hills" residential development	8. The Hermitage - future residential and golf course
3. Rural private residential properties	9. Gledswood Homestead
4. Assembly Hall of Jehovah's Witness	10. Rural private residential and agricultural properties
5. Existing Water Canal	11. DA approved maintenance shed (approx. 20x8m)
6. "Crest" residential development	12. Proposed senior's retirement village (proposal 09)

The timing and staging of the implementation of the Proposal is not known but would be subject to a range of factors including but not limited to; funding, access and planning approval.

### 4.2 Senior's Village

The proposed design of the senior's village development is indicated in oblique aerial images shown in Figure 4 below as prepared by Thomson Adsett.





# 5.0 Contextual Analysis

The following chapter is a review of the study area's main urban and environmental characteristics. An understanding of the local context provides the basis for the understanding of the existing landscape context and visual baseline.

# 5.I Site

LGCC is an 18-hole golf course encompassing an area of approximately 100 hectares. The golf course and club are set in a rural area with gently undulating terrain with remnant native (Eucalyptus species) trees interspersed around the site. There is also a permanent water body, which contributes to the overall aesthetic of the golf course and club. The existing club house building consists of a restaurant, conference facility and pro-shop.



Figure 5 – Lakeside Golf Club Camden views

### 5.2 Local Context

The below images represent key physical elements surrounding the LGCC to help illustrate the surrounding landscape character and context.

The area is characterised by rural farmland and large lot, private rural properties. Camden Valley Way provides a major vehicle connection to the north and south just west of the site. The area is also known for sport and recreation with other golf facilities in the area such as the Country Club Camden Valley, Macarthur Grange Country Club and the Camden Golf Club. Areas to the north, south and west of the LGCC are currently being developed into low density suburban residential development.



**Emerald Hills Residential Development** 

Raby Road looking north

The Assembly Hall of Jehovah's Witness, to the east of the site, contains a hall with coach drop off, car parking area, proprietor's residence and ancillary structures as well as maintained lawn and garden areas.



Assembly Hall of Jehovah's Witness coach arrival

Assembly Hall of Jehovah's Witness



View north of the "Crest" residential development and wider landscape

Upper Canal, which runs to the east and south of the site is listed under Schedule five as a NSW State Heritage item.





Upper Canal bridge

Upper Canal looking west



View north from former Caballo Blanco site



Country Club Camden Valley



View south from Country Club Camden Valley car park

Gledswood Homestead and Raby House are west and northwest respectively. Gledswood is an Australian colonial farm with many of its original buildings that date from the early 1800's.



Gledswood Homestead



View from the proposal location / ILU - looking towards Gledswood Homestead. The homestead can just be seen beyond the existing vegetation.



View East from Raby House

### 5.3 Planning Context

The LGCCsite of works contains various land use zones including R1 General Residential, RE2 Private Recreation and E2 Environmental Conservation, refer also Figure 6.

The proposal land is zoned RE2 and is a prohibited use as senior's housing under the provisions of the CLEP 2010. Permissibility of the development is provided by the provisions of State Environmental Planning Policy (Housing for seniors or People with a Disability) 2004 (SEPP). The provisions of the CLEP 2010 apply to the site so far as built form & affectations on the site however further the SEPP identifies built standards that cannot be used to refuse development consent for such facilities and include:

- **building height:** if all proposed buildings are 8 metres or less in height; or
- density and scale: if the density and scale of the buildings when expressed as a floor space ratio is 1:1 or less

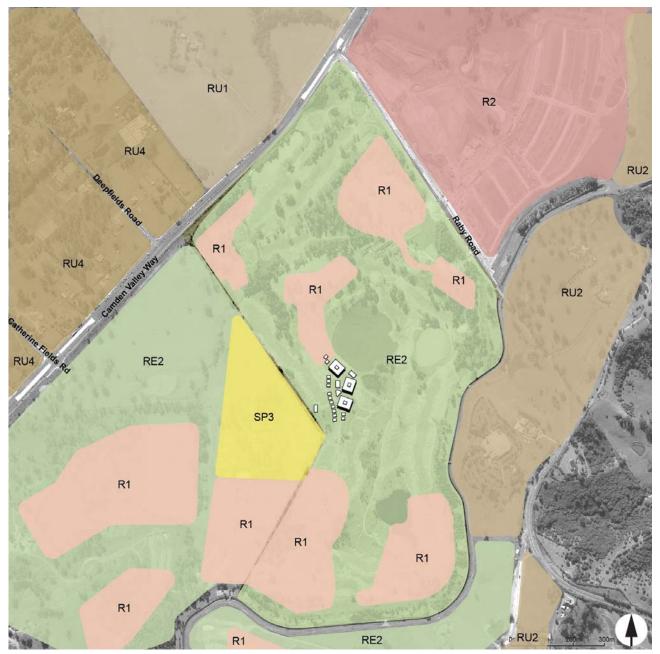


Figure 6 - Land Use Zoning Diagram

KEY	
R1	General Residential
R5	Large Lot Residential
RE2	Private Recreation
E2	Environmental Conservation
SP3	Special Purpose
RU1	Primary Production
RU2	Rural Landscape
RU4	Primary Production Small Lots
SRGC	SEPP Sydney Region Growth Centres

### 5.4 Topography

The site and surrounding areas include ridgelines and rolling hills within the visual context of the Greater Blue Mountains to the west. The topography of the site of works and surrounding area is typical of the Cumberland Plains, consisting of gently rolling foot hills with local relief of 90-140 metres. Slopes are generally less than 5 percent but sometimes to 10 percent and occasionally between 10-30 percent.

A ridge line running east-west, & extending north with a high point of 140 metres AHD occurs to the south & east of the proposal. The proposals are approximately between level 100 to 110 AHD, refer also Figure 7.

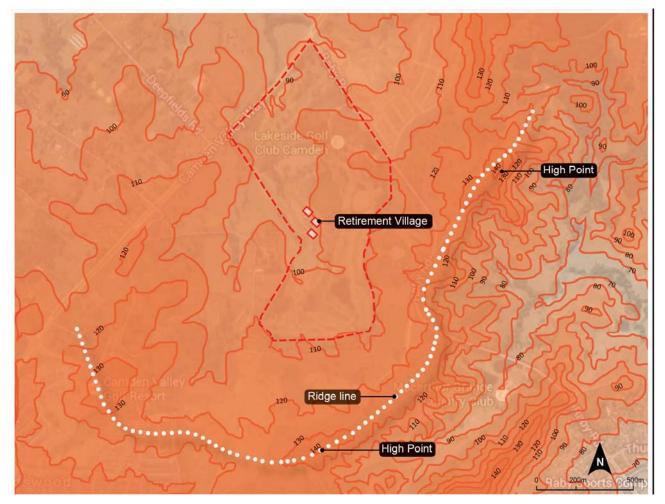


Figure 7 - Existing Landform

### 5.5 Surrounding Development

Areas to the north, west and south of the LGCC are currently undergoing significant evolution from a primarily rural landscape to a highly urban environment. Land release areas are being developed for (primarily) residential housing to the north and south. To the east there are current planning proposals that have been a by the authorizing local government to rezone land from rural uses to transitional large lot residential or medium density development. There is also a golf course indicated to the west as part of the Future Hermitage estate development.

Figure 8 is a composite of existing satellite aerial imagery overlain with masterplans obtained from website information for each of the proposed developments.



Figure 8 - Surrounding Development

The diagram indicates that surrounding areas will undergo significant changes to the landscape character from its existing rural character to a suburban character. The extent of changes to the landscape is significant as the surrounding landscape setting should be considered with regards to the proposed development at the LGCC.

# 6.0 Visual Impact Assessment

The visual impact assessment of the potential future senior's village has been undertaken through field observations, consideration of the current and future landscape character and analysis of the anticipated change to existing views that may occur as a result of the implementation of the future development post construction.

# 6.1 Viewpoint locations

A total of six viewpoint locations have been assessed. The locations have been selected based on Camden Council's concerns regarding the potential for visual impacts on existing vistas of the rural landscape to or from key historic locations in the areas surrounding the proposed developments, refer also Figure 9.

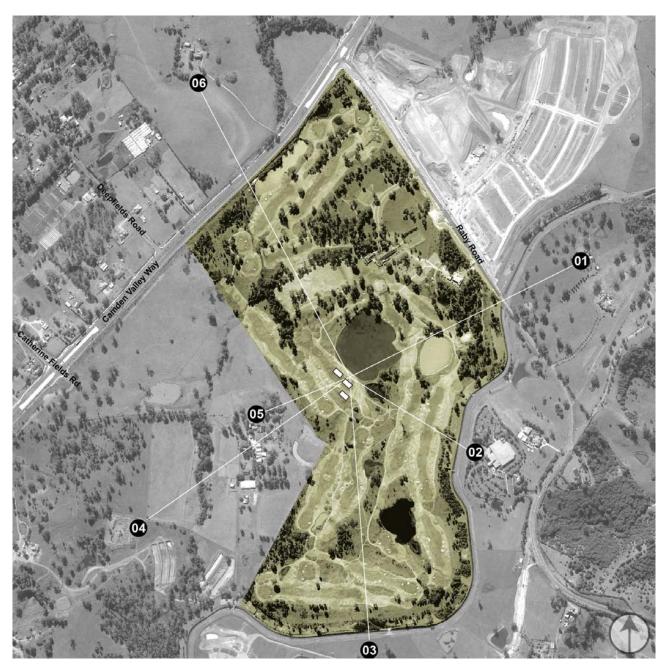


Figure 9 - Representative Viewpoints and distances

### 6.2 Assessment Methodology

Each of the six viewpoints is assessed utilising digital technology combined with survey information also known as *Photogrammetry* resulting in the creation of CGIs that simulate, with survey accuracy, how the proposed developments will be seen from a location and visual receivers. Following is an outline of the process involved in the development of CGIs.

A CGI combines a digital photograph with a computer generated, 3D model of the proposed development. The CGI process employed for this visual assessment was developed by RPS in conjunction with Emeritus Professor John Fryer of the school of Surveying and Photogrammetry at the University of Newcastle.

A ground survey was first undertaken to establish a survey control network and coordinated marks at the locations where the photographs were taken. This allowed an accurate determination of the location of the camera and direction and tilt of the photograph.

A Canon EOS 650D with Canon EF 24mm fixed focal length lens was used to take the photographs. This camera and lens combination is calibrated with Photogrammetry software so that lens distortion and exact focal length can be determined. The camera was then mounted on top of a WILD T1000 theodolite with a custom made bracket to align the camera with the theodolite in order to eliminate camera roll.

The position and orientation of the camera was calculated during the field survey taking into account the height and tilt of the camera mounting system. Direction and orientation for each of the photos was recorded at the time of capture.

The proposed buildings were then "modelled", positioned and coloured from plans and information supplied from outside sources. Spatial accuracy is ensured through the use of "real world" coordinate systems.

A virtual camera in the CAD package was used to exactly simulate the location, orientation and specifications of the camera used to take the actual photos. Thus, when the proposed buildings are built, the view through the virtual camera will look the same as the CGI view. The EF 24mm lens is specifically used for this process as it accurately represents the field of view and magnification of the human eye and therefore this methodology and equipment represent a survey accurate view and model combination.

# 6.3 Viewpoint I – 121 Raby Road

#### Extent of subject site



Figure 10 - View west towards the retirement village from private property

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
The selected viewpoint represents views from rural residential visual receivers in dwellings, refer Figure 10. Visual receivers in private dwellings generally have open views of the surrounding areas and potentially long viewing times, thereby a potentially higher sensitivity to changes in the visual environment.	The proposed retirement village is located to the west of the viewpoint location. Existing foreground views consist of a mix of open grassland, post and rail boundary fencing and a mix of native and exotic trees at varying maturity. Middle ground views include a consistent, continuous and predominantly native mature tree canopy. The Blue Mountains can also be seen in the distance. The scenic amenity of this view would generally be considered to be moderate- high due to the minimal appearance of urban development.	It is unlikely that the proposed retirement village will alter the existing views it will be hidden from view by existing tree canopy and vegetation. Magnitude rating = Negligible Sensitivity Rating = Moderate	All elements of the retirement village will be screened by existing trees, therefore there would be no discernible change to the view. A <b>negligible</b> visual impact rating results when combining sensitivity and magnitude in the grading matrix (Figure 2).

# 6.4 Viewpoint 2 - Assembly Hall Of Jehovah's Witness (Ahjw)



Figure 11 - View northwest towards the proposed retirement village development

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
This viewpoint represents views from the western perimeter of the AHJW property adjacent the car park, refer Figure 11. Visual receivers may be temporary users of the car park areas and along the western areas of the property.	The proposed retirement village is located to the northwest of the viewpoint location. The view is of a modified landscape with gently undulating terrain including foreground views of open mown grass areas, post and chain mesh boundary fencing, a water canal with adjacent gravel access road, utility poles, wires and signage. Partial glimpses of the golf course exist through a mix of native trees, mid-storey and lower screen plantings of varying height and maturity. The Blue Mountains can also be seen in the distance. The scenic amenity of this view would generally be considered to be moderate-low considering the golf course development and the presence of a gravel service road, fencing, canal and services infrastructure.	The proposal will be partially screened by existing low-level vegetation and a Norfolk Island pine (Araucaria species) with some portions of the eastern facades and roof potentially visible. Magnitude rating = Low Sensitivity Rating = Low	Although the retirement village will introduce a new element, views are filtered by existing vegetation. The height of the retirement village is lower than the distant tree canopy and horizon. This results in a Low impact rating.

# 6.5 **VIEWPOINT 3 – Rural Residential Area (south)**



Figure 12 - View north of the proposed retirement village

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
This viewpoint is located along an existing private access road near rural residential properties to the south of the proposal, refer Figure 12. Visual receivers in private dwellings generally have open views of the surrounding areas and potentially long viewing times, thereby a potentially higher sensitivity to changes in the visual environment.	Foreground views consist of open grassland, post and chain boundary fencing. The view contains construction earthworks & street pole lighting for a new residential development. Middle to long distance views include tree canopy and existing residential dwellings dotted along a continuous ridge to the north. Power lines and a support tower are strong urban elements in the view. Scenic amenity is considered low due to the predominance of urban development.	The proposal will be partly screened by existing low- level vegetation with some portions of the southern facade and roofs visible. Future development in the foreground may become the dominant visible element within view depending on the height, scale & spacing of the structures. Magnitude rating = Low- negligible Sensitivity Rating = Low	The proposal is part of a changing landscape to more suburban. A <b>low or</b> <b>negligible</b> visual impact rating results when combining sensitivity and magnitude in the grading matrix (Figure 2). The VAC is considered high considering the context of a semi- urban and rural landscape.

# 6.6 Viewpoint 4 - Gledswood Ponds



Figure 13 - View northeast of the proposed retirement village

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
The selected viewpoint represents views from the Gledswood Ponds area. From this viewpoint there are open views of the surrounding semi- wooded, rural landscape, refer Figure 13.	Foreground views consist of a mix of open grassland and mown grass areas with scattered remnant native trees. Middle ground views are occupied by a fairly consistent, continuous and predominantly native mature tree canopy. Partial views of the Gledswood Homestead property car park and homestead buildings are evident in the middle ground along with power lines and a tower as well as a rural access road to the west. A tree-lined ridge contains views to the north. This view would generally be considered of a Moderate scenic amenity due to a mix of visible development in a rural setting.	Partial views of the southern and western facades are likely to be possible through existing tree canopies. Magnitude rating = Low Sensitivity Rating = Moderate	The proposed retirement village will be lower than the existing ridge line and obscured by trees in the foreground. A <b>negligible</b> visual impact rating results when combining sensitivity and magnitude in the grading matrix (Figure 2).

# 6.7 Viewpoint 5 - Gledswood Homestead



Figure 14 - View northeast of the proposed retirement village

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
The selected viewpoint represents the main & most exposed view of the proposal, for temporary visual receivers such as tourists and/or patrons visiting the gardens and longer stay workers with generally open views to the northeast, refer also Figure 14.	Foreground views consist of trees, hedges & planting associated with the gardens. Middle ground views consist of golf course effects. More distant views are curtailed by a continuous existing tree canopy with a utility tower and power lines being a prominent element in the view. The existing golf club house building is just visible through trees. The view would be considered of a moderate-low scenic value taking into consideration both the foreground garden settings, the golf course and utility infrastructure.	Open views of the proposed retirement village building facades and roofs will be possible within an identifiable distance which will replace current views of the golf course. Magnitude rating = Low Sensitivity Rating = High	The retirement village will change the existing character of the view from a more pastoral managed landscape to a suburban character, so the Sensitivity Rating is <b>High</b> . However, in consideration of the approved development planned in neighbouring properties, the Magnitude Rating is considered <b>Low</b> , therefore resulting in a <b>Moderate</b> visual impact.

# 6.8 Viewpoint 6 - Raby House



Figure 15 - View southeast towards the proposed retirement village

Description	Existing Visual Condition	Changes to Visual Environment	Visual Impact
The selected viewpoint is representative of a residential visual receiver in a rural residential property with generally open views to the east and of the surrounding areas, refer also Figure 15.	Foreground views consist of a mix of open grassland, rural post and wire fencing and scattered remnant trees. A large power pole and wires is a dominant element in the view. Existing tree canopy fills the middle ground and more distant views. Earthworks, as part of a new residential development, is visible through trees to the left of the view. The view would generally be considered of a moderate scenic amenity considering the modified nature of the landscape and the new residential development.	It is unlikely that the proposed retirement village development will in any way alter the existing views as it will be hidden from view by existing tree canopy, vegetation and land form. Magnitude rating = Negligible Sensitivity Rating = Moderate	All elements of the retirement village will be screened by existing trees, therefore there would be no discernible change to the view and therefore a <b>negligible</b> impact on the amenity of the view when combining sensitivity and magnitude.

# 7.0 Conclusion

# 7.1 Summary of Impacts

The following summarises the anticipated visual impacts by the proposed the retirement village development on the surrounding areas.

Viewpoint	Location	Distance (approximate)	Magnitude	Sensitivity	Visual Impact
1	121 Raby Road	900 metres	Negligible	Moderate	Negligible
2	Assembly Hall of Jehovah's Witness	4 metres	Low	Low	Low
3	Rural residential area (south)	1500 metres	Low-Negligible	Low	Low - Negligible
4	Gledswood Ponds	800 metres	Low	Moderate	Negligible
5	Gledswood Homestead	200 metres	Low	High	Moderate
6	Raby House	1000 metres	Negligible	Moderate	Negligible

Figure 16 - Summary of results

The assessment results highlight that while there are opportunities to view the Proposal from the identified locations, visual impacts are generally range from low to negligible due to a range of factors including existing trees, land form, current residential and urban development, and distance.

Viewpoint No.5 from the Gledswood Homestead of the retirement village is assessed as being a Moderate visual impact. Although the Magnitude rating is considered Low due to the neighbouring proposed development, this Moderate rating is largely due to the impact the development will have on the existing landscape character – the High sensitivity of the view.

The ratings from these views could potentially be diminished through the implementation of mitigation measures.

# 7.2 Mitigation Measures

Although the visual impacts relating to the proposed retirement village are considered Low, additional measures should be taken to further reduce the visual impacts from viewpoint areas, where the development may be seen. The following measures may help in reducing the Moderate-Low assessment ratings if successfully implemented:

• Utilise finishes and materials of a high standard complementary to the existing locality & landscape

- Minimise reflective surfaces with a preferred use of muted/less intrusive colours particularly regarding the northern and western facades
- Prepare lighting models for the proposed lighting of the proposal during its operation. Develop lighting that addresses Australian Standards AS4282 Control of the Obtrusive Effects of Outdoor Lighting. Ensure that all light spill is contained within the boundary limits of the car park wherever possible
- Where feasible, use trees and/or other screening vegetation to assist in reducing the visual prominence of the structure particularly along the northern and southern façade

### 7.3 Landscaping

Within this rural / recreational context, landscaping is perhaps the most effective mechanism in reducing the visual impact. Additional tiered landscaping to the proposal boundaries will significantly reduce visibility of the retirement village components from the Gledswood Homestead, and reduce the overall visual impact rating to a Low grade. This reduction in impact has been represented in Figure 16 below, whereby a structured landscape buffer of trees, shrubs and groundcovers will effectively soften views to the proposal.



Figure 17 – Artist impression highlighting the effective use of landscaping to reduce visual impact.

#### 7.4 Construction

- Retain and protect existing trees and vegetation wherever practicable
- Minimise or eliminate light spill, wherever possible, on adjacent properties

- The site to be kept tidy and well maintained, including removal of all rubbish at regular intervals. There should be no storage of materials beyond the construction boundaries
- Restore any areas that are impacted by construction with appropriate landscape treatments
- Work/site compounds should be screened, with shade cloth or similar material (where necessary) to minimise visual impacts on key viewing locations

#### 7.5 Operation

- Replace damaged or missing elements as required
- Undertake regular landscape maintenance works.

# 8.0 References

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