



CLOUSTON associates

GREENWICH HOSPITAL REDEVELOPMENT LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT

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GREENWICH HOSPITAL REDEVELOPMENT
LANDSCAPE CHARACTER AND VISUAL
IMPACT ASSESSMENT



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Note: This document is Preliminary unless Validated.

Cover page: The north-eastern corner of the Greenwich Hospital site.
This page: Looking north along River Road from Sarnier Road.



TABLE OF CONTENTS

Title	page
EXECUTIVE SUMMARY	6
PART A - EXISTING CONDITIONS	
1.0 INTRODUCTION	10
2.0 METHODOLOGY	14
3.0 PLANNING CONTEXT	24
4.0 LANDSCAPE CHARACTER AND VISUAL ENVIRONMENT	30
5.0 VISUAL CATCHMENT ANALYSIS AND VIEWPOINT SELECTION	34
PART B - VISUAL IMPACT ASSESSMENT	
6.0 THE SITE	40
7.0 THE PROPOSAL	44
8.0 VISUAL IMPACT ANALYSIS	48
9.0 MITIGATION RECOMMENDATIONS	76
10.0 CONCLUSION	80

Looking into the Greenwich Hospital Site from Cliff Road residence.

Executive summary

Pallister House.

EXECUTIVE SUMMARY

This Landscape Character & Visual Impact Assessment (LCVIA) has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) that the application should be supported by a visual impact assessment. The LCVIA is one of a number of technical reports supporting the Environmental Impact Statement (EIS) for the Greenwich Hospital Redevelopment concept (hereafter referred to as the Proposal).

An LCVIA takes into account all effects of change and development in a visual scene that may impact visual amenity. It is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the visual scene, both quantitatively and qualitatively.

After undertaking a visual catchment assessment of the wider context of the site a number of suitable viewpoints were selected to analyse for the visual impact. A range of viewpoints were selected surrounding the Proposal with a combination of private and public viewpoints.

The selection of views for detailed evaluation later in this report has been based on the following sources:

- Visual assessment policy guidance in particular the NSW Land and Environment Court Planning Principles;
- Background documents;
- Desktop mapping;
- In field evaluation undertaken for this report.

The current hospital is located at 97-115 River Road in Greenwich on Lot 3 & 4 DP 584287 and is zoned SP2 Infrastructure (Health Service Facilities) under Lave Cove Local Environmental Plan 2009.

The Proposal consists of the following principal components:

- Construction of a new hospital facility and integrated healthcare uses and services including:
 - A new main hospital building up to RL 80.0;
 - Two new seniors living buildings, Nth building up to RL56.36, Sth building up to RL60.65;
 - A new respite care building up to RL 56.9;
- Construction of associated site facilities and services, including pedestrian and vehicular access and basement parking;
- Site landscaping and infrastructure works; and
- Preservation of Pallister House which will continue to host dementia care and administrative functions.

Of the 13 viewpoints selected and analysed the findings are as follows:

- One viewpoint with a **negligible** rating
- Two viewpoints with a **low** rating
- One viewpoint with a **low/moderate** viewpoint rating
- Six viewpoints with a **moderate** rating
- Two viewpoints with a **moderate/high** rating
- One viewpoint with a **high** rating.

A range of potential mitigation measures have been considered in order to reduce any visual impacts. After an analysis of the visual impacts the most appropriate form of mitigation would be 'Alleviation', although a number of other mitigation techniques could also contribute positively to the Proposal and are outlined in Section 9.0 - Mitigation Recommendations.



PART A

existing conditions

1.0 Introduction



Looking north from Gore Creek Reserve towards Greenwich Hospital.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

CLOUSTON Associates has been commissioned by TSA Management to prepare the Landscape Character & Visual Impact Assessment (LCVIA) for the proposed Greenwich Hospital Redevelopment.

The LCVIA has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) that the application should be supported by a visual impact assessment. This LCVIA is one of a number of technical reports supporting the Environmental Impact Statement (EIS) for the Proposal.

This LCVIA is submitted to the Department of Planning, Industry and Environment (DPIE) in support of a State Significant Development Application (SSD-13619238) for the redevelopment of Greenwich Hospital into an integrated hospital and seniors living facility on land identified as 97-115 River Road, Greenwich (the site). The extent of the site is shown below.



The subject proposal is for the detailed design and construction of the facility following its concept approval under SSD-8699. Specifically, SSD-13619238 seeks approval for the following:

- Demolition of the existing hospital building and associated facilities at the site;
- Construction of a new hospital facility and integrated healthcare campus comprising of hospital, residential aged care, seniors housing, overnight respite, across:
 - A new main hospital building up to RL 80.0;
 - Two new seniors living buildings, Northern building up to RL 56.36, and Southern building up to RL 60.65;
 - A new 2-3 respite care building up to RL 56.9;
- Construction of associated site facilities and services, including pedestrian and vehicular access and basement parking;
- Site landscaping and infrastructure works; and
- Preservation of Pallister House which will continue to host dementia care and administrative functions.



1.0 INTRODUCTION

In accordance with section 4.39 of the Environmental Planning & Assessment Act 1979 (EP&A Act), the Secretary's Environmental Assessment Requirements (SEARs) for SSD-13619238 were issued on 24 February, 2021. This report has been prepared to respond to the following SEARs:

SEAR	Relevant section of report
Planning Secretary's Environmental Assessment Requirements <i>Section 4.12(8) of the Environmental Planning and Assessment Act 1979</i> <i>Schedule 2 of the Environmental Planning and Assessment Regulation 2000</i>	2.0 Methodology 3.0 Planning context 4.0 Landscape character and visual environment 5.0 Visual catchment analysis and viewpoint selection 6.0 The site 7.0 The proposal 8.0 Visual impact analysis 9.0 Mitigation recommendations
Development Consent <i>Section 4.38 of the Environmental Planning and Assessment Act 1979</i>	2.0 Methodology 3.0 Planning context 4.0 Landscape character and visual environment 5.0 Visual catchment analysis and viewpoint selection 6.0 The site 7.0 The proposal 8.0 Visual impact analysis 9.0 Mitigation recommendations

1.2 VISUAL ASSESSMENT RATIONALE

An LCVIA takes into account all effects of change and development in a visual scene that may impact visual amenity. It is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the visual scene, both quantitatively and qualitatively.

Judgement as to the significance of the effects is arrived at by a process of reasoning, based upon analysis of the baseline conditions, identification of visual receptors (viewers of the scene) and assessment of their sensitivity, as well as the magnitude and nature of the changes that may result from any development.

This assessment is an independent report and is based on a professional analysis of the visual environment and the Proposal at the time of writing. The current and potential future viewers (visual receptors) have not been consulted about their perceptions. The analysis and conclusions are therefore based solely on a professional assessment of the anticipated impacts, based on a best practice methodology.

2.0 Methodology



2.0 METHODOLOGY

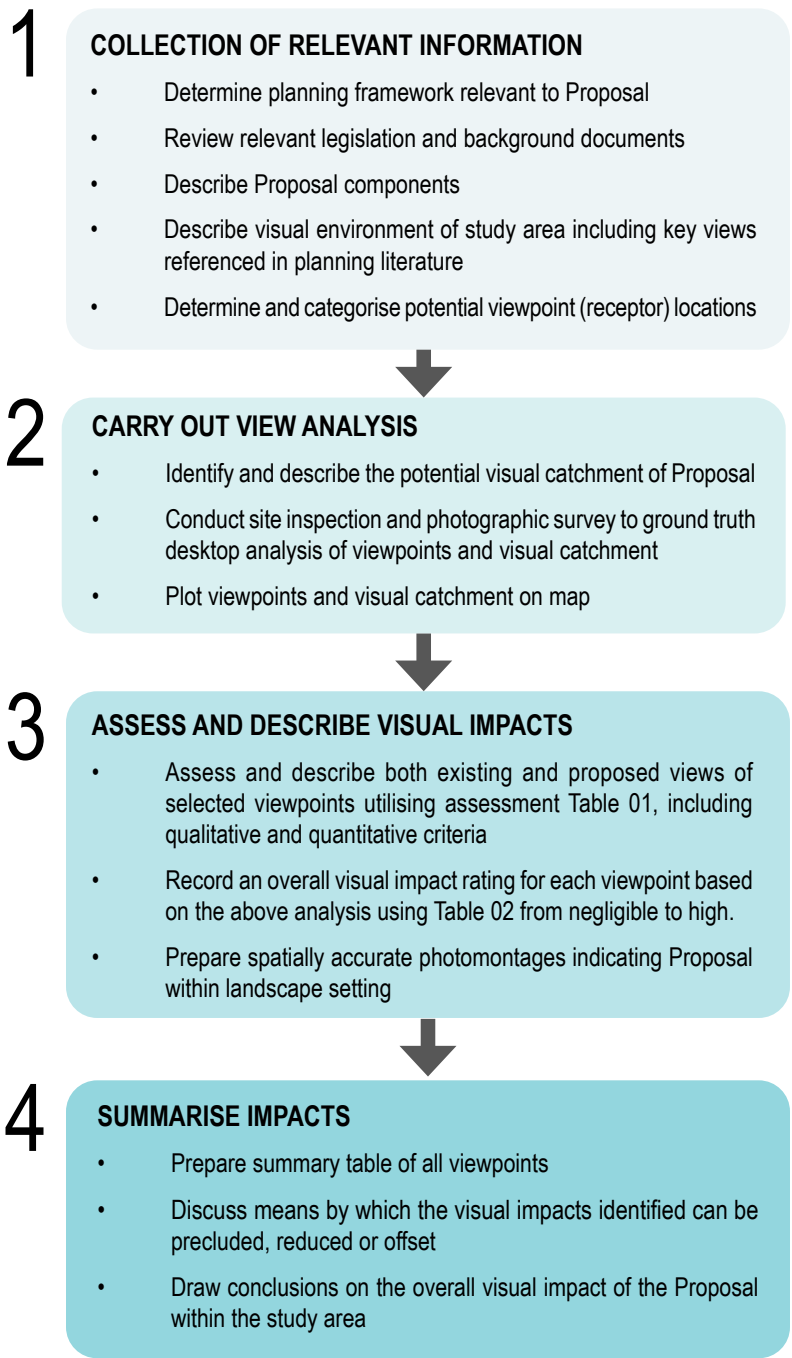


Figure 2.0 - Summary of CLOUSTON methodology.

2.0 METHODOLOGY

2.1 METHODOLOGY

Landscape Character and Visual Impact Assessment aims to ensure that all possible effects of change and development in the landscape, views and visual amenity are taken into account. It is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the landscape, both quantitatively and qualitatively.

The Commission of the NSW Land and Environment Court have developed Planning Principles that relate to visual impact assessment and have developed assessment steps to be followed:

Step 1: Identify the nature and scope of the existing views from the public domain. This identification should encompass (but is not limited to):

- the nature and extent of any existing obstruction of the view
- relevant compositional elements of the view (such as is it static or dynamic and, if dynamic, the nature and frequency of changes to the view)
- what might not be in the view – such as the absence of human structures in the outlook across a natural area
- is the change permanent or temporary
- what might be the curtilages of important elements within the view

Step 2: Identify the locations in the public domain from which the potentially interrupted view is enjoyed. (Note that the Planning Principles give primacy of views from the public domain over views from private land).

Step 3: Identify the extent of the obstruction at each relevant location.

Step 4: Identify the intensity of public use of those locations where that enjoyment will be obscured, in whole or in part, by the proposed development.

Step 5: Identify whether or not there is any document that identifies the importance of the view to be assessed. The absence of such provisions does not exclude a broad public interest consideration of impacts on public domain views. Heritage items (such as Aboriginal and environmental) should also be considered, as should direct impacts on the local community.

2.2 QUANTITATIVE AND QUALITATIVE VALUES

The visual experience of the area and its landscape setting varies depending on the viewer's standpoint within and outside the site and indeed from the viewer's personal perceptions of what they may appreciate in any given setting.

This requires an assessment to address both the quantitative characteristics of the landscape views (what elements form the scene? What features dominate? What breadth of view is offered – narrow vista or wide panorama?) and the qualitative assessment of the values ascribed to those scenes.

2.0 METHODOLOGY

The quantitative-based strategies are less debatable (can that view still be seen when the new built form is introduced? How much of that view will we lose?) than is establishing the qualitative strategies (which view is more important to retain?); the latter could be perceived differently by every viewer that sees that scene. Such variation of perception is particularly acute around the built form.

2.3 FIELD OF VIEW

The choice of lens, camera format and final presentation has a significant bearing on the understanding of site photos. There is a balance to be struck in seeking to replicate the human eye with respect to focal length, looking straight ahead and the experience of the view with its wider context, so that a project's appearance and its place within its environment can be recognised and understood.

In recognising that no photographic image can exactly replicate the view of the human eye, extensive literature has been published on the nearest equivalent combination of focal length and field of view of a camera that best emulates human vision.

Much of this literature is contradictory with a further complication to this process being the differing sensor formats of digital cameras which affect the apparent focal length and field of view.

It is important to note that the process of assigning visual impact ratings to viewpoints is undertaken during a site visit and is calculated from a human vision perspective on site. Photographic images should be considered to be representative only.

Viewpoint photos have been taken with a Sony Alpha ILCE-A7 II with the following specification:

- Body type: Compact
- Sensor size: 855.62mm² (35.80mm x 23.90mm)
- Sensor type: CMOS Full Frame
- ISO: Auto
- Focal length: 50mm

The use of a 50mm focal length and a full frame sensor is generally considered the closest achievable replication of the human eye view and is in line with the current guidelines of the Landscape Institute (UK).

2.4 ASSESSMENT METHODOLOGY

CLOUSTON Associates has developed a best practice methodology based on internationally accredited approaches and 20 years of experience in the field of visual assessment. There are several critical dimensions demonstrated through this assessment and evaluation:

- Ensuring all receptors (viewers) have been adequately identified, even at distance, with emphasis on public domain views
- Comprehensive evaluation of context to determine visual catchment of the site from these areas
- Being clear on and separately defining quantitative impacts (distance, magnitude, duration etc) as against qualitative impacts (viewer type and context of view)

2.0 METHODOLOGY

- Providing a clear rationale for how impacts are compared and contrasted
- Ensuring photomontages include views from the highest potential impact locations, identified from analysis above
- Being clear on the differing forms of mitigation options, namely avoidance, amelioration (eg design), mitigation (eg screening) and compensation (on or offsite)

2.5 ASSESSMENT PROCESS

The initial step involves the collection of relevant information regarding the Proposal, and its compatibility with the surrounding landscape. Desktop analysis is undertaken to determine the visual catchment of the Proposal and potential visual receivers through the use of mapping and topography analysis. Site visits are then undertaken to confirm the visual catchment and visual receivers.

The next step is to carry out a view analysis that identifies the potential visual catchment and areas from which the Proposal Site may be viewed. Viewpoints are analysed and defined into different categories and sensitivities in terms of their land use context and spatial relationship to the Proposal Site and the landscape in which they are located. A photographic inventory from identified key viewpoints is suggested, plotting the viewpoints on a map.

An evaluation matrix is then completed that summarises the full range of viewer situations identified, assessing the indicative contribution to potential visual impact of key factors for each selected viewpoint. The scores for these key factors are then averaged to determine a High, Moderate, Low or Negligible impact rating.

2.6 View Selection Criteria

The selection of views for detailed evaluation for the Proposal are based on the following sources:

- visual assessment policy guidance in particular the NSW Land and Environment Court Planning Principles;
- desktop mapping;
- in-field evaluation;
- SEARS requirements.

Informed by the above considerations, the selection criteria for views to be assessed in detail will include potentially impacted views from:

- the public domain (principally streets, parks and waterways)
- pedestrians and cyclists
- views and vistas identified within local planning documents
- close and direct views
- transport (private and public)
- distant and filtered views
- any impacted heritage areas or items.

2.0 METHODOLOGY

2.7 CHRONOLOGY OF ASSESSMENT

For this LCVIA the sequential assessment steps employed in determining the potential visual impact of the Proposal Site are as follows:

Stage 1:

Establishing the baseline – drawing on background documents and site investigation to document the existing landscape character and visual environment of the study area and its visual catchment. This leads to establishing the most significant views and vistas within and surrounding the Proposal Site.

Stage 2:

Visual Impact Assessment - assessment of the visual impacts of the Proposal Site f set against the planning and design principles. This leads to determining any mitigation measures that may be required to reduce visual impacts from the preferred development option.

2.8 RATING SYSTEM

The overall visual impact rating of a project on any given viewpoint/visual receptor is based on themes of magnitude and sensitivity, recorded using a four band scoring system from negligible to high.

- Sensitivity: each visual receptor type has an inherent and varied sensitivity to change in the visual scene based on the personal context in which their view is being experienced (ie. At home, on the street, in a park etc). This sensitivity has a direct bearing on the perception of visual impact experienced by the receptor and qualifies the quantitative impacts
- Magnitude: a measure of the magnitude of the visual effects of the development within the landscape. A series of quantitative assessments are studied, including distance from development, quantum of view, period of view and scale of change
- Overall Impact Rating: The severity of these impacts is calculated using matrix Table 1 – based on a combination of magnitude and sensitivity.

	HIGH MAGNITUDE	MODERATE MAGNITUDE	LOW MAGNITUDE	NEGLECTIBLE MAGNITUDE
HIGH SENSITIVITY	HIGH	HIGH - MODERATE	MODERATE	NEGLECTIBLE
MODERATE SENSITIVITY	HIGH - MODERATE	MODERATE	MODERATE/ LOW	NEGLECTIBLE
LOW SENSITIVITY	MODERATE	MODERATE/LOW	LOW	NEGLECTIBLE
NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE	NEGLECTIBLE

Table 1: Visual Impact Rating as a combination of Sensitivity and Magnitude. Source: Environmental Impact Assessment Practice Note: Guideline for Landscape Character and Visual Impact Assessment (EIA-N04). Roads and Maritime Services.

2.0 METHODOLOGY

	FACTOR		NEGLECTIBLE	LOW IMPACT	MODERATE IMPACT	HIGH IMPACT
QUALITATIVE	Viewer Sensitivity	Each visual receptor type has an inherent and varied sensitivity to change in the visual scene based on the personal context in which their view is being experienced. This sensitivity has a direct bearing on the perception of visual impact experienced by the receptor and qualifies the quantitative impacts. Number of viewers also has a bearing on sensitivity. Viewpoints have a varied number of potential receivers depending on whether the viewpoint is public or private, the popularity of the viewing location and its ease of accessibility. Views from public reserves and open space are often given the highest weighting due to the increased number of viewers affected.	Vacant lot, uninhabited building, car park.	Minor roads, service providers.	Residential properties with limited views, commercial properties, scenic public roads (eg official tourist routes).	Public open space, public reserves, living areas or gardens/ balconies of residential properties with direct views of Project.
	Quantum of View	The quantum of view relates to the openness of the view and the receptor's angle of view to the scene. A development located in the direct line of sight has a higher impact than if it were located obliquely at the edge of the view. Whether the view of the Project is filtered by vegetation or built form also affects the impact, as does the nature of the view (panoramic, restricted etc.). A small element within a panoramic view has less impact than the same element within a restricted or narrow view.	Only a n insignificant part of the Project is discernible.	An oblique, highly filtered or largely obscured view of the Project or a view where the Project occupies a very small section of the view frame.	A direct view of the Project or its presence in a broader view where the Project occupies a moderate proportion of the view frame.	A direct view of the Project or its presence (sometimes in a very narrow or highly framed view), where the Project occupies the greater proportion of the view frame.
QUANTITATIVE	Distance of View	The effect the Project has on the view relating to the distance between the Project and the visual receptor. The distances are from the approximate boundary of the Project site.	Over 3000m	Viewing distance of between 1000-3000m.	Viewing distance between 100m and 1000m.	Viewing distance between 0 and 100m.
	Period of View	The length of time the visual receptor is exposed to the view. The duration of view affects the impact of the Project on the viewer - the longer the exposure the more detailed the impression of the proposed change in terms of visual impact.	Less than 1 second	1 to 10 seconds: often from a road or walking past.	1 to 5 minutes: usually from a road/ driveway entrance, walking past.	Significant part of the day: usually residential property.
	Scale of Change	Scale of change is a quantitative assessment of the change in compositional elements of the view. If the proposed development is largely similar in nature and scale to that of existing elements in the vicinity, the scale of change is low. If the development radically changes the nature or composition of the elements in the view, the scale of change is high. Distance from the development would accentuate or moderate the scale and variety of visible elements in the overall view and hence influence this rating.	Project barely discernible	Elements and composition of the view would remain largely unaltered.	Elements within the view would be at odds with existing features in the landscape	Elements within the view would greatly dominate existing features in the landscape

Table 2: Sensitivity and Magnitude Rating Criteria.

2.0 METHODOLOGY

LOCATION		Viewpoint location
DISTANCE		Distance to Project site boundary
RECEPTORS		Description of viewers
NO. OF VIEWERS		Number of viewers
EXISTING VIEW		Description of current view
EXPECTED VISUAL IMPACT		Description of expected view
Receptor Type	Private	
Viewpoint Number	2	
Sensitivity rating of receptor	MODERATE	Assessment matrix table
Magnitude - Distance	MODERATE	
Magnitude - Quantum of view	MODERATE	
Magnitude - Period of View	MODERATE	
Magnitude Scale of change	HIGH	
Overall Magnitude rating	MODERATE	
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE	Overall visual impact rating

Table 3: Example of Assessment Format Before Mitigation Measures.

2.9 PHOTOMONTAGE METHODOLOGY

The following spatially accurate photomontages of the Proposal have been created by Impact Multimedia, employing the following methodology.

2.9.1 Viewpoint Selection

The photomontage viewpoints were selected from within the visual catchment identified in Section 5.0 - Visual Catchment Analysis and Viewpoint Selection. Viewpoints 1 - 4 have been selected as they are in the public domain at varied distances from the Proposal site, and are likely to have the most visual receivers.

2.9.2 Spatial Verification Process

- The area within the region to be photographed was assessed for possible geographical features to act as markers such as base of light poles, tops of bollards, corners of buildings, base of street signage, corners of sign etc
- Trimble Geo 7x Range finder and GPS was used to create and locate these marker points
- Photos are taken from the specified locations ensuring eight or more marker locations are captured in the image and then the location of the Camera is also recorded by the Geo7x
- Basic geometry is created to reflect the features marked and placed relative to the 3D points. For example, if the marker was indicating the base of a light pole, a cylinder was placed over the corresponding point for ease of matching
- FOV and resolution from the camera, attributed in meta data when the photos are taken, are noted and applied to the 3D camera
- Each image is placed into the 3D software as a contextual background and from the specific camera the points and features are matched to reflect those in the scene, as attained by the Geo7x
- The 3D model of the existing structures is used to double check the accuracy of the spatial verification
- Once satisfied that the spatial verification was accurate per the above methodology the 3D model of the proposed structure is introduced into the scene using positional data from the model provided and placed lighting in the scene to reflect the time/location/position of the photo. The results are rendered by the 3D software as an image for each camera
- In the case where existing content is obscured by trees in the final design these trees will be removed, elements are montaged from other photos to suit the scene
- The image is finished in photoshop to achieve realistic lighting and vegetation of the scene.

Materiality shown in the photomontages are indicative only of the architectural intent. Final materiality will be developed in the detailed design phase.

2.10 INDICATIVE VIEW VISUALISATIONS (BLOCK MODELLING)

The remaining viewpoints (5-13) are accompanied by block model visualisations of the Proposal within the existing landscape context. These block models have been created using 3D modelling software in order to position the Proposal within the landscape. The images are designed to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or landscape design.

As a result of the 3D block models showing limited materiality, translucency, reflections and shadows they are therefore likely to appear more solid and 'blocky' than in reality as they are produced primarily in order to aid the reader with scale.

Viewpoints where the Proposal is obscured by vegetation have a white outline showing the extent of the Proposal as well as a faded out render in order to indicate the Proposal beyond.



Proposal visible.



Proposal not visible behind vegetation.

3.0 Planning Context



Looking east along River Road.

3.0 PLANNING CONTEXT

Outlined below is the planning context in relation to views and visual impact. A comprehensive overview of the planning context outside of views and visual impact can be found in the Environmental Impact Statement (EIS).

3.1 SYDNEY REGIONAL ENVIRONMENTAL PLAN (SYDNEY HARBOUR CATCHMENT) 2005 (SREP)

SREP Sydney harbour Catchment 2005 covers the area of Sydney Harbour, including Parramatta River and its tributaries and the Lane Cove River and includes planning principles and controls for the catchment area. Aims of the SREP include:

- 13 Sydney Harbour Catchment
 - (b) the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geo-diversity
 - (f) development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour
 - (g) the number of publicly accessible vantage points for viewing Sydney harbour should be increased
- 14 Foreshores and Waterways Area
 - (e) development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores
- 15 Heritage Conservation
 - (d) the natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area should be protected
 - (e) significant fabric, settings, relics and views associated with the heritage significance of heritage items should be conserved
- 25 Foreshore and waterways scenic quality
 - (a) the scale, form, design and siting of any building should be based on an analysis of:
 - (i) the land on which it is to be erected, and
 - (ii) the adjoining land, and
 - (iii) the likely future character of the locality,
 - (b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries,
 - (c) the cumulative impact of water-based development should not detract from the character of the waterways and adjoining foreshores.
- 26 Maintenance, protection and enhancement of views
 - (a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,
 - (b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,
 - (c) the cumulative impact of development on views should be minimised.

3.0 PLANNING CONTEXT

3.2 SYDNEY HARBOUR FORESHORE & WATERWAYS AREA DEVELOPMENT CONTROL PLAN 2005

The SHFWA DCP uses performance-based criteria and guidelines relating to visual and natural environments. The visual impact of proposed developments on the landscape is required to be considered by the consent authority. The SHFWA DCP states that the visual impact of a development will vary depending on:

- the nature of the proposal - its height, siting, scale, colour, reflectivity and function
- the landscape setting in which it is proposed
- the degree of change created - whether it will be minimal or not
- the ability of the proposal to integrate with the landscape character

3.3 LANE COVE LOCAL ENVIRONMENTAL PLAN 2009

The site is currently zoned SP2 Infrastructure Zone (Health Services Facility) in Lane Cove Local Environmental Plan (LEP) 2009. The objectives of the SP2 zone are:

- To provide for infrastructure and related uses;
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

The permissible uses on the site include the purpose shown on the land zoning map,, including development that is ordinarily incidental or ancillary to the development for that purpose. The purpose on the land zoning map is "Health Services Facility". In the LEP a Health Services Facility is defined as:

a building or place used to provide medical or other services relating to the maintenance or improvement of the health, or the restoration to health, of persons or the prevention of disease in or treatment of injury to persons, and includes any of the following:

- *(a) a medical centre,*
- *(b) community health service facilities,*
- *(c) health consulting rooms,*
- *(d) patient transport facilities, including helipads and ambulance facilities,*
- *(e) hospital.*

3.4 THE LAND & ENVIRONMENT COURT PLANNING PRINCIPLES

The Land and Environment Court of New South Wales was established in 1980 by the Land and Environment Court Act 1979. Relevant principles have been developed in visual assessment case judgments to guide future decision-making in development appeals. These include separate but related principles for private and public domain views.

The principles set out a process for assessing the acceptability of impact. The two most relevant cases to this site are:

- Private views - Tenacity Consulting v Warringah Council (2004)
- Public domain views - Rose Bay Marina Pty Limited v Woollahra Municipal Council (2013)

3.0 PLANNING CONTEXT

3.4.1 Planning Principle for Private views - Tenacity Consulting v Warringah Council (2004)

The key points from this principle include:

Assessment of views to be affected

- Water views are valued more highly than land views.
- Iconic views (eg of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons.
- Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.

What part of the property the views are obtained

- The protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries.
- Sitting views are more difficult to protect than standing views.

Extent of the impact

- The impact on views from living areas is more significant than from bedrooms or service areas.
- It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating.

Reasonableness of the proposal

- With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable.

3.4.2 Planning Principle for Public domain views - Rose Bay Marina Pty Limited v Woollahra Municipal Council (2013)

The assessment process from this principle includes:

Identification Stage

Identify the nature and scope of the existing views from the public domain:

- the nature and extent of any existing obstruction of the view
- relevant compositional elements of the view
- what might not be in the view - such as the absence of human structures in the outlook across a natural area
- is the change permanent or temporary.

This is followed by identifying the locations in the public domain from which the potentially interrupted view is enjoyed and the extent of obstruction at each relevant location. The intensity of use of this locations is also to be recorded. Finally, the existence of any documents that identifies the importance of the view - ie. international, national, state or local heritage recognition is ascertained.



3.0 PLANNING CONTEXT

Analysis of impacts

- The analysis required of a particular development proposal's public domain view impact is both quantitative as well as qualitative.
- A quantitative evaluation of a view requires an assessment of the extent of the present view, the compositional elements within it and the extent to which the view will be obstructed by or have new elements inserted into it by the proposed development.
- In the absence of any planning document objective/aim, the fundamental quantitative question is whether the view that will remain after the development (if permitted) is still sufficient to understand and appreciate the nature of and attractive or significant elements within the presently unobstructed or partially obstructed view. If the view remaining (if the development were to be approved) will be sufficient to understand and appreciate the nature of the existing view, the fundamental quantitative question is likely to be satisfied.
- The outcome of a qualitative assessment will necessarily be subjective. However, although beauty is inevitably in the eye of the beholder, the framework for how an assessment is undertaken must be clearly articulated. Any qualitative assessment must set out the factors taken into account and the weight attached to them. Whilst minds may differ on outcomes of such an assessment, there should not be issues arising concerning the rigour of the process.
- As with Tenacity, a high value is to be placed on what may be regarded as iconic views (major landmarks or physical features such as land/water interfaces).

Other factors to be considered in undertaking a qualitative assessment of a public domain view impact include:

- Is any significance attached to the view likely to be altered?
- If so, who or what organisation has attributed that significance and why have they done so?
- Is the present view regarded as desirable and would the change make it less so (and why)?
- Should any change to whether the view is a static or dynamic one be regarded as positive or negative and why?
- If the present view attracts the public to specific locations, why and how will that attraction be impacted?
- Is any present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?
- However, on the other hand, if the present obstruction of the view is extensive, does that which remains nonetheless warrant preservation (it may retain all or part of an iconic feature, for example)?
- If the change to the view is its alteration by the insertion of some new element(s), how does that alter the nature of the present view?

The principles established by the Court from both cases have been integrated into the approach adopted for this evaluation.

4.0 Landscape Character and Visual Environment



Looking north from the corner of Gore Street and St Vincent Road.

4.0 LANDSCAPE CHARACTER AND VISUAL ENVIRONMENT

Landscape character is a combination of distinctive qualities of a certain area including readily identifiable elements such as landform, vegetation cover, built-form and architecture, as well as history, seasonal changes, human culture, urban grain, wildlife and land use. Together these elements produce a distinctive character that influences how the landscape is perceived and valued by the community.

4.1 WIDER SURROUNDING LANDSCAPE

The Proposal is located within the Lane Cove Local Government Area which is approximately 10.5km² in area. The general attributes can be characterised by:

- a mix of housing types including low rise apartments and large and small homes on separate blocks;
- large tracts of bushland;
- neighbourhood shopping areas;
- commercial development;
- high-rise commercial and residential development (within St Leonards);
- light industrial areas in Lane Cove West;
- a mixture of open space recreation types.

4.2 CLIMATE

The climate surrounding the Proposal Site is consistent with most Sydney suburbs which are near the coast, namely warm and humid summers and generally mild winters overall. The average maximum summer temperature is around 26°C and the average minimum 19°C, with the average winter maximum temperature being 17°C and the average minimum 9°C based on Sydney Observatory Hill measurements since 1858.

4.3 TOPOGRAPHY

Ridges and creek valleys are the defining features of the topography for the area. Tributary creeks have cut into the sides of the main river valley and as a result have formed the distinctive ridges and valleys of the area.

4.4 HERITAGE

Prior to European settlement Aboriginal clans in the Lane Cove area were the Cameraygal and Wallumedagal, however knowledge of the exact boundaries of Sydney clans is limited. With the arrival of Europeans, armed conflict and disease broke out and resulted in the destruction of the Sydney clans.

Although land grants began in 1794 (predominately to non-commissioned officers and privates) much of the land was initially not habitable as a result of the steep topography and dense vegetation, however by the 19th century some farms and dairies were established.

Residential growth in the area became significant after World War Two as a result of blocks of land being granted to returning soldiers as the land value at the time was relatively cheap. It wasn't until the 1980s and 90s that land value in the area surged as people began to prize water views, public transport and relatively large block sizes.

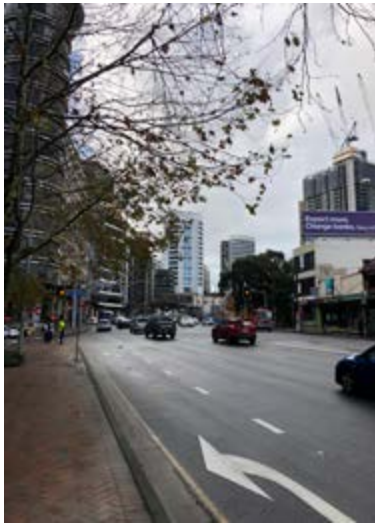
4.0 LANDSCAPE CHARACTER AND VISUAL ENVIRONMENT



Bushland and foreshore reserves in Lane Cove (The Natural Environment of Lane Cove, Lynne McLoughlin, 2nd ed., 2017).



Quiet Residential Streets.



Pacific Highway Approaching St Leonards Train Station.



Gore Creek Bushland Track.

4.0 LANDSCAPE CHARACTER AND VISUAL ENVIRONMENT

4.5 RESIDENTIAL HOUSING

Residential housing is a significant characteristic of the area surrounding the Proposal. A mixture of dwelling types can be found in the area including detached housing, medium density and high density. According to the 2016 Census, the Lane Cove Council area consisted of approximately 40.6% detached (separate) housing, 13.4% medium density and 45.4% high density.

The dominant residential type directly surrounding the Proposal is low density detached housing on separate blocks with surrounding gardens.

4.6 OPEN SPACE & BUSHLAND

Open space comprises approximately 14% (or 151 hectares) of the Lane Cove Council area and is a mixture of passive open space (parks), sports grounds and bushland reserves. Of the nearly 90 parks in the Lane Cove area, approximately 115ha is in Council ownership and approximately 36ha is held by private owners.

The most significant open space features in direct proximity to the Proposal are Bob Campbell Oval & Gore Creek Reserve as well as Gore Creek bushland surrounding the Gore Creek walking track connecting to Lane Cove Bushland Park. The Reserve and Oval consist of BBQ and picnic facilities, toilets and limited parking facilities, as well as the sporting oval, cricket wicket, playground and exercise equipment. The Reserve and Oval combined with the bushland are classified as a regional level recreation area.

The bushland of Gore Creek Reserve covers approximately 5.8 hectares from Bushland Park in the north through to the bay. Walking tracks are present within the bushland and follows old tracks made by bullock drays which were once present in the area in order to transport timber to barges.

4.7 ST LEONARDS & CROWS NEST

St Leonards is a diversified mixed-use area to the north of the site which includes:

- high rise office developments;
- a mixture of retail density;
- low, medium and high density residential;
- health services including the Royal North Shore Hospital and North Shore Private Hospital;
- education and technology services including Northern Sydney Institute of TAFE;
- industrial services.

The diversity of uses in the area can be linked to the rise of well connected public transport and areas around these locations (such as St Leonards Train Station) have the most dense built form. A counterbalance to this density can be seen in the Crows Nest retail area and residential precincts. Areas such as Willoughby Road consist primarily of two level retail and dining business and a developed public domain. Residential precincts consist of low density housing, many of which are traditional bungalows or cottages, and have quiet residential streets.

5.0 Visual Catchment Analysis and Viewpoint Selection

Looking west from the top of Gore Street.

5.0 VISUAL CATCHMENT ANALYSIS AND VIEWPOINT SELECTION

EXISTING VISUAL CATCHMENT

This desktop topography study is sourced from Google Earth and is limited to an estimated viewshed based on topography only, without taking into account vegetation or building heights. This analysis has been used as a guide only, while significant ground studies have been conducted in and around the site to ascertain the key locations from which the proposal would potentially be visible.

BASIS OF SELECTION

The selection of views for detailed evaluation later in this report has been based on the following sources:

- Visual assessment policy guidance in particular the NSW Land and Environment Court Planning Principles;
- Background documents;
- Desktop mapping;
- In field evaluation undertaken for this report.

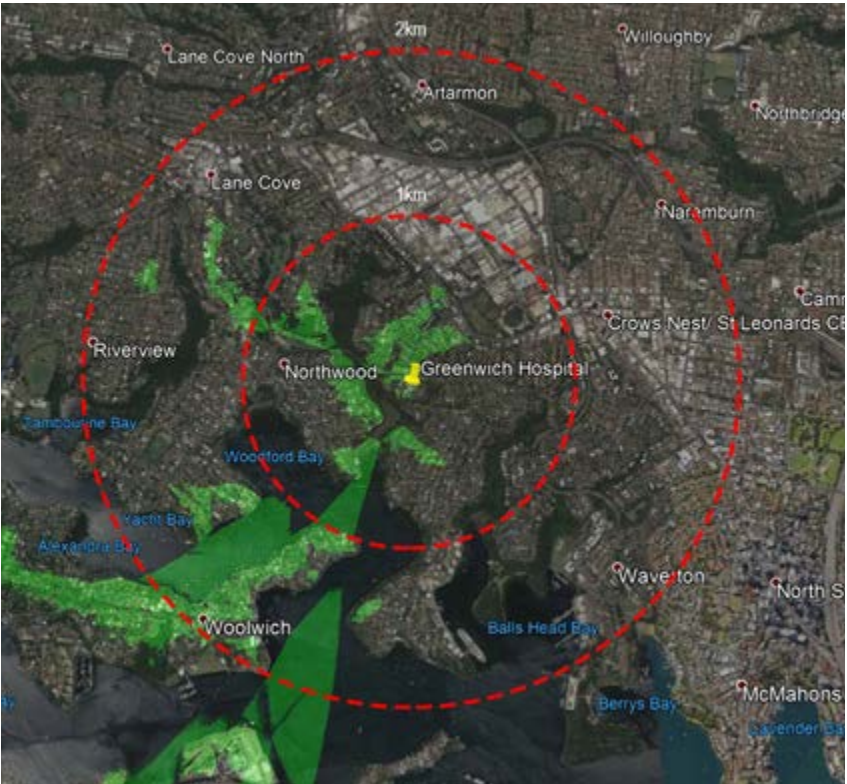


Figure 5.1 - Surrounding viewshed. ■ Potential viewshed based on topography only

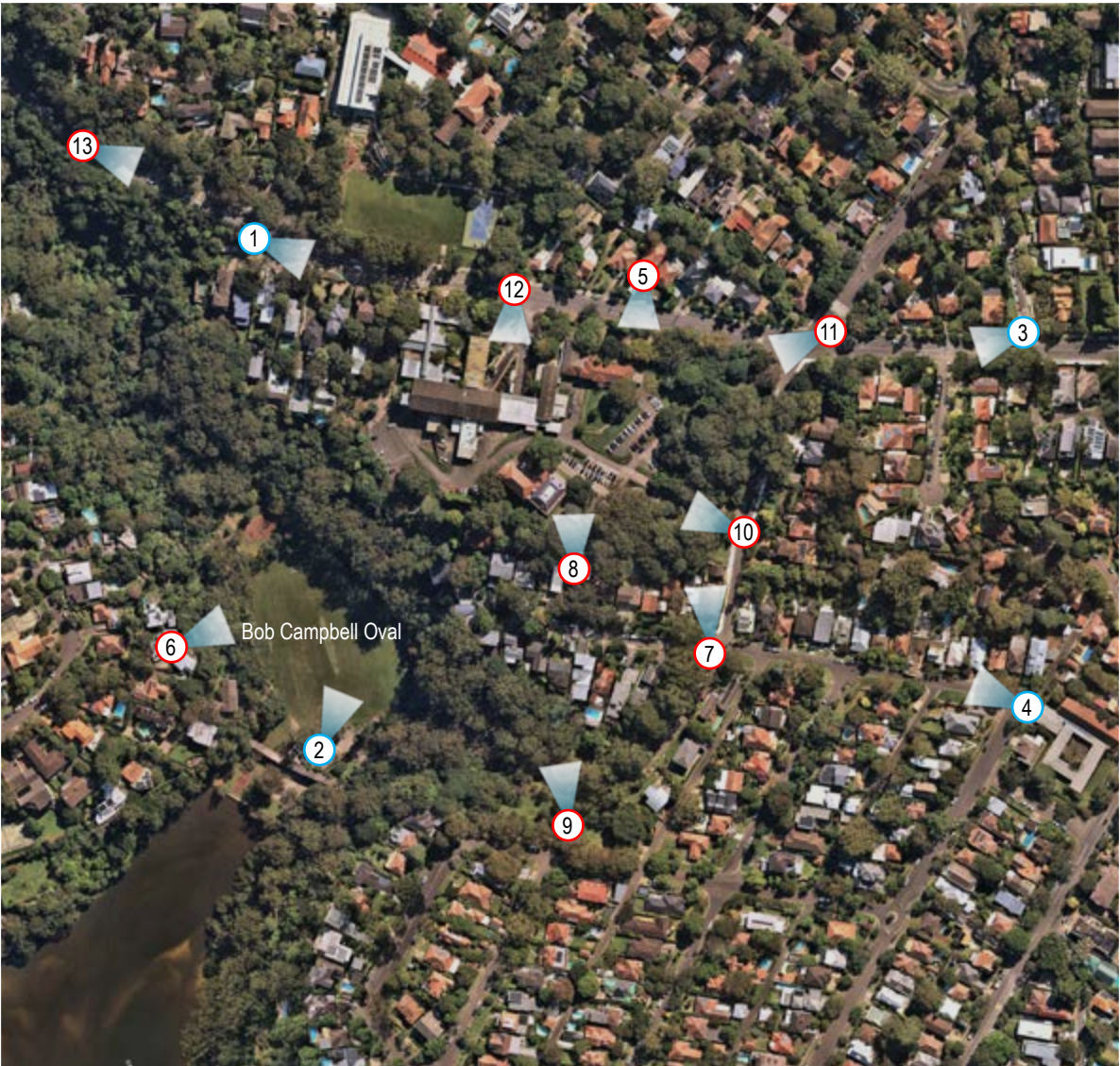


Looking upwards from Bob Campbell Oval to private dwellings.

5.0 VISUAL CATCHMENT ANALYSIS AND VIEWPOINT SELECTION

Based on the foregoing selection criteria this section maps 13 views of the site from a variety of close and more distant viewpoints.

Viewpoints 1-4 were selected to be photomontaged as a result of them being public viewpoints with a higher number of viewers. Viewpoints 5-13 have been block modelled (refer to Section 2.0 - Methodology). As a result of photography being undertaken during winter, some trees within the views currently have no foliage. During the summer months the views would have an increased level of vegetation.



Block Modelled Viewpoint Photomontaged Viewpoint

PART B

visual impact assessment

Playground at Bob Campbell Oval.

6.0 The Site



Looking at the north-western corner of the existing Greenwich Hospital site.

6.0 THE SITE

6.1 SITE CHARACTERISTICS

The current hospital is located at 97-115 River Road in Greenwich on Lot 3 & 4 DP 584287 and is zoned SP2 Infrastructure (Health Service Facilities) under Lave Cove Local Environmental Plan 2009. HammondCare has owned and operated the hospital since 2008.

Lot 3 DP 584287 contains the existing hospital, associated inpatient and outpatient facilities, car parking and service areas. Existing buildings range between 1 and 5 storeys in height and are interconnected through internal corridors and external pathways.

The site is approximately 3.376ha and rectangular in shape with road frontages to the heavily used River Road on the northern boundary and quieter St Vincents Road on the eastern boundary. The site topography rises towards the centre of the site from the south-eastern and south-western property boundaries, with the south-western part of the site falling steeply away towards Gore Creek.

A mixture of vegetation exists on the site and includes exotic species and remnant vegetation, particularly to the eastern side of the site. Within the site the vegetation predominantly consists of lawns and planting beds.

6.2 SITE HISTORY

Greenwich Hospital was opened by the Minister for Health in 1966. From 1970 to 1997 the hospital continued to evolve into a multi-disciplinary care practice, featuring purpose-built facilities and a combined network of medical specialists.

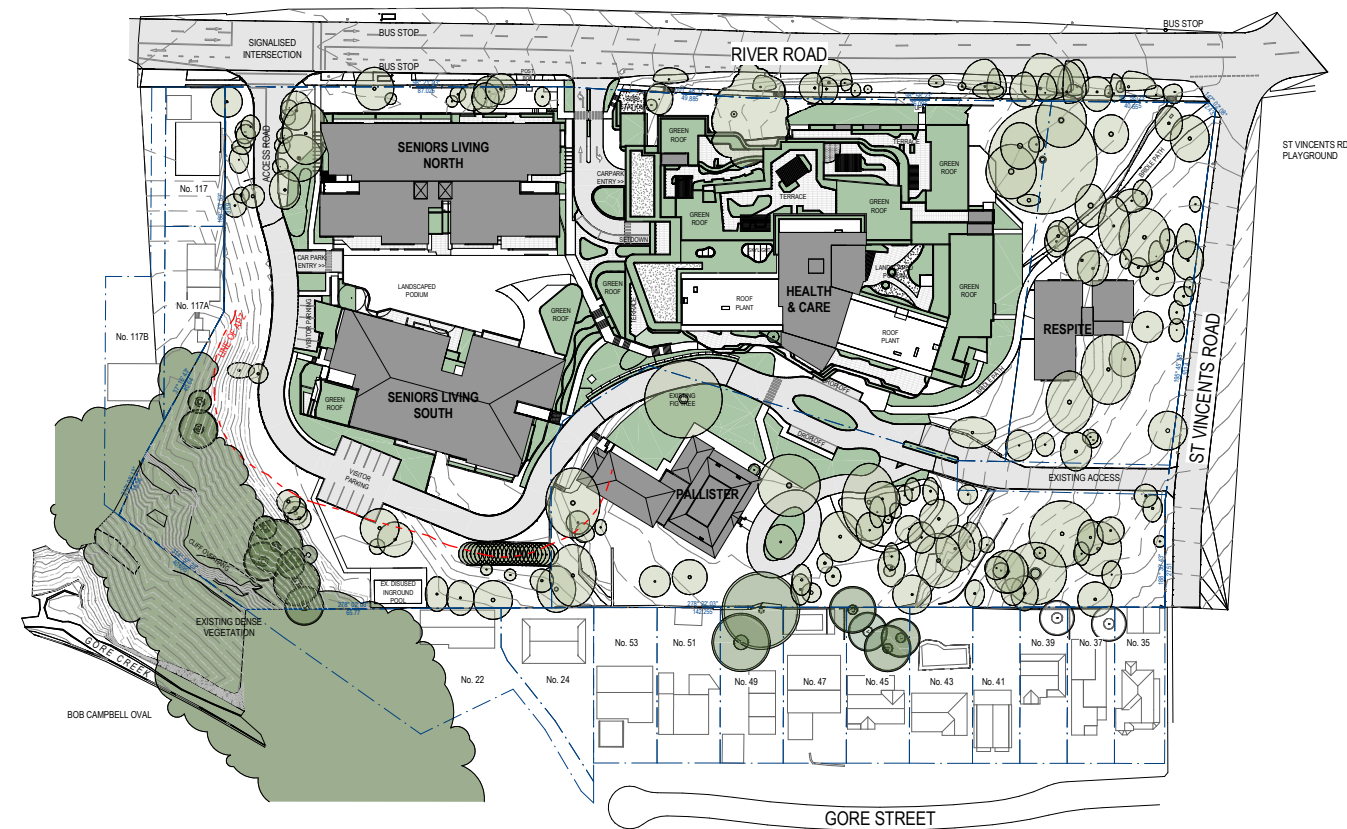
Pallister House (previously 'Standish') was built on the site in 1892 and was originally a private residence. Since this time, the site has been associated with a range of welfare and community activities, including use as a girl's home from 1936.

'Pallister is listed as a state heritage item SHR 00574. The following components of the curtilage area contribute to the significance of Pallister House:

- 'Pallister' the two-storey late Victorian house;
- tear-drop shaped carriage loop;
- mature fig tree;
- bridle path from the corner of Rover Road and St Vincents Road towards Pallister House.

Pallister House currently houses the hospitals dementia centre, research facilities and education services.

In recent years, the services provided at Greenwich Hospital have continued to expand, with new dementia behaviour management and advisory services operating from the site as well as learning and research facilities.



Greenwich Hospital Concept Plan.(Not to scale)

7.0 THE PROPOSAL

7.1 PROJECT SUMMARY

The existing Greenwich Hospital site provides rehabilitation beds, specialised residential care and a variety of out-patient services in a group of buildings which are aging and no longer suit current needs.

The Proposal provides a strategy for the staged redevelopment of the Greenwich Hospital site to provide better integrated hospital, out-patients, residential care services, seniors living and community facilities.

The Proposal consists of the following principle components:

- Construction of a new hospital facility and integrated healthcare uses and services including:
 - A new 7 storey main hospital building;
 - Two new 5-6 storey serviced self-care housing buildings (serviced seniors living);
 - A new 2-3 storey respite care building;
- Construction of associated site facilities and services, including pedestrian and vehicular access and basement parking;
- Site landscaping and infrastructure works; and
- Preservation of Pallister House which will continue to host dementia care and administrative functions.

The Greenwich Masterplan has been designed to increase the service potential and amenity of the site, whilst also limiting the impact on the existing Heritage Precinct and environmental character. Key design principles have been summarised below.

IDENTITY

By redeveloping the Greenwich Hospital Site, HammondCare will provide an integrated campus that will see seniors living, residential aged care, rehabilitation, palliative care and hospice care services provided in a single location.

STAGING AND SITING

The proposed development has been designed to ensure a continuity of service delivery through the strategic siting and decanting of Greenwich Hospital.

BUILT FORM AND SCALE

The proposed Greenwich Hospital has been designed to step back from the River Road property boundary, thereby reducing the scale of the development from the street. On the western boundary, the access road provides a landscape setback.

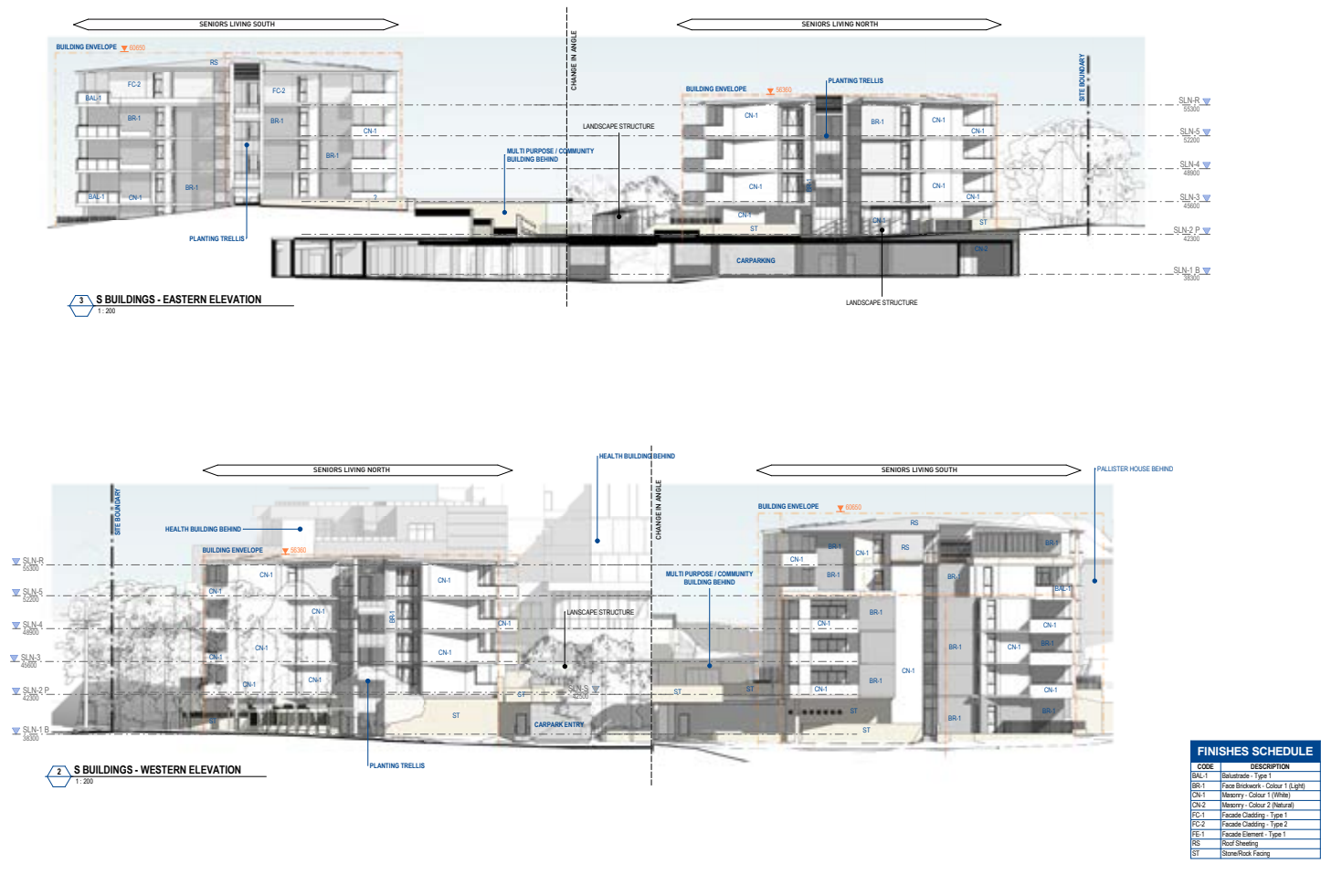


St Vincents Road.

7.0 THE PROPOSAL



Tree Retention/Removal Plan. (Not to scale)



Site Sections. (Not to scale)



Site Sections. (Not to scale)

VIEWPOINT 1

LOCATION	Public footpath, approximately 150 River Road
DISTANCE	130m
RECEPTORS	Road and footpath users
NO. OF VIEWERS	High
EXISTING VIEW	<p>The most noticeable characteristic of the existing view is the level of mature vegetation that occupies the foreground through to the more distant view. This vegetation is also evident moving from the left to the right of the scene.</p> <p>Elements of low level structures on the southern side of River Road are evident through the vegetation, and are a mixture of private residences and existing Greenwich Hospital buildings.</p>

EXPECTED VISUAL IMPACT	
It is anticipated that a clear view of the upper levels of the Northern Seniors Living Units building fronting River Road will occur from this location. A small number of trees on site will be removed in order to accommodate the Seniors Living Units..	
Existing vegetation will obscure a large proportion of the lower levels of the Seniors Living Units .	

Receptor Type	Public
Viewpoint Number	1
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	MODERATE
Magnitude - Period of View	MODERATE
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Photomontage View of Proposal.

VIEWPOINT 2

LOCATION	Gore Creek Reserve
DISTANCE	180m
RECEPTORS	Reserve users
NO. OF VIEWERS	Moderate
EXISTING VIEW	<p>A significant amount of mature vegetation on the steep slope separating the reserve and the existing hospital site behind this.</p> <p>The current level of built elements in the scene is very limited and consists of sports lighting and fencing along the creek line.</p>

EXPECTED VISUAL IMPACT	
<p>Filtered views of the upper levels of the southern Seniors Living Units building will be possible in the centre of the view. Views of the lower levels of the Seniors Living Units will not be possible due the density of the existing vegetation on the ridge.</p> <p>Although the majority of Seniors Living Units will be obscured from this location, the presence of built form will still be perceptible on and close to the skyline from the reserve but will not create an overbearing presence in the visual scene.</p>	

Receptor Type	Public
Viewpoint Number	2
Sensitivity rating of receptor	HIGH
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	LOW
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Photomontage View of Proposal.

VIEWPOINT 3

LOCATION	Corner of River Road and Sarner Road
DISTANCE	170m
RECEPTORS	Road user and footpath users
NO. OF VIEWERS	High
EXISTING VIEW	<p>Existing mature vegetation from the existing Greenwich Hospital and St Vincent's Playground can be seen running along River Road into the distance.</p> <p>The most noticeable built elements in the current view are River Road as well as power lines and street lighting. No built elements of the existing Greenwich Hospital are currently visible.</p>

EXPECTED VISUAL IMPACT	
Views of the upper levels of the proposed new hospital building will be visible from this location. Significant retained vegetation on the north-eastern corner of the site will completely obscure views of the lower levels.	
Although more of the hospital will be obscured rather than visible, the upper levels will introduce a moderate new built form element to the visual scene above the tree canopy. Vehicles will have a limited viewing exposure to the new built element depending on the speed of the traffic, with pedestrians using the footpath having a longer period of view. The new built form will not form the dominant feature of the visual scene, with mature vegetation still comprising a large part of the view.	

Receptor Type	Public
Viewpoint Number	3
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Photomontage View of Proposal.

VIEWPOINT 4

LOCATION	Corner of Gore Street & Carlotta Street
DISTANCE	500m
RECEPTORS	Road users and footpath users
NO. OF VIEWERS	Low - Moderate
EXISTING VIEW	<p>Mature vegetation on the existing Greenwich Hospital site can be seen in the distance, with no built elements of the current hospital visible.</p> <p>Gore Street can be seen in the foreground of the view, before it disappears out of site as it recedes into the distance as a result of the change in topography. Private residences can be seen to the right of the view running along Gore Street.</p>

EXPECTED VISUAL IMPACT	
<p>The significant amount of existing mature vegetation in the mid-ground receding into the distance and on site will result in a large amount of the Proposal being obscured from this location.</p> <p>The upper levels of the Proposal will be visible from this location and will add a noticeable new built element form to the view. Although the Proposal will be a distinct new addition to the skyline, given the distance of this viewpoint from the Proposal it will not produce a dominating element to the wider view.</p> <p>Due to the orientation of the houses running down Gore Street and existing vegetation on these properties, many of the private residences will not have visual access to the Proposal.</p>	

Receptor Type	Public
Viewpoint Number	4
Sensitivity rating of receptor	LOW
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	LOW/MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Photomontage View of Proposal.

VIEWPOINT 5

LOCATION	110 River Road
DISTANCE	25m
RECEPTORS	Private Residents
NO. OF VIEWERS	Low
EXISTING VIEW	<p>The foreground of the view consists of a concrete terrace surrounded by a low brick wall. The house is elevated above River Road and as a result is approximately level with the vegetated landform on the opposite side of the road.</p> <p>The mid-ground and distant view is currently dominated by mature vegetation, with only minor elements of built form visible, consisting of power lines, street lighting and the roof of an existing building on the site.</p>

EXPECTED VISUAL IMPACT
<p>The proposed hospital will be clearly visible from this location amongst retained vegetation running along River Road. The hospital will replace current mid and long distance views of vegetation to the right of the view as well as reducing the amount of open sky currently visible above this. It is anticipated that retained and proposed tree planting will provide filtered views of the lower levels of the proposed building.</p>

Receptor Type	Private
Viewpoint Number	5
Sensitivity rating of receptor	HIGH
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	HIGH
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	HIGH



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or landscape design.

VIEWPOINT 6

LOCATION	46a Cliff Road
DISTANCE	170m
RECEPTORS	Private residents
NO. OF VIEWERS	Low
EXISTING VIEW	<p>The western and southern side of the existing brick hospital can be seen over the canopy of mature trees that ring Bob Campbell Oval. Other private homes can be seen to the left of the view.</p> <p>In the distance beyond the hospital can be seen the upper levels of large commercial buildings located in St. Leonards to the north-east of the site.</p>

EXPECTED VISUAL IMPACT

Significant views of the Seniors Living Units buildings rising above the tree canopy to the centre and right of the view will be possible from this location and will obstruct the view of the commercial buildings in the distance.

Although the proposed buildings will be replacing the current hospital, the perception of built form in proximity to the viewpoint location will be increased as a result of the increased massing of the Proposal.

The perception of mature vegetation within the visual scene will remain largely unchanged as a result of the majority of it being located outside of the site boundary and will therefore not be changed.

Receptor Type	Private
Viewpoint Number	6
Sensitivity rating of receptor	HIGH
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	MODERATE
Magnitude - Period of View	HIGH
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE/HIGH



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Initial View (Year 1)

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.



Anticipated View Upon Planting Maturity.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design. Anticipated planting maturity is based on landscape design intent information currently available (to be further developed in detailed design).

VIEWPOINT 7

LOCATION	Corner of Gore Street and St Vincents Road
DISTANCE	60m
RECEPTORS	Road and footpath users
NO. OF VIEWERS	Low
EXISTING VIEW	A combination of tall mature vegetation located on the existing Greenwich Hospital site can be seen. Built elements in the form of a private residence as well as a public road to the right of the view and power lines crisscrossing the view are also present.

EXPECTED VISUAL IMPACT	
As a result of mature vegetation, the health respite facility will be obscured. To the right of the view the hospital will be highly filtered by vegetation and will not allow for any discernible views.	

Receptor Type	Public
Viewpoint Number	7
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	NEGLIGIBLE
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	NEGLIGIBLE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	NEGLIGIBLE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Anticipated View.



Anticipated View with outline of the new building.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.

VIEWPOINT 8

LOCATION	47 Gore Street
DISTANCE	0m
RECEPTORS	Private residents
NO. OF VIEWERS	Low
EXISTING VIEW	Significant mature vegetation dominates the current view which results in highly filtered views beyond this which are free of built elements of the current hospital.

EXPECTED VISUAL IMPACT	
The retention of the majority of mature vegetation at this location (with one tree scheduled for removal) will result in highly filtered views of the proposed hospital.	
Although the view through the vegetation will be filtered, it will result in the current filtered views of open sky beyond being replaced by filtered views of built-form, and will create a noticeable increase in the perception of built-form from this location.	

Receptor Type	Private
Viewpoint Number	8
Sensitivity rating of receptor	HIGH
Magnitude - Distance	HIGH
Magnitude - Quantum of view	LOW
Magnitude - Period of View	HIGH
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE/HIGH



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or landscape design.

VIEWPOINT 9

LOCATION	Local reserve, Ffrench Street
DISTANCE	165m
RECEPTORS	Reserve users
NO. OF VIEWERS	Low
EXISTING VIEW	<p>Existing mature vegetation dominates nearly the entire visual scene, and only allows for highly filtered views to a small number of private residences in the distance on Gore Street.</p> <p>No built elements of the existing Greenwich Hospital site are currently visible.</p>

EXPECTED VISUAL IMPACT	
<p>Dense mature vegetation within the reserve as well as vegetation on either side of St Vincents Road to the north of the reserve creates a highly obstructed and filtered view of the site.</p> <p>Only the very upper level of the proposed hospital will be visible in the centre of the view where a break in the vegetation occurs, although this will form a noticeable edition to the skyline that occupies the currently unoccupied space.</p>	

Receptor Type	Public
Viewpoint Number	9
Sensitivity rating of receptor	HIGH
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	LOW
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Anticipated View.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.



Anticipated View with outline of the new building.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.

VIEWPOINT 10

LOCATION	Footpath outside 20 St Vincents Road
DISTANCE	10m
RECEPTORS	Road and Footpath users, residents of house
NO. OF VIEWERS	Low - Moderate
EXISTING VIEW	<p>Mature vegetation on site can be seen to either side of the St Vincent Road entrance to the hospital site. The vegetation prevents any long distance views into the site on either the left or the right of the scene, and only allows for highly filtered views in the middle of the view. A small framed view clear of any vegetation recedes into the distance.</p> <p>A change in level between St Vincent Road and the carpark that this entrance leads to is noticeable.</p>

EXPECTED VISUAL IMPACT
It is anticipated that the existing retained trees will largely obscure the proposed hospital building and only highly filtered views being occasionally possible.

Receptor Type	Public
Viewpoint Number	10
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	LOW
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	LOW



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS

CLOUSTON associates



Existing View.



Anticipated View.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.



Anticipated View with outline of the new building.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.

VIEWPOINT 11

LOCATION	Corner of River Road and St Vincents Road
DISTANCE	50m
RECEPTORS	Road and footpath users
NO. OF VIEWERS	High
EXISTING VIEW	<p>Existing mature vegetation can be seen on the north-eastern corner of the hospital site receding into the distance along River Road. The mature vegetation largely blocks any views of built form on site, with only a small, highly filtered element visible near a purple sign.</p> <p>River Road and a number of power lines form the most dominant built elements in the visual scene, with a number of signs on site and running parallel to the road also visible.</p>

EXPECTED VISUAL IMPACT	
Views of the upper levels of the proposed hospital will be clearly visible from this location. Due the retention of existing mature vegetation on the north-eastern corner of the site views of the lower levels of the hospital will be obstructed.	
Views of the upper levels of the proposed hospital will add a noticeable new built form element to the visual scene above the tree canopy.	

Receptor Type	Public
Viewpoint Number	11
Sensitivity rating of receptor	MODERATE
Magnitude - Distance	HIGH
Magnitude - Quantum of view	LOW
Magnitude - Period of View	LOW
Magnitude Scale of change	MODERATE
Overall Magnitude rating	MODERATE
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or landscape design.

VIEWPOINT 12

LOCATION	Public footpath outside of 120 River Road
DISTANCE	13m
RECEPTORS	Road and footpath users
NO. OF VIEWERS	High
EXISTING VIEW	<p>This location allows for a direct view into the existing hospital site. A number of built-form elements form a significant proportion of the scene, with part of the existing hospital visible in the foreground and the roof of Pallister House beyond this.</p> <p>A large mature tree can be seen in the distance beyond Pallister House.</p>

EXPECTED VISUAL IMPACT	
<p>A direct view of a number of elements of the Proposal will be visible from this location. The historic Pallister House will become far more visible than in the current view, which will be a positive contribution to the scene.</p> <p>Significant new built-form elements will also become visible on the right of the view. New built-form elements include the western edge of the proposed cafe terrace and eastern edge of the Northern Senior Living Units to the centre and right of the view.</p>	

Receptor Type	Public
Viewpoint Number	12
Sensitivity rating of receptor	LOW
Magnitude - Distance	HIGH
Magnitude - Quantum of view	HIGH
Magnitude - Period of View	LOW
Magnitude Scale of change	HIGH
Overall Magnitude rating	HIGH
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	MODERATE



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS

CLOUSTON associates



Existing View.



Initial View (Year 1)



Anticipated View Upon Planting Maturity.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design. Anticipated planting maturity is based on landscape design intent information currently available (to be further developed in detailed design).

VIEWPOINT 13

LOCATION	Footpath outside of 10 River Road
DISTANCE	270m
RECEPTORS	Road and footpath users
NO. OF VIEWERS	High
EXISTING VIEW	<p>Mature vegetation in the foreground to the left of the scene as well as vegetation to the centre and right of the scene on the southern side of River Road receding into the distance.</p> <p>The most noticeable built element of the scene is River Road receding into the distance, with a crash barrier and a number of power poles with lighting also contributing to the scene.</p>

EXPECTED VISUAL IMPACT	
<p>A small proportion of the Seniors Living Units will be visible in the distance through highly filtered views as a result of vegetation. A significant amount of mature vegetation located on private properties and running along River Road will not be changed, and will obstruct views of the lower levels of the buildings.</p> <p>The level of visibility will be highly limited, although the presence of built-form will be discernible. The period of view will generally be brief as a result of the speed that cars are travelling along the road and that vehicle users make up the majority of users as opposed to pedestrians which would have a longer viewing period.</p>	

Receptor Type	Public
Viewpoint Number	13
Sensitivity rating of receptor	LOW
Magnitude - Distance	MODERATE
Magnitude - Quantum of view	NEGLIGIBLE
Magnitude - Period of View	LOW
Magnitude Scale of change	NEGLIGIBLE
Overall Magnitude rating	LOW
Overall VISUAL IMPACT RATING (combination of sensitivity and magnitude ratings)	LOW



Viewpoint Location.

8.0 VISUAL IMPACT ANALYSIS



Existing View.



Anticipated View.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.



Anticipated View with outline of the new building.

Images intended to give an **indicative impression of the size and scale** (massing only) of the Proposal within the view frame and are not intended to accurately reflect materiality or final landscape design.



Corner of St Vincents Road & Gore Street.

8.0 VISUAL IMPACT ANALYSIS

VIEWPOINT LOCATIONS	RECEPTOR SENSITIVITY	MAGNITUDE					IMPACT RATING
		DISTANCE	QUANTUM OF VIEW	PERIOD OF VIEW	SCALE OF CHANGE	OVERALL MAGNITUDE RATING	
1. Public footpath (approx. 150 River Road)	M	H	M	M	M	M	MODERATE
2. Gore Creek Reserve	H	M	N	L	N	L	MODERATE
3. Cnr. River Road & Sarnar Road	M	M	L	L	M	M	MODERATE
4. Cnr. Gore Street & Carlotta Street	L	M	L	L	M	M	LOW/MODERATE
5. 110 River Road	H	H	H	H	H	H	HIGH
6. 46a Cliff Road	H	M	M	H	M	M	MODERATE/HIGH
7. Cnr. Gore Street & St Vincents Road	L	H	N	N	N	N	NEGLIGIBLE
8. 47 Gore Street	H	H	L	H	M	M	MODERATE/HIGH
9. Local Reserve, Ffrench Street	H	M	L	L	L	L	MODERATE
10. Footpath (approx. 20 St Vincents Road)	L	H	N	L	N	L	LOW
11. Cnr. of River Road & St Vincents Road	M	H	L	L	M	M	MODERATE
12. Footpath (approx. 120 River Road)	L	H	H	L	H	H	MODERATE
13. Footpath (approx. 10 River Road)	L	M	N	L	N	L	LOW

Summary of visual impacts of the Project across the study area.

8.1 VISUAL IMPACT SUMMARY

The visual impacts of the Proposal on the studied viewpoints range from negligible to high.

- One viewpoint received an impact rating of Negligible
- Two viewpoints received an impact rating of Low
- One viewpoint received an impact rating of Low/Moderate
- Six viewpoints received an impact rating of Moderate
- Two viewpoints received an impact rating of Moderate/High
- One viewpoint received an impact rating of High

9.0 Mitigation recommendations



Looking west along River Road.

9.0 MITIGATION RECOMMENDATIONS

9.1 APPROACHES TO MITIGATION

There are typically five broad approaches to mitigating the visual impacts of any change to a scene that entails built form development. These are through:

- Avoidance – where the visual impact of the proposal is deemed of a scale that cannot be mitigated by any of the approaches outlined below, this approach implies relocating the proposal elsewhere on the site with lesser visual impacts or not proceeding with the proposal on the site at all
- Reduction – typically this approach seeks to mitigate impacts through the reduction of some part of the proposed structure or development (ie. reduced height or omission of parts of the built structure/s)
- Alleviation – this approach entails design refinements to the proposal to mitigate visual impacts. These refinements might typically include built form articulation, choice of material and colours and/or planting design
- Off-site Compensation – where none of the above approaches will provide adequate visual impact mitigation for off site visual receptors, this approach entails off site works on the land from which the viewpoint is experienced (eg screening close to the viewpoint), usually carried out with the agreement of the affected landowner.
- Management – in this approach the mitigation response typically entails an operational or management action such as construction management.

Set out below are the relevant responses to these approaches with respect to the Proposal.

9.2 RECOMMENDED MITIGATION

Avoidance

Zoning of the site, land requirements for successful operations, as well as a hospital currently operating on the site indicate that locating the Proposal elsewhere is not a viable option. Similarly, not proceeding with the Proposal would result in a continuing decrease in the hospital's effectiveness for the community and the current hospital no longer conforming to best practice. As a result of these factors, 'Avoidance' is not an appropriate form of mitigation for the Proposal.

Reduction

For the locations where the visual impact is rated High and Moderate/High, the removal or substantial reduction of the built form would logically alleviate the visual impacts. This would however (in the case of the hospital) have an operational impact on the functionality and effectiveness of facility, which could result in a facility that is not fit for purpose.

Alleviation

A significant amount of mature vegetation exists on site and in the surrounding area, both on public and private land. This vegetation obstructs or provides highly filtered views of the Proposal, and the option to introduce more planting is mainly limited to on-site options,



Bob Campbell Oval.

9.0 MITIGATION RECOMMENDATIONS

which has been utilised with the introduction of 92 new trees on site in the current concept landscape design.

The use of strategic planting could be used on private properties to filter views of the Proposal if individual residents feel that the visual impacts are significant enough to warrant this. This could be undertaken through consultation during the detailed design phase.

The most appropriate form of Alleviation would be in built-form articulation and materials selection during the detailed design phase, as well as through landscape design and planting for the Proposal. This would contribute towards the Proposal integrating as sympathetically as possible with the surrounding landscape, and potentially contribute to the surrounding built environment through well considered design.

Off-site compensation

As previously mentioned, the ability to provide off-site compensation through the use of strategic planting is limited, but could provide filtered views of the Proposal for a limited number of receivers if they felt the visual impacts were too intrusive.

Management

An appropriate Construction Environmental Management Plan (CEMP) should be prepared for the construction phase of the Proposal by the responsible construction contractor which outlines management measures for environmental impacts including impacts on sensitive receivers.

9.3 CONSTRUCTION IMPACTS

The Proposal will involve a construction phase with associated additional temporary visual impacts. The following activities are likely to occur:

- clearing of vegetation
- setting up of site compounds
- stockpiling
- earthworks
- site fencing
- increased site traffic including heavy vehicles

During the construction period, many viewpoints studied within this report are likely to have increased visual impacts. Views of site compounds, storage areas and increased site traffic (including trucks) will lead to a reduction in visual amenity.

Impacts will reduce as viewing distance and screening vegetation increase. Furthermore these visual impacts will be of a temporary nature and will reduce for all viewpoints once the Proposal is complete and the construction areas made good.



Intersection of Gore Street and St Vincents Road.

10.0 CONCLUSION

10.1 FINDINGS

A comprehensive visual impact assessment of the Proposal on the surrounding area has been conducted.

The study has identified and evaluated the existing visual environment, key views and view types before progressing to an assessment of quantitate and qualitative criteria using best practice methodology. A number of mitigation measures have also been proposed to reduce visual impacts of the Proposal to the surrounding area.

10.2 SUMMARY OF FINDINGS

Overall, the following conclusions can be drawn on the Proposal's impacts to visual amenity within the study area:

- mature vegetation (particularly to the east and south of the site) obstructs or provides highly filtered views of a substantial proportion of the Proposal;
- the Proposal is most visually accessible when viewed from the north of the site as a result of less substantial groupings of mature vegetation creating a more open northern boundary compared to the other sides of the site;
- the northern facades of the proposed Hospital and northern Seniors Living Units building will be visible above the retained and proposed vegetation running parallel to River Road;
- the highest level of visual receivers is centred around River Road as a result of the high level of vehicle usage (particularly at peak hours) as well as a number of private properties being elevated above the road and therefore increasing their visual accessibility to the Proposal;
- the visual catchment of the Proposal is limited as result of topography and surrounding vegetation, with the upper levels of the Hospital and Seniors Living Units buildings being the most visually accessible elements at distance;
- the most significant public space that will be impacted is Bob Campbell Oval and Gore Creek Reserve, with highly filtered views of the upper levels of the southern Seniors Living Units building being visible.

10.3 CONCLUSIONS

This LCVIA employs a rigorous, best practice methodology to identify levels of visual impacts and potential mitigation measures, based on a professional evaluation.

Whilst it is acknowledged that the perceived visual impact of the Proposal will vary from viewer to viewer, the methodology used to evaluate visual impact in this instance is informed by internationally accredited approaches and the author's 20 years of experience in the field of visual impact.

This methodology takes into consideration the local context and references both international standards and local legislations, policy and Land and Environment Court principles.



Existing Hospital Carpark.

10.0 CONCLUSION

Of the 13 viewpoints selected and analysed the findings are as follows:

- One viewpoint with a **negligible** rating
- Two viewpoints with a **low** rating
- One viewpoints with a **low/moderate** viewpoint rating
- Six viewpoints with a **moderate** rating
- Two viewpoints with a **moderate/high** rating
- One viewpoint with a **high** rating.

While the foregoing visual impact analysis of the Proposal highlights one High and several Moderate to Moderate/High impacts, these impacts are not extensive in terms of visual catchment as existing vegetation and topography tend to generate single standpoint views rather than wide panoramic views.

Both the public and private locations are located within a very close proximity to the Proposal, with Viewpoint 4 being the most distant location at 500m. The impact ratings generally decrease when moving away from the Proposal as a result of the surrounding topography and extent of existing vegetation.

Although the Proposal will introduce a significant new level of built-form and development to the site, much of this will be obscured, with the upper levels of the proposed buildings forming the most noticeable element to the surrounding area.

On balance it is the professional opinion of the authors of this assessment that (on the basis that the proposed mitigation measures are implemented through the detailed design stage) the visual impacts combined with the overall visual catchment of the Proposal are such that they would not constitute reasons to hinder planning approval on visual impact grounds.



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