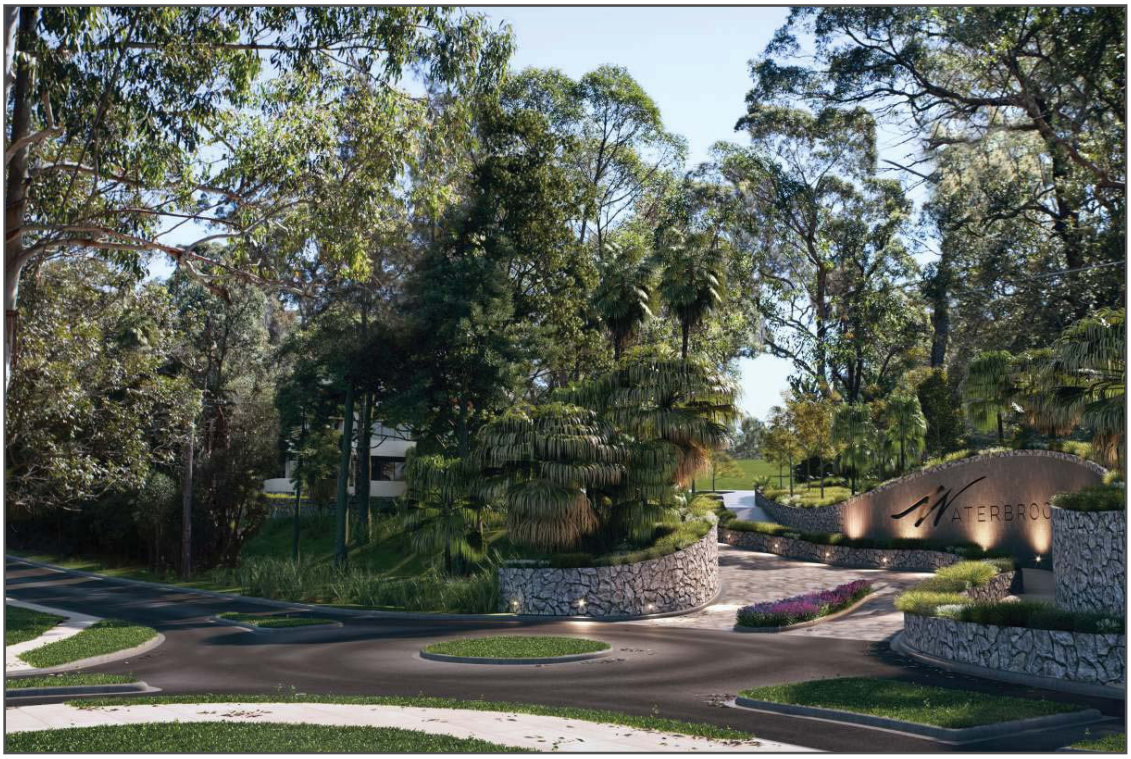
rla
richard lamb & associates

Development Application
Seniors Living Bayview Golf Course



Visual Impact Assessment Report

Report prepared for Waterbrook

by Dr. Richard Lamb and Jane Maze-Riley

August 2018

1/134 Military Road, Neutral Bay, NSW 2089 PO Box 1727 Neutral Bay NSW 2089
T 02 99530922 F 02 99538911 E info@richardlamb.com.au W www.richardlamb.com.au

richard lamb & associates

Table of Contents

Table of Contents

1.0 Purpose of this report

Richard Lamb and Associates (RLA) have been commissioned by the applicants, Waterbrook Bayview Pty Ltd, to provide an independent assessment of the likely effects of the proposed development on public and private domain views. Dr Lamb is a professional consultant and principal of RLA, a consultancy specialising in view loss, visual impacts and landscape heritage matters. A summary CV is attached to this advice. A full CV can be read or downloaded from the tab on the Home page of the RLA website at www.richardlamb.com.au.

This report follows the detailed methodology developed by Dr Lamb for the analysis of visual effects of new built forms or structures in the landscape and the potential impacts of the effects on views. The fully detailed methodology for this report is included at Appendix 2. It is accompanied by a flow chart that shows the logic, sequence and components for the documentation, analysis and assessment of visual impacts.

1.1 Limitations

This report concerns visual impacts only and is based on field work and an assessment of a representative sample of public and private domain views, a range of which were recommended by RLA to be modelled by architectural illustrators for the Applicant, Virtual Ideas. Visual issues also arise for other technical disciplines such as town planning, urban design, landscape design and architecture. Technical reports from these disciplines may include other considerations of visual issues and are addressed by others with appropriate expertise from those perspectives.

2.0 Background

Waterbrook in partnership with the Bayview Golf Club have prepared a DA for the development of 95 in-fill self-care seniors living units within the Bayview Golf Course, on land owned by the Bayview Golf Club. The proposed development is located in the north part of the Golf Course, north of Cabbage Tree Road and is one part of upgrade works to the course that includes a reconfiguration of the 18-hole course, flood mitigation works, a revegetation strategy and other minor building improvements.

The upgrade of the Golf Course and reconfiguration of the course, flood mitigation works and minor improvements are not the subject of this report, which is confined to consideration of the visual impacts of the self-care seniors living component of the proposed development.

The built form the subject of this report is massed into 6 blocks that are of three to four residential storeys in height of above-ground built form, with Block A at the east end, being the closest to adjoining residential development.

We are advised that the proposed development reflects the height, bulk and scale of the proposed development as shown in the Site Compatibility Certificate 2016, which was subsequently approved by the Department of Planning and Environment (DPE) in 2017, under Clause 25(4) (a) of the Seniors SEPP. The Concept Approval includes built form of 3 to four storeys in height.

RLA provided advice to the Applicant in relation to the documentation of the Visual Impact Assessment prepared by Virtual Ideas, architectural illustrators, which accompanied the current application. We undertook a peer review in relation to the methodology and assumptions used, the likely accuracy of the preparation of photomontages and the coverage and comprehensiveness of the locations of the views represented, with regard to visual exposure to the public and the private domains. This included consideration of the reasons given by Northern Beaches Council for concerns about the visual impacts of the proposal as set out a letter to Waterbrook Bayview Pty Ltd, dated 30 April, 2018.

We reviewed the visual impact assessment (VIA) prepared by Virtual Ideas that accompanied the current application and found, based on the methods, assumptions and our experience working with Virtual Ideas on other large-scale projects, that the standard and quality of their work and the visual materials provided can be relied upon as being accurate and representative of the likely visual impacts of the proposed development.

As part of our peer review, we provided advice in relation to the need to provide additional views, to supplement and increase the comprehensiveness of the VIA and to test whether the concerns expressed by Council with regard to visual impacts were likely to be well founded. We recommended the following;

- Additional photomontages should be prepared to represent the proposed development's bulk, scale and massing as simple undetailed, unadorned and uncoloured block-model montages, in the existing visual setting and without proposed planting.
- Some of the locations for public views, from which images had been photographed and photomontages prepared, should be repositioned, for example view 15 and view 1 in the VIA that accompanied the current application, to better represent the short, near-axial views that occurs along a section of Cabbage Tree Road.

- Additional locations should be visualised at Barkala Road and at the public park in Annam Road.
- Further representative private domain views should be visualised, from levels equivalent to the floor levels of adjacent dwellings, for example from dwellings accessed from Konda Close, Kiewa Close and Kiah Close.
- Images used should be captured with a standardised focal length for the high resolution photographs used to prepare photomontages, taken where possible from surveyed locations.
- A comparative analysis of 3D modelling of the 3-4 storey SCC envelopes approved in 2016 (the Concept Approval) and the DA scheme submitted could be carried out, based on the new or adjusted view locations.

Virtual Ideas have prepared an amended Visual Impact Assessment including these recommendations.

We have prepared this report, based on our own field assessment and documentation and the information included in the amended VIA, which includes a significant number of new photomontages and CGIs, representing views recommended to be added by RLA.

We can certify that the processes employed for the preparation of the photomontages follow the practice note established in the Land and Environment Court of New South Wales for the use of such material in evidence that has become the standard adopted to assure the accuracy of photomontages. The Visual Impact Assessment represents best practice for preparation of photomontages and can be relied on as a reasonable, accurate and objective presentation of the worst-case impacts of the proposed development, as well as rendered photorealistic photomontages that include vegetation.

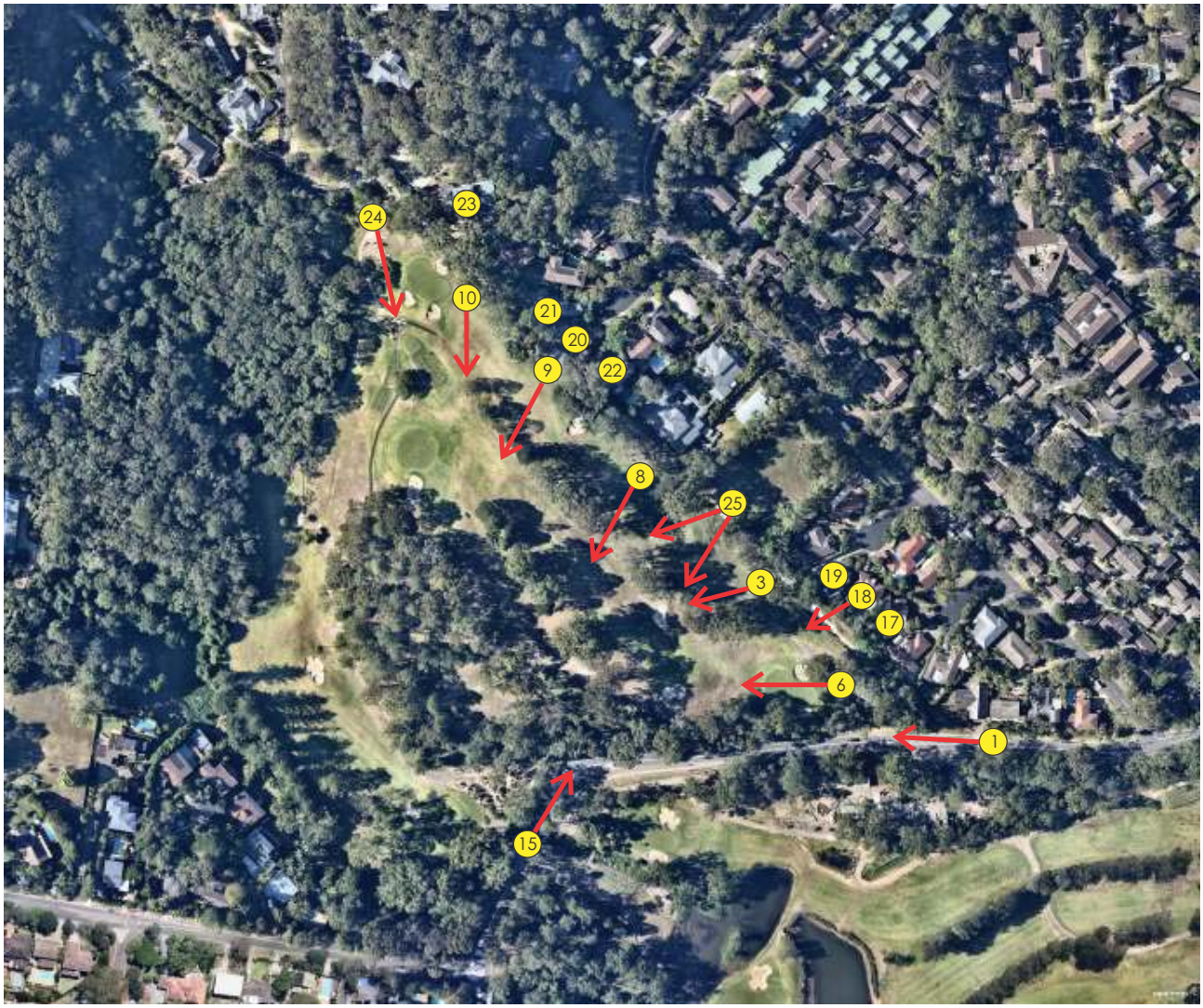
The photomontages include uncoloured, undetailed and un-vegetated views. They thus exaggerate the visibility of the built form and show contrasts of colour, texture, line and form far in excess of what the proposal as built would have with the existing environment. Rendered full in colour, with realistic fall of light and shade and with detailing, textures and with proposed landscape materials at photorealistic densities, the proposed development would in most views be of moderate to low visibility and highly compatible with the adjacent environment, as is amply demonstrated in the fully textured photomontages provided.

2.1 Documents Consulted

- SEE prepared by Ethos Urban
- DA set drawings prepared by Marchese Partners
- Visual Impact Assessment, Waterbrook Bayview, prepared by Virtual Ideas, submitted with the current DA, dated 28 November, 2018
- Amended Visual Impact Assessment prepared by Virtual Ideas 2 August, 2018
- Landscape planting plan and northern boundary new tree plan Rev A, prepared by Site Design Studios 3 August, 2018

2.2 Assessment Methodology

The assessment methodology adopted in this report is set out in Appendix 2. A flow chart at Figure B1 indicates the relationships among the parts of the visual impact assessment and the logic of progress through the methodology.



Map 1: Waterbrook Seniors Living - Proposed photomontage view locations

15 **Recommended locations**

indicative angle of view, avoiding existing vegetation where possible

rla
richard lamb & associates

NORTH

Not to Scale

Map 2: RLA photographic plate locations (see Appendix A)

15 **View locations**

Not to Scale

3.0 View analysis

3.1 View locations and situations

The subject site is located in the north-west part of Bayview Golf Course, in Bayview. The Golf Course is divided into two parts, the northern part of which includes the subject site and is bounded by Pittwater Road to the east and Cabbage Tree Road to the south. The north part of the Golf Course is generally higher and includes more varied topography relative to the southern part and is surrounded to the north, west and east by residential development. The adjacent residential development contains a high proportion of seniors living developments of varying scales and several large scale individual aged care facilities.

The proposed development is centrally located in the northern part of the Golf Course, set back substantially from all Golf Course boundaries. We refer to this part of the Golf Course as the subject site. The subject site will occupy part of the Golf Course that is currently characterised by fairways, fairway vegetation and significant areas of indigenous native and cultural vegetation, on a broadly triangular footprint, that is accessed from the south, via Cabbage Tree Road.

The west boundary of the northern part of the Golf Course adjoins an area of dense vegetation of a natural appearance which appears to be contiguous with part of the Katandra Bushland Reserve located south of Cabbage Tree Road. The densely vegetated area also includes a limited number of isolated individual residences that are accessed via long driveways and some seniors living developments located along the east side of Minkara Road. Aveo Minkara Aged Care and Aveo Minkara Resort are located west of the subject site on elevated, heavily vegetated east-facing slopes. The developments are separated from the Golf Course by steep valley topography, the east side of which is traversed by Barkala Road. This is a private road to a designed estate which provides access to approximately 15 dwellings.

Residential development to the north and north-east located in three short cul-de-sacs that are accessed via Annam Road, border the north boundary of the Gold Course. Annam Road is a crescent which climbs in elevation to the west and encircles Bay View Gardens seniors living. This is a sprawling development characterised by two and three-storey built forms, massed in rectangular blocks of units and individual dwellings. The Bayview Gardens site is undulating, heavily treed and displays circa 1970-1980s architectural style and materials, for example brown clinker bricks, brown tile roofs, and timber, vertical slat balustrades.

Dwellings at the south end of a number of small cul-de-sacs including Kian Close, Kiewa Close and Konda Close are orientated to the south so that they have potential views of the Golf Course and the subject site. We observed the presence of a fire trail along the rear of houses accessed via the cul-de-sacs, which separates dwellings from the Golf Course.

The fire trail is an open, grassy unformed track, flanked along both sides by a variety of vegetation including clear trunked trees within the Golf Course. Some vegetation at the northern end of the trail within the Golf Course appears to have been pruned, in some cases severely, possibly to to improve visual access into and across the Golf Course.

The subject site rises in elevation to the west and is marked along its southern edge by a steep, vegetated slope. The slope falls to the south towards Cabbage Tree Road and includes dense mixed primarily native vegetation that is also weed-infested close to the road, the structure of which will be retained and rehabilitated, with the tree cover augmented by additional planting.

The proposed built form will be nestled into the north-east edge of an existing band of vegetation to the north, which separates two fairways. We observed that another narrow band of fairway planting to the north and north-east of the subject site and buildings B, C and D, exists and that other screen vegetation has been established along all of the Golf Course boundaries. Fairway planting, particularly the band that is located north of buildings B, C and D, is characterised by clear tree trunks and turf with no understorey planting presumably to facilitate the ease of movement between fairways.

3.2 Visual catchment

3.2.1 Public Domain

The location of the subject site and proposed development is such that visual access from the public domain the west, north and east is limited or unavailable. There is low external visibility of the Golf Course and subject site from public roads and publicly accessible vantage points that immediately surround the site, with the exception of one pocket park in Annam Road.

We observed a view towards the Golf Course and to the north end of the subject site from a short section on Cabbage Tree Road at the brow of a rise immediately east of Minkara Road. This isolated view is available from a short section of the road and would be seen from moving viewing locations.

Filtered views to the Golf Course exist from a reserve at 11A Annam Road but no other significant public domain visual access to the site is available from Annam Road, Kiah Close, Kiewa Close or Konda Close.

Potential views exist from two close, isolated locations along Cabbage Tree Road, including a view north-west at the entrance into the site, predominantly for west-bound road users. The second view exists to the north for east-bound users of Cabbage Tree Road where the road is orientated directly toward the site before turning sharply to the east. Notwithstanding an almost continuous vegetative screen along the southern boundary of the subject site, a small gap in the vegetation in this vicinity exists which allows for a potential near-axial view to proposed three-storey built form of the Facilities building, that is located close to, but significantly above the road level. There are no views to the site from Cabbage Tree Road once it leaves the boundary of the Golf Course to the west.

3.2.2 Private Domain

Residential development exists adjacent to the site to south, west, north and east. Visual access from the west and south-west is constrained by vegetation within the course along its boundary, within Katandra Reserve and by mature vegetation that will be retained along the south side of the built form proposed.

Potential visual access from residential development including from Minkara Aged Care and Resort on Minkara Road north-west of the site is unlikely. Notwithstanding these areas are elevated in relation to

the subject site, they are approximately 600m to the west and typically are of three to four residential storeys in height, which is similar to the height of the mature tree canopy which exists between the seniors living development and the subject site.

Barkala Road includes houses located adjacent to the north-west tip of the Golf Course, the closest of which at 4 Barkala Road is located adjacent to the new tees proposed for the 6th fairway, which are elevated and will be protected from view by mounding. The dwelling is currently partly located below the level of the existing tee such that views to the south may be partly obscured. Barkala Road drops steeply to the west into a heavily treed valley so that the majority of dwellings along it are not orientated towards the Golf Course and have no, or limited visual access to the subject site.

39-41 Annam Road is a battle axe block located east of the subject site and close to the north end of the fire trail. This is a long, rectangular shaped two-storey dwelling that is elevated in relation to the subject site. The dwelling is orientated so that its long southern elevation is orientated towards the subject site. The rear garden which adjoins the fire trail is largely an open turfed area and free of vegetation. Potential views exist to the subject site below clear stemmed boundary vegetation on the Golf Course.

27 Annam Road is located down-slope adjacent to Konda Close. It is orientated towards the south-west so that potential views to the northern edge of the proposed built form are possible. Some fire trail and Golf Course vegetation has been pruned in this location, possibly to improve potential views to the south-east across the course. 6 and 4 Konda Close are located at the south end of the cul-de-sac and have rear elevations and floor levels that will provide for potential views across the Golf Course and to the subject site.

Some dwellings located at the south end of Kiewa Close and Kiah Close have views from the rear into the Golf Couse. These dwellings are located close to the east end of the proposed development and we observed that vegetation along the boundary in this vicinity is relatively sparse.

Residential development located east of the subject site including dwellings between Annam Road and the proposed site entrance present to the south and are unlikely to have direct views of the subjects site.

Views from dwellings accessed via long driveways on the east side of Cabbage Tree Road, west of the subject site, may be possible. Potential views would be horizontal or upwards from the lower part of the road but in the majority of cases would be screened by the canopy of a row of Norfolk Island Pine trees located along the western boundary of the Golf Course. Initial views 13, 14 and 15 prepared by Virtual Ideas show potential views from these locations. Further screening would be provided by mature vegetation on the slope into which the built form will be positioned. For this reason, in our opinion visual exposure to the subject site from this direction would be constrained and very limited.

3.2.3 Summary of Visual Access

Public domain access to the subject site is limited to isolated, close, short term views from moving viewing locations on Cabbage Tree Road and an isolated public reserve in Annam Road, from which the views are similar to those from adjacent residences that flank it. It is unlikely that any public views across the site would extend to include distant, scenic or highly valued features or heritage items that could be affected by the proposed development.

Private domain access to the subject site is limited to close views to parts of the Golf Course. Views available are from floor levels that are not dissimilar to the heights of the topography of the site so that panoramic views beyond the site to the south or east are unlikely to be available. It is unlikely that any private domain views across the site would extend to include distant, scenic or highly valued features or heritage items, that could be affected or blocked by the proposed development.

We acknowledge that the visual setting of the subject site and Golf Course generally may be considered as aesthetically pleasing by those who have views to it. We note that the site is zoned as private recreation and as such features of it could be changed at any time by the owners such as additional planting established along boundaries, the construction of a permissible exempt structures for example storage or maintenance sheds which could create visual effects and impacts on private domain views, or changes to the use of the land to other forms of recreation.

Specific views from close residential locations are discussed below, based on analysis of block-model and textured photomontages.

4.0 Visual effects analysis

In line with our methodology and as determined in section 3.2 above, the visual catchment of the subject site is small. Potential views are largely constrained by topography and vegetation. Visual access to the subject site and to the visual effects caused by the proposed development on the public domain, would be limited. The majority of surrounding publicly accessible viewing places have no views of the proposed development. Adjacent private residences are the few locations with partial views. However, some visual effects (or parts) of the proposed development will be able to be viewed from some isolated locations and may have an effect on the existing character or scenic quality of views, primarily as experienced by private residents. Baseline criteria for the analysis of visual changes caused by the development on views, are described below.

4.1 Baseline factors

4.1.1 Visual character of the site

The subject site is characterised by the open green space of the Golf Course predominantly devoid of built form and including manicured fairways, tall fairway vegetation and other stands of mature vegetation both indigenous native vegetation and cultural vegetation, within the course. Although sand bunkers, access paths and small ancillary structures are visible in places, the character of the site appears to be 'natural' notwithstanding it's topography and vegetation are the result of significant modification over time.

4.1.2 Visual Character of the Streetscape

We have considered the streetscape character of the surrounding visual context including roads and areas that are not located within the visual catchment. This is to say that although the streets are nearby or adjacent to the site, there may be no visual access to the built form proposed from the streetscape itself. In this regard there is no means by which the majority of the public would be able to make a comparison of the existing visual character of streetscapes and the proposed visual character of the development within the Golf Course. The discussion of streetscape character is however relevant as a baseline factor against which the level of change caused by the proposal can be assessed. The desired future character of the locality is also relevant to assessing the extent of acceptable change to character.

The character of Cabbage Tree Road, Minkara Road and Annam Road are those most relevant to this analysis. Cabbage Tree Road to the south and west is predominantly characterised by individual dwellings on large lots across an undulating landscape. Dwellings along the southern side in the lower reaches of the Cabbage Tree Road are more visible from the street relative to those located along the north side or those higher up, as it rises in elevation to west it follows a local ridgeline so that topography on either side falls away from the road. Therefore, many dwellings and parts of some lots are located below the road level as is the case for the Aveo Peninsula Gardens at 79 Cabbage Tree Road. In this way the two-three storey seniors living development does not contribute significantly to the streetscape character. Overall, the predominant streetscape character of Cabbage Tree Road is of one to two-storey dwellings set within a mature treed landscape.

Minkara Road streetscape is predominantly characterised by mature vegetation lining both sides with intermittent residential development including two large seniors facilities mid-way along the east side. The majority of both the seniors living developments are not located close to the road and in this regard they make a small contribution to the streetscape character of the road.

Annam Road and the 3 cul-de-sacs which intersect with it, are characterised by circa 1970s and 1980s one to two-storey residential development including detached dwellings and the Bayview Gardens seniors living development which fills the majority of the north side of the road in the general vicinity of the Golf Course. Bayview Gardens seniors living development occupies sloping topography so that the two to three-storey built form appears to be of greater height and scale in some views, for example it appears as four to five storeys in elevation when viewed from Kiah Close.

East of the subject site along Cabbage Tree Road residential development is predominantly characterised by one to two-storey residential development, that is set on sloping land above the road.

4.1.3 Effects on Visual Character

In summary, the proposal would create initial contrast and change in some, predominantly private views, by adding new and distinctive features to the existing setting. However, based on an our analysis of the block-model and textured photomontages as per Table B.2.1 in Appendix 2, the initial effects would be rated as 'medium', but would fall to 'low' following the establishment of additional Golf Course boundary planting and the installation of the intensive landscape gardens surrounding each of the proposed built forms. To the extent that they are visible, this would be assisted by the effect of colour, texture and detailing of the buildings, that are intended inter alia to mitigate visual impacts and to increase the compatibility of the proposed buildings with the adjacent setting.

4.2.1 Scenic Quality

Scenic quality is a measure of the ranking, which the setting of the proposal would be predicted to have, on the basis of empirical research carried out on scenic beauty, attractiveness, preference or other criteria of scenic quality.

Scenic quality is a baseline factor against which the visual impacts caused by the proposal are assessed. The scenic quality of the view that could be affected by the proposed development would be rated as medium, as the environment, while largely devoid of buildings and therefore 'natural' in that sense, is highly modified, with the exception of areas of indigenous native vegetation and remnant, indigenous vegetation that is retained between fairways and in strategic locations around some tees and greens. The scenic quality is similar to a large scale public park and the quality is increased by the proportion of tree vegetation of a genuinely natural appearance and the moderately complex topography.

4.2.2 Effects on scenic quality

The effects of the proposal on scenic quality would be limited from the public domain and varied in private domain views dependent on the relative viewing level and the nature and extent of existing visual access. Scenic quality ratings typically decline with the presence of built development, no matter what its intrinsic aesthetic quality is.

The built form proposed would create new features in the 'natural', predominantly green, treed setting. However, the built form would not reduce the extent of panoramic views or the vegetated nature of the views, given the substantial amount of landscape planting that is proposed, or the existing dominance of views by vegetation above and behind the development in most views. The proposal would also provide significant screening effects and attractive garden features that would complement the scenic quality of views. The views would nonetheless have a distinctly built character by comparison to the existing situation.

In the closest and potentially most affected private domain views from residences to the north and east the proposal would be rated as having medium visual effects on the scenic quality of views in the short term, that is during and immediately post-construction. The level of effects would revert to low once the landscape has been successfully established. This is because the proposed built form does not block or reduce access to panoramic views and the initial proportion and potential dominance of the parts of the views of new built forms would be mitigated by the growth of the landscape planting.

In public views the proposal would not create any significant negative effects on local scenic quality. The proposed buildings would be of minor public visibility and not capable of significantly decreasing scenic quality in publicly available views. In this regard, in our opinion, the proposed development would have a medium to low effect on scenic quality overall.

4.3.1 View place sensitivity

We consider the site to be of low view place sensitivity. This is because it has low visual exposure to the public domain. While it has visual exposure to Cabbage Tree Road over a short section and while the road would carry significant numbers of viewers, the views are predominantly from moving (dynamic) locations and of short viewing periods. In our method, a view from a high volume road qualifies for high sensitivity status, however the viewing situation limits visual exposure of the site to glimpses. There are no lookouts or reserves that are intended to make use of scenic resources that include the site and which could be affected by the proposed development. One pocket park exists in Annam Road that has no facilities or furniture to support or invite viewers to stay to enjoy the view. The only other publicly available viewing situation is on the fire trail along the north side of the site. In our opinion, the majority of the public would be insensitive to the visual effects of the proposed development as it is effectively invisible and the visibility of the development in the public domain, on Cabbage Tree Road, would not significantly diminish the experience of using the road. While it is possible to view the site to some extent from the adjacent fire trail to the north and Annam Park, it would not be likely to be a place attracting high volume use, for example by cultural tourists or others seeking scenic experiences or who might have heightened expectations for scenic quality. In addition, it is on the interface with residential development itself, where the view is dominated by the manufactured and manicured Golf Course.

4.3.2 Viewer sensitivity

We consider the site to be of medium viewer sensitivity, as it is partly exposed to views from residences that back onto the Golf Course. Some of these appear to make specific use of visual access across their rear boundaries from internal and external living areas, across the fire trail that separates them from

the Golf Course and through Golf Course vegetation, in the direction of the site. The un-built and park-like environment of the Golf Course, kept manicured and managed as a part of the management of the course itself, provides a pleasant outlook. The addition of built development into the view will cause changes to the intrinsic character of the view and may have some low level view blocking effects, however not to scenic, but rather to foreground features, such as vegetation.

4.3.3 Effects on sensitivity

In our opinion, sensitivity is limited to consideration of the potential effects on the sensitivity of a small number of private domain residences and viewers adjacent to the site to the north. The view place, or public sensitivity is low, resulting in a low public interest in the visual impacts of the proposed development. The public in general would be unaware of the presence of the development.

4.2 Variable factors

This part of the analysis summarises the visual effects of variable factors (Chapter B2.2.2 of the Methodology in Appendix 2). These variable factors are also considered in the analysis of individual views modelled either as photomontages or CGIs by Virtual Ideas (see below).

4.2 Effects on Composition

Due to the limited visual exposure of the subject site to views, effects of it on the composition of views is rated as low for all public domain views and medium-low for the indicative private domain views that have been modelled. This is because all close views are heavily filtered or screened by foreground vegetation so that the existing views are not significantly reduced. While the buildings would be visible to close range views initially, the visibility would fall as landscape is established. In addition, as the background to the views is dominated by the existing tree canopy above and behind the scale of the proposed development, which would be unchanged, the overall view compositions would remain largely unchanged.

4.3 Relative viewing level

Public domain views are predominantly limited to Cabbage Tree Road and are upward (viewer inferior) relative to the viewer's location. The proposed development would be of minimal visibility overall and the buildings would not form a horizon or dominate the view.

Private domain views vary in relative level but are mostly approximately on-grade (viewer equal), slightly or above (viewer superior) or slightly below (viewer inferior), from residences close to and north of the site. Views in Cabbage Tree Road south of the site are significantly above the site level and have minimal views of the site or proposed buildings. The relative viewing level would therefore not result in the view being dominated by the proposed buildings or forming a horizon above the existing environment. In other words, relative viewing level would not increase the visual effects of the proposed development on the public domain.

4.4 Viewing period

Viewing period (the time available to use a viewing situation) would be low for public domain views on Cabbage Tree Road and slightly longer for pedestrians in the vicinity of the entrance to the proposed development and long for viewers on the fire trail north of the site. The public domain otherwise provides so few viewing opportunities that viewing period would not significantly affect visual impacts.

Private viewing locations provide the situation for long term views from adjacent residences, or repeated view experiences. Viewing period would increase the significance of specific visual effects.

4.5 Viewing distance

Viewing distance would only increase the extent of visual effects of the proposed development on views from the entrance off Cabbage Tree Road, for public views, as there is a close-range view opportunity of a small part of the proposal available there. Public views otherwise are at similar distances to adjacent residences north of the site, when experienced from the fire trail on the north edge of the site. That viewing distance is considered to be close range in our methodology. However, the development is not in the immediate foreground and would be partly or significantly screened by existing and future vegetation canopy. In combination with considering view composition, the proposed development would not cause loss of panoramic views or the composition of views dominated by vegetation canopy.

4.6 View loss or blocking

The proposed development would not cause significant view loss or blocking of views. Scenic features beyond the site would not be blocked or lost. The buildings proposed would replace views of vegetation and views across a fairway in some cases from adjacent residences to the north and may be seen partly against the sky in some close views. No significant view loss or blocking would be likely to occur.

4.7 Effects on individual views

The proposal is shown in a series of block-model photomontages to ensure that the height, bulk and scale of the built form proposed can be analysed in its visual context. The proposal is shown immediately post-completion without vegetation as a translucent grey colour, and in further photomontages with vegetation and both landscape and architectural detail in rendered views referred to in the Virtual Ideas amended Visual Impact Assessment as textured photomontages.

The proposed landscape planting scheme in textured photomontages, shows vegetation at various stages of development, growth rates and conditions. The proposed planting is rendered to closely represent the form and canopy shape of various species that have been selected based on their compatibility with local environmental conditions. The renders to show the proposed ground cover and low shrub species as 'mature' after approximately 3-4 years of growth. Taller shrub and small tree species to approximately 4-6m in height, are proposed in clusters along the eastern elevation of buildings and include indigenous native species such as Wild Quince (*Guioa semiglauca),* Lily Pilly *(Acmena smithii)* and Grey Myrtle *(Backhousia myrtifolia).* Some 'feature' trees such as the Cabbage Tree Palms (*Livistona australis*) and selected *Eucalyptus* and *Corymbia* Species are shown as more

mature forms, having been taller at the time of planting. Other clusters of trees particularly adjacent to Buildings A, B, C and D are shown at earlier growth stages, or equivalent to approximately of 2-3 metres in height and 2-3 years of growth.

RLA have made comments on the visual effects of planting only in selected textured views, where the proposed planting is highly visible and makes a significant contribution to the visual character or mitigation of visual impacts on views.

We note that the textured photomontages do not include additional remediation planting that is proposed around the boundary and within some parts of the golf course. This planting is designed to augment stands of existing native vegetation and increase the biodiversity present in the local environment and in the majority of external views into the site, will also provide additional screening effects.

4.7.1 Public domain view locations

Location 1 Cabbage Tree Road

This is a close view from an isolated location on a public road that is considered as being of high sensitivity, as it provides close views of the entrance to the site from a road with high usage. However, the view is available only from a very short section of the road and from moving (dynamic) viewing locations, meaning that views are of short viewing period and from an inferior position (below the site in relative elevation). The view is also available to pedestrians but unlikely to be experienced by large numbers of viewers. The built form of the development would be at best only partly visible. The public would be unaware of the overall character, bulk and scale of the proposal. To the extent that it is visible, the built form would appear predominantly to have a two-storey character that is compatible with other institutional/residential buildings of a similar function (aged care), that are common in the locality. The appearance of the proposal would not significantly conflict with the scenic quality of the view. Contrast with natural features would be mitigated over time by planting at the entrance of the site, use of natural materials, varied textures and additional landscape gardens surrounding the built form. Overall in this view, the proposal does not create negative effects on features of scenic quality.

Location 1 Cabbage Tree Road (textured photomontage)

The view above has been rendered to include the proposed landscape scheme which shows vegetation at various stages of growth, assuming optimal growth rates and conditions. Feature trees and mass planting located near the entrance combine with taller existing vegetation to create a vegetative screen that blocks views to the majority of the built form proposed. The planting scheme in this view, augments and enhances the existing character and scenic quality of the local visual context, by providing additional variety, colour and forms of vegetation. The planting scheme as shown in this broadly semi-mature state, effectively mitigates the potential visual impacts and increases the visual absorption capacity of the proposed development, on this view.

Location 1A Cabbage Tree Road

This is a longer rang view from the same isolated location on a public road. It is also of high sensitivity, and also provides short period, dynamic views from below the site in relative elevation. In the worst-case view (without vegetation or mitigation measures), the built form would be at best only partly visible, and as noted for View Location 1, the public would be unaware of the overall character, bulk and scale of the development. Of low overall visibility, the built form would be compatible with local precedents for residential buildings of a similar function, that are common on the locality.

Location 1A Cabbage Tree Road (textured photomontage)

This longer range view to the proposed development also includes feature trees and mass planting located near the entrance, which combined with existing taller vegetation for example *Eucalpytus s*pecies, creates a vegetative screen that blocks views to the majority of the built form proposed. The planting scheme enhances the existing character and scenic quality of the local visual context, by providing additional variety, colour and forms of vegetation. The planting scheme as shown in this broadly semi-mature state, effectively mitigates the potential visual impacts and increases the visual absorption capacity of the proposed development, on this view.

Location 2 Cabbage Tree Road

This is a close, upward view from the entrance to the site, close to a public road that is considered as being of high sensitivity. However, as the view is virtually inside the entrance to the proposed development, there is a lower public interest in the view, as the view opportunity is fleeting and dynamic, primarily being a glimpse of the view from a moving location on the road. The proposal has the appearance of a predominantly two-storey form and scale that is compatible with adjacent resident precedents and would not significantly conflict with the scenic quality of the view.

Location 2 Cabbage Tree Road (textured photomontage)

In this close upward view the semi-mature landscape includes advanced height Cabbage Tree Palms and vegetation in planters along the second floor, which combine to create screening effects in relation to the built form. This image demonstrates that the initial contrasts with natural features would be mitigated over time by planting, use of natural materials and textures, additional landscape gardens surrounding the built form and growth of and augmentation of indigenous native vegetation.

Location 3 Fire trail

Five views were analysed in photomontages on locations on the fire trail along the northern margin of the Golf Course. To minimise repetition, the general principles with regard to visual effects are analysed for the first view. For subsequent views, only variations from those principle, if they occur, are mentioned. As noted above, although the fire trail is informally publicly accessible, public use is discouraged.

This is a view from the south-east end of the Fire trail, where the proposed development would be closest to the viewer and where current vegetation between fairways is open and discontinuous. The

proposed built form shown in the photomontages with no mitigation measures shows that the buildings would initially be evident, as a stepped, 3-storey form that is broken up into individual buildings and also articulated, on the northern elevations. The individual buildings are modulated with height and step in above the second floor, reducing bulk as height increases. Façades are broken up by breaks and are topped by set-in upper floors with deeper balconies and wide roof overhangs. These features will generate deep shadow lines and contrasts of light and shade, reducing the perception of bulk and producing a form that is clearly of a residential scale.

Location 3 Fire trail (textured photomontage)

The proposed landscape in this view includes a mid-ground of individual trees shown as juvenile forms or approximately after 2-3 years of growth assuming optimum growth conditions. As this vegetation matures, it is likely to form a semi-continuous grove of trees to further block views of the proposed built form and other landscape planting and gardens adjacent to the building. This render demonstrates that the planting scheme once established, will effectively mitigate the potential visual impacts and increase the visual absorption capacity of the proposed development, in this and similar views.

Location 6 Fire trail

This is a view representative of the majority of views from the Fire trail, where the proposed development is significantly set back from the viewer. The foreground of the view would remain a golf fairway partly screened by vegetation, whereas the area between the current fairway vegetation in the middle distance and the buildings is intended to be landscaped with a range of tree and shrub vegetation.

Location 6 Fire Trail (textured photomontage)

As can be seen in the rendered photomontages, the landscape will screen the buildings from view. The overall visibility of the built form would be no greater than the visibility of residential development in the adjacent streets and would diminish in time as the taller shrubs and small tree species in groves along the eastern elevation of the buildings, mature.

Location 8 Fire trail

See analysis of view from Location 6.

Location 9 Fire trail

See analysis of view from Location 6.

Location 10 Fire trail

This is a view representative of the views from the north-west part of the Fire trail, where the proposed development is further set back from the viewer. The foreground of the view would remain a golf

fairway significantly screened by vegetation. The visibility of the proposed development would be low. The proposed landscape will significantly screen the buildings from view. The overall visibility of the built form would be no greater than the visibility of residential development in the adjacent streets.

Location 15 Cabbage Tree Road

This is a close view from the public road that is considered as being of high sensitivity. This is a near-axial view is available from a short section of the road in a dynamic view situation.

The proposal is spatially well separated from road and screened by substantial existing vegetation. The photomontage in the amended VIA without any future landscaping shows how little there would be of the proposed development visible. The public would be unaware of the presence of the development and so it would not conflict with the existing scenic quality of the view. Overall in this view, the proposal does not create negative effects on features of the character or scenic quality of the view.

Location 24 Barkala Road

This is a close, horizontal view from a public road that is considered to be of low sensitivity as the road is of low public use and therefore there would be expected to be a low public interest in the view. The view into the site is available from one isolated location, where the north parts of blocks D and E are partly visible and appear predominantly as single storey forms, behind existing mid-ground vegetation. There is limited planting proposed for the north end of the development so that the built form may be more visible for a longer period of time, relative to other views. The proposal would be predominantly seen from moving viewing locations and the initial contrast with natural features and scenic quality of the view would reduce over time with the establishment of planting around the built form and north of Fairway 6.

Location 25 Annam Park

This is a close view from a public park that is considered to be of medium sensitivity due to the potential number of users and longer potential viewing period. The reserve does not include any facilities for example seats or playground equipment such that would attract higher user numbers or viewers accommodated for sustained periods. The viewing situation is similar to views from the fire trail that is visible in the foreground of the view. In the photomontages with no vegetation or detailing present, there would be visibility of parts of the built form that is of up to three storeys in height. The buildings do not block views of any scenic features beyond the site. The buildings are only partly visible and have an overall residential character. They appear significantly separated from each other by breaks that are proposed to be landscaped. Notwithstanding the close proximity of the reserve to the Golf Course itself, the proposed buildings would be approximately a minimum of 80m to the south. In our opinion, the buildings would appear compatible with residential development in the vicinity, which also includes many aged care facilities, of varied architectural form and landscape design.

Location 25 Annam Park (textured photomontage)

The initial contrast with natural features in the view would reduce over time with the establishment of planting along the north elevations of Buildings B and C. This includes the taller shrubs and small

tree species planted in groves along the eastern elevation of the buildings, which would mature in time and appear similar to other fairway planting. The overall visibility of the built form would be no greater than the visibility of residential development in the adjacent streets and would diminish in time.

4.7.2 Private domain view locations

The proposal is shown in two block-model photomontages to ensure that the height, bulk and scale of the built form proposed can be analysed in its visual context. The proposal is shown immediately post completion without vegetation as a translucent grey colour, and in further photomontages with vegetation and architectural detail in fully rendered views.

The effects of the proposed built form on potential private domain views have been modelled by Virtual Ideas. We provide a description of each private domain view below and note that notwithstanding the proposed development will create new built forms in the foreground or mid-ground of the majority of views in all cases, it does not create view loss.

As with the views from the Fire trail analysed above, to minimise repetition, the analysis is made from the first private domain viewing position, in numerical order. For subsequent views only changes, if any, are noted. The views have been generated either with photographic images captured as closely as possible to residences and to represent realistic viewing heights, or with CGIs based on a 3D model of the site and buildings, the camera levels of which are also based on survey with assumptions made to simulate internal floor levels.

Position 16 16 Cabbage Tree Road

The view is from the driveway and is representative of views from similar access ways to other adjacent properties. The profile of the proposed development is shown in red to indicate the location of the development in the view. Vegetation in the gardens of the properties themselves and in the Golf Course, between the development site and the viewer, almost totally screens the view of the development.

Position 17 4 Kiah Close

The view represented is a CGI, based on survey of the residence and the 3D model of the proposed development. The view is simulated to represent a possible view from the residence, with no proposed landscape shown. The foreground is simplified and does not show vegetation associated with the fire trail in the foreground. Part of the proposed development (predominantly the north elevation of Block A) may be visible through a gap in existing fairway boundary vegetation that currently occurs south-west of the residence. The buildings visible are predominantly of three storey form, stepping up to four storeys in part. Future vegetation would be expected to significantly screen the buildings from view, as evident in the textured photomontages for views from the fire trail in the vicinity, such as the view from Position 6.

Position 18 2 Kiewa Close

The view represented is a CGI, based on survey of the residence and the 3D model of the proposed development, simulated to represent a possible view, with no proposed landscape shown. The

foreground is simplified and does not show vegetation associated with the fire trail in the foreground. Part of the proposed development (Blocks A and B) may be visible through a gap in existing fairway boundary vegetation. The buildings visible are predominantly of three storey form and significantly screened by existing vegetation. Future vegetation would be expected to significantly screen the buildings from view.

Position 19 3 Kiewa Close

The view represented is a CGI. Part of the proposed development may be visible through the same gap in existing fairway boundary vegetation that currently occurs south-west of Positions 17, 18 and 19. The buildings visible (Blocks A and B) are predominantly of three storey form, stepping up to four storeys in part. Future vegetation would be expected to significantly screen the buildings from view, as evident in the textured photomontages for views from the fire trail in the vicinity, such as the view from Position 6.

Position 22 4 Konda Place

The view is taken adjacent to a south facing external part of the dwelling and is heavily filtered by vegetation. In the view without vegetation, the proposed buildings would be partly visibility, but substantially screened by existing foreground vegetation. In this view the proposed development creates low visual effects on scenic quality and character. The proposed development does not significantly or detrimentally change the composition of view.

Position 26 3 Kiah Close

The view is taken inside the south boundary fence and is heavily filtered by vegetation. This view provides an indicative view from the lower garden area of the dwelling rather than a living area. The proposed built form without proposed vegetation shown to be substantially screened by existing vegetation with some parts being visible below the canopy of foreground vegetation. In this view the proposed development creates low visual effects on scenic quality and character, notwithstanding the dwelling is a close, high sensitivity location. The proposed development does not significantly or detrimentally change the composition of the view.

5.0 Summary of the extent of visual effects

The visual effects of the proposed development on the majority of generally accessible public domain views would be minor. The most affected public domain views would be from Cabbage Tree Road and Barkala Road, however in all cases, the views into the site that include parts of the proposed built form, would be of short duration, from dynamic viewing locations and little of the proposed development would be visible. The effects of the built form over time would be mitigated by the establishment and growth of planting in and around the subject site which would reduce visual impacts of the effects on views to a rating of low.

The level of visual effects on the less accessible public domain, that is likely to be experienced by only small numbers of viewers, is considered to be low to medium on views from the fire trail on the north side of the site. The same rating is considered warranted from views from some individual residences north of the site. The medium effects on some public domain and isolated residential views are expected to decline as the landscape and other mitigation measures mature.

6.0 Visual impact analysis

The significance of visual impacts is differentiated from the extent of visual effects by giving weight to relevant impact criteria. In this way, the relative importance of impacts is distinguished from the size of the visual effects. The weighting factors determined to be appropriate are visual absorption capacity and compatibility. Please refer to section B2.3 of the methodology in Appendix 2 for the explanation of these terms.

6.1 Visual Absorption Capacity

Visual Absorption Capacity (VAC) means the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment. Prominence is also an attribute with relevance to VAC. It is assumed in this assessment that higher VAC can only occur where there is low to moderate prominence of the proposal in the scene.

In all public domain views, the VAC of the visual context is high, given the screening effects of the intervening vegetation and limited visual access to the majority of the built form proposed. The majority of the buildings that are proposed are not visible at all in the public domain (Blocks E and F), of minimal visibility (Block D) or not prominent in views (Block C and the majority of the Facilities Building). Of the buildings that are visible to the public or private domain, Blocks A, B and C would decrease in prominence as the proposed landscape design matures, increasing the VAC. In the majority of views the proposed development would be subordinate to other features, such as the height and density of the existing tree canopy in the foreground, mid-ground and in the background composition, depending on the viewing direction.

In relation to private domain views, the VAC is likely to be low-moderate initially, particularly in private domain views including dwellings located between Kiewa and Kiah Closes, during or immediately post-construction. The VAC would increase to medium or high for these private domain views as the landscape planting around buildings and along the Golf Course boundary, matures.

In our opinion, the high VAC should be acknowledged as a factor that decreases the significance of impacts compared the extent of visual effects (ie, is a down-weight on impact significance).

6.2 Compatibility

Our methodology includes an analysis of the compatibility of the proposed development with urban features. In our opinion, there are two main issues to address with regard to compatibility which relate to the two dominant attributes of the adjacent setting, being detached residential development and seniors living developments. Both exist comfortably in the adjacent environment.

Our understanding of the meaning of compatibility has been informed by the planning principle established by Roseth SC in 'compatibility in the urban environment' in *Project Ventures v Pittwater Council [2005] NSWLEC 191.*

> The principle states that *"The most appropriate meaning of compatibility in an urban design context is 'capable of existing together in harmony'. Compatibility is thus different from sameness".* The principle goes on to assert that *"it is generally accepted that buildings can exist together in harmony without having the same density, scale or appearance."*

Further, Roseth points out that *"the most important contributor to urban character is the relationship of built form to surrounding space, a relationship that is created by building height, setbacks and landscaping."*

In our opinion the proposed development is sensitively located in relation to its surrounding visual context separated by a wide setback to built forms that are not dissimilar in height to and compatible with the existing residential and aged care development context. In addition the proposed development includes a comprehensive landscape scheme which in time, will establish significant vegetative screens around the majority of built forms, but more importantly, set them appropriately into the semi-natural setting of the golf course.

Roseth determines that if compatibility between a building and its surroundings is desired, two key questions should be answered including;

Are the proposal's physical impacts on the surrounding development acceptable? And is the proposal's appearance in harmony with the buildings around it and the character of the street?

The question can be answered readily, given that it is unlikely that any detrimental physical impacts on surrounding development would occur. With regard to visual impacts or impacts on the surrounding visual context including the streetscape, which is the primary concern with impact of the development on existing or desired character, there is minimal impact of the development. There are no streetscapes that are significantly affected by the proposal. Cabbage Tree Road is the only high usage road of visual sensitivity in the vicinity and the proposal is of minimal visibility from that location.

The proposal is also of low exposure to the adjacent residential setting, just as it is to the low accessibility public domain of the fire trail adjacent to the site. This means, as noted in Section 4.3.3, that the site is of low overall visual sensitivity, meaning that while there may be differences between the proposal and the character of the adjacent residential context, if considered in isolation, the differences make no significant impact on the adjacent environment.

Some differences with adjacent residential development, which is exclusively detached low density in this case, are also a logical and inescapable consequence of the proposal being a contemporary seniors' living development. There are inevitable differences between the two. The proposal is medium density in form and character, composed of multi-unit or multi-function specialised buildings. Given the low visibility, low sensitivity, low visual impact and low exposure to streetscapes and to the residential environment generally, there is clearly scope for the proposal to be acceptable with a character that has some contrasts with the immediate setting.

It would be meaningless, in our opinion, for the proposal to emulate a streetscape appearance of the low density residential streets, when it does not have a significant streetscape presence and is mostly invisible to the public.

The proposal is of medium compatibility with detached low density residential development, only if considered in isolation and without the medium density seniors living built forms that have a high presence and reach relatively high densities in the adjacent context. In our opinion the proposal overall is of high visual compatibility. The high compatibility is a factor that justifies decreases the significance of impacts compared the extent of visual effects (ie, is a down-weight on impact significance).

6.3 Applying the weighting factors

The overall level of visual effects has been rated as low, with some isolated medium level effects. Both of the weighting factors identified are justified as being down-weights on the significance of impacts compared to the already medium to low levels of visual effects. In our opinion, the residual visual impacts of the proposal are of low significance as a result.

6.4 Planning principles for view loss and view sharing

In our opinion two planning principles may be relevant to the assessment of visual impacts in relation to view loss and view sharing in this application, *Tenacity and Rose Bay Marina.*

6.4.1 Tenacity planning principle

The *Tenacity* judgement established by Roseth SC of the Land and Environment Court of New South Wales in *Tenacity Consulting v Warringah [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours (Tenacity),* is an acknowledged tool for the assessment of view loss.

Roseth SC in *Tenacity* defines a four-step process to assist in the determination of the impacts of a development on views from the private domain. The steps are sequential and in some cases conditional, meaning that proceeding to further steps may not be required if the conditions for satisfying the preceding threshold are not met in each view considered.

However, in the preamble of the assessment and prior to undertaking Step 1, an initial threshold in *Tenacity* is whether a proposed development takes away part of the view and enjoys it for its own benefit. If it does, the other steps in the planning principle, beginning with Step 1, may need to be undertaken. However, if there is no substantive loss, or if the items lost are not considered to be valued in *Tenacity* terms, the threshold is not met and there is no justification for proceeding to Step 2, or other steps beyond Step 2.

Based on a review of photomontages which show indicative views from adjoining houses and our own field work inspections, in our opinion view loss is not substantive. The minor view loss caused does not include scenic or highly valued items described in *Tenacity*. In our opinion private domain view loss would be minor and in this regard *Tenacity* has no work to do.

6.4.2 Rose Bay Marina planning principle

The planning principles in *Rose Bay Marina Pty Limited v Woollahra Municipal Council and Anor [2013] NSWLEC 1046 (Rose Bay Marina)* have extended Tenacity to considering view loss from the public domain.

In *Rose Bay Marina* Moore SC sets out a process for assessing the acceptability of visual impacts of private developments on views from the public domain in the vicinity of the development. The process of determining whether a development is acceptable or not must account for reasonable development expectations as well as the enjoyment of members of the public, or outlooks from public places

In our opinion public domain view loss would be minimal, as a result of low visual effects and impacts caused be the proposed development on the views analysed. In that regard and having considered both the quantitative and qualitative aspects of the proposal in the terms set out in *Rose Bay Marina,* it is our opinion that there would be no significant view loss to the public domain and the planning principle in Rose Bay Marina also has no work to do in relation to this proposal.

6.5 Assessment of mitigation measures

Visual impacts mitigation is provided at several levels. At the first, is layout planning of the development, which provides for low visual exposure of the proposed buildings and landscapes. At the next level, the appearance of the form, bulk and scale of the buildings is mitigated through the modelling and massing of the buildings, articulation of individual buildings, separations between buildings and reduction in bulk with height. Materiality, texture and detailing of the buildings increases diversity, visual interest and compatibility and decreases contrasts with the adjacent residential context.

At the final level, mitigation is also provided by planting that is proposed adjacent to, on and among the built forms. The proposal includes a comprehensive landscape scheme which once established, would provide substantial ornamental gardens close to the buildings and small groves of medium height trees surrounding them, which merge with and visually expand the existing fairway planting.

Further remediation planting proposed along the boundaries of the golf course will provide additional screening of the majority of the built forms proposed. In our opinion, when taken together, the visual impacts mitigation measures would be successful in proving a compatible setting for the proposed development and in reducing residual visual impacts.

7.0 Conclusion

The subject site and proposed development has a small visual catchment, from which there are only a limited number of direct views to any part of the built form proposed.

The visual effects of the proposed development on baseline factors such as site and streetscape character, scenic quality, view place sensitivity and viewer sensitivity, are minor.

The visual effects of the proposed development in relation to variable factors such as composition, viewing level, period, distance and view blocking are likely to be insignificant.

An analysis of the visual effects of the proposed development on sensitive private or public domain views as modelled in block-model and textured photomontages shows that the visual effects of the proposal in its setting would be minor.

The visual absorption capacity of the site is high in all public views and moderate to high in private domain views given the significant amount of existing vegetation surrounding and within the Golf Course and the additional planting that is proposed.

In our opinion the proposed development is compatible with the form, scale and surrounding residential and seniors living visual context. Although the built form proposed is different if considered in isolation to the immediate residential context, it is compatible in terms of its spatial setting, height and massing and the contribution of the landscape planting to the existing visual character.

The overall visual impacts of the proposed development therefore in our opinion are low.

Any residual visual impacts would be successfully mitigated by the range of mitigation measures, assisted by the landscape scheme, that is proposed around the built form and in other parts of the Golf Course.

Dr Richard Lamb

2 August 2018

Appendix 1 Photographic plates

Location 1: View north to residential context via the driveway at 80b Cabbage Tree Road

Location 2: View south-east from the north end of the Fire Trail adjacent to Barkala Road

Location 3: Indicative view to the south from the fire trail adjacent to 29 Annam Road

Location 4: Detail view of 29 Annam Road

Location 5: View west to residential context on elevated parts of Cabbage Tree Road

Location 6: Detail view 27 Annam Road

Location 7: View east along fire trail adjacent to 27 Annam Road

Location 8: Indicative view from the fire trail adjacent to 27 Annam Road to the subject site

Location 9: Detail view of 6 Konda Close

Location 10: Indicative view from the fire trail adjacent to Konda Close

Location 11: Detail view of 5 Konda Close

Location 12: Indicative view from the fire trail adjacent to 5 Konda Close

Location 13: View to the subject site from the 4th Fairway

Location 14: View east to the east end of the subject site

Location 15: detail view 15 Annam Road, with the Golf Course and subject site visible at the end of the driveway

Location 16: View residential development in Kiewa Close

Location 17: View of seniors living development in Annam Road opposite Kiewa Close

Location 18: Detail view Kiah Close seen from Annam Road

Location 19: Houses facing the cul de sac in Kiah Close

Location 20: View of dense seniors living development opposite Kiah Close in Annam Road

Location 21 view west along Cabbage Tree Road near the proposed site entrance detail view

Location 24: view north towards the subject site from Cabbage Tree Road

B.1 Introduction

The assessment of visual impacts is a field that requires a degree of subjective judgement and cannot be made fully objective. It is therefore necessary to limit the subjectivity of the work by adopting a systematic, explicit and comprehensive approach. This has the aim of separating aspects that can be more objective, for example the physical setting, visual character, visibility and visual qualities of a proposal, from more subjective elements, such as visual absorption capacity and the compatibility of the proposal with the setting.

The methodology used in the present assessment has been developed over several years and uses relevant aspects of methods accepted in landscape assessment, extended and modified to adapt to urban and maritime environments. The modifications introduced are informed by visual perception research that has been carried out by ourselves and others in both natural and urban contexts.

The flow chart at Figure B1 indicates the relationships among the parts of the visual impact assessment methodology.

B.2 Components of the Methodology

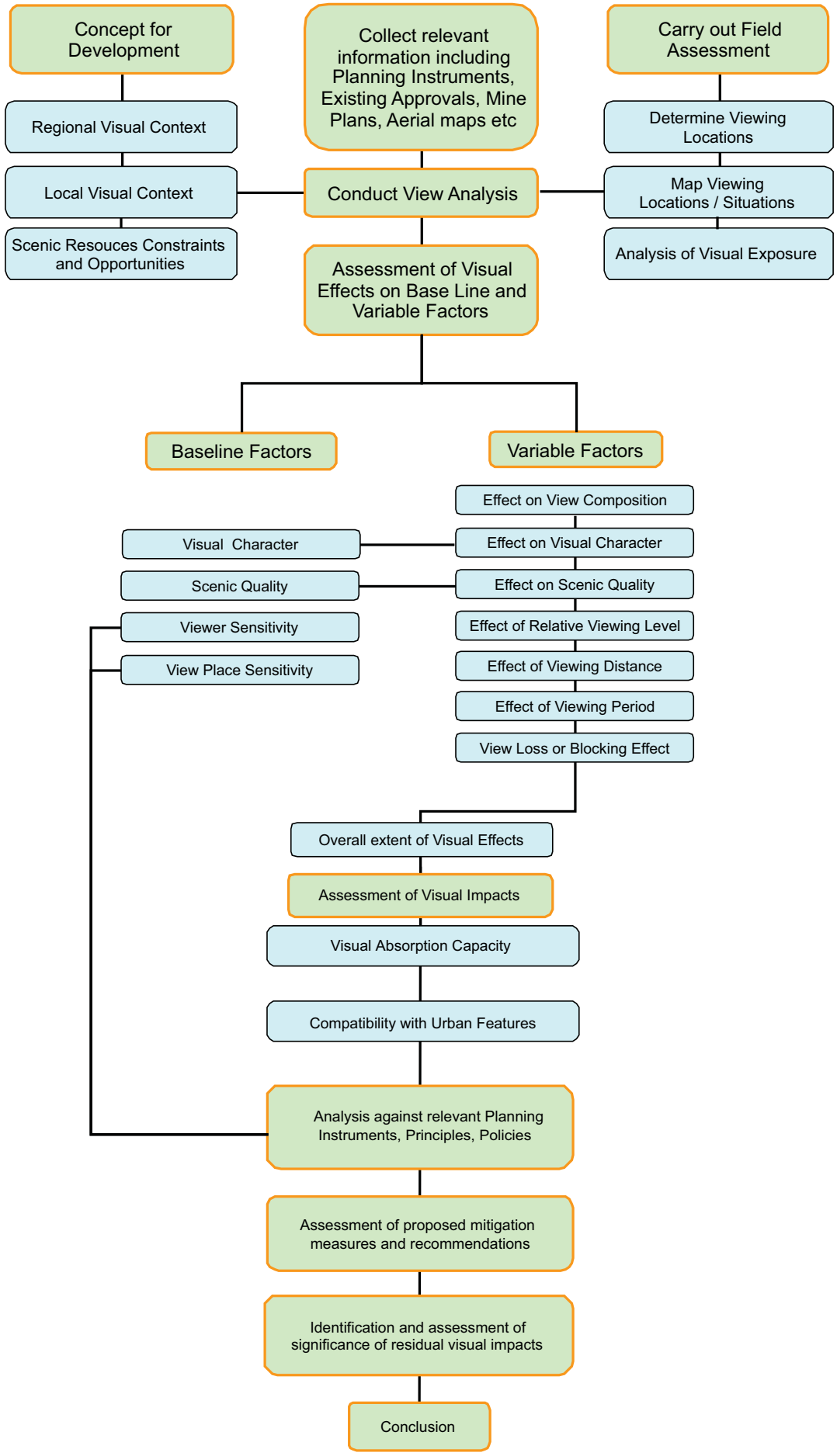
Overall, the major components of the visual impact assessment are determining the concept for the development and general strategic planning principles, view analysis, visual effects analysis, visual impact evaluation and assessment of significance of residual visual impacts. This assessment is also supplemented with an assessment of the merits and compliance of the proposed redevelopment with the relevant policies in relation to visual and related amenity impacts and the mitigation measures that have been undertaken or could be proposed to reduce or eliminate residual impacts.

B.2.1 The Components of the View Analysis

The development proposed and detailed field assessment

This includes a thorough understanding of the proposed development including its location, scale and extent, to understand the scale and spatial arrangement of the development. The next step is to carry out a detailed field assessment by identifying the potential viewing locations, visiting the representative locations, documenting the proposal's approximate location on a base map, photographing representative locations and making an overall assessment of the visual effects and relative visual impacts factors. The assessment factors are explained in Section B2.2 and B2.3. The factors were in three ranges; Low, Medium and High. An indicative rating table that describes what is considered a low, medium and high effect and impact on each factor is shown in Tables B2.1 and B2.2, respectively.

Figure B1: *RLA Development Assessment Method Flow Chart*



Identifying and mapping viewing locations and situations

The representative sample of viewing locations visited during the field assessment are mapped. The locations used were recommended to the proponent by RLA as being a reasonable representative sample of the kind of views that would be available. Analytical block model photomontages have been prepared to represent the general arrangement of proposed development. (see photomontages, Appendix 1).

Identification and mapping of visual catchment

The potential total visual catchment is small, given the location of the subject site is largely within an existing Golf Course, set away from its boundary, and in an undulating heavily treed landscape.

RLA have inspected and documented views from between 100m and 1000m of the subject site and made observations from further afield surrounding the golf course where possible. The potential total visual catchment means the physical area within which the proposal would be visible and identifiable if there were no other constraints on that visibility, such as intervening vegetation and buildings. The catchment is not delineated by a finite boundary because there is no identifiable physical feature that can define it.

Within the potential total visual catchment, the visibility of the proposal would therefore vary. We identify the area within which the proposal would be identifiable and where it could cause visual impacts by assessing visibility.

Visibility means the extent to which the proposal would be physically visible to the extent that it could be identified, for example as a new, novel, contrasting or alternatively a recognisable but compatible feature. Features such as infrastructure, buildings and intervening topography can affect the degree of visibility.

B2.2 The components of the Visual Effect Analysis Matrix

B2.2.1 Baseline Factors

These are the criteria that remain predominantly constant and independent of the nature of viewing locations and factors which condition the viewing situation.

Visual character

The visual character of the locality in which the development would be seen is identified. It consists of identification of the physical and built components of the area and the setting of the proposal that contribute to its visual character. The character elements include topography, vegetation, land uses, settlement pattern, urban and built form, interfaces with streets and both natural and cultural vegetation.

Visual character is a baseline factor against which the level of change caused by the proposal can be assessed. The desired future character of the locality is also relevant to assessing the extent of acceptable change to character.

Scenic Quality

Scenic quality is a measure of the ranking, which the setting of the proposal either is accepted to have, or would be predicted to have, on the basis of empirical research carried out on scenic beauty, attractiveness, preference or other criteria of scenic quality.

Scenic quality is a baseline factor against which the visual impacts caused by the proposal are assessed.

View place sensitivity

View place sensitivity means a measure of the public interest in the view. The public interest is considered to be reflected in the relative number of viewers likely to experience the view from a publicly available location. Places from which there would be close or middle-distance views available to large numbers of viewers from public places such as roads, or to either large or smaller numbers of viewers over a sustained period of viewing time in places such as reserves, beaches and lookouts, are considered to be sensitive viewing places.

Viewer sensitivity

Viewer sensitivity means a measure of the private interests in the effects of the proposal on views. The private interest is considered to be reflected in the extent to which viewers, predominantly viewing from private residences, would perceive the effects of the proposal. Residences from which there would be close or medium distance range views affected, particularly those which are available over extended periods from places such as the living rooms and outdoor recreational spaces, are considered to be places of medium and high viewer sensitivity respectively.

B2.2.2 Variable Factors

These are the assessment factors that vary between viewing places with respect to the extent of visual effects.

View composition type

View composition type means the spatial situation of the proposal with regard to the organisation of the view when it is considered in formal pictorial terms. The types of view composition identified are:

Expansive (an angle of view unrestricted other than by features behind the viewer, such as a hillside, vegetation and buildings.)

Restricted (a view which is restricted, either at close range or some other distance, by features between or to the sides of the viewer and the view such as vegetation and buildings.)

Panoramic (a 360 degree angle of view unrestricted by any features close to the viewer who is surrounded by space elements.)

Focal (a view that is focused and directed toward the proposal by lateral features close to the viewer, such as road corridors, roadside vegetation, buildings, boats etc.)

Feature (a view where the proposal is the form element that dominates the view, for example in close range views.)

It is considered that the extent of the visual effects of the proposal is related to its situation in the composition of the view. The visual effect of the proposal on the composition of the view is considered to be greater on a focal or a feature view, cognisant of the distance effect, compared to a restricted, panoramic or expansive view.

Relative viewing level

Relative viewing level means the location of the viewer in relative relief, compared to the location of the proposal. It is conventional in landscape assessment to assess views from locations above, level with and below the relative location of the proposal. However when maritime developments are concerned, the latter viewing level (i.e. relatively below the level of the proposal) has no practical application.

It is considered that the visual effects of a development are related to the relative viewing level and distance. Viewing levels above the development where views are possible over and beyond it decrease the visual effects, whereas views from level with and close to the development, dependent on viewing distance, may experience higher effects, particularly if built form intrudes into horizons.

Viewing period

Viewing period in this assessment means the influence on the visual effects of the proposal which is caused by the time available for a viewer to experience the view. It is assumed that the longer the potential viewing period, experienced either from fixed or moving viewing places such as dwellings, roads etc, the higher the potential for a viewer to perceive the visual effects of the proposal. Repeated viewing period events, for example views repeatedly experienced from roads as a result of regular travelling, are considered to increase perception of the visual effects of the proposal.

Viewing distance

Viewing distance means the influence on the perception of the visual effects of the proposal which is caused by the distance between the viewer and the development proposed. It is assumed that the viewing distance is inversely proportional to the perception of visual effects: the greater the potential viewing distance, experienced either from fixed or moving viewing places, the lower the potential for a viewer to perceive and respond to the visual effects of the proposal.

Three classes of viewing distance have been adopted which are close range (<100m), medium range (100-1000m) and distant (>1000m).

View loss or blocking effects

View loss or blocking effects in this assessment means a measure of the extent to which the proposal is responsible for view loss or blocking the visibility of items in the view. View loss is considered in relation to the principles enunciated in the Land and Environment Court of NSW by Roseth SC in *Tenacity Consulting v Warringah [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours*. Although *Tenacity* concerned view losses from residential

properties, the matter of what could be construed to be a valuable feature of the view which could be lost, e.g. specific features of views such as whole views and iconic items, alluded to in *Tenacity*, are of some relevance to the public domain also. View loss in the public domain specifically has been considered in relation to the planning principles in *Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor. [2013] NSWLEC 1046*.

It is assumed that view loss and blocking effects increase the perception of the visual effects of the proposal. An indicative rating table that describes what is considered a low, medium and high visual effect on each factor is shown in Table B 2.1, below.

Table B 2.1: *Indicative ratings of visual effects factors*

Visual Effects Factors			
Factors	Low Effect	Medium Effect	High Effect
Scenic quality	Proposal does not have negative effects on features which are associated with high scenic quality, such as the quality of panoramic views, proportion of or dominance of structures, appearance of interfaces and presence of extensive areas of natural landscape.	Proposal has the effect of reducing any or all of: the extent of panoramic views, the proportion of or dominance of natural features, without significantly decreasing their presence in the view or the contribution that the combination of these features make to overall scenic quality	The proposal significantly decreases or eliminates perception of the integrity of any of: panoramic views, dominance of extensive areas of scenic items or features or important focal views. The result is a significant decrease in perception of the contribution that the combinations of these features make to scenic quality.
Visual character	Proposal does not decrease the presence of or conflict with existing scenic character elements such as built form, building scale, urban fabric, natural features. Low presence in the street.	Proposal contrasts with or changes the relationship between existing scenic character elements in some individual views by adding new or distinctive features, but does not affect the overall visual character of the setting. Moderate impact on streetscape.	The proposal introduces new or contrasting features which conflict with, reduce or eliminate existing character features. The proposal causes a loss of or unacceptable change to the overall visual character of individual items, streetscape or the whole locality.
View place sensitivity	Public domain viewing places providing distant views, and/or with small number of users for small periods of viewing time (Glimpses-as explained in viewing period).	Medium distance range views from roads, recreation areas etc. with medium number of viewers for a medium time (a few minutes or up to half day-as explained in viewing period).	Close distance range views from roads, recreation areas, lookouts or scenic routes with medium to high numbers of users for most the day (as explained in viewing period).
Viewer sensitivity	Residences providing distant views (>1000m)	Residences located at medium range from site (100-1000m) with views of the development available from bedrooms and utility areas.	Residences located at close or middle distance (<100m as explained in viewing distance) with views of the development available from living spaces and private open spaces.
View composition	Panoramic views unaffected, overall view composition retained, or existing views restricted in visibility of the proposal by the screening or blocking effect of structures or buildings.	Expansive or restricted views where the restrictions created by new work do not significantly reduce visibility of the proposal or important features of the visual environment.	Feature or focal views significantly and detrimentally changed
Relative viewing level	Elevated position such as ridge top, building or structure with views over and beyond the site.	Slightly elevated with partial or extensive views over the site.	View from inferior postion with view blocked by proposal.
Viewing period	Glimpse (eg moving vehicles)	Few minutes up to half day (eg walking on scenic trails, recreation in adjoining open space).	Majority of day (eg adjoining residence or workplace).
Viewing distance	Land area (Distant Views) (>1000m).	Land (Medium Range) (100-1000m).	Adjoining residences (Close)(<100m).
View loss or blocking effect	No view loss or blocking	Partial or marginal view loss compared to the expanse/extent of views retained. No loss of views of scenic icons.	Loss of majority of available views such as scenic items, icons, whole views, documented valued views.

B2.2. 3 Overall Extent of Visual Effects

Based on the inspection of the pattern of the assessment ratings for the above factors on each viewing location an overall rating is arrived at which represents an overall extent of visual effects for a viewing location.

B2.3 The Components of the Visual Impact Analysis

The criteria in 2.2 concern assessment of the extent of the visual effects of the proposal when seen from specific viewing places. The extent of the visual effects is the baseline assessment against which to judge the visual impacts.

Whether a visual effect is an impact of potential significance cannot be equated directly to the extent of the visual effect. For example, a high visual effect can be quite acceptable, whereas a small one can be unacceptable. Thus, it is necessary to give a weighting to the assessed levels of effects to arrive at an assessment of the impact.

This method therefore does not equate visual effects directly to visual impacts. The approach is to assess visual effects as in B2.2. above to arrive at an overall level of visual effect of the proposal for each kind of viewing place and then to assess the level of impact, if any, by giving differential weighting to impact criteria. By this means, the relative importance of impacts are distinguished from the size of the effect. We consider that two weighting criteria are appropriate to the overall assessment of visual impacts, Physical Absorption Capacity and Visual Compatibility. Each of these addresses the primary question of the acceptability of the visual effects and changes caused by the proposal.

B2.3.1 Visual Absorption Capacity

Visual Absorption Capacity (VAC) means the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment.

VAC includes the ability of existing elements of the landscape to physically hide, screen or disguise the proposal. It also includes the extent to which the colours, material and finishes of buildings and in the case of boats and buildings, the scale and character of these allows them to blend with or reduce contrast with others of the same or closely similar kinds to the extent that they cannot easily be distinguished as new features of the environment.

Prominence is also an attribute with relevance to VAC. It is assumed in this assessment that higher VAC can only occur where there is low to moderate prominence of the proposal in the scene.

Low to moderate prominence means:

Low: The proposal has either no visual effect on the landscape or the proposal is evident but is subordinate to other elements in the scene by virtue of its small scale, screening by intervening elements, difficulty of being identified or compatibility with existing elements.

Moderate: The proposal is either evident or identifiable in the scene, but is less prominent, makes a smaller contribution to the overall scene, or does not contrast substantially with other elements or is a substantial element, but is equivalent in prominence to other elements and landscape alterations in the scene.

Design and mitigation factors are also important to determining the VAC. Appropriate colours, materials, building forms, line, geometry, textures, scale, character and appearance of buildings and other structures are relevant to increasing VAC and decreasing prominence.

VAC is related to but distinct from Visual Compatibility (see below).

B2.3.2 Visual Compatibility

Visual Compatibility is not a measure of how much the proposal conforms to or mimics its surroundings. The relevant parameters for visual compatibility are whether the proposal can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed. It assumes that there is a moderate to high visibility of the project to some viewing places. It further assumes that novel elements which presently do not exist in the immediate context can be perceived as visually compatible with that context, provided that they do not result in the loss of or excessive modification of the visual character of the locality, that is visually accessible to the public.

As the development proposed is under the SEPP HSPD, it also cannot be expected to comply literally with prescriptive desired future character attributes that are dominated by detached residential development precedents. A comparative analysis of the compatibility of similar items to the proposal with other locations in the area which have similar visual character and scenic quality, or likely changed future character, can give a guide to the likely future compatibility of the proposal in its setting.

Because the development proposed is in a context that contains both detached residences, and many examples of aged care facilities that exhibit different built forms, scales, layout planning, densities and landscape design, the question of its visual impacts also depends on its perception both as an entity and in regard to its compatibility with the major scenic character attributes. The proposal does not have to be the same or similar to past precedents to be compatible.

Visual compatibility with surrounding features

This assessment is a measure of the extent to which the visual effects of the proposal are compatible with urban and natural features in the surrounding visual context. It is assumed that in some views the proposal can be seen and clearly distinguished from its surroundings. Compatibility does not require that identical or closely similar features to those which are proposed exist in the immediate surroundings.

Compatibility with urban and natural features means that the proposal responds positively to or borrows from within the range of features of character, scale, form, colours, materials and geometrical arrangements of urban and natural features of similar developments or of areas of the locality which have the same or similar existing visual character.

An indicative rating table that describes what is considered a low, medium and high impact on each factor is shown in Table B2.2, below.

Table B2.2: *Indicative ratings table of visual impacts factors*

Visual Impacts Factors			
Factors	Low Impact	Medium Impact	High Impact
Visual absorption capacity	Existing elements of the landscape physically hide, screen or disguise the proposal. The presence of buildings and associated structures in the existing landscape context reduce visibility. Low contrast and high blending within the existing elements of the setting and built forms.	The proposal is of moderate visibility but is not prominent because its components, forms and line and its textures, scale and building form have low to moderate contrasts with existing features of the scene.	The proposal is of high visibility and it is prominent in some views. The project has a high contrast and low blending within the existing elements of the of the setting.
Compatibility with urban/natural features	High compatibility with the character, scale, form, colours, materials and geometrical arrangements of existing urban and natural features in the immediate context. Low contrast with existing elements of the built environment.	Moderate compatibility with the character, and geometrical arrangements of the existing urban and natural features in the immediate context. The proposal introduces new urban features, but these features are compatible with the scenic character and qualities of facilities with similar purpose or in similar settings.	The character, scale, form and spatial arrangement of the proposal has low compatibility with the urban features in the immediate context or which could reasonably be expected to be new additions to it when compared to other examples in similar settings.

B2.4 Overall Extent of Visual Impact

Based on the inspection of the pattern of the assessment ratings for the above factors for each viewing location, an overall rating is arrived at which represents an overall extent of visual impact.

B2.4.1 Applying the weighting factors

An overall impact rating is arrived at by applying the weighting factors of VAC and Compatibility to the overall extent of visual impacts. An upweight increases the significance of the impact compared to the level of visual exposure, while a down-weight decreases it.

B2.5 Significance of residual visual impacts

Finally, after the visual effects of the mitigation factors are assessed, a relevant question is whether there are any residual visual impacts and whether they are acceptable in the circumstances. These residual impacts are predominantly related to the extent of permanent visual change to the immediate setting.

In terms of the urban component of the development, residual impacts relate to individuals' preferences for the nature and extent of change which cannot be mitigated by means such as colours, materials, the articulation of building surfaces and landscape design. These personal preferences are also a result of people's resistance to or resilience towards change to the existing arrangement of views. Individuals or groups may express strong preferences for either the existing, approved or proposed form of urban development.

The significance of these residual impacts is assessed based on the relative sensitivity of viewing places that may experience these impacts. Whether overcoming these impacts would result in undermining of the potential capacity of the development site to economically support the intended use is not the focus of a visual impacts assessment.

Summary Curriculum Vitae: Dr Richard Lamb

Summary

- Professional consultant specialising in visual and heritage impacts assessment and the principal of Richard Lamb and Associates (RLA).
- Senior lecturer in Architecture, Landscape Architecture and Heritage Conservation in the Faculty of Architecture, Design and Planning at the University of Sydney 1980-2009.
- Director of Master of Heritage Conservation Program, University of Sydney, 1998-2006.
- 30 years' experinence in teaching and research in environmental impact, heritage and visual impact assessment.
- Teaching and research expertise in assessment and interpretation of heritage items and places, cultural transformations of environments, conservation methods and practices, visual perception and cognition, landscape studies, aesthetic assessment and landscape assessment.
- Supervision of Master and PhD students postgraduate students in heritage conservation and environment/behaviour studies.

- Richard Lamb provides:
  - professional services, expert advice and landscape and visual assessments
  - Strategic planning studies to protect and enhance scenic quality and landscape heritage values
  - Scenic and aesthetic assessments in all development scenario contexts, from rural to urban
  - Advice and assessment of view loss, view sharing and landscape heritage impacts
  - Expert advice, evidence and testimony to the Land and Environment Court of NSW and Planning and Environment Court of Queensland in various classes of litigation
  - Specialisation in matters of visual impacts, view loss and landscape heritage in projects including:
    - Urban developments, rezoning and planning proposals, urban renewal and urban release areas
    - Project and proposal visualisation and certification of photomontage preparation
    - Extractive industry, infrastructure, signage and maritime developments
    - Development assessment, strategic planning, landscape conservation
  - Appearances in over 250 Land and Environment Court of New South Wales cases, submissions to several Commissions of Inquiry and the principal consultant for over 1000 consultancies.

- Qualifications
  - Bachelor of Science - First Class Honours double major, University of New England
  - Doctor of Philosophy, University of New England in 1975
- International Journals for which publications have been refereed
  - Journal of Architectural & Planning Research
  - Architectural Science Review
  - People and Physical Environment Research
  - Journal of the Australian and New Zealand Association for Person Environment Studies
  - Journal of Environmental Psychology
  - Australasian Journal of Environmental Management
  - Ecological Management & Restoration
  - Urban Design Review International
- Full CV available on Home page tab of RLA website at www.richardlamb.com.au