

urbaine

D E S I G N G R O U P

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Planning Proposal:
Nos.2-6, Dee Why Parade, part of 8, Dee Why Parade, 10-12,
Dee Why Parade and part of 2, Clarence Avenue.

Visual Impact Assessment Report,
December 8, 2023

urbaine design group

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1. INTRODUCTION

1.1 Scope and Purpose of Report.

This Visual Impact Report has been prepared by Urbaine Design Group for Marchese Partners to support a Planning Proposal, being submitted to the Northern Beaches Council for the construction of a 6 and 7-storey, mixed-use development with residential and retail uses at Nos.2-6, Dee Why Parade, part of 8, Dee Why Parade, 10-12, Dee Why Parade and part of 2, Clarence Avenue.

Urbaine Design Group, and its Director, John Aspinall, BA(Hons), BArch(Hons) have been preparing 3d imagery and Visual Impact Assessments, both in Australia and Internationally for over 25 years. Their methods are regularly published in planning and architectural journals and John Aspinall has lectured in Architectural Design at both the University of Technology Sydney and The University of New South Wales.

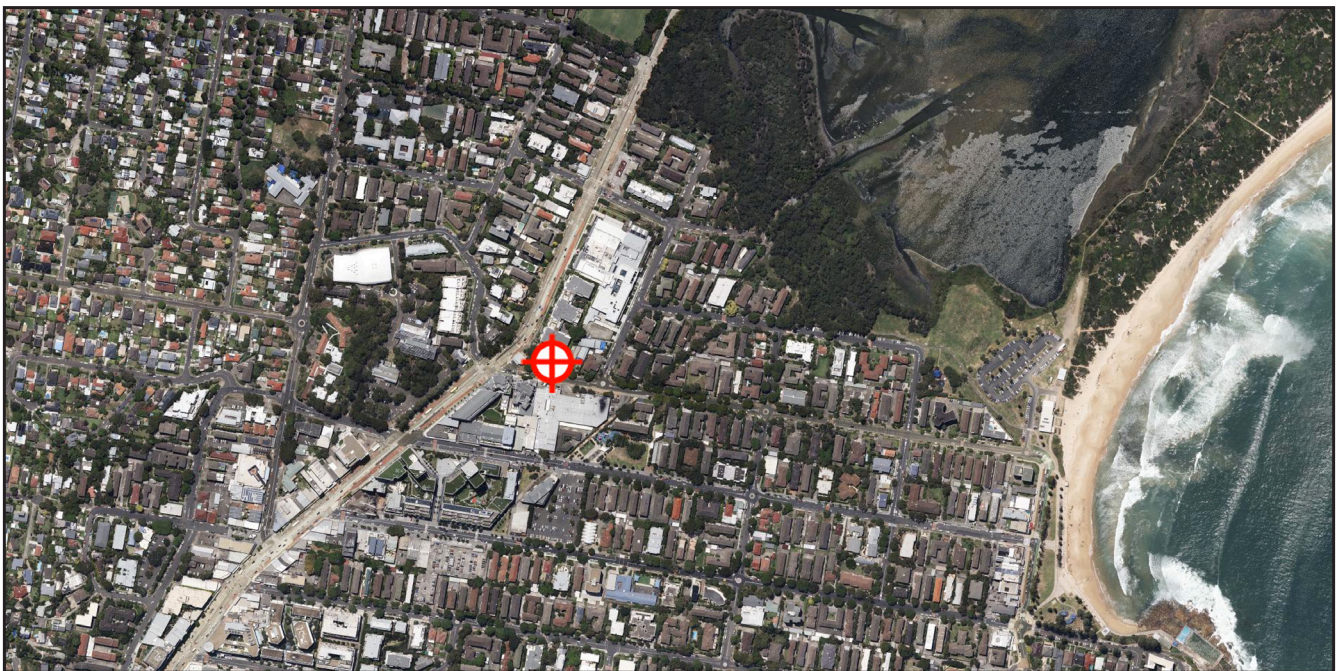


Figure 1 – Site location shown with red target.

1.2 The Proposed Development

1.2.1. The Site and existing property:

The site has the following characteristics:

The street address is: Nos.2-6, Dee Why Parade, part of 8, Dee Why Parade, 10-12, Dee Why Parade and part of 2, Clarence Avenue.

The site is within approximately 500m of Dee Why's retail area (Coles precinct) on Howard Ave and around 200m from the Dee Why Reserve and Lagoon as well as Dee Why Park. The site is within 1km of Dee Why Beach.

In recent years, the surrounding area has seen many new residential developments being constructed along the Pittwater Road, notably the Lighthouse development and associated retail precinct, as well as the large development on the corner of Dee Why Parade and Pittwater Road, contributing to the revitalisation of the Town Centre. The subject site is on the perimeter of Dee Why Town Centre.

Pittwater Road is a classified road that links Balgowlah to Mona Vale with connectivity to the city to the south

and Palm Beach to the north. It has a 6-lane carriageway that carries a large volume of traffic and is well serviced by public buses. A bus stop is immediately adjacent to the RSL Club site on either side of Pittwater Road providing readily available public transport.



Figure 2 – site location shown in red overlay.



Figure 3 – North Elevation of the new proposal by Marchese Partners.

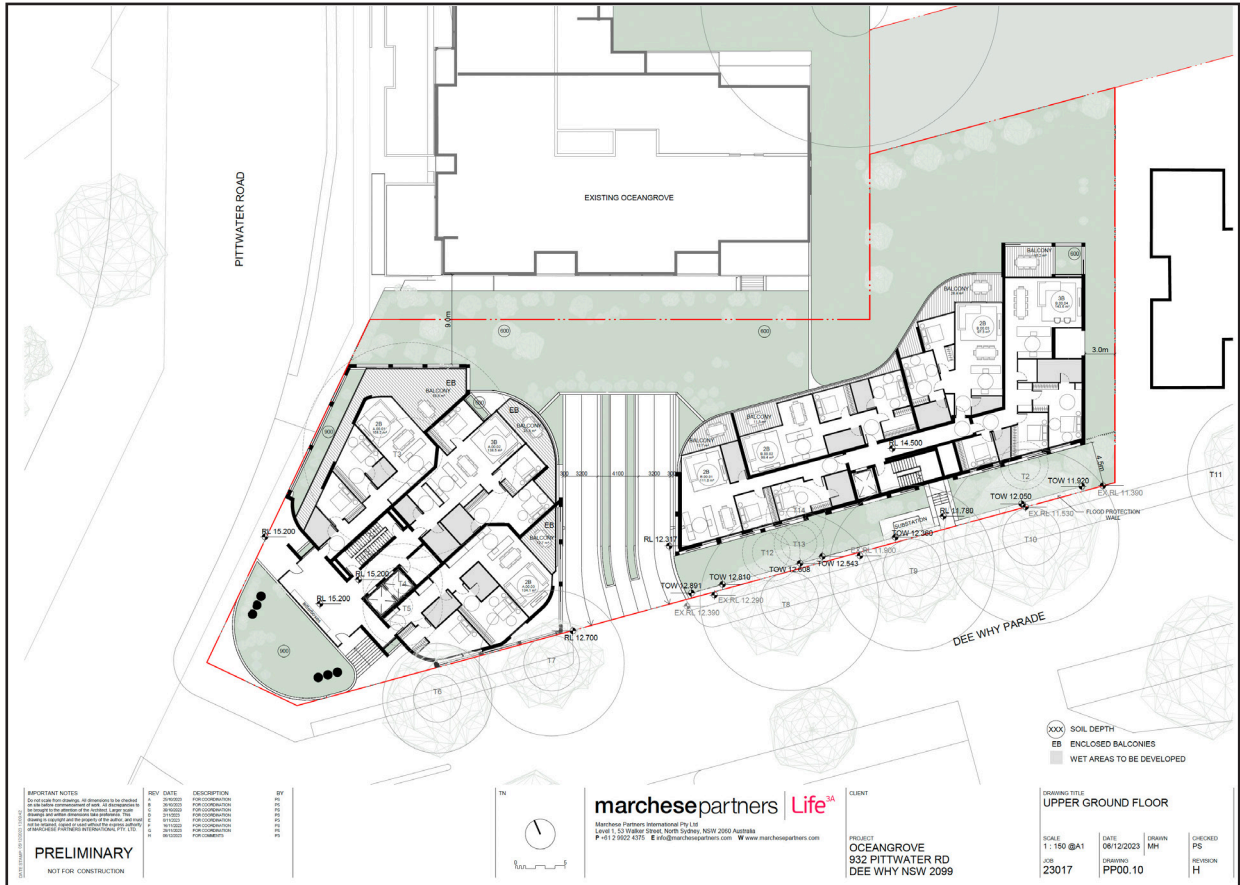


Figure 4 – Ground floor plan of proposed design by Marchese Partners.

1.3 Methodology of Assessment:

The methods used by Urbaine, for the generation of photomontaged images, showing the proposed development in photomontaged context are summarised in an article prepared for New Planner magazine in December 2018 and contained in Appendix B. A combination of the methods described were utilised in the preparation of the photomontaged views used in this visual impact assessment report, below.

1.3.1. Process for real photo montaging:

Initially, a Metromap point cloud survey of the site and surrounding buildings was sourced for accurate 3d data of all existing buildings on the subject site and its surroundings.

A detailed modelling matching the building envelope of the latest Marchese Partners design and its associated interaction with the surrounding site (see Figure 4 for ground floor plan) was matched to the scene to known surveyed positions and the existing building.

Virtual cameras were placed into the 3D model with the same mathematical known lenses and sensor sizes and characteristics to match various selected viewpoints, in both height, position and roll, pitch and yaw using a process of triangulation. The precision is verified by a high quality match to the physically accurate point cloud and surveyed positions of the existing building.

From these cameras, rendered views have been generated and photomontaged into the existing photos. The final selection of images shows these stages, including the block montage of the original development application and concluding with an outline, indicating the potential visual impact and view loss. The images within the report are of a standard lens format, as are the views contained within Appendix A.

The Visual Impact Assessment includes detailed evaluation of views from several neighbouring properties at various levels, as described further below.

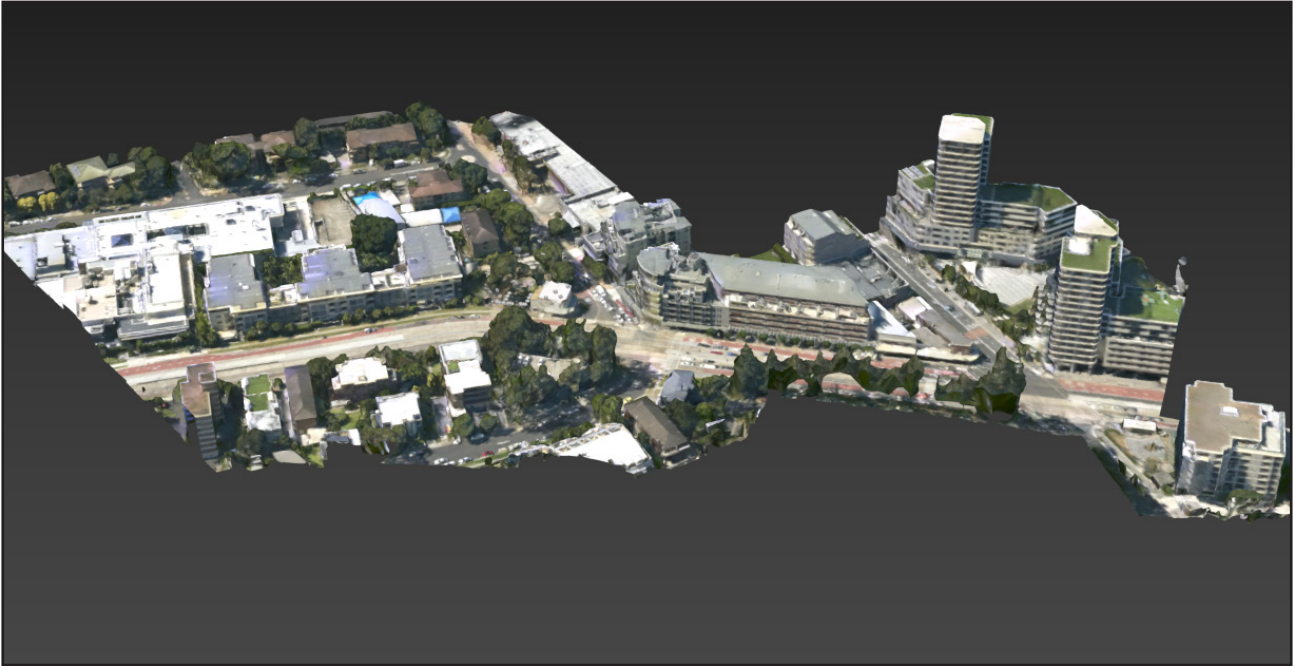


Figure 5 – Point cloud survey produced by METROMAP.s

1.3.2. Assessment Methodology:

There are no set guidelines within Australia regarding the actual methodology for visual impact assessment, although there are a number of requirements defined by the Land and Environment Court (LEC) relating to the preparation of photomontages upon which an assessment can be based (Appendix C).

Where a proposal is likely to adversely affect views from either private or public land, Council will give consideration to the Land and Environment Court's Planning Principle for view sharing established in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140. This Planning Principle establishes a four-step assessment to assist in deciding whether or not view sharing is reasonable:

- Step 1: assessment of views to be affected.
- Step 2: consider from what part of the property the views are obtained.
- Step 3: assess the extent of the impact.
- Step 4: assess the reasonableness of the proposal that is causing the impact.

- Environmental Impact Assessment Practice Note, Guideline for Landscape Character and Visual Impact Assessment (EIA-N04) NSW RMS (2013);
- Visual Landscape Planning in Western Australia, A Manual for Evaluation, Assessment, Siting and Design, Western Australia Planning Commission (2007);
- Guidelines for Landscape and Visual Impact Assessment, (Wilson, 2002);

In order to assess the visual impact of the Design Proposal, it is necessary to identify a suitable scope of publicly, or privately accessible locations that may be impacted by it, evaluate the visual sensitivity of the Design Proposal to each location and determine the overall visual impact of the Design Proposal. Accessible locations that feature a prominent, direct and mostly unobstructed line of sight to the subject site are used to assess the visual impact of the Design Proposal. The impact to each location is then assessed by overlaying an accurate visualisation of the new design onto the base photography and interpreting the amount of view loss in each situation, together with potential opportunities for mitigation.

Views of high visual quality are those featuring a variety of natural environments / landmark features, long range, distant views and with no, or minimal, disturbance as a result of human development or activity. Views of low visual quality are those featuring highly developed environments and short range, close distance views, with little or no natural features.

Visual sensitivity is evaluated through consideration of distance of the view location to the site boundary and also to proposed buildings on the site within the Design Proposal. Then, as an assessment of how the Design Proposal will impact on the particular viewpoint. Visual sensitivity provides the reference point to the potential visual impact of the Design Proposal to both the public and residents, located within, and near to the viewpoint locations.

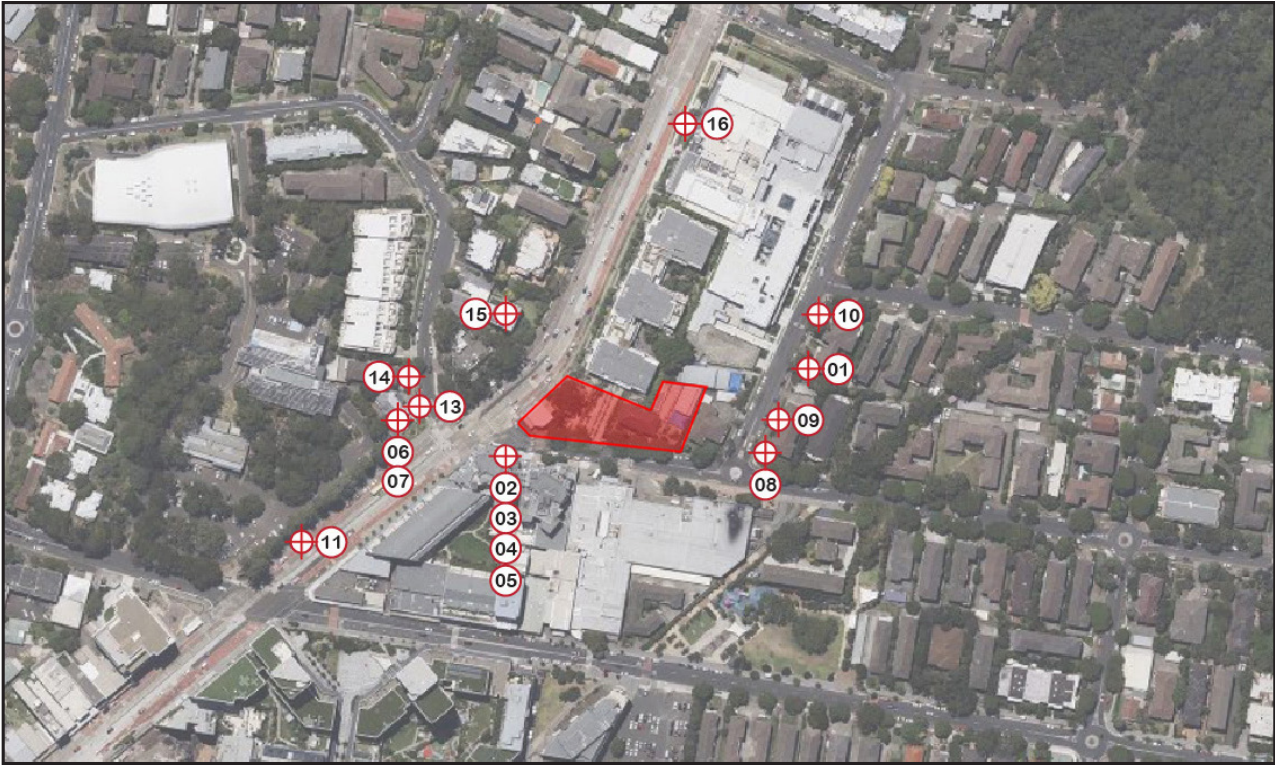


Figure 6: Selected neighbouring property viewpoint locations for visual impact assessments. Site indicated in red.

Site Inspections:

Several site inspections were undertaken to photograph the site and surrounding area to investigate:

- The topography and existing urban structure of the local area
- The streetscapes and houses most likely to be affected by the Proposal
- Important vistas and viewsheds
- Other major influences on local character and amenity

The site map, see figure 6 indicates chosen locations for site photography – also shown in Appendix A.

Contextual Analysis

An analysis was undertaken of the visual and statutory planning contexts relevant to the assessment of visual impacts in a Development Application.

Visual Impact Analysis

The visual impacts of the proposed development were analysed in relation to the visual context and assessed for their likely impact upon the local area and upon specific residential properties.

Statutory Planning Assessment

The results of the local view impact assessment are included in Section 3 of this report, with large format images included in Appendix A.

1.4 References:

The following documentation and references informed the preparation of this report:

- The design drawings and information relied upon for this report were prepared by Marchese Partners.
- Warringah DCP, 2011.
- Creating Places for People - An Urban Design Protocol for Australian Cities:
- Australia and New Zealand Urban Design Protocol:
- The Value of Urban Design:
- Fifteen Qualities of Good Urban Places:
- The Image of the City (1960), Kevin Lynch

2. THE SITE AND THE VISUAL CONTEXT.

Visual impacts occur within an existing visual context where they can affect its character and amenity. This section of the report describes the existing visual context and identifies its defining visual characteristics. Defining the local area relevant to the visual assessment of a proposed development is subject to possible cognitive mapping considerations and statutory planning requirements. Notwithstanding these issues, the surrounding local area that may be affected by the visual impact of the proposed development is considered to be the area identified on in the topographical area map, Figure 7.

Although some individuals may experience the visual context from private properties with associated views, the general public primarily experiences the visual context from within the public realm where they form impressions in relation to its character and amenity. The public realm is generally considered to include the public roads, reserves, open spaces and public buildings. This shows the rising landform to the south and east of the subject site.

The visual context is subject to “frames of reference” that structure the cognitive association of visual elements. The “local area” (as discussed above) provides one such frame of reference. Other “frames of reference” include the different contextual scales at which visual associations are established and influence the legibility, character and amenity of the urban environment. Within the scope of this report three contextual scales are considered relevant to the analysis of the visual context and the visual impact of the proposed development.



Figure 7: Subject area topographical map.

The ‘Street Context’ provides a frame of reference for reviewing the visual relationship of the new development (and in particular its facades) in relation to the adjoining pedestrian spaces and roads. Elements of the development within this frame of reference are experienced in relatively close proximity where, if compatible with the human scale they are more likely to facilitate positive visual engagement and contribute to the “activation” of adjoining pedestrian spaces.

The ‘Neighbourhood Context’ provides a broader frame of reference that relates the appearance of the development as a whole to the appearance of other developments within the local area. As a frame of reference, it evolves from the understanding gained after experiencing the site context and the low density of development. Within this context the relative appearance, size and scale of different buildings are compared for their visual compatibility and contribution to a shared character from which a unique “sense of place” may emerge. This frame of reference involves the consideration of developments not necessarily available to view at the same time. It therefore has greater recourse to memory and the need to consider developments separated in time and space. The neighbourhood context is relevant to the visual ‘legibility’ of a development and its relationship to other developments, which informs the cognitive mapping of the local area to provide an understanding of its arrangement and functionality.

The 'Town / City Context' provides a frame of reference that relates the significance of key developments or neighbourhoods to the town as a whole. The contribution that distinctive neighbourhoods make (or may potentially make) to the image of the city can be affected by the visual impact of an individual development through its influence on the neighbourhood's character and legibility. Within this context, it is also important to be aware of other proposed developments in the area.

2.1 Visual Features and Local Landmarks:

The site is located to the north of the commercial area of Dee Why centred along Pittwater Road.

- Opposite the site is a mixture of older style and newer residential buildings and some retail commercial properties.
- To the south is a mixture of new residential apartment buildings along the eastern side of Pittwater Road.
- East of the site along Clarence avenue is mostly medium density residential flats.
- To the north is a retirement village (Oceangrove)

2.2 Streetscapes:

The site is surrounded by residential apartment buildings to the west, south and east. The RSL and its associated senior living facility is to the north. At street level, there is a mix of retail and commercial outlets, typical of a large suburb, such as Dee Why. The main feature at the northern end of the town centre is the six lane primary access road, Pittwater Road.

2.3 The selected view locations for the local view analysis:

As a result of the site's topography, the visual impact is primarily relevant from the residential and commercial properties surrounding the subject site, particularly to the south and also from the gaps between various buildings, observed from the street. The properties on the southern and eastern boundaries, and across Pittwater Road, have the greatest potential for negative visual impact, being orientated towards the Collaroy Plateau ridgeline and the ocean.

A large number of site photos were taken and a smaller number of local views selected from these, relevant for the public and private viewing locations, as described above. These are a mixture of static viewpoints, namely, fixed locations, as opposed to locations where viewing from a vehicle may be more likely – dynamic.

The selected photos are intended to allow consideration of the visual and urban impact of the new development at both an individual and local level. They incorporate private viewing locations from properties to the north of the subject site, where the new proposal falls within direct line of sight and impacts on the neighbouring views and light access

2.4 Period of View:

- (a) Intermittent, or Dynamic if it will be viewed from a car traveling along a road; or
 - (b) Stationary, or Static if the proposal can be viewed from a fixed location or for an extended period of time.
- In this instance, most views will be considered as stationary, since the impact is most significant on views from adjoining properties.

2.5 Context of View:

The context of the view relates to where the proposed development is being viewed from. The context will be different if viewed from a neighbouring building, or garden, where views can be considered for an extended period of time, as opposed to a glimpse obtained from a moving vehicle.

2.6 Extent of View:

The extent to which various components of a development would be visible is critical. For example, if the visibility assessment is of a multi-storey development proposal in a low-density context of 2 to 3 storey buildings, it would be considered to have a significant local scale visual impact, whereas if a development proposal is located in an area of a CBD containing buildings of a similar scale and height, it may be considered to have a lower scale visual impact.

The capacity of the landscape to absorb the development is to be ranked as high, medium or low, with a low ranking representing the highest visual impact upon the scenic environmental quality of the specific locality, since there is little capacity to absorb the visual impact within the landscape.

3. VISUAL IMPACT OF THE PROPOSED DEVELOPMENT.

3.1 Visual Impact Assessments from 26 viewpoint locations – from around the subject site and the adjoining buildings

3.1.1. Method of Assessment:

In order to allow a quantitative assessment of the visual impact, photos were selected that represented relevant viewing locations from the specific locations likely to be affected. Within these areas, photographs were taken from the property boundaries or where possible, equating to standing height views within the relevant buildings. A drone with 35mm sensor equivalent of 24mm was used to take all viewpoint photos, at an approximate eye level of 1600mm.

The photos include location descriptions, to be read in conjunction with the site map, contained in Appendix A. Additionally, information is supplied as to the distance from the site boundary for each location and the distance to the closest built form is provided in Section 3.1.2 below.

To assess the visual impact, there are 2 relevant aspects - view loss of actual substance (landscape, middle and distance view elements etc.) and also direct sky view loss. To a large extent, the value associated with a view is subjective, although a range of relative values can be assigned to assist with comparing views. Figure 8 is a scale of values from 0 to 15, used to allow a numeric value to be given to a particular view, for the purposes of comparison.

On the same table are a series of values, from zero to 15, that reflect the amount of visual impact.

The second means of assessment relates to assigning a qualitative value to the existing view, based on criteria of visual quality defined in the table – also in Figure 8.

The % visual content is then assessed, together with a visual assessment of the new development's ability to blend into the existing surroundings.

Scale	Value	Visual Quality	Visual Impact	Tenacity Value
0	Negligible	N/A	No negative impact on the pre-existing visual quality of the view.	Nil
1	Low	Predominant presence of low quality manmade features. Minimal views of natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc). Uniformity of land form.	A minor negative impact on the pre-existing visual quality of the view. Examples: <ul style="list-style-type: none"> - Minor impacts on natural landscapes. - No impact on iconic views - Impacts on a small number of receivers. - Significant distance between the development and receiver. 	Negligible
2				
3				
4				
5				
6	Medium	Presence of some natural features mixed with manmade features. Some views of distinct natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc).	A medium negative impact on the pre-existing visual quality of the view: Examples: <ul style="list-style-type: none"> - Moderate impacts on iconic views or natural landscapes. - Impacts on a moderate number of receivers. - Located nearby the receiver. 	Moderate
7				
8				
9				
10				
11	High	Predominantly natural features. Minimal manmade features, however if present of a high architectural standard. Significant views of distinct natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc). Presence of iconic regional views or landmark features.	A high negative impact on the pre-existing visual quality of a view: Examples: <ul style="list-style-type: none"> - Loss of iconic views. - Impacts on a significant number of receivers. - Overshadowing effect. - Directly adjacent the receiver. 	Severe
12				
13				
14				
15				
				Devastating

Figure 8 – Urbaine Design Visual Assessment Scale

3.1.2: Assessment at selected viewpoints.

Viewpoint 01



P02 DJI_0269 a.jpg

Existing site photo.

From Clarence Avenue, looking towards subject site.

RL + 18.15m

Distance to site boundary: 65.42m

Distance to centre of subject site: 120.6m



P02 DJI_0269 c.jpg

Photomontaged view of new proposal



P02 DJI_0269 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 23%

Visual impact ratio - view loss (including buildings) : sky view loss: 79% : 21%

Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no: 3 /15

This is a static, private viewpoint from the third floor of the apartment building at No.1, Richmond Avenue at the junction with Clarence Avenue, looking in a west-southwesterly direction towards the subject site. The foreground of the view is across Clarence Avenue towards two storey apartments, adjoining the subject site. The value of the existing view is low-to-medium.

The new proposal is observed behind existing street trees and does not impact on views of any high value. The scale of the design is appropriate to the apartment buildings to the south, sitting behind the site, on Pittwater Road.

The view loss and visual impact, in the context of available views from this location, would be considered minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 02



P03 DJI_0282 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 34.05m

Distance to site boundary: 25.89m

Distance to centre of subject site: 64.43m



P03 DJI_0282 c.jpg

Photomontaged view of new proposal



P03 DJI_0282 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 76%

Visual impact ratio - view loss (including buildings) : sky view loss: 74% : 26%

Existing Visual Quality Scale no: 9 /15 Visual Impact Assessment Scale no: 10/15

This is a static, private viewpoint from the equivalent of a level 5 balcony on the northwestern corner of the apartment building at No.1 Dee Why Parade, at the junction with Pittwater Road. The view is to the northeast, looking up Pittwater Road and across the subject site, with the ridge of Collaroy Plateau in the distance and a small glimpse of Dee Why Lagoon. The value of the existing view is Medium.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes Pittwater Road, the RSL complex, most of Collaroy Plateau to the point where the ridge declines towards Pittwater Road in the far distance. A large proportion of the view loss is also of the sky view.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 03



P04 DJI_0291 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 34.78m

Distance to site boundary: 26.27m

Distance to centre of subject site: 64.12m



P04 DJI_0291 c.jpg

Photomontaged view of new proposal



P04 DJI_0291 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 73%

Visual impact ratio - view loss (including buildings) : sky view loss: 77% : 23%

Existing Visual Quality Scale no: 10 /15 Visual Impact Assessment Scale no: 10/15

This is a static, private viewpoint from the equivalent of a level 6 balcony on the northwestern corner of the apartment building at No.1 Dee Why Parade, at the junction with Pittwater Road. The view is to the northeast, looking up Pittwater Road and across the subject site, with the ridge of Collaroy Plateau in the distance and a small glimpse of Dee Why Lagoon. The value of the existing view is Medium-to-High.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes Pittwater Road, the RSL complex, most of Collaroy Plateau to the point where the ridge declines towards Pittwater Road in the far distance. A large proportion of the view loss is also of the sky view.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 04



P05 DJI_0301 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 35.78m

Distance to site boundary: 23.4m

Distance to centre of subject site: 63.77m



P05 DJI_0301 c.jpg

Photomontaged view of new proposal



P05 DJI_0301 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 67%

Visual impact ratio - view loss (including buildings) : sky view loss:81% : 19%

Existing Visual Quality Scale no: 10 /15 Visual Impact Assessment Scale no: 11 /15

This is a static, private viewpoint from the equivalent of a level 7 balcony on the northwestern corner of the apartment building at No.1 Dee Why Parade, at the junction with Pittwater Road. The view is to the northeast, looking up Pittwater Road and across the subject site, with the ridge of Collaroy Plateau in the distance and a small glimpse of Dee Why Lagoon. The value of the existing view is Medium-to-High.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes Pittwater Road, the RSL complex, most of Collaroy Plateau to the point where the ridge declines towards Pittwater Road in the far distance. A large proportion of the view loss is also of the sky view.

The view loss and visual impact, in the context of available views from this location, would be considered Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 05



P07 DJI_0317 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 40.88m

Distance to site boundary: 2.41m

Distance to centre of subject site: 63.9m



P07 DJI_0317 c.jpg

Photomontaged view of new proposal



P07 DJI_0317 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 68%

Visual impact ratio - view loss (including buildings) : sky view loss: 81% : 9%

Existing Visual Quality Scale no: 11 /15 Visual Impact Assessment Scale no: 11 /15

This is a static, private viewpoint from the equivalent of a level 8 balcony on the northwestern corner of the apartment building at No.1 Dee Why Parade, at the junction with Pittwater Road. The view is to the northeast, looking up Pittwater Road and across the subject site, with the ridge of Collaroy Plateau in the distance and a small glimpse of Dee Why Lagoon. The value of the existing view is High.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes Pittwater Road, the RSL complex, most of Collaroy Plateau to the point where the ridge declines towards Pittwater Road in the far distance. A large proportion of the view loss is also of the sky view.

The view loss and visual impact, in the context of available views from this location, would be considered Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 06



P08 DJI_0330 a.jpg

Existing site photo.

From Kingsway, looking towards subject site.

RL + 27.91m

Distance to site boundary: 66.2m

Distance to centre of subject site: 119.8m



P08 DJI_0330 c.jpg

Photomontaged view of new proposal



P08 DJI_0330 d.jpg

Extent of development’s visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 88%
 Visual impact ratio - view loss (including buildings) : sky view loss: 45% : 55%
 Existing Visual Quality Scale no: 9 /15 Visual Impact Assessment Scale no: 9/15

This is a static, private viewpoint from the equivalent of level 3 on the northeastern corner of the small residential building, adjoining No.2, Kingsway, at the junction with Pittwater Road. The view is to the east-southeast, across Pittwater Road in the foreground, looking down Dee Why Parade towards the ocean and across the subject site. The ocean and horizon is visible at the end of Dee Why Parade, with glimpses through the trees to the north. The value of the existing view is Medium-to-High.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes mature street trees on adjoining sites, towards the ocean. Small amounts of ocean views are also impacted. A large proportion of the view loss is also of the sky view, above the horizon.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 07



P09 DJI_0340 a.jpg

Existing site photo.

From Kingsway, looking towards subject site.

RL + 32.18m

Distance to site boundary: 66.49m

Distance to centre of subject site: 120.1m



P09 DJI_0340 c.jpg

Photomontaged view of new proposal



P09 DJI_0340 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 86%
 Visual impact ratio - view loss (including buildings) : sky view loss: 61% : 39%
 Existing Visual Quality Scale no: 10 /15 Visual Impact Assessment Scale no: 10 /15

This is a static, private viewpoint from the equivalent of level 4 on the northeastern corner of the small residential building, adjoining No.2, Kingsway, at the junction with Pittwater Road. The view is to the east-southeast, across Pittwater Road in the foreground, looking down Dee Why Parade towards the ocean and across the subject site. The ocean and horizon is visible at the end of Dee Why Parade, with glimpses through the trees to the north. The value of the existing view is Medium-to-High.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes mature street trees on adjoining sites, towards the ocean. Small amounts of ocean views are also impacted. A large proportion of the view loss is also of the sky view, above the horizon.

The view loss and visual impact, in the context of available views from this location, would be considered Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings, when assessed against the permissible building envelope on the subject site.

Viewpoint 08



P11 IMG_0303 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 17.76m

Distance to site boundary: 52.92m

Distance to centre of subject site: 97.1m



P11 IMG_0303 c.jpg

Photomontaged view of new proposal



P11 IMG_0303 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 37%

Visual impact ratio - view loss (including buildings) : sky view loss: 37% : 63%

Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no: 5 /15

This is a static, private viewpoint from the second floor balcony of the apartment building at Nos.20-22, Dee Why Parade, at the junction with Clarence Avenue, looking in a west-northwesterly direction towards the subject site. The foreground of the view is across Clarence Avenue towards two storey apartments, adjoining the subject site. The value of the existing view is low.

The new proposal is observed behind existing street trees and does not impact on views of any high value. The scale of the design is appropriate to the apartment buildings to the west, sitting behind the site, on the western side of Pittwater Road.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 09



P13 IMG_0328 a.jpg

Existing site photo.

From Dee Why Parade, looking towards subject site.

RL + 17.08m

Distance to site boundary: 51.4m

Distance to centre of subject site: 98.33 m



P13 IMG_0328 c.jpg

Photomontaged view of new proposal



P13 IMG_0328 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 29%

Visual impact ratio - view loss (including buildings) : sky view loss: 81% : 19%

Existing Visual Quality Scale no: 3 /15 Visual Impact Assessment Scale no: 4 /15

This is a static, private viewpoint from the second floor balcony of the northwest corner of the apartment building at Nos.20-22, Dee Why Parade, at the junction with Clarence Avenue, looking in a westerly direction towards the subject site. The foreground of the view is across Clarence Avenue towards two storey apartments, adjoining the subject site. The value of the existing view is low.

The new proposal is observed behind existing street trees and does not impact on views of any high value. The scale of the design is appropriate to the apartment buildings to the west, sitting behind the site, on the western side of Pittwater Road.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 10



P14 IMG_0338 a.jpg

Existing site photo.

From Clarence Avenue, looking towards subject site.

RL + 10.08m

Distance to site boundary: 65.94m

Distance to centre of subject site: 128.4m



P14 IMG_0338 c.jpg

Photomontaged view of new proposal



P14 IMG_0338 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 38%

Visual impact ratio - view loss (including buildings) : sky view loss: 29% : 71%

Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no:4 /15

This is a static, private viewpoint from the eastern pavement of Clarence Avenue, alongside the western elevation of No.1 Richmond Avenue, looking in a westerly direction towards the subject site. The foreground of the view is across Clarence Avenue towards two storey apartments, adjoining the subject site and the entrance to the RSL car park. The value of the existing view is low.

The new proposal is observed behind existing, residential buildings and landscape and does not impact on views of any high value. The scale of the design is appropriate to the apartment buildings to the west, sitting behind the site, on the western side of Pittwater Road.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 11



P15 IMG_0349 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 20.3m

Distance to site boundary: 157.4m

Distance to centre of subject site: 206.1m



P15 IMG_0349 c.jpg

Photomontaged view of new proposal



P15 IMG_0349 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 43%

Visual impact ratio - view loss (including buildings) : sky view loss: 62% : 38%

Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no: 3 /15

This is a static, private viewpoint from the western pavement of Pittwater Road, at the junction with David Avenue, looking in a northwesterly direction towards the subject site. The foreground of the view is across Pittwater Road towards five and six storey apartments, along the eastern side of Pittwater road, running north towards Dee Why Parade and the subject site in the middle distance.

The new proposal is observed, mostly behind the existing, residential buildings and does not impact on views of any high value, beyond a small number of mature trees behind the site. The scale of the design is appropriate to the apartment buildings to the south, sitting in front of the site, on the eastern side of Pittwater Road. The new proposal provides an effective continuation of the streetscape, when observed from this viewpoint.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 12



P16 IMG_0359 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 20.87m

Distance to site boundary: 322.5m

Distance to centre of subject site: 370.13m



P16 IMG_0359 c.jpg

Photomontaged view of new proposal



P16 IMG_0359 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 12%
Visual impact ratio - view loss (including buildings) : sky view loss: 56% : 44%
Existing Visual Quality Scale no: 3 /15 Visual Impact Assessment Scale no: 2 /15

This is a static, private viewpoint from the central divide of Pittwater Road, opposite the junction with Oaks Avenue, looking in a northwesterly direction towards the subject site. The foreground of the view is across Pittwater Road towards a mixture of mid and high-rise apartment towers, along the eastern side of Pittwater road, running north towards Howard Avenue and then Dee Why Parade and the subject site in the middle distance.

The new proposal is significantly obscured by the existing residential buildings and does not impact on views of any high value, beyond a small number of mature trees behind the site. The scale of the design is appropriate to the apartment buildings to the south, sitting in front of the site, on the eastern side of Pittwater Road. The new proposal provides an effective continuation of the streetscape, when observed from this viewpoint.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 13



P17 IMG_0372 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 19.52m

Distance to site boundary: 55.71m

Distance to centre of subject site: 109.23m



P17 IMG_0372 c.jpg

Photomontaged view of new proposal



P17 IMG_0372 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - X94%

Visual impact ratio - view loss (including buildings) : sky view loss: 38% : 62%

Existing Visual Quality Scale no: 7 /15 Visual Impact Assessment Scale no: 6/15

This is a static, private viewpoint from the western pavement of Pittwater Road, at the junction with Dee Why Parade, looking in an easterly direction towards the subject site. The foreground of the view is across Pittwater Road and then directly down Dee Why Parade, towards the ocean, although this is not visible from this height. Beyond the subject site are a number of mature trees along Dee Why Parade and adjoining properties.

The new proposal is observed, uninterrupted, on the corner of Pittwater Road and Dee Why Parade. The lower levels of the building to the north, align with the RSL complex to the north, while the main tower relates, in scale and mass, to the 6 and 7 storey apartment buildings to the south.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 14



P21 IMG_0413 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 33.32m

Distance to site boundary: 47.22m

Distance to centre of subject site: 81.3m



P21 IMG_0413 c.jpg

Photomontaged view of new proposal



P21 IMG_0413 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 91%

Visual impact ratio - view loss (including buildings) : sky view loss: 28% : 72%

Existing Visual Quality Scale no: 8 /15 Visual Impact Assessment Scale no: 10/15

This is a static, private viewpoint from the roof of the residential apartment building, at No.735, Pittwater Road, to the north of the junction with Kingsway. The view is to the east-southeast, across Pittwater Road in the foreground, looking towards district views of eastern Dee Why and across the subject site. The ocean and horizon is partially visible at the end of Dee Why Parade. The value of the existing view is Medium.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe. The visual impact is across the entire width of the subject site and includes mature street trees on adjoining sites, towards the ocean. The district views are also impacted in the distance, beyond Dee Why Parade. A large proportion of the view loss is also of the sky view, above the horizon.

The view loss and visual impact, in the context of available views from this location, would be considered Moderate-to-Severe, within the context of overall views available from this location.

The proposal can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings. Although it exceeds the permissible height limit of 12m / 13m, it can be recognised, visually, as a transition from the taller residential apartment buildings to the south and the lower level buildings of the RSL and its associated senior living accommodation to the north. In this respect, the stepdown in building height across the site is very effective.

Viewpoint 15



P22 IMG_0428 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 15.12m

Distance to site boundary: 126.81m

Distance to centre of subject site: 141.27m



P22 IMG_0428 c.jpg

Photomontaged view of new proposal



P22 IMG_0428 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 71%
 Visual impact ratio - view loss (including buildings) : sky view loss: 86% : 16%
 Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no: 3 /15

This is a static, private viewpoint from the eastern pavement of Pittwater Road, at the junction with Dee Why RSL bus stop, looking in a south-southeasterly direction towards the subject site. The foreground of the view is down the eastern pavement and across Pittwater Road towards five and six storey apartments, along the western side of Pittwater road, running south towards the junction with Kingsway and Dee Why Parade, where the subject site is located.

The new proposal is observed behind the existing, residential buildings that adjoin the RSL and does not impact on views of any high value, beyond the apartment buildings to the south. The scale of the design is appropriate to the apartment buildings to the south of the site, sitting to the rear, on the eastern side of Pittwater Road. The new proposal provides an effective continuation of the streetscape, when observed from this viewpoint.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

Viewpoint 16



P24 IMG_0448 a.jpg

Existing site photo.

From Pittwater Road, looking towards subject site.

RL + 4.79m

Distance to site boundary: 434.2m

Distance to centre of subject site: 445.85m



P24 IMG_0448 c.jpg

Photomontaged view of new proposal



P24 IMG_0448 d.jpg

Extent of development's visual impact indicated with cyan overlay and red outline.

Visual impact – Amount of new development (non-landscape) visible in view - 34%

Visual impact ratio - view loss (including buildings) : sky view loss: 74% : 26%

Existing Visual Quality Scale no: 4 /15 Visual Impact Assessment Scale no: 3 /15

This is a static, private viewpoint from the western pavement of Pittwater Road, at the junction with Lismore Avenue, looking in a south-southeasterly direction towards the subject site. The foreground of the view is down the western pavement and across Pittwater Road towards five and six storey apartments, along the western side of Pittwater road, in the far distance. Although there are plentiful amounts of landscaping from this viewpoint, the value of the view is not assessed as high.

The new proposal is observed behind the existing, residential buildings that adjoin the RSL and does not impact on views of any high value, beyond the apartment buildings to the south. The scale of the design is appropriate to the apartment buildings to the south of the site, sitting to the rear, on the eastern side of Pittwater Road. The new proposal provides an effective continuation of the streetscape, when observed from this viewpoint.

The view loss and visual impact, in the context of available views from this location, would be considered Minor and can be considered a good design outcome in relation to its urban context and the scale of neighbouring buildings.

4. SUMMARY ASSESSMENT.

This Visual Impact Assessment from Urbaine Design seeks to provide an objective approach to the likely visual impact and potential view loss from neighbours, surrounding the site of a new proposed development at Nos.2-6, Dee Why Parade, part of 8, Dee Why Parade, 10-12, Dee Why Parade and part of 2, Clarence Avenue.

Firstly, it is important to acknowledge the extent of visual impact and view loss incurred as a result of the existing building. Alongside this, the architectural and material quality of the existing buildings can also be considered in the overall assessment, when viewed alongside the new planning proposal.

The scale of buildings along Pittwater Road, towards the northern end of the Dee Why are consistent in their height as they approach Dee Why Parade. This is a necessary bounding element to these buildings and provides an visual reduction in scale between the 7 and 8 storey apartment buildings and the lower 3 storey senior living development, which forms part of Dee Why RSL.

In this respect, the new proposal effectively provides a continuation to this streetscape and fills a gap within the overall urban fabric in this area. This can be clearly seen from public viewpoints to the north and south of the site.

View loss, although classed as 'severe' in some instances, should be read alongside the Furlong v Northern Beaches Council [2022] NSWLEC 1208 judgement, which stipulates that views obtained within the whole of any residence should also be considered. In this instance, the worst-affected locations have extensive and uninterrupted views in multiple directions, of high-value, not impacted by the new proposal.

In conclusion, the development proposal at Nos.2-6, Dee Why Parade, part of 8, Dee Why Parade, 10-12, Dee Why Parade and part of 2, Clarence Avenue. can be seen to be providing a sensitive architectural solution to the brief requirements, the site and the overall architectural context of the area.

On the grounds of visual impact, I would recommend this development proposal for approval.



John Aspinall, Director, **Urbaine Design Group Pty Ltd.**

5. APPENDICES.

- 5.1 APPENDIX A: Photomontages and view loss assessment images of the Proposed Development from 26 local viewpoints + verification diagrams.
- 5.2 APPENDIX B: Methodology article – Planning Australia, by Urbaine Architecture. Land and Environment Court guidelines for photomontages.
- 5.3 APPENDIX C: Land and Environment Court guidelines for photomontages.
- 5.4 APPENDIX D: Surveyed camera position data.

APPENDIX B:

Aspinall CV and Expert Witness experience.
Methodology article – Planning Australia, by Urbaine Architecture

JOHN ASPINALL. director: urbaine design group

UK Qualified Architect RIBA BA(Hons) BArch(Hons) Liverpool University, UK.

24 years' architectural experience in London and Sydney.

Halpin Stow Partnership, London, SW1

John Andrews International, Sydney

Cox and Partners, Sydney

Seidler and associates

NBRS Architects, Milsons Point

Urbaine Pty Ltd (current)

Design Competitions:

UK 1990 – Final 6. RIBA 'housing in a hostile environment'. Exhibited at the Royal Academy, London

UK Design Council – innovation development scheme finalist – various products, 1990.

Winner: International Design Competition: Sydney Town Hall, 2000

Finalist: Boy Charlton Swimming pool Competition, Sydney, 2001

Finalist: Coney Island Redevelopment Competition, NY 2003

Design Tutor: UTS, Sydney, 1997 – 2002

This role involved tutoring students within years 1 to 3 of the BA Architecture course. Specifically, I developed programs and tasks to break down the conventional problem-solving thinking, instilled through the secondary education system. Weekly briefs would seek to challenge their preconceived ideas and encourage a return to design thinking, based on First Principles.

Design Tutor: UNSW, Sydney 2002 – 2005

This role involved tutoring students within years 4 to 6 of the BArch course. Major design projects would be undertaken during this time, lasting between 6 and 8 weeks. I was focused on encouraging rationality of design decision-making, rather than post-rationalisation, which is an ongoing difficulty in design justification.

Current Position: URBAINE GROUP Pty Ltd

Currently, Principal Architect of Urbaine - architectural design development and visualisation consultancy: 24 staff, with offices in: Sydney, Shanghai, Doha and Sarajevo.

Urbaine specialises in design development via interactive 3d modelling.

Urbaine's scale of work varies from city master planning to furniture and product design, while our client base consists of architects, Government bodies, developers, interior designers, planners, advertising agencies and video producers.

URBAINE encourages all clients to bring the 3D visualisation facility into the design process sufficiently early to allow far more effective design development in a short time frame. This process is utilised extensively by many local and international companies, including Lend Lease, Multiplex, Hassell, PTW, Foster and Partners, City of Sydney, Landcom and several other Governmental bodies. URBAINE involves all members of the design team in assessing the impact of design deci-

sions from the earliest stages of concept design. Because much of URBAINÉ's work is International, the 3D CAD model projects are rotated between the various offices, effectively allowing a 24hr cycle of operation during the design development process, for clients in any location. An ever-increasing proportion of URBAINÉ'S work is related to public consultation visualisations and assessments. As a result, there has also been an increase in the Land And Environment Court representations. Extensive experience in creating and validating photomontaged views of building and environmental proposals. Experience with 3D photomontages began in 1990 and has included work for many of the world's leading architectural practices and legal firms.

Co-Founder Quicksmart Homes Pty Ltd. , 2007 - 2009

Responsible for the design and construction of 360 student accommodation building at ANU Canberra, utilising standard shipping containers as the base modules.

Design Principal and co-owner of Excalibur Modular Systems Pty Ltd: 2009 to present.

High specification prefabricated building solutions, designed in Sydney and being produced in China.

Excalibur has developed a number of modular designs for instant delivery and deployment around the world. Currently working with the Cameroon Government providing social infrastructure for this rapidly developing country.

The modular accommodation represents a very low carbon footprint solution

Expert Legal Witness, 2005 to present

In Australia and the UK, for the Land and Environment Court. Expert witness for visual impact studies of new developments.

Currently consulting with many NSW Councils and large developers and planners, including City of Sydney, Lend Lease, Mirvac, Foster + Partners, Linklaters.

Author of several articles in 'Planning Australia' and 'Architecture Australia' relating to design development and to the assessment of visual impacts, specifically related to the accuracy of photomontaging.

Currently preparing a set of revised recommendations for the Land and Environment Court relating to the preparation and verification of photomontaged views for the purposes of assessing visual impact

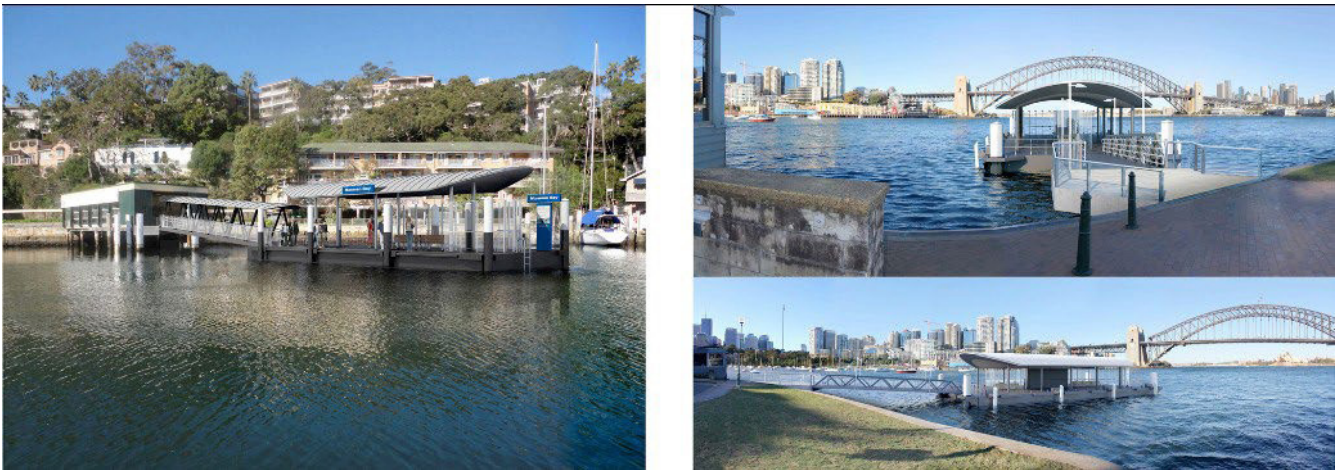


Photomontaged views of new apartment building at Pyrmont: Urbaine

Australia’s rapid construction growth over the past 10 years has coincided with significant advances in the technology behind the delivery of built projects. In particular, BIM (Building Information Modelling). Virtual Reality and ever-faster methods of preparing CAD construction documentation.

Alongside these advances, sits a number of potential problems that need to be considered by all of those involved in the process of building procurement. Specifically, the ease with which CAD software creates the appearance of very credible drawn information, often without the thoroughness and deliberation afforded by architects, and others, in years past.

Nowhere is this more apparent than in the area of visual impact assessments, where a very accurate representation of a building project in context is the starting point for discussion on a project’s suitability for a site. The consequences of any inaccuracies in this imagery are significant and far-reaching, with little opportunity to redress any errors once a development is approved.



Photomontaged views of new Sydney Harbour wharves: Urbaine

Urbaine Architecture has been involved in the preparation of visual impact studies over a 20 year period, in Australia and Internationally. Urbaine’s Director, John Aspinall, has been at the forefront of developing methods of verifying the accuracy of visualisations, particularly in his role as an expert witness in Land and Environment Court cases.

In Urbaine’s experience, a significant majority of visualisation material presented to court is inaccurate to the

point of being invalid for any legal planning decisions. Equally concerning is the amount of time spent, by other consultants, analysing and responding to this base material, which again can be redundant in light of the frequent inaccuracies. The cost of planning consultant reports and legal advice far exceeds that of generating the imagery around which all the decisions are being made.

Over the last 10 years, advances in 3d modelling and digital photography have allowed many practitioners to claim levels of expertise that are based more on the performance of software than on a rigorous understanding of geometry, architecture and visual perspective. From a traditional architect's

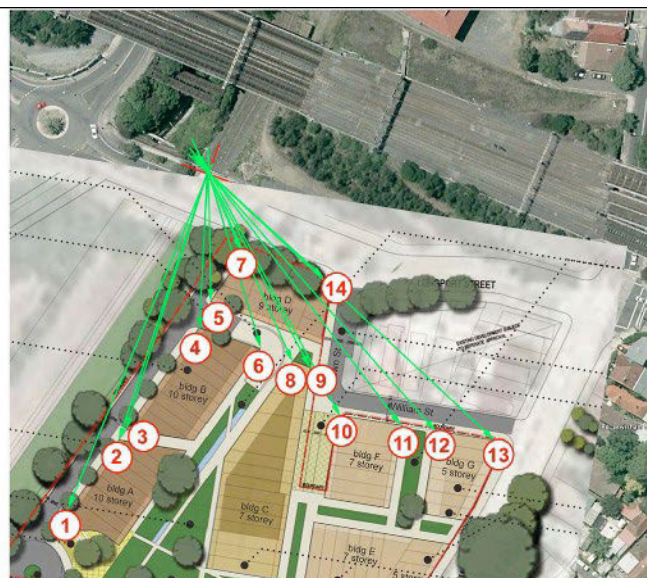
training, prior to the introduction of CAD and 3d modelling, a good understanding of the principles of perspective, light, shadow and building articulation, were taught throughout the training of architects.

Statutory Authorities, and in particular the Land and Environment Court, have attempted to introduce a degree of compliance, but, as yet, this is more quantitative, than qualitative and is resulting in an outward appearance of accuracy verification, without any actual explanation being requested behind the creation of the work.

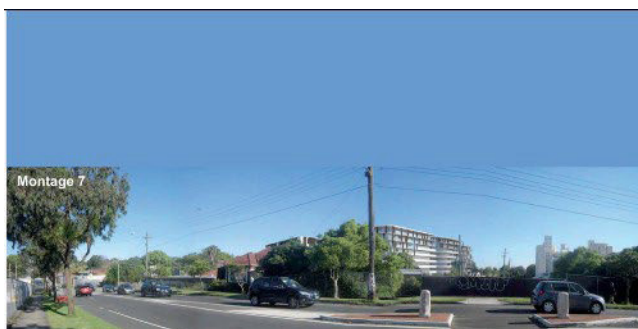
Currently, the Land and Environment Court specifies that any photomontages, relied on as part of expert evidence in Class 1 appeals, must show the existing surveyed elements, corresponding with the same elements in the photograph. Often, any surveyed elements can form such a small portion of a photograph that, even by overlaying the surveyed elements as a 3d model, any degree of accuracy is almost impossible to verify. For sites where there are no existing structures, which is frequent, this presents a far more challenging exercise. Below is one such example, highlighted in the Sydney Morning Herald, as an example of extreme inaccuracy of a visual impact assessment. Urbaine was engaged to assess the degree to which the images were incorrect – determined to be by a factor of almost 75%.



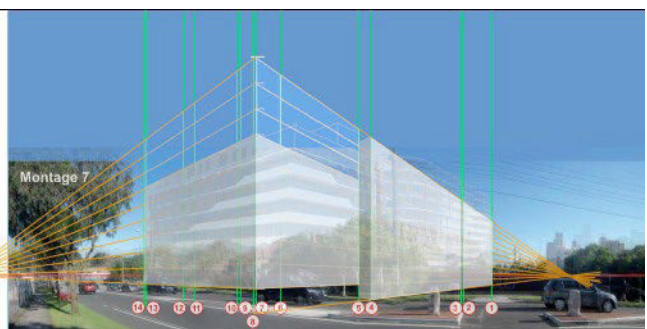
SMH article re inaccurate visualisations



Key visual location points on site: Urbaine



Photomontage submitted by developer



Assessment of inaccuracy by Urbaine

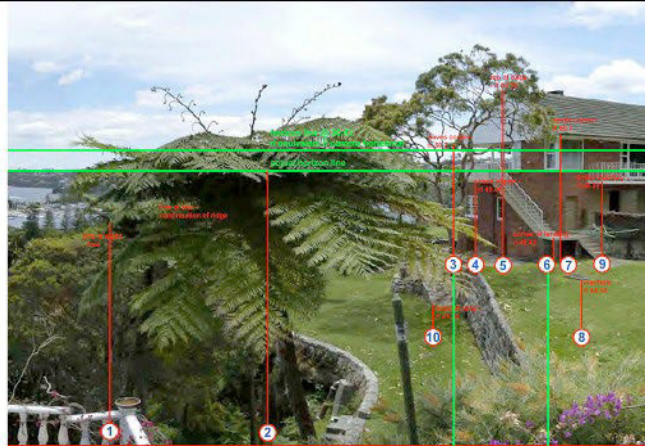
Urbaine has developed a number of methods for adding verification data to the 3d model of proposed buildings and hence to the final photomontages. These include the use of physical site poles, located at known positions and heights around a site, together with drones for accurate height and location verification and the use of landscaped elements within the 3d model to further add known points of references. Elements observed in a photograph can be used to align with the corresponding elements of the new building in plan. If 4 or more known positions can be aligned, as a minimum, there is a good opportunity to create a verifiable alignment.

Every site presents different opportunities for verification and, often, Urbaine is required to assess montages from photographs taken by a third party. In these cases, a combination of assessing aerial photography, alongside a survey will allow reference points to be placed into the relevant 3d model prior to overlaying onto the photos for checking.

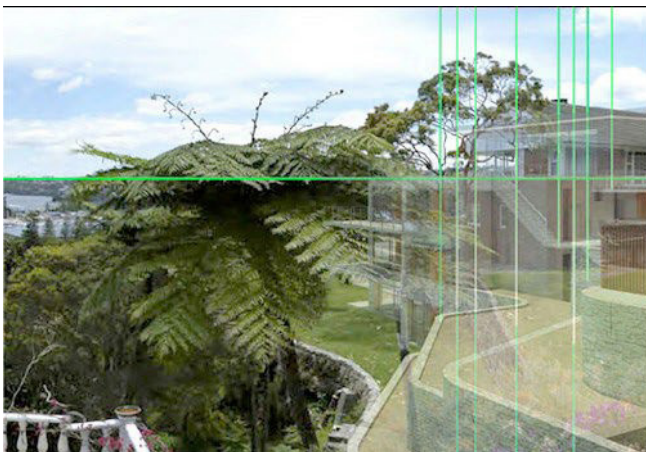
The following example clearly demonstrates this – a house montaged into a view, by others, using very few points of reference for verification. By analysing the existing photo alongside the survey, the existing site was able to be recreated with a series of reference elements built into the model. A fully rendered version of all the elements was then placed over the photo and the final model applied to this. As can be seen, the original montage and the final verified version are dramatically different and, in this case, to the disadvantage of the complainant.



Photomontage submitted by developer



Key visual location points on site: Urbaine



Key points and 3d model overlaid onto existing photo



Final accurate photomontage: Urbaine

Often, Urbaine’s work is on very open sites, where contentious proposals for development will be relying on minimising the visual impact through mounding and landscaping. In these cases, accuracy is critical, particularly in relation to the heights above existing ground levels. In the following example, a business park was proposed on very large open site, adjoining several residential properties, with views through to the Blue Mountains, to the West of Sydney. Urbaine spent a day preparing the site, by placing a number of site poles, all of 3m in height. These were located on junctions of the various land lots, as observed in the survey information. These 3d poles were then replicated in the 3d CAD model in the same height and position as on the actual site. This permitted the buildings and the landscaping to be very accurately positioned into the photographs and, subsequently, for accurate sections to be taken through the 3d model to assess the actual percentage view loss of close and distant views.



Physical 3000mm site poles placed at lot corners 3d poles located in the 3d model and positioned on photo



Proposed buildings and landscape mounding applied

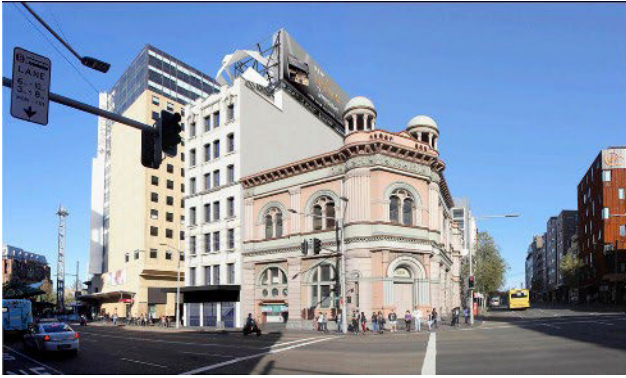


Proposed landscape applied – shown as semi-mature

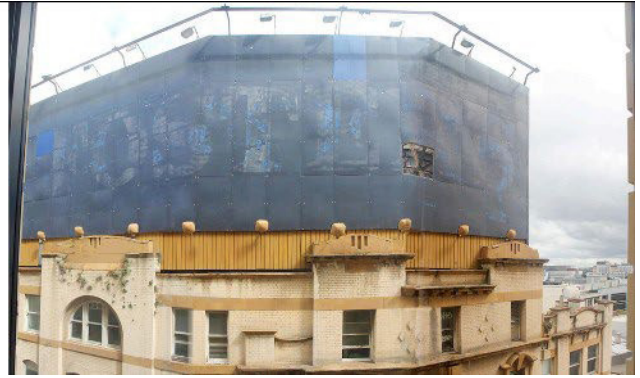


Final verified photomontage by Urbaine

Further examples, below, show similar methods being used to give an actual percentage figure to view loss, shown in red, in these images. This was for a digital advertising hoarding, adjoining a hotel. As can be seen, the view loss is far outweighed by the view gain, in addition to being based around a far more visually engaging sculpture. In terms of being used as a factual tool for legal representation and negotiation, these images are proving to be very useful and are accompanied by a series of diagrams explaining the methodology of their compilation and, hence verifying their accuracy.



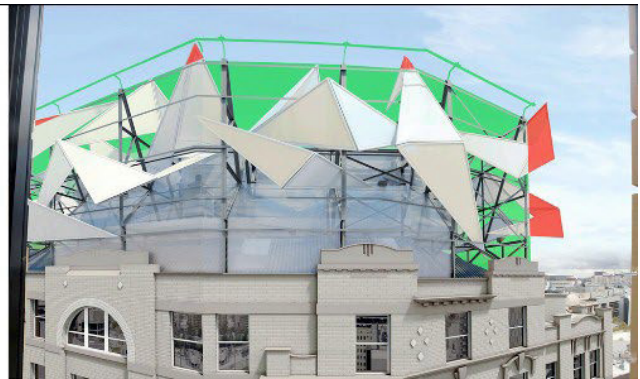
Photomontage of proposed building for digital billboard



Existing situation – view from adjoining hotel

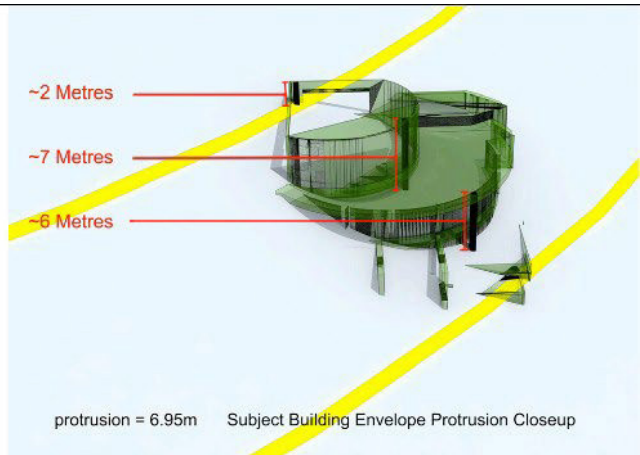
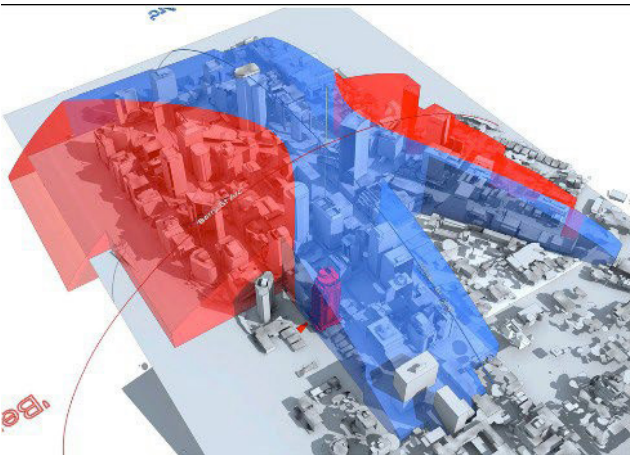


Photomontage of view from hotel



View loss – green = view gain / red = view loss

There are also several areas of assessment that can be used to resolve potential planning approval issues in the early stages of design. In the case below, the permissible building envelope in North Sydney CBD was modelled in 3d to determine if a building proposal would exceed the permitted height limit. Information relating to the amount of encroachment beyond the envelope allowed the architect to re-design the plant room profiles accordingly to avoid any breach.



3d model of planning height zones Extent of protrusion of proposed design prior to re- design

Urbaine's experience in this field has placed the company in a strong position to advise on the verification of imagery and also to assist in developing more robust methods of analysis of such imagery. As a minimum, Urbaine would suggest that anyone engaging the services of visualisation companies should request the following information, as a minimum requirement:

1. Height and plan location of camera to be verified and clearly shown on an aerial photo, along with the sun position at time of photography.
2. A minimum of 4 surveyed points identified in plan, at ground level relating to elements on the photograph and hence to the location of the superimposed building.

3. A minimum of 4 surveyed height points to locate the imposed building in the vertical plane.
4. A series of images to be prepared to explain each photomontaged view, in line with the above stages.

This is an absolute minimum from which a client can determine the verifiability of a photomontaged image. From this point the images can be assessed by other consultants and used to prepare a legal case for planning approval.

APPENDIX C:

Land and Environment Court guidelines for photomontages

Land and Environment Court guidelines for photomontages:

Use of photomontages

The following requirements for photomontages proposed to be relied on as or as part of expert evidence in Class 1 appeals will apply for proceedings commenced on or after 1 October 2013. The following directions will apply to photomontages from that date:

Requirements for photomontages

1. Any photomontage proposed to be relied on in an expert report or as demonstrating an expert opinion as an accurate depiction of some intended future change to the present physical position concerning an identified location is to be accompanied by:

Existing Photograph.

- a) A photograph showing the current, unchanged view of the location depicted in the photomontage from the same viewing point as that of the photomontage (the existing photograph);
- b) A copy of the existing photograph with the wire frame lines depicted so as to demonstrate the data from which the photomontage has been constructed. The wire frame overlay represents the existing surveyed elements which correspond with the same elements in the existing photograph; and
- c) A 2D plan showing the location of the camera and target point that corresponds to the same location the existing photograph was taken.

Survey data.

- d) Confirmation that accurate 2D/3D survey data has been used to prepare the Photomontages. This is to include confirmation that survey data was used:
 - i. for depiction of existing buildings or existing elements as shown in the wire frame; and
 - ii. to establish an accurate camera location and RL of the camera.

2. Any expert statement or other document demonstrating an expert opinion that proposes to rely on a photomontage is to include details of:

- a) The name and qualifications of the surveyor who prepared the survey information from which the underlying data for the wire frame from which the photomontage was derived was obtained; and
- b) The camera type and field of view of the lens used for the purpose of the photograph in (1) (a) from which the photomontage has been derived.

APPENDIX D:

Surveyed camera position data

CAMERA POSITIONS - GDA 2020 AT STANDING HEIGHT (1.6M)



Viewpoint	Easting	Northing	AHD
8	341628.765	6264061.211	17.388
10	341655.297	6264133.903	9.829
11	341349.138	6264000.668	20.005
12	341230.397	6263880.944	20.872
13	341430.011	6264072.817	18.167
14	341478.013	6264135.575	32.448
15	341559.717	6264219.994	14.786
16	341661.13	6264512.946	5.022

NOTE:

POSITIONS ARE INDICATIVE FOR PRESENTATION PURPOSES.
 DATA WAS CAPTURED USING GNSS RTK ROVER
 CAMERA POSITIONS ARE FROM GNSS WITH NTRIP CORRECTIONS
 OBSERVATIONS WITHIN +/- 0.100M
 COORDINATES ARE BASED ON MGA2020 USING SS18989 AS ORIGIN.
 LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD) USING
 SS18989

SKETCH PLAN SHOWING
 INDICATIVE CAMERA POSITIONS FOR -
 DeeWhy - Oceangrove

JOB NO: 443 MCP_DeWhy	LGA: NORTHERN BEACHES
DATE: 10.10.2023	DATUM: AHD
DRAWN: DK	SCALE: N/A
CHECK: JA	SHEET: 1:1