
Urbaine Design Group Pty Ltd, 74 , The Corso, Manly, NSW 2095



VISUAL IMPACT ASSESSMENT

**STATE SIGNIFICANT DEVELOPMENT APPLICATION:
NOS.59-63 TRAFALGAR AVENUE & 1A-1B VALLEY ROAD
LINDFIELD NSW 2070**

FEBRUARY 13 2026

Project Type: State Significant Development Application
 Lot: 30/-/DP4215, 1/-/DP127411, B/-/DP344051, 71/-/DP4665, 7/-/DP17373
 Address: 59-63 Trafalgar Avenue & 1A-1B Valley Road, Lindfield NSW 2070

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1. INTRODUCTION

1.1. Scope and Purpose of Report

This Visual Impact Report has been prepared for Castle Hill No. 8 Pty Ltd to accompany a detailed State Significant Development Application (SSDA) for a Residential Flat Building at Nos.59-63 Trafalgar Avenue & 1A-1B Valley Rd, Lindfield

This report has been prepared to respond to the Secretary's Environmental Assessment Requirements (SEARS) - SSD-79276958. Specifically, Section 6: Visual Impact

- Provide a visual analysis of the development from key viewpoints, including photomontages or perspectives showing the proposed and likely future development.
- Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the development on the existing catchment.

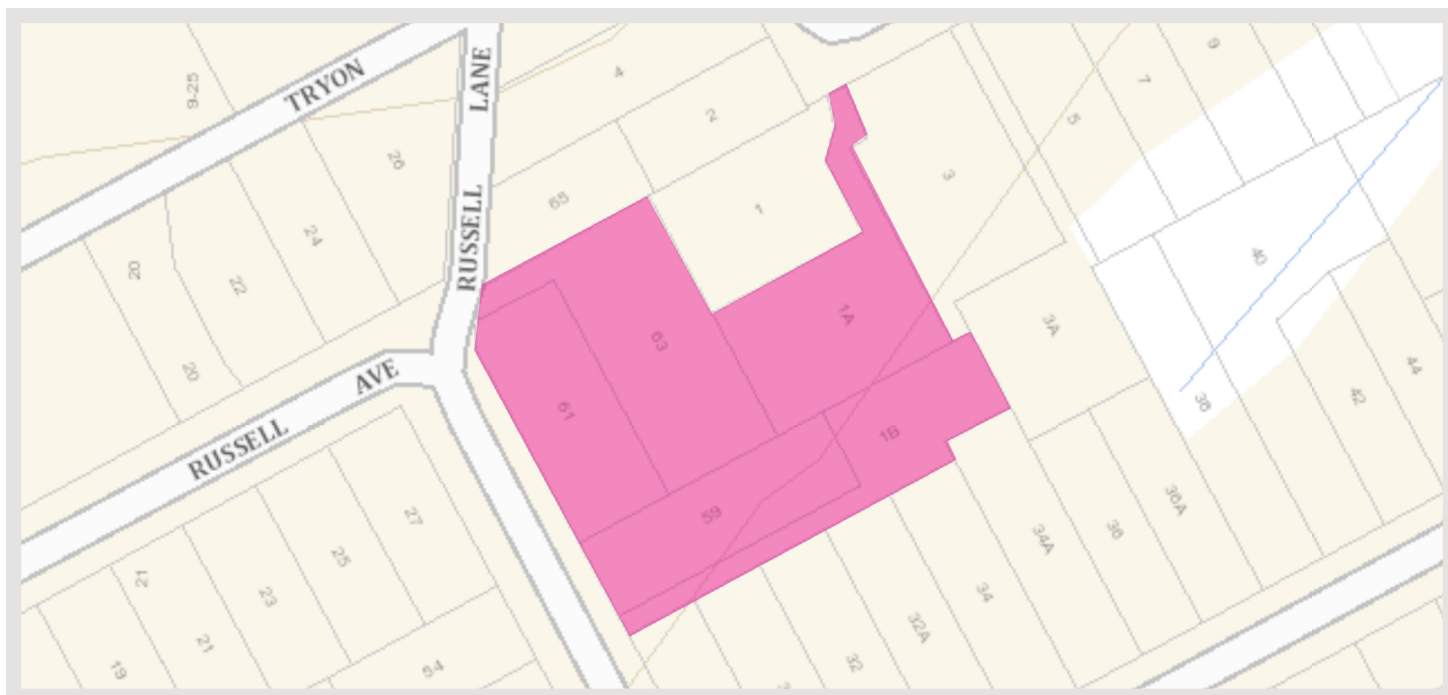


Figure 1 – Site location shown in magenta

1.2. The Proposed Development

1.2.1. The Site and existing property

59-63 Trafalgar Avenue & 1A-1B Valley Rd, Lindfield

Lot 71 / DP4665

Lot 30 / DP4215

Lot 1 / DP127411

Lot B / DP344051

Lot 7 / DP17373

6,672 sqm



Figure 2 – Subject site shown in magenta overlay

1.3. Proposed Land Use and Built Form

Demolition of existing structures

Tree removal and site clearing

Construction of a new 9-storey residential flat building comprising of 219 residential apartments (inclusive of affordable housing apartments) and basement car parking

External landscaping works

220 apartments

17% of total proposed GFA to be dedicated as affordable housing utilising the TOD provisions of SEPP (Housing) 2021 Chapter 5 and Infill affordable housing provisions of SEPP (Housing) 2021 Chapter 2.

See Figures 3 and 4 for typical floor plan and elevation.

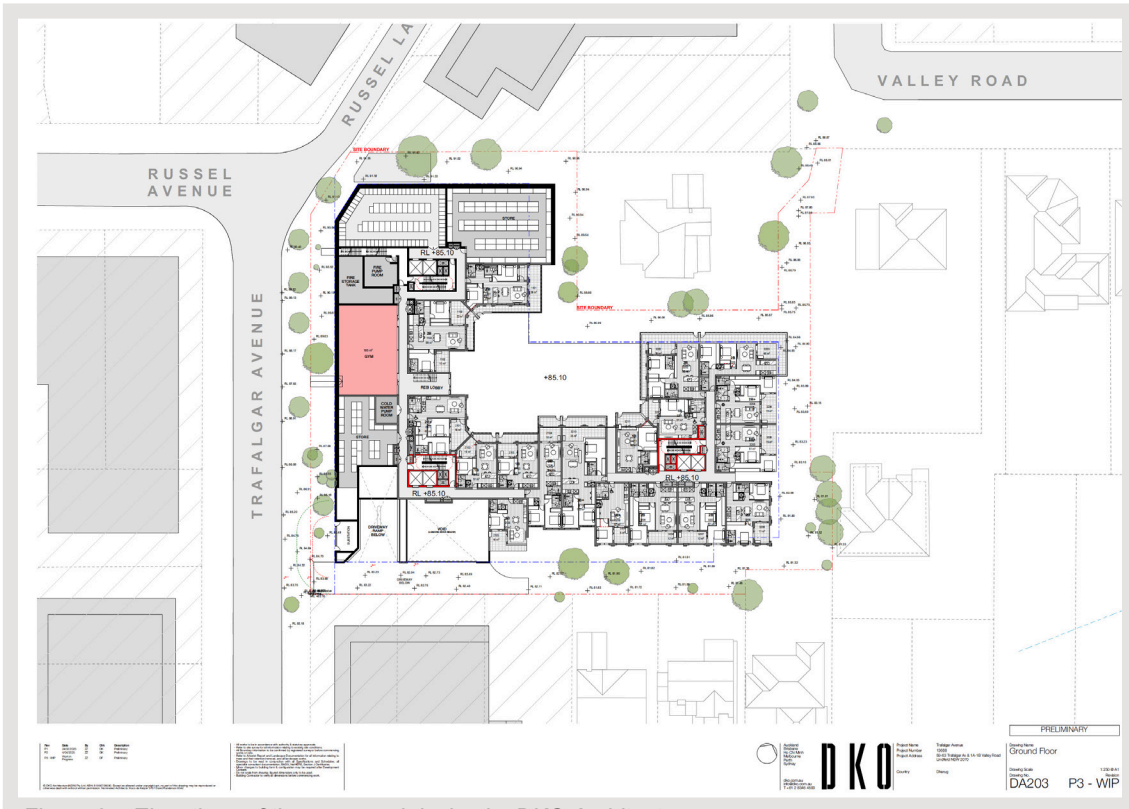


Figure 3 – Elevations of the proposed design by DKO Architects.

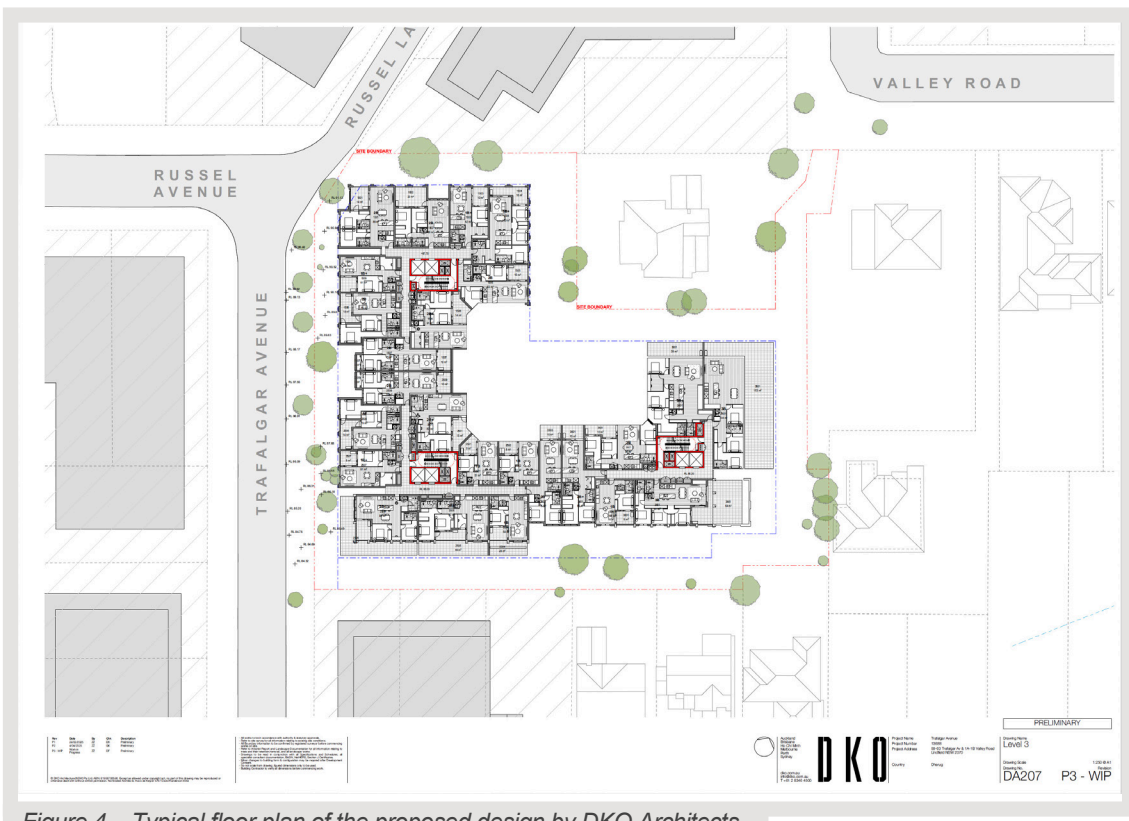


Figure 4 – Typical floor plan of the proposed design by DKO Architects.

1.4. 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 A. A combination of the methods described were utilised in the preparation of the photomontaged views used in this visual impact assessment report.

1.4.1. Process

Survey, plans, elevations and model of the proposal were sourced from the architect, DKO Architects and aligned to the scene using the survey information from Norton Survey Partners, which accompanies the DA submission.

A drone assessment was undertaken and triangulated into a 3D point cloud which was aligned to ground control points using a RTK GNSS rover with NTRIP corrections. This was placed into the scene with a wider area LIDAR point cloud models and further verified against the survey DWG.

The 3D scene was assessed for potential viewsheds to visit to investigate to assess the impact.

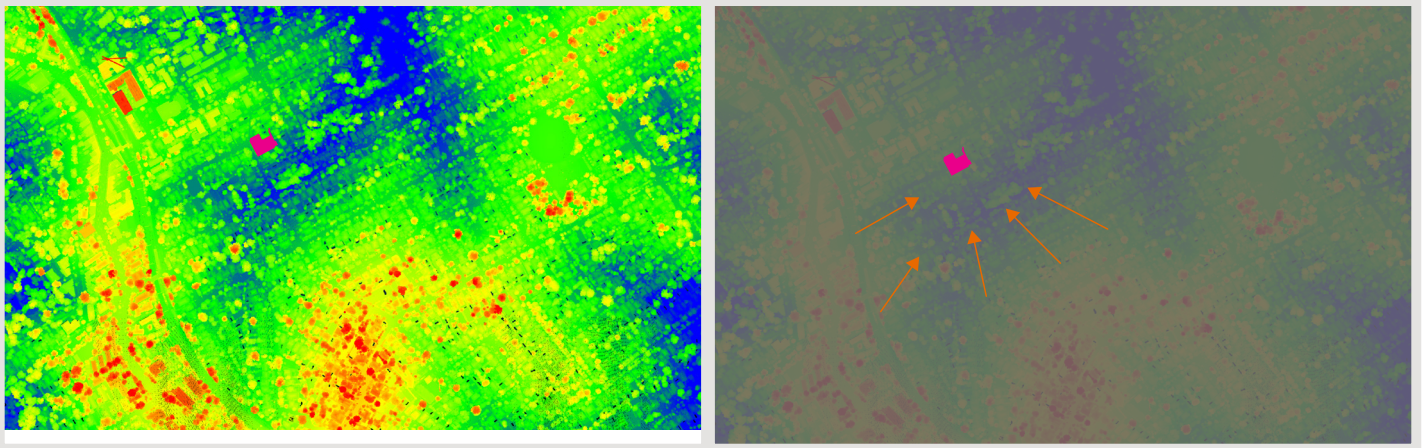


Figure 5 – (Left) Point Cloud with gradient height map, lowest blue, highest red - (Right) Primary viewshed overlay

Site photos were taken and position taken with an RTK GNSS rover and selected to montage from all the available images (Appendix E) to show a balance of view impacts from primary locations within the visited locations with the highest potential for view loss impact.

Virtual cameras were placed into the 3D model to match various selected viewpoints, in both height and position. These locations were measured on-site using a survey provided. From these cameras, rendered views have been generated and photomontaged into the existing photos, using the ground plane for alignment at standing height 1600mm.

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. For the purposes of statutory requirements, the images within the report are of a standard lens format.

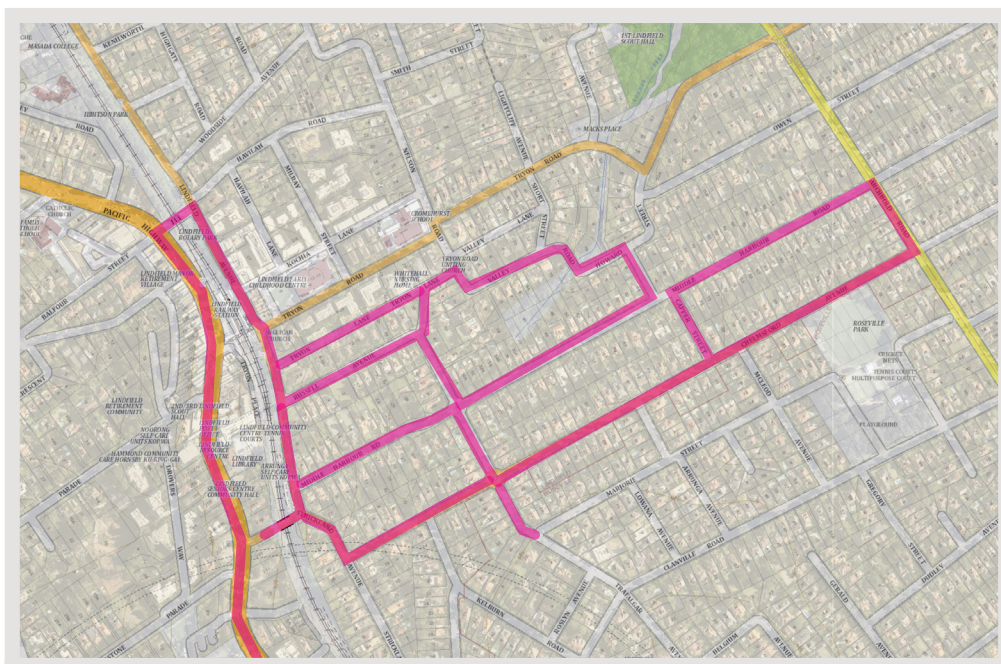


Figure 6 – Route of investigated areas

1.4.2. 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.

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.*

However, there is no peer review system for determining the accuracy of the base material used for visual impact assessments. As a result, Urbaine Group provides a detailed description of its methodologies and the resultant accuracy verifiability – this is contained within Appendix A. The methodology applied to the visual assessment of the current design proposal has been developed from consideration of the following key documents:

- *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 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 Project 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.

For public viewing locations, the Planning Principle for Public domain views - *Rose Bay Marina Pty Limited v Woollahra Municipal Council* (2013) forms a means of assessment. The assessment process from this principle includes: Identification Stage:

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

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

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

Analysis of impacts:

- *The analysis required of a particular development proposal's public domain view impact is both quantitative as well as qualitative.*
- *A quantitative evaluation of a view requires an assessment of the extent of the present view, the compositional elements within it and the extent to which the view will be obstructed by or have new elements inserted into it by the proposed development.*
- *In the absence of any planning document objective/aim, the fundamental quantitative question is whether the*

view that will remain after the development (if permitted) is still sufficient to understand and appreciate the nature of and attractive or significant elements within the presently unobstructed or partially obstructed view. If the view remaining (if the development were to be approved) will be sufficient to understand and appreciate the nature of the existing view, the fundamental quantitative question is likely to be satisfied.

- The outcome of a qualitative assessment will necessarily be subjective. However, although beauty is inevitably in the eye of the beholder, the framework for how an assessment is undertaken must be clearly articulated.
- Any qualitative assessment must set out the factors taken into account and the weight attached to them. Whilst minds may differ on outcomes of such an assessment, there should not be issues arising concerning the rigour of the process.
- As with *Tenacity*, a high value is to be placed on what may be regarded as iconic views (major landmarks or physical features such as land/water interfaces).
- Other factors to be considered in undertaking a qualitative assessment of a public domain view impact include:
 - Is any significance attached to the view likely to be altered?
 - If so, who or what organisation has attributed that significance and why have they done so?
 - Is the present view regarded as desirable and would the change make it less so (and why)?
 - Should any change to whether the view is a static or dynamic one be regarded as positive or negative and why?
 - If the present view attracts the public to specific locations, why and how will that attraction be impacted?
 - Is any present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?
 - However, on the other hand, if the present obstruction of the view is extensive, does that which remains nonetheless warrant preservation (it may retain all or part of an iconic feature, for example)?
 - If the change to the view is its alteration by the insertion of some new element(s), how does that alter the nature of the present view?

The principles established by the Court from both cases have been integrated into the approach adopted for this evaluation. In order to assess the visual impact of the Design Proposal, it is necessary to identify a suitable scope of publicly 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 Project 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.

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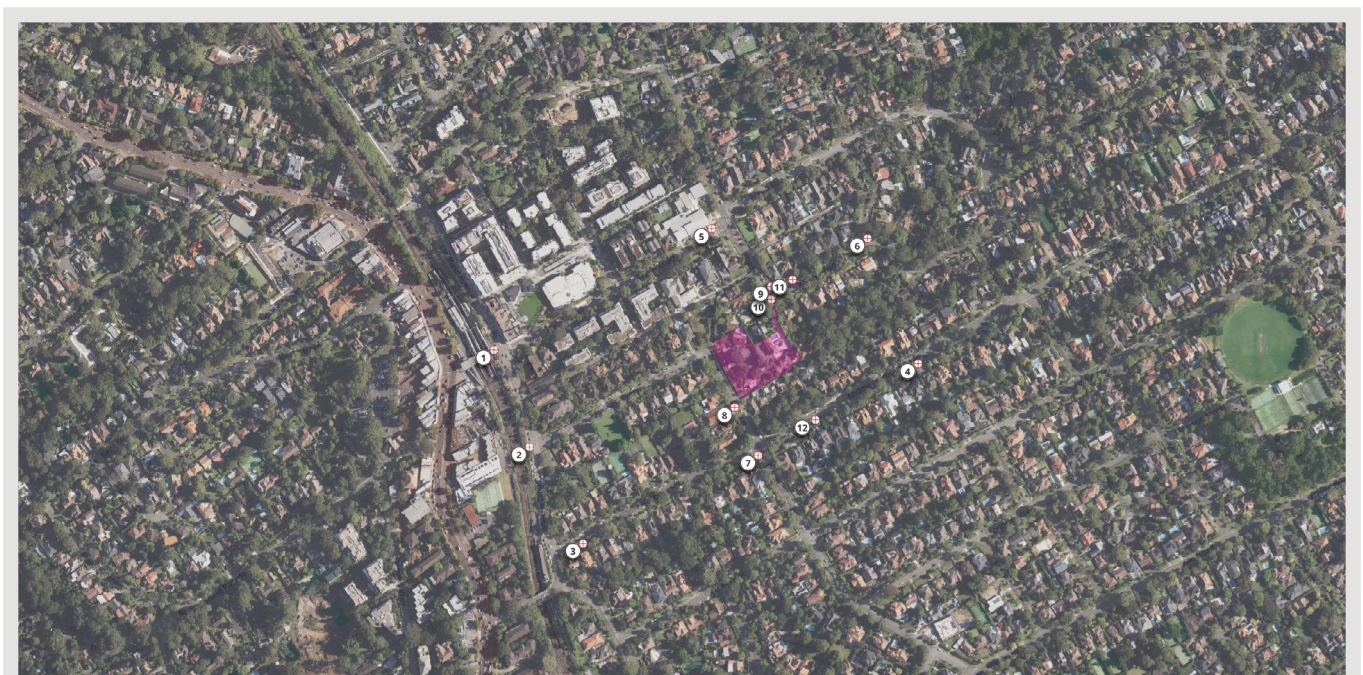


Figure 7: Selected private viewpoint locations for visual impact assessments with site outlined in red.

1.4.3. Site Inspections

A site inspection was 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 map, see figure 7, indicates chosen locations for site photography.

1.4.4. Contextual Analysis:

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

1.4.5. 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.

1.4.6. Statutory Planning Assessment:

The results of the local view impact assessment are included in Section 3 of this report.

1.5. References

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

- *Design Documentation*
- *The design drawings and information relied upon for the preparations of this report were prepared by DKO*
- *Ku-ring-gai Development Control Plan.*
- *Photography by Urbaine Design Group*
- *3d and photomontages by Urbaine Design Group*
- *LIDAR from ICSM- ALS50ii (Airborne Laser Scanner)*



Figure 8: Land zoning map, indicating site with blue outline.

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 9.

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.

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.

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.

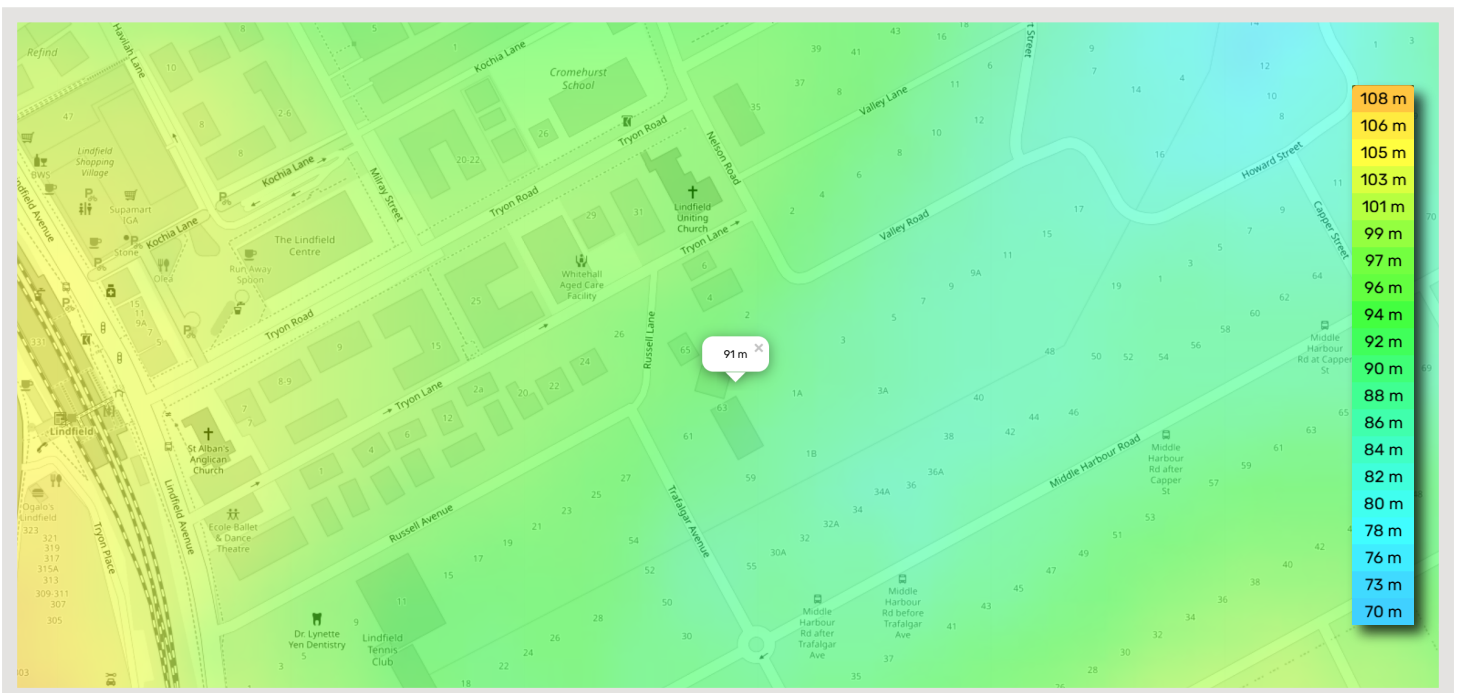


Figure 9: Subject area topographical map.

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.

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. The Visual Context

The immediate surroundings of the site feature a range of properties, mostly single-storey residential dwellings with some 2 and 3 storey mixed-use developments towards the town centre. These buildings showcase a blend of architectural styles, encompassing both traditional and contemporary designs. The area's development history spans different eras, leading to a mixture of construction materials and finishes. As a result, the buildings exhibit varying setbacks from the public domain, contributing to the overall character of the neighbourhood.

The locality has a residential, leafy character characterised by a streetscape quality of side setbacks and predominant, mature landscape. The building heights reinforce the existing townscape, in response to the undulating character of the area.

While this reflects the existing context, it is understood that current planning controls (Transit Oriented Development as well as Low and Mid-Rise Housing) will drastically alter the future context of the area, enabling up to 9 storey buildings to be constructed within 800m of the railway station.

2.2. Visual Features and Local Landmarks

Particular elements in the urban pattern, through either location and/or built form provide visual nodes and landmarks that assist in differentiating locations within the broader visual context. The following visual nodes are considered to be of the greatest significance in terms of their contribution to the character and legibility of the local and surrounding area:

The railway station, Lindfield Village Green and Pacific Highway are the significant focal points in the immediate vicinity of the subject site. Beyond this, the streets themselves present a visual intensity of dense, mature landscape, which conjoins with Gordon Creek to the northeast.

2.3. Streetscapes

Within the immediate and surrounding areas, the streetscapes are typical of Sydney's outer suburbs, being a mixture of individual houses and apartments blocks of varying scales, commercial building, schools and large, public parks. The landscaping is predominantly mature and well established.

Of greatest relevance, in terms of visual impact, is the amount and maturity of the existing landscaping in this area, both along the streets and within the private gardens. The density of foliage ensures views to the subject site are significantly screened from locations beyond its immediate surroundings. This continuation of street trees has been incorporated into the design proposal.

In most instances, the view to the subject site will be from dynamic viewpoints - cars and pedestrians, which serves to further diminish the likelihood of excessive visual impact.

Appendix B contains the full selection of photos from the site visit, further demonstrating the streetscapes of this locality.

2.4. The selected view locations for the local view analysis

As a result of the site's topography, the visual impact is primarily relevant to the residential properties to the south and east of the subject site. A large number of site photos were taken and a smaller number of specific views selected from these, relevant for private viewing locations, as described above. The selected photos are intended to allow consideration of the visual and urban impact of the new development at a local level and, specifically, from the neighbouring properties and public viewing locations.

2.5. Context of View

The context of the view relates to where the proposed development is being viewed from. The context is different if viewed from a neighbouring building, or garden, as is the case here, 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 viewpoint locations

Visual Impact Assessments from 12 viewpoint locations – from Public places

3.1.1. Method of Assessment

In order to allow a quantitative assessment of the visual impact locations where view impact and view loss, a Canon EOS Full Frame Digital Camera with fixed focal length 24mm lens was used to take all viewpoint photos, at an 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 10 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 – see figure 10.

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

TENACITY / SCALE / VALUE		VISUAL IMPACT		VISUAL QUALITY			
NIL	0	NEGLIGIBLE	No negative impact on the pre-existing visual quality of the view	N/A			
	1		LOW	A minor negative impact on the pre-existing visual quality of the view Examples: minor impact on natural landscapes no impact on iconic views impact on small number of receivers significant distance between the development and receiver	Predominant presence of low quality man made features		
NEGILIBLE	2	Minimal views of natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc.)					
	3	Uniformity of land forms					
	4	MINOR			5	Presence of some natural features mixed with manmade features	
6	MEDIUM						
7		SEVERE	10	Predominantly natural features Minimal manmade features, however if present of a high architectural standard			
8						HIGH	A high negative impact on the pre-existing visual quality of a view Examples: loss of iconic view impact on significant number of receivers overshadowing effect directly adjacent the receiver
9		Presence of iconic regional views of landmark features					
11	DEVASTATING	13					
12					14		
15							

Figure 10: Urbaine Group Assessment Table

3.1.2. Assessment at selected viewpoints

VIEWPOINT 01



Existing site photo - Lindfield Train station

From standing position on the public pavement
RL + 106.09m - Distance to boundary 289.40m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal (Unseen)



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 0%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: N/A*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 0 /15*

This is a static, private view from the eastern exit of Lindfield train station, 1 metre from the safety railing, at standing height, directed across Lindfield Avenue's public pavement. The near foreground view from this viewpoint shows Lindfield Avenue, and its junction with Tyron Road, to the east. At the northern corner of this road junction, is a row of mixed-use properties of 3 storeys, with retail premises on the ground level, terminating the view in this direction. To the northeast, along Tyron Road, is the St Albans Anglican Church and glimpses of residential properties between the dense canopies of mature street trees that line both sides of the road. A large tree canopy on the western side of Lindfield Avenue terminates the view to the south, in the foreground.

The tree canopies, in the direction of the subject site, effectively conceal the full extent of the proposal. The visual impact from this public viewpoint, is therefore assessed as Nil.

Tenacity Assessment Summary:

- *Value of view: Moderate*
- *View location: Upper level window - secondary, outdoor living space.*
- *Extent of impact: Minor*

Reasonableness of proposal: Within the context of the development's height compliance, the proposal can be deemed acceptable, since the highest value components of the view remain and views to the south and west are not impacted.

VIEWPOINT 02



Existing site photo -Lindfield Avenue

From standing position on the public pavement
RL + 95.76m - Distance to boundary 274.40m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in cyan with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 31%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 4% : 96%*
- *Existing Visual Assessment Scale no: 6 /15 & Visual Impact Assessment Scale no: 5 /15*

This is a static and dynamic public viewpoint from the western pavement of Lindfield Avenue, adjoining the boundary fencing along the North Shore railway line. The view looks in an east-northeasterly direction directly along Russell Avenue in the direction of the subject site. The road junction is relatively clear of any trees and landscaping. However, the dense street and garden tree canopies are seen as the road rises in elevation towards its eastern end. There are elements of the individual properties along Russell Avenue that are visible close to the junction, but further east, all the properties are concealed, with trees also screening much of the subject site at its lower levels.

The visual impact from the development proposal is relatively limited, as a result of the rising topography and the tree screening to the site's west. The landform ensures there are no distant views available and that the new development sits at a high point to the east. The large tree canopies cover most of the southern portions of the new building, while the northwestern corner is seen at its upper levels through the gap in the landscaping, at the end of Russell Avenue, at its junction with Trafalgar Avenue and Russell Lane.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Low-to-Medium.*
- *View location: Public pavement view*
- *Extent of impact: Minor.*

Reasonableness of proposal: Within the context of the development's height compliance, the proposal can be deemed acceptable, since the highest value components of the view remain and views to the south and west are not impacted.

VIEWPOINT 03



Existing site photo - Middle Harbour Rd

From standing position on the public pavement
RL + 98.61m - Distance to boundary 273.57m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in cyan with red outline, future buildings context in blue outline

Visual Impact Assessment:

- Visual impact – Amount of new development visible in view - 4%
- Visual impact ratio - view loss (including buildings) : sky view loss: 0% : 100%
- Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 1 /15

This is a static and dynamic, public view from the eastern pavement of Middle Harbour Road, looking north-northeast at standing height. This is located on the driveway for no.3, Middle Harbour Road, adjoining the pavement edge. The grass verges on both sides of the road are lined with a mix of mature trees, which block much of the views to neighbouring properties, the road and any distant vistas. There are also a number of large, mature pine trees, to the northeast that rise to a higher elevation, impacting only on the sky views beyond. The properties in this view are individual houses, of single and double-storey, with densely landscaped front gardens, adding to the visual obstruction of the site.

The visual impact, from the proposed development, is significantly minimised by the existing trees in this direction. There are very small glimpses of the northwestern corner of the building, at its upper levels only and this portion impacts upon sky view beyond the subject site. The visual impact would be assessed as Negligible.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- Value of view: Medium.
- View location: Public pavement.
- Extent of impact: Negligible.

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and almost entirely screened from the observer, both by existing buildings and intermediate landscaping.

VIEWPOINT 04



Existing site photo - Middle Harbour Road

From standing position on the public pavement
RL + 84.92m - Distance to boundary 150.09m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in cyan with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 11%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 0% : 100%*
- *Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static and dynamic, public viewpoint located at the entry driveway to the residential property at no.55, Middle Harbour Road, looking due west towards the subject site. As with other locations along Middle Harbour Road, the road has wide grass verges, containing regularly spaced streets trees, of various types and heights. The residential properties are typically of single, or double storey older style construction, with well landscaped gardens facing the road. Behind these properties, is Gordon Creek, along which are many mature trees, considerably higher than those long the street. These trees screen any distant views beyond the creek line and many of the potential views of the subject site.

The visual impact of the new proposal is not significant from this location, with all the lower levels of the building obscured by the dense treeline along Gordon Creek. At the upper level of the development, there are small, filtered glimpses of the built form, along its eastern and southern elevations. The visual impact from this location is assessed as Negligible.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public pavement*
- *Extent of impact: Negligible*

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and largely screened from the observer, both by existing buildings and intermediate landscaping.

VIEWPOINT 05



Existing site photo -

From standing position on the public pavement
RL + 93.22m - Distance to boundary 134.67m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal (Unseen)



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 0%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: N/A*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 0 /15*

This is a static and dynamic public viewpoint from the pavement on the northern side of Tryon Road, adjoining the pedestrian crossing that faces the Tryon Road Uniting Church, at no.33, Tryon Road on the southern side. The view looks towards the northern facade of the church, towards the subject site in a south-southwesterly direction. Tryon Road is lined with regularly spaced mature trees, which filter much of the church and sky view in this direction. As a result of the scale of the church structure, the subject site is not visible from this location.

The height of the new proposal is entirely concealed by the church building in the foreground of this view. The visual impact from the proposed development is therefore assessed as Nil from this location.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public ground level view - pavement.*
- *Extent of impact: Nil*

Reasonableness of proposal: The proposal is not visible from this location and is not assessed for its reasonableness as a result.

VIEWPOINT 06



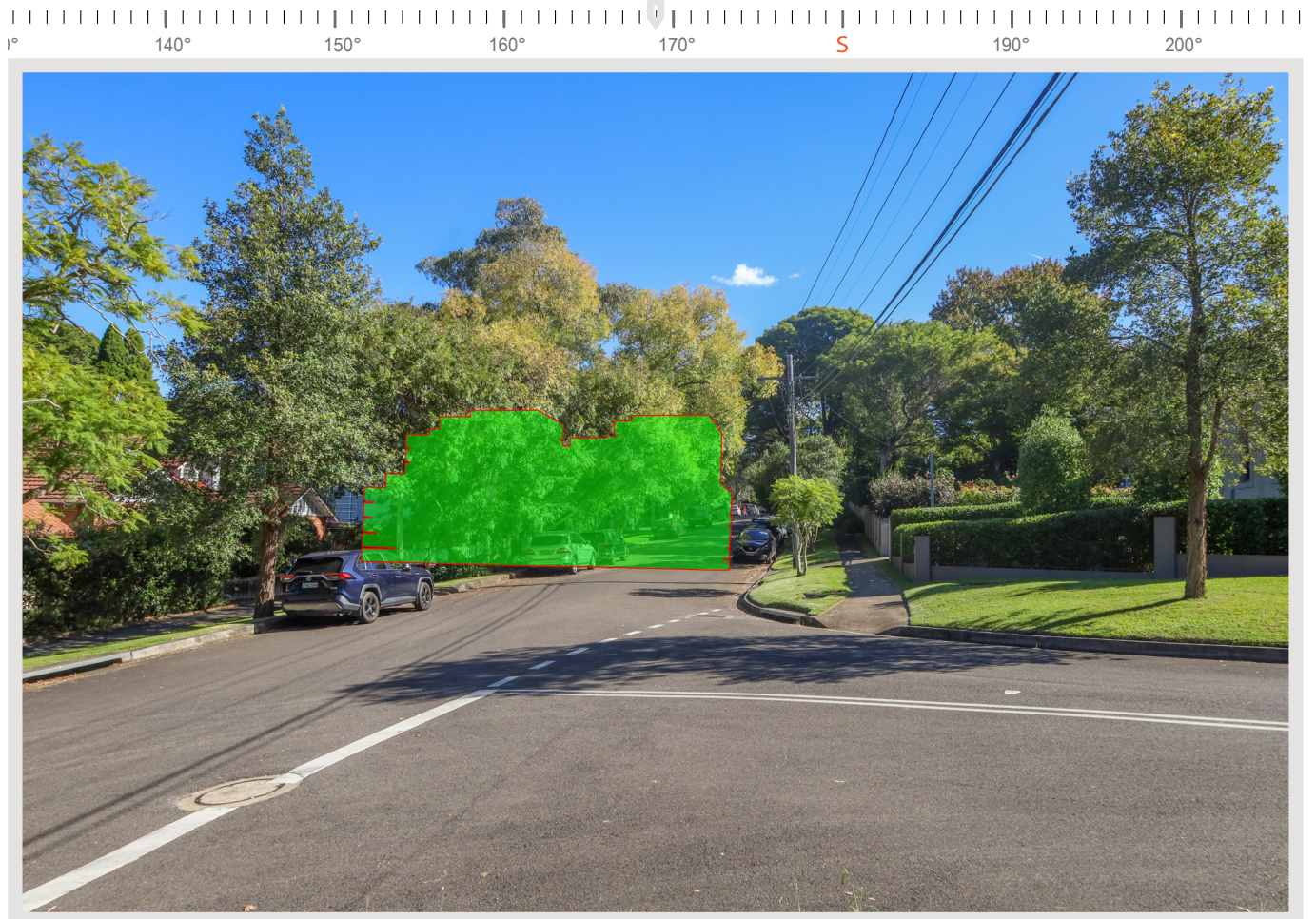
Existing site photo -Valley Rd and Short Street

From standing position on the public pavement
RL +82.28m - Distance to boundary 165.18m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal (Unseen)



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 0%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: N/A*
- *Existing Visual Assessment Scale no: 10 /15 & Visual Impact Assessment Scale no: 0 /15*

This is a static , public ground-level viewpoint from Valley Road, at its junction with Short Street, to the north, looking southwest towards the subject site. The view looks across the junction to the bounding fence and hedges of no.12, Valley Road, to the west. This particular view contains a variety of dense, mature trees, lining the streets and within the front gardens of the properties. There are only very small glimpses of the properties through the landscaping and, since these are low-level, nothing is seen above the treeline. To the south, the larger trees along Gordon Greek are observed as the view moves towards the location of the subject site.

As a result of the dense tree canopies in the foreground, middle and far distance, the subject site is not visible from this location. The visual impact is, therefore, assessed as Nil.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium-to-High*
- *View location: Public pavement - street level view.*
- *Extent of impact: Nil*

Reasonableness of proposal: The proposal is not visible from this location and is not assessed for its reasonableness as a result.

VIEWPOINT 07



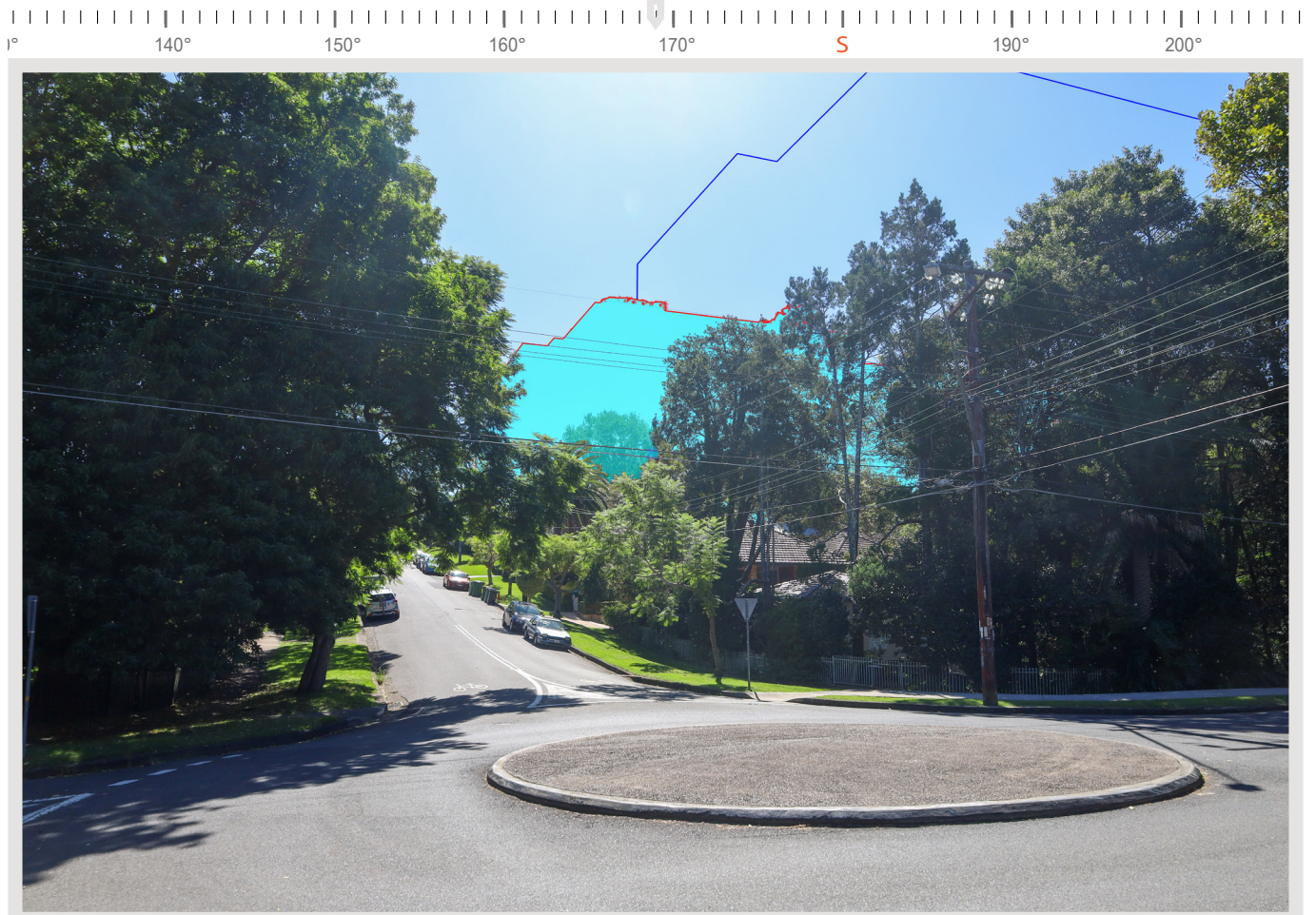
Existing site photo - Middle Harbour Road and Trafalgar Avenue.

From standing position on the public pavement
RL + 81.92m - Distance to boundary 89.57m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in cyan with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 37%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 14% : 86%*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 9 /15*

This is a static and dynamic public viewpoint, located at the roundabout junction between Trafalgar Avenue and Middle Harbour Road roundabout and, from there, directly along Trafalgar Avenue, in a west-northwesterly direction, towards the subject site. The view is typical of this area of low-level residential buildings, with mature trees running along the grass verges on both sides of Trafalgar Avenue and with heavily landscaped front gardens to the individual properties. The houses are visible at their floor levels, but largely concealed at ground level. As the view moves to the north, so the trees become larger and more dense, effectively screening any distant views in this direction, both in front of, and behind the subject site.

The visual impact of the development proposal, from this location, is diminished at the lower levels by the larger tree screening to its south. Almost all the lower levels are obscured, as is much of the mid-level of the building. The south-eastern corner is also blocked by a large tree in the midground of the view, within one of the close residential property gardens. View loss is confined to sky view behind the subject site to the north and the visual impact is assessed as Moderate, as a result of its verticality, relative to the contextual built form.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public pavement - roundabout at street level.*
- *Extent of impact: Moderate*

Reasonableness of proposal: Within the context of the development's height compliance, the proposal can be deemed acceptable, since the massing of the building is significantly screened with existing and proposed trees. There is no view loss to elements of high value, only to the sky view above the site.

VIEWPOINT 08



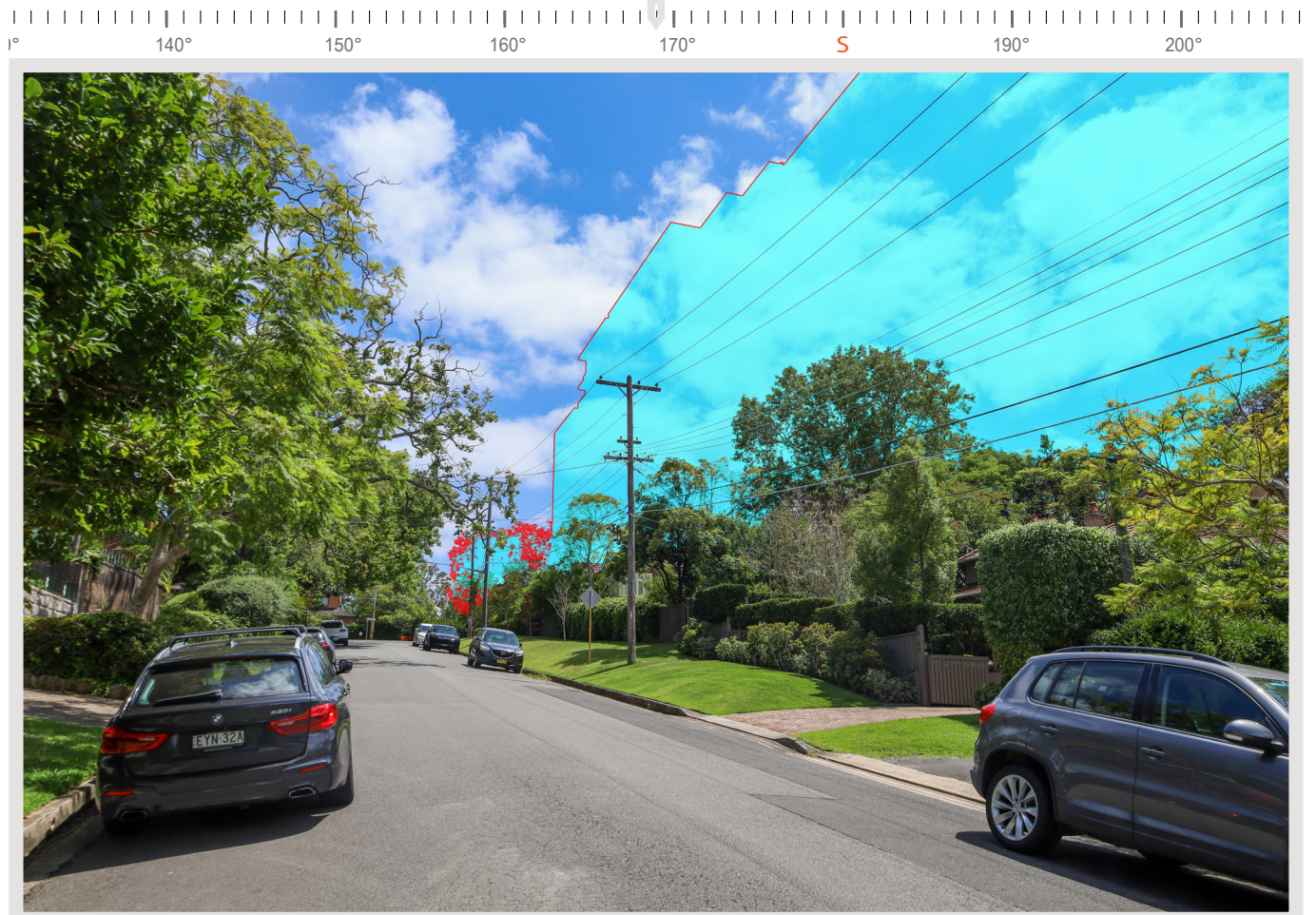
Existing site photo - Trafalgar Avenue

From standing position
RL + 84.66m - Distance to boundary 9.99m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in cyan with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 65%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 16% : 84%*
- *Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 10 /15*

This is a static and public viewpoint, located on Trafalgar Avenue, opposite No.55 and looking north towards the subject site. The immediate foreground boasts a verdant residential streetscape that gently ascends. The lower portion of the view is occupied by the paved road, which is bounded by a concrete kerb and a well-maintained grass verge on the northeast side. The residential property at No. 59 Trafalgar Avenue, which is situated to the northeast, is surrounded by low boundary walls, timber fencing, and lush hedgerows. Mature trees and shrubs significantly obscure the building frontages in the front setbacks. To the northwest, the region is further enhanced by the extension of the green corridor. In the background, the avenue is distinguished by a canopy of mature trees as it continues to the north, with occasional glimpses of tiled residential roofs emerging through the foliage.

The visual impact of the development proposal, from this location, can be assessed as severe. The new proposal will result in the increase in building scale and visual mass, impacting the sky view. Despite the fact that the landscaping aids in the softening of the transition between the built environment and its surroundings, the multi-story structures continue to dominate the visual space, replacing the previously open and low-density aesthetic.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public pavement.*
- *Extent of impact: Severe*

Reasonableness of proposal: Within the context of the development's height compliance, the proposal can be deemed acceptable, since the building is significantly screened by the existing landscape and this will increase over time, with proposed street trees and internal site landscape.

VIEWPOINT 09



Existing site photo - Nelson Road.

From standing position on the public pavement
RL + 91.08m - Distance to boundary 37.67m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 16%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 0% : 100%*
- *Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static and dynamic public viewpoint from the pavement on the eastern side of Nelson Road, looking south towards the subject site. The view is across the road, with mature street trees blocking much of the existing site view. Further west are two, double-storey houses, with a mix of fencing and hedges at their eastern, front boundaries. Beyond these, are several mature trees within the rear gardens of these properties.

The northern and eastern facades of the new proposal are significantly screened by the mature tree canopies in the foreground and midground and the entirety of the lower levels are concealed by the existing houses on Nelson Road. As a result, the visual impact is assessed as Negligible.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public ground level view from pavement.*
- *Extent of impact: Negligible*

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and largely screened from the observer, both by existing buildings and intermediate landscaping.

VIEWPOINT 10



Existing site photo - Nelson Road

From standing position
RL + 90.34m - Distance to boundary 12.12m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- Visual impact – Amount of new development visible in view - 25%
- Visual impact ratio - view loss (including buildings) : sky view loss: 0% : 100%
- Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 6 /15

This is a static and dynamic public viewpoint from Nelson Road, oriented towards the south, the paved roadway and adjacent footpath traverse the lower section of the vista, bordered by a slender grass verge. Large mature trees enhance the scene. The landscaped residential front of property No. 1 Valley Road is observable, characterised by a gently inclined garden footpath, low masonry letterboxes, and tiered plantings. Dense shrubs and well-established trees provide partial screening of the dwelling beyond. To the southwest, a wooden boundary fence and neatly trimmed hedges delineate the property line of No. 2 Nelson Road, positioned behind a meticulously maintained lawn and additional mature trees. Moving further south into the background, the perspective is enclosed by a broad tree canopy, with overlapping foliage predominating the skyline. There is a reasonable amount of screening though residential structures can be discerned through the surrounding vegetation.

The visual impact of the development proposal, from this location, can be assessed as moderate. The new proposal will be obscured at the lower levels by the existing building at No.1 Valley Road, although the upper levels will be partially screened by existing foliage, they will have a visual impact.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- Value of view: Medium
- View location: Public ground level view - pavement.
- Extent of impact: Minor-Moderate

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and largely screened from the observer, both by existing buildings and intermediate landscaping.

VIEWPOINT 11



Existing site photo -Valley Rd

From standing position on the public pavement
RL +89.39m - Distance to boundary 47.18m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 41%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 3% : 97%*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 6 /15*

This is a static and dynamic public viewpoint from the northern pavement of Valley Road, adjoining the entrance to the residential property at no.4. The view looks in a south-southwesterly direction towards the subject site, with dense shrubs and hedges lining the northern side of the road, in the foreground. The view continues to the southwest along the pavement, with large, mature trees on the street verge, blocking much of the middle and distant views in this direction. Views to the site are also filtered through tree canopies in this direction.

The lower levels of the new proposal are entirely concealed by the existing hedge in the foreground and the larger tree canopies in the middle distance on the southern side of the road. Parts of the northern and eastern elevations are seen beyond these at the upper levels, impacting upon the distant sky view only. Although the scale and height of the new building would be in contrast to its surroundings, the screening effects of the landscape elements limit the visual impact to an assessment of Minor-to-Moderate.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public pavement - street level view.*
- *Extent of impact: Minor-to-Moderate.*

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and largely screened from the observer, both by existing buildings and intermediate landscaping.

VIEWPOINT 12



Existing site photo - Middle Harbour Road

From standing position on the public pavement
RL +81.68 m - Distance to boundary 69.63m

Camera - Canon RP
Lens - 24mm



Photomontage of Proposal



Visual impact in green with red outline, future buildings context in blue outline

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 41%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 3% : 97%*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 7 /15*

This is a static and dynamic public viewpoint from the public pavement opposite Middle Harbour Road, facing north-northwest. In the immediate foreground the asphalt surface is visible, along with a narrow grass verge and a concrete footpath that runs parallel to it on the north side. The pedestrian entrance and driveway crossover of No. 34 Middle Harbour Road which is identified by a dark metal gate set between thick, well-kept hedges. In addition to providing partial screening from street level, this hedgeline forms a continuous green boundary along the property's frontage. The background is dominated by mature tree canopy that frames and extends over the streetscape, including tall eucalyptus trees and established deciduous trees.

The visual impact of the development proposal, from this location, can be assessed as Moderate. From this vantage point, the new proposal will be screened by existing tree canopy and vegetation. Mature trees and overhanging branches in the midground will partially obscure the upper portions. Additionally, the lower levels of the proposal will be substantially concealed by the existing built form at No.34 Middle Harbour Road.

Rose Bay Marina Pty Limited v Woollahra Municipal Council Assessment Summary:

- *Value of view: Medium*
- *View location: Public pavement - street level view.*
- *Extent of impact: Minor-to-Moderate.*

Reasonableness of proposal: The proposal is acceptable in relation to its visual impact from this location, being both distant and largely screened from the observer, both by existing buildings and intermediate landscaping.

4. SUMMARY ASSESSMENT

This Visual Impact Assessment from Urbaine Design seeks to provide an objective approach to the likely visual impact on the surrounding areas from the development proposal at nos.59-63 Trafalgar Av & 1A-1B Valley Road.

This Visual Impact assessment has undertaken a review of the proposal, within its future setting and concludes that, although there are locations within the neighbouring area and properties that are impacted by the new development, the relevant views, as selected within the report, are all observed from within a 1km radius of the subject site. after an extensive site visit, viewpoints we selected through their accessibility and intensity of usage by the public, in addition to their likelihood to be impacted.

The assessment of view loss experienced by residents is assessed, overall, between Nil and Moderate, largely as a result of the dense, mature landscaping around the subject site and within the surrounding neighbourhood. Views from public areas are also minimal, or nil, for the same reason.

Since the proposal is largely compliant, it satisfies the Council's guidelines for view sharing between neighbouring properties and for views from public locations. Based on our 3D analysis, photography, and site visit it would be my recommendation that the State Significant Development application be approved on the grounds of an acceptable amount of visual impact and view loss, when assessed against the permissible building envelope for the site and the future context of the area.

Based on our 3D analysis, photography, and site visit it would be my recommendation that the Development Application be approved on the grounds of an acceptable amount of visual impact and view loss, when assessed against the permissible building envelope for the site.



John Aspinall, Director,

urbaine design group pty ltd

5. APPENDICES

APPENDIX A: Assessment Images - panoramic (additional PDF)

APPENDIX B: Aspinall CV

- *LEC Guidelines for Photomontages*
- *Visual Impact Assessment Methodology*

APPENDIX C: Survey and camera positions

APPENDIX D: Wireframe/alignment images

5.1. APPENDIX B: Methodology, C.V and L.E.C Guidelines

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 decisions from the earliest stages of concept design. Because much of URBAINE'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 URBAINE'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

VISUAL IMPACT ASSESSMENTS: A REALITY CHECK.
BY JOHN ASPINALL.

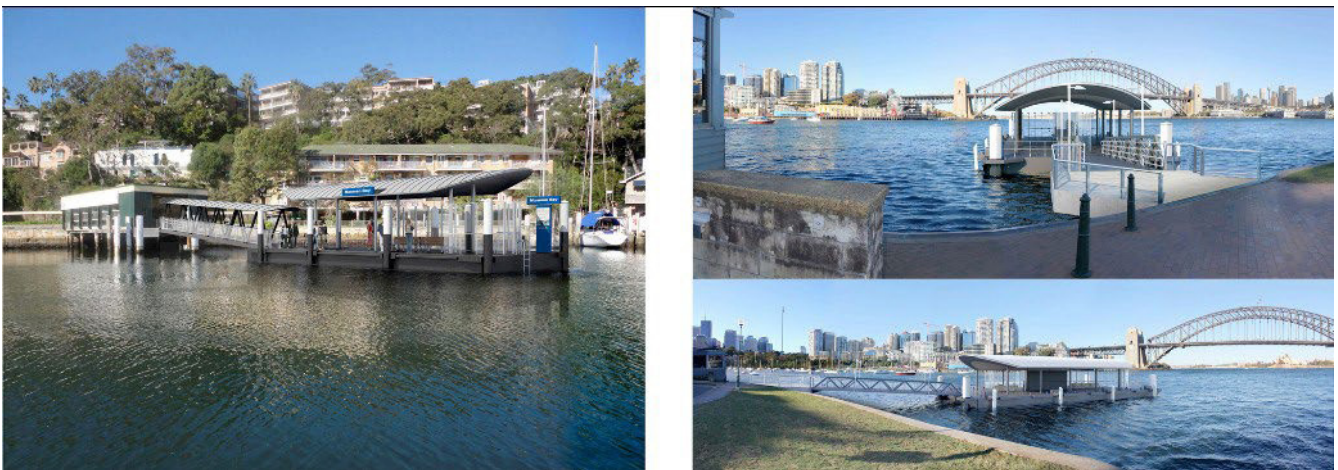


Photomontaged views of new apartment building at Pyrmont: Urbaine

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

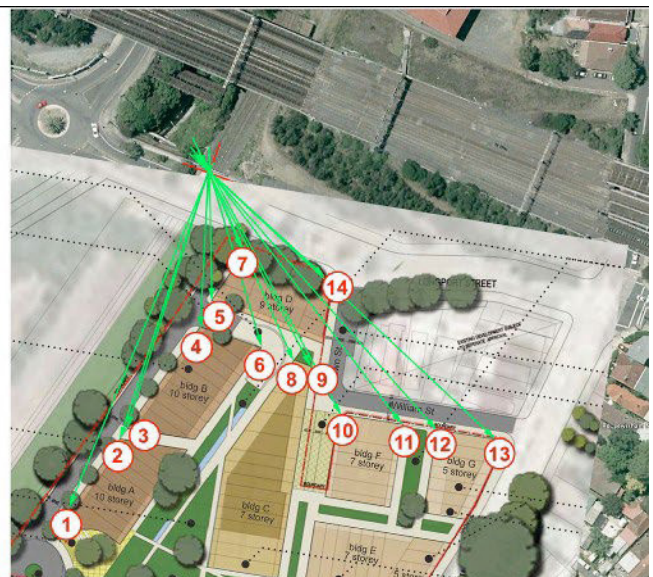
throughout the training of architects.

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.

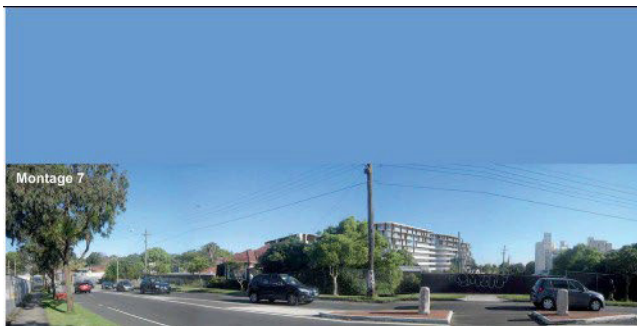
Currently, the Land and Environment Court specifies that any photomontages, relied on as part of expert evidence in Class 1 appeals, must show the existing surveyed elements, corresponding with the same elements in the photograph. Often, any surveyed elements can form such a small portion of a photograph 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%.



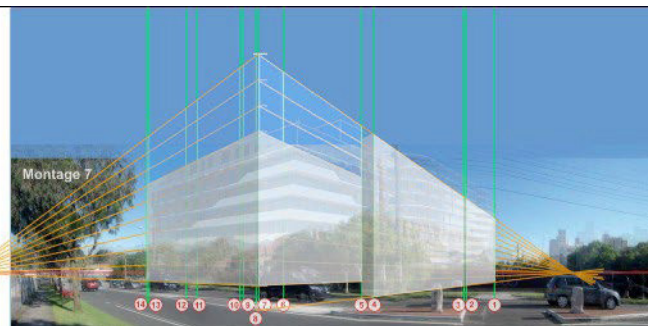
SMH article re inaccurate visualisations



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.

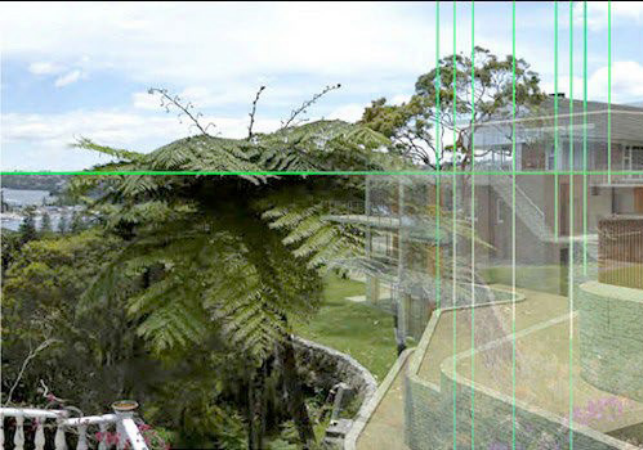
The following example clearly demonstrates this – a house montaged into a view, by others, using very few points of reference for verification. By analysing the existing photo alongside the survey, the existing site was able to be recreated with a series of reference elements built into the model. A 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

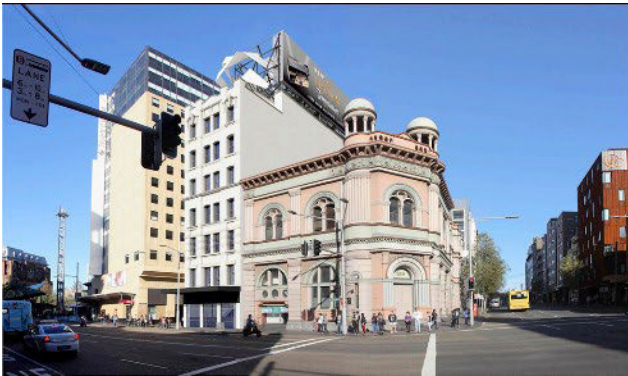


Proposed landscape applied – shown as semi-mature

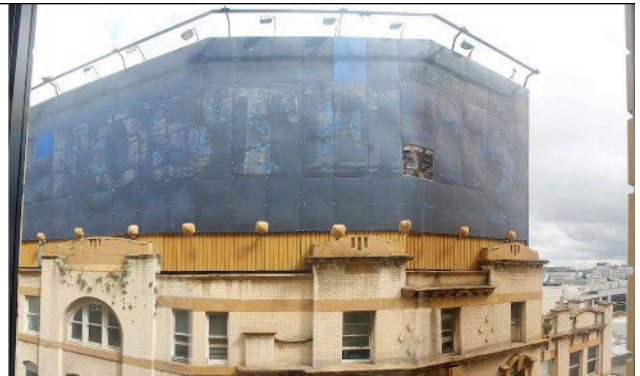


Final verified photomontage by Urbaine

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 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.



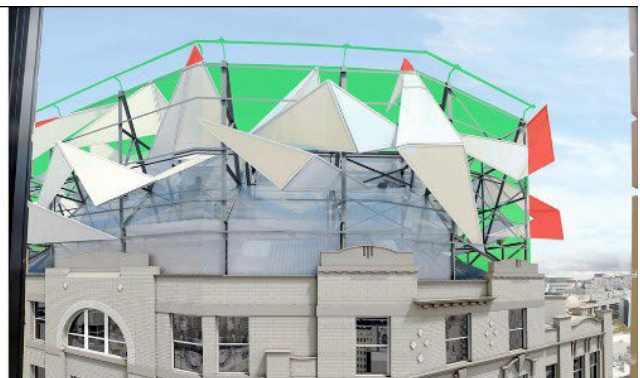
Photomontage of proposed building for digital billboard



Existing situation – view from adjoining hotel

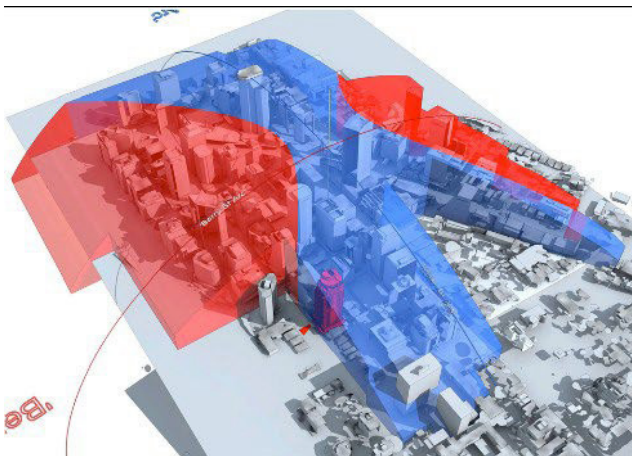


Photomontage of view from hotel

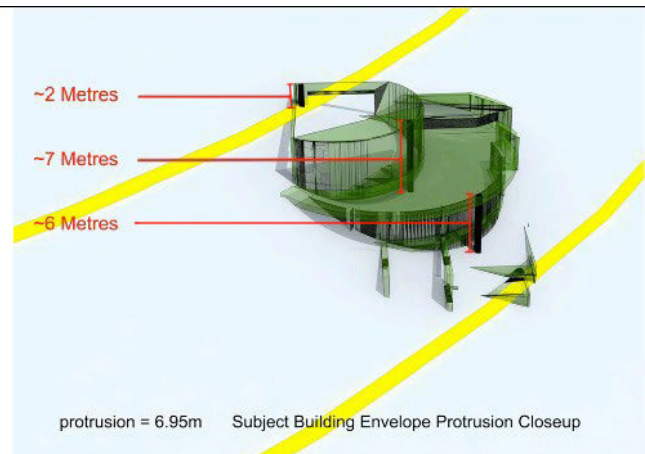


View loss – green = view gain / red = view loss

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.



Policy: Use of Photomontages and Visualisation Tools

Commencement

1. This policy commences on 17 May 2024 and replaces the policy published 21 August 2013.

Purpose of the policy

2. This policy is to guide the preparation of photomontages, still images, video images, and other visualisation tools to depict the development in an appeal under the *Environmental Planning and Assessment Act 1979*, to ensure that the data they present is represented and interpreted accurately, and that their use would assist the Court in determining the appeal.

Application

3. The policy applies to appeals under the EPA Act, where photomontages or other visual tools are to be submitted as part of expert evidence.

Definitions

4. In this Policy:

Appeal means an appeal to the Court under the EPA Act.

CGI means Computer Generated Image.

Commissioner means a Commissioner or Acting Commissioner of the Court.

Court means the Land and Environment Court of New South Wales.

Development means the development for which consent is sought in the development application that is the subject of the appeal.

EPA Act means the *Environmental Planning and Assessment Act 1979*.



Existing Image means an unchanged or unaltered image of the location, viewing angle and approximate conditions on which the proposed development will be overlaid, to convey the issues in dispute.

Judge means a Judge of the Court.

Photomontages means, for the purpose of this policy, any visual tool or aid, whether still image, video, computer generated image, two dimensional (2D) or three dimensional (3D) or other visual means to depict development plans.

Registrar means a Registrar of the Court.

RL Reduced Level or Relative Level as defined in Australian Standard® AS1100 Technical Drawings.

General principles

5. A photomontage submitted in an appeal should provide to the Judge, Commissioner or Registrar the most accurate visual images of the development in its real-world location, so as to specifically convey the issues in dispute.
6. A photomontage must include:
 - 6.1 the existing image;
 - 6.2 a 2D plan and/or elevation showing the location of the camera, target point/viewing angle, and lighting source that corresponds to the location from where the existing image was taken; and
 - 6.3 the proposed built envelope and key features of the development overlaid on the existing image in the form of a wire frame and/or 'block massing' model to demonstrate the development.
7. Where a photorealistic CGI of the development is used:
 - 7.1 the metadata from the existing image to create an identical 3D computer generated camera should be provided;
 - 7.2 the environmental conditions of the CGI should be set to the same parameters as the existing image;
 - 7.3 colour matching in the CGI is to correspond with the existing image; and



- 7.4 the details of the software used in creating the CGI should be stated as part of the submission of the photomontage.
8. A detailed summary of the methodology used to create the photomontage should be provided, including:
- 8.1 survey data that is used to create the photomontages, including the name and qualifications of the surveyor who prepared the survey information from which the underlying data for the wire frame was obtained;
 - 8.2 site specific topographical data used to create the photomontages, including the source and references utilised for the topographical data (for example paper, or survey inputs from file types such as from 'DWG' or 'DXF');
 - 8.3 the camera type, lens, focal length or field of view, and sensor used for the purpose of the photograph from which the existing image has been derived;
 - 8.4 accurate location, alignment and direction of the camera (whether fixed on tripod or drone) and RL of the camera for the existing image;
 - 8.5 data that was used to prepare the photomontages, such as:
 - 8.5.1 use of relevant plans and data for the depiction of existing buildings or existing elements as shown in the wire frame, block massing model or photorealistic CGI;
 - 8.5.2 the means by which terrain has been generated (such as surveyed spot levels and/or contours or by some form of point cloud, or Ground Control Point survey method);
 - 8.5.3 any variables applied to the images such as, time of day, lighting and weather conditions;
 - 8.5.4 consistency in application of scale and interpretation of the relevant data;
 - 8.5.5 rationale for selecting a particular view, use of camera lens or conditions in creating the image. For example, in circumstances where a development is best depicted with an expanded field of view or panoramic view, the type of panorama head and equipment must be stated, in addition to the data above.



- 8.6 where a photomontage has used more than one baseline image to represent the existing context (that is where multiple images are 'stitched together'), this must be stated, and the requirements above should be adapted to convey the key data required to verify its accuracy; and
- 8.7 whether any editing software or other visual manipulation has been used in the preparation of the final image, for example an adjustment in contrast, saturation, tilt shift or the like.

Visualisation Tools

9. As technology emerges, the principles outlined above are to be applied. What is important is that the Court has an unaltered and real life baseline, summary of metadata so the veracity of imagery presented can be verified, and application of relevant overlays of the proposed development that assists in the Court's consideration of the real issues in dispute.
10. All effort is to be made and the 'best practices' are to be applied when utilising technology for the purposes of visualisation of the development to ensure accuracy and avoid bias of information interpretation.

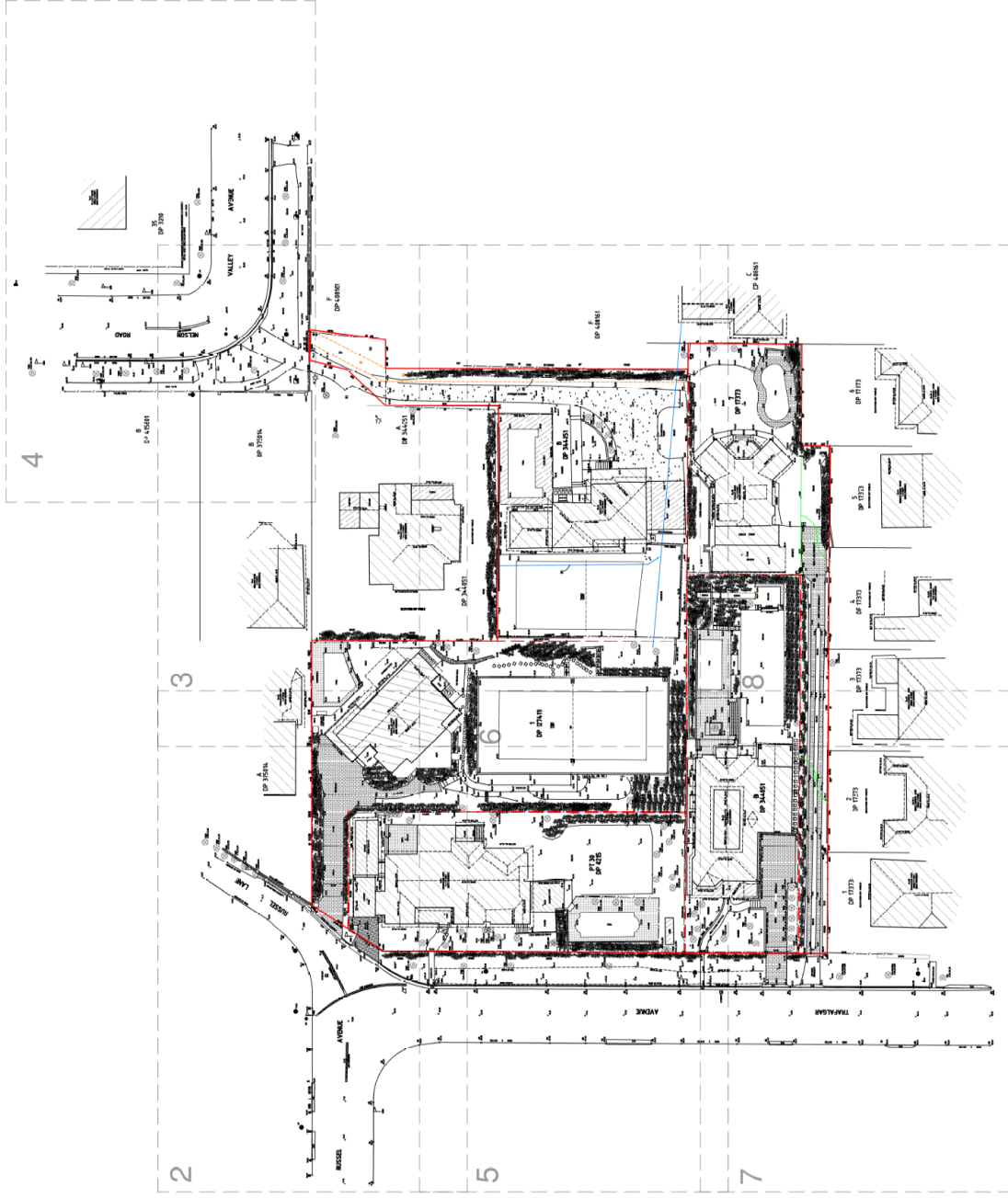
Paperless Hearings

11. Parties should be prepared to display the photomontage electronically if it is to be relied upon, or be the subject of an examination of an expert witness.
12. It will be the responsibility of the party whose expert is being examined, to provide a device compatible with courtroom technology which can display the photomontage electronically. This will allow the presiding officer, the experts, lawyers and all other people to be able to see in real time and on a common image, the subject of the examination.

Issued by:

***The Honourable Justice Brian J Preston
Chief Judge – Land and Environment Court of NSW
Date: 17 May 2024***

5.2. APPENDIX C: Survey and camera positions

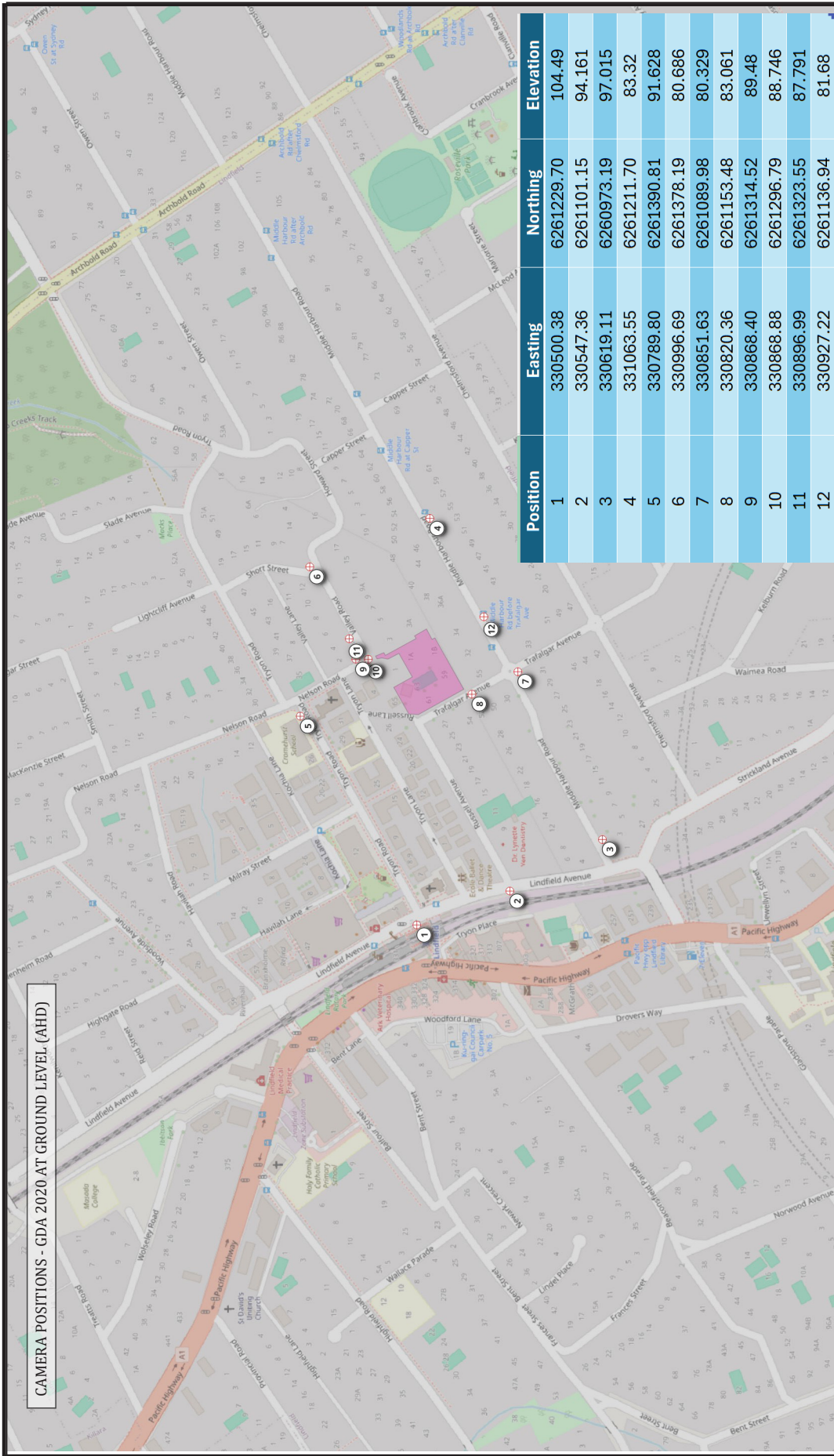


- NOTES:**
- 1) BOUNDARY BEARING (AND DIMENSION) COLLECTED FROM LAWS ON PUBLIC RECORD
 - 2) POSITION AS SHOWN IN 1:500 MAPS, 1:1000 AND 1:2000
 - 3) BTL COMPILED PART LOT 50 OF 403 LOT 4 AS SHOWN IN 1:500 LOT 724 1859A LOT 104 12411
 - 4) BTL AREA 65% OF TITLE DIMENSIONS
 - 5) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED
 - 6) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED
 - 7) THESE NOTES APPLY TO THE ENTIRE SITE AND ARE NOT TO BE USED AS A REFERENCE FOR ANY PART OF THE PROJECT

- NOTES:**
- 1) EXISTING DIMENSIONS AFFECTING BANK 27 SITE
 - 2) IN PART OF WALLS FACE (2017)
 - 3) BOUNDARY BEARING (AND DIMENSION) COLLECTED FROM LAWS ON PUBLIC RECORD
 - 4) BTL AREA 65% OF TITLE DIMENSIONS
 - 5) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED
 - 6) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED
 - 7) THESE NOTES APPLY TO THE ENTIRE SITE AND ARE NOT TO BE USED AS A REFERENCE FOR ANY PART OF THE PROJECT

Norton Survey Partners
 SURVEYORS & LAND TITLE CONSULTANTS
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 office@norton.com.au
 500 BALMAIN ROAD
 LINDFIELD N.S.W. 2040

TITLE: PLAN SHOWING SELECTED DETAIL & LEVELS OVER	
LGA: KURUNGAI	REFERENCE: 21482
CLIENT: LANDMARK GROUP	DATE: 20.07.25 SHEET
SCALE (AT A1): 1:500	DITLM: _AMD SURVEYOR: RK T OF 8



CAMERA POSITIONS - GDA 2020 AT GROUND LEVEL (AHD)

SKETCH PLAN SHOWING
INDICATIVE CAMERA POSITIONS FOR -
NOS.59-63 TRAFALGAR AV & 1A-1B VALLEY ROAD
LINDFIELD NSW 2070

JOB NO: 664 LMK_Trafalgar	IGA: KU-RING-GAI COUNCIL
DATE: 02.02.2026	DATUM: AHD
DRAWN: DK	SCALE: N/A
CHECK: JA	SHEET: 1:1

NOTE:
BUILDING POSITIONS ARE INDICATIVE FOR PRESENTATION PURPOSES.
DATA WAS CAPTURED USING GNSS RTK ROVER
CAMERA POSITIONS ARE FROM GNSS WITH NTRIP CORRECTIONS OBSERVATIONS WITHIN +/- 0.01M
LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD)

5.3. APPENDIX D: Wireframe images



Viewpoint 01



Viewpoint 02



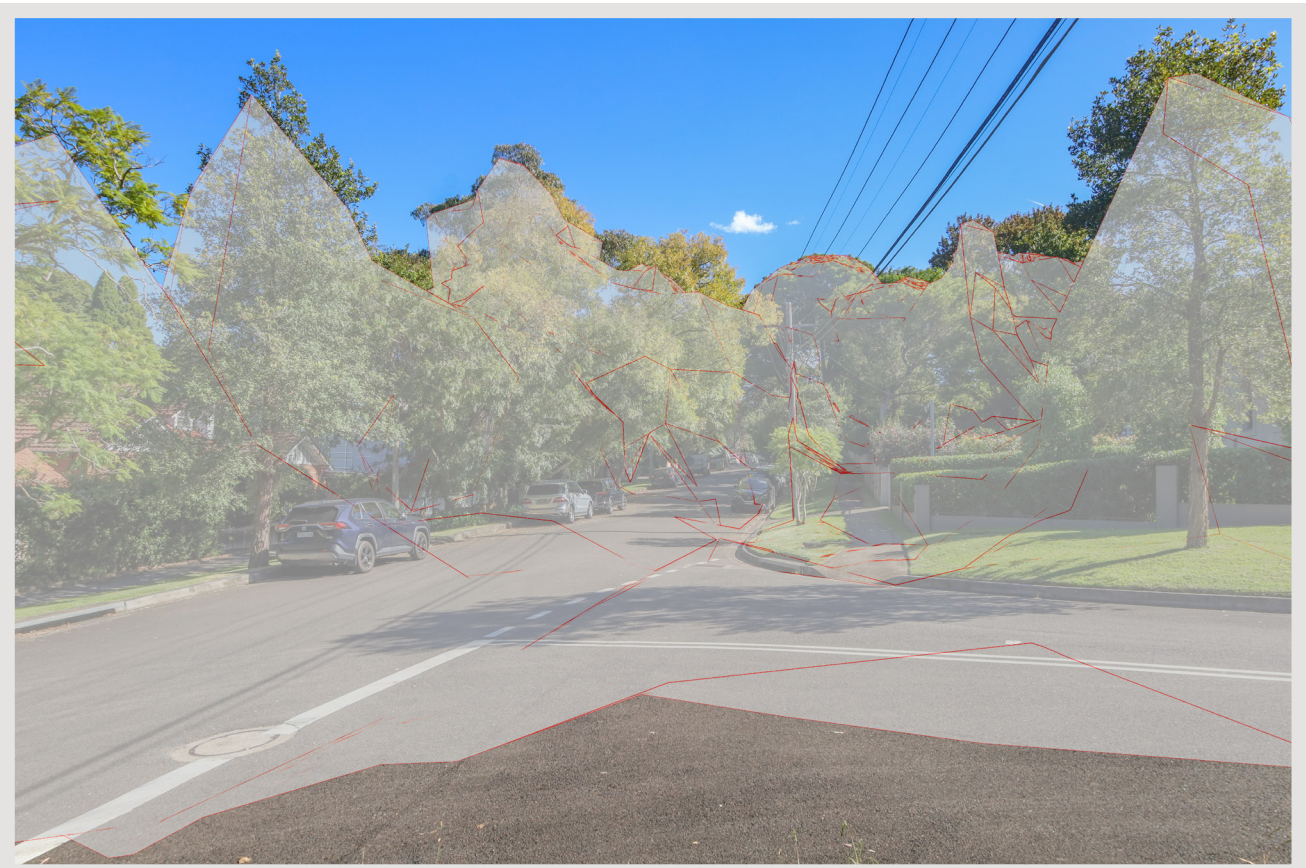
Viewpoint 03



Viewpoint 04



Viewpoint 05



Viewpoint 06



Viewpoint 07



Viewpoint 08



Viewpoint 09



Viewpoint 10

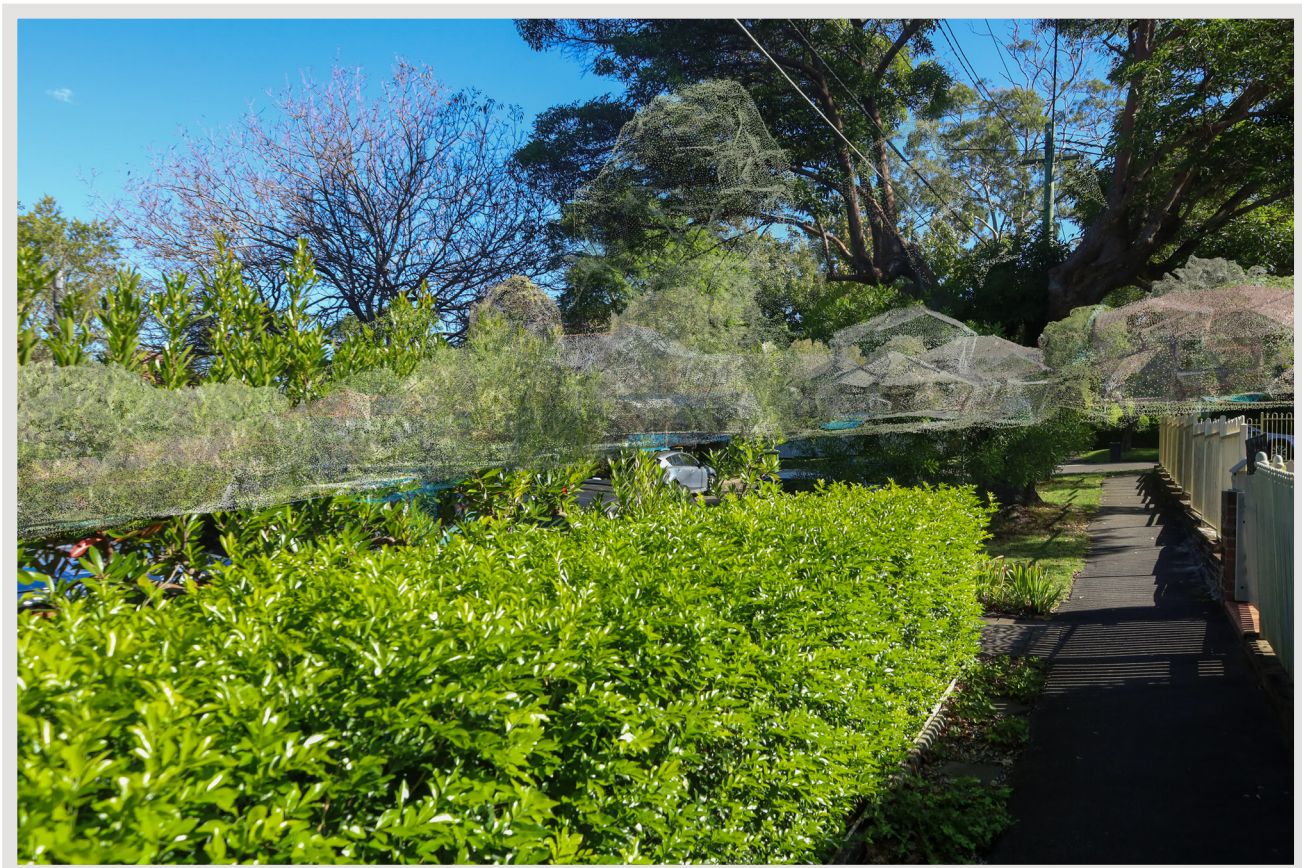


Viewpoint 11



Viewpoint 12

C01 IMG_7724 b.jpg



Viewpoint 13



Viewpoint 14

C01 IMG_7724 b.jpg