Urbaine Design Group Pty Ltd, 19c/74 , The Corso, Manly, NSW 2095

urbaine
DESIGN GROUP

VISUAL IMPACT ASSESSMENT

STATE SIGNIFICANT DEVELOPMENT APPLICATION
LOT 8/-/DP9789, 7/-/DP9789, 6/-/DP9789
NOS.1-5 NELSON ROAD, LINDFIELD 2070

MAY 29 2025

Project Type: State Significant Development Application
Lot: 8/-/DP9789, 7/-/DP9789, 6/-/DP9789
Address: Nos.1-5 Nelson Road, Lindfield 2070

CONTENTS

APPENDIX A: Assessment Images - panoramic **(additional PDF)**

1. INTRODUCTION

1.1. Scope and Purpose of Report

This Visual Impact Report has been prepared for Castle Hill No. 3 Pty Ltd and is submitted to the Ku-ring-gai Council in support of a Development Application (DA) for a Residential Flat Building at Nos.1-5 Nelson Road, Lindfield 2070 (the site). The report provides an analysis of the proposed development's visual impact in relation to its visual and statutory contexts and is to be read in conjunction with the drawings and other material submitted with the development application.

Figure 1 – Site location shown in magenta

1.2. The Proposed Development

The proposed development comprises

- Demolition of existing structures
- Tree removal and site clearing
- Construction of a new residential flat building comprising of residential apartments (inclusive of affordable housing apartments) and basement car parking
- External landscaping works

1.2.1. The Site and existing property

The subject site

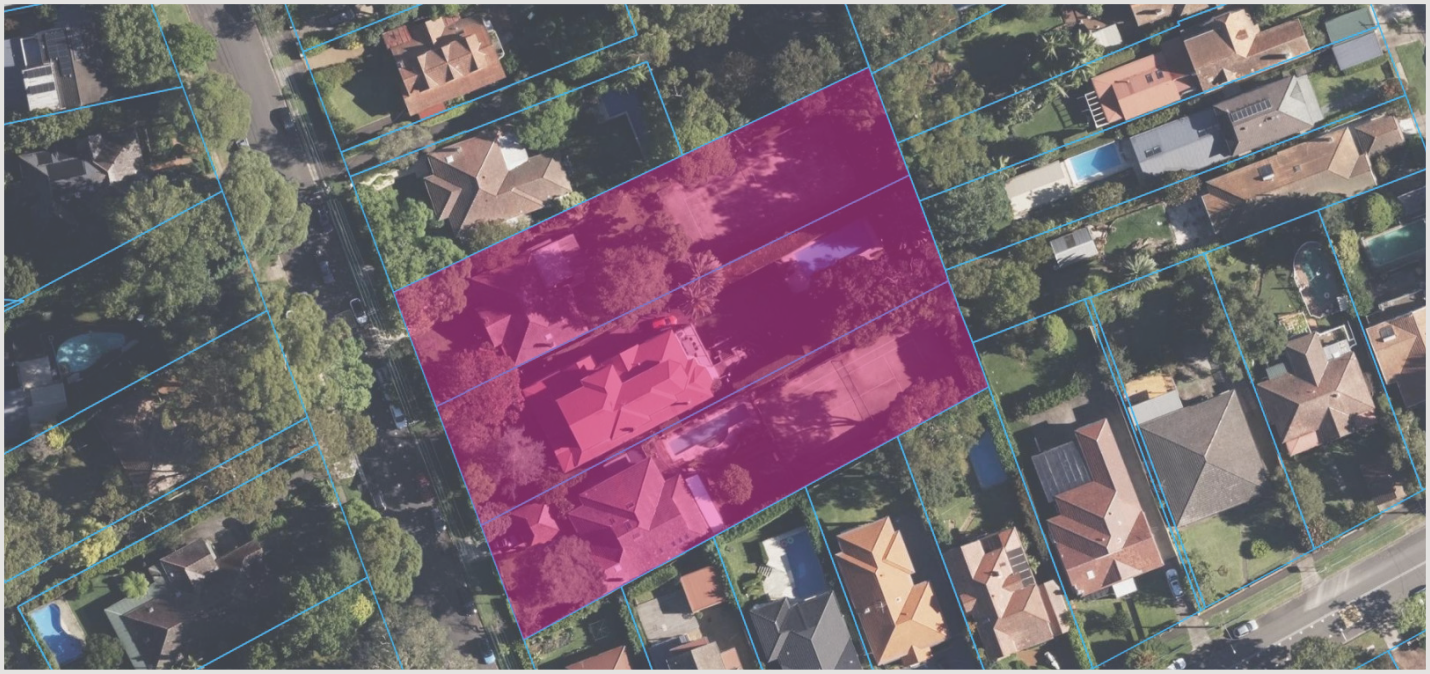


Figure 2 – Subject site shown in magenta overlay

1.3. Proposed Land Use and Built Form

The proposed development comprises

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 Harrison Friedman & Associates Pty Ltd Surveyors, 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 and further verified against the survey DWG.

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.

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.

Figure 5: 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 5, 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 Architects*
- *Ku-ring-gai Development Control Plan*

- *Ku-ring-gai Local Environmental plan 2015*
- *Photography by Urbaine Design Group*
- *3d and photomontages by Urbaine Design Group*
- *LIDAR from ICSM- ALS50ii (Airborne Laser Scanner)*

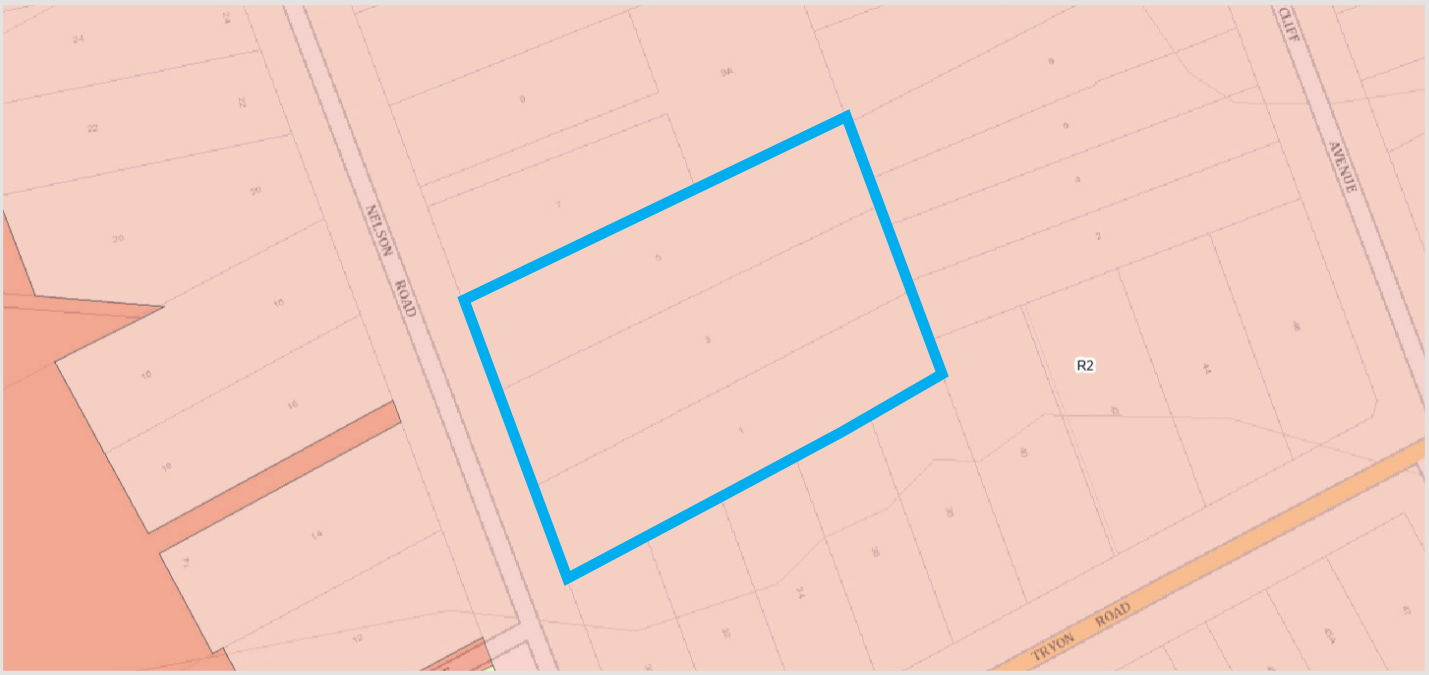


Figure 6: Land zoning map, indicating site with blue outline.

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 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.

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 7: 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 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. 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 if 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 7 viewpoint locations – from within a 1km radius of the subject site.

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 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 – see 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.

TENACITY / SCALE / VALUE		VISUAL IMPACT	VISUAL QUALITY
NIL	0	**NEGLIGIBLE** No negative impact on the pre-existing visual quality of the view	N/A
NEGILIBLE	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 Minimal views of natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc.) Uniformity of land forms
	2		
	3		
MINOR	4		
	5		
	6	**MEDIUM** A medium negative impact on the pre-existing visual quality of the view Examples: moderate impact on iconic views or natural landscapes impact on moderate number of receivers located nearby the receiver	Presence of some natural features mixed with manmade features Some views of distinct natural formations (e.g. cliffs, mountains, coastlines, waterways, ridges etc.)
MODERATE	7		
	8		
	9		
SEVERE	10		
	11	**HIGH** A high negative impact on the pre-existing visual quality of a view Examples: loss of iconic vie impact on significant number of receivers owershadowing effect directly adjacent the receiver	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 of landmark features
	12		
DEVASTATING	13		
	14		
	15		

Figure 8: Urbaine Group Assessment Table

3.1.2. Assessment at selected viewpoints

VIEWPOINT 01

Existing site photo - Lindfield Village Green- park area

From standing position on the public park.
RL +99.23m Distance to boundary 318.28m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

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

This is a static public view from Lindfield Village Green's central lawn, facing west,with the public park in the foreground. The mid ground reveals commercial buildings: No. 10 Tryon Road to the north, seen laterally with its west-facing boundary, and No. 12 Tryon Road centrally, with only its east-facing front facade visible. A visual opening between these structures frames Kochia Lane and the public footpath along this.

The proposed development has no observable impact on this view. It remains entirely concealed by No.12, Tryon Road, resulting in no visual change, with neither view loss nor gain assessed from this location. The visual impact and view loss is therefore assessed as Nil.

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Low-to-Medium.*
- *View location: Public park.*
- *Extent of impact: Nil.*

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 - Nelson Street- public pavement

From standing position on the public pavement
RL + 100.87m - Distance to boundary 280.39m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 8%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 3% : 97%*
- *Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static, public view from the western pavement corner of Nelson Street at its junction with Woodside Avenue. The foreground features the street junction, with Woodside Avenue extending westward. The mid ground is densely screened by mature street and garden trees, limiting visibility to the subject site. To the east, a multi-story residential building at No. 23 Nelson Road is visible. In the southern background, mature landscaping combines progressively to obscure any distant, panoramic views. The curved nature of Nelson Street further restricts visibility of residential streets-capes beyond this location.

The proposal's visual impact will result in a small area of central view loss, mostly to sky view above the site, observed beyond the existing tree cover. However, the proposal does not obstruct or diminish key visual aspects, maintaining an elevated visual quality. Given the natural screening and existing conditions, the extent of view impact is assessed as Negligible.

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

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

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 unimpacted.

VIEWPOINT 03

Existing site photo - Dangar Street

From standing position on public pavement grounds
RL + 94.30m - Distance to boundary 191.21m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 21%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 2% : 98%*
- *Existing Visual Assessment Scale no: 7 /15 & Visual Impact Assessment Scale no: 5 /15*

This is a static, public view from the pavement along Dangar Street, looking south, at standing height. The foreground consists of the public pavement, extending across the visual field towards its junction with Smith Street to the west. In the mid ground, residential dwellings line both sides of the pavement. To the east, the nearest structure is No. 2 Dangar Street. Opposite, along the curve of the pavement, two neighbouring properties exhibit structural uniformity in vertical elements and composition. The closest dwelling to the east is No. 11 Smith Street, with the neighbouring site on No.15 Smith Street, positioned centrally along the same street. As a result of extensive landscaping to the western view, with accentuated density, further distant views in this direction are concealed entirely.

The view impact of the proposal, from this location will result in a view loss observable above the roofs of the two aforementioned properties along Nelson Street. The view loss relates to sky element views only, in addition to the site being visually softened by high level tree canopies. The majority of views are maintained, as a majority of all residential visual grounds remain. Hence, the visual impact assessment is Negligible-to-Minor.

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Medium.*
- *View location: Public street junction*
- *Extent of impact: Negligible-to-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 04

Existing site photo - Tryon Road

From standing position on the public pavement
RL + 95.107m - Distance to boundary 122.91m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 23%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 7% : 93%*
- *Existing Visual Assessment Scale no: 3 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static and dynamic public viewpoint from the pavement on the eastern side of the road intersection, looking north-north west towards Tryon Road's junction with Nelson Road. The view is across the road intersection and from there, along Tyron Road to the two-storey flat roof commercial property at No.8 Nelson Road, which runs parallel to the western side of the road. Mature street trees border Tryon Road on the western side, providing screening for the residential residences located along this portion of the public road. Far distant views reveal a faint glimpse of the elevated park area along Eastern Arterial Road, which is located in the northern panorama.

The visual impact of the new proposal, from this location is substantially mitigated by the high canopies of street trees. The tree forms soften the building's side and top profiles, with the only view loss being the sky view beyond the proposal and above the subject site. The visual impact, despite the increased scale, is assessed as Negligible.

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Low*
- *View location: Public pavement - western side of road.*
- *Extent of impact: Negligible*

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 05

Existing site photo - Lindfield Oval

From standing position on park grounds
RL + 95.10m - Distance to boundary 810.62m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

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

This is a static and dynamic public viewppoint from the eastern perimeter of Lindfield Oval, looking due south across the park bounds, toward the natural tree boundary. The view initially showcases the grass playinn surface of the oval, which being the dominant visual component, as it spans the majority of all observable aspects. The view of the background concludes the park area, where a line of natural barriers are observed, comprising various mature trees, presented with both an accentuated density of branches as well as an elevate vertical element. All streetscapes beyond the park area are screened. To the east, the Lindfield Rugby Club is the only visible structure from this vantage point.

The visual impact, of the new proposal, from this location, is not significant, as a result of its total concealment from the viewer by the existing trees. The visual impact is therefore assessed as Nil

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Medium-to-High*
- *View location: Sports field - public location.*
- *Extent of impact: Nil.*

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 06

Existing site photo -Rosebery Road

From standing position on the public pavement
RL + 95.10m - Distance to boundary 787.15m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

- *Visual impact – Amount of new development visible in view - 0%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 0% : 0%*
- *Existing Visual Assessment Scale no: 5 /15 & Visual Impact Assessment Scale no: 0 /15*

This is a static and dynamic public viewpoint from the pavement at the eastern corner of the junction between Rosebery Road and Stanhope Road, looking south-southwest. The view extends across the junction, toward structurally uniform residential dwellings along Stanhope Road. To the south, mature trees line both sides of the street, increasing in density as they extend into the distance.Large street trees overlook residential rooftops, fully obscuring panoramic views in the background and far distance. The observed dwellings begin with No. 91 Stanhope Road to the east, followed centrally by No. 89 and No. 87 Stanhope Road. The view concludes with No. 81 Stanhope Road, positioned at the westernmost aspect.

The visual impact of the proposal, from this location will result in no directly observable view loss nor gain. Thus, from this location, the extent of impact can be assessed as Nil

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Low-to-Medium.*
- *View location: Public street junction*
- *Extent of impact: Nil.*

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 07

Existing site photo - LIndfield oval Park

From standing position on the park grounds
RL + 99.11m - Distance to boundary 698.78m

Camera - Canon RP
Lens - 24mm

Photomontage of Proposal

Visual impact in cyan with red outline, view gain in yellow

Visual Impact Assessment:

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

This is a static, public view from the northern boundary of LIndfield Oval Park, looking southwest towards the residential dwellings positioned along Tryon Road. From this location, the immediate observable aspects pertain to park grounds, which are presented to be a dominant visual component, spanning from the immediate foreground towards the observable midground. To the west, residential dwellings are seen, positioned along Tryon Road, running adjacent to the curved fence of the park land. An abundance of foliage is observed behind the wooden fencing of the park and then, beyond the existing rooftops of the residential properties.

The visual impact from the new proposal is not directly observable from this viewpoint. Taking that into consideration, there is no view gain nor direct view loss from this location. As such, the extent of view impact can be assessed as Nil.

LEC Judgement: Rose Bay Marina v Woollahra Council (2013) Assessment Criteria:

- *Value of view: Medium-to-High*
- *View location: Public park perimeter.*
- *Extent of impact: Nil*

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.

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.1-5 Nelson Road, Lindfield 2070.

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 Negligible, largely as a result of the dense, mature landscaping around the subject site and within the surrounding neighbourhood. Views from public recreation areas are also minimal, or nil, for the same reason.

Since the proposal is largely compliant, it satisfies the Council's guildelines 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.

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

APPENDIX D: Wireframe/alignment images

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

JOHN ASPINALL. director: urbaine design group

UK Qualifed 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 visualisaton 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 photmonages 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

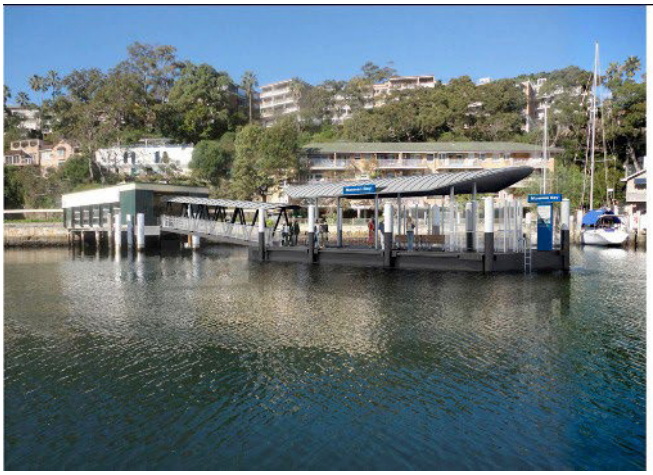
VISUAL IMPACT ASSESSMENTS: A REALITY CHECK.
BY JOHN ASPINALL.

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'straining, 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%.

Domain

The Sydney Morning Herald

Inaccurate images anger residents

February 21

Kelsey Munro

Picture imperfect ... the original interpretation of how the Lewisham Estates development will look.

CAN residents affected by big development proposals rely on developers' photo montages?

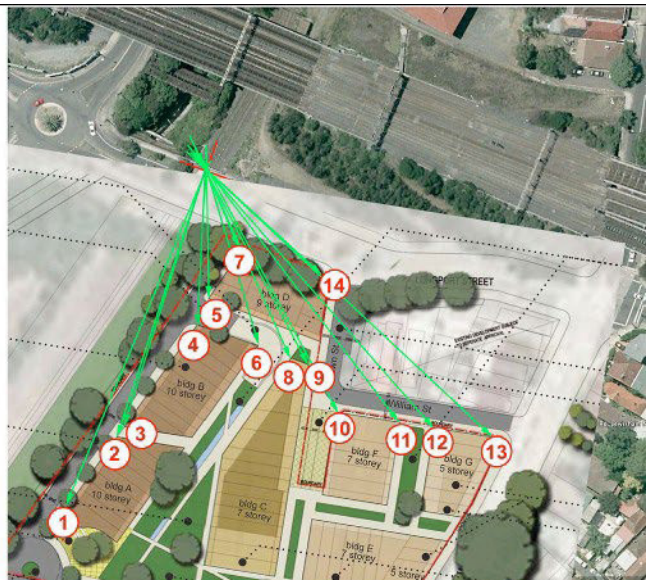
One inner west group thinks not, after inaccuracies were found in a series of digital photo montages which made the proposed Lewisham Estates development appear much smaller than it would if built.

The developer was sent back to the drawing board by the Department of Planning to redo the images that were publicly exhibited for the project after questions were raised over their accuracy.

The corrected interpretation of how the Lewisham Estates development will look.

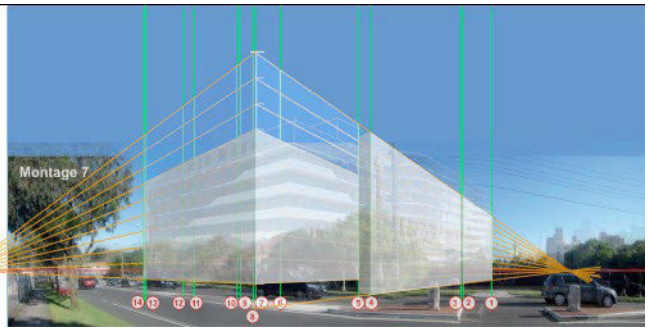
The No Lewisham Towers residents' action group claims the original images were so misleading that the corrected ones should go on public exhibition before the Planning Assessment Commission makes its determination next week.

SMH article re inaccurate visualisations



Key visual location points on site: Urbaine

Photomontage submitted by developer



Assessment of inaccuracy by Urbaine

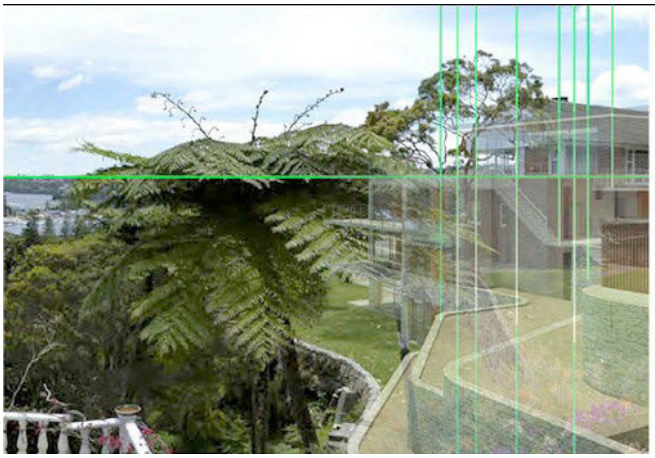
Urbaine has developed a number of methods for adding verification data to the 3d model of proposed buildings and hence to the final photomontages. These include the use of physical site poles, located at known positions and heights around a site, together with drones for accurate height and location 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

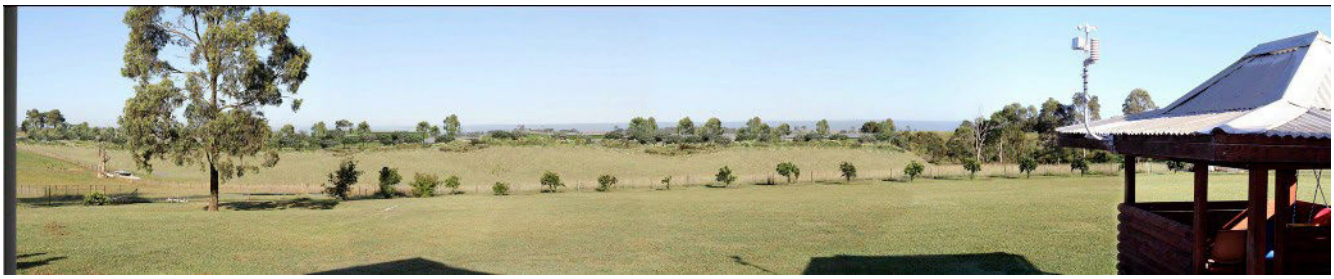
Often, Urbaine's work is on very open sites, where contentious proposals for development will be relying on minimising the visual impact through mounding and landscaping. In these cases, accuracy is critical, particularly in relation to the heights above existing ground levels. In the following example, 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

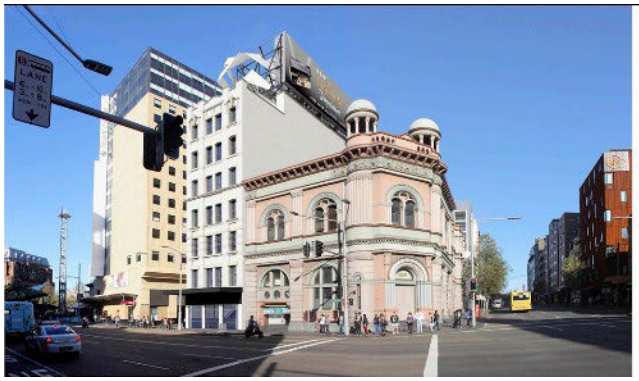
Proposed buildings and landscape mounding applied

Proposed landscape applied – shown as semi-mature

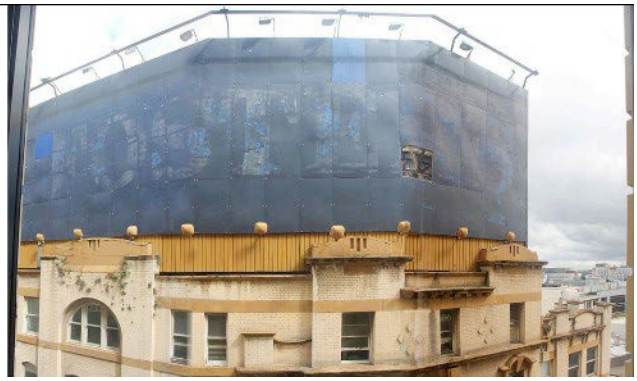


Final verified photomontage by Urbaine

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.

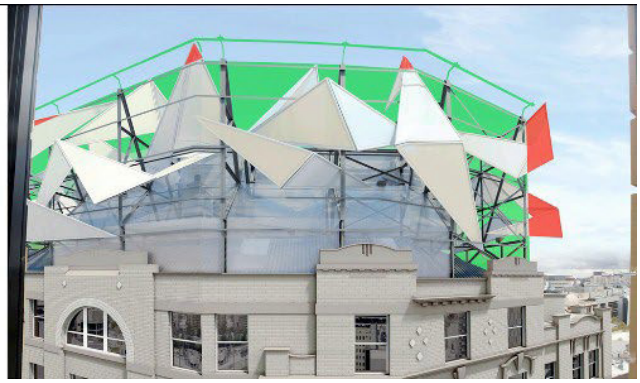


Photomontage of proposed building for digital billboard



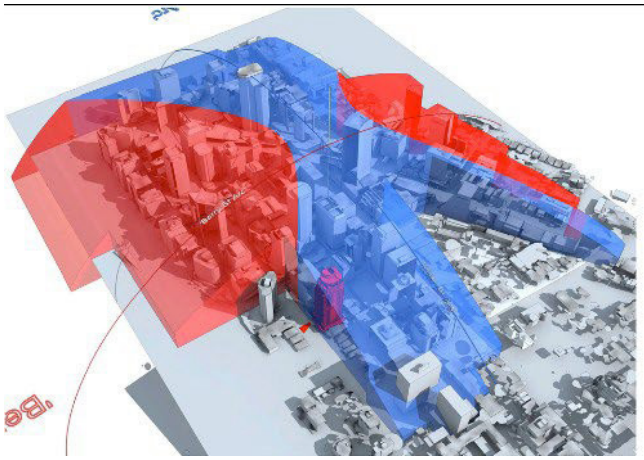
Existing situation – view from adjoining hot

Photomontage of view from hotel

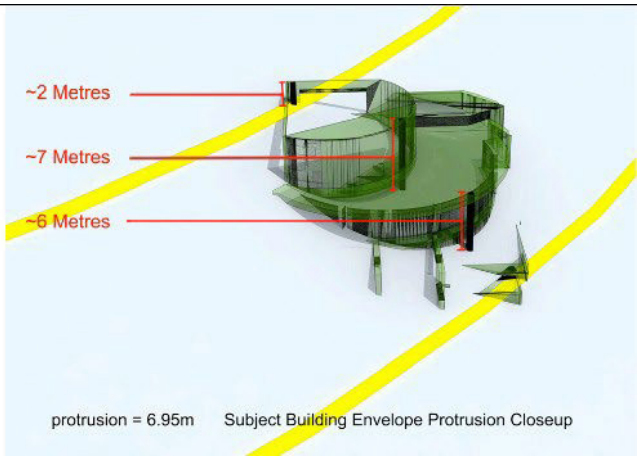


View loss – green = view gain / red = view loss

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 place 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.

Land and Environment Court
of New South Wales

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


PLAN SHOWING SITE DETAILS AND LEVELS
FOR BUILDING DESIGN PURPOSES
AT No's 1-5 NELSON ROAD, LINDFIELD
LOTS 6,7 & 8 IN DP 9789
FOR LANDMARK
HARRISON FRIEDMANN & ASSOCIATES PTY LTD
NELSON ROAD
DP 9789
DP 525755
DP 34295
DP 8597
DP 655054
DP 1061677
DP 962629
DP 303306
NOTES
LEGEND