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

urbaine

D E S I G N G R O U P

VISUAL IMPACT ASSESSMENT

DEVELOPMENT APPLICATION:

NOS.33-35, FAIRLIGHT STREET &
10-12, CLIFFORD AVENUE, FAIRLIGHT

DECEMBER 11 2024

CONTENTS

1. INTRODUCTION	4
1.1. Scope and Purpose of Report	4
1.2. The Proposed Development	5
1.2.1. The Site and existing property	5
1.3. Proposed Land Use and Built Form	6
1.4. Methodology of Assessment	8
1.4.1. Process	8
1.4.2. Assessment Methodology	9
1.4.3. Site Inspections	10
1.4.4. Contextual Analysis:	10
1.4.5. Visual Impact Analysis:	10
1.4.6. Statutory Planning Assessment:	10
1.5. References	11
2. THE SITE AND THE VISUAL CONTEXT	11
2.1. The Visual Context	12
2.2. Roadscapes	12
2.3. The selected view locations for the local view analysis	12
2.4. Period of View	13
2.5. Context of View	13
2.6. Extent of View	13
3. VISUAL IMPACT OF THE PROPOSED DEVELOPMENT	14
3.1. Visual Impact Assessments viewpoint locations	14
3.1.1. Method of Assessment	14
3.1.2. Assessment at selected viewpoints	15
4. SUMMARY ASSESSMENT	36
5. APPENDICES	37
5.1. APPENDIX A: Assessment Images - panoramic	37

1. INTRODUCTION

1.1. Scope and Purpose of Report

This Visual Impact Report has been prepared by Urbaine Architectural as supporting documentation for a Development Application for a new apartment building at 33-35, Fairlight Street & 10-12, Clifford Avenue, Fairlight, on behalf of Allen Group Developments, The Applicant. The subject land is identified as Lots 8 and 9, DP 3742, see figures 1 and 2 for site location.

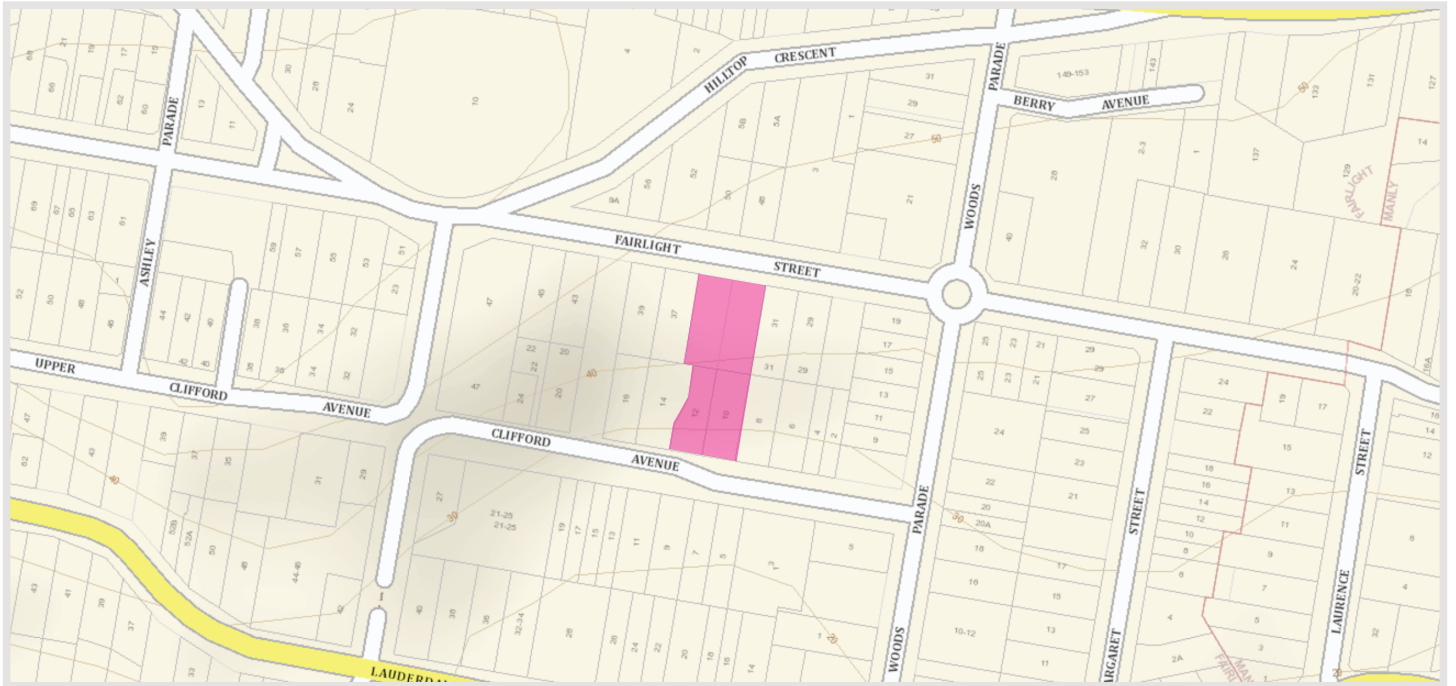


Figure 1 – Site location shown in magenta

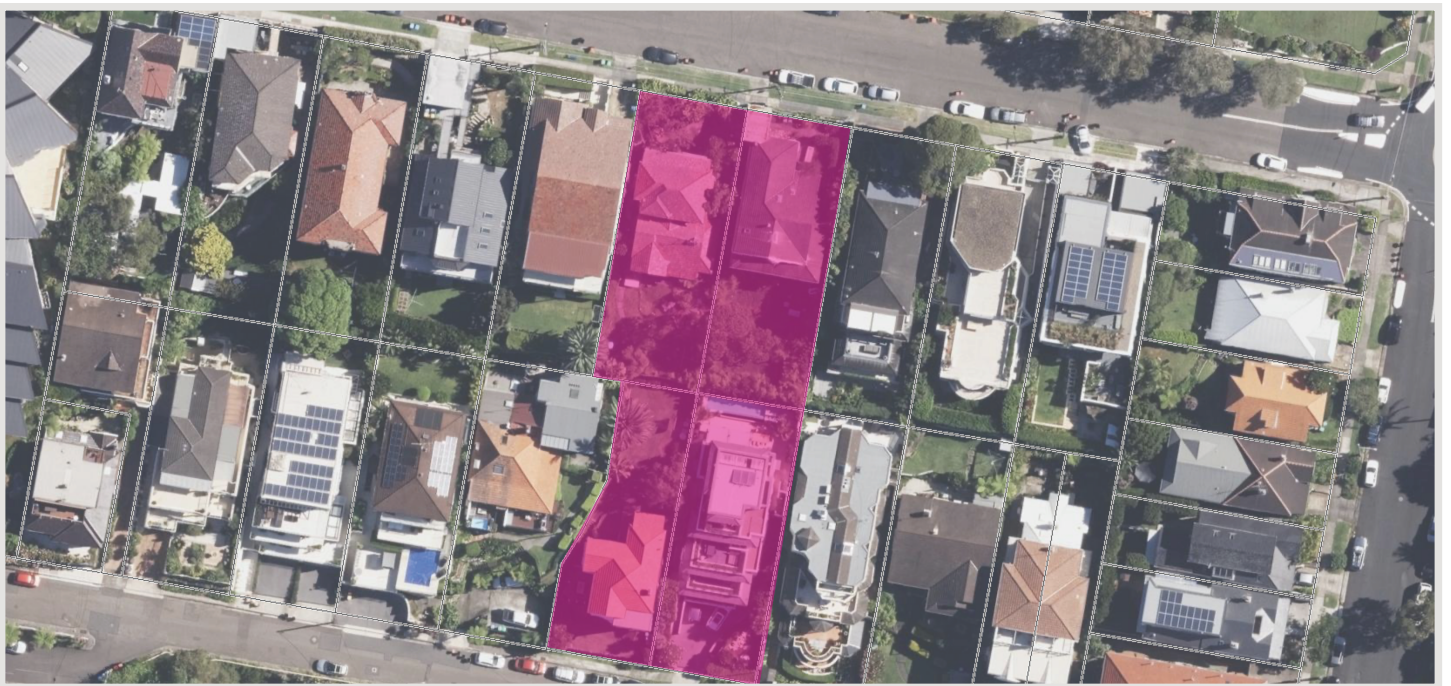


Figure 2 – Subject site shown in magenta overlay

This Assessment describes the subject site and the surrounding area, together with the relevant planning controls and policies relating to the site and the type of development proposed. It provides an assessment of the proposed development against the heads of consideration as set out in Section 4.15 of the Environmental Planning and Assessment Act 1979. As a result of that assessment it is concluded that the development of the site in the manner proposed is considered to be acceptable and is worthy of the support of the Council.

1.2. The Proposed Development

The proposed development comprises of the demolition of the existing dwelling and subsequent construction of an architecturally designed two-to-four storey apartment building.

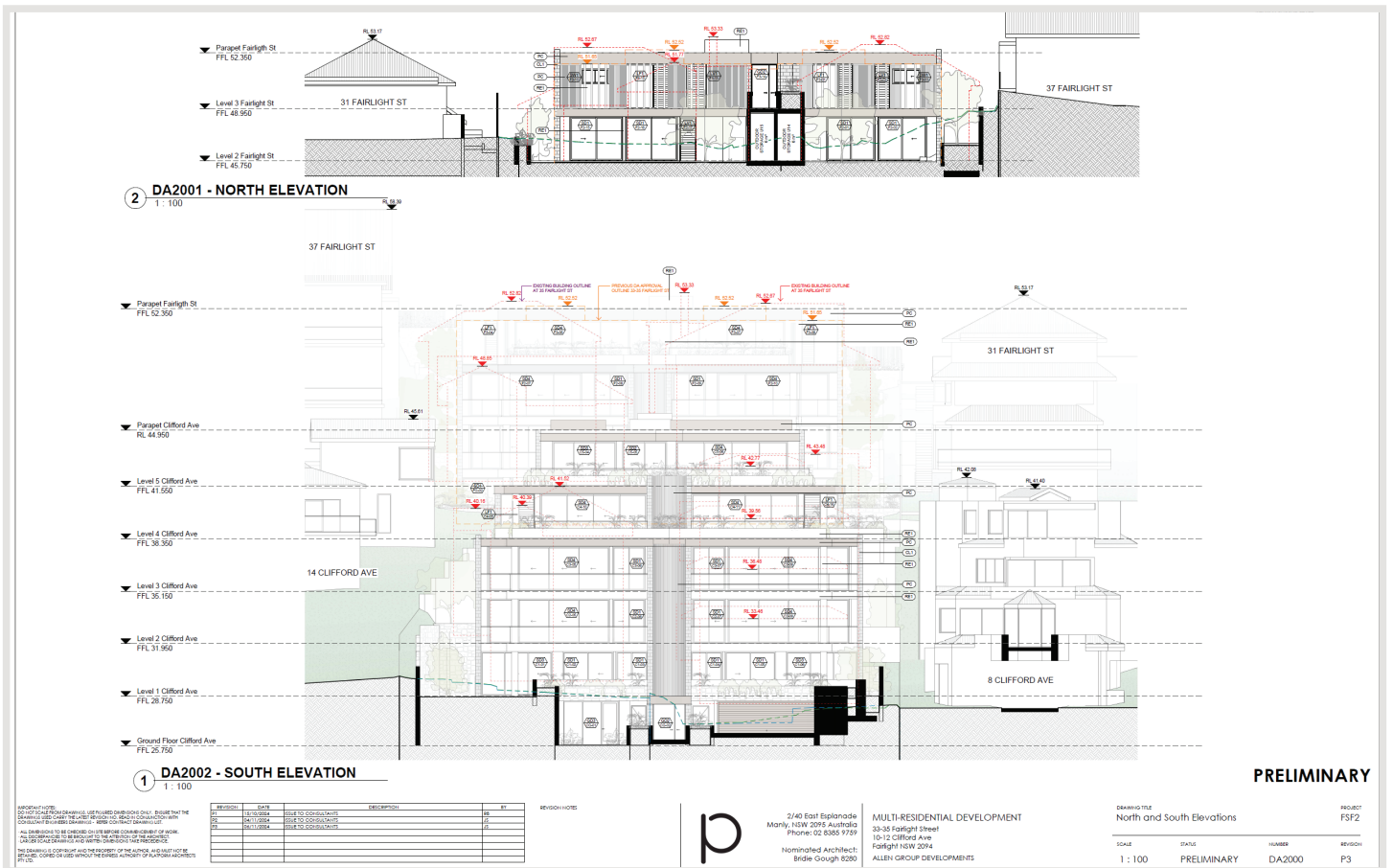


Figure 3 – Elevations of proposed design – from the north and south from Platform Architects

1.2.1. The Site and existing property

The land that is subject to this application is known as 33-35, & 10-12, Clifford Avenue, Fairlight. The Site has been historically subdivided to create Lots 8 and 9, DP 3742:

- Lot 8 (the No.35, Fairlight Street Site) has an area of 8,613sqm with frontage of 16.85m to Fairlight Street.
- Lot 9 (the No.33, Fairlight Street Site) has an area of 9,613sqm with frontage of 16.48m to Fairlight Street.

The land slopes from Fairlight Street downward, to the south towards North Harbour and includes terracing and 2 existing houses. Vehicular access to the Site is currently obtained from Fairlight Street and accesses a standalone garage for one of the existing properties, at No.33, Fairlight Street. A number of ancillary features including paved areas, stairs, sheds and retaining structures occupy the area currently used as the rear yard. Several trees are also scattered along the boundaries of the site. The garden areas are generally unmaintained but provide evidence of previous formal arrangements.

1.3. Proposed Land Use and Built Form

Approval is sought for the proposed demolition of the 2 existing dwellings, tree removal, and erection of a single multiple apartment building at Nos.33-35, Fairlight Street, Fairlight which comprises two (2) existing allotments. Plans outlining the proposed development accompany this application and are outlined below. See Figure 3 for elevations of new proposal, from Fairlight Street and from the south.

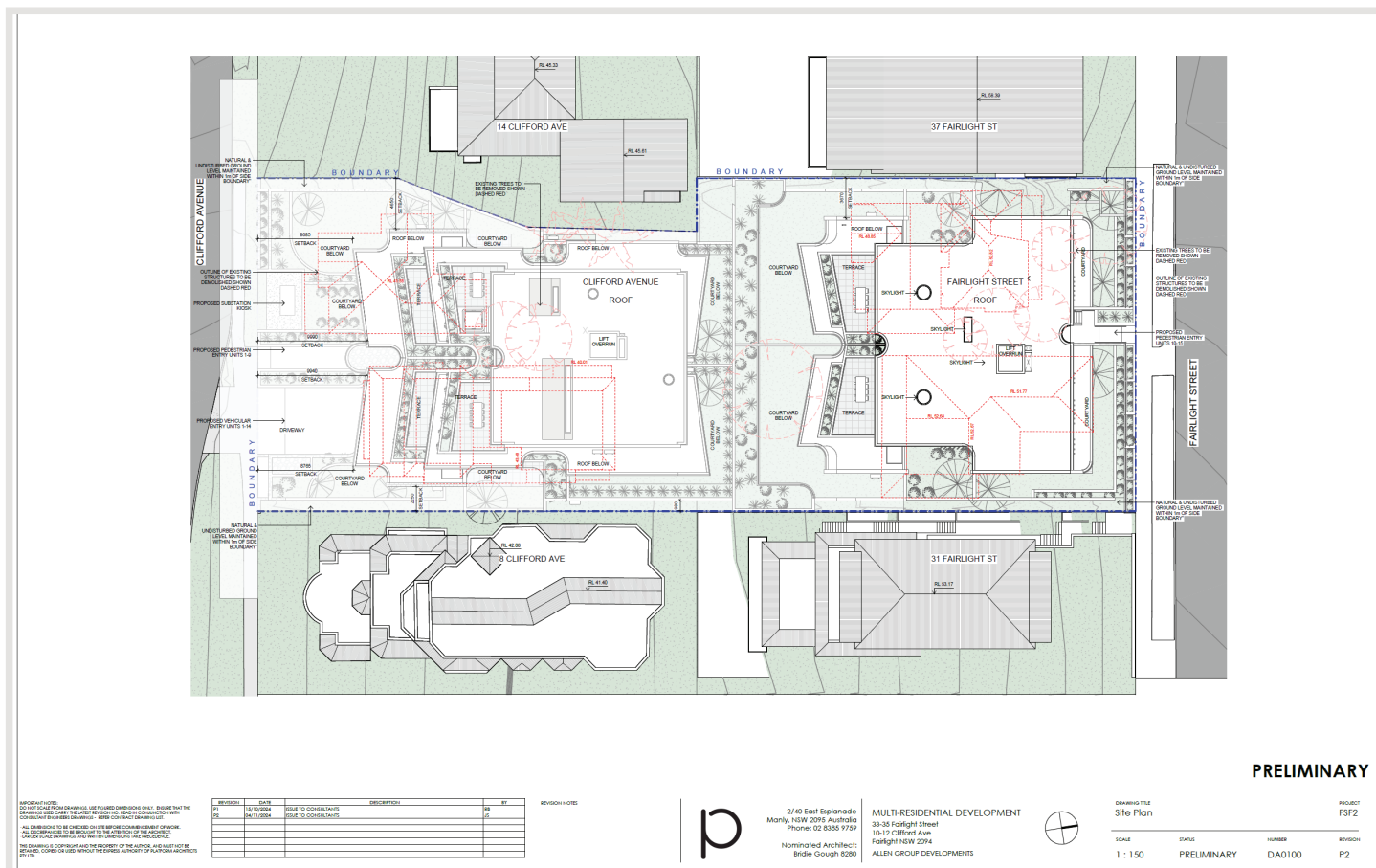


Figure 4 – Site Plan of proposed design – from Platform Architects

Demolition

- The development seeks to demolish all existing structures and ancillary development within the Site including retaining walls, sheds, garage, garden beds, and hardstand spaces. Fencing to the east, south and west will also be removed and replaced.

Tree Removal

- No significant vegetation exists on the Site. All vegetation will be removed and replaced with new planting under the proposed design.

Erection of Dwellings

- A new two-to-four storey apartment building is to be erected across both allotments: See Figure 4 for site plan
- Lot 8 (No.33, Fairlight Street Site)
- Lot 9 (No.35, Fairlight Street Site)

The subject property is zoned R1 General Residential pursuant to the provisions of the Warringah Local Environmental Plan 2011 (WLEP) and the Manly Residential Development Control Plan 2013 see Figure 5. Dwelling houses and apartment buildings are permissible in the zone with consent. The site is not heritage listed or located within a heritage conservation area.

The stated zone objectives are as follows:

- To provide for the housing needs of the community within a low-density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that low density residential environments are characterised by landscaped settings that are in harmony with the natural environment of Warringah.



Figure 5 – Manly DCP Zoning Map

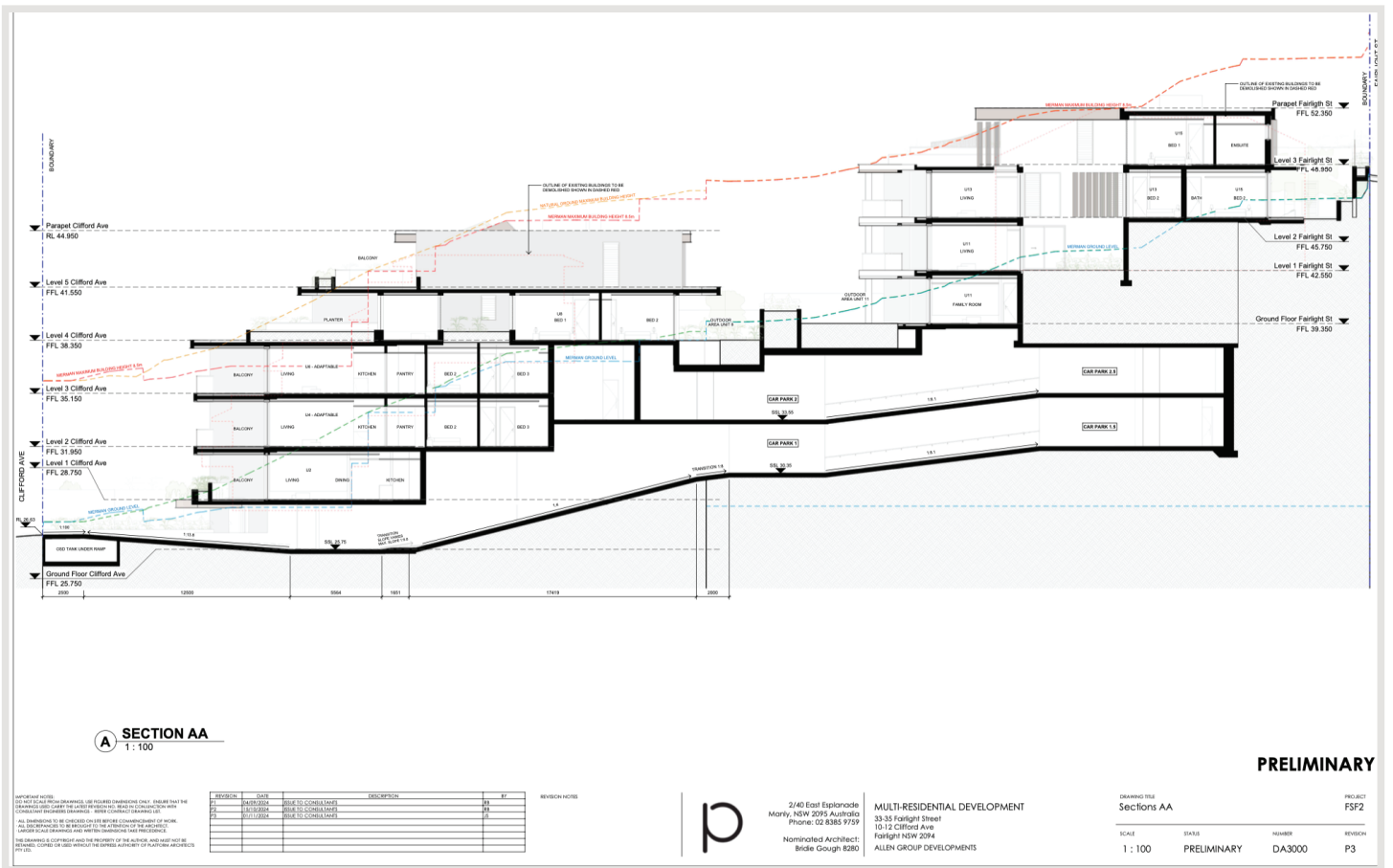


Figure 6 – Drawing from Platform Architects, showing a cross-section through the site

Manly Residential Development Control Plan 2013

The Manly DCP 2013 applies to all land where the LEP applies. Therefore, the DCP applies to the subject development.

Part 3 provides general principles applying to all development and Part 4 outlines development controls for specific forms of development including residential. The relevant provisions of Part 3 are summarised below:

Clause 3.1.1

Streetscape (Residential Areas) The site is bounded by Fairlight Street to the north and by the northern boundaries of residential properties along Clifford Avenue, to the south. These streets are characterised by a mix of single dwelling housing, multi-unit housing and residential flat buildings. The existing dwellings are relatively modest in comparison. The proposed development amalgamates the 2 plots with a corresponding exceedance of the FSR, but contained almost entirely within the designated building height envelope – see section drawings in Figure 6. The resultant development is considered to be compatible with the existing streetscape, architecturally.

Clause 3.3 - Landscaping

The proposal maintains and increased reasonable landscaping on site which complies with the Landscape Area controls of the DCP.

Clause 3.4 - Amenity (Views, Overshadowing, Overlooking/Privacy, Noise)

The objectives of the clause are noted as:

- *(Objective 1) To protect the amenity of existing and future residents and minimise the impact of new development, including alterations and additions, on privacy, views, solar access and general amenity of adjoining and nearby properties.*
- *(Objective 2) To maximise the provision of open space for recreational needs of the occupier and provide privacy and shade. It is suggested that the works will achieve these objectives and, in various locations, will result in an increase in the view from neighbouring properties.*

Subdivision

The proposal does not involve subdivision.

Height of Buildings

The maximum building height is 8.5m. The proposed works will result in a small portion of the proposal exceeding this height limit, around South-West parapet above unit 1 living areas (approx 430 mm). This breach is not related to the habitable floor spaces and has no impact on surrounding neighbours and views

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. This same methodology is currently under review by the Land and Environment Court as a basis for future VIA guidelines to supercede the current instructions.

1.4.1. Process

Initially, a fully contoured 3d model was created of the site and surrounding buildings to the extent of the designated viewpoints, with detailed modelling matching the building envelope of the latest Platform Architects design of the proposed extension.

Virtual cameras were placed into the model to match various selected viewpoints, in both height and position. From these cameras, rendered views have been generated and photomontaged into the existing photos, using the ground plane for alignment (allowing 2 set camera heights for standing and sitting positions being at 1600mm and 1100mm respectively). Several site location poles were placed into the 3d model to allow accurate alignment with the original photo. These poles align with known elements of the building and surroundings, such as top of ridge and eaves location on the dwelling, together with existing trees and site boundary intersections.

The rendered views create an accurate interpretation of the visual impact and provide a basis for minimising any

view loss by the incorporation of amended building heights and landscape, where appropriate. The final selection of images shows these stages, concluding with an outline, indicating the potential visual impact.

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.

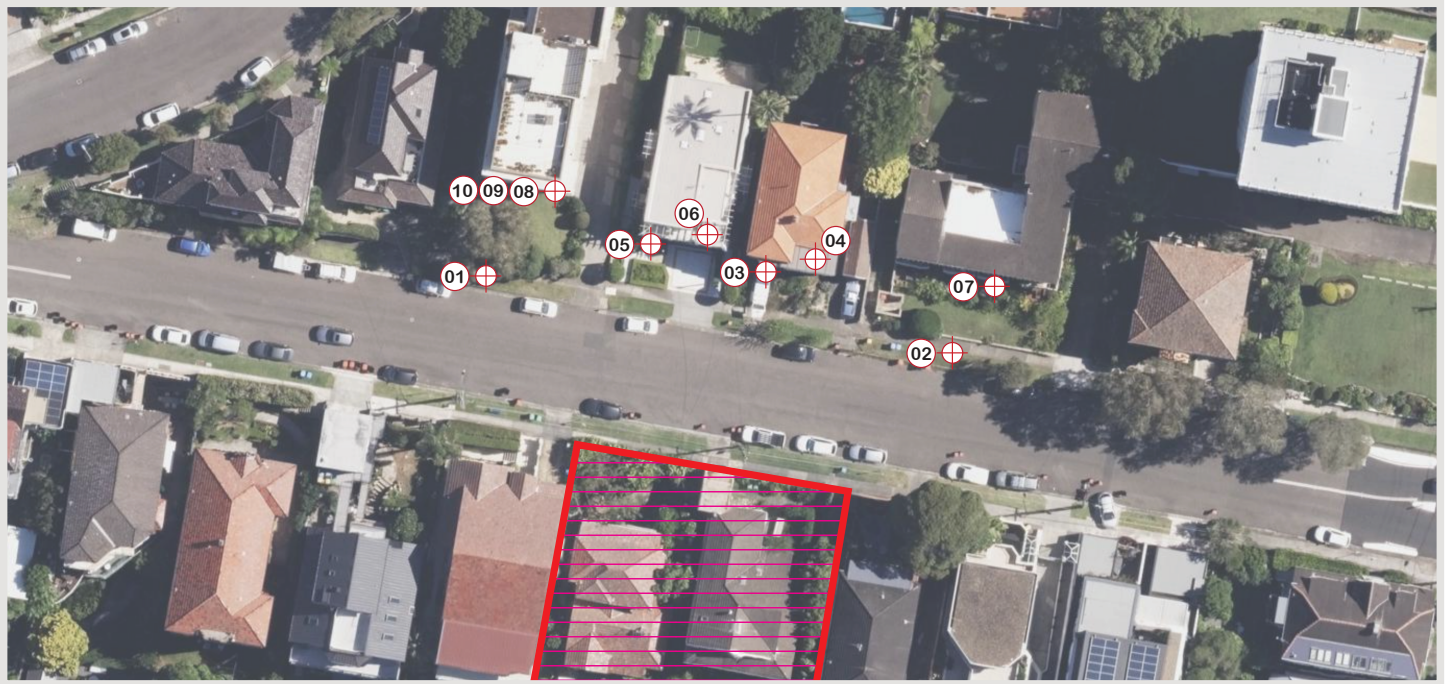


Figure 7: Selected private viewpoint locations for visual impact assessments with site outlined in red.

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 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:

- The design drawings and information relied upon for the preparations of this report were prepared by Platform Architects., dated December, 2021.
- Creating Places for People - An Urban Design Protocol for Australian Cities: www.urbandesign.gov.au/downloads/index.as
- State Environmental Planning Policy No.55 - Remediation of Land;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- Australia and New Zealand Urban Design Protocol: www.mfe.govt.nz/publications/urban/design-protocol-mar05/urban-design-protocol-colour.pdf
- The Value of Design: www.designcouncil.org.uk/Documents/Documents/Publications/CABE/the-value-of-urban-design.pdf
- Fifteen Qualities of Good Urban Places: www.goldcoast.qld.gov.au/planning-and-building/fifteen-qualities-of-good-urban-places-3774.html
- The Image of the City (1960), Kevin Lynch
- The Environmental Planning and Assessment Act 1979 as amended ("the Act");
- Environmental Planning & Assessment Act, 1979.
- Manly Local Environmental Plan 2013.
- Manly Development Control Plan 2013.

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 general topographical area map, Figure 8. This shows the steep fall of land from the houses on the souther side of Fairlight Street to the Roads below, being Clifford and Lauderdale Avenues.



Figure 8: Subject area topographical map.

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.

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

Within the Road context, development is predominantly 1, 2 and 3 storey individual dwelling houses and small apartment buildings, orientated to maximise ocean and district views. The subject property is not heritage listed.

Within the urban context, there is a diverse fabric consisting of predominantly low density residential, with wide Roads and mature, established landscaping. The iconic views from Fairlight Street are to the south and The Harbour and ocean. These are almost entirely unaffected by the visual impact of the current design.

2.2. Roadscapes

Within the local and surrounding areas, the roadscapes are typical of a well-established suburban area, that being focused on public amenity. The residential lots are medium to large and, as a result of the topography, have the option of enabling view sharing throughout the neighbourhood.

2.3. The selected view locations for the local view analysis

As a result of the site’s topography, the visual impact is primarily relevant from the residential properties surrounding the subject site and also from the gaps between houses, observed from the Road. The houses and apartments on the northern side of Fairlight Street have the greatest potential for negative visual impact. A large number of site photos were taken and a smaller number of local views selected from these, relevant for the private viewing locations, as described above. These are a mixture of static viewpoints, namely, fixed locations, as opposed to locations where viewing from a vehicle may be more likely – dynamic. See Figure 9 for photo locations. The selected photos are intended to allow consideration of the visual and urban impact of the new

development at both an individual and local level. They incorporate private viewing locations from Fairlight Street, where the subject site falls within direct line of sight and impacts on the neighbouring views and light access.

2.4. Period of View

The view is either:

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

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 10 viewpoint locations – from 33-35 Fairlight Street

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 9 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 9.

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	NEGLECTIBLE	No negative impact on the pre-existing visual quality of the view	N/A
NEGLECTIBLE	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			
MODERATE	7	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.)
	8			
	9			
SEVERE	10	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	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
	11			
12				
DEVASTATING	13			
	14			
	15			

Figure 9: Urbaine Group Assessment Table

3.1.2. Assessment at selected viewpoints

VIEWPOINT 01



Existing site photo -Pavement, Fairlight Street.

RL +53.815 From southern pavement edge, adjoining southwest boundary corner of unit block at No.52, Fairlight Street, looking south-southeast towards subject site @ standing height equivalent.
Distance to site boundary: 25.35m. Distance to proposed buildings: 31.72m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 24%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 11 /15 & Visual Impact Assessment Scale no: 2 /15 (+ view gain)*

This is a static and dynamic public viewpoint from the pavement on the northern side of Fairlight Street.

From this location, the existing view is south-south-east across the subject site and towards Manly Cove and North Harbour. The foreshore buildings along Oyama Cove Avenue are clearly visible, with the eastern hill of Manly behind and the Quarantine Station on the distant foreshore. The existing view is terminated by the distant apartment building at No.1, Lauderdale Avenue, which also obscures the end profile of North Head in the distance.

The high-value view, to the harbour, is maintained and increased moderately, as a result of the removal of existing landscape and demolition of the existing houses. Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: High*
- *View location: Street level 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 and views to the south and west are not impacted.

VIEWPOINT 02



Existing site photo - Ground level adjacent to No.3, Hilltop Crescent

RL +47.925 From southern pavement edge, adjoining centerline of southern boundary of unit block at No.3, Hilltop Crescent, looking south southwest towards subject site @ standing height equivalent.
Distance to site boundary: 21.4m. Distance to proposed buildings: 26.55m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 17%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 73% : 27%*
- *Existing Visual Assessment Scale no: 3 /15 & Visual Impact Assessment Scale no: 4 /15*

This is a static and dynamic public viewpoint from the pavement on the northern side of Fairlight Street.

From this location, the existing view is southwest across the subject site and towards the existing two storey house to the west of the site. There are no high value views from this location. The streetscape rises from east to west, with several houses visible on the ridgeline in the middle distance.

The new proposal impacts upon a small area of the eastern elevation of the adjoining house and then to the sky view above this. There is a moderate amount of view gain also observed. Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The reduced visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: Low*
- *View location: Street level pavement*
- *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 03



Existing site photo - From first storey level window of 48 Fairlight Street.

RL +452.69 From first floor southwestern window of No.48, Fairlight Street – 1m outside glazing line, looking due south over subject site @ standing height equivalent..

Distance to site boundary: 25.1m. Distance to proposed buildings: 30.55m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 19%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 94% : 6%*
- *Existing Visual Assessment Scale no: 9 /15 & Visual Impact Assessment Scale no: 9 /15*

This is a static, private viewpoint from the first floor of No.48, Fairlight Street.

From this location, the existing view is south across the subject site and towards North Harbour, Dobroyd Head, in the middle distance and to South Head and the eastern suburbs in the far distance. North Head is also visible behind the existing building to the east of the subject site.

The view across the subject site has a moderate increase in view loss and visual impact to the south-south-west, of the lower reaches of Dobroyd Head, as it falls towards Reef Bay, as a result of the new development, which sits within the designated building height envelope. The existing view is terminated by the 2 existing, adjoining properties to the east and west. Under the Tenacity ruling, the new proposal does increase the view loss, but remains within the permitted building envelope. Views remain available from this property to the east and southeast. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: HMedium*
- *View location: Private view. Level 1 apartment window.*
- *Extent of impact: Moderate.*

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 - No.48, Fairlight Street.

RL +56.457 From second floor southeastern window of No.48, Fairlight Street – 1m outside glazing line, looking due south over subject site @ standing height equivalent..

Distance to site boundary: 27.2m. Distance to proposed building: 32.72m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 31%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 12 /15 & Visual Impact Assessment Scale no:6 /15 (+ view gain)*

This is a static, private viewpoint from the second floor of No.48, Fairlight Street.

From this location, the existing view is south across the subject site and towards North Harbour, Dobroyd Head, in the middle distance and to South Head and the eastern suburbs in the far distance. North Head is also visible behind the existing building to the east of the subject site.

The high-value view, to the harbour, is maintained and slightly increased, as a result of the removal of existing landscape and demolition of the existing houses. There is a very slight increase in water view that becomes available towards Forty Baskets Beach, as a result of the lowered roof form of the new proposal. This also opens up a small additional amount of water view to North Harbour in the direction of Reef Bay. This is countered by a small increase in water view loss towards the northern foreshore of the bay. The visual impact increases at the centre of the new development, where the two roof forms of the previous houses created a gap in the visible built form. This roof is now continuous, The existing view is terminated by the 2 existing, adjoining properties to the east and west.

Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: High.*
- *View location: Private view. Level 2 apartment window.*
- *Extent of impact: Minor-to-Moderate.*

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 - No.50, Fairlight Street.

RL +53.252 From first floor southwestern window of No.50, Fairlight Street – 1m outside glazing line, looking due south over subject site @ standing height equivalent..

Distance to site boundary: 26.6m. Distance to proposed building: 32.15m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 17%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 9 /15 & Visual Impact Assessment Scale no: 7 /15 (+ view gain)*

This is a static, private viewpoint from the first floor of No.50, Fairlight Street.

From this location, the existing view is south across the subject site and towards North Harbour, Dobroyd Head, in the middle distance and to South Head and the eastern suburbs in the far distance. North Head is also partially visible behind the existing building to the east of the subject site and also behind the apartment building at No.1, Lauderdale Avenue.

The high-value view, to the harbour, is maintained and slightly increased, as a result of the removal of existing landscape and demolition of the existing houses. There is a measurable increase in water view that becomes available towards North Harbour, as a result of the lowered roof form of the new proposal.

The visual impact increases at the centre of the new development, where the two roof forms of the previous houses created a gap in the visible built form. This roof is now continuous, resulting in a small increase in water view loss. The existing view is terminated by the 2 existing, adjoining properties to the east and west. Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: Medium-to-High.*
- *View location: Private view. Level 1 apartment window.*
- *Extent of impact: Moderate.*

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 - No.50, Fairlight Street.

RL +56.021 From second floor southeastern balcony of No.50, Fairlight Street – 1m outside balcony balustrade, looking due south over subject site @ standing height equivalent..
Distance to site boundary: 28.3m. Distance to proposed building: 33.82m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 31%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 12 /15 & Visual Impact Assessment Scale no: 7 /15 (+ view gain)*

This is a static, private viewpoint from the second floor of No.50, Fairlight Street.

From this location, the existing view is south across the subject site and towards North Harbour, Dobroyd Head, in the middle distance and to South Head and the eastern suburbs in the far distance. North Head is also partially visible behind the existing building to the east of the subject site and also behind the apartment building at No.1, Lauderdale Avenue. The high-value view, to the harbour, is maintained and increased, as a result of the removal of existing landscape and demolition of the existing houses. There is a measurable increase in water view that becomes available towards North Harbour, as a result of the lowered roof form of the new proposal.

The visual impact, and associated view loss, increases at the centre of the new development, where the two roof forms of the previous houses created a gap in the visible built form. This roof is now continuous, resulting in a small increase in water view loss. The existing view is terminated by the 2 existing, adjoining properties to the east and west.

Tenacity Assessment Summary:

- *Value of view: High.*
- *View location: Private view. Level 2 apartment balcony.*
- *Extent of impact: Moderate.*

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 - No.3, Hilltop Crescent.

RL +52.894 From second floor living room at centre of southern façade of unit building at No.3, Hilltop Crescent, looking south- southwest towards subject site @ standing height equivalent..

Distance to site boundary: 33.15m. Distance to proposed building: 39.25m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 29%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 8 /15 & Visual Impact Assessment Scale no: 5 /15 (+ view gain)*

This is a static, private viewpoint from the second floor of No.3, Hilltop Crescent.

From this location, the existing view is southwest across the subject site and towards North Harbour, Dobroyd Head, in the middle distance and to the residential areas of Balgowlah Heights in the far distance. Portions of the eastern suburbs, towards South Head are also partially visible behind the existing buildings to the east of the subject site. There is a distant water view from this location, across the subject site towards Jilling Cove.

The visual impact, and associated view loss, increases at the centre of the new development, where the two roof forms of the previous houses created a gap in the visible built form. This roof is now continuous, resulting in a small increase in water view loss. The existing view is terminated by the 2 existing, adjoining properties to the east and west.

Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application.

Tenacity Assessment Summary:

- *Value of view: Medium*
- *View location: Private view. Level 2 living room*
- *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 08



Existing site photo - No.52 Fairlight upper level balcony.

RL + 55.938m. From first floor living room at southeast corner of southern façade of unit building at No.52, Fairlight St, looking south-southwest towards subject site @ standing height equivalent. Distance to boundary:27.60m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 34%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 12 /15 & Visual Impact Assessment Scale no: 6 /15 (+ view gain)*

This is a static, private viewpoint from the first floor of No.52, Fairlight Street.

From this location, the existing view is south-south-east across the subject site and towards Manly Cove and North Harbour. The foreshore buildings along Oyama Cove Avenue are clearly visible, with the eastern hill of Manly behind and the Quarantine Station on the distant foreshore. The southern end of north head is currently obscured by the apartment building at No.1, Lauderdale Avenue. However, South Head and Watsons Bay are entirely visible from this location.

The high-value view, to the harbour, is maintained and increased, as a result of the removal of existing landscape and demolition of the existing houses.

The view across the subject site has a very small increase in visual impact to the east, as a result of the new development, which sits within the designated building height envelope. The existing view, towards the horizon, between The Heads, is also terminated by the distant apartment building at No.1, Lauderdale Avenue.

Tenacity Assessment Summary:

- *Value of view: High.*
- *View location: Private view. Level 1 apartment living room window.*
- *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 09



Existing site photo - No.52 Fairlight Street.

RL +55.654 From first floor living room at southeast corner of southern façade of unit building at No.52, Fairlight St, looking south-southwest towards subject site @ standing height equivalent.. Distance to site boundary: 28.2m. Distance to proposed building: 34.32m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 41%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 12 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static, private viewpoint from the third floor of No.52, Fairlight Street.

From this location, the existing view is south-south-east across the subject site and towards Manly Cove and North Harbour. The foreshore buildings along Oyama Cove Avenue are clearly visible, with the eastern hill of Manly behind and the Quarantine Station on the distant foreshore. The southern end of north head is currently obscured by the apartment building at No.1, Lauderdale Avenue. However, South Head and Watsons Bay are entirely visible from this location. The high-value view, to the harbour, is maintained.

The view across the subject site has a very small increase in visual impact to the east and south of the subject site, as a result of the new development, which sits within the designated building height envelope. The existing view, towards the horizon, between The Heads, is already terminated by the distant apartment building at No.1, Lauderdale Avenue. There is no loss of any high value views as a result of the new proposal.

Tenacity Assessment Summary:

- *Value of view: High.*
- *View location: Private view. Level 1 apartment window - living room.*
- *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 10



Existing site photo No.52, Fairlight Street.

RL +60.621 From second floor living room balcony at southeast corner of southern façade of unit building at No.52, Fairlight St, looking south-southwest towards subject site.

Distance to site boundary: 28.2m. Distance to proposed building: 34.32m



Photomontage of Proposal



Visual Impact in cyan with red outline

Visual Impact Assessment

- *Visual impact – Amount of new development visible in view - 41%*
- *Visual impact ratio - view loss (including buildings) : sky view loss: 100% : 0%*
- *Existing Visual Assessment Scale no: 12 /15 & Visual Impact Assessment Scale no: 2 /15*

This is a static, private viewpoint from the second floor of No.52, Fairlight Street.

From this location, the existing view is south-south-east across the subject site and towards Manly Cove and North Harbour. The foreshore buildings along Oyama Cove Avenue are clearly visible, with the eastern hill of Manly behind and the Quarantine Station on the distant foreshore. A very small part of the southern end of north head is currently obscured by the apartment building at No.1, Lauderdale Avenue. However, South Head and Watsons Bay are entirely visible from this location. The high-value view, to the harbour, is fully maintained.

The view across the subject site has a very small increase in visual impact to the east and south of the subject site, as a result of the new development, which sits within the designated building height envelope. The existing view, towards the horizon, between The Heads, is only partially obscured by the distant apartment building at No.1, Lauderdale Avenue.

Under the Tenacity ruling, there are no issues raised as to view sharing as a result of the new proposal. The increased visual impact will be further softened with the additional landscaping proposed as part of the Development Application. There is no loss of any high value views as a result of the new proposal.

Tenacity Assessment Summary:

- *Value of view: High.*
- *View location: Private view. Level 2 apartment window - living room.*
- *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.

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.33-35, Fairlight Street & 10-12, Clifford Avenue, Fairlight

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 properties that are impacted by the new development, the relevant views, as selected within the report, are all observed from no.317, Victoria Parade, which is the house to the rear of the subject site.

The assessment of view loss experienced by residents across 2 levels of the house vary between Moderate and Moderate-to-Severe. These have been assessed in both primary and secondary living areas. The highest value components of the view are retained at the upper level of the neighbouring property, whilst at the lower level, it would not be reasonably expected for full views to be retained by any future development that is permitted to accommodate 2 storeys of accommodation on this site.

Since the proposal is largely compliant, it satisfies the Council's guidelines for view sharing between neighbouring properties.

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

5.1. APPENDIX A: Assessment Images - panoramic

APPENDIX B: Aspinall CV

LEC Guidelines for Photomontages

Visual Impact Assessment Methodology

APPENDIX C: Survey

APPENDIX D: Wireframe/alignment images

APPENDIX B:

Aspinall CV and Expert Witness experience.

Methodology article – Planning Australia, by Urbaine Architecture

JOHN ASPINALL. director: urbaine design group

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

24 years' architectural experience in London and Sydney.

Halpin Stow Partnership, London, SW1

John Andrews International, Sydney

Cox and Partners, Sydney

Seidler and associates

NBRS Architects, Milsons Point

Urbaine Pty Ltd (current)

Design Competitions:

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

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

Winner: International Design Competition: Sydney Town Hall, 2000

Finalist: Boy Charlton Swimming pool Competition, Sydney, 2001

Finalist: Coney Island Redevelopment Competition, NY 2003

Design Tutor: UTS, Sydney, 1997 – 2002

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

Design Tutor: UNSW, Sydney 2002 – 2005

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

Current Position: URBAINE GROUP Pty Ltd

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

Urbaine specialises in design development via interactive 3d modelling.

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

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

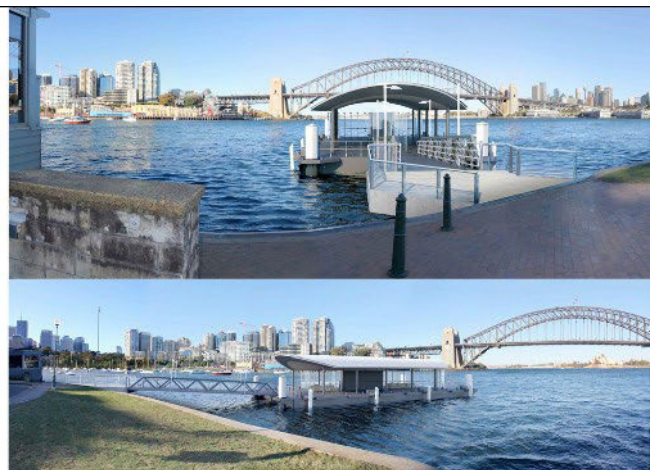
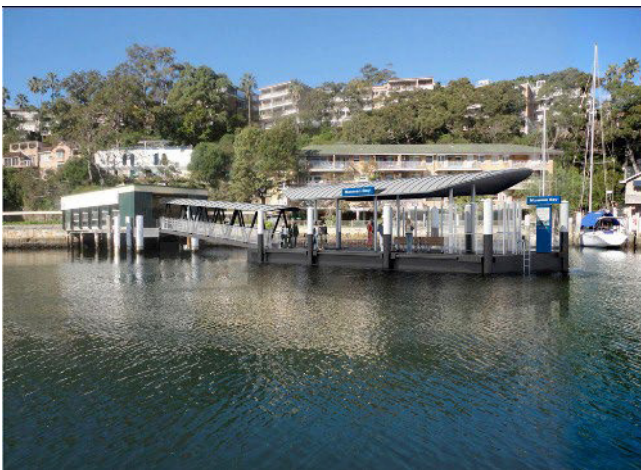


Photomontaged views of new apartment building at Pyrmont: Urbaine

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

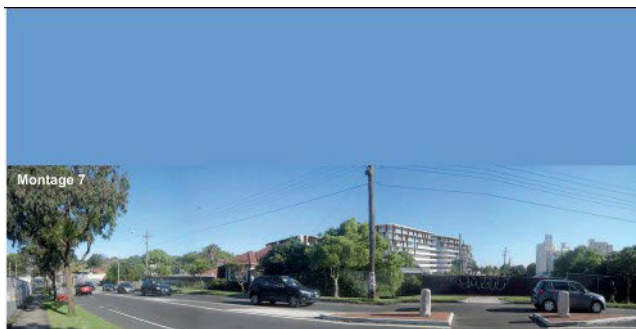
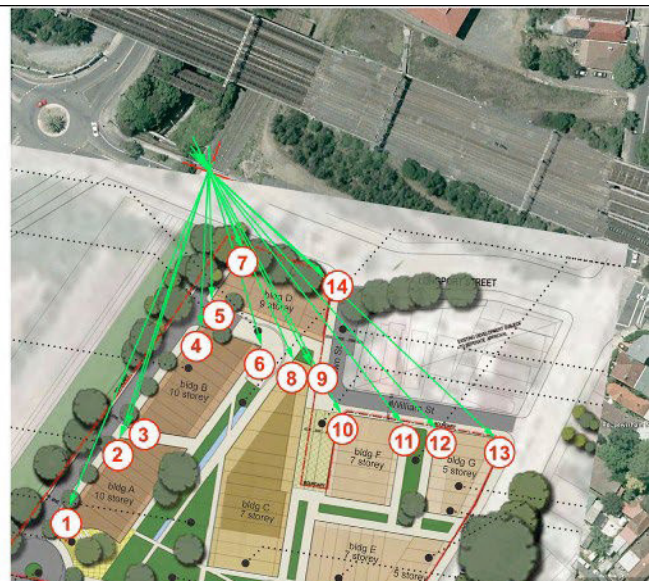
modelling, a good understanding of the principles of perspective, light, shadow and building articulation, were taught throughout the training of architects.

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.

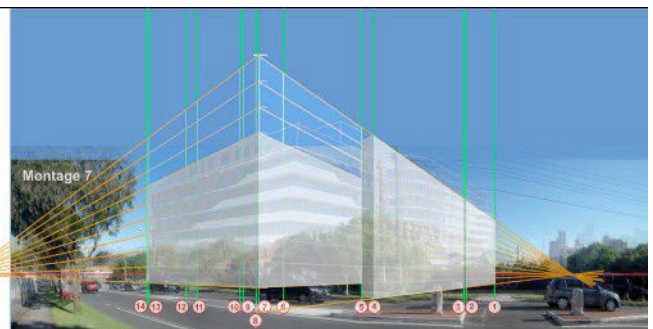
Currently, the Land and Environment Court specifies that any photomontages, relied on as part of expert evidence in Class 1 appeals, must show the existing surveyed elements, corresponding with the same elements in the photograph. Often, any surveyed elements can form such a small portion of a photograph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



Photomontage submitted by developer



Assessment of inaccuracy by Urbaine

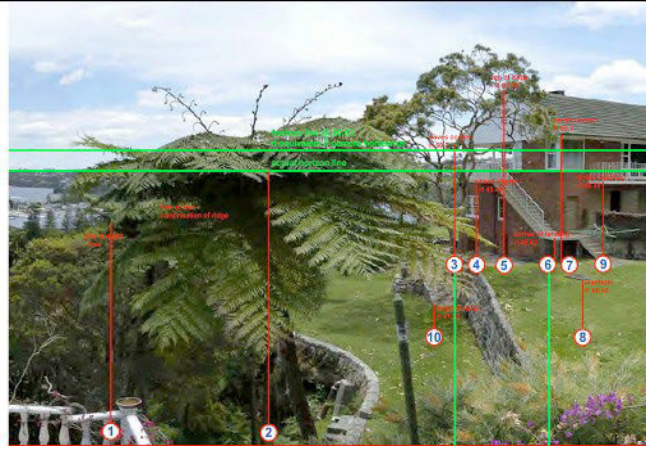
Urbaine has developed a number of methods for adding verification data to the 3d model of proposed buildings and hence to the final photomontages. These include the use of physical site poles, located at known positions and heights around a site, together with drones for accurate height and location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

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

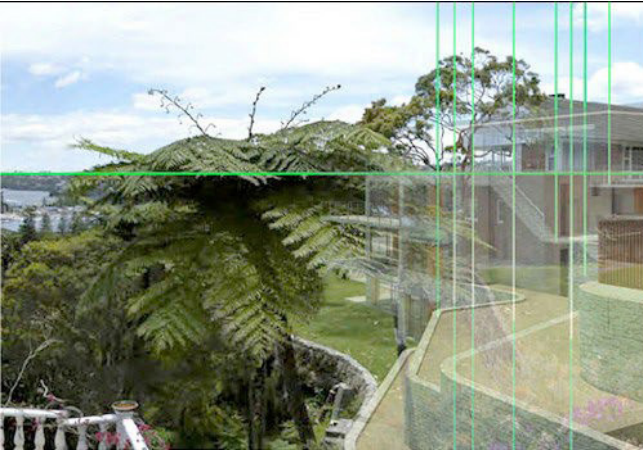
The following example clearly demonstrates this – a house montaged into a view, by others, using very few points of reference for verification. By analysing the existing photo alongside the survey, the existing site was able to be recreated with a series of reference elements built into the model. A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



Photomontage submitted by developer



Key visual location points on site: Urbaine



Key points and 3d model overlaid onto existing photo



Final accurate photomontage: Urbaine

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



Physical 3000mm site poles placed at lot corners



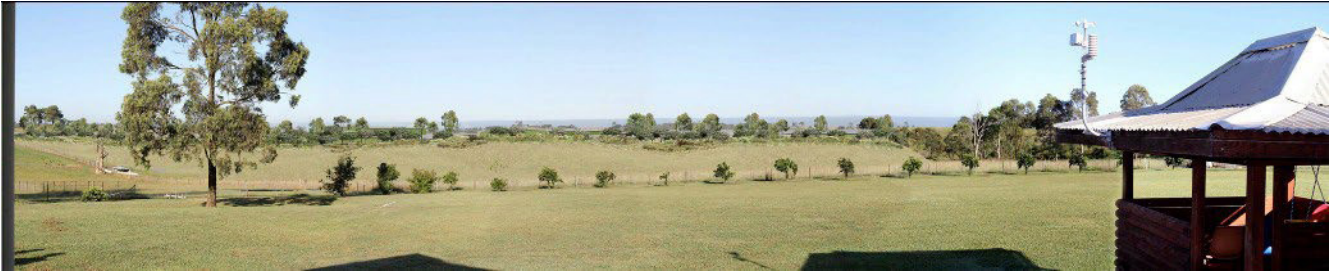
3d poles located in the 3d model and positioned on photo



Proposed buildings and landscape mounding applied

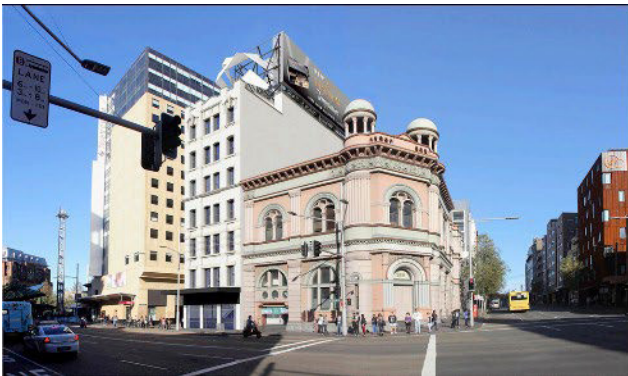


Proposed landscape applied – shown as semi-mature

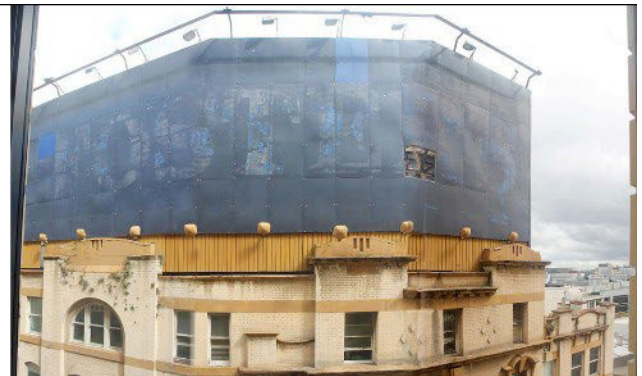


Final verified photomontage by Urbaine

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



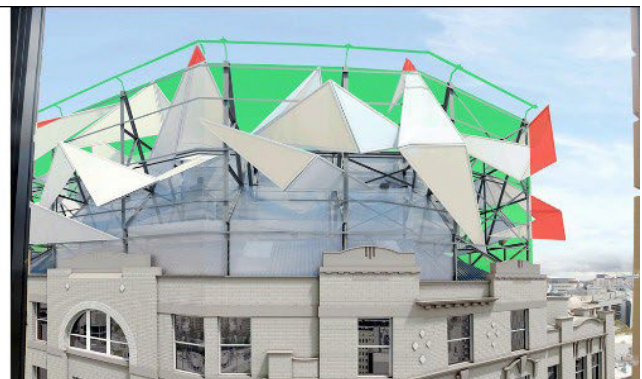
Photomontage of proposed building for digital billboard



Existing situation – view from adjoining hotel

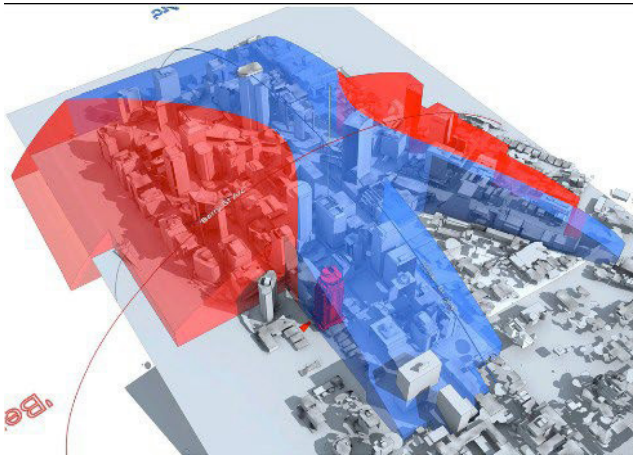


Photomontage of view from hotel

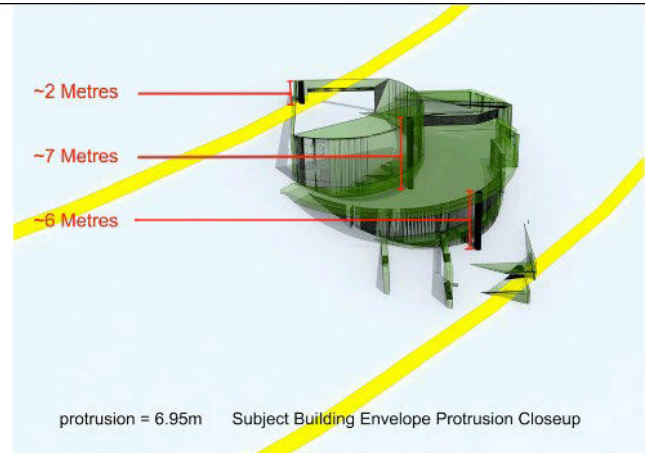


View loss – green = view gain / red = view loss

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



3d model of planning height zones



Extent of protrusion of proposed design prior to re- design

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

visualisation companies should request the following information, as a minimum requirement:

1. Height and plan location of camera to be verified and clearly shown on an aerial photo, along with the sun position at time of photography.
2. A minimum of 4 surveyed points identified in plan, at ground level relating to elements on the photograph and hence to the location of the superimposed building.
3. A minimum of 4 surveyed height points to locate the imposed building in the vertical plane.
4. A series of images to be prepared to explain each photomontaged view, in line with the above stages.

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



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*

APPENDIX C:

Survey

