CENTRAL COAST QUARTER

26 - 30 MANN STREET, GOSFORD

STAGE 1 DEVELOPMENT APPLICATION

VISUAL IMPACT ASSESSMENT

+ VIEW SHARING ANALYSIS

AUGUST 2021

Prepared by

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Prepared for

S H GOSFORD
RESIDENTIAL P/L

Issue	Date	Status	Checked
A	30 Oct 2020	Preliminary	NC
B	21 April 2021	DRAFT	NC
C	23 April 2021	Final	NC
D	27 August 2021	Final (amended)	NC

Contents

EXECUTIVE SUMMARY

SH Gosford Residential Pty Ltd proposes a mixed-use development at 26-30 Mann Street, Gosford that will incorporate commercial, retail (including food and drink premises), hotel and residential accommodation.

One of the requirements of the SEARs issued for the project was the preparation of a detailed evaluation of views from a series of nominated viewpoints that are all located on public land. In addition, an assessment of the potential for view sharing was called for in relation to existing multi-level residential buildings adjoining the project site.

A detailed Visual Impact Assessment and View Sharing Analysis Report was prepared by Corkery Consulting and submitted as part of the Master Plan Development Application (DA). The DA Assessment Report prepared by the Department of Planning, Industry and Environment (DPIE) accepted the findings of the Visual Impact Assessment and View Sharing Analysis. The Development Consent issued for the Masterplan included Condition C14 which requires that a new Visual Impact Assessment and View Sharing Analysis be submitted with each DA for the three development Stages of the project.

This visual assessment report has been prepared to accompany the Stage 1 DA for the Northern Tower. The Visual Assessment has been carried out in accordance with relevant sections of the *Environmental Impact Assessment Guidance Note: Guideline for landscape character and visual impact assessment* (EIA-N04) (Roads and Maritime, 2018). Results of the visual assessment indicate that the level of visual impact of the proposed Stage 1 development on the nominated viewpoints will range from low to high, depending on the distance of the view, extent of screening by other buildings and vegetation, as well as the level of visual sensitivity of the potential viewers.

Proposed mitigation measures, which include modifications to the design of the Northern Tower and implementation of the landscape concept design, will significantly reduce the potential visual impact. In addition, tree planting along Baker Street and carried out as part of the Leagues Club Park development adjoining the project site will partially screen views of the podium and lower levels of the tower as the trees mature.

Photomontages incorporated in the Report were prepared by Architectural Images and illustrate predicted views of the proposed Stage 1 development from the viewpoints nominated in the SEARs. Future towers to be developed in Stages 2 and 3, which will be the subject of separate DA's, are shown in the photomontages as 3D images of the building envelopes. Details of the methodology followed by Architectural Images to prepare the photomontages are included in Appendix A.

The View Sharing Analysis presented in this report was carried in accordance with the principles set out in the Land and Environment Court of NSW Judgment Tenacity v Warringah (2004). It involves a four-step process to determine if the extent of view sharing could be considered reasonable. Results of the view sharing analysis indicate that the extent of water views from the upper floors of 'The Broadwater', 'Georgiana Quay', 'Merindah' and 17 Mann Street apartment towers will be reduced by moderate amounts with a portion of the existing views being transferred to apartments on the western side of the proposed Stage 1 northern tower at 26-30 Mann Street.

The significance of the predicted view reduction and transfer generally falls into the category of Moderate as defined in the Report. Given that multiple sites adjoining 26-30 Mann Street have been zoned to allow the development of multi-storey apartment buildings it would be reasonable to expect that a portion the existing water views would be transferred to the new development.

1. INTRODUCTION

1.1. Development Proposal

SH Gosford Residential Pty Ltd proposes a mixed-use development at 26-30 Mann Street, Gosford that would incorporate commercial, retail (including food and drink premises), hotel and residential accommodation. The regional context of the project site at the southern end of Gosford commercial centre near the Brisbane Water waterfront is illustrated on **Figure 1**.

Figure 1 – Regional Context of Gosford

SH Gosford Residential Pty Ltd submitted a State Significant Development Application (SSDa) that included a Visual Impact Assessment (VIA) prepared by Corkery Consulting as specialist consultants engaged by SH Gosford Residential P/L. The VIA included a comprehensive visual assessment and view sharing analysis for the proposed development. The results of that assessment were presented in a report that formed part of the SSDA for the Masterplan of the whole development.

The VIA included detailed evaluation of views from the locations listed in the SEARs and supplementary viewpoints nominated by the Department of Planning, Industry and Environment (DPIE), all of which are accessible to the public. A series of photomontages were prepared by Architectural Images to illustrate the scale and form of the development proposed in the SSDA, when viewed from the nominated public viewpoints.

Architectural Images also arranged for a series of photographs to be taken from a drone at viewpoints associated with existing and proposed multi-storey buildings that adjoin the project site. Photomontages were prepared to illustrate the predicted views from the viewpoints after completion of the proposed development at 26-30 Mann Street. Architectural plans and elevations of the proposed development, as well as existing and proposed multi-level buildings in the vicinity of the development, were also reviewed to identify the location and elevation of view situations in the various buildings. This information was used in the view sharing analysis that was included as part of the VIA Report for the SSDA.

This Visual Impact Assessment and View Sharing Analysis Report is submitted to the Department of Planning, Industry and Environment (DPIE) on behalf of the SH Gosford Residential and in support of an application for SSD application number 23588910 at 26-30 Mann Street, Gosford. The SSDA seeks consent for:

- Demolition of the existing retaining wall on site.
- Removal of three trees located at the site interface with Baker Street.
- Excavation to a depth of approximately 1.3m to accommodate the proposed ground floor structure.
- Earthworks to level the site in readiness for the proposed building.
- Construction of a 25-storey (26 level) mixed-use building, comprising:
  - 621sqm of retail GFA.
  - 136 apartments, equating to 13,263sqm of residential GFA.
  - Four parking levels for 183 cars, with vehicular access from Baker Street.
  - Storage areas and services.
  - Communal open space.
- Publicly accessible through site link, including stairs, walkways, public lift, public art and landscaping.

1.2. SSDA Approval

Approval of the SSDS for the project Master Plan was issued by the Independent Planning Commission in August 2020 together with a Statement of Reasons for the decision.

The Commission generally supported the assessment and conclusions of the Department of Planning, Industry and Environment (DPIE), subject to some modifications to the building form. DPIE noted that the view loss resulting from the existing, approved and proposed development range from moderate to severe. However, DPIE concluded that on-balance the most affected properties retain some elements of existing views and most cases these include water views and therefore the impacts were considered reasonable within the overall context.

Condition C14 of the Master Plan Consent requires that a new Visual Impact and View Loss Assessment be prepared and included in the DA for each stage of the three stages of the approved development.

This report presents the VIA and View Sharing Analysis prepared by Corkery Consulting to be submitted with the DA for Stage 1 of the approved Master Plan which primarily comprises the Northern Tower. In preparing the Visual Assessment consideration has been given the modifications to the architectural design of the Northern Tower in response to the SSDA Assessment Report.

It is noted that the building form for the Northern Tower underwent five design review sessions with the CoGDAP and the Panel confirmed that the resulting design is capable of achieving 'Design Excellence'

2. CONTEXT

2.1. Landscape Setting

The local context of the project site is illustrated in **Figure 2**.The two key landscape features that relate to the setting of the Gosford commercial centre are the expansive water surface of Brisbane Water to the south together with the forest-covered hills to the east and west that form a natural landscape backdrop.

Figure 2 – Local Context of Site at 26-30 Mann Street, Gosford

The project site is located at the base of a long slope that extends up to Rumbulara Reserve to the east. The Reserve is located on a forest-covered ridgeline that forms the backdrop to development adjoining the project site when viewed from the west and south-west.

The extensive water surface of Brisbane Water contrasts with the forest covered hills that define the valley in which the commercial centre of Gosford is located. The landform configuration provides open views across the water surface in which the relationship between the urban development of Gosford and the backdrop of forest-covered hills is clearly apparent. Views to these hills from Brisbane Water, the waterfront and motorists approaching Gosford from the west along the Central Coast Highway, form major components of the landscape setting of Gosford. While the visually prominent hilltops potentially provide views towards the project site, they are generally blocked by extensive tree canopy cover. One exception is a location in Rumbulara Reserve where an opening in the tree canopy allows views to the site from a ridge top lookout area.

2.2. Urban Context

Urban development within the commercial centre of Gosford is currently taking place in accordance with the Gosford Urban Design Framework and the Gosford Development Control Plan 2018. Implementation of these planning instruments is intended to result in the creation of a cluster of multi-storey buildings at the southern end of Mann Street on both sides.

Mann Street forms the primary north-south road corridor through the centre of Gosford. Views along Mann Street to the north are generally framed by adjoining commercial buildings while views to the south in the vicinity of the project site are generally blocked by the large trees growing in the War Memorial and Poppy Park. The north-south alignment of Mann Street combined with the natural topography has resulted in the series of cross streets being relatively steep on the eastern side of Mann Street. The gradient of these cross streets provides opportunities for long distance views to the west along the street corridors. Views along the cross streets will contrast with the more visually enclosed character of Mann Street that will be increased by the proposed new high-rise buildings on both sides of the street. However, the sloping topography will provide opportunities for view corridors to be maintained between the buildings in the proposed development to reduce the level of visual enclosure for pedestrians and motorists moving along Mann Street.

Central Coast Stadium forms a visually prominent and distinctive structure located on the waterfront of Brisbane Water. The flat public open space adjoining the waterfront of Brisbane Water provides many opportunities for open views to the south across the water surface of Brisbane Water to forest covered hills and ridges beyond. The open spaces also provide views of the prominent hills to the east and west of the commercial centre of Gosford.

2.3. Context of Gosford Urban Design Framework

The plan presented in Figure 4 has been reproduced from the Urban Design Framework (UDF) and illustrates the context of the Civic Hart of Gosford located in a valley between the forest-covered and visually prominent landforms of Presidents Hill to the west and Rumbalara Reserve to the east.

The City South precinct identified in the UDF incorporates the Central Coast Stadium, Leagues Club Park, War Memorial, Poppy Park, Gosford Wharf, and Brisbane Water waterfront open space and recreation facilities.

The plan shows that Rumbalara Reserve is located to the northeast of the 26-30 Mann Street site, which adjoins the Leagues Club Field shown in green on the plan. The tree-covered ridge running south from Rumbalara Reserve forms the skyline backdrop in views to the east from Brian McGowan Bridge for motorists or pedestrians travelling towards the project site along the Central Coast Highway.

Views from Brisbane Water illustrate the visual prominence of Presidents Hill and Rumbalara Reserve with the urban centre of Gosford located in the valley between them. The montages of the view from Brisbane Water presented on Figures 29 and 31 show that the proposed development at 26-30 Mann Street would not block views to the Rumbalara Reserve. However, the group of three

residential towers proposed at the 'Waterside' development, which are shown in red on the montage, would block views of Rumbalara Reserve from parts of Brisbane Water.

Figure 3 - Landscape Context of Gosford City Centre (source Gosford UDF)

The Gosford UDF is focused on three distinct but linked places within walking distance of one another. They include the Civic Heart, City North and City South, which are intended to assist people to navigate across the city and encourage walking. The three places are each about 400m apart, which is generally considered to be a comfortable 10 minutes' walk. This arrangement will encourage people to explore and stay in the urban centre of Gosford. Enabling a network of connected places will allow the clustering of public domain improvements and investment in the city. With the public domain and green infrastructure creating a desirable place to live and work, private and public investment can provide the final ingredient for a positive outcome.

The proposed development at 26-30 Mann Street will form a key connectivity link by providing a convenient, safe and enjoyable pedestrian connection for residents in new high-rise buildings along Mann Street to the waterfront recreation opportunities that will include the Leagues Club Fields Park shown in Figure 4, which is currently under construction. The connection will not only be functional but will also provide an enjoyable physical and visual experience for pedestrians as a major contribution to a high-quality urban design outcome to help achieve the goals of the UDF.

City South forms the interface between Gosford City and Brisbane Water waterfront as a key arrival point, both for the regional population and visitors to the Central Coast. City South accommodates many existing regional attractors that draw large numbers of people into the area. The focus for City South is to provide a sense of place and a strong identity for Gosford. It is intended to help shape development and associated investment to ensure public access and amenity. City South is to become a place where people want to visit and spend time to engage with the Civic Heart and City

North. A major new attraction will be the 'nature-inspired' regional play space on the site of Leagues Club Fields.

The UDF specifically refers to the 26-30 Mann Street site as part of the future Baker Street extension and a key link that reconnects the city centre to the waterfront and Leagues Club Fields Park. The location of 26-30 Mann Street on the primary arrival axis and view from the Central Coast Highway makes it a key part of the city image. The site also forms an important edge to the Leagues Club Fields Park and the pedestrian focus of Baker Street. The proposed layout of the 26-30 Mann Street development, comprising a series of slender towers with view corridors between them will help achieve the stated intent of the UDF.

Figure 4 - Photomontage of proposed Leagues Club Fields Park adjoining 26-30 Mann Street (source Hunter & Central Coast Development Corporation)

The character of the current interface between the Leagues Club Park and the project site is illustrated by the photographs on the following page.

2.4. Gosford Development Control Plan (DCP) 2018

Gosford City Centre Development Control Plan (DCP) 2018 states that the new built form in Gosford should strive for design excellence, deliver best practice sustainability, be of the highest quality and reflect the regional importance of the City Centre. Built form is expected to provide an attractive and desirable setting for all users, including those in the public realm and those within the buildings themselves.

The Visual Impact Assessment Report submitted with the approved Master Plan DA demonstrated that the proposed development at 26-30 Mann Street will meet all of the DCP Objectives.

Baker Street frontage to project site

Leagues Club Park Interface with project site

3. DESIGN MODIFICATIONS TO IMPROVE VISUAL OUTCOME

It is noted that the building form for the Northern Tower underwent five design review sessions with the CoGDAP and the Panel confirmed that the resulting design is capable of achieving 'Design Excellence'. In response to Condition B1 issued by DPIE the design architects DKO Architecture carried out a process of design refinement that will mitigate the potential visual impact of the Northern Tower. The revised building design has resulted in a development envelope that represented 85% of the previous volume. By maintaining the design height and reducing the volume a more slender tower has been designed that will be visually less prominent than the original design.

In addition, the three-dimensional form of the tower has been articulated by incorporating a deep recess on the western side of the tower that creates the appearance of two slender towers. This visual affect is reinforced by the top of the tower being stepped by finishing portions of the tower at two different elevations. The result is to visually reduce the apparent bulk of the building. The stepped form of the top of the tower reflects the slope of the ridgeline that forms the backdrop in views from the west that include the Central Coast Highway over the Brian McGowan Bridge.

The modulation of light and shadow on the facades of the buildings will visually articulate the structures and mitigate their apparent visual bulk. The extent to which these mitigation measures will be effective is illustrated by the photomontages prepared by Architectural Images for each of the viewpoints nominated in the SEARs. In addition, the design modifications that provide view corridors between the three proposed buildings will reduced the extent of view sharing with the adjoining multi-storey residential buildings.

Tree planting carried out along the Baker Street extension along the western edge of the Northern Tower will in time provide visual screening to the podium and lower levels of the tower. Tree planting that has been carried out within the Leagues Club Fields Park will also contribute to the screening of ground level views as the trees mature. A potential mitigation measure could include additional tree planting at the northern end of Poppy Park to screen views of the buildings from within the Park.

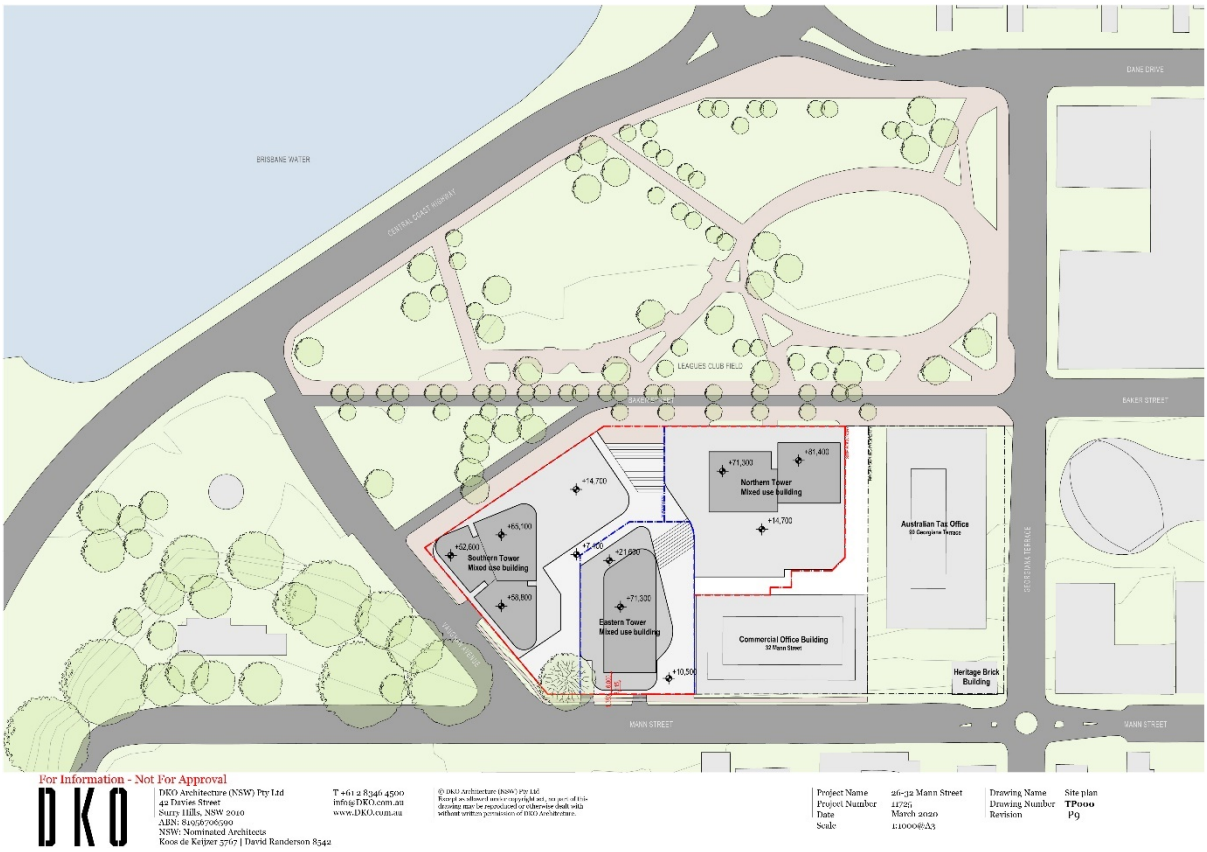


Figure 5 – Layout of Proposed Development at 26-30 Mann Street showing three towers

4. METHODOLOGY

4.1. Introduction

The visual assessment has been carried out in accordance with relevant sections of the *Environmental Impact Assessment Guidance Note: Guideline for landscape character and visual impact assessment* (EIA-N04) (Roads and Maritime, 2018).

The methodology involved the following tasks:

- Assess and describe the landscape context in which the proposed development is located
- Carry out field inspection to verify the key viewpoints nominated in the SEARs and take reference photographs for use in carrying out the visual assessment
- Determine the potential visual impact on those viewpoints located in places that are accessible to the public
- Review the photomontages of views from the nominated viewpoints prepared by Architectural Images to confirm the level of potential visual impact from the proposed development
- Identify representative viewpoints in existing high rise buildings adjoining the project site and analyse the potential view sharing that would result from the proposed development.

Results of the visual impact assessment of the nominated viewpoints are presented in this Report together with details of the methodology that was followed.

In addition, the issue of view sharing has been addressed and the results presented in this Report. View sharing principles set out in the Land and Environment Court of NSW Judgment Tenacity v Warringah (2004) have been referenced in addressing the issue in relation to the proposed development at 26-30 Mann Street. The Court Judgement noted that the notion of view sharing is invoked when a property currently enjoys views, and a portion of those views would be transfered to the occupants of a proposed new development. A four-step assessment process was set out in the Judgement to determine if the extent of view sharing would be considered reasonable.

The first step is to determine the nature of the view that is to be shared. In the case of the proposed development at 26-30 Mann Street the most highly valued views are waterscape views of Brisbane Water.

The second step is to determine from what parts of the existing buildings the water views are currently available from. In the case of the proposed development at 26-30 Mann Street there are three adjacent multi-storey residential apartment blocks that include ‘The Broadwater’, ‘Georgiana Quay’ and ‘Merindah’. Views from these buildings are from residential apartments and associated private balconies.

The third step is to assess the extent of view sharing, both quantitatively and qualitatively. The quantity of view sharing has been measured as a percentage of the existing view. The qualitative aspect of view sharing has been assessed by applying a scale of ratings that include negligible, low, medium, high and extreme. Each of these ratings are defined in order to achieve a level of consistency throughout the assessment process and to provide readers of the report with a clear understanding of the ratings.

The fourth step is to assess the reasonableness of the view sharing that would result from the proposed development. The Land and Environment Judgement notes that the question should be asked as to whether the layout, form and configuration of the buildings in the proposed development would result in a reasonable view sharing outcome.

Each of the four steps used in assessing view sharing analysis are addressed in Section 7 of this Report.

4.2. Key Viewpoints and Photomontage Locations

The key viewpoints identified on Figure 6 are those listed in the SEARs issued for the project development application together with supplementary viewpoints nominated by DPIE. The illustrated by photographs on the following pages together with photomontages of the predicted future view following completion of the Stage 1 development.

Figure 6– Key Viewpoints and Photomontage Location Plan

5. PHOTOMONTAGES

5.1. Introduction

A series of photomontages have been prepared by Architectural Images for each of the viewpoints nominated in the SEARs, with the exception of Viewpoint 1 at Presidents Hill Lookout where views of the site at 26-30 Mann Street are completely blocked by trees. The photomontages illustrate how the view will change as a result of the proposed development at 26-30 Mann Street. A detailed description of the methodology used by Architectural Images to prepare the photomontages is presented in Appendix A together with information about the photography, survey, 3D Model, camera matching, camera information and software used. The photomontages, the photographs they are based on, the 3D wireframe models of proposed buildings and RL information are also presented in Appendix A.

The photomontages prepared by Architectural Images are presented on the following pages together with the photographs of the existing view that was used as the base for each photomontage. These effectively provides a set of before and after images of the views from the nominated viewpoints. Locations of the viewpoints used to prepare the photomontages are shown on Figure 6.

5.2. Viewpoint 1 - Presidents Hill Lookout

Figure 7 - No photomontage was prepared for this viewpoint as tree canopies block views of the project site

5.3. Viewpoint 2 - Brian McGowan Bridge

Figure 8 - Current view of existing development at 26-30 Mann Street with 'The Broadwater' and 'Merindah' developments beyond

Figure 9 - Photomontage of proposed Stage 1 Northern Tower & outlines of Stages 2 & 3, with a portion of future 'Creightons' development outlined in red

5.4. Viewpoint 3 - Gosford Waterfront

Figure 10 - View across Central Coast Highway & Leagues Club Park to 26-30 Mann Street with existing commercial building in centre & ATO on left

Figure 11 - Photomontage of proposed Stage 1 Northern Tower & outline of Stage 2 & 3 towers in transparent outline & a portion of 'Creightons' development in red

5.5. Viewpoint 4 - Leagues Club Field

Figure 12 - View across Leagues Club Park to 26-30 Mann Street site with corner of existing building on left

Figure 13 - Photomontage of view from Leagues Club Park to proposed Stage 1 Northern Tower, with proposed Stage 3 tower in transparent outline

5.6. Viewpoint 5 - Poppy Park

Figure 14 - View of existing building on 26-30 Mann Street site with ATO beyond & cars parked along Vaughan Ave.

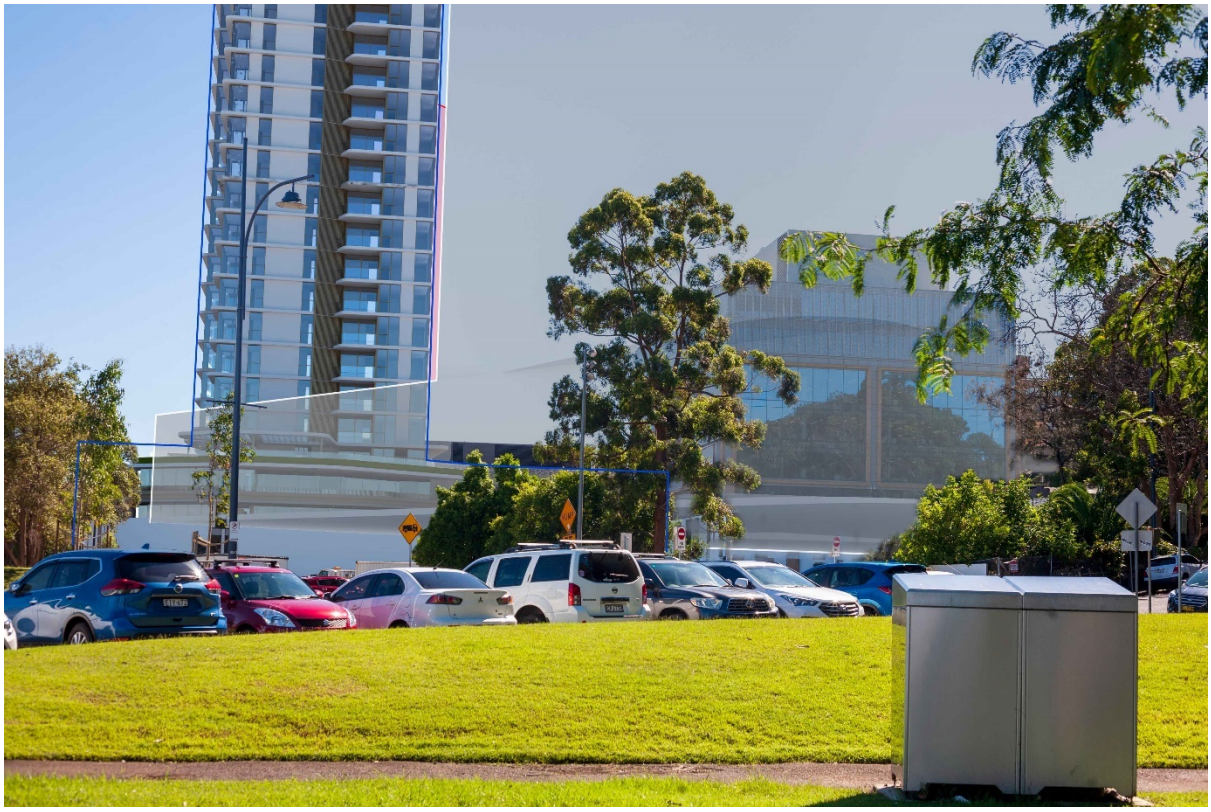


Figure 15 - Photomontage showing the Stage 1 Northern Tower on left & outline of proposed Stage 3 tower in transparent outline

5.7. Viewpoint 6 - War Memorial Park

Figure 16 - View towards 26-30 Mann St. site with mature trees blocking view

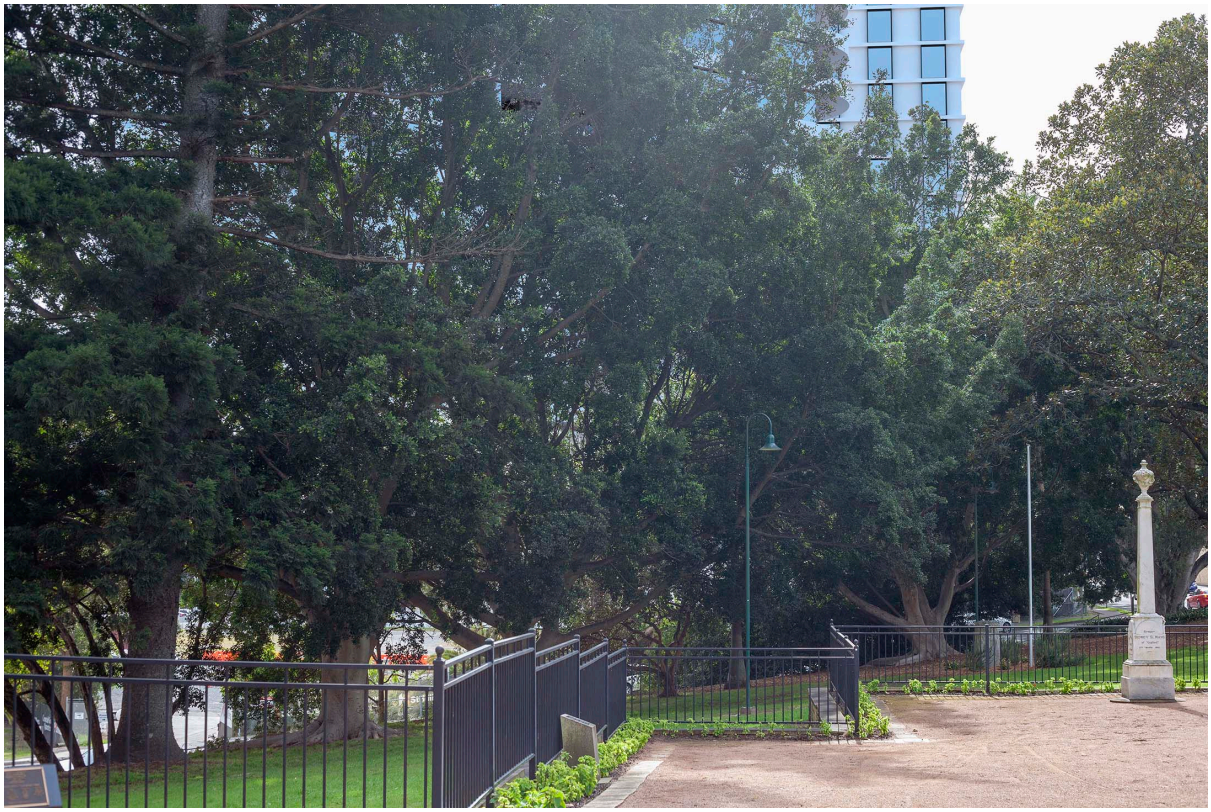


Figure 17 - Photomontage with mature trees blocking most of the view with a small portion of the proposed Stage 1 Northern Tower visible above the trees

5.8. Viewpoint 7 - Mann Street & Georgiana Terrace intersection

Figure 18 - View across intersection with ATO building to right & top of existing commercial building at 26-30 Mann St. visible above brick building

Figure 19 - Photomontage showing part of proposed Stage 1 Northern Tower, with ATO & brick building in foreground

5.9. Viewpoint 7a - Mann Street & Donnison Street intersection

Figure 20 - View south along Mann Street with top of building commercial building at 26-30 Mann St. visible on skyline

Figure 21 - Photomontage showing upper portion of proposed Stage 1 Northern Tower & future Stage 2 & 3 buildings shown as 3-D outlines. The proposed 'Waterside' development buildings outlined in red will block view of the Stage 1 Northern Tower

5.10. Viewpoint 8 - Gosford Railway Station Pedestrian Bridge

Figure 22 - View towards the 26-30 Mann St. site with Gosford Council Office (brown) in front of 'Merindah' apartments

Figure 23 - Photomontage illustrating that potential views of the proposed 26-30 Mann St. development will be blocked by the proposed 'The Waterside' development buildings that are outlined in red

5.11. Viewpoint 9 - Kibble Park

Figure 24 - View towards 26-30 Mann St. site with Gosford Council Office (brown) in left portion of the image & library to the right

Figure 25 - Photomontage showing top of proposed Stage 1 Northern Tower at 26-30 Mann St. in centre of image & 'The Waterside' development buildings shown in red

5.12. Viewpoint 10 - Rumbulara Reserve

Figure 26 - View through gap in tree canopy towards 26-30 Mann St.

Figure 27 - Photomontage showing proposed Stage 1 Northern Tower at 26-30 Mann St. with Stages 2 & 3 buildings outlined in grey & proposed 'Creightons' development in centre & 'The Waterside' to right in red

5.13. Viewpoint 11 - Brisbane Water & Point Clare to Gosford Railway Crossing

Figure 28 - View from Brisbane Water to Gosford waterfront & existing building at 26-30 Mann St. in centre of image & 'Merindah' to right

Figure 29 - Photomontage showing proposed Stage 1 Northern Tower at 26-30 Mann St. & future Stages 2 & 3 towers outlined in transparent grey with proposed 'Creightons' development in red visible between them & proposed 'The Waterside' development on left outlined in red

5.14. Viewpoint 12 - Brisbane Water Marine Rescue Jetty

Figure 30 - View from Brisbane Water to Gosford waterfront & existing building at 26-30 Mann St. near centre of image with the Gosford Wharf to the right & the 'Merindah' beyond

Figure 31 - Photomontage showing proposed Stage 1 Northern Tower at 26-30 Mann St. & Stages 2 & 3 outlined in grey & 'The Waterside' development outlined in red

5.15. Viewpoint 12a–Gosford Wharf

Figure 32 - View from Gosford Wharf across waterfront to existing building at 26-30 Mann St. in centre with ATO to left & 'Merindah' to the right

Figure 33 - Photomontage showing proposed Stage 1 Northern Tower at 26-30 Mann St. & future Stages 2 & 3 towers outlined in grey with proposed 'The Waterside' development outlined in red on left & a small portion of 'The Creighton's' visible in red near the centre of the image

6. VISUAL IMPACT ASSESSMENT

6.1. Introduction

The viewpoints listed in the SEARs have been used as the basis for the assessment of potential visual impact of the proposed development. These viewpoints are considered to be representative of views from the main public places in areas surrounding the project site.

The potential visual impact of the proposed development has been assessed by applying the following matrix in Figure 34, which is based on the Roads and Maritime Services (RMS) Guidelines EIA-N04, to each of the viewpoints.

SENSITIVITY OF VIEWERS	MAGNITUDE OF VISIBILITY: High	Moderate	Low	Negligible
High	High	Mod / High	Moderate	Negligible
Moderate	Mod / High	Moderate	Mod / Low	Negligible
Low	Moderate	Mod / Low	Low Impact	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Figure 34 - Visual Impact Assessment Matrix

The various levels of visual impact in the Matrix are identified through the combination of magnitude of visibility and sensitivity of the viewer. These levels of visual impact are defined as:

- **Negligible Visual Impact** - only a very small portion of the proposed development would be discernible and/or it would be located at such a distance that it would be scarcely visible.
- **Low Visual Impact** - the proposed development would constitute only a minor component of the wider view and might be missed by the casual observer; awareness of the development would not have a marked effect on the overall quality of the view.
- **Moderate Visual Impact** - the proposed development may form a visible and recognisable new element within the overall scene and may be readily noticed by an observer.
- **High Visual Impact** – the proposed development would form a significant and immediately apparent part of the view that would affect and change its overall character (the change may be positive or negative).

These definitions have been adapted from 'Guidelines for Landscape and Visual Impact Assessment' prepared by The Landscape Institute and Institute of Environmental Management and Assessment in the UK, 2002.

6.2. Magnitude of Visibility

The extent to which the proposed development would be visible is referred to as the magnitude of visibility. It is influenced by the scale, form and character of the visible portions of the proposed buildings and the distance of the view. The magnitude of visibility reflects the extent to which the existing view will be changed by the proposed development. The four categories of magnitude of visibility are defined below.

Negligible (N) – very minor loss or alteration to one or more key elements, features or characteristics of the visual landscape character and/or introduction of elements that are compatible with the existing visible landscape.

Low (L) – minor loss of/or alterations to one or more key elements, features or characteristics of the visual landscape character and/or introduction of elements that are generally characteristic of the existing visible landscape

Moderate (M) – partial loss of or alteration to one or more key elements, features or characteristics of the visual landscape character and/or introduction of elements that may be prominent but not considered to be uncharacteristic of the existing visible landscape.

High (H) - total loss of key elements, features or characteristics of the existing visual landscape character and/or introduction of elements considered to be totally uncharacteristic of the existing visible landscape.

TABLE 1: MAGNITUDE OF VISIBILITY – VIEWPOINTS

Viewpoint	View Distance	Magnitude of Visibility	Comment
1. Presidents Hill Lookout	**785m**	NEGLIGIBLE	Potential views of the site are blocked by trees and other vegetation
2. Brian McGowan Bridge	**445m**	MODERATE	View along paths and roadway are framed by roadside safety screens with the development site in the centre of the view. The combination of view distance together with existing and proposed development result in a moderate magnitude of visibility
3. Gosford Waterfront	**195m**	MODERATE	Open space along the waterfront and the Leagues Club Park allow views of the western facade of the Northern Tower. A row of mature Canary Island palms growing alongside the Central Coast Highway and recent tree planting in the Leagues Club Park development will provide additional visual screening as they mature.
4. Leagues Club Field Park	**180m**	HIGH	Views across the new Leagues Club Park will include all of the western facade of the proposed Northern Tower, but tree planting along the Baker Street western frontage combined with tree planting in the new park that replace the playing fields will provide visual screening of the podium and lower levels of the Northern Tower as the trees mature.
5. Poppy Park	**300m**	MODERATE	Open views across Poppy Park would include the upper portion of the proposed Northern Tower, but tree planting along the Baker Street and in the new Leagues Club Park will provide visual screening of the podium and lower portions of the Northern Tower as the trees mature.
6. War Memorial Park	**300m**	LOW	Views towards the project site are generally blocked by mature trees. The podium and lower floors of the

			Northern Tower will be blocked from view while a portion of the upper floors will be visible.
7. Mann St. & Georgiana Terrace intersection	**155m**	MODERATE	Views to south west from the intersection will have views of the podium and lower floors of the proposed Northern Tower blocked by the existing brick building, ATO office building and the existing commercial building on the project site.
7a. Mann St. & Donnison St. intersection	**346m**	LOW	Views to south from the intersection are framed by commercial development that blocks views of most of the existing development on the project site at 26-30 Mann Street.
8. Gosford Railway Station	**775m**	LOW	This long-distance view will have the lower levels and podium of the proposed Northern Tower blocked by existing and proposed high rise towers.
9. Kibble Park	**465m**	LOW	Existing buildings in the foreground and mid-distance will block views of the lower portion of the proposed Northern Tower.
10. Rumbulara Reserve	**1,060m**	LOW	Potential views of the project site are generally blocked by trees and other vegetation but at one particular location a gap in the tree canopy provide views to the project site that will include the Stage 1 Northern Tower.
11. Brisbane Water and the Point Clare to Gosford Railway Crossing	**787m**	LOW	Distant views over Brisbane Water and the Gosford waterfront towards the proposed Stage 1 Northern Tower are open but long distance with the building forming a relatively small portion of the view. The Northern Tower will appear as part of a cluster of high rise buildings viewed against a backdrop of the forest-covered ridge of Rumbulara Reserve.
12. Brisbane Water Marine Rescue Jetty	**1,225m**	LOW	The Northern Tower will generally be viewed at a distance of more than a kilometre with the water surface forming the foreground and mid-distance and the tower forming a small portion of the view. The tower will appear as part of a cluster of high rise buildings viewed against a backdrop of the forest-covered ridge of Rumbulara Reserve.
12a. Gosford Wharf	**350m**	MODERATE	The podium and lower floors of the tower will be screened from view by existing mature trees and recently planted trees in the new Leagues Club Park.

6.3. Visual Sensitivity of Viewers

Visual sensitivity refers to the extent to which viewers are able and/or willing to accept the change to the existing view that would result from a proposed development without perceiving it as an adverse impact on the existing visual quality.

Viewer sensitivity is influenced by a combination of factors that include:

- Location and context of the view, which may include residences, workplaces, recreation/open space areas, pedestrian paths, cycle ways and roads
- Expectations and activities of the viewer that may include residents relaxing at home, pedestrians walking along footpaths, people participating in recreation/sporting activities, people engaged in work activities, motorists or cyclists moving along road corridors
- Importance of the view, which could include views identified as being a regional scenic resource, referred to in tourist maps/guides, numbers of people deliberately seeking the view, reference to the view in literature and media.
- The key viewpoints from which the proposed development would potentially be visible have been assessed to determine the magnitude of visibility and the results presented in Table 2.

TABLE 2: VIEWER SENSITIVITY ASSESSMENT

Category of Viewer	Predicted Sensitivity	Comment
Residents	**HIGH**	Residents are generally visually sensitive to new development that is visible from their home or apartment
Office workers	**MODERATE**	The attention of office workers is mainly focused on the task at hand, but they are moderately sensitive if they enjoy attractive views from their office
Public open space and waterfront visitors	**MODERATE**	Visitors to public open space are often engaged in recreation activities that absorb their attention but those who use open space to sit and relax will be moderately sensitive to changes to the view
Recreation boating on Brisbane Water	**LOW**	People engaged in boating will generally be focused on sailing or boating activities with a low sensitivity to change to views that take place on land
Commuters on train	**LOW**	Commuters on trains are generally engaged in activities that maintain their view within the train (reading, talking, listening to or checking personal electronic devices)
Pedestrians & Cyclists	**LOW**	Pedestrians walking along footpaths in the commercial centre of Gosford are generally focused on where they are walking or their mobile phone and generally not sensitive to changes to the view. Cyclists are generally focused on avoiding vehicles and pedestrians and have a low sensitivity to changes to views
Motorists	**LOW**	Motorists in urban areas generally have a low visual sensitivity as they are focused on the act of driving and their view is concentrated the road in front of them

6.4. Visual Impact Assessment

The potential visual impact of the proposed development on each the key viewpoints was assessed using the following matrix.

SENSITIVITY OF VIEWERS	MAGNITUDE OF VISIBILITY: High	Moderate	Low	Negligible
High	High	Mod / High	Moderate	Negligible
Moderate	Mod / High	Moderate	Mod / Low	Negligible
Low	Moderate	Mod / Low	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Visual Impact Assessment Matrix

The Magnitude of Visibility and the Visual Sensitivity of Viewer have been combination to determine the level of visual impact for each viewpoint.

TABLE 3 - VISUAL IMPACT ASSESSMENT AT NOMINATED VIEWPOINTS

Viewpoint	Magnitude of Visibility	Visual Sensitivity of viewer	Visual Impact Level	Comments
1. Presidents Hill Lookout	NEGLIGIBLE	HIGH	NEGLIGIBLE	While visitors to the lookout enjoy panoramic views at some locations on the hilltop these views do not include the 26-30 Mann Street site.
2. Brian McGowan Bridge	MODERATE	LOW	MOD /LOW	The proposed Northern Tower will be seen as part of a cluster of high-rise buildings at the southern end of Gosford commercial centre.
3. Gosford Waterfront	MOD	MOD	MOD	Most waterfront users direct their view toward Brisbane Water with attractive views that include boating activity and are generally not looking towards the development site.
4. Leagues Club Park	HIGH	MOD	MOD / HIGH	Visitors to the Park will generally be focused on recreation activities and attractions in the Park, rather than views to adjoining urban development.
5. Poppy Park	MOD	MOD	MOD	Visitors are generally engaged in passive recreation, sitting or picnicking but views generally are towards the public art installation in the Park or to

				Brisbane Water, rather than towards the proposed tower.
6. War Memorial Park	LOW	MOD	MOD/ LOW	Mature trees create a high level of visual enclosure and while a small portion of the upper levels of the Northern Tower will be visible, most visitors have their attention focused on the memorial.
7. Mann Street - Georgiana Terrace intersection	MOD	LOW	MOD /LOW	Although part of the upper levels of the proposed Northern Tower will be visible to pedestrians and motorists at the intersection, the visual impact will be relatively low as most pedestrians and motorists will be focused on their line of movement and avoiding collisions.
7a. Mann St. & Donnison St. intersection	LOW	LOW	LOW	Although part of the upper levels of the proposed Northern Tower will be visible to pedestrians and motorists at the intersection, the visual impact will be low due to the relatively long view distance and most pedestrians and motorists being focused on their line of movement and avoiding collisions.
8. Gosford Railway Station	LOW	LOW	LOW	While the upper levels of the proposed Northern Tower will initially be visible to pedestrians using the bridge, the visual impact will be relatively low due to the long distance of the view and the focus of most pedestrians on where they are walking. In the longer term the proposed 'Waterside' development will block views of the Northern Tower and reduce the visual impact to Negligible.
9. Kibble Park	LOW	MOD	MOD /LOW	Although part of the upper levels of the proposed Northern Tower will be visible to park users, the visual impact will be low due to the long distance of the view and the fact that most park users are focused on recreation activities or socialising.
10. Rumbulara Reserve	LOW	HIGH	MOD /LOW	Views from the Reserve are generally blocked by tree canopies but there is one location where a gap in the tree canopy allows a view to the 26-32

				Mann Street site and Brisbane Water beyond. The Northern Tower will be visible, but the long distance of the view and the limited extent of the viewing area makes the visual impact low.
11. Brisbane Water & Point Clare to Gosford Railway Crossing	**LOW**	**LOW**	**LOW**	The visual impact of the proposed Northern Tower is predicted to be low due to the long distance of the view and the fact that the tower will form part of a cluster of existing and proposed high rise building when viewed from the railway crossing. Most of the views will be long distance and the attention of people on the train will generally be focussed on activities within the train, such as reading or using digital devices.
12. Brisbane Water Marine Rescue Jetty	**LOW**	**LOW**	**LOW**	The visual impact of the proposed Northern Tower is predicted to be low due to combination of a long-distance view and the fact that the tower will form part of a cluster of existing and proposed high rise buildings. The attention of most people engaged in recreation boating on Brisbane Water are generally focused on sailing or boating activities.
12a. Gosford Wharf	**MOD**	**MOD**	**MOD**	The visual impact of the proposed Northern Tower is predicted to be moderate due to visual screening by mature trees of the podium and lower levels of the tower. The upper levels will be seen in the context of other multi-storey buildings adjoining the project site.

6.5. Mitigation Measures

Mitigation of potential visual impacts of the proposed Stage 1 Northern Tower will be achieved through a combination of design initiatives that include:

- Refinements to the design of the tower and podium by DKO Architects in response to design review comments and consultation with the Design Review Panel.
- Preparation of a Landscape Design Concept for the podium, Baker Street frontage and the pedestrian corridor connection between Mann Street and Baker Street.

The potential visual impact of the development on viewpoints to the west of the project site will also be mitigated by tree planting carried out as part of the Leagues Club Park development that has replaced the visually open turf-covered sports fields.

The effectiveness of these mitigation measures varies between the various viewpoints. For long distance views, such as those from Brian McGowan Bridge and views from Brisbane Water, the most significant visual impact mitigation will result from the design refinements of the tower structure. From those viewpoints close to the project, the mitigation of potential visual impact will primarily result from existing and newly planted trees together with landscape treatment of the western and southern edges of the podium. The extent to which these mitigation measures will be effective is illustrated by the photomontages prepared by Architectural Images for each of the nominated viewpoints.

In response to Condition B1 issued by DPIE the design architects DKO Architecture carried out a process of design refinement that will mitigate the potential visual impact of the Northern Tower. The revised building design has resulted in a development envelope that represented 85% of the previous volume. By maintaining the design height and reducing the volume a more slender tower has been designed that will be visually less prominent than the original design. In addition, the three-dimensional form of the tower has been articulated by incorporating a deep recess on the western side of the tower that creates the appearance of two slender towers. This visual affect is reinforced by the top of the tower being stepped by finishing portions of the tower at two different elevations. The result is to visually reduce the apparent bulk of the building.

The stepped form of the top of the tower reflects the slope of the ridgeline that forms the backdrop in views from the west that include the Central Coast Highway over the Brian McGowan Bridge. The pattern of light and shadow on the facades of the tower will visually articulate the structure as the light changes throughout the day to further mitigate its apparent visual bulk.

The south-west corner of the podium has been chamfered to improve sight lines to and from the central pedestrian corridor and reduce the visual prominence of the podium structure. The front edge of the tower has been moved back from the western edge of the podium by 5.7 metres which will result in a larger proportion of the lover levels of the tower being visually screened by to the podium in views from Baker Street and from the adjoining new Leagues Club Park.

The Landscape Design Concept covers the podium, Baker Street frontage and the pedestrian corridor connection between Mann Street and Baker Street. Tree planting along the central pedestrian corridor will provide visual softening of the adjoining structures as well as shade for pedestrians. Tree planting along the Baker Street together with planting carried out in the Leagues Club Fields Park will contribute to the screening of ground level views of the podium and tower as the trees mature over time.

7. VIEW SHARING ANALYSIS FOR STAGE 1 DA

7.1. Introduction

The SSDA for the proposed mixed-use development at 26-30 Mann Street included a Visual Impact Assessment that incorporated a view sharing assessment.

It is noted that the extent of transfer of views presented in the Concept SSDA for the whole development was considered reasonable and accepted by DPIE and the IPC. Further it is noted that the design refinements incorporated in the Northern Tower include confining the built form to 85% of the volumetric fill. This has resulted in a narrower tower that will reduce the extent of view sharing compared to the approved Concept SSDA design.

The SSDA approval for the overall development issued by the Independent Planning Commission included a requirement that a visual impact assessment and view sharing analysis be submitted with each of the three stages of the approved Master Plan.

The view sharing analysis presented in this section of the report is specifically related to the DA for the Northern Tower that forms Stage 1 of the project. Stage 1 comprises a residential tower and podium incorporating commercial uses. While this analysis is focused on Stage 1 it sits within the context of the visual impact assessment that was prepared as part of the DA for the 26-30 Mann Street development master plan.

The Gosford SEPP allows for uplift which is expressed in the approved SSDA Concept envelopes (as amended). This DA for the Northern Tower not only complies with those approved parameters but achieves an improved outcome through the various post-consent design modifications.

In the context of 26-30 Mann Street the primary consideration of view sharing relates to water views of Brisbane Water. In addressing the issue of view sharing there are three adjoining multi-story residential buildings from which water views are currently available and may be reduced by the proposed Stage 1 development. These existing buildings include:

- ‘The Broadwater’, which is an apartment complex located on Georgiana Terrace adjoining Henry Parry Drive
- The ‘Merindah’, which is a multi-level residential apartment building
- ‘Georgiana Quay’, which is an apartment complex located on Henry Parry Drive.

The urban context of the 26-30 Mann Street project site and its relation to the street pattern together with the footprints of adjoining residential and commercial buildings are shown on Figure 34. The proposed Northern Tower is shown in red and the other two towers are shown in pink. The existing commercial building on the 26-30 Mann Street site is shown in blue together with the existing ATO building located on the northern boundary fronting on to Georgiana Terrace. The waterfront open spaces adjoining Brisbane Water, which include the Leagues Club Fields Park, Poppy Park and War Memorial are shown in green. Kibble Park, which is located north east of the project site, is also identified in green. Although construction has not yet commenced on the ‘Waterside’ and ‘Creightons’ developments the footprints of these proposed towers are shown in yellow.

Figure 34 – Existing & proposed building footprints on the 26-30 Mann St. site & adjoining areas

7.2. View Sharing Analysis

This view sharing analysis was carried out in accordance with the principles set out in the Land and Environment Court of NSW Judgment Tenacity v Warringah (2004), which involves a four-step process to determine if the extent of view sharing would be considered to be reasonable. The concept of view sharing is applicable when a property that currently has significant views is required to share some of those views with a proposed new development by transferring some of the view to the occupants of the new development.

The four-step view sharing analysis process included the following components:

a) Determine the characteristics of the view to be shared
b) Identify what part of the existing buildings the view is currently available from
c) Assess the extent of the view sharing impact
d) Assess the reasonableness of view sharing that would result from the proposed development.

a) Characteristics of view

The characteristics of the views that are to be shared in relation to the proposed development at 26-30 Mann Street are primarily water views over Brisbane Water, which extend to forest covered slopes and ridgeline in the distance. A focus on water views was therefore adopted as the basis for determining the extent of views from existing multi-storey apartment buildings and the potential extent of view sharing associated with the proposed Stage 1 development of the Northern Tower at 26-30 Mann Street.

b) Existing views

To determine from which part of the existing apartment buildings the water views are currently available, reference was made to the floor plans of 'The Broadwater' and 'Merindah' developments. Assessment of the Georgian Quay residential development was based on a visual inspection of the western side of the building to determine the configuration of windows and balconies.

c) Extent and significance of views

The extent of impact on the current water views of the proposed development was determined by taking account of existing buildings that may partly or wholly block views to the water surface from nominated viewpoints on the residential apartment buildings. Photos from the nominated viewpoints were taken and photomontages prepared to display the extent and quality of view sharing from each of the buildings. The degree to which the proposed development of the Northern Tower would further reduce the currently available views and thereby transfer part of the view to the proposed Northern Tower was shown on a series of analysis diagrams that plot the view cone.

The significance of the view reduction has been assessed qualitatively by applying ratings that include negligible, minor, moderate, severe and extreme. Each of these ratings is defined below in order to achieve a level of consistency throughout the assessment and to provide readers with a clear understanding of the qualitative assessment.

The levels of significance of the view reduction that would result from view sharing are defined as:

- **Negligible** - only a very small portion that is barely perceptible
- **Minor** - the proposed development would result in a small portion of the water view being blocked and transferred to the new development
- **Moderate -** the proposed development would result in some water views being blocked and transferred to the new development
- **Severe -** most of the current water views from the existing apartments would be blocked by the proposed new development
- **Extreme -** all of the currently available water views from the existing apartments would be blocked by the proposed development and wholly transferred to the new apartment building.

d) Reasonableness

The final step of the view sharing assessment was to determine how reasonable the extent of view sharing associated with the proposed development would be. To arrive at a determination of reasonableness consideration was given to the question of whether the proposed layout, form and

configuration of the buildings provide a reasonable view sharing outcome within the context of planning approval requirements and whether a more skilful design could better mitigate potential impact on views from adjoining properties.

The footprints of the proposed buildings at 26-30 Mann Street are shown on Figure 35 together with the existing buildings that were analysed in relation to view sharing. Viewpoints located on the buildings include:

D1 – 'The Broadwater'

- Upper-level floors 6 to 8
- Lower-level floors 1- 5

D2 – 'Merindah'

- Upper-level floors 7 to 15
- Podium

D3 – Georgiana Quay

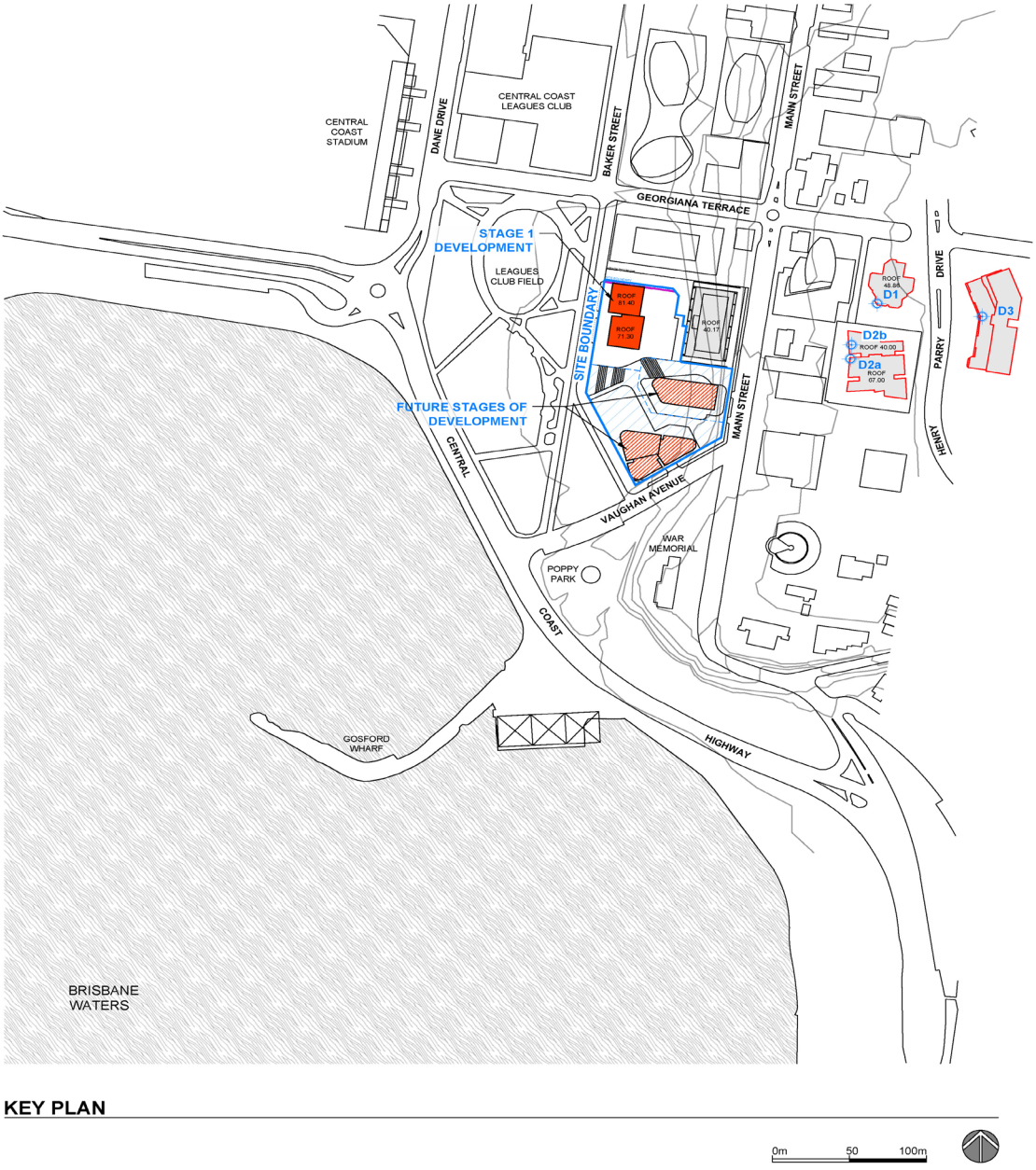


Figure 35 – Key Plan of viewpoint locations for the View Sharing Analysis

7.3. 'The Broadwater' Development | 127-129 Georgiana Terrace

7.3.1. Characteristics of existing views

'The Broadwater' building located on Georgiana Terrace to the west of Henry Parry Drive comprises a multi-level residential development that extends to 8 floors in which apartments occupy the four corners of the floor plate as indicated on Figure 36. Each apartment has a balcony that wraps around it to provide views from an arc of more than 180 degrees. The apartments located on the south west corner of the building have the most direct views over the 26-30 Mann Street site.

An assessment of the existing water views from 'The Broadwater' apartment building was carried out from a nominated viewpoint at D1 on the south west corner of the building. Photomontages from the viewpoint were prepared to confirm the extent and quality of view sharing and view cones from multiple levels of the building were plotted and analysed to give a more complete understanding of the impact of view sharing from the entire building.

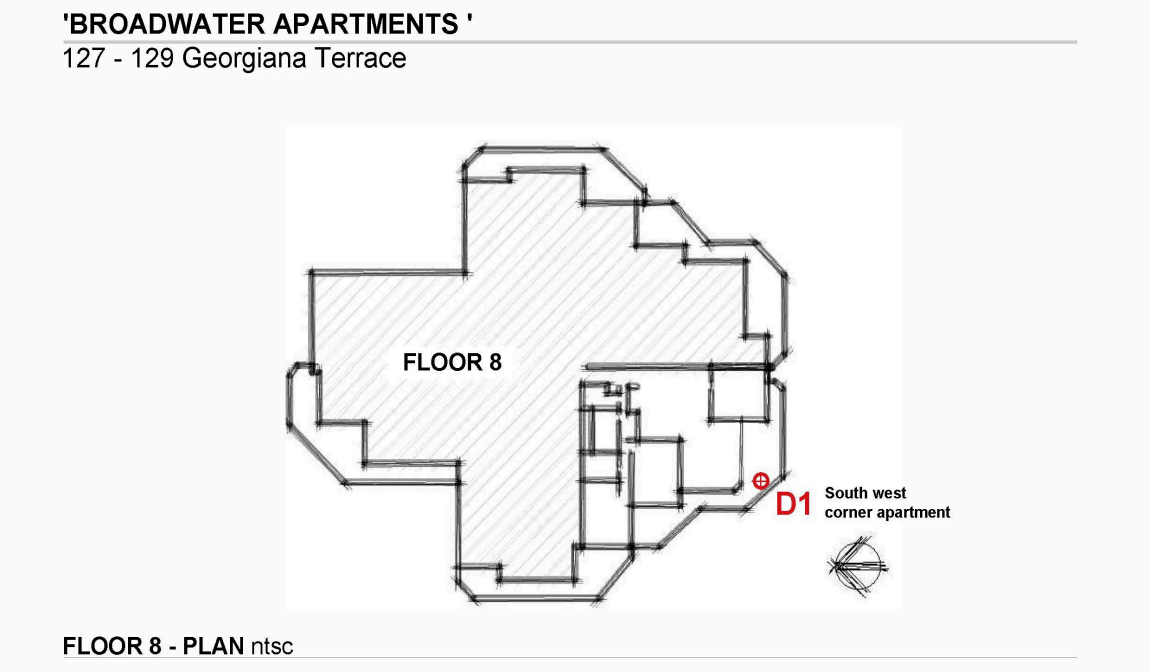


Figure 36 – Typical floor plan of Broadwater Apartments

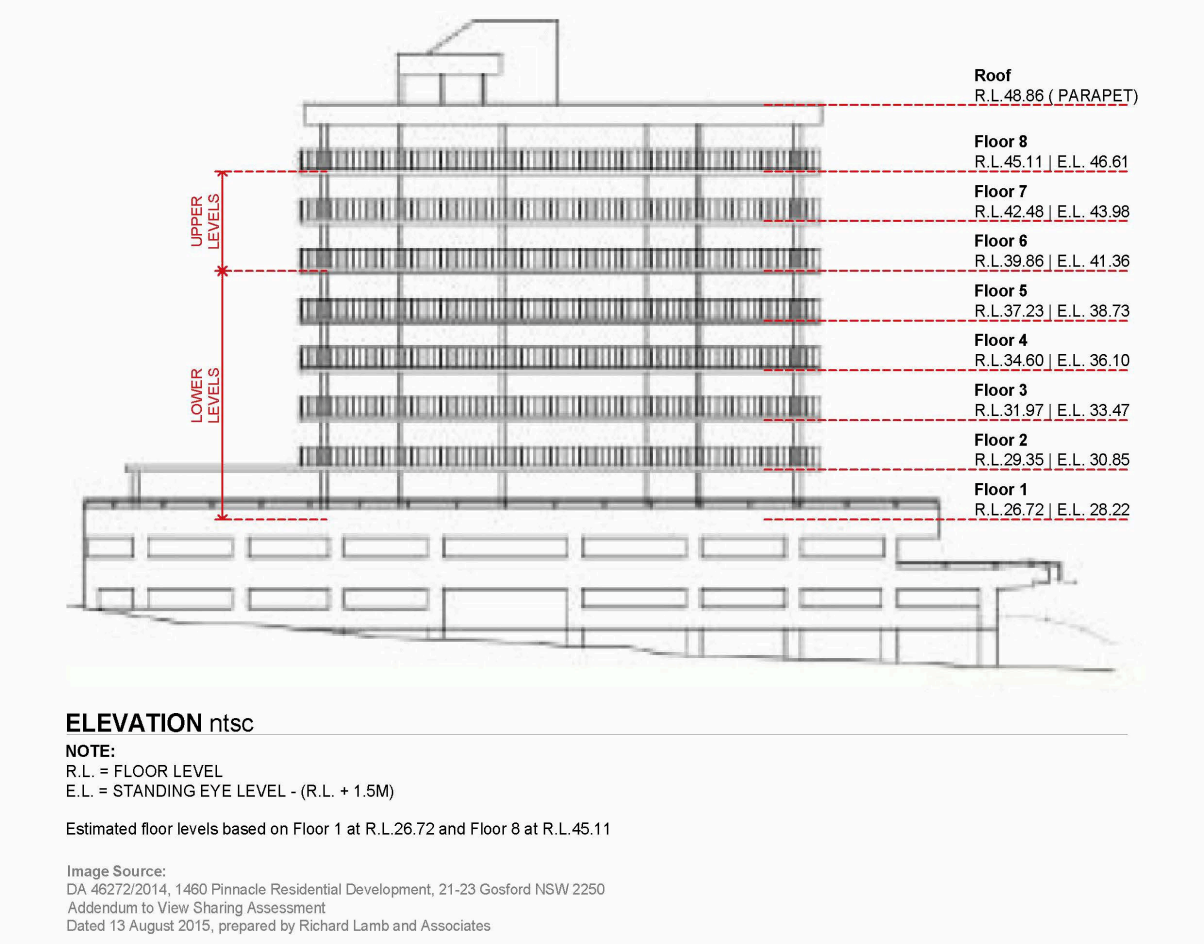


Figure 37 – Northern Elevation of Broadwater Apartments

7.3.2. View sharing analysis

A series of photomontages presented has been prepared by Architectural Images for use in the assessment the extent and quality of view sharing. A detailed description of the methodology used by Architectural Images to prepare the photomontages is presented in Appendix B together with information about the photography, survey, 3D Model, camera matching, camera information and software used together with photomontages, the photographs they are based on, the 3D wireframe models of proposed buildings and RL information. The view cone of the photo taken from the nominated viewpoint is shown in Figure 38. Photos of the existing situation and photomontages are presented on the pages that follow.

'The Broadwater' apartments currently enjoy panoramic views to the south and west across urban development in the foreground to Brisbane Water in the mid to long distance and forest covered slopes and ridges in the far distance. Views to the majority of the land/water interface along the Gosford waterfront are screened by existing trees and vegetation to the southwest and to the west by the existing building at 32 Mann Street. The photomontages indicate that potential water views to the south from 'The Broadwater' are already blocked by the 'Merindah' multi-storey residential apartment building.

The highest level apartments in The Broadwater are located on Floor 8 and the apartment with the most significant water view located to the rear of the block on the south west corner of the building. Living areas in the apartment face southwest with the kitchen facing south and a bedroom facing west. Occupants of the apartment have access to a private balcony that provides panoramic views to the south and west. The proposed multi-storey residential buildings on the 26-30 Mann Street site will reduce a portion of the water views to the west and southwest that include the remaining land/water interface along the Gosford waterfront.

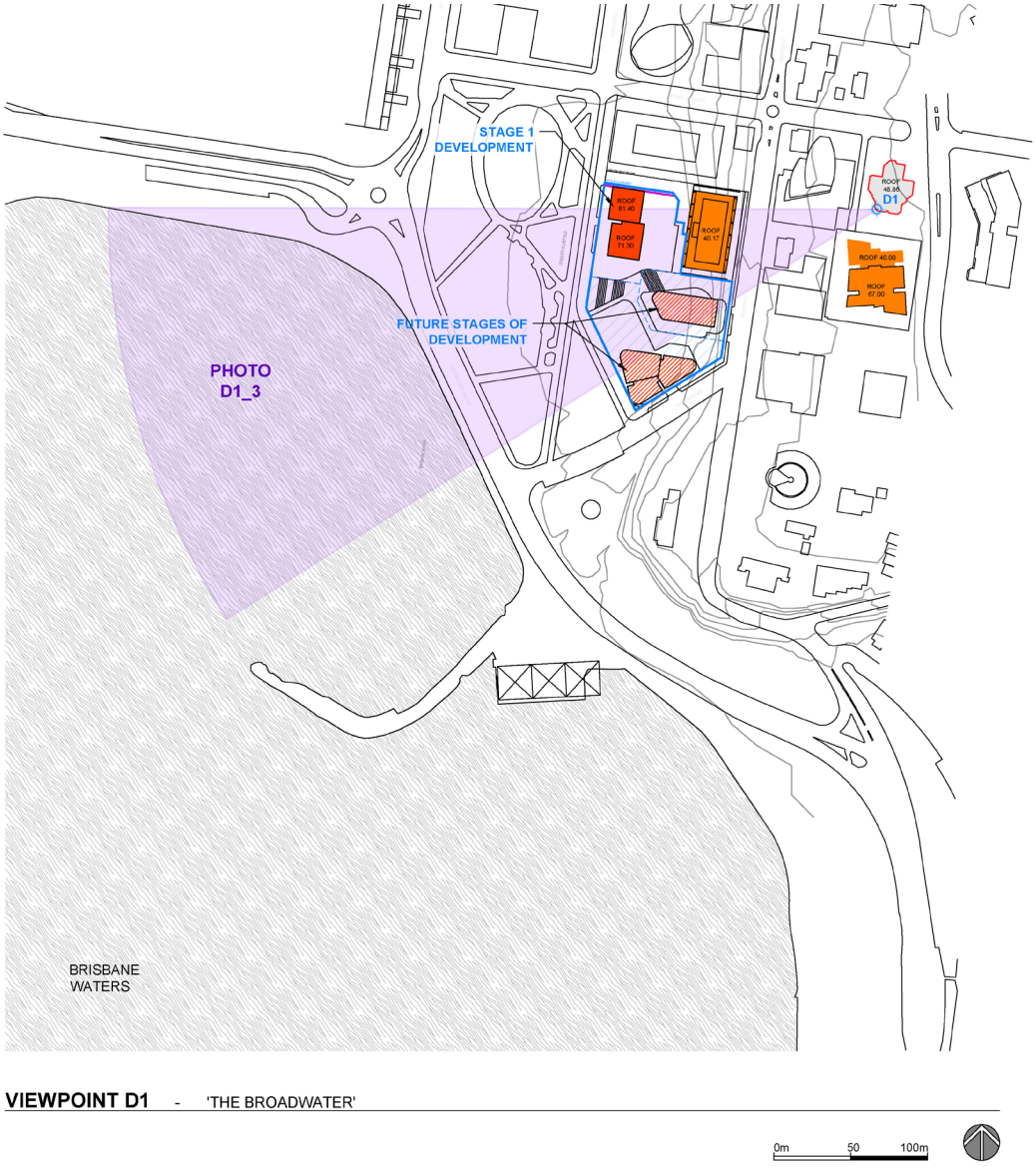


Figure 38 – Photomontage view cones for 'The Broadwater' development at Eye level RL 46.61

Photo D1.1

Existing view looking west from 'The Broadwater'

Montage D1.2 Predicted view looking west from 'The Broadwater'

Figure 39 – Viewpoint D1 existing view & photomontage

Further assessment of the impact on existing water views from 'The Broadwater' apartment building was carried out through the analysis of view cones from the nominated viewpoints on the lower floor as well as the top floor. The angle of the view cone was determined by the width of the view to the water surface of Brisbane Water in the vicinity of the Gosford waterfront. The elevation of the viewpoint was assumed to be the RL of the selected floor of the building plus 1.5 metres to account of the eye level of the average standing person.

Upper Floors – Floors 6, 7 & 8

The analysis presented in Figure 40 confirms that potential water views to the south from the upper floors are already blocked by the 'Merindah' development. The proposed multi-storey residential building in Stage 1 of the 26-30 Mann Street site development would reduce portions of the view to the west leaving open water views to the south-west.

The significance of the predicted view reduction and transfer falls within the category of Minor as defined in Section 7.2. Some of the water view will be transferred to the proposed Stage 1 northern tower, the majority of which is from the living room and balcony of the southwest facing apartments. Given that multiple sites adjoining 'The Broadwater' have been zoned to allow multi-storey buildings to be developed it is reasonable to expect that that a portion of the existing water views would be transferred to the new development.

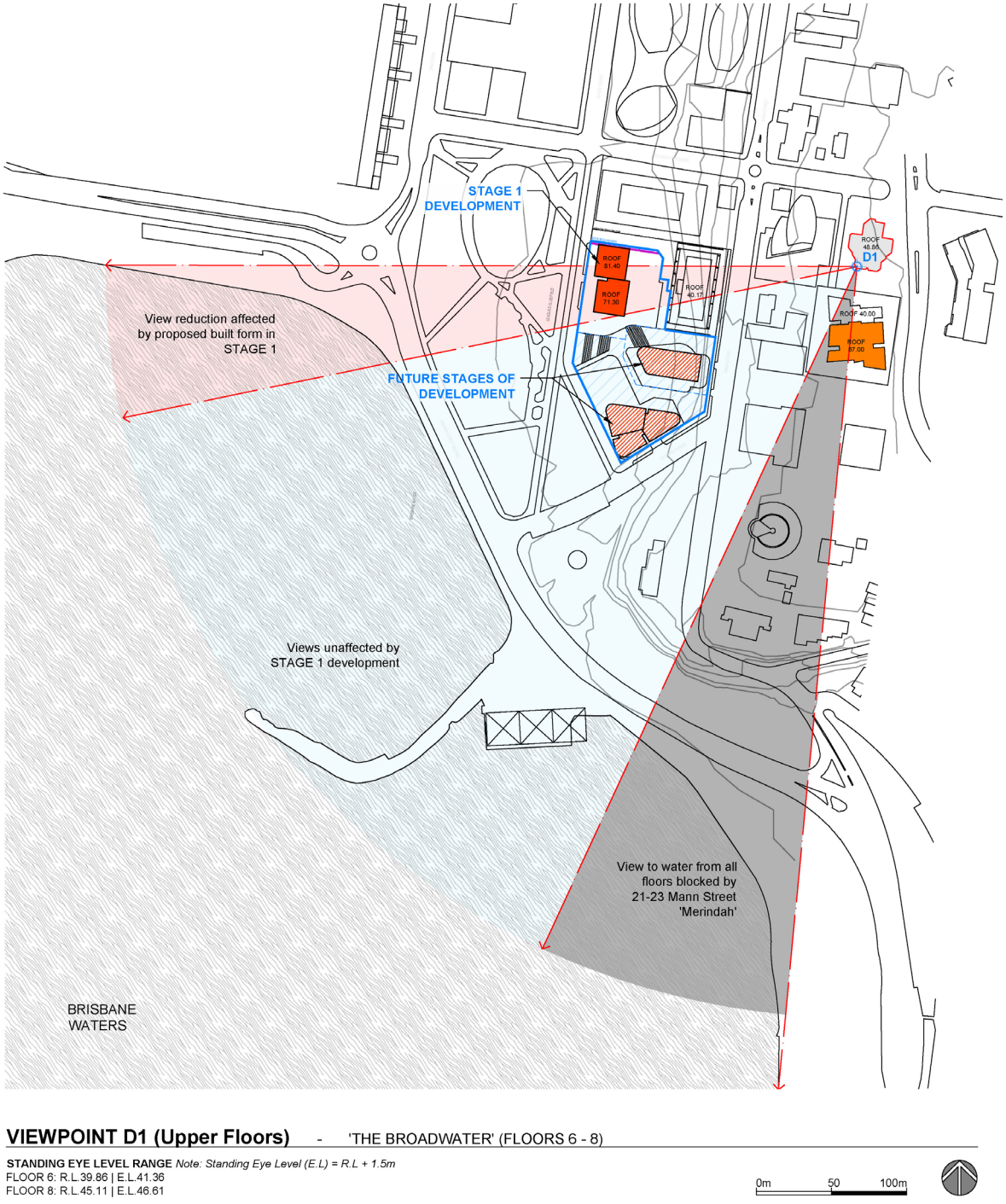


Figure 40– View Sharing Analysis Diagram for 'The Broadwater' development – Upper Floors

Lower Floors – Floor 5 & lower

The existing building on the project site at 26-30 Mann Street has a top level of RL 40.17m. Consequently, views from apartments in 'The Broadwater' on Level 5 and lower floors are already blocked by the existing building as illustrated on Figure 41. The proposed Stage 1 development at 26-30 Mann Street would therefore not result in any additional blowing of views. The significance of the view reduction and transfer would therefore be Negligible as defined in Section 7.2. Existing water views from lower floors of 'The Broadwater' to the south of the existing building on the project site would be maintained.

Figure 41 – View Sharing Analysis Diagram for 'The Broadwater' development– Lower Floors

7.3.3. Reasonableness assessment

Given that multiple sites adjoining 'The Broadwater' have been zoned to allow multi-storey buildings to be developed it is reasonable to expect that that a portion of the existing water views would be transferred to the new development.

The magnitude of the view transferred from the upper floors of 'The Broadwater' to the proposed Stage 1 Northern Tower of the 26-30 Mann Street development has been assessed as falling in to the category of Moderate as defined in Section 7.2. Water views from the lower floors of 'The Broadwater' are already blocked by the existing commercial building on the project site.

7.4. 'Merindah' Development | 21 – 23 Mann Street

7.4.1. Characteristics of existing views

'Merindah' building residential apartments are in a configuration in which the southern portion of the building extends to 15 floors while the northern portion consists of 6 floors with a landscaped podium above, which is accessible to residents and incorporates planting and seating for passive recreation. The configuration of the apartments in the southern portion of the building comprises three apartments, along the western side of the building, each with a balcony as shown in Figure 42. Views from the balconies are generally to the southwest with part of the view over the project site and a portion of view to Brisbane Water and Gosford waterfront. The western elevation of the Merindah building presented on Figure 43 shows the relative locations of the Podium on Floor 7 and the top floor at level 15.

Figure 42 - Floor Plans of apartments on Floor 15 & Podium Level of 'Merindah'

An assessment of the existing water views from the 'Merindah' apartment building was carried out from nominated viewpoints on the top floor D2(a) and the podium level D2(b). Photomontages from the viewpoints were prepared to confirm the extent and quality of view sharing. View cones from multiple levels of the building were plotted and analysed to give a more complete understanding of the potential impact of view sharing from the entire building.

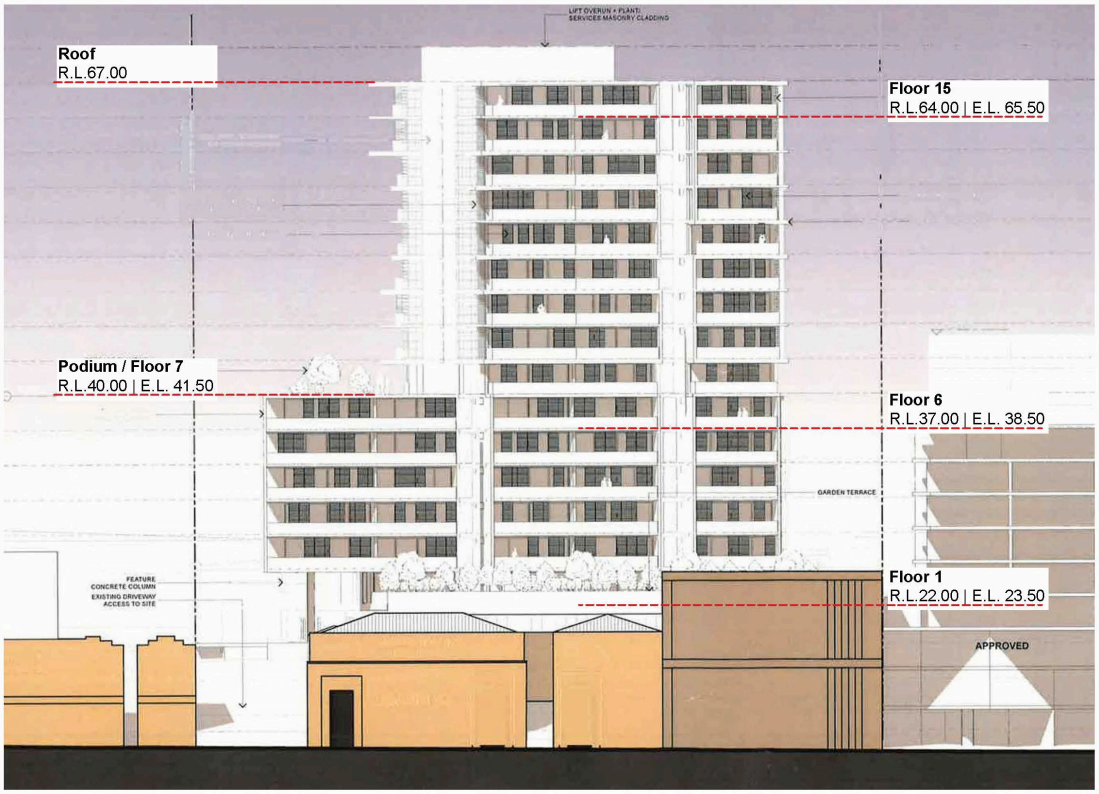


Figure 43 - Western Elevation of 'Merindah' showing Podium level & top floor

7.4.2. View sharing analysis

Assessment of the impact of Stage 1 Development of the Northern Tower on existing water views from the 'Merindah' apartment building was carried out through the analysis of view cones from the nominated viewpoints D2a on the top floor and D2b on the lower floor podium. The elevations of the viewpoints were assumed to be the RL of the selected floor of the building plus 1.5 metres to account of the eye level of the average standing person.

Upper Level Apartments

Views from Viewpoint D2(a) on floor 15 comprise of existing urban development in the foreground with waterfront open space, land/water interface of Brisbane Waters and forest covered slopes and ridge beyond as illustrated by the photograph in Figure 45.

The proposed development of the Stage 1 Northern Tower will block only a small portion of the water view as illustrated on Figure 44, with views to the southwest over Brisbane Waters largely be unaffected. However, future development stages at 26-30 Mann Street will involve significant sharing of water views as shown by the photomontage in Figure 46. The views to be shared will primarily be those from the balconies of the apartments along the western face of the southern portion of 'Merindah' building.

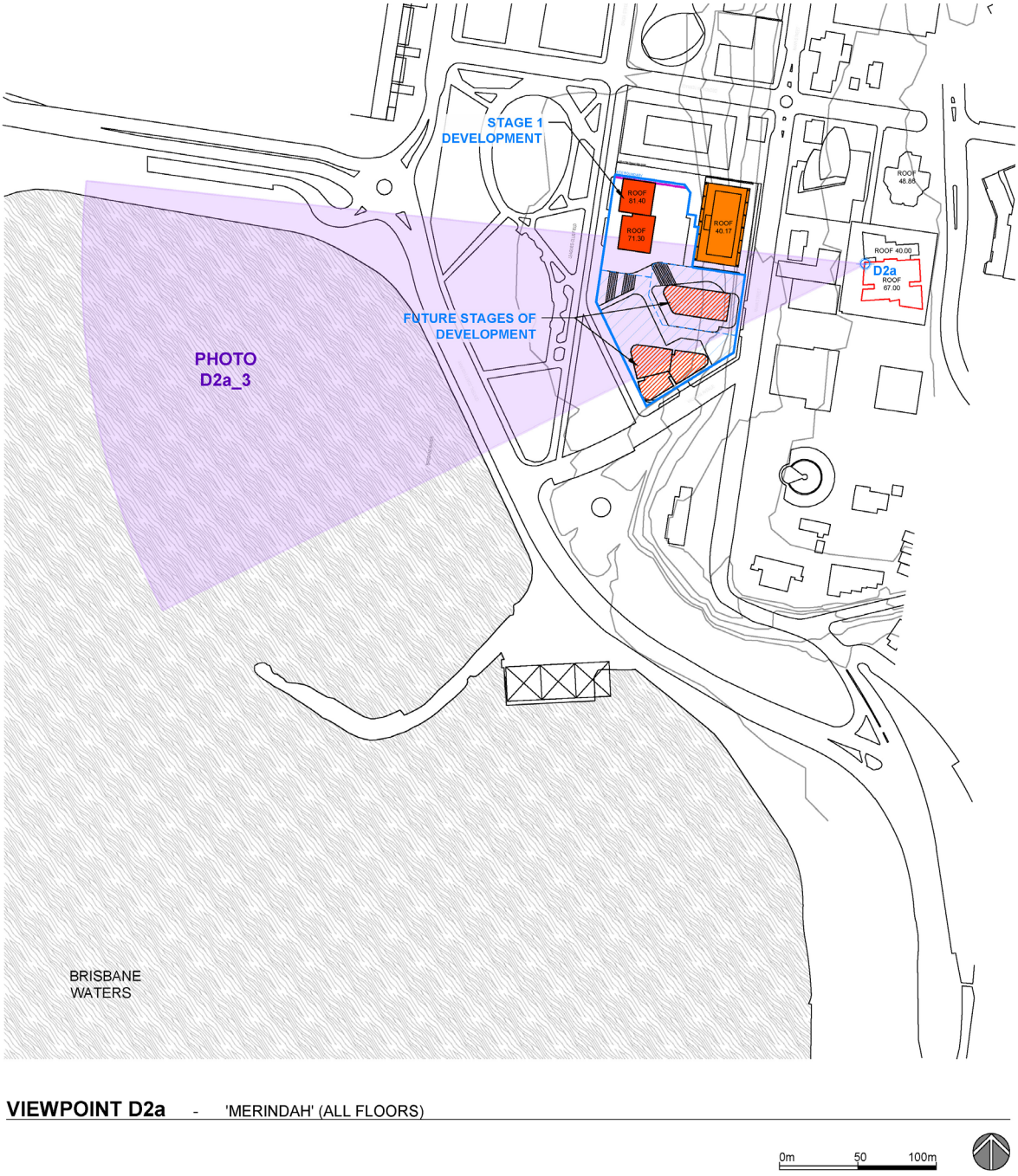
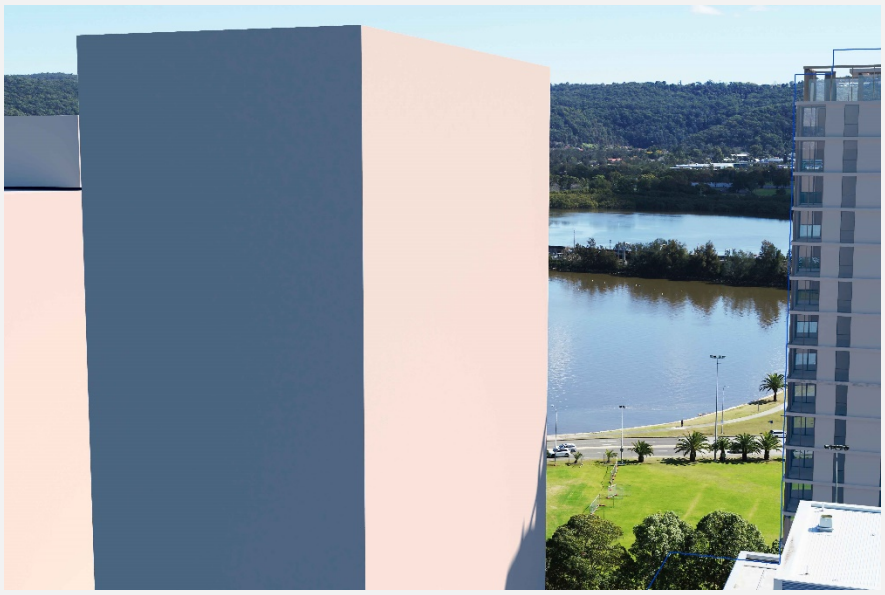


Figure 44 – View cone covered by the photomontage from Viewpoint D2(a) on Floor 15 |Eye level RL65.50

Photo D2a.1
Existing view looking west from 'Merindah' floor 15

Figure 45 – Viewpoint D2a existing photo from level of floor 15



Montage D2a.2
Predicted view looking west from 'Merindah' Floor 15 with Stage 1 tower partly visible on right hand edge of photo & future development stages 2 & 3 towers in left half of the photograph

Figure 46 – Photomontage from Viewpoint D2a

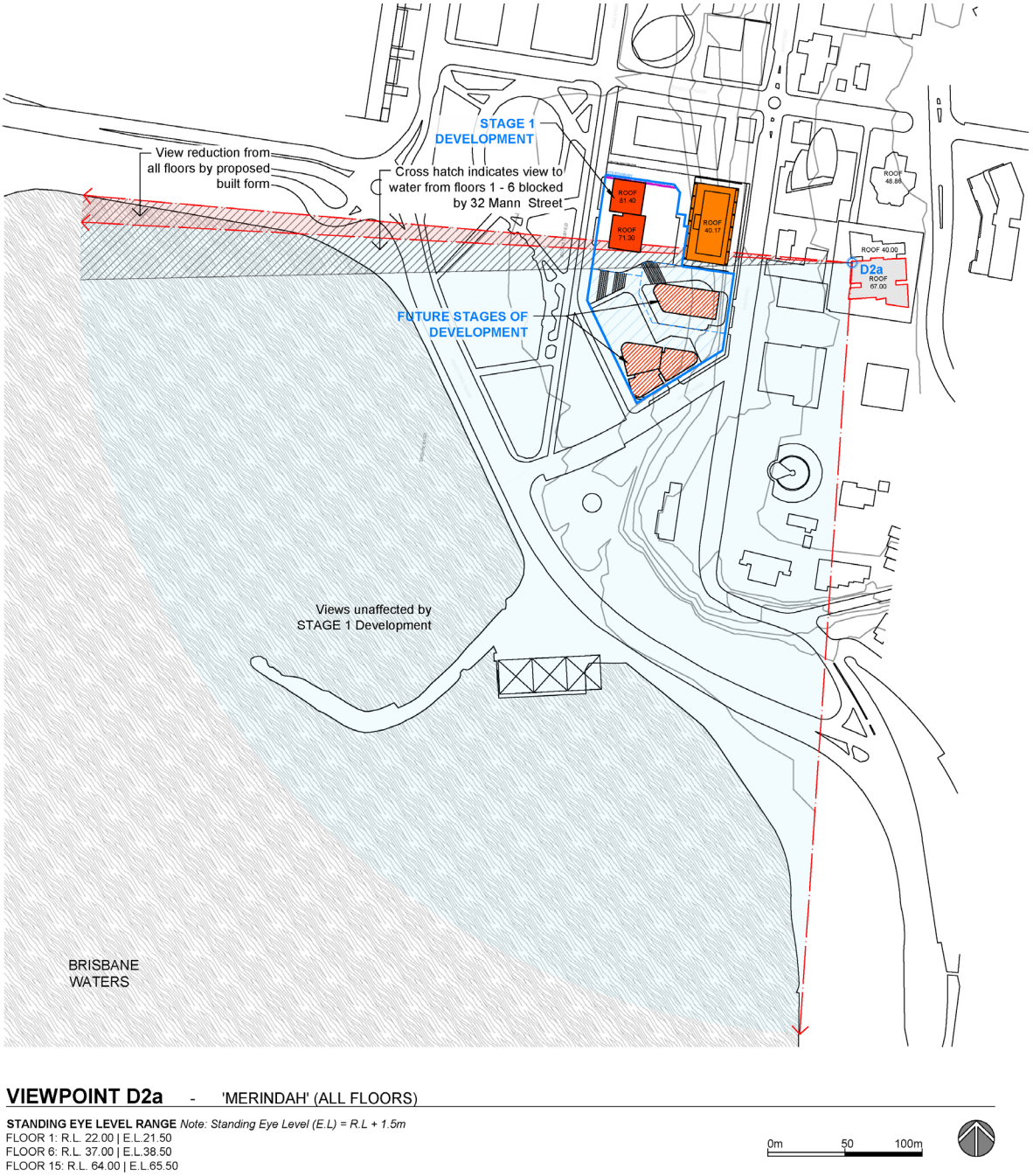


Figure 47 – View Sharing Analysis Diagram for the 'Merindah' development – Upper Floors, Viewpoint D2a

The extent of view sharing and transfer was determined in plan by projecting a view cone to Brisbane Water that takes account of the proposed Northern Tower in the Stage 1 Development. Results of the view sharing analysis for the upper floors of the 'Merindah' are illustrated in Figure 47. The analysis indicates that the existing building on the project site would not block views from the upper floors of the Merindah development and the proposed Stage 1 development of the Northern Tower would result in a minor reduction in the extent of water views of Brisbane Waters.

The significance of the predicted view reduction and transfer associated with the upper floors that would result from the Stage 1 development of the Northern Tower has been assessed as falling within the category of Negligible.

Podium & Lower Floors

The podium level Viewpoint D2(b) is located on Floor 7 on the western face of the northern face of the 'Merindah' building and presents similar views to the upper-level apartments. However, due to the lower height less water surface is visible. The existing building on the project site at 26-30 Mann Street has a top level of RL 40.17m, which means that views to Brisbane Waters from the podium of 'Merindah' at standing eye height of 40.15m are blocked, which is illustrated in the photograph on Figure 49. Views from apartments on floors below the podium are also blocked by the existing building. Future development stages at 26-30 Mann Street will involve significant sharing of water views as indicated by the photomontage in Figure 50.

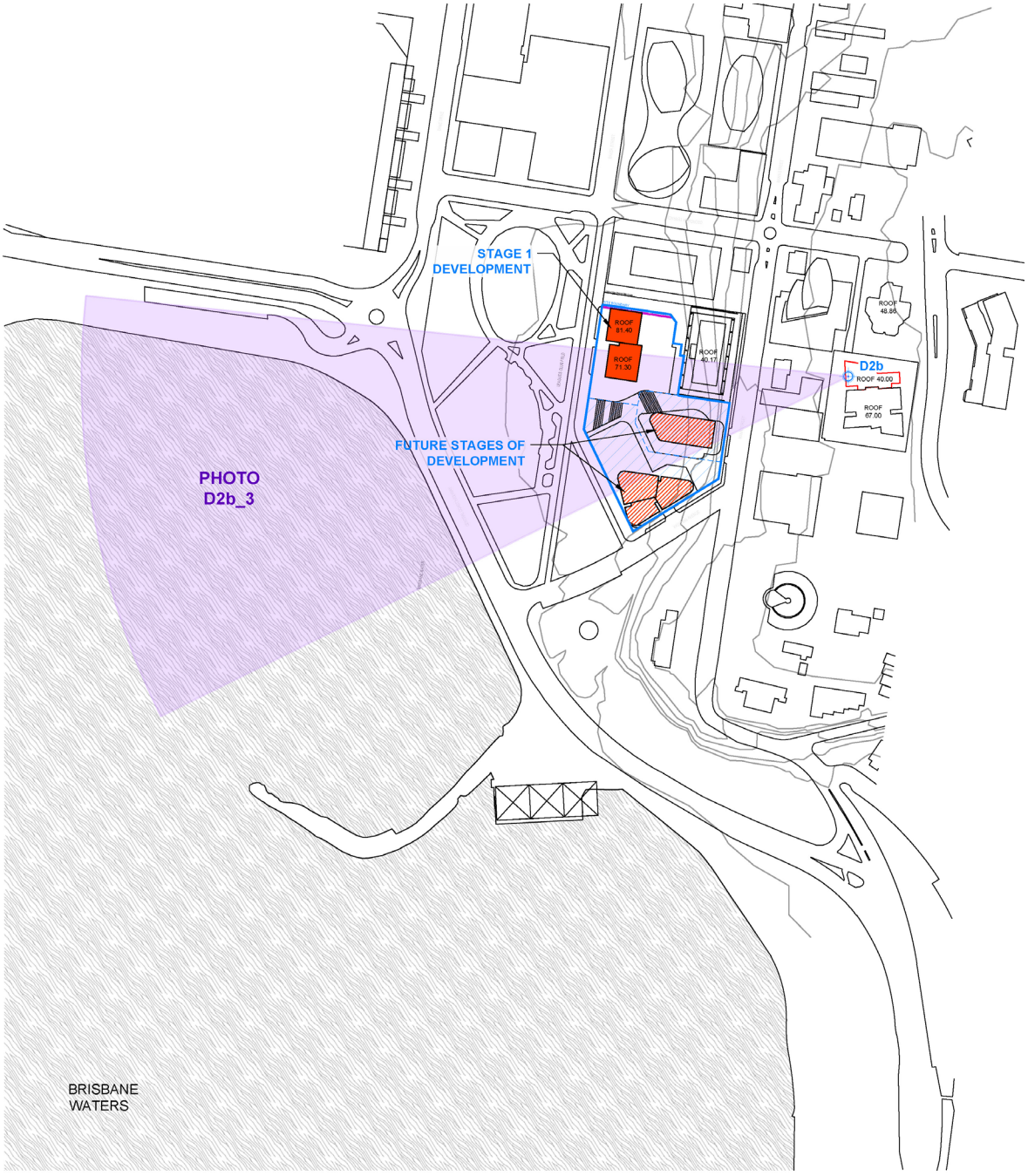
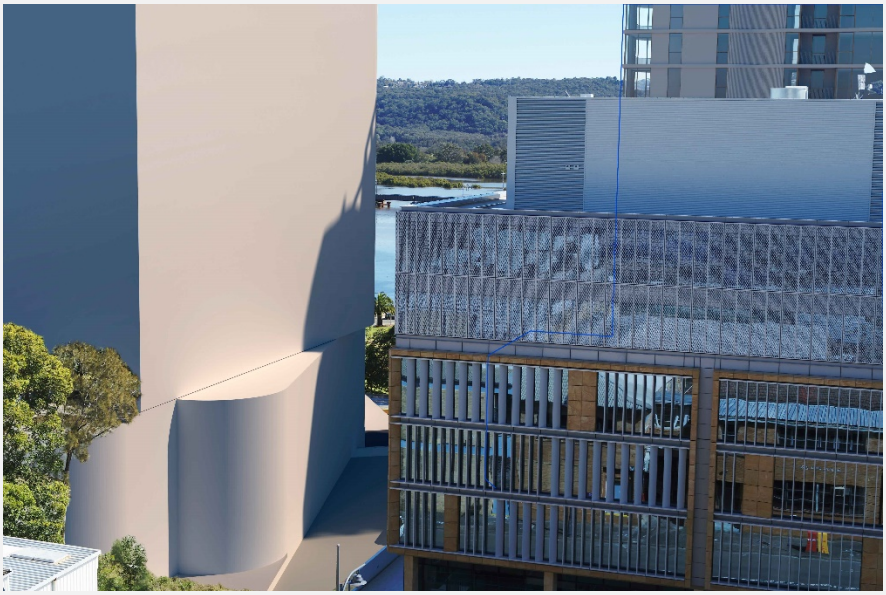


Figure 48 – Photomontage view cones for the 'Merindah' from Podium Viewpoint D2b | Eye level RL 41.50

Photo 2b.1
Existing view looking west from 'Merindah' Podium with existing building at 26-30 Mann St. blocking views of Brisbane Waters in right hand portion of the image

Figure 49 – Viewpoint D2b photo of existing view at podium level



Montage 2b.1
Predicted view looking west from 'Merindah' Podium level with a small portion of the Stage 1 Northern Tower visible above the existing building in the foreground & Stage2 tower on left

Figure 50 – Viewpoint D2b photomontage

The extent of view sharing and transfer was determined in plan by projecting a view cone from the Podium level of the 'Merindah' development to the surface of Brisbane Water. Results of the view sharing analysis are illustrated in Figure 51**,** which confirms that views from 'Merindah' to the west and southwest will be largely unaffected by the proposed Stage 1 development of the Northern Tower on the 26-30 Mann Street site. As illustrated in Figure 50 the significance of the predicted view reduction and transfer would fall within the category of Minor.

Some of the view to the forest covered ridge to the west will be transferred to the proposed development from the Podium on the northern portion of the 'Merindah' building, while a large portion of the view to the southwest will be unaffected by the Stage 1 Northern Tower development.

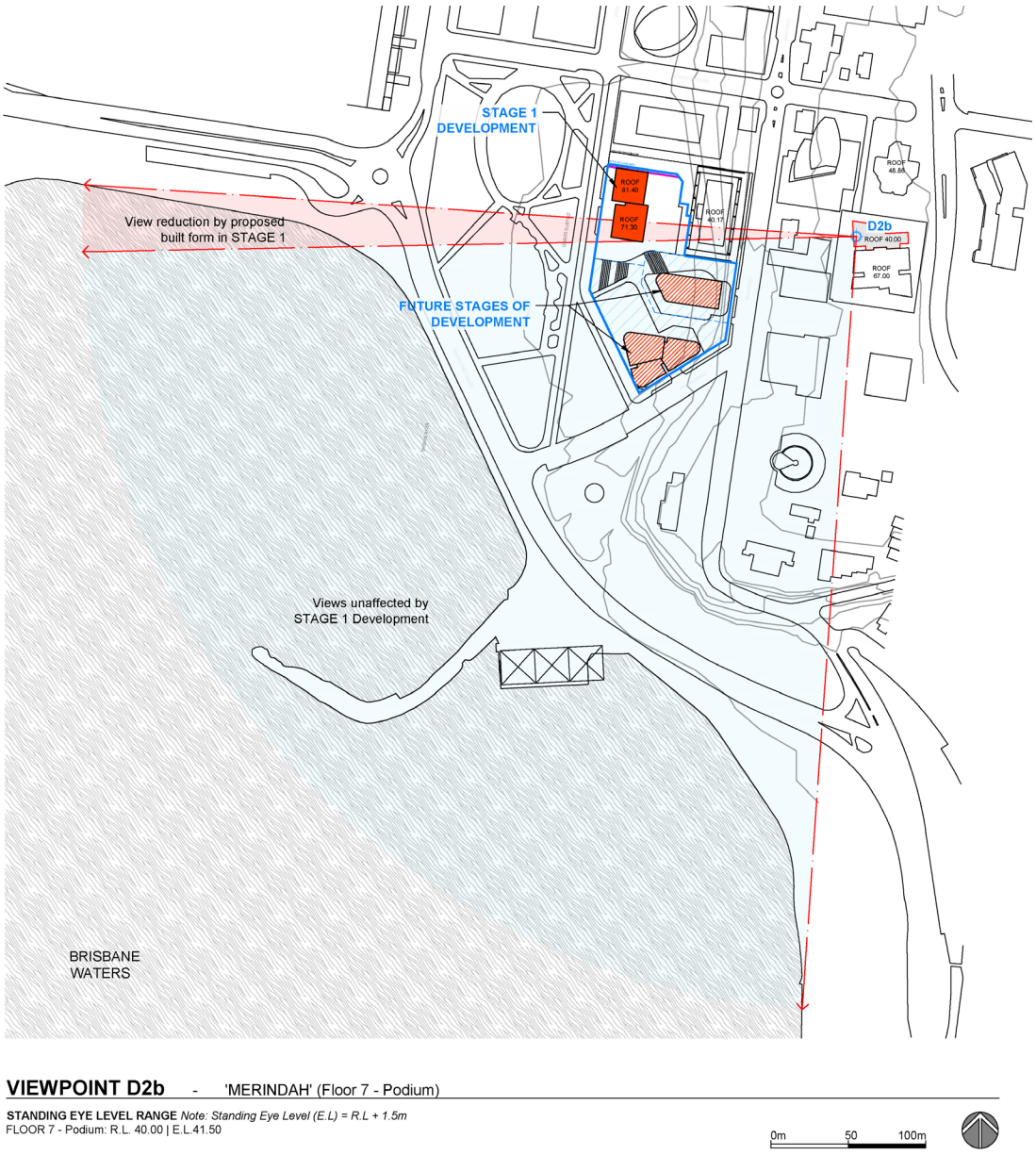


Figure 51 – View Sharing Analysis Diagram for 'Merindah' development – Podium & lower floors

7.4.3. Reasonableness assessment

As multiple sites adjoining the 'Merindah' development have been zoned to allow multi-storey buildings to be developed it is reasonable to expect that that a portion of the existing water views would be transferred to the new developments.

The assessment indicates that development to the proposed Stage 1 Northern Tower of the 26-30 Mann Street would result in a very small portion of the water view from Upper Floors of the 'Merindah' being transferred to the Stage 1 development. The magnitude of existing view that would be transferred has been assessed as falling into the category of Negligible.

The proposed development of the Stage 1 Northern Tower would result in a small portion of the water view from the Podium and Lower Floors of the 'Merindah' development being blocked and transferred to the new development. The magnitude of the existing view that would be transferred has been assessed as falling into the category of Minor.

7.5. Georgiana Quay Development | 107-115 Henry Parry Drive

7.5.1. Characteristics of existing views

Georgiana Quay is a multi-level residential apartment building located on the eastern side of Henry Parry Drive. The DA 46272/2014 for 'Merindah' development included a View Loss and View Sharing Assessment prepared by Dr. Richard Lamb in 2014. The assessment included images presented on drawing SK-120 in the Assessment Report, which show that the 'Merindah' development blocks a substantial portion of the water views from Georgiana Quay while retaining a water view to the south and a glimpse of Brisbane Water to the west.

7.5.2. View sharing analysis

As the view cone of this glimpse extends across the project site an assessment of the potential reduction in available water views was carried out and the results of the analysis are presented in Figure 52. The analysis indicates that a large proportion of the water view is already blocked by 'Merindah' development. The proposed Stage 1 Development of the Northern Tower at 26-30 Mann Street would result in a minor reduction of the water view to the west while views of Brisbane Water to the south west would be unaffected. The significance of the predicted view reduction and transfer falls within the category of Minor.

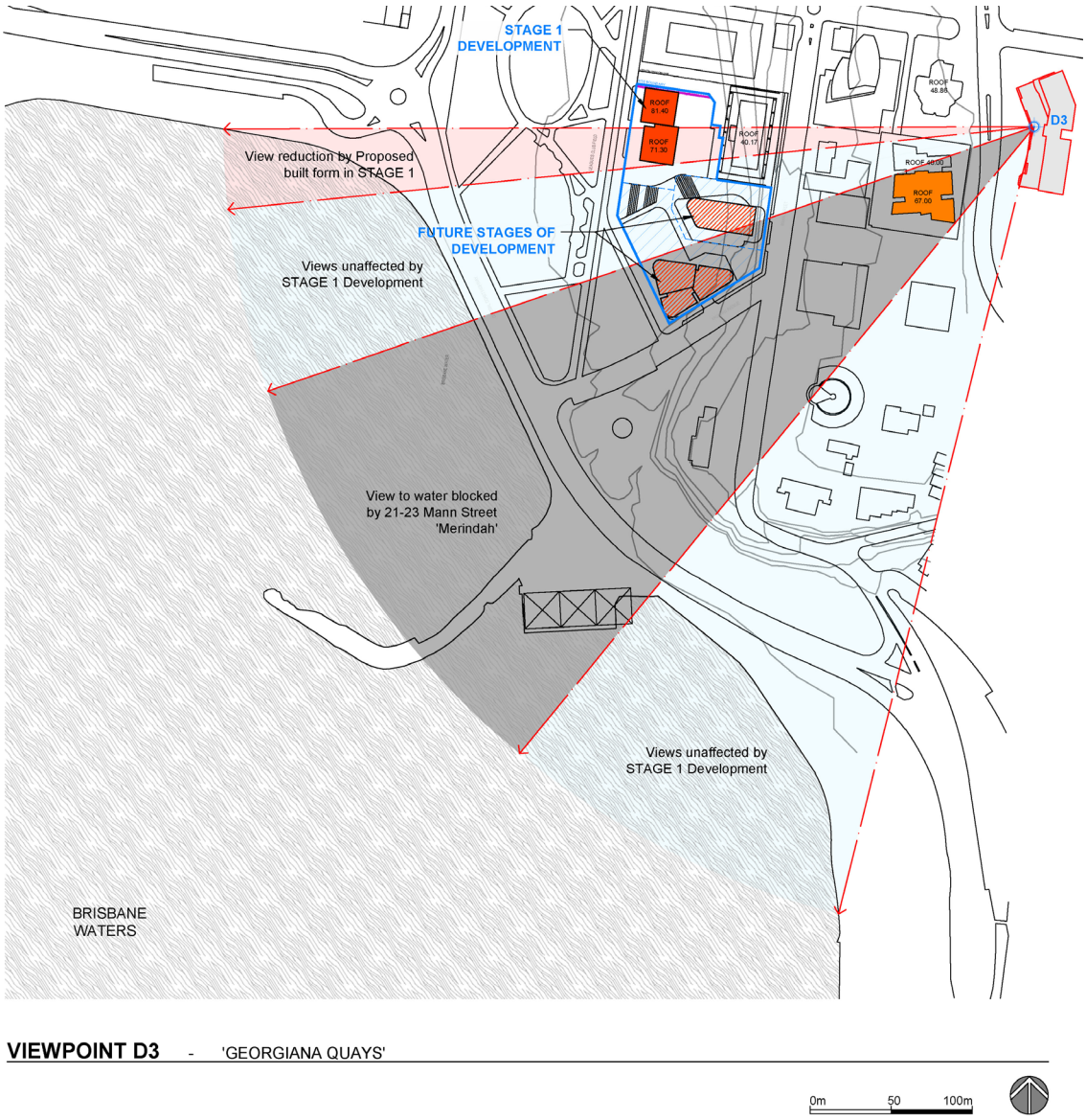


Figure 52 – View Sharing Analysis Diagram for 'Georgiana Quay' development

7.5.3. Reasonableness assessment

Given that multiple sites adjoining Georgiana Quay have been zoned to allow multi-storey apartment buildings to be developed it is reasonable to expect that some of the currently available water view would be transferred to occupants of the apartments along the western side of the proposed Northern Tower at 26-30 Mann Street.

7.6. No. 17 Mann Street Development Proposal

7.6.1. Characteristics of future views

The proposed development at 17 Mann Street includes two multi-level residential blocks. The layout is shown on Figure 53 and a section/elevation shown on Figure 54. The western Block A would comprise six levels of residential units over commercial and parking space adjoining Mann Street. The eastern Block B would include nine levels of residential units adjoining Henry Parry Drive.

In Block A the floors range in elevation from RL19.20 to RL33.80 with the top residential unit set back approximately 12 metres from the Mann Street frontage. A roof terrace garden is proposed at this level that extends from the Mann Street edge to the residential unit. The level of Mann Street at the front of the building is RL9.00.

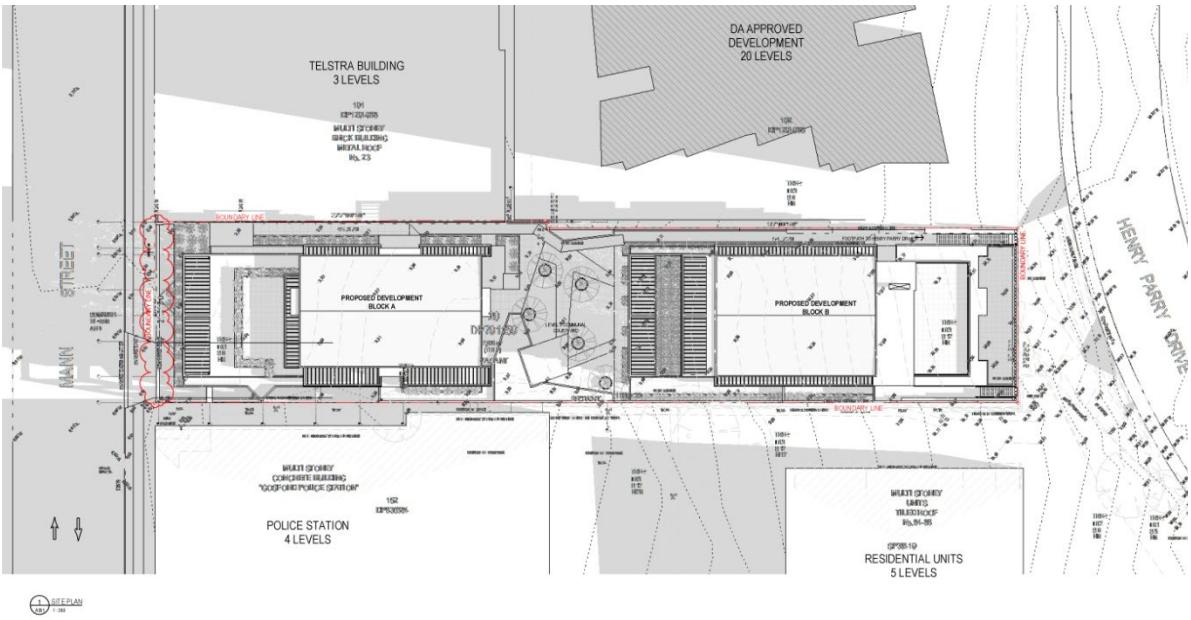


Figure 53 – No. 17 Mann Street DA Submission, Layout Plan (source: Gosford Council web site)

Figure 54 – No. 17 Mann Street DA Submission, Cross-section (source: Gosford Council web site)

7.6.2. View sharing analysis

Future occupants of apartments in Block A of 17 facing Mann Street will not have existing water views blocked by the proposed Stage 1 Development of the Northern Tower at 26-30 Mann Street as illustrated on Figure 55. Occupants of the apartments fronting on to Mann Street will retain views to the south west over the tree canopies in War Memorial and Poppy Park and extending to Brisbane Water. The magnitude of the existing view that would be transferred has been assessed as falling into the category of Negligible.

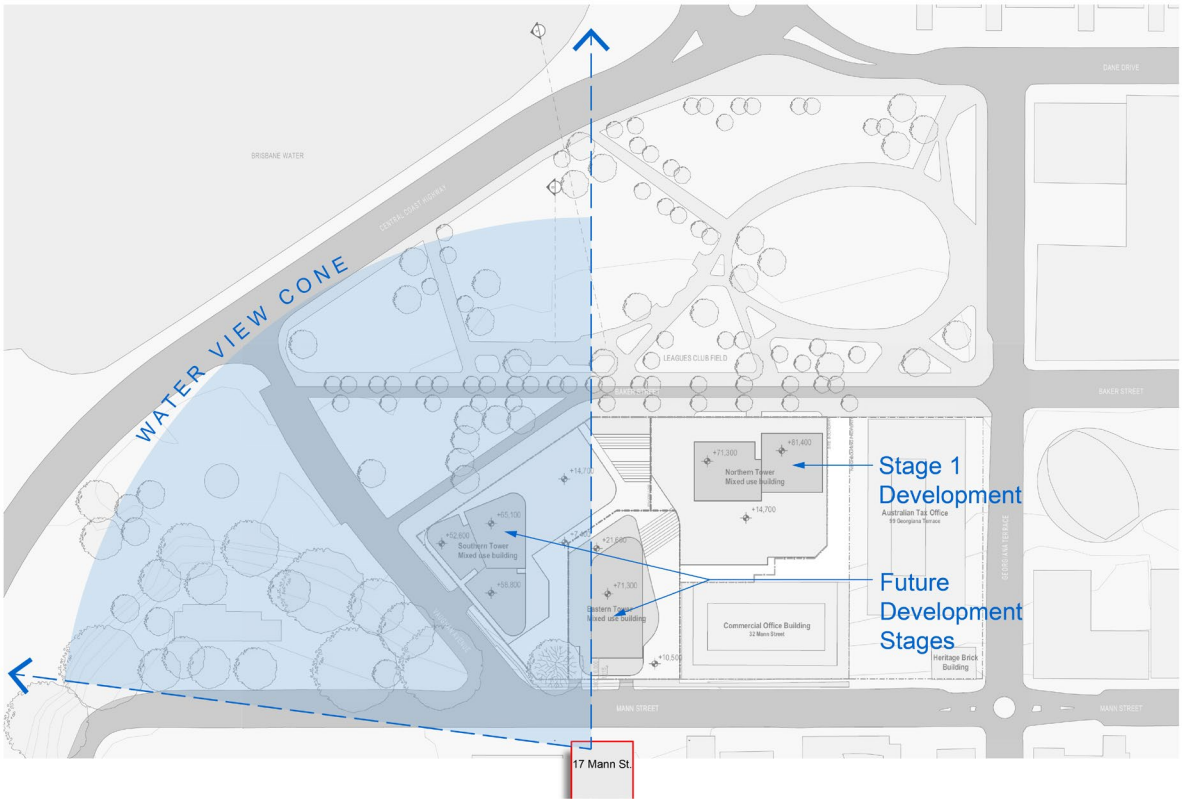


Figure 55 - View analysis from 17 Mann Street

8. CONCLUSION

This report presents the results of an assessment of the potential visual impact of the proposed Stage 1 development of the Northern Tower at 26-30 Mann Street by SH Gosford Residential P/L. from a series of viewpoints listed in the SEARs and supplementary viewpoints nominated by DPIE.

The methodology used to determine the potential visual impact of the proposed development is based on the Roads and Maritime Services process that is widely used for visual assessment. The potential visual impact has been assessed through the application of a matrix that combines the magnitude of visibility of the proposed development with the sensitivity of the viewer.

The assessment included reference to a series of photomontages that illustrate predicted views of the proposed Stage 1 Northern Tower development from the nominated viewpoints. Photomontages prepared by Architectural Images illustrate the predicted view that would be available from the nominated viewpoints upon completion of the development.

The levels of potential visual impact for the Stage 1 Northern Tower development at 26-30 Mann Street range from negligible to high but the majority of viewpoints fall within the moderate to low category.

A range of measures are identified that will mitigate the potential visual impact of the Stage 1 development. These measures include refinements that the design architects have the building design in response to review comments by DPIE. These refinements have resulted in a reduced bulk

and increased articulation of the built form to produce a slender and visually less prominent structure.

The Landscape Plant prepared for the Stage 1 DA includes extensive planting on the podium and along the central pedestrian corridor that will provide shade and visually soften the structural surfaces. Tree planting along the Baker Street frontage and associated with the Leagues Club Park development will result in visual screening of the podium and lower levels of the tower in views from the west.

Results of the view sharing analysis carried out for existing multi-storey residential buildings adjoining the proposed Stage 1 development of the Northern Tower site indicate that a portion of the existing water views will be reduced, and the views transferred to apartments located along the western side of the proposed Stage 1 tower in the northern portion of the 26-30 Mann Street development site. The significance of the predicted view reduction and transfer generally falls in to the category of Minor as defined in this Report. Given that multiple sites adjoining 26-30 Mann Street have been zoned to allow multi-storey apartment buildings to be developed it would be reasonable to expect that a portion the existing water views would be transferred to the new development.

Future development of Stages 2 and 3 to be carried out in accordance with the masterplan of the approved SSDA will each involve a tower on a podium that will be located south of the Stage 1 Northern Tower. These future development stages will be subject to separate development applications that will include visual impact assessments and view sharing provisions.

APPENDIX A

Photomontage Methodology Statement

prepared by Andrew Slocombe, Director of Architectural Images

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Photomontage Methodology Statement

26 Mann Street, Gosford.

Prepared By

Andrew Slocombe
Director
Architectural Images (Aust) Pty Ltd
46, 6-8 Herbert St
St Leonards NSW 2065

Project Team

Client	**SH Gosford Residential Pty Ltd**
Land Surveyor	**Veris** Level 2, 69 Cowper Street Wallsend NSW 2287
Architect	**DKO** 119 Redfern Street Redfern NSW 2016
Planner	**Urbis** Tower 2, Level 23, Darling Park 201 Sussex Street Sydney NSW 2000
Urban Designer	**Corkery Consulting** Suite 3, 38 Albany Street St Leonards NSW 2065

1.0 Introduction

This document has been prepared by Architectural Images (Aust) Pty Ltd to explain the methodology used for producing photomontage images for the proposed mixed use development. The visual assessment of the proposed development reflects current best practice in relation to the verification of images. The purpose of photomontage images is to present an accurate overview of the proposed development and its visual effect on the surrounding context.

The methodologies described in this document are based on current best practice and follow the requirements of the Land and Environment Court and relied on as or as part of expert evidence in Class 1 appeals that apply for proceedings commenced on or after 1 October, 2013.

It was assumed that all the information including the architectural drawings, and survey data supplied by the relevant project team were correct and accurate.

Architectural Images was established over 24 years ago and have been producing imagery for development proposals for local councils, government planning authorities, and the Land & Environmental court for the past 15 years.

2.0 Methodology

2.1 Photography

The background photography used for the photomontage images was derived from a digital Canon EOS 5D 12.8 Megapixel resolution camera with a full size sensor / 1:1 lens conversion ratio. A Canon EF, L series 50mm fixed lens was used.

The lens type used in the photography reflects as closely as possible what can be seen by the human eye. The methodology used in the production of the photographic images form the pictorial basis for the creation of the photomontage/ view impact analysis.

The photography has not been altered or corrected other than minimal exposure and colour correction for optimal viewing. All photography was taken with the lens height centred at 1500mm to simulate standard eye-height. The final camera positions/ view points (15) were nominated by the urban designer.

2.2 Survey

Site and surrounding area survey data provided represents the terrestrial, and building structures in a CAD format. All levels are located to relevant AHD. The survey works were undertaken using GPS equipment together with a long range reflector less electronic distance measuring equipment. An accuracy of + or – 45mm to Ordnance Survey grid/datum was achieved.

2.3 3D Model

The three-dimensional computer model of the development and surrounding proposed buildings was generated by the architects DKO.

2.4 Camera Matching

This process is used by setting up a wire frame CAD structure and superimposing into the existing photography using the software 3D Max. Relevant survey data is located in the digitalised photograph for each view is then calculated and imported into 3D Studio Max as a backdrop to the 3D model. The survey data and the specifications of the lens type relating to each existing view are also entered into 3D Studio Max. The survey points of the camera position and those relating to specified objects within each particular image are then highlighted on the digitised image. Once the process of camera matching is complete, the 3D model of the proposed development is accurately positioned within each of the existing photographs.

2.5 Camera Information

Camera Information			
Name	**Focal Length**	**Camera Height (RL)**	**Date**
V1_MG_5326	50mm	N/A	29/07/2019
V2_MG_5296	50mm	8.0	26/07/2019
V3_MG_5300	50mm	3.3	26/07/2019
V4_MG_5283	50mm	3.6	26/07/2019
V5_MG_5273	50mm	4.0	26/07/2019
V6_MG_5277	50mm	11.9	26/07/2019
V7_MG_5287	50mm	12.5	26/07/2019
V7a_MG_5359	50mm	7.3	19/08/2019
V8_MG_5305	50mm	16.0	26/07/2019
V9_MG_5289	50mm	10.0	26/07/2019
V10_MG_5330	50mm	136.0	29/07/2019
V10a_MG_5370	50mm	N/A	19/08/2019
V11_MG_5335	50mm	6.0	6/08/2019
V12_P1140154	53mm	2.0	26/07/2019
V12a_MG_5269	50mm	2.3	26/07/2019

2.6 Software
The following software products were used to produce the photomontage images.

3D Studio Max Version 2020
Application: to camera match the wire frame CAD model into the existing photography.

VRAY Renderer
Application: to render out each photomontage image.

Adobe Photoshop CC2019
Application: to compose the final montage by placing the rendered image accurately into the background photography.

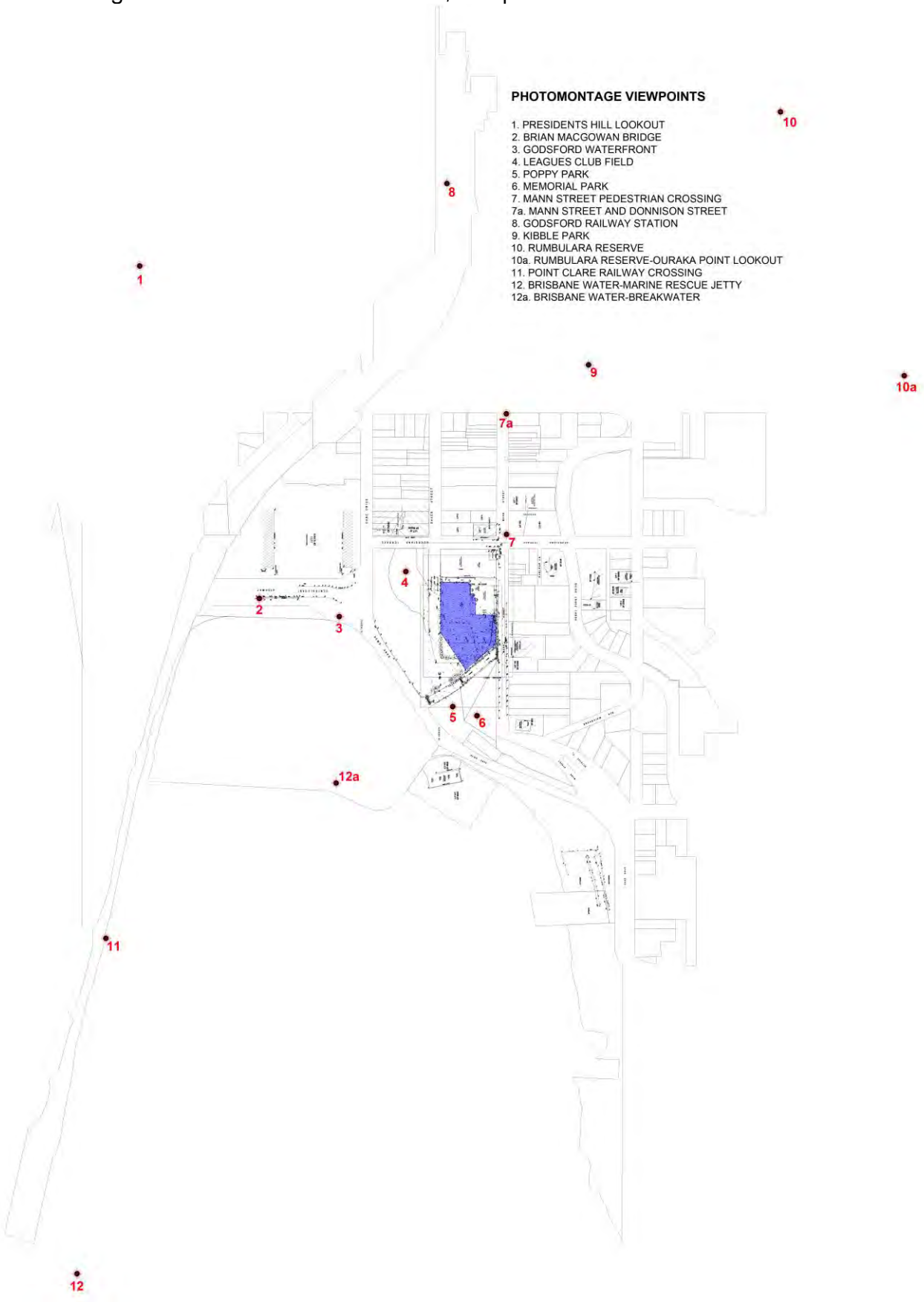
Andrew Slocombe

Managing Director
Architectural Images (Aust) Pty Ltd

3.0 Supporting Evidence

3.1 Camera Locations/ Viewpoints

The following are the selected camera location/ viewpoints:-



3.2 Existing Photography, Proposed, & Proposed With Wire Frame

V1_MG_5326 – Existing

V1_MG_5326 – Proposed (no impact)

V2_MG_5296 – Existing

V2_MG_5296 – Proposed

V2_MG_5296 – Proposed with wire frame

V2_MG_5296 – Survey reference points

V3_MG_5300 – Existing

V3_MG_5300 – Proposed

V3_MG_5300 – Proposed with wire frame

V3_MG_5300 – Survey reference points

V4_MG_5283 – Existing

V4_MG_5283 – Proposed

V4_MG_5283 – Proposed with wire frame

V4_MG_5283 – Survey reference points

V5_MG_5273 – Existing

V5_MG_5273 – Proposed

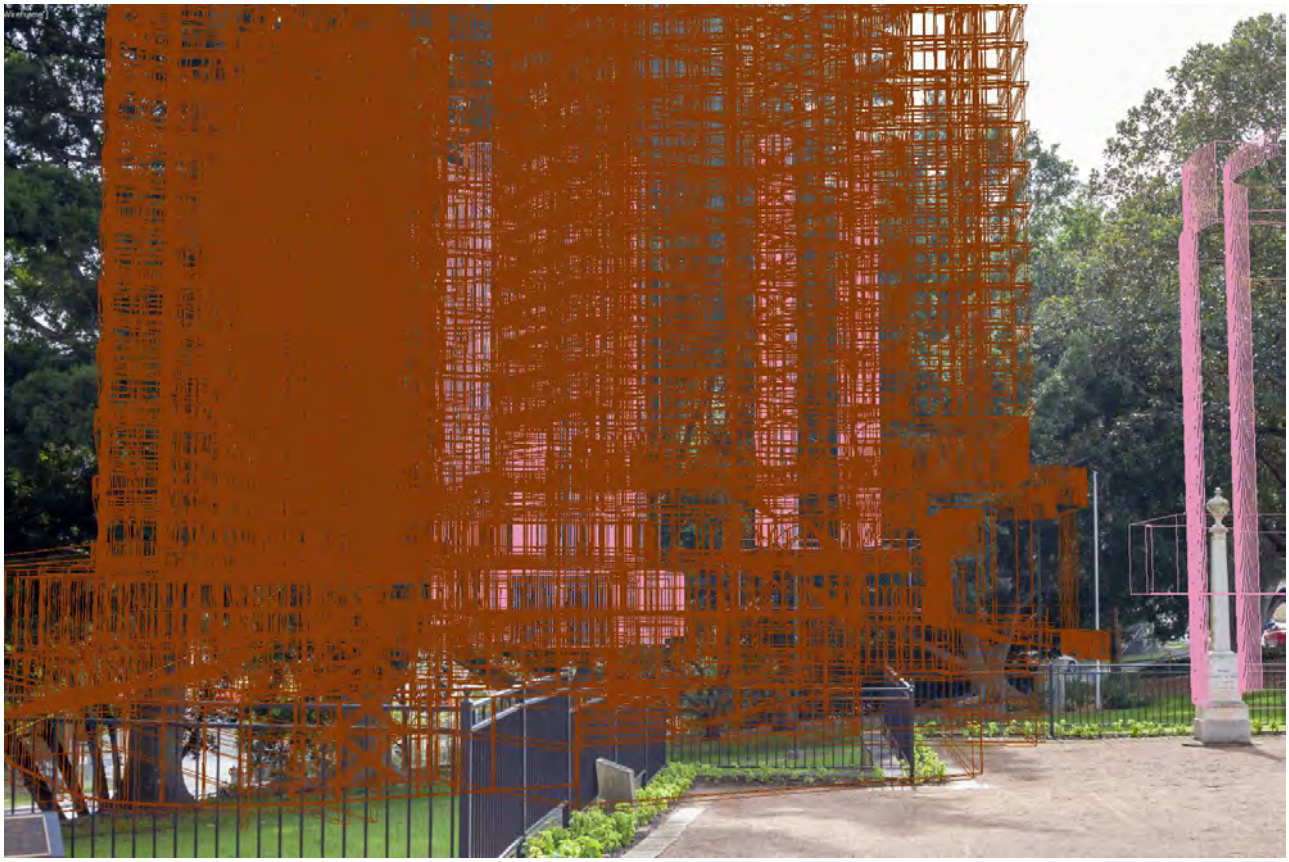
V5_MG_5273 – Proposed with wire frame

V5_MG_5273 – Survey reference points

V6_MG_5277 – Existing

V6_MG_5277 – Proposed

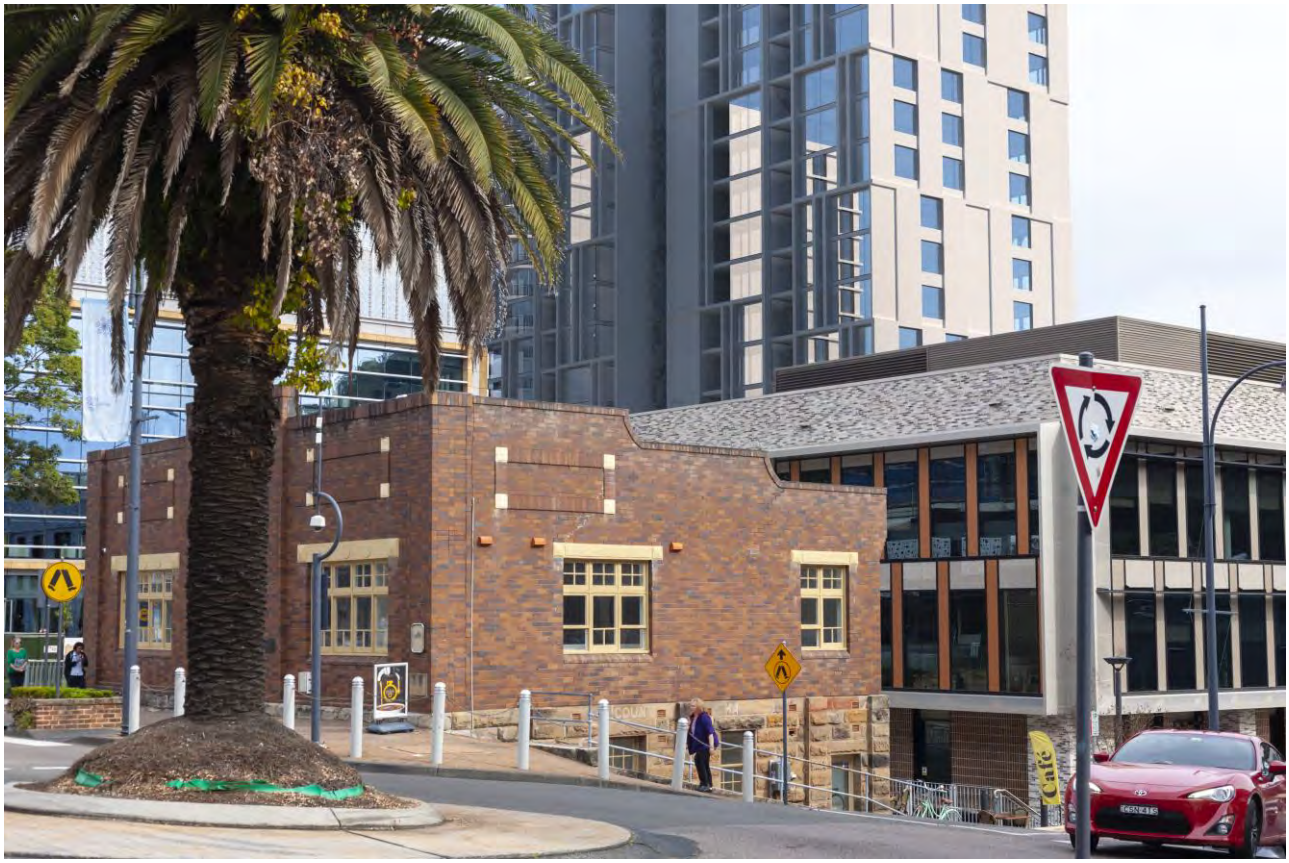
V6_MG_5277 – Proposed with wire frame



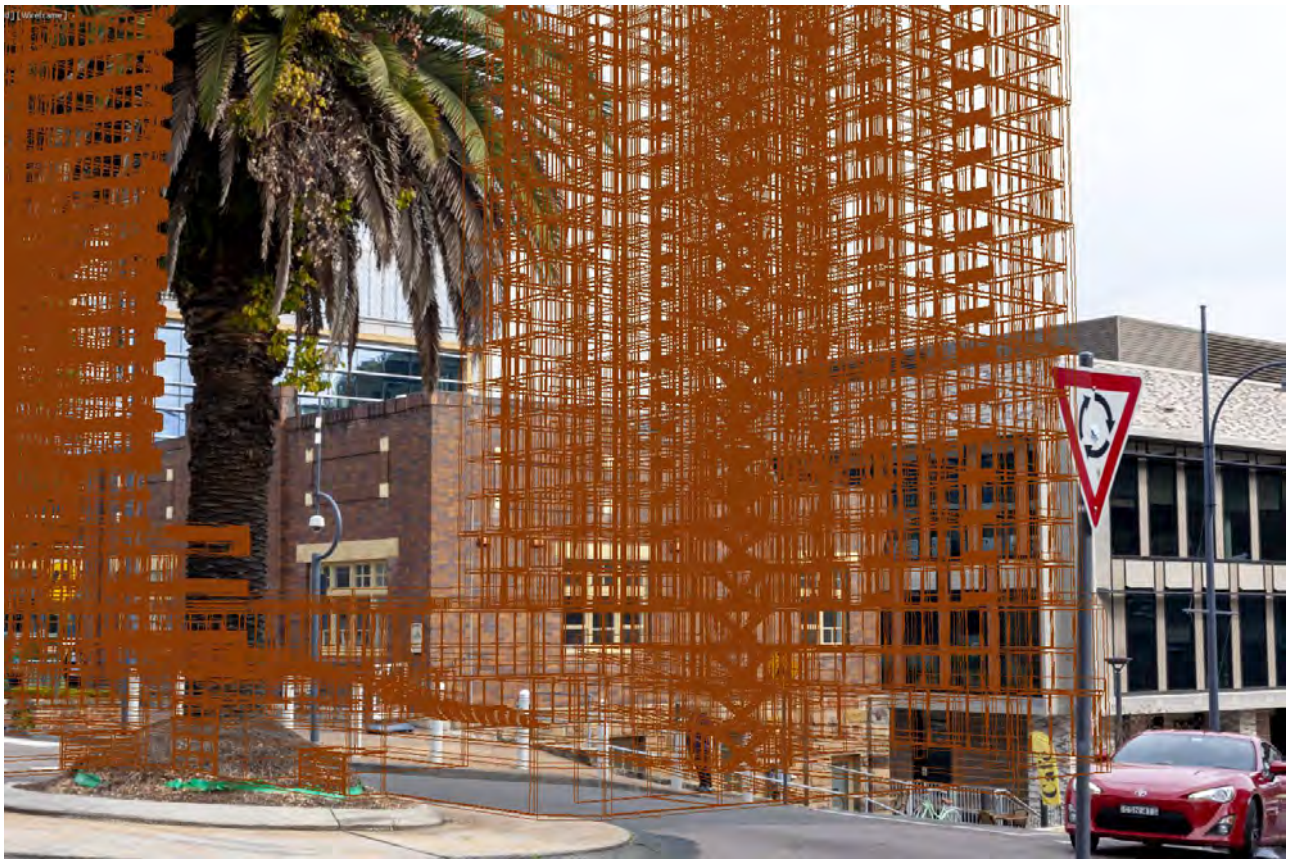
V6_MG_5277 – Survey reference points

V7_MG_5287 – Existing

V7_MG_5287 – Proposed



V7_MG_5287 – Proposed with wire frame



V7_MG_5287 – Survey reference points

V7a_MG_5359 – Existing

V7a_MG_5359 – Proposed

V7a_MG_5359 – Proposed with wire frame

V7a_MG_5359 – Survey reference points

V8_MG_5305 – Existing

V8_MG_5305 – Proposed

V8_MG_5305 – Proposed with wire frame

V8_MG_5305 – Survey reference points

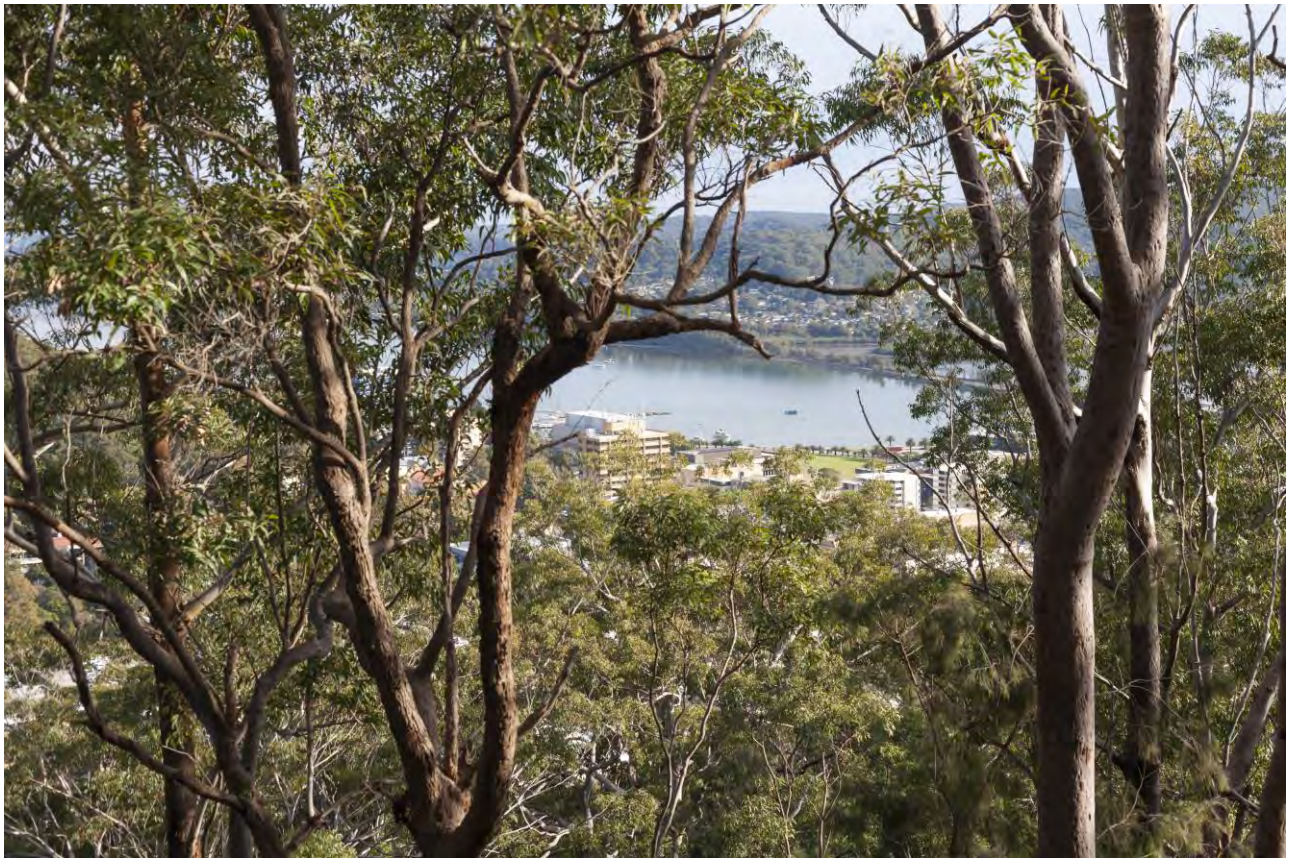
V9_MG_5289 – Existing

V9_MG_5289 – Proposed

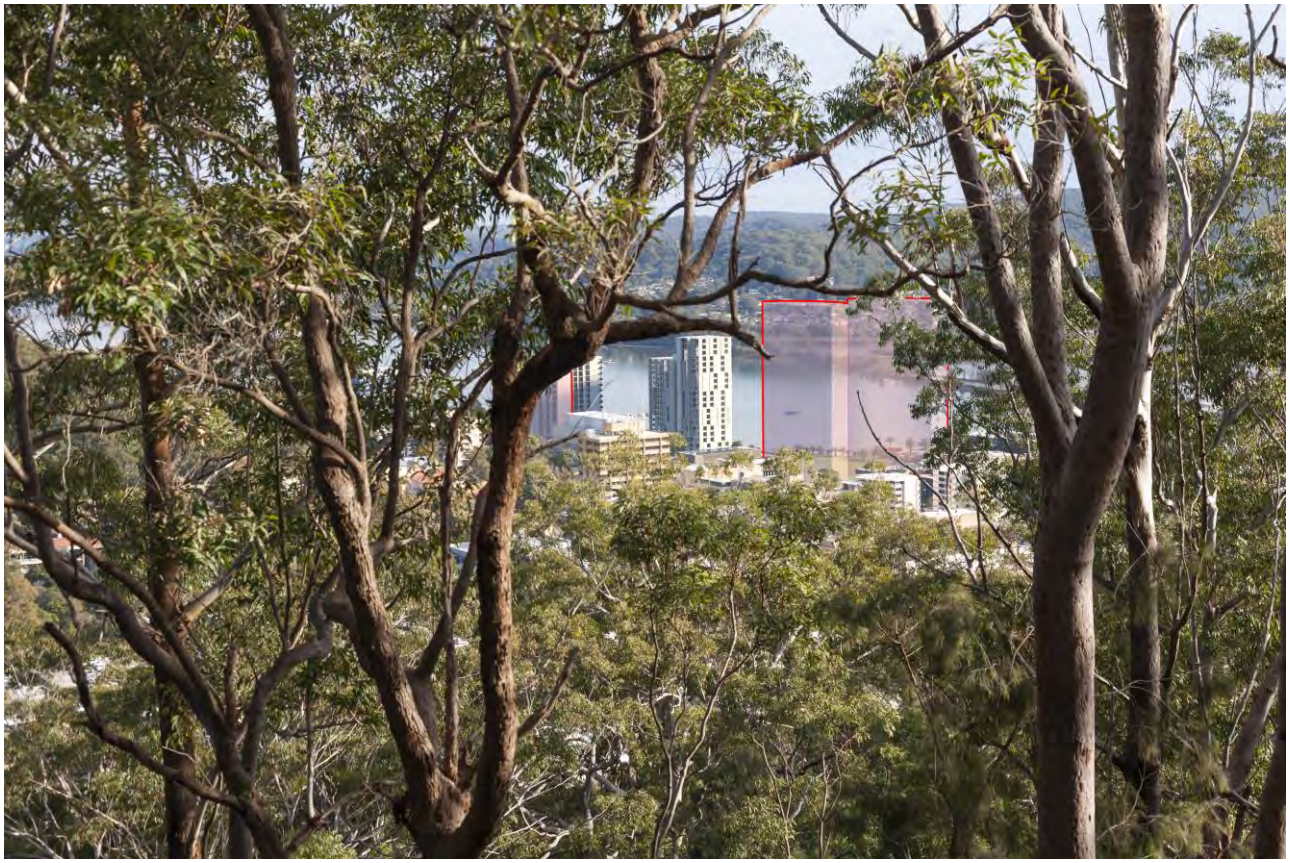
V9_MG_5289 – Proposed with wire frame

V9_MG_5289 – Survey reference points

V10_MG_5330 – Existing

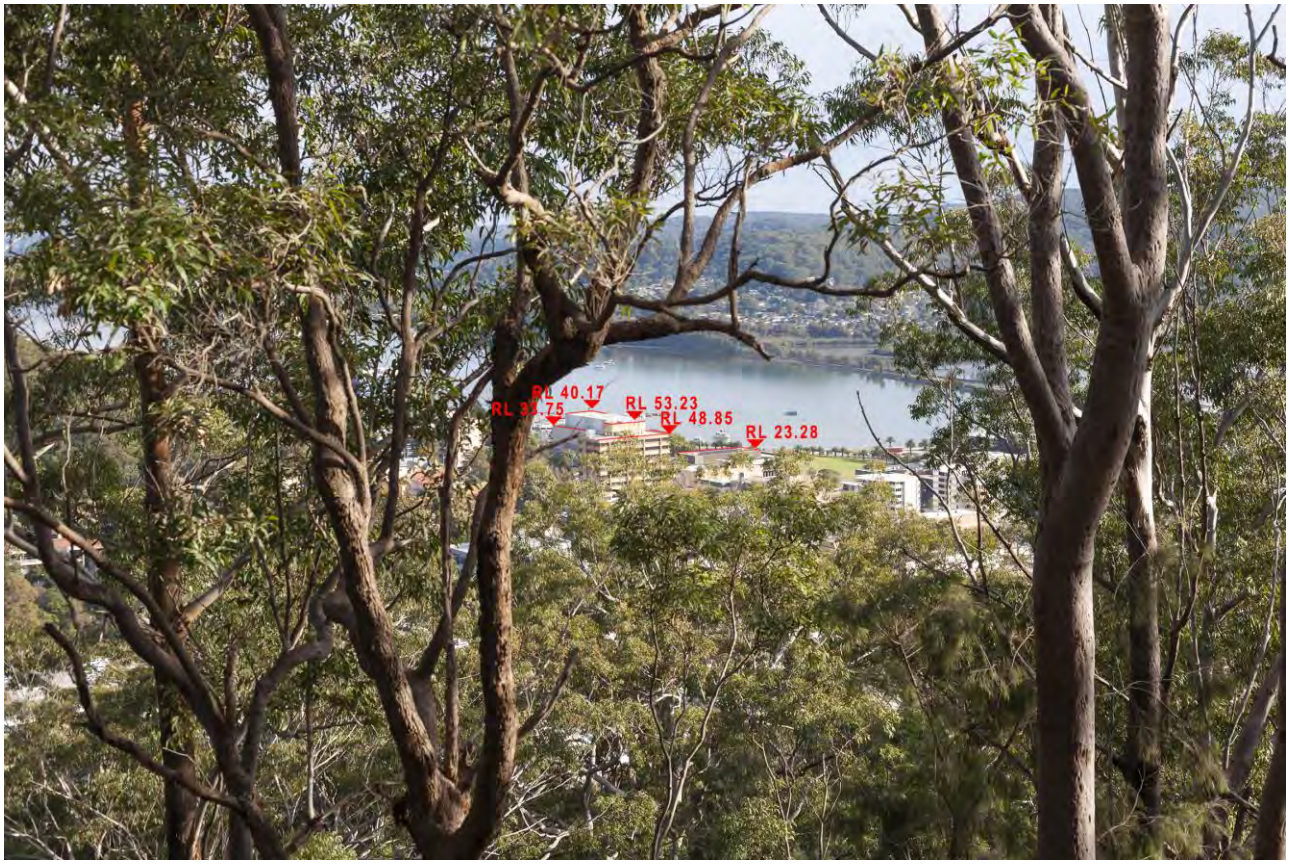


V10_MG_5330 – Proposed

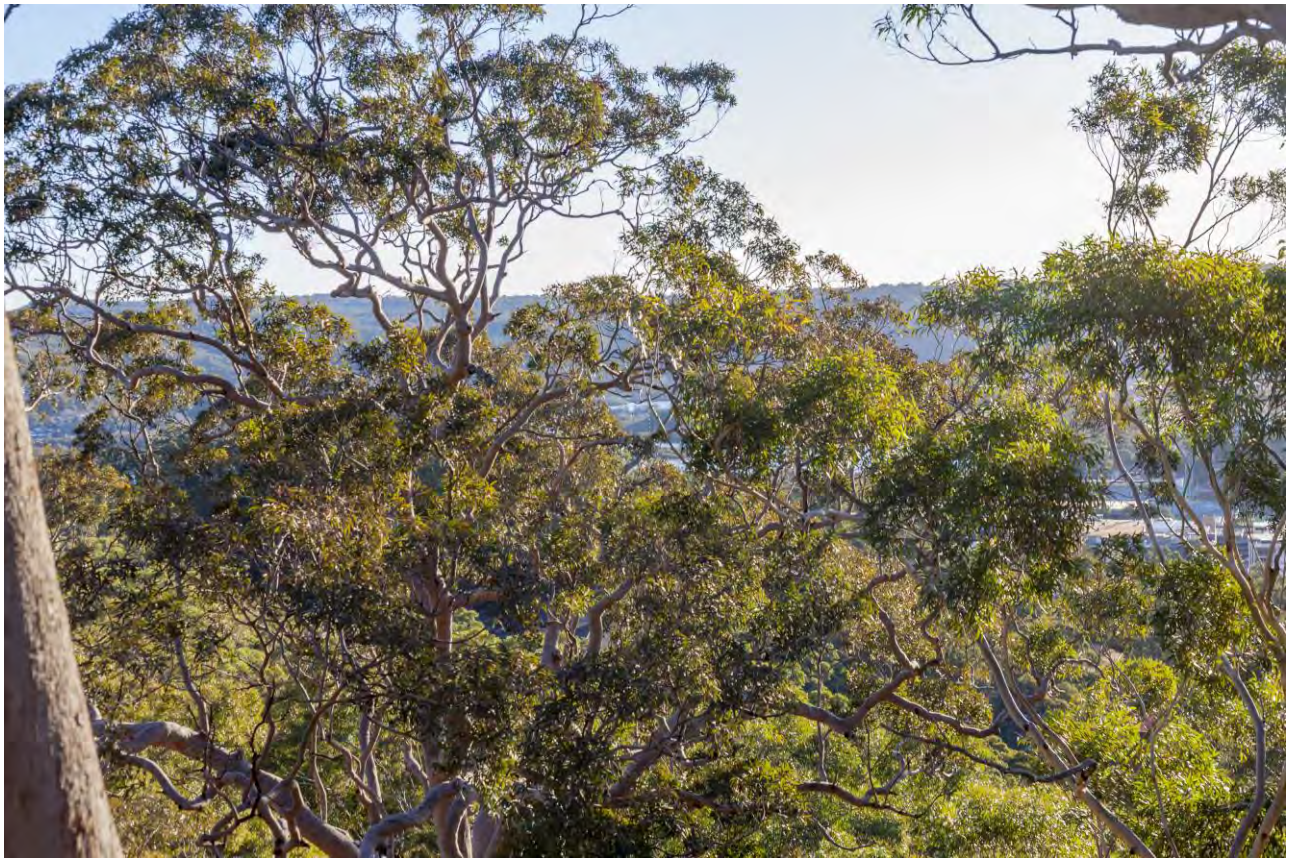


V10_MG_5330 – Proposed with wire frame

V10_MG_5330 – Survey reference points



V10a_MG_5370 – Existing

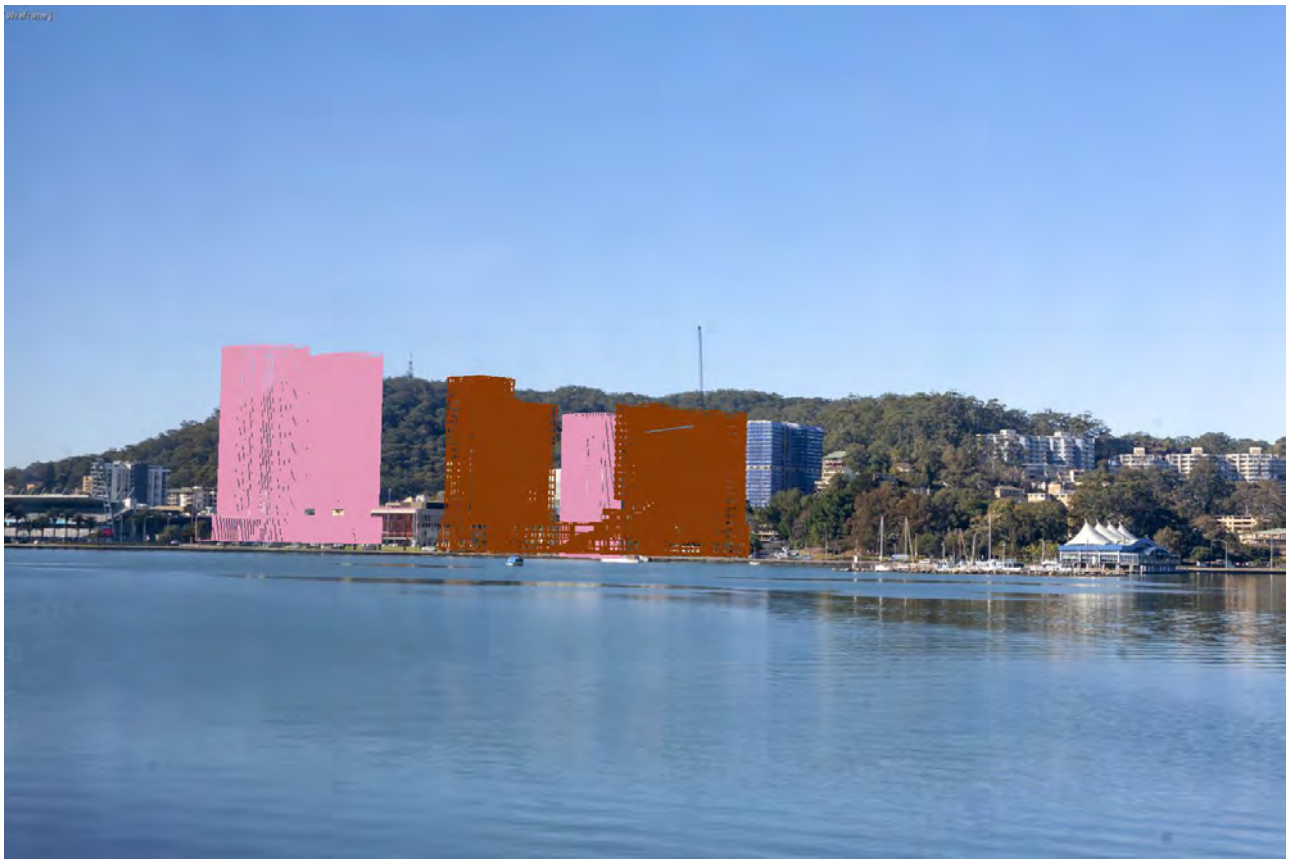


V10a_MG_5370 – Proposed (no impact)

V11_MG_5335 – Existing

V11_MG_5335 – Proposed

V11_MG_5335 – Proposed with wire frame



V11_MG_5335 – Survey reference points

V12_P1140154 – Existing

V12_P1140154 – Proposed

V12_P1140154 – Proposed with wire frame

V12_P1140154 – Survey reference points

V12a_MG_5269 – Existing

V12a_MG_5269 – Proposed

V12a_MG_5269 – Proposed with wire frame

V12a_MG_5269 – Survey reference points

APPENDIX B

View Impact Assessment Verification

prepared by Andrew Slocombe, Director of Architectural Images

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View Impact Assessment Imagery Methodology Statement

26 Mann Street, Gosford.

Prepared By

Andrew Slocombe
Director
Architectural Images (Aust) Pty Ltd
46, 6-8 Herbert St
St Leonards NSW 2065

Project Team

Client	**SH Gosford Residential Pty Ltd**
Land Surveyor	**Veris** Level 2, 69 Cowper Street Wallsend NSW 2287
Architect	**DKO** 119 Redfern Street Redfern NSW 2016
Planner	**Urbis** Tower 2, Level 23, Darling Park 201 Sussex Street Sydney NSW 2000
Urban Designer	**Corkery Consulting** Suite 3, 38 Albany Street St Leonards NSW 2065

1.0 Introduction

This document has been prepared by Architectural Images (Aust) Pty Ltd to explain the methodology used for producing view impact assessment imagery for the proposed mixed use development. The visual assessment of the proposed development reflects current best practice in relation to the verification of images. The purpose of the assessment imagery is to present an accurate overview of the proposed development and its visual effect on the existing surrounding buildings.

The methodologies described in this document are based on current best practice and follow the requirements of the Land and Environment Court and relied on as or as part of expert evidence in Class 1 appeals that apply for proceedings commenced on or after 1 October, 2013.

It was assumed that all the information including the architectural drawings, and survey data supplied by the relevant project team were correct and accurate.

Architectural Images was established over 24 years ago and have been producing imagery for development proposals for local councils, government planning authorities, and the Land & Environmental court for the past 15 years.

2.0 Methodology

2.1 Photography

The background photography used for the assessment imagery was derived from a DJI Zenmuse X7 digital camera with a Sigma DJI DL 35mm lens with a focal length of 52mm.

The lens type used in the photography reflects as closely as possible what can be seen by the human eye. The methodology used in the production of the photographic images form the pictorial basis for the creation of the view impact analysis.

The photography has not been altered or corrected other than minimal exposure and colour correction for optimal viewing. All photography was taken with the lens height centred at 1500mm to simulate standard eye-height. The final camera positions/ view points (9) were nominated by the urban designer.

2.2 Survey

Site and surrounding area survey data provided represents the terrestrial, and building structures in a CAD format. All levels are located to relevant AHD. The survey works were undertaken using GPS equipment together with a long range reflector less electronic distance measuring equipment. An accuracy of + or – 45mm to Ordnance Survey grid/datum was achieved.

2.3 3D Model

The three-dimensional computer model of the development and surrounding proposed buildings was generated by the architects DKO.

2.4 Camera Matching

This process is used by setting up a wire frame CAD structure and superimposing into the existing photography using the software 3D Max. Relevant survey data is located in the digitalised photograph for each view is then calculated and imported into 3D Studio Max as a backdrop to the 3D model. The survey data and the specifications of the lens type relating to each existing view are also entered into 3D Studio Max. The survey points of the camera position and those relating to specified objects within each particular image are then highlighted on the digitised image. Once the process of camera matching is complete, the 3D model of the proposed development is accurately positioned within each of the existing photographs.

2.5 Camera Information

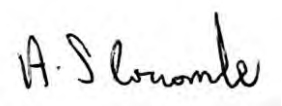
Camera Information			
Name	**Focal Length**	**Camera Height (RL)**	**Date**
D1	52mm	45.11	1/09/2019
D2a	52mm	64.0	1/09/2019
D2b	52mm	40.0	1/09/2019

2.6 Software
The following software products were used to produce the photomontage images.

3D Studio Max Version 2020
Application: to camera match the wire frame CAD model into the existing photography.

VRAY Renderer
Application: to render out each photomontage image.

Adobe Photoshop CC2019
Application: to compose the final montage by placing the rendered image accurately into the background photography.



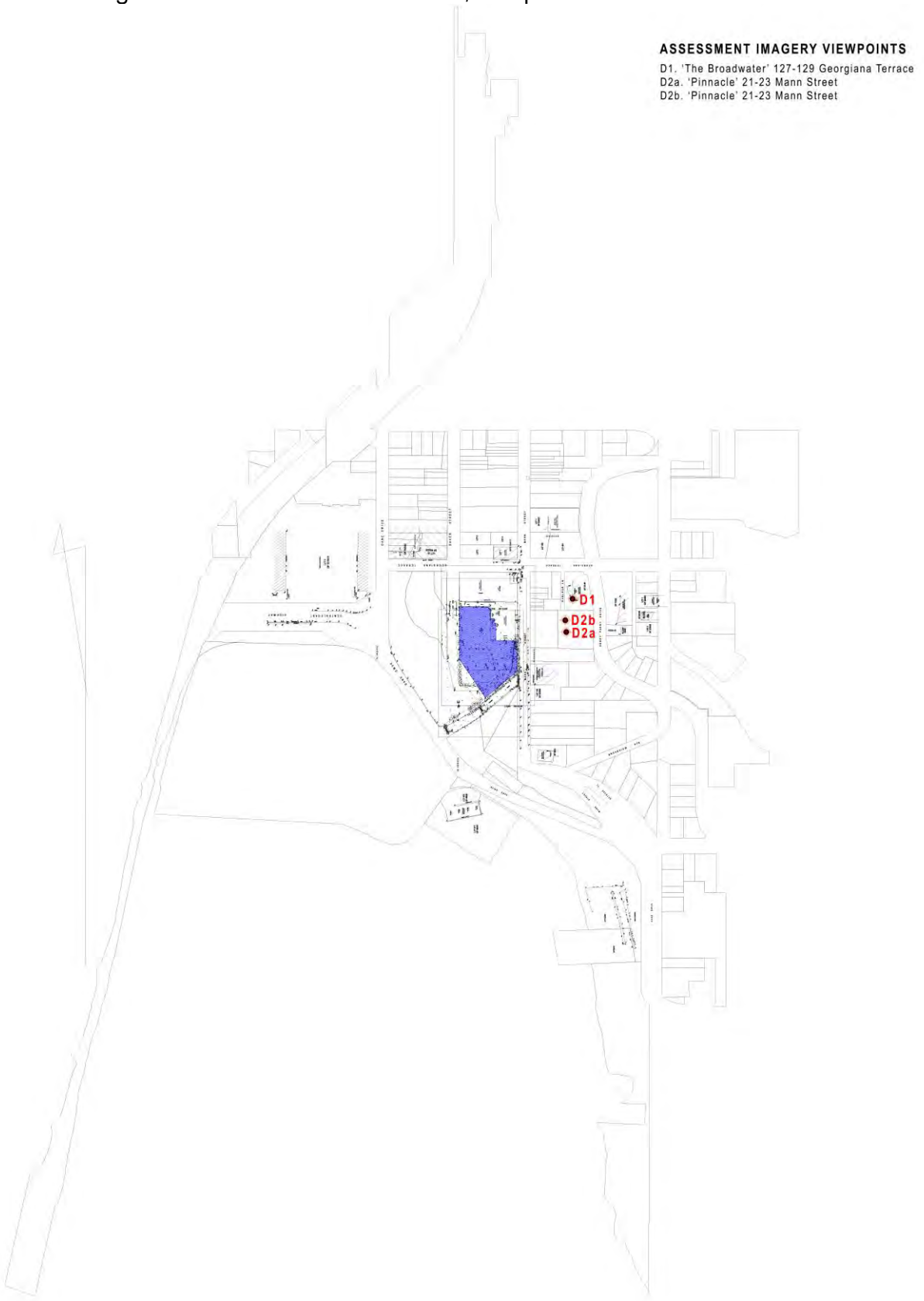
Andrew Slocombe

Managing Director
Architectural Images (Aust) Pty Ltd

3.0 Supporting Evidence

3.1 Camera Locations/ Viewpoints

The following are the selected camera location/ viewpoints:-



3.2 Existing Photography, Proposed, & Proposed With Wire Frame

D1_DJI_0131 – Existing

D1_DJI_0131 – Proposed (no impact)

D1_DJI_0131 – Proposed with wire frame (no impact)

D1_DJI_0131 – Survey reference points

D1_DJI_0128 – Existing

D1_DJI_0128 – Proposed

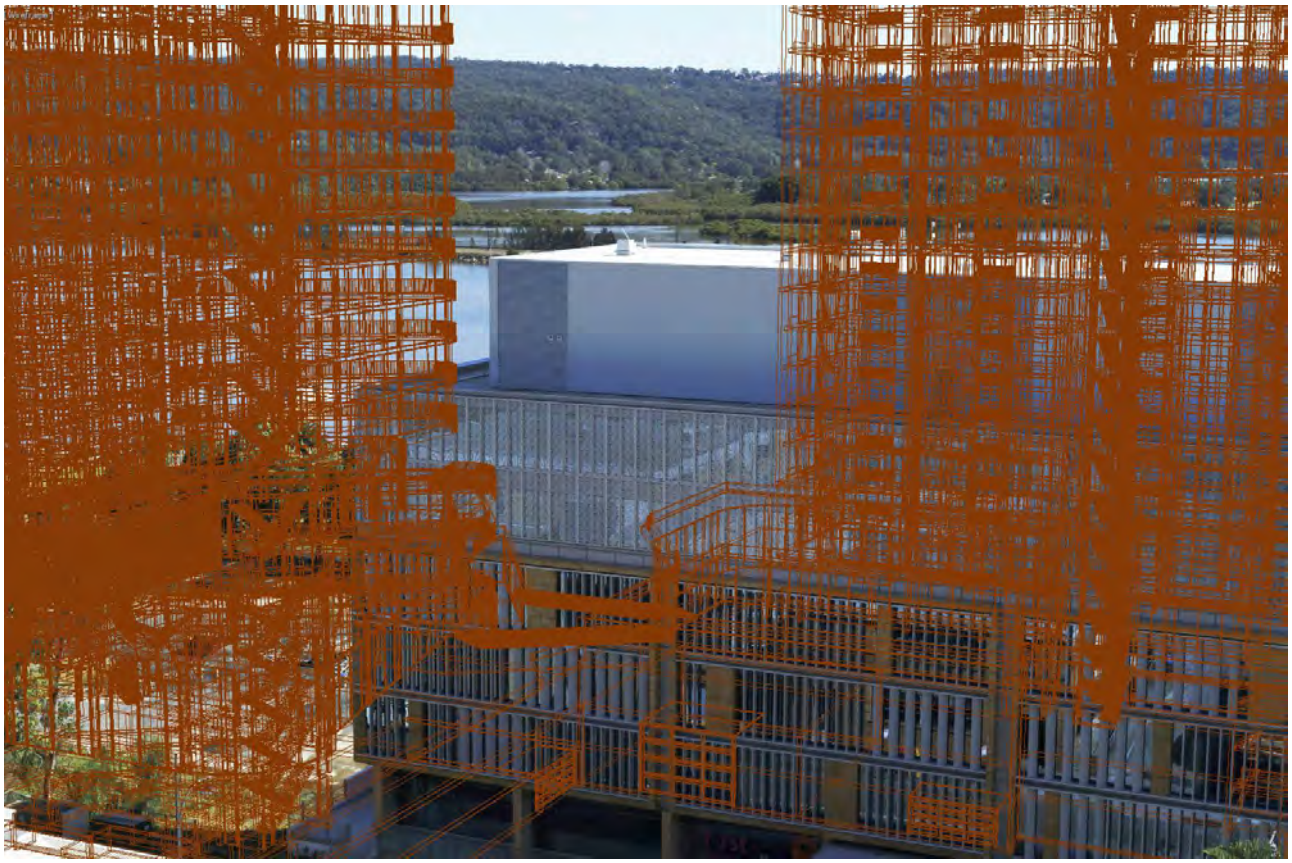
D1_DJI_0128 – Proposed with wire frame

D1_DJI_0128 – Survey reference points

D1_DJI_0126 – Existing

D1_DJI_0126 – Proposed

D1_DJI_0126 – Proposed with wire frame



D1_DJI_0126 – Survey reference points

D2a_DJI_0112 – Existing

D2a_DJI_0112 – Proposed (no impact)

D2a_DJI_0112 – Proposed with wire frame (no impact)

D2a_DJI_0112 – Survey reference points

D2a_DJI_0108 – Existing

D2a_DJI_0108 – Proposed

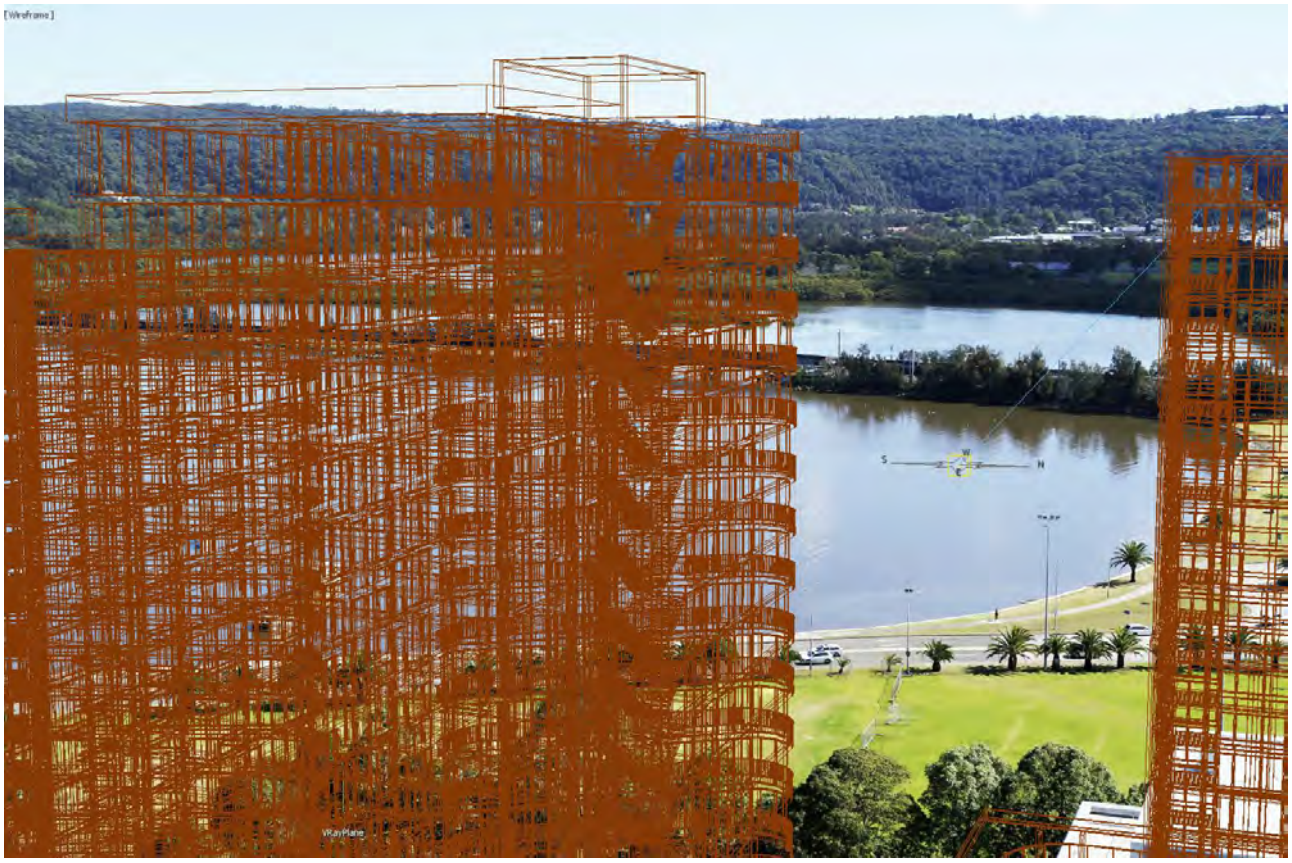
D2a_DJI_0108 – Proposed with wire frame

D2a_DJI_0108 – Survey reference points

D2a_DJI_0104 – Existing

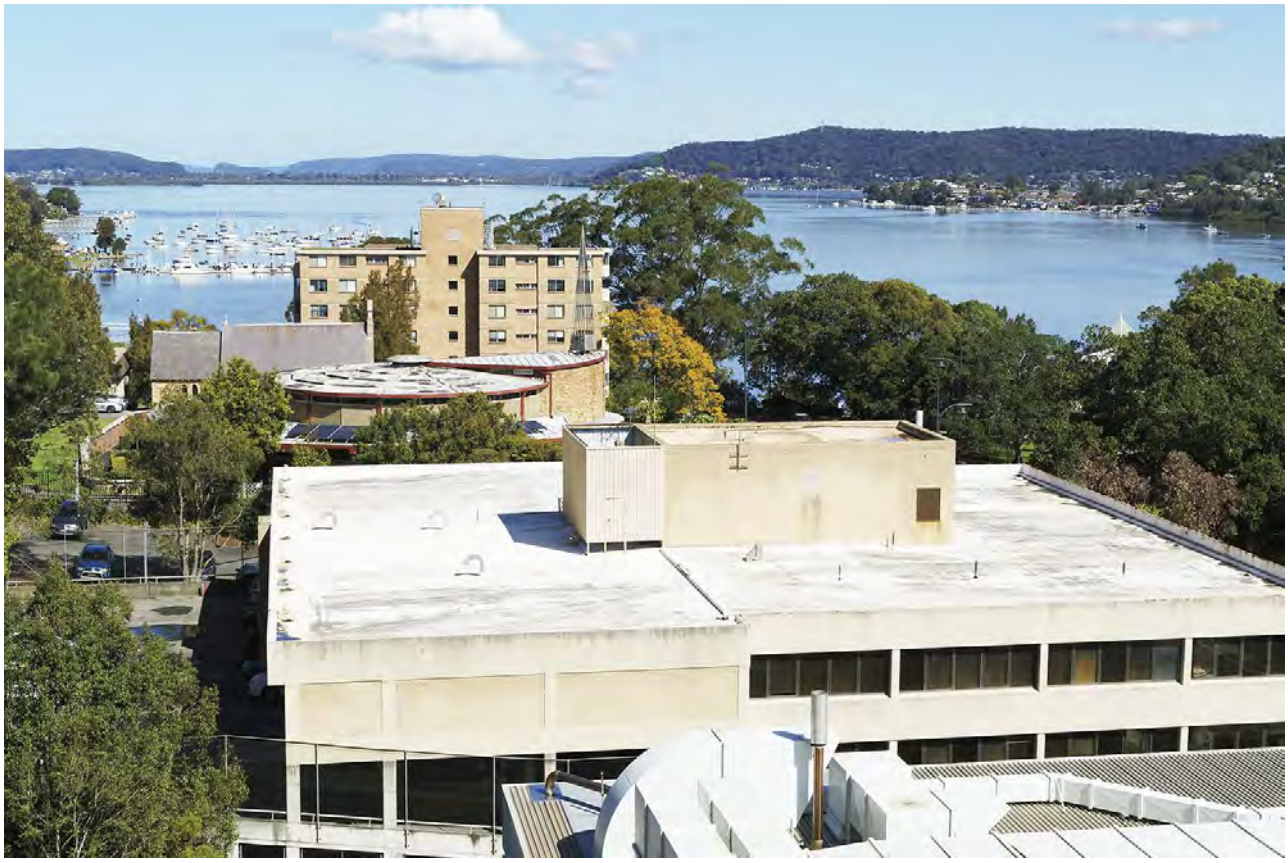
D2a_DJI_0104 – Proposed

D2a_DJI_0104 – Proposed with wire frame

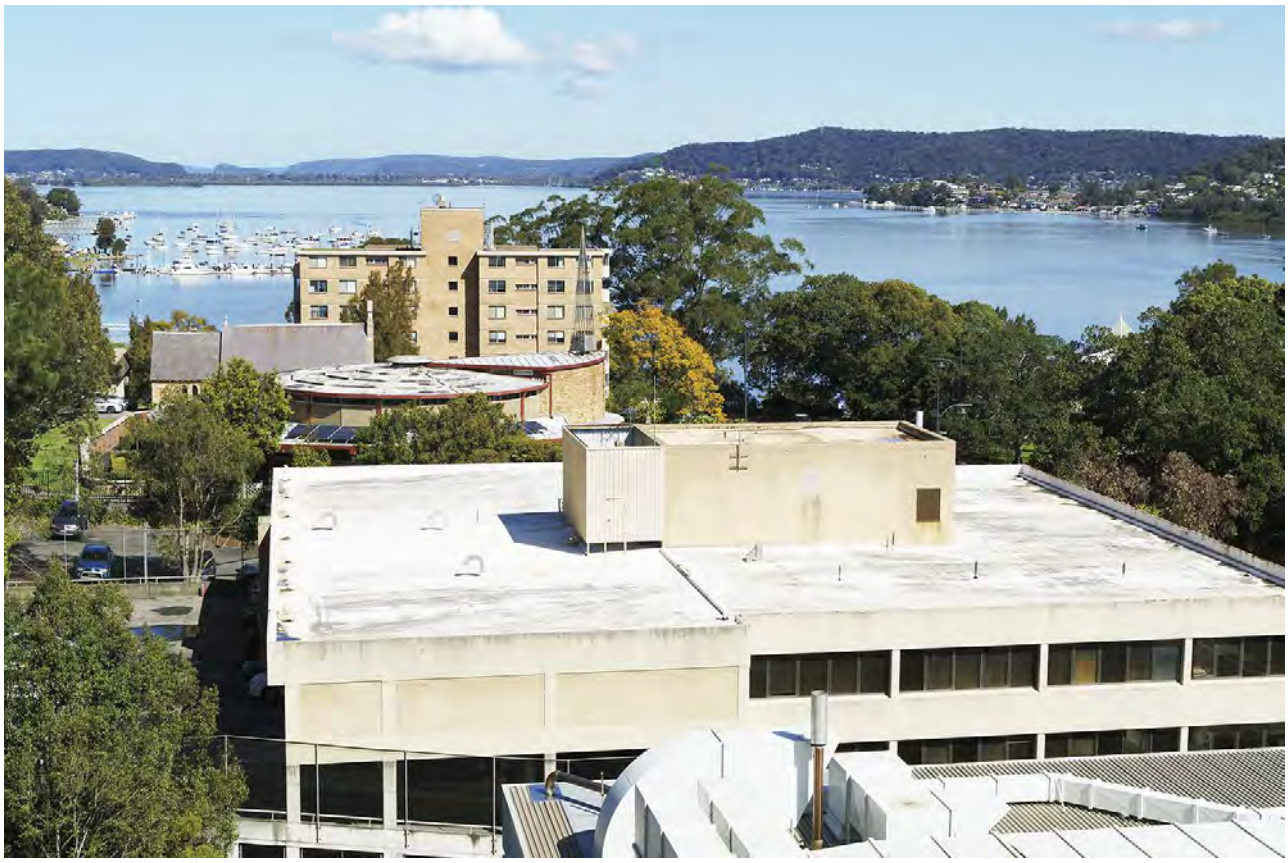


D2a_DJI_0104 – Survey reference points

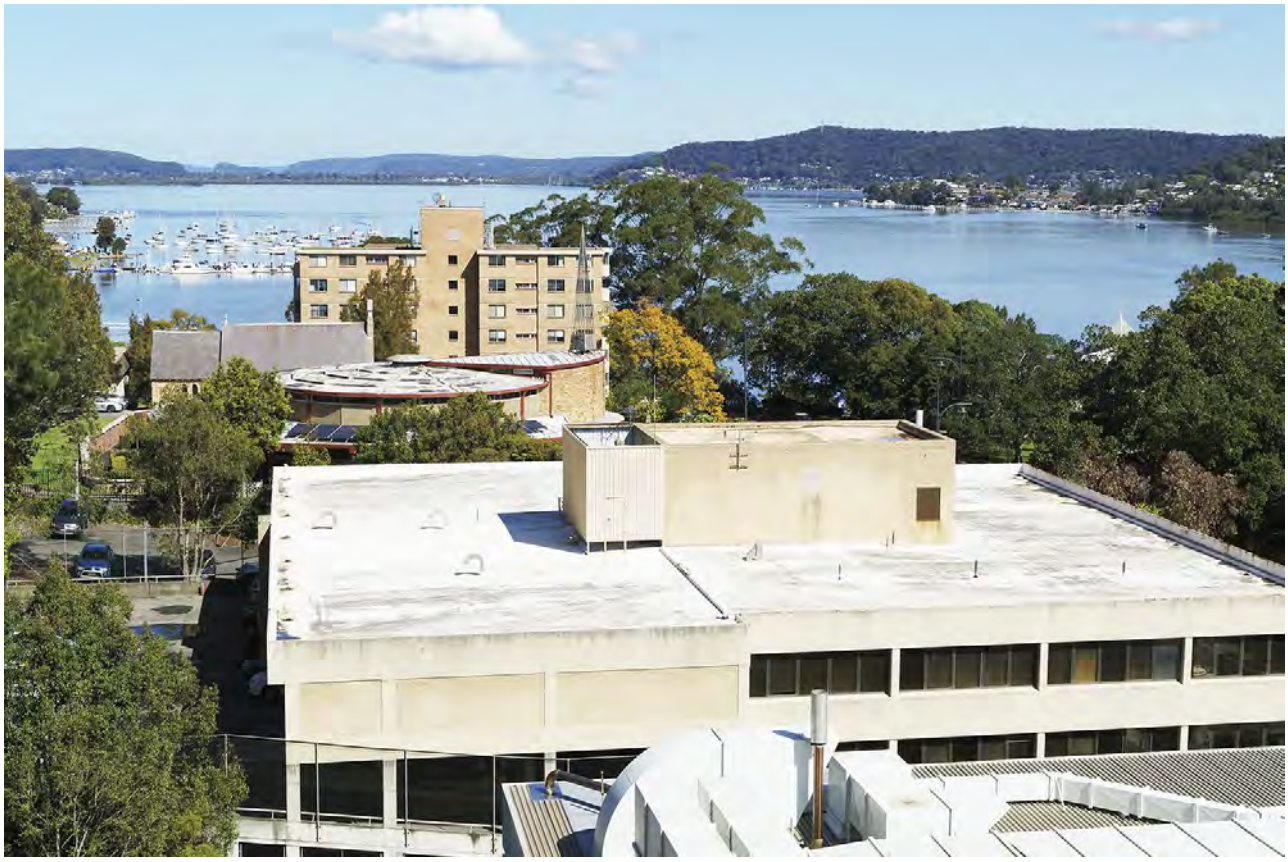
D2b_DJI_0123 – Existing



D2b_DJI_0123 – Proposed (no impact)



D2b_DJI_0123 – Proposed with wire frame (no impact)

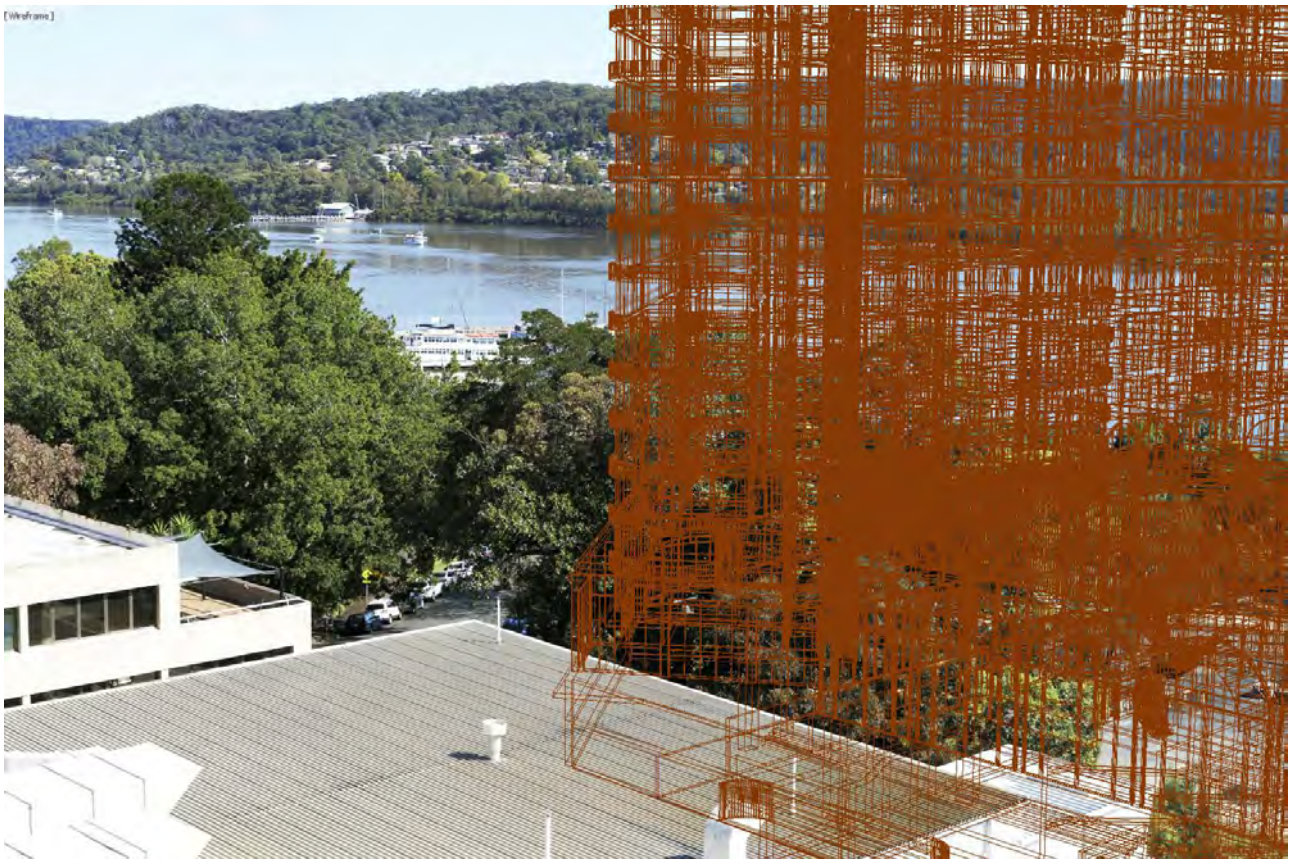


D2b_DJI_0123 – Survey reference points

D2b_DJI_0118 – Existing

D2b_DJI_0118 – Proposed

D2b_DJI_0118 – Proposed with wire frame

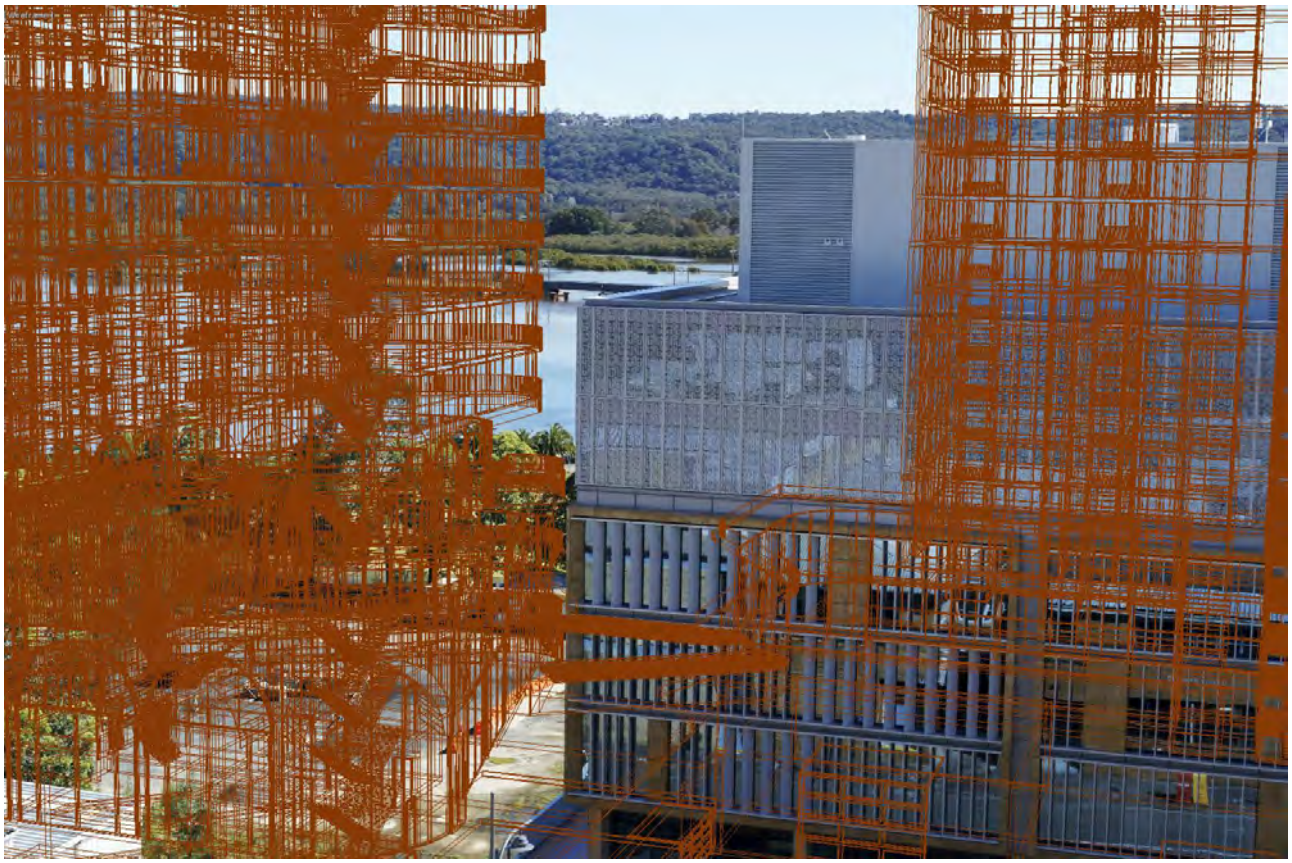


D2b_DJI_0118 – Survey reference points

D2b_DJI_0116 – Existing

D2b_DJI_0116 – Proposed

D2b_DJI_0116 – Proposed with wire frame



D2b_DJI_0116 – Survey reference points