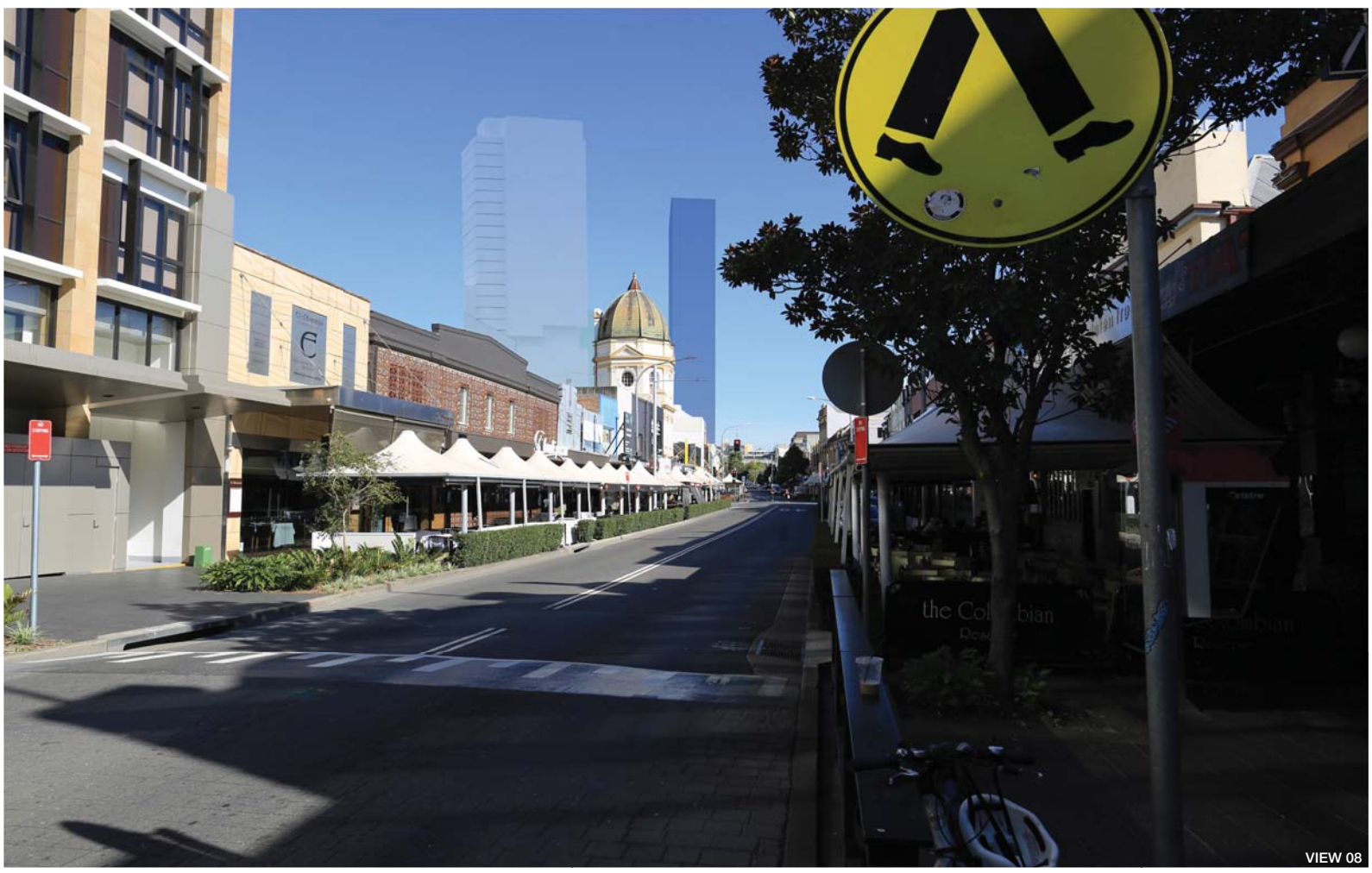
Section 75W Modification Application (MOD 1)

MP10_0068 Westfield Shopping Centre Parramatta



VIEW 08

Report prepared for Scentre Group

Prepared by: Dr Richard Lamb and Jane Maze-Riley

VISUAL IMPACT ASSESSMENT

June 2018

1/134 Military Road, Neutral Bay, NSW 2098 PO Box 1727 Neutral Bay NSW 2089
T 02 99530922 F 02 99538911 E info@richardlamb.com.au W www.richardlamb.com.au

Contents

Executive Summary

Objectives

The objective of this report is to prepare an independent Visual Impact Assessment (VIA) to accompany the s.75W application for the Westfield Shopping Centre Parramatta. The s.75W application seeks to modify the existing approved development MP 10_0068. The commercial tower envelope was approved in 2014. The application is referred to as Section 75W Modification (MOD 1) to the Approved Commercial Tower Building Envelope Concept Approval Major Project MP10_0068 Westfield Shopping Centre Parramatta (MOD 1).

This VIA includes certification of the accuracy of the preparation of photomontages required to accompany the VIA by the Secretary's Environmental Assessment Requirements (SEARs). A Certification Report is included in Appendix 4.

Key Issue 6 of the SEARs requires the preparation of a Visual Impact Assessment, specific requirements for which are included in section 6 Plans and Documents in the SEARs.

Methods and Results

The VIA methodology is set out in Appendix 2 and includes a method flow chart and a detailed description of each part of the process that has been followed. It consists of three main components beginning with analysis and documentation of existing views and an analysis of baseline factors, analysis of the extent of visual effects, followed by the third main component which is the assessment of visual impacts.

It was found that no significant change would occur to the effect of the project on the visual catchment, or to the visual character, scenic quality, or public domain sensitivity of the site as a result of MOD 1.

There would be low to medium visual exposure to most view locations other than some close views that may be associated with higher sensitivity and higher levels of visual effects.

When the levels of visual effect were weighted against criteria of visual absorption capacity and compatibility with the Concept Approval and urban features, including the desired future character of the visual context of the wider Parramatta CBD, the residual visual impacts were considered to decrease in significance and be low overall.

Conclusions

The results were assessed against relevant legislation including documented historic views and the SEARs and VIA also considered requirements outlined by Parramatta City Council.

The overall visual impacts of MOD 1 were found to be low and acceptable.

The level of visual change caused by MOD 1 compared to the Concept Approval on close sensitive views was considered to be an appropriate outcome. In our opinion, a similar level of visual effects and impacts on close, sensitive views are anticipated and have been approved in the Concept Approval. The additional, incremental or residual impacts that would be caused by MOD 1 were considered to be compatible with the approved Concept Plan and the existing and emerging visual context, including documented heritage views.

Specific concerns to manage and reduce visual impacts on key views south along Church Street and from view locations near Old Government House and in Parramatta Park would be met in the project.

Recommendations

The minor overall visual impacts of MOD 1 do not require extensive recommendation for impact mitigation.

1 Objectives of assessment

1.1 Objectives of this report

Richard Lamb and Associates (RLA) were commissioned to prepare an independent visual impact assessment (VIA) of MOD 1 for the Westfield Parramatta Shopping Centre, by Scentre Group. RLA are specialist consultants in visual impacts, views, view loss and landscape heritage. A CV for the principal and author of this report, Dr Richard Lamb is included as Appendix 5.

1.2 Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements (SEARs) dated 29th September 2017 identify the key issues that are relevant to visual impacts.

Key Issue 4,

A detailed visual impact assessment (VIA) must be undertaken to identify visual changes and view impacts of the projects to/from key vantage points and surrounding land. Photomontages or perspectives should be provided showing the project.

The VIA must consider the impact of the project on key views to and from places of heritage significance including important views identified in the Conservation agreement for the protection and conservation of World and National Heritage values of the Australian Convict sites, Old Government House and Domain, Parramatta.

1.3 Plans and documents

The SEARs, under Plans and Document that shall be submitted, require, at item 6;

6. Visual Impact Assessment

The visual impact assessment, including focal lengths, must be done in accordance with the Land and Environment Court requirements, to/from key vantage points and surrounding land.

Visual Assessment Methodology

The consultant's methodology should be explicit. This may include a flow-chart indicating how the analysis is to be undertaken, or a narrative description of the proposed sequence of activities.

As part of the methodology, the consultant should provide and explain criteria for assessment relevant to the site, local context and proposed built form and public domain outcomes. A rationale should be provided for the choice of criteria. Criteria must include reference to the planning framework.

An assessment matrix should be produced including number of viewers, period of view, distance of view, location of viewer to determine potential visual impact ie. high medium or low.

Visual Catchment

Potential visual catchment and view locations including contours (areas from which the development is visible) should be identified. This must include but is not limited to Church Street, (from north to south), Fitzwilliam Street, Argyle Street, Centenary Square, Old Government House and Lancer Barracks.

Table 1 below summarises the provision of information by RLA and its compliance with the SEARS.

In relation to the analysis of visual effects and impacts RLA have also had regard to the following relevant planning instruments, policies and guidelines;

Parramatta LEP 2011

Parramatta DCP 2012

Conservation Agreement for the protection and conservation of World Heritage Values of the Australian Convict Sites, Old Government House and Domain

Parramatta Park Conservation and Management Plan

Development in Parramatta City and the impact on Old Government House and Domain's World and National Heritage listed values Technical Report (Technical report)

Heritage Study CBD planning Controls (Urbis 2015)

1.3 The Site and surrounds

The subject site for the tower proposed in MOD 1 is on top of the existing podium of the Parramatta Westfield Shopping centre, located at 151 Church Street at the corner with Argyle Street. The existing site is characterised by retail and commercial development including a podium that is equivalent to approximately 4-5 residential stories in height and includes rooftop plant and carparking. The existing shopping centre is extensive low-rise development that fills an entire block of land bounded by Argyle Street to the north, Church Street to the east, Marsden Street to the west and Campbell Street to the south.

1.4 Limitations

This report concerns visual impacts only. Visual issues also arise for other technical disciplines such as town planning, urban design, landscape design, architecture and heritage conservation. Technical reports from these disciplined may include consideration of visual issues and are addressed by others with appropriate expertise.

2 Project Background and Description

Table 1 Compliance with SEARs

Item	Requirement	Addressed in RLA VIA
Key Issue 4	Visual Impact Assessment photomonatges including from key vantage points including; Conservation agreement for the protection and conservation of World and National Heritage values of the Australian Convict sites, Old Government House and Domain, Parramatta.	Photomonatges are provided from 4 locations in Parramatta Park including 2 locations adjacent to Old Government Park (VP 12, 13, 14 and 15).
Plans and documents, Item 6 Visual Assessment Methodology	The visual impact should include focal lengths in accordance with the Land and Environment Court of NSW	An explanation of the focal lengths used and the process followed in relation to the preparation of visual material including photomontages is included in Appendix 4 certification report. The processes used follow the requirements of the Land and Environment Court of New South Wales.
	The VIA methodology should explicit, may include a flow chart or a narrative of sequence of activities. The methodology should explain criteria for assessment ie. Local context. Criteria should include reference to the planning context.)	A methodological Flow Chart is included in Appendix 2 within an explicit description of the each component of the method. The criteria used for the assessment are discussed in sections included in sections 3.1 and 3.2.
	Assessment matrix including number and location of viewers and potential visual impact ratings	Details are recorded for each view locations (view point VP) on Data Sheets. Data sheets are included at Appendix 3.
	The visual catchment should be defined and explained.	The visual catchment is defined and explained in section 2.1 and 3.1
	An Assessment matrix should be produced including number and location of viewers and potential visual impact ratings.	Details are recorded for each view point on Data Sheets. Data sheets are included at Appendix 3
Visual Catchment	The potential visual catchment and view locations including contours should be identified and included Church Street (from north to south) Fitzwilliam Street, Argyle Street, Centenary Square, Old Government House and Lancer Barracks. Categories of views should be defined and plotted.	The extent of visual catchment is described in section 3.1.1. The extent is visual catchemnt has not been explicitly defined (mapped) or contours shown due to the potential scale of the area, given the height of MOD 1. The visual effects and impacts of the Concept Approval and MOD 1 are recorded for a range of locations for 17 key view points (VPs) including those listed. The locations for all VPs are shown on Map 1 and photomontages for all VPs are included in Appendix 1.
	Key vantage points should be described and represent a variety of locations in the public domain eg public domain areas streets, heritage items and open spaces.	Views from key vanatge points are described in Table 1. The 17 views analysed are from a variety of locations from close, medium and distant range, streets, public places and heritage items. Data sheets for each view location are included in Appendix 4 and summarised in Table 2.
	Photos are required for representative view categories plotted on a map.	Map 1 identifies the location of additional views that were not selected for modelling.
Visual Material	Reference to site analysis	A site analysis is included at 1.3 and 2.1 and in section 3.0.
	A key plan is required to locate view points and a narrative provided to explain their selection.	A view location map (Map 1) is included in section 2.1. Justification of view places is included in section 3.1
	Photomontages should show the Concept Approval and Mod 1 envelopes. The location of cross sections should be clearly shown on a key plan and choices explained in the context f the visual catchment.	Photomontages include both envelopes shown in translucent colours of green (Concept Approval) and blue (MOD 1). Cross sections showing the proposed development within the visual catchment have not been provided. In our opinion given the potential horizontal scale and extent of the visual catchment, cross sections would be excessively large and ineffective. There would be no meaningful utility in preparing such sections. Further information in relation to the visual catchment is included in section 3.1.1.
	Vertical exaggeration should provide an accurate impression of buildings in the context of the visual catchment.	Accurate photomontage representations of the buildings have been prepared for 17 views and are included in Appendix 1.
	A key plan is required to locate view points and a narrative provided to explain their selection.	Refer to Map 1, and discussion is provided in section 3.1.1.
	The assessment must benchmark against the existing situation and currently approved plans	Table 1 includes a description of the existing, approved and proposed development. Photographs in Appendix 1.
	Before, approved and proposed views should be prepared using focal lengths equivalent to the human eye (50mmx 35mm FX format , 46^0 angle of view.	Existing, approved and proposed views are shown in Appendix 1. A description of the process and focal lengths used in included in the certification report in Appendix 4.

The Concept Approval includes internal and external building works at the existing Westfield Paramatta Shopping Centre including a tower form located west of the corner of Church Street and Argyle Street.

During the design phase of MOD 1 Paramatta Council provided feedback in relation to important views. In particular this required that any tower form should not terminate a potential axial view from the north along Church Street and should reduce potential amenity impacts such as overshadowing and the appearance of building bulk. In addition, the existing podium should be used as a base for the tower form and both forms should not create negative effects on views to St Johns Cathedral from the axis of Church Street. Church Street is not a straight street north or south of St Johns Cathedral and it also changes direction several times. A major change of alignment is in the immediate vicinity of the Cathedral.

To the extent that it is possible to propose a practical tower location that is not seen in the axis of part of Church Street north of the Cathedral, the proposed development has been amended so that the tower form is located further west away from the terminus of a potential axial view south along Church Street and rather than acting as a terminus to the view, acts as a backdrop to the Cathedral. In addition, the MOD 1 tower form has a reduced sized and simple rectangular floorplate to give the appearance of a narrower, slimmer form, particularly in views from the north. The tower is also proposed to be taller compared to the Concept Approval.

Therefore in terms of visual change that is relevant to the assessment of potential visual impacts, MOD 1 proposes the following changes;

Relocate the approved office tower to the west along the Argyle Street frontage (about midway between Church Street and Marsden Street), increase the size of the tower to some 112,000m2 GFA and increase the height of the tower to 43 commercial storeys including plant.

2.1 External Visibility

Of the works proposed, the tower form has a wide potential visual catchment. The tower form would be visible in all directions in close, medium and distant views. However, the extent of visibility depends on the location of the viewer and intervening built form and vegetation, and in close and medium distant range views, the alignment of streets. For example in close views such as approximately 450 metres to the north-west at the west end of Hunter Street which is a documented historic view in the Parramatta Development Control Plan (PDCP historic view 2 refer to Plate 31) the alignment of the road and the street wall height and bulk of buildings in the foreground of views, would block all views to the proposed tower form. Views from the north-west from open areas within Parramatta Park would include the upper parts of the slim tower form, visible among other buildings in the foreground or mid-ground composition of the view.

The extent of visibility of the built forms included in MOD1 is documented in individual data sheets for 18 views which have been analysed with the assistance of block-model photomontages. A comparative analysis of the visual effects of the Concept Approval and MOD 1 is tabulated in Table 1. The data sheets provide a matrix of visual effects and impacts criteria as required by the SEARs. A summary of levels of visual effects and impacts identified in the data sheets is in Table 3

3 Visual effects analysis

The fully detailed methodology for this report is in Appendix 2. It is accompanied by a flow chart that shows the logic, sequence and components for the documentation, analysis and assessment of visual impacts.

This section of the report is based on Section B2.2 of the methodology. Section B2.2 details the components of the visual effects analysis matrix. The analysis of the cause and extent of visual effects provides the baseline to the assessment of visual impacts.

3.1 Baseline visual effects analysis factors

(See B2.2.1, Methodology, in Appendix 2)

3.1.1 The effective visual catchment of the project site

The site is located at the south end of the existing Parramatta CBD, south of the Parramatta River and is surrounded by a relatively flat landscape.

Small variations in topography exist to the north where the landscape slopes gently towards the Parramatta River and to the south, where there is a low ridge along which runs part of the Great Western Highway. The landscape in these areas is slightly elevated relative to Church Street. Any tower form building including the Concept Approval and likewise the s.75W application office tower would have a large potential visual catchment. This would not be confined to the application considered in this report but would also apply to other emerging tall buildings in the Parramatta CBD.

During field work the potential visibility of the MOD 1 was determined by RLA using a combination of techniques. These included field observation of the site in close views, using surrounding marker buildings to identify the location of the subject site in more distant views and use of an electronic compass and GPS to locate it. In distant range views where the site itself was not visible, other features in the Parramatta skyline were used to approximately locate the MOD 1 tower form for example cranes being used for construction at Parramatta Square. The bearings to the site from important view locations, which had been identified on aerial imagery, were used as another cross-check.

The Meriton tower was used as an approximate marker for development at the north end of the Parramatta CBD close to the river. The tower form in MOD 1 would potentially be visible to the north including locations to the north-west and north-east for example from elevated locations on Windsor Road in Northmead and in North Parramatta. To the east, views would be possible from Rydalmere and Camellia. The tower element proposed in MOD 1 would be visible at much greater distances, as evident in the visibility of the existing Meriton Tower at the northern gateway on Church Street, which is visible in some conditions from places as far away as North Ryde and the Sydney CBD. However, these are isolated views from distant viewing locations and in our opinion are not sensitive locations.

We distinguish between the total visual catchment (the area in which there is any visibility of an item) and the effective catchment. The effective catchment is the area within which there is sufficient detail to perceive the nature and quality of a development, as well as the potential for it to have negative effects, for example on specific views, settings, streetscapes or items of scenic or cultural significance. The effective visual catchment is smaller than the total visual catchment.

It is impractical to map the total visual catchment, notwithstanding the reference to this in the SEARs, as the tower proposed would be widely visible from considerable distances in some locations outside Parramatta, whereas in the closer locality, the visibility would be significantly restricted by existing development that varies enormously in height and bulk. For example, the proposed tower in MOD 1 would not be visible from most of the commercial area of Parramatta and surrounding suburbs but would be visible from some isolated locations (see Appendix A and photomontages). A map even of the effective visual catchment would be of no utility, as it would be largely blank, showing large areas from which the building would not be visible.

Views to MOD 1 would be available from the west from parts of Mays Hill as shown in photographic

Map 1: Photomontage view locations 3

Photographic plate locations 1

Approximate location of subject site

NORTH

Not to Scale

Location 18
View north-west from near the entrance of the Parramatta Train Station on Argyle Street

plate 25. This view location is from within the former Parramatta Golf Course and represents an isolated view from an east-facing slope in a similar location to view 8 in Figure 4.3.3.4 of the DCP. The view in the DCP does not include the subject site, as it is orientated toward the north-east, whereas the site is to the east. The view is also not indicative of views available from adjoining roads or residential development located further west along Pye Street or adjacent to the west side of the Golf Course in Lichen Place or Parkside Lane. Views from residential areas to the west are constrained by vegetation in the golf course, rising intervening topography and residential development in the vicinity that is predominantly characterised by closely spaced, long built forms of three storeys.

There are no notable high points west or north-west of the subject site within the local visual context from which to see the site with the exception of some isolated knolls and the banks of the Parramatta River within Paramatta Park. Old Government House is located at the top of the banks of the Parramatta River so that topography slopes gently towards the east and towards the existing Parramatta CBD. The upper parts of the tower would be visible from the northern wide-open spaces of the park for example from the Dairy Precinct. In this regard we make the assumption that parts of the proposed development would also be visible from Parramatta Old Kings Oval and the vicinity of the Parramatta Stadium.

Views from the east to parts of the tower form in MOD 1 are available from parts of Harris Park. Residential development in this part of Parramatta is low density and low scale so that from some locations the tower form would be visible above such low-height built forms. A near-axial view would be available along Hassell Street in the vicinity of Hambledon Cottage. Other glimpses of the tower from the east would be available from parts of Harris Street near George Street for example at the Macarthur Street Bridge (Gasworks Bridge). We observed an isolated view from the Grand Drive railway overbridge at Camellia approximately 2km east of the site.

To the south the tower form would be visible from the southern approaches to the city along Church

Street (photographic plate 321 and photomontage 5).

In all cases the upper parts of the tower form would be visible above intervening development some of which is of large scale and medium height. The proposed development would also be visible in the context of the existing and emerging skyline of the Parramatta CBD that is undergoing a significant uplift in height, soon to include buildings taller than the MOD 1 tower proposed.

Overall notwithstanding the proposed development has a large total visual catchment, direct views from close and medium range locations are constrained because of the blocking effects of other intervening built form and vegetation and because the viewer would often have to look upwards to well above the street wall height to be able to include the tower form in the composition of views.

3.1.2 Visual character

Parramatta Westfield is located at the intersection of Argyle Street and Church Street south of Centenary Square and close to the CBD of Parramatta. The Westfield Shopping Centre is an extensive currently low-rise development that fills an entire block of land bounded by Argyle Street to the north, Church Street to the east, Marsden Street to the west and Campbell Street to the south. The centre is largely comprised of a podium form which is equivalent to approximately 4-5 residential stories in height and includes rooftop plant and carparking. The site is adjacent to the main western railway lines and is immediately east of Parramatta Railway Station and Bus interchange. An elevated section of the railway is directly north of the subject of the shopping centre. Therefore the visual character of the site and streetscapes is strongly influenced by transport infrastructure as well as retail and commercial development.

The subject site is located in a part of the Parramatta referred to as the 'Southern Gateway' because

Potential future character for the CBD, seen looking generally south-east from the Parramatta River. (see Urban Design Report)

Location 19
Axial view south along Horwood Place in the mid commercial area of Parramatta

Location 20
View south from a central-east location in Centenary Square

Location 21
Context view from Church Street south of its intersection with George Street

Location 22
View south along Church Street from the Lennox Bridge heritage item

built form in this vicinity at the southern end of the Parramatta CBD is taller relative to the predominantly low height built form and heritage streetscape character along Church Street to the north. The visual character surrounding the site is predominantly characterised by retail, commercial and mixed-use developments on all sides, many of which include existing and tower and podium elements. Many tall tower forms are present in the immediate and wider visual context and others have either been approved or are under construction for example to the north, the recently completed Meriton Tower at the junction of Church Street and the Parramatta River and the approved Riverside Tower immediately to its west on the west side of Church Street that is currently under construction. We observed that construction on a large site known as Parramatta Square includes podium and tower forms for buildings 6, 4 and 3 and the tall tower form of the Aspire Tower. We observed other mixed use developments under construction to the south-east at the north-east corner of Church Street and Parkes Street.

In this regard, the urban landscape of Parramatta is undergoing rapid change as a result of strategic planning decisions to remove building height limits from most of the City Core, which is also proposed to be expanded to include the Westfield site. The future planning controls are likely to dispense with height limits over most of the Westfield site. Existing and future approved tall buildings are intended to become a characteristic feature of the skyline of Parramatta.

The emerging high-rise skyline of Parramatta already features a number of tall buildings, however approved and proposed tall buildings will create a substantial uplift in building heights and the profile of the CBD, as seen from the many potential vantage points in the relatively flat landscape. Below, as an indication of potential future character for the CBD, seen looking generally south-east from the Parramatta River. It is derived from the Urban Design Report and shows existing, approved and proposed future building forms, among which the proposed Section 75W office tower, is shown, adjacent to the group of approved buildings in the directly adjacent Parramatta Square, which includes the significantly taller Aspire building.

In our opinion the MOD 1 tower is a built form that would be compatible with the desired and emerging predominant visual character of the surrounding Southern Gateway area.

.

3.1.3 Scenic quality

The site would rank as of moderate-low scenic quality with regard to the opportunity for views presented to users of the precinct. The existing building and Concept Approval is typical in form and similar in height to others within its immediate surroundings particularly to the east and south-east in the Parramatta CBD that were constructed predominantly in the late 20th century.

3.1.4 View place sensitivity

The development site ranks as of low view place sensitivity in the present context. (Table B 2.1 in Appendix 2 Methodology).

View place sensitivity would be likely to remain as low or increase to low-medium following construction of the Concept Approval. The view place sensitivity is likely to remain as low-medium as a result of the construction of the approval of MOD 1. In other words the visual changes caused by the proposed development would have a neutral effect on view place sensitivity compared to the Concept Approval. In our opinion there would be no increase in potential public interest in the views or higher number of viewers to experience the views as a result of the approval of MOD 1.

Location 23
Axial view south along Church Street adjacent to No. 257 Church Street

Location 24
View south-west from the north side of Harris Park adjacent to Queens Wharf in George Street

Location 25
View south-east from sloping ground in the former Parramatta Golf Course at the approximate location of Parramatta DCP historic view 8 at Mays Hill

Location 26
View north along Church Street opposite Campbell Street

3.1.5 Viewer sensitivity

Viewer sensitivity is identified and rated on the relevant View Place Data Sheet (data sheet) included in Appendix 3. Similarly, ratings given in relation to viewer sensitivity are also likely to remain the same as in relation to the Concept Approval. Viewer sensitivity is determined by private interests in the effect of the proposal on views and is reflected in the extent to which viewers in the private domain would be affected by the views, particularly in a negative way, such as by view loss.

Viewer sensitivity in the public and private domain decreases with distance. It is considered that the highest impacts occur in the closest sensitivity range (within 500m), with moderate sensitivity at the medium sensitivity range (500m-1000m) and low sensitivity beyond 1000m.

3.1.5.1 Private Domain Views

There are no significant areas of residential development in the vicinity of the site to its north, west or south that could be affected by view loss caused by MOD 1. There are two existing residential towers on the east side of Church Street, located south-east of the proposed development and approved towers at 55 Aird Street. Other approved tower forms are located to the west at 11-13 Aird Street and 2 O'Connell Street. Due to the location and spatial separation of these approved developments and the subject site they are unlikely to be affected by potential view loss in relation to MOD 1.

The B1 tower at 118 Church Street and the Escen Building at 140 Church Street both have western elevations with windows and potential views to the west and north-west that would include the subject site and proposed tower form in MOD 1.

These are tall tower forms themselves and although RLA have not had the opportunity to inspect and document views from these locations, we have assumed that potential views to the north and north-west would be panoramic and may include scenic features such as parts of the distant eastern slopes of the Blue Mountains. Given the likely panoramic field of view available to views from the towers, we assume that views in most directions would not include the site. Views from the towers would also be affected by buildings under construction such as Aspire, approved buildings yet to be constructed in Parramatta Square and Church Street, and potentially by proposed buildings in the vicinity.

140 Church Street (called Tower 1 in this discussion) is located closest to the subject site at the corner of Fitzwilliam Street and Church Street and appears to be approximately 23 residential storeys in height, with 118 Church Street (Tower 2) being located further south and of a similar height. In absence of being able to inspect views from apartments in these building, Woods Bagot project architects prepared 3D computer generated images (CGIs) to simulate the potential views from high level apartments at Towers 1 and 2. The location and envelopes of approved and existing built forms that have been modelled by Woods Bagot are included at Appendix 5.

A range of view orientations were modelled for upper northern unit views in Tower 1 and upper Units in Tower 2. These show the building envelope of the Concept Approval in green and the MOD 1 envelope in blue. We observed from fieldwork and from an analysis of the modelling prepared, that residential Towers 1 and 2 are significantly lower in height to the Concept Approval so that some level of potential view blocking would be likely to occur in relation to the approved building in views from some units in both towers.

The CGI modelling shows that in relation to MOD 1, views from Tower 1 to the north-west may be improved because of the greater spatial separation and change in orientation of the massing of MOD 1 compared to the Concept Approval. Views 2 and 3 from Tower 1 show that the viewing blocking effects are improved because the foreground and mid-ground are more open due to the proposed tower being located further west. The re-orientation of MOD 1 blocks part of the mid-ground view that is characterised by low-scale built form. In this regard it appears that potential visual impacts of

MOD 1 on private domain views from Tower 1 would be not be significantly different to the those caused by the Concept Approval.

View blocking effects of MOD 1 on views to the north-west from Tower 2 would be improved because of an increased spatial separation and re-orientation of the proposed tower. The CGI's show that an approved development at 55 Aird Street which is located in the foreground of views creates significant view blocking effects and blocks part of the MOD 1 tower. We note that the approved Parramatta Square building 'Aspire' also contributes to view blocking in some views from Tower 2 constraining views to the north.

In summary in our opinion the extra of MOD 1 tower would not create additional view loss accept in relation to areas of open sky, only. The re-location of the proposed tower form would predominantly block views of low-scale commercial development in the mid-ground composition of views. Overall potential visual effects and impacts of MOD 1 on private domain views would not be likely to be significantly different in nature or extent than in the Concept Approval.

In this regard viewer sensitivity is considered to be a baseline factor that would not be significantly different for the MOD 1 application than in the Concept Approval.

3.2 Variable visual effects factors

(See B2.2.2, Methodology, in Appendix 2)

Variable factors which influence the visual effects of the MOD 1 are recorded on the data sheets for each view location. (See Appendix 3).

3.2.1 View composition type

The composition type from each view location is recorded on the data sheets (See Appendix 3). The composition of the views comparing the Concept Approval and MOD 1 are shown for 17 view places in the photomontages (Appendix 1).

The view composition type for analysed views, including a small number of close range view locations, is restricted, as the tower is only partly visible, with no adjacent features present.

Close views will be possible from locations such as Fitzwilliam Street (photomontage 17), part of Church Street (photomontages 7and 8), Argyle Street (photomontage 18), the Lancer Barracks Gates in Station Street (photomontage 4) and Centenary Square (photomontage 6). The MOD 1 tower would be visible in upward views above the immediate streetscape setting and the height of foreground buildings. The tower component proposed in MOD 1, although taller and differently located, would make no significant change to the view composition compared to the Concept Approval. In each case, the tower would be a feature of the view, isolated in space and seen against the sky.

Medium range views are typically also of restricted composition, as intervening development and vegetation blocks views to the podium and the lower part of the tower form (see for example photomontages of views from Hassall Street (photomontage 1), Gasworks Bridge (photomontage 2) and Church Street (photomontages 5 and 8).

Views that contain a significant proportion of the tower in MOD 1 are typically from distant range classes, for example views from North Parramatta (photomontages 10 and 11 in Church Street), Marsden Street (photomontage 12) and Old Government House and Domain and Parramatta Park (photomontages 13-16). These views are expansive, where the tower form is, in some cases isolated or would be visible in the same composition as approved but not yet constructed tower forms and from distances where future detail cannot be easily discerned.

3.2.2 Relative viewing level

The effects of the relative viewing level for each view location are recorded on the data sheets (See Appendix 3). Most relevant public viewing places are level with or slightly above the site in relative relief. Intervening development frequently blocks views toward the podium levels of the Concept Approval and MOD 1. As both the approved development in the Concept Approval and the building proposed in MOD 1 would be viewed predominantly against the sky, the effect of viewing level is not considered to significantly affect visual impacts.

3.2.3 Viewing period

The effects of viewing period are recorded in the data sheets (See Appendix 3). Longer viewing periods provide the circumstances for more analytical and reflective viewing and therefore higher engagement with the visual environment. Two classes of viewing locations could provide the circumstances for longer viewing period and therefore higher engagement with the visual environment (public spaces or recreational or tourism use, such as Centennial Square and Parramatta Park). The higher potential for longer term views is acknowledged in the data sheets in Appendix 3.

The visual effects of the proposed MOD 1 would not differ from the Concept Approval in relation to the effect of viewing period where both would be visible. The number of locations from which longer viewing times are possible would be increased however, by the increase in visual catchment in Parramatta Park and Old Government House and Domain caused by the increased height sought in the MOD 1 tower.

3.2.4 Viewing distance

The relative effects of viewing distance are described in Appendix 2, Methodology. Typical viewing distances that could be affected have been ascertained for each analysed viewing place and are recorded in the data sheets.

Viewers in the close-range category perceive the same components of the view in MOD 1 as in the Concept Approval. The proposal is for a tower visible against the sky. The details of a future tower building would be clearly evident. In some of the views, the podium would also be partly visible (Fitzwilliam Street, photomontage 17; Argyle Street, photomontage 18; Centenary Square, photomontage 6; Church Street, photomontage 7). The visibility of the podium element from Centenary Square and the southern end of the northern section of Church Street would decrease or be zero if future development in accordance with the height controls that apply to land between St Johns Cathedral and the site is constructed.

Viewers in the medium distance range generally also perceive the same components of the view in MOD 1 as in the Concept Approval, this time as an isolated tower element without the context of adjacent lower development and the podium. In some cases, the MOD 1 tower would be visible, whereas the Concept Approval tower would not be visible from the same location, as it is obscured by other existing development, for example from Church Street at Victoria Road (photomontage10) and Old Government House (photomontage 13).

The principle above applies equally to other tall built form existing, under construction or proposed for development in the Parramatta CBD, as a result of the relatively flat topography.

In the distant range views, the MOD 1 tower would in most cases be visible as an isolated element. The lower Concept Approval tower would not be visible from the same locations (for example from Church Street near Fennell Street (photomontage 11) and from Parramatta Park (Old Government House Dairy Precinct or River Views site, photomontages 15 and 15, respectively).

3.2.5 View sharing or blocking

Location 27
Context view north-west to the Parramatta CBD from midway along Wigram Street

Location 28
Detail of residential development south of and close to the subject site. The closest dark grey building is the B1 Tower at 118 Church Street.

There are two planning principles from the Land and Environment Court of New South Wales that are relevant, ie. *Tenacity Consulting v Warringah [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours (Tenacity)* and *Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor. [2013] NSWLEC 1046 (Rose Bay)*.

Tenacity concerns view sharing in the private domain and is the most widely referenced planning principle according to Land and Environment Court of New South Wales records. In analysing the viewer sensitivity above in relation to viewer sensitivity, it was concluded that it is unlikely that private domain views would be significantly affected by a different nature or extent of view loss caused by the MOD 1 application, compared to the Concept Approval. A full assessment of view loss in the private domain adopting the *Tenacity* principles would require a detailed assessment of individual views from dwellings that would be more appropriate at the development application stage. Nevertheless, it appears unlikely that a view sharing assessment would conclude that the MOD 1 application would be unreasonable on comparison to the Concept Approval, in the terms of *Tenacity*.

Rose Bay is relevant to view loss in the public domain. The principle in *Rose Bay* contains a recommended approach based first of a quantitative and secondly a qualitative assessment. It also emphasises the need to consider views that have been identified as of specific importance, for documented heritage views or views identified in planning instruments and policies.

The analysis of views and the photomontages in Appendix 1 includes views required in the SEARs, documented heritage views, views identified in the PDCP and other sensitive locations identified by RLA. The analysis of potential view loss that could be caused by the tower element proposed in MOD 1, considering each of the quantitative and qualitative assessment issues mentioned in *Rose Bay*, shows that the proposal does not have the potential to block views from the public domain. The tower is seen against the sky but otherwise causes no view loss. While the tower is quantitatively taller than in the Concept Approval and qualitatively different, being of a differently shaped and smaller footprint, the extra height sought and slimmer profile does not result in view loss in the public domain. It is therefore concluded that the planning principle in *Rose Bay* has no work to do in relation to this application.

In summary, in relation to view sharing or blocking, it is concluded that the MOD 1 application would not cause significantly greater of qualitatively different view loss in comparison to the Concept Approval.

3.2.6 Overall extent of visual effects

The indicative ratings table for ranking visual effects factors (Table B 2.1 in Appendix 2) was used as a guide to assessment of the overall level of visual effects considered against each of the factors above. The level of visual effects for 17 different view locations are recorded in the data sheets (See Appendix 3). The visual effects of MOD 1 have been assessed in relation to views required in the SEARs and additional views, both those documented as of heritage or strategic planning relevant in the PDCP and others identified as sensitive locations by RLA. The effects of both the Concept Approval and MOD 1 application on 17 of the viewing locations analysed were modelled in 3D by the project architects, Woods Bagot, following the Land and Environment Court of New South Wales practice direction for the preparation of photomontages. The details of the methods used and steps taken to satisfy the requirements of the Land and Environment Court of New South Wales practice note can be found in the Photomontage Certification Report at Appendix 4. In accordance with our methodology (Appendix 2), we determine visual effects to be the baseline against which the assessment of visual impacts is made.

Inspection of the data sheets (data summarised in Table 3, Appendix 3) shows that a low level of visual effects would be predominantly caused by the change of location and increased height of the tower form in MOD 1, compared to the Concept Approval. The highest level of effects is Medium, which is recorded for a close-range view from Centenary Square (VP6). Low visual effects are caused for all views that were analysed except for (VP6).

Summary data table for photomontage views

				Impact Weighting factors				
View Location Number	Direct visibility (any part of MOD1 Y/N	Distance class	Overall level of visual effects	Visual Absorption Capacity	Compatibility Concept Approval	Compatibility urban features	Sensitivity	Overall Visual Impact
VP1	Y	Distant	Low	Medium	High	High	Low	Low
VP2	Y	Medium	Low	High	High	High	Low	Low
VP4	Y	Close	Low	High	High	High	High	Low
VP5	Y	Medium	Low	High	High	High	Low	Low
VP6	Y	Close	Medium	Low	High	High	High	Medium
VP7	Y	Close	Low	Low	High	High	Medium	Low
VP8	Y	Medium	Low	Medium	High	High	Medium	Low
VP9	Y	Medium	Low	High	High	High	Low	Low
VP10	Y	Medium	Low	High	High	High	Low	Low
VP11	Y	Distant	Low	High	High	High	Low	Low
VP 12	Y	Medium	Low	High	High	High	Low	Low
VP13	Y	Medium	Low	Medium	High	High	High	Low
VP14	Y	Medium	Low	Medium	High	High	High	Low
VP15	Y	Distant	Low	Medium	High	High	High	Low
VP16	Y	Distant	Low	High	High	High	High	Low
VP17	Y	Close	Low	High	High	High	Low	Low
VP18	Y	Close	Low	High	High	High	Low	Low

4 Methods and results

This section of the report is based on Section B2.3 of the methodology detailed in Appendix 2. Section B2.3 details the components of the visual impacts analysis. The result of the analysis of visual effects (Section 3, above), is the baseline data for the visual impact analysis.

4.1 Visual impact analysis

The significance of visual impacts is differentiated from the extent of visual effects by giving weight to relevant impact criteria. In this way, the relative importance of impacts is distinguished from the size of the visual effects. The weighting factors determined to be appropriate are sensitivity, visual absorption capacity and compatibility. Compatibility was further broken down into compatibility with urban features and compatibility with the Concept Approval.

4.1.1 Sensitivity

The data sheets prepared by RLA acknowledge that the majority of view places inspected are busy public domain locations with high numbers of potential viewers. However, the overall rating for view place sensitivity was weighted according to other variable factors such as whether the view could be interpreted as or is a documented heritage view, the amenity of the location and heritage significance of the locations. In this regard 9 view places were rated as low sensitivity, 2 locations rated as having medium sensitivity and 6 locations as high sensitivity. The high sensitivity locations include close locations from Centenary Square (VP6) and adjacent to the Lancer Barracks (VP4) and all four views from Parramatta Park.

4.1.2 Visual absorption capacity

For most viewers within the immediate and wider visual catchment, the environment has a high visual absorption capacity (VAC) for MOD 1. While the visual catchment identified above in Section 3 is large, views from most of it are either distant and partial, or blocked in the foreground by intervening built form or vegetation.

In the more distant views, detail is not easily perceived. The proposed MOD 1 form would not be perceived as being significantly different in terms of form or character to the Concept Approval and would be visible in the context of other tall forms that have been approved or are under construction. Notwithstanding the location of the tower is further to the west and its height has been increased, the visual absorption capacity of the wider visual context of the site remains high in the majority of views. In our opinion, in the majority of close and medium distance views inspected the VAC for the MOD 1 would be rated as high. This is the case for 5 medium range view points, 2 close range viewpoints and 3 distant range view points. 3 viewpoints have VAC ratings of medium from medium range locations and 2 have a medium rating from distant locations including VP13,14 and 15 in Parramatta Park. Views from VP 6 (Centenary Square) and 7 (close view from Church Street) were assessed as having the visual context with the lowest visual absorption capacity to blend with or reduce the contrast of MOD 1 and were therefore rated as having low VAC. In these views the majority of the proposed tower is spatially isolated from other tall forms in the immediate visual context.

Notwithstanding 5 ratings of medium and 2 ratings of low VAC from the 17 view places inspected, in our opinion as approved tower forms are constructed and other developments are approved in Paramatta as part of the areas continued expansion, the VAC for MOD 1 will increase.

4.1.3 Compatibility

4.1.3.1 Compatibility with urban features

In all cases the visual compatibility of MOD 1 in relation to other urban features was rated as high. This is because in the majority of views the proposed tower would be visible within an immediate visual context that includes or will include other tall tower forms. Our assessment takes into account towers that are under construction in Parramatta Square and other approved developments in Parramatta Square, Aird Street and O'Connell Street. In this regard the change in location and additional height of MOD 1 is not dissimilar to the scale, character and form to other urban features and has a high compatibility with the existing, emerging and desired future character of the Parramatta CBD.

As noted in relation to the emerging visual character above, the urban landscape of Parramatta is undergoing rapid change, removal of existing height limits and expansion of the CBD character to the south. Existing and future approved tall buildings will create a substantial uplift in the profile of the CBD. In this context, the compatibility of the s.75W application with urban features is rated as high.

4.1.3.2 Compatibility with the Concept Approval

This assessment is a measure of the extent to which the visual effects of the proposal are compatible with the Concept Approval. Although MOD 1 is relocated to the west and is taller compared to the Concept Approval, in all views it will appear to be similar in form and character to it. For this reason, compatibility of MOD 1 with the Concept Approval was rated in all views to be high.

4.2 Applying the weighting factors

The weighting factors are applied to the overall level of visual effects to determine the significance of visual impacts.

The overall level of visual effects on all medium and long-range views in the public and the private domain was rated as low.

Potential visual effects and impacts on private domain views have not been specifically analysed, however based on our experience, observation and review of modelling prepared by Woods Bagot, in our opinion there are would a limited number of high sensitivity private domain viewing places that could be affected. Further discussion in relation to private domain views can be found above in section 3.1.5.1

As each of the weighting criteria above is generally high overall, this decreases the significance of visual impacts and therefore there is no utility in applying the weighting factors to the medium or distant view places.

This leaves consideration of the close-range views in the public domain as the only relevant views to which the weighting factors can be validly applied. Inspection of Table 3 shows that the only medium level of visual effects would be for VP6, Centenary Square.

RLA determined that the visual effects of MOD 1 in this one close view from Centenary Square deserved a higher rating of medium, because of its close proximity, the sensitivity of the view place, potential extended viewing periods and effects on the visual character of the view.

The effect of applying the weighting factors to the visual effects of MOD 1 reduces the significance of the effects to a low visual impacts rating.

4.3 Overall visual impacts

The overall level of visual impacts was rated as low for all views with the exception of VP6. The low overall impacts rating is based on the assessment of the combination of baseline factors described in section 3 above which are explained in Appendix 2 Assessment Methodology, for example; visual character, quality, distance and viewing period etc and weighting factors such as compatibility. Inspection of the data sheets shows that notwithstanding the sensitivity of some locations and a variable level of visual absorption capacity, the most important weighting factor in determining the visual impacts of MOD 1, is compatibility. The compatibility with urban features and the Concept Approval was high for all VPs whilst the level of visual effects was low for all locations accept VP 6.

5 Assessment

This chapter outlines the assessment in relation to Council's issues and a comparison of the visual impacts of the Concept Approval with MOD 1

5.1 RLA Response to Council's Issues

We are advised that Council provided specific feedback in relation to views south along Church Street to St Johns Cathedral in terms of heritage impacts and termination of a potential view along the street.

RLA documented views from 8 locations north of the site along Church Street. The closest and most relevant are those shown in photomontages from view locations 6, 7 and 8. The visual effects of MOD 1 are described and rated in Table B2.2 and the visual impacts of the effects are rated in the data sheets for each location.

The tower form is not the subject of an axial view along Church Street. The tower is located further west than the apparent terminus of Church street where it curves eastwards at the intersection of Macquarie Street and Centenary Square. A potential near axial view to the south along Church Street would be possible if the viewer stands in the centre of the carriageway close to the intersection and looks to the south south-west. However, vehicle traffic in this part of Church Street immediately north of Centenary Square is restricted to one north-bound lane, so that views to the south from this location would not be focal or axial views along the Street for road users. In addition, views to the Cathedral for pedestrians walking south from both footpaths, are constrained by built form, street tree vegetation and overhead awnings so that direct axial views along the street corridor are restricted.

The building, while visible above and behind the Cathedral from the approximate location of view 3 in Figure 4.3.3.4 of the DCP in Church Street, does not obscure view of the Cathedral. It is a background feature, beyond the Cathedral. None of the three views 2, 3 or 4 would be blocked or obscured by the s.75W office tower: the Cathedral remains the centre and the focus of the view.

In our opinion the level of potential visual effects and impacts of the proposed built form on the view south along Church Street is acceptable and would not significantly or negatively affect views to Centenary Square or St Johns Cathedral, compared the effects of the Concept Approval.

5.2 Comparison of visual impacts of the Concept Approval and MOD 1

An indicative ratings table was developed as a guide to assessment of compatibility of the proposed development with the Concept Approval (see Table 2).

Table 2 Summary of Visual Effects

RLA image prefix	Photomontage Location/number	Location Description	Visual Effects of the Concept Approval	Visual Effects of s.75W MOD 1
RLA 272	Church Street	Approximate location of DCP historic view 5 south from oppostite Meriton Building, near Lennox Bridge	The approved tower is not visible in this view.	Most of the proposed MOD 1 tower is visible to the east of Church Street. The tower does not provide a terminus in the axial view south along Church Street and is set back significanty from heritage items and streetscape forms in the foreground of this view. Notwithstanding the proposed tower would create a taller feature in the composition of this view compared to the Concept Approval, it blocks views only of open sky. The proposed tower is visible in the context of other approved forms that are similar in character and scale. The proposed MOD 1 tower creates visual effects that are compatible with the emerging and desired future character of Parramatta.
RLA 267	Church Street	Approximate location of DCP historic view 3 south along Church Street	The approved tower is not visible in this view.	The MOD 1 tower is visible to the west of Church Street, as it curves to the east in the mid-ground composition of this view. The tower is significanty spatially separated from St Johns Cathedral to the south notwithstanding it will be visible in the same composition. The tower would introduce a new tall slim built form into the view but does not block views to the Cathedral or other heritage items in the vicinity and blocks only views of open sky. The proposed tower would be seen in teh context of otherapproved tall built forms. The visual effects of MOD 1 are compatible with the emerging and desired future character of Parramatta.
RLA 287	Church Street	Approximate location of DCP historic view 6 south along Church Street from intersection with Fennel Street	Part of the approved tower is visible in the background composition and partly obscured by intervening built forms.	Part of the proposed MOD 1 tower is visible in the background composition but is partly obscured by intervening development and vegetation. The tower creates a taller feature in the composition relative to the Concept Approval, but it does not create view loss. It is visible in the context of other developmnet that is not dissimilar in form or scale and in this regard its visual effects are compatible with the emerging and desired future character of Parramatta.
RLA 290	Church Street	View south from NW corner of Victoria and Church Street	The tower is not visible in this view.	Part of the proposed MOD 1 tower is visible in the background composition but is partly obscured by intervening development and vegetation. The tower would create a taller feature in the composition of views relative to the Concept Approval, but it does not create view loss except to areas of open sky. The visual effects of MOD 1 are compatible with the emerging and desired future character of Parramatta.
RLA 347	Fitzwilliam Street	RLA view west	The Concept Approval tower creates a new builidng mass at the terminus of a focal view along Fitzwilliam Street. It is significanly screened by an existing apartment building in Church Street. The tower may cause some view loss to adjacent residential towers.	The proposed tower creates a similar visible building mass in a similar alignment to the Concept Approval near the terminus of a view along Fitzwilliam Street. The MOD 1 massing is compatible with the emerging and desired future character of Parramatta.
RLA 348	Argyle Street	RLA view west	The Concept Approval tower provides a new built form in the mid-ground of the view. The approved form is partly screened by existing residential tower development.	The proposed tower is slimmer, is also partly screened by an existing residential tower and does not create significantly more visual effects or potential view blocking in the public or private domain, compared to the Concept Approval.
RLA 266	Centenary Square	Memorial steps at the north side of the square	The approved tower is not present in the composition of this view.	The MOD 1 tower is visible in the mid-ground composition, significanty spatially separated from St Johns Cathedral. It would introduce a new tall slim feature in the composition but does not block views to the Cathedral or other heritage items in the vicinity and blocks views only of open sky. The proposed tower is visible in the context of other approved forms and is not dissimilar in from or scale to them. The proposed MOD 1 tower creates visual effects that are compatible with the emerging and desired future character of this part of Parramatta.

Table 2: Indicative ratings table (continued)

RLA image prefix	Photomontage Location/number	Location Description	Visual Effects of the Concept Approval	Visual Effects of s.75W MOD 1
RLA 261	Station Street/ Lancer Barracks	RLA view north-west rear gate of Lancer Barracks	The Concept Approval provides a new built form in the mid-ground of the view. The approved form is partly screened by lower commercial development and is visible in the context of other forms that are similar in form, height and scale.	The MOD 1 tower is slimmer and does not create significantly more visual effects or potential view blocking effects compared to the Concept Approval.
RLA 336	Old Government House	DCP historic view 9 bath house and Technical Report view 5	The Concept Approval built form is visible in the centre of the view between other development.	The MOD 1 tower is taller and slimmer and does not create significantly more visual effects than the Concept Approval. The proposed tower is visible within a cluster of other tall built forms so that the visual effects of it are compatible with the emerging and desired future character of Parramatta.
RLA 332	Old Government House	DCP historic view 1 carriage loop	The approved tower is not present in the composition of this view.	The proposed slimmer tower does not create significantly more visual effects or potential view blocking effects compared to the Concept Approval. The tower is visible within a cluster of other tall built forms and is compatible with the emerging and desired future character of Parramatta.
RLA 302	Parramatta Park	Technical Report view 5 Dairy Precinct	The approved tower is not present in the composition of this view.	The upper part of the MOD 1 tower is visible in the background composition above vegetation and other development. Notwithstanding it would create a new slim feature in the composition of such views, it does not create view loss except to areas of open sky. It is visible in the context of other approved development that is similar in form and scale. The visual effects of MOD 1 are compatible with the emerging and desired future character of Parramatta.
RLA 303	Parramatta Park	Technical Report view 8 River Views	The approved tower is not present in the composition of this view	The upper part of the MOD 1 tower is visible in the background composition above vegetation and other development. It would create a new slim feature in the composition of views but does not create view loss except of open sky. The proposed tower is seen in the context of other tall tower forms and in this regard, the visual effects of MOD 1 are compatible with the emerging and desired future character of Parramatta.
RLA 276	Corner Horwood and George Streets	RLA view from north-east	A small part of the Concept Approval buit form is visible in the view above intervening development.	The MOD 1 tower would introduce a tall slim form into the view that is partly obscured by other approved intervening development. It does not create significantly more visual effects or potential view blocking effects compared to the Concept Approval other than to areas of sky. The proposed tower is visible in the context of other approved tower forms and in this regard its visual effects are compatible with the emerging and desired future character of Parramatta.
RLA 319	Hambledon Cottage	RLA view east along Hassall Street	A small part of the Concept Approval buit form is visible in the view above intervening development.	The upper part of the MOD 1 tower is visible in the background composition above other development. It will create a new slim feature in views but does not create view loss except of open sky. The proposed tower is visible within a cluster of other tall built forms so that the visual effects of MOD 1 are compaitble with the emerging and desired future character of this part of Parramatta.
RLA 320	Macarthur Bridge	RLA view south-east	The approved tower is not present in the composition of this view	Part of the MOD 1 tower is visible and contributes to the background composition behind other built forms. It is visible in the context of existing and approved developments that are not dissimilar in height and scale. The proposed Mod 1 tower does not create view loss except of open sky. The proposed tower is visible within a cluster of other tall built forms so that the visual effects of MOD 1 are compaitble with the emerging and desired future character of this part of Parramatta.

Table 2: Indicative ratings table (continued)

RLA image prefix	Photomontage Location/number	Location Description	Visual Effects of the Concept Approval	Visual Effects of s.75W MOD 1
RLA 329	Marsden Street Bridge	RLA view south	A small part of the Concept Approval built form is visible in the view above intervening development.	The MOD 1 tower would introduce a tall slim form into the background composition of the view. It does not create significantly more visual effects or potential view blocking effects compared to the Concept Approval. The proposed tower is visible in the context of other approved forms including at Parramatta Square that are currently under construction and is not dissimilar in height and scale to these and other approved forms. The visual effects of MOD 1 are compatible with the emerging and desired future character of Parramatta and tall built forms.
RLA 321	Church Street and Great Western Highway	RLA view north	The Concept Approval provides a new built form in the mid-ground composition above development in the Southern Gateway area.	The MOD 1 tower form would introduce a new tall, slim form into the view and is partly visible in the background composition. The proposed tower is visible within a cluster of approved built forms that are not dissimilar in height and scale to it so that the visual effects of MOD 1 are compaitble with the emerging and desired future character of Parramatta. The proposed Mod 1 tower does not create significantly more visual effects or potential view blocking compared to the Concept Approval other than to areas of sky.

6 Conclusions and Recommendations

This section summarises the conclusions derived from Section 3 (Site Analysis), 4 (Methods and results) and 5 (Assessment) of this report.

6.1 Effect of the project on its visual catchment

The project will increase the extent of the potential visual catchment to include some more distant viewing locations due to an increase in height of the s.75W office tower. However, the extent of the effective visual catchment will not be significantly different to that which relates to the Concept Approval. Notwithstanding the tower has increased in height and moved further to the west its form and character are similar to the Concept Approval and will generate similar visual effects within the surrounding visual context.

The profile of the CBD of Parramatta is undergoing rapid and desired change supported by strategic planning decisions to remove building height limits from most of the City Core, extend the core to the Westfield site and beyond and encourage future tall building to become characteristic of the future skyline of Parramatta.

The emerging high-rise skyline of Parramatta will feature a number of tall buildings among which the proposed tower will be visible and no more notable than others.

6.2 Effect on visual character and scenic quality

There would be a low level of visual effect on existing visual character and scenic quality. The proposed MOD 1 would retain the existing visual character and scenic quality of the site. The urban landscape of Parramatta is also undergoing rapid change with existing and future approved tall buildings becoming a characteristic feature of the skyline of Parramatta.

The proposed development would not create any significant additional impacts on the visual character and scenic quality of the site and surroundings but will complement the emerging quality of the setting.

6.3 Effect on private views

In our opinion there would be limited and potentially minor effects of MOD 1 on private views from the adjacent residential developments compared to the effects of the Concept Approval. It is concluded that there would be no significant view loss or change to the composition of views from the private domain.

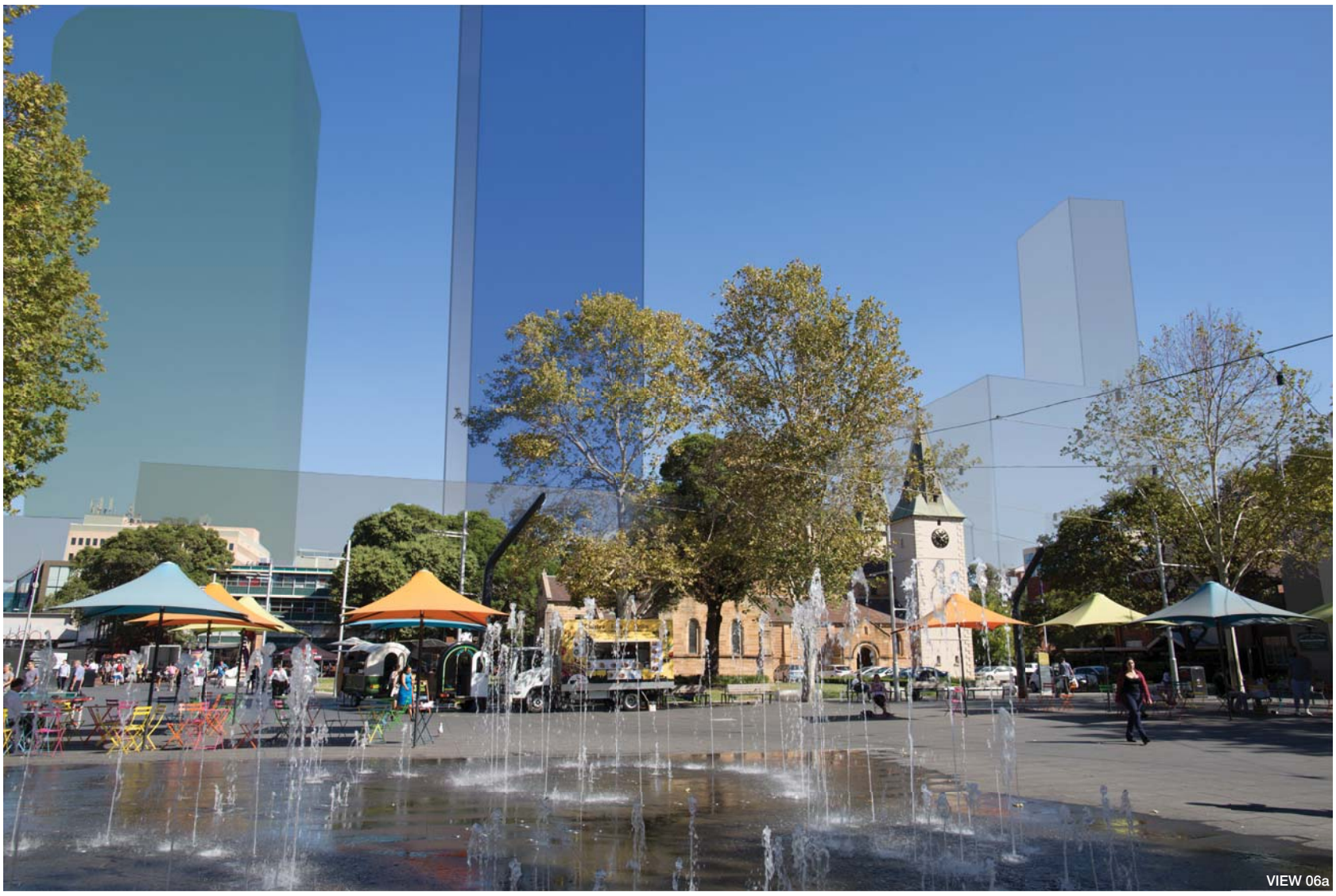
6.4 Effect of variable visual factors

Analysis of the effect of variable factors on the extent of visual effects in Section 3.2 showed that there would not be significant view loss or blocking or change to existing view compositions. Viewing distance and public domain sensitivity were found likely to increase the level of visual effects only in close range views. However, higher view place sensitivity and longer viewing periods for close range views would be down-weighted within the context of significant change being an attribute of the desired future character and emerging taller skyline of the Parramatta CBD.

6.5 Overall extent of visual effects

The visual effects of the proposal will be low in all views. A medium level of visual effects will only occur in one close view, VP6 from Centenary Square. In common with other buildings approved in the same visual catchment, the s.75W office tower will be visible against the sky as part of the backdrop to the Square and the Cathedral. The Cathedral will continue to dominate the foreground and be the focus of the view, as also noted in the Statement of Heritage Impact.

PLEP 2011 permits buildings to be constructed to 28m in height on the northern side of the railway embankment, between the site of the proposed tower and St Johns Cathedral. As is the case with the proposed s.75W office tower, these buildings would form a backdrop to the Cathedral (see figure below) e would be no significant difference between the effects of the building in the Concept Approval and the s.75W tower in this regard.



Photomontage from location 6 which includes approved envelopes and envelopes in the immediate vicinity that comply with the PLEP height controls

6.6 Overall visual impacts

Applying the weighting factors of visual absorption capacity and visual compatibility with urban features and the Concept Approval to the level of overall visual effects, resulted in the overall extent of visual impacts being reduced in significance to low for all views.

Location 1
View west along Hassall Street from outside the gates to Hambledon Cottage

Photomontage 1
Photomontage from location 1

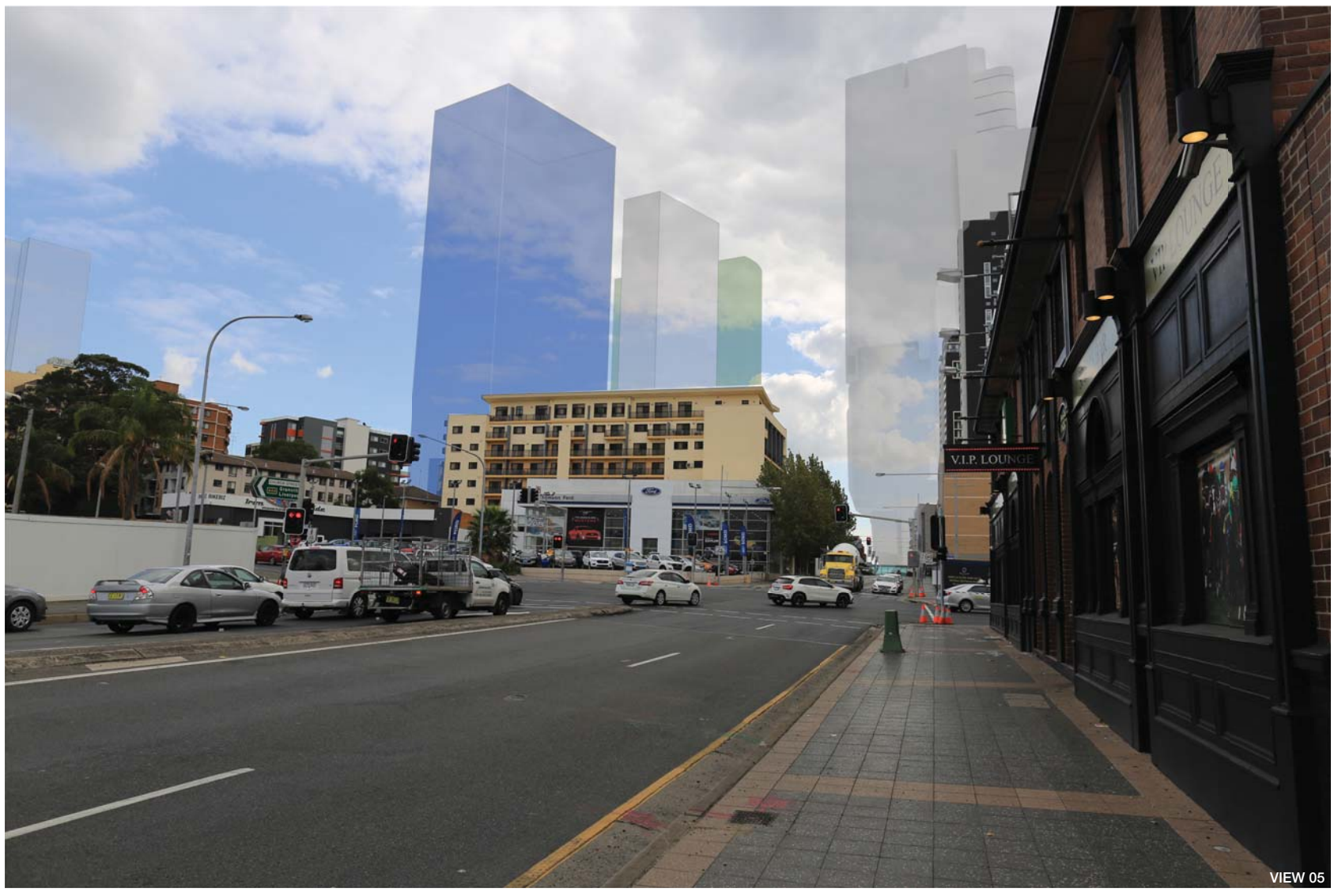
Location 2
View south-west from Macarthur Street Gasworks Bridge over the Parramatta River

Photomontage 2
Photomontage from location 2

Location 4
View north-west from near the gates of the Lancer Barracks in Station Street

Photomontage 4
Photomontage from location 4

Location 5
View north along Church Street from south of the intersection with the Great Western Highway



Photomontage 5
Photomontage from location 5

Location 6
View south-south-west from the memorial steps in Centenary Square

Photomontage 6
Photomontgage from location 6

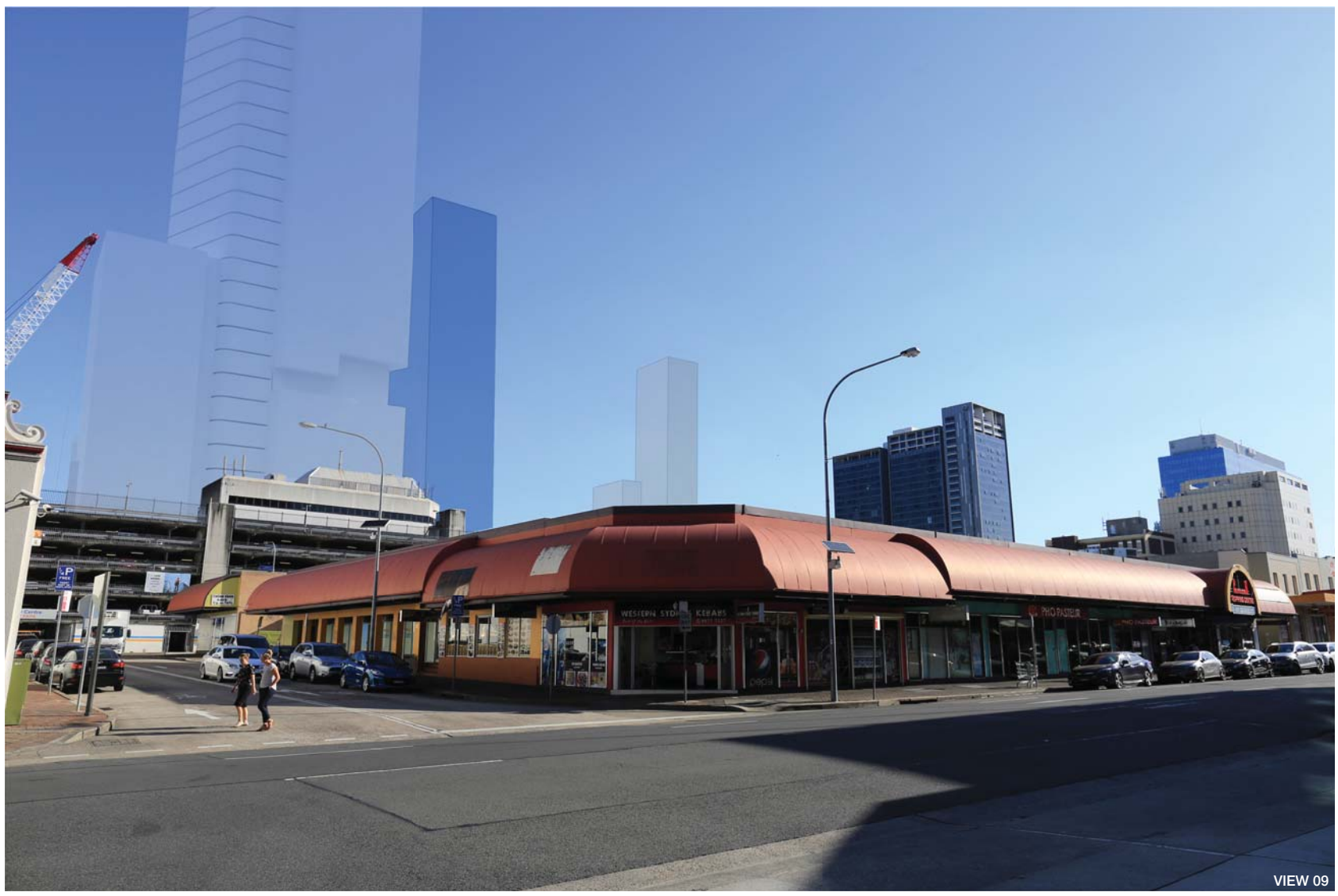
Location 7
View south along Church Street, from the approximate location of Parramatta DCP historic view 3 from outside the former post office

Photomontage 7
Photomontage from location 7

Location 8
View south along Church Street form the approximate location of Parramatta DCP historic view 5 including the ANZ dome

Photomontage 8
Photomontage from location 8

Location 9
View south-west from the north-east corner of Horwood Place and George Street



Photomontage 9
Photomontage from location 9

Location 10
View south along Church Street from the north-east corner of Church Street and Victoria Road

Photomontgae 10
Photompntage from location 10

Location 11
View south along Church Street from the approximate location of Parramatta DCP historic view 6

Photomontage 11
Photomontage from location 11

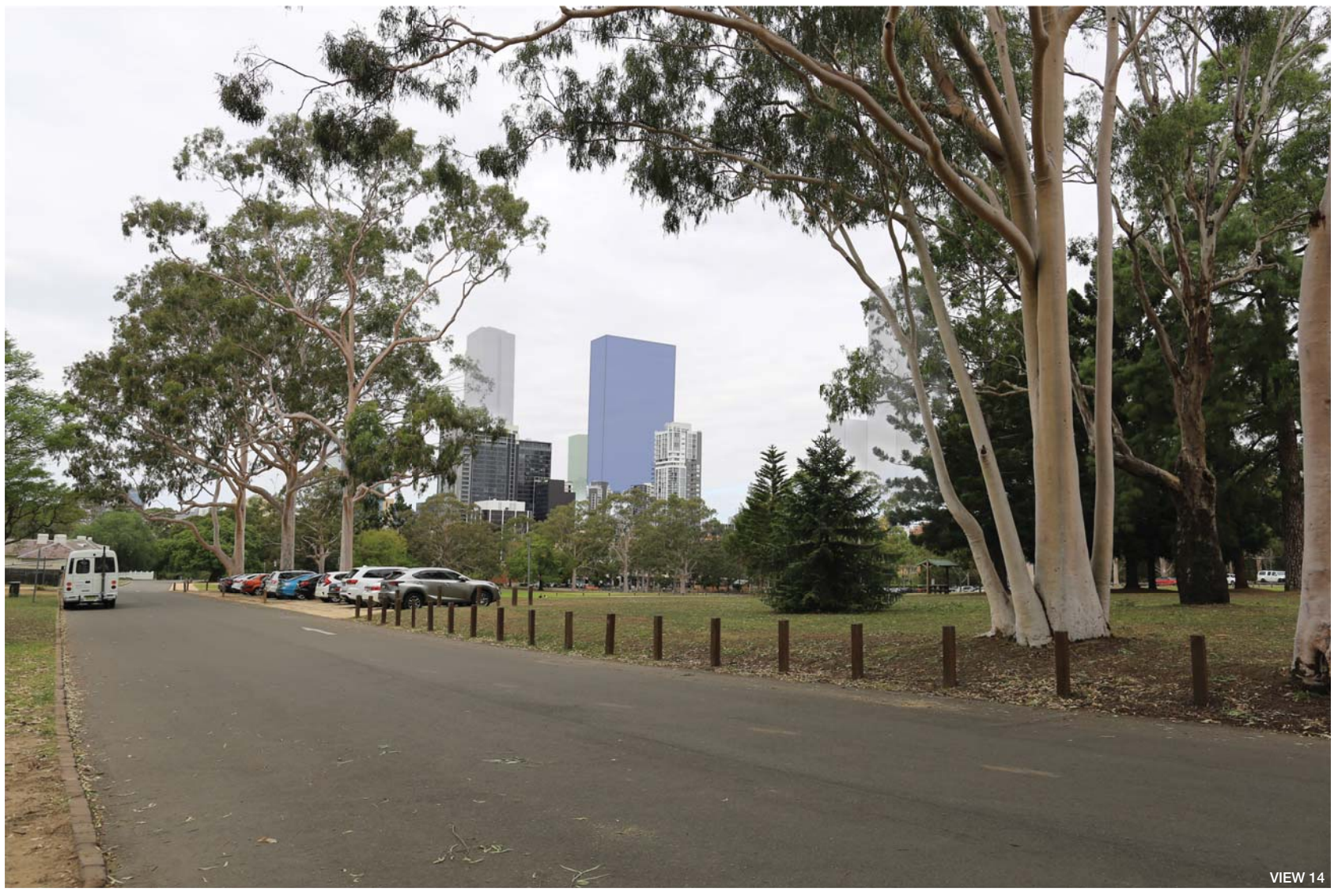
Location 12
View south from the north-west end of the Marsden Street Bridge

Photomontage 12
Photomontage from location 12

Location 13
View south-east from the approximate location of Parramatta DCP historic view adjacent to the north side of the Carriage Loop in front of Old Governmnet House in Parramatta Park

Photomontage 13
Photomontage from location 13

Location 14
View south-east from the approximate location of Parramatta DCP historic view 9, entry road to Old Government House , in the Bath House Area of Parramatta Park

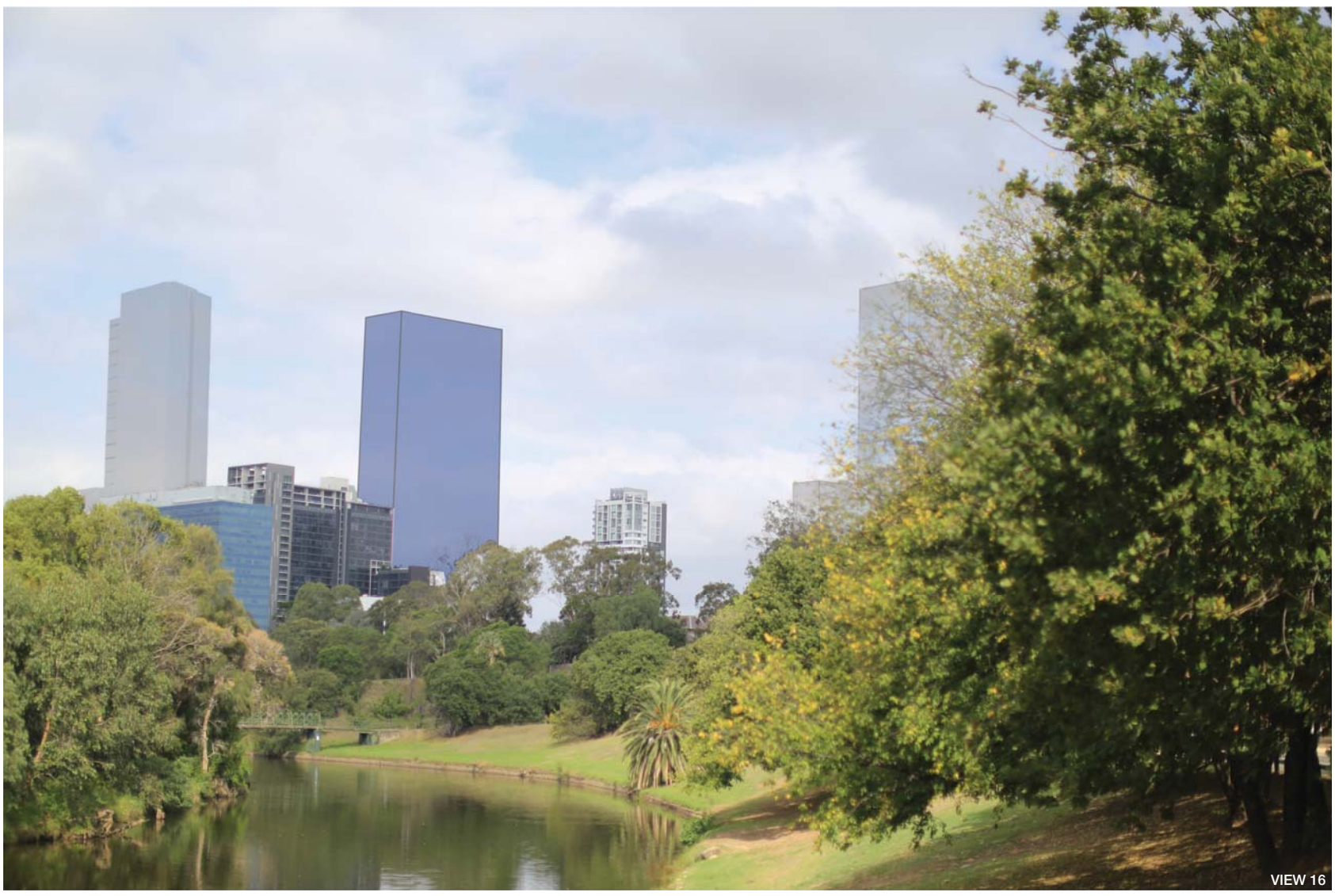


Photomontage 14
Photomontage from location 14

Location 15
View south-east from the approximate location of Technical Report view 5 in the Dairy Precinct of Parramatta Park

Photomontage 15
Photomontage from location 15

Location 16
View south-east from the banks of Parramatta River in Parratta Park from the approximate location of Technical Report view location 8



Photomontage 16
Photomontage from location 16

Location 17
View west along Fitzwilliam Street from south of its intersection with Fire Hose Lane

Photomontage 17
Photomontage from location 17

Location 18
View west along Argyle Street adjacent to historic railway station entrance

Photomontage 18
Photomontage from location 18

Appendix 2: Assessment Methodology

B.1 Introduction

The assessment of visual impacts is a field that requires a degree of subjective judgement and cannot be made fully objective. It is therefore necessary to limit the subjectivity of the work by adopting a systematic, explicit and comprehensive approach. This has the aim of separating aspects that can be more objective, for example the physical setting, visual character, visibility and visual qualities of a proposal, from more subjective elements, such as visual absorption capacity and the compatibility of the proposal with the setting.

The methodology used in the present assessment has been developed over several years and uses relevant aspects of methods accepted in landscape assessment, extended and modified to adapt to urban and maritime environments. The modifications introduced are informed by visual perception research that has been carried out by ourselves and others in both natural and urban contexts.

The flow chart at Figure B1 indicates the relationships among the parts of the visual impact assessment methodology.

B.2 Components of the Methodology

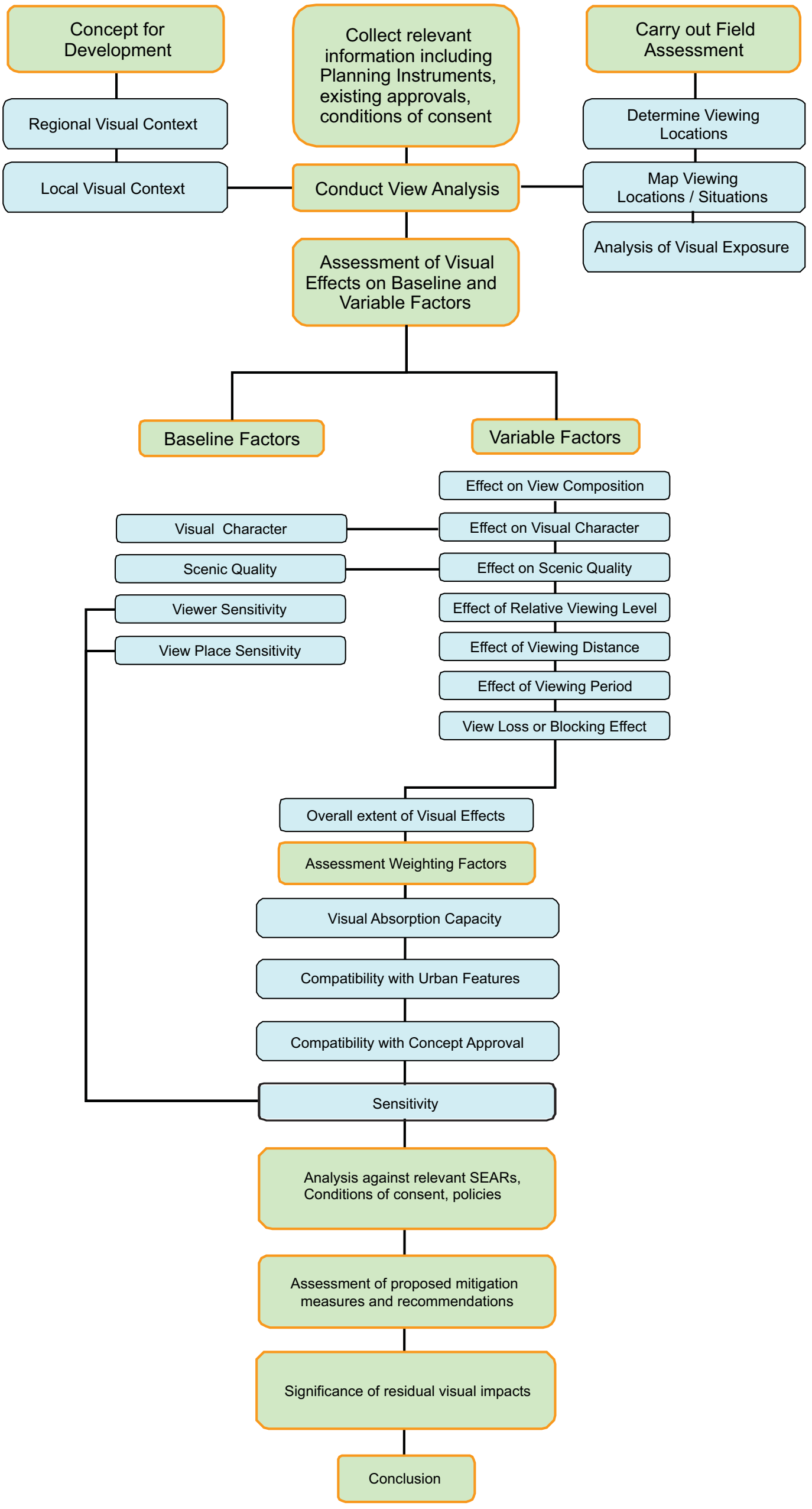
Overall, the major components of the visual impact assessment are determining the concept for the development, and general strategic planning principles, view analysis, visual effects analysis, visual impact evaluation and assessment of significance of residual visual impacts. This assessment is also supplemented with an assessment of the merits and compliance of the proposed redevelopment with the relevant policies in relation to visual and related amenity impacts and the mitigation measures that have been undertaken or could be proposed to reduce or eliminate residual impacts.

B.2.1 The Components of the View Analysis

The development proposed and detailed field assessment

This includes a thorough understanding of the proposed development including its location, scale and extent to understand the scale and spatial arrangement of the development. The next step is to carry out a detailed field assessment by identifying the potential viewing locations, visiting the representative locations, documenting the proposal's approximate location on a base map, photographing representative locations and rating overall assessment of the visual effects and relative visual impacts factors. The assessment factors are explained in Section B2.2 and B2.3. The factors were in three ranges; Low, Medium and High. An indicative rating table that describes what is considered a low, medium and high effect and impact on each factor is shown in Tables B2.1 and B2.2, respectively.

Figure B1: *RLA Development Assessment Method Flow Chart*



Identifying and mapping viewing locations and situations

The representative viewing locations sample visited during the field assessment are mapped including the ones for which analytical and block model photomontages have been prepared to represent the general arrangement of tower form. (see photomontages, Appendix 1). The locations include those identified in the SEARs, others that are documented in Statutory and non-statutory documents and additional sensitive locations identified by RLA

Identification and mapping of visual catchment

The potential total visual catchment is very large given the scale of the proposed tower, within a wide and relatively flat visual context. In this regard there is notwithstanding utility in attempting to map all locations from which views to parts of the tower may be visible. RLA have inspected and documented views from between 100m and 1500m of the subject site and made observations from further afield to the north, east and south. The potential total visual catchment means the physical area within which the proposal would be visible and identifiable if there were no other constraints on that visibility, such as intervening vegetation and buildings. The catchment on the water is not delineated by a finite boundary because there is no identifiable physical feature that can define it. As is the case for views from the distant foreshore or land, the potential total visual catchment is larger than the area within which there could be visual effects of the proposal. This is because with increasing distance, perspective effects, the horizon of the water body itself and intervening elements such as topography, buildings and vegetation, a viewer's ability to discern and potentially be affected by the proposal would decrease to zero before the theoretical extent of the potential total visual catchment is reached.

Within the potential total visual catchment, the visibility of the proposal would therefore vary. We identify the area within which the proposal would be identifiable and where it could cause visual impacts by assessing visibility.

Visibility means the extent to which the proposal would be physically visible to the extent that it could be identified, for example as a new, novel, contrasting or alternatively a recognisable but compatible feature. Features such as infrastructure, buildings and intervening topography can affect the degree of visibility.

B2.2 The components of the Visual Effect Analysis Matrix

B2.2.1 Baseline Factors

These are the criteria that remain predominantly constant and independent of the nature of viewing locations and factors which condition the viewing situation.

Visual character

The visual character of the locality in which the development would be seen is identified. It consists of identification of the physical and built components of the area and the setting of the proposal that contribute to its visual character. The character elements include topography, vegetation, land uses, settlement pattern, urban and built form, interface of land-water elements, maritime features and waterways.

Visual character is a baseline factor against which the level of change caused by the proposal can be assessed. The desired future character of the locality is also relevant to assessing the extent of acceptable change to character.

Scenic Quality

Scenic quality is a measure of the ranking, which the setting of the proposal either is accepted to, or would be predicted to have, on the basis of empirical research carried out on scenic beauty, attractiveness, preference or other criteria of scenic quality.

Scenic quality is a baseline factor against which the visual impacts caused by the proposal are assessed.

View place sensitivity

View place sensitivity means a measure of the public interest in the view. The public interest is considered to be reflected in the relative number of viewers likely to experience the view from a publicly available location. Places from which there would be close or middle distance views available to large numbers of viewers from public places such as roads, or to either large or smaller numbers of viewers over a sustained period of viewing time in places such as reserves, beaches and walking tracks, are considered to be sensitive viewing places.

Viewer sensitivity

Viewer sensitivity means a measure of the private interests in the effects of the proposal on views. The private interest is considered to be reflected in the extent to which viewers, predominantly viewing from private residences, would perceive the effects of the proposal. Residences from which there would be close or medium distance range views affected, particularly those which are available over extended periods from places such as the living rooms and outdoor recreational spaces, are considered to be places of medium and high viewer sensitivity respectively.

B2.2.2 Variable Factors

These are the assessment factors that vary between viewing places with respect to the extent of visual effects.

View composition type

View composition type means the spatial situation of the proposal with regard to the organisation of the view when it is considered in formal pictorial terms. The types of view composition identified are:

Expansive (an angle of view unrestricted other than by features behind the viewer, such as a hillside, vegetation and buildings.)

Restricted (a view which is restricted, either at close range or some other distance, by features between or to the sides of the viewer and the view such as vegetation and buildings.)

Panoramic (a 360 degree angle of view unrestricted by any features close to the viewer who is surrounded by space elements.)

Focal (a view that is focused and directed toward the proposal by lateral features close to the viewer, such as road corridors, roadside vegetation, buildings, boats etc.)

Feature (a view where the proposal is the form element that dominates the view, for example in close range views.)

It is considered that the extent of the visual effects of the proposal is related to its situation in the composition of the view. The visual effect of the proposal on the composition of the view is considered to be greater on a focal or a feature view, cognisant of the distance effect, compared to a restricted, panoramic or expansive view.

Relative viewing level

Relative viewing level means the location of the viewer in relative relief, compared to the location of the proposal. It is conventional in landscape assessment to assess views from locations above, level with and below the relative location of the proposal. However when maritime developments are concerned, the latter viewing level (i.e. relatively below the level of the proposal) has no practical application.

It is considered that the visual effects of a development are related to the relative viewing level and distance. Viewing levels above the development where views are possible over and beyond it decrease the visual effects, whereas views from level with and close to the development, dependent on viewing distance, may experience higher effects, particularly if built form intrudes into horizons.

Viewing period

Viewing period in this assessment means the influence on the visual effects of the proposal which is caused by the time available for a viewer to experience the view. It is assumed that the longer the potential viewing period, experienced either from fixed or moving viewing places such as dwellings, roads or the waterway, the higher the potential for a viewer to perceive the visual effects of the proposal. Repeated viewing period events, for example views repeatedly experienced from roads as a result of regular travelling, are considered to increase perception of the visual effects of the proposal.

Viewing distance

Viewing distance means the influence on the perception of the visual effects of the proposal which is caused by the distance between the viewer and the development proposed. It is assumed that the viewing distance is inversely proportional to the perception of visual effects: the greater the potential viewing distance, experienced either from fixed or moving viewing places, the lower the potential for a viewer to perceive and respond to the visual effects of the proposal.

Three classes of viewing distance have been adopted which are close range (<100m), medium range (100-1000m) and distant (>1000m).

View loss or blocking effects

View loss or blocking effects in this assessment means a measure of the extent to which the proposal is responsible for view loss or blocking the visibility of items in the view. View loss is considered in relation to the principles enunciated in the Land and Environment Court of NSW by Roseth SC in *Tenacity Consulting v Warringah [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours* Although Tenacity concerned view losses from residential properties, the matter of what could be construed to be a valuable feature of the view which could be lost, e.g. specific features of views such as whole views and iconic elements viewed across water, alluded to in *Tenacity*, are of some relevance to the public domain also. View loss in the public domain specifically has been considered in relation to the planning principles in *Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor. [2013] NSWLEC 1046*.

It is assumed that view loss and blocking effects increase the perception of the visual effects of the proposal. View loss and view blocking are important matters for consideration regarding short range views from the public domain as identified in the SEARs.

An indicative rating table that describes what is considered a low, medium and high visual effect on each factor is shown in Table B2.1, below.

Table B 2.1: *Indicative ratings of visual effects factors*

Visual Effects Factors Factors	Low Effect	Medium Effect	High Effect
Scenic quality	Proposal does not have negative effects on features which are associated with high scenic quality, such as the quality of panoramic views, proportion of or dominance of structures, appearance of land-water interfaces and presence of extensive areas of water.	Proposal has the effect of reducing any or all of: the extent of panoramic views, the proportion of or dominance of water and maritime features, without significantly decreasing their presence in the view or the contribution that the combination of these features make to overall scenic quality	The proposal significantly decreases or eliminates perception of the integrity of any of: panoramic views, dominance of extensive areas of water and maritime features or important focal views. The result is a significant decrease in perception of the contribution that the combinations of these features make to scenic quality.
Visual character	Proposal does not decrease the presence of or conflict with existing scenic character elements such as built form, building scale, urban fabric, land/water interface and maritime features.	Proposal contrasts with or changes the relationship between existing scenic character elements in some individual views by adding new or distinctive features, but does not affect the overall visual character of the Wharf precinct's setting.	The proposal introduces new or contrasting features which conflict with, reduce or eliminate existing character features. The proposal causes a loss of or unacceptable change to the overall visual character of individual items or the locality.
View place sensitivity	Public domain viewing places providing distant views, and/or with small number of users for small periods of viewing time (Glimpses-as explained in viewing period).	Medium distance range views from roads, recreation areas and waterways with medium number of viewers for a medium time (a few minutes or up to half day-as explained in viewing period).	Close distance range views from roads, recreation areas, foreshores and waterways with medium to high numbers of users for most the day (as explained in viewing period).
Viewer sensitivity	Residences providing distant views (>1000m)	Residences located at medium range from site (100-1000m) with views of the development available from bedrooms and utility areas.	Residences located at close or middle distance (<100m as explained in viewing distance) with views of the development available from living spaces and private open spaces.
View composition	Panoramic views unaffected, overall view composition retained, or existing views restricted in visibility of the proposal by the screening or blocking effect of structures or buildings..	Expansive or restricted views where the restrictions created by new work do not significantly reduce visibility of the proposal or important features of the visual environment.	Feature or focal views significantly and detrimentally changed
Relative viewing level	Elevated position such as ridge top, building or structure with views over and beyond the site.	Slightly elevated with partial or extensive views over the site.	Adjoining shorelines, aprons, waterway or reserves with view blocked by proposal.
Viewing period	Glimpse (eg moving vehicles or boats).	Few minutes up to half day (eg walking along foreshore, recreation in adjoining open space, boating on adjoining waterway).	Majority of day (eg adjoining residence or workplace).
Viewing distance	Land area or waterways (Distant Views) (>1000m).	Land or water (Medium Range) (100-1000m).	Adjoining residences, shoreline or waterway (Close)(<100m).
View loss or blocking effect	No view loss or blocking	Partial or marginal view loss compared to the expanse/extent of views retained. No loss of views of scenic icons.	Loss of majority of available views such as those of shoreline, waterways, land-water interface, in a restricted or focal view. Loss of views of scenic icons.

B2.2. 3 Overall Extent of Visual Effect

Based on the inspection of the pattern of the assessment ratings for the above factors on each viewing location an overall rating is arrived at which represents an overall extent of visual effects for a viewing location.

B2.3 The Components of the Visual Impact Analysis

The criteria in 2.2 concern assessment of the extent of the visual effects of the proposal when seen from specific viewing places. The extent of the visual effects is the baseline assessment against which to judge the visual impacts.

Whether a visual effect is an impact of potential significance cannot be equated directly to the extent of the visual effect. For example, a high visual effect can be quite acceptable, whereas a small one can be unacceptable. Thus, it is necessary to give a weighting to the assessed levels of effects to arrive at an assessment of the impact.

This method therefore does not equate visual effects directly to visual impacts. The approach is to assess visual effects as in B2.2. above to arrive at an overall level of visual effect of the proposal for each kind of viewing place and then to assess the level of impact, if any, by giving differential weighting to impact criteria. By this means, the relative importance of impacts are distinguished from the size of the effect. We consider that two weighting criteria are appropriate to the overall assessment of visual impacts, Physical Absorption Capacity and Visual Compatibility. Each of these addressed the primary question of the acceptability of the visual effects and changes caused by the proposal.

B2.3.1 Visual Absorption Capacity

Visual Absorption Capacity (VAC) means the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment.

PAC includes the ability of existing elements of the landscape to physically hide, screen or disguise the proposal. It also includes the extent to which the colours, material and finishes of buildings and in the case of boats and buildings, the scale and character of these allows them to blend with or reduce contrast with others of the same or closely similar kinds to the extent that they cannot easily be distinguished as new features of the environment.

Prominence is also an attribute with relevance to VAC. It is assumed in this assessment that higher VAC can only occur where there is low to moderate prominence of the proposal in the scene.

Low to moderate prominence means:

Low: The proposal has either no visual effect on the landscape or the proposal is evident but is subordinate to other elements in the scene by virtue of its small scale, screening by intervening elements, difficulty of being identified or compatibility with existing elements.

Moderate: The proposal is either evident or identifiable in the scene, but is less prominent, makes a smaller contribution to the overall scene, or does not contrast substantially with other elements or is a substantial element, but is equivalent in prominence to other elements and landscape alterations in the scene.

Design and mitigation factors are also important to determining the VAC. Appropriate colours, materials, building forms, line, geometry, textures, scale, character and appearance of buildings and other structures are relevant to increasing VAC and decreasing prominence.

VAC is related to but distinct from Visual Compatibility (see below).

B2.3.2 Visual Compatibility

Visual Compatibility is not a measure of whether the proposal can be seen or distinguished from its surroundings. The relevant parameters for visual compatibility are whether the proposal can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed. It assumes that there is a moderate to high visibility of the project to some viewing places. It further assumes that novel elements which presently do not exist in the immediate context can be perceived as visually compatible with that context provided that they do not result in the loss of or excessive modification of the visual character of the locality.

A comparative analysis of the compatibility of similar items to the proposal with other locations in the area which have similar visual character and scenic quality or likely changed future character can give a guide to the likely future compatibility of the proposal in its setting.

Because the development proposed is on the interface between water and land, with components on each, the question of its visual impacts also depends on its perception both as an entity and in regard to its compatibility with the major scenic character attributes. In this regard, both the urban/natural environment and the maritime/industrial environment are attributes of relevance. Hence, it is considered that there are two relevant measures of Visual Compatibility, i.e. Compatibility with Urban and Natural Features, and Compatibility with Maritime/Industrial Features.

Visual compatibility with urban features

This assessment is a measure of the extent to which the visual effects of the proposal are compatible with urban and natural features. It is assumed that in some views the proposal can be seen and clearly distinguished from its surroundings. Compatibility does not require that identical or closely similar features to those which are proposed exist in the immediate surroundings.

Compatibility with Urban and Natural Features means that the proposal responds positively to or borrows from within the range of features of character, scale, form, colours, materials and geometrical arrangements of urban and natural features of the surrounding area or of areas of the locality which have the same or similar existing visual character.

Visual compatibility with the Concept Approval

This assessment is a measure of the extent to which the visual effects of the proposed development are compatible with the Concept Approval. It is assumed that in some views the proposal can be seen and the additional height and westerly location of the tower be distinguished from the Concept Approval. Compatibility does not require that identical or closely similar features to those which are proposed exist in the immediate surroundings.

Compatibility on this criterion means that the proposal responds positively to, borrows from or appropriately extends the range of features of character, scale, form, colours, materials and overall qualities of maritime/industrial development sites of the surrounding area or of similar areas of the locality or region.

An indicative rating table that describes what is considered a low, medium and high impact on each factor is shown in Table B2.2, below.

Table B2.2: *Indicative ratings table of visual impacts factors*

Visual Impacts Factors			
Factors	Low Impact	Medium Impact	High Impact
Visual absorption capacity	Existing elements of the landscape physically hide, screen or disguise the proposal. The presence of buildings and associated structures in the existing landscape context reduce visibility. Low contrast and high blending within the existing elements of the setting and built forms.	The proposal is of moderate visibility but is not prominent because its components, forms and line and its textures, scale and building and vessel form have low to moderate contrasts with existing features of the scene.	The proposal is of high visibility and it is prominent in some views. The project has a high contrast and low blending within the existing elements of the of the setting and foreshores.
Compatibility with urban/natural features	High compatibility with the character, scale, form, colours, materials and geometrical arrangements of existing urban and natural features in the immediate context. Low contrast with existing elements of the built environment.	Moderate compatibility with the character, and geometrical arrangements of the existing urban and natural features in the immediate context. The proposal introduces new urban features, but these features are compatible with the scenic character and qualities of facilities in similar settings.	The character, scale, form and spatial arrangement of the proposal has low compatibility with the urban features in the immediate context or which could reasonably be expected to be new additions to it when compared to other examples in similar settings.
Compatibility with the Concept Approval	High compatibility with the character, scale, form, colours, materials and geometrical arrangements of existing maritime industrial features in the immediate context. Low contrast with existing elements of the maritime environment.	Moderate compatibility with the character, and built form of the existing maritime industrial buildings in the immediate context. The proposal introduces new maritime or industrial features, but these are compatible with the scenic character and qualities of the maritime/industrial setting.	The character, scale, form and spatial arrangement of the proposal has low compatibility with the maritime/industrial context or which could reasonably be expected to be new additions to it.

B2.4 Overall Extent of Visual Impact

Based on the inspection of the pattern of the assessment ratings for the above factors for each viewing location, an overall rating is arrived at which represents an overall extent of visual impacts for a sensitivity zone.

Three visual sensitivity zones are identified which are based on the view place sensitivity or viewer sensitivity as explained above in Section B2.2.1. These are related to the distance zones from the development site and whether views are from significant public domain or private viewing locations. Viewing places within the high or medium visual sensitivity zones are further assessed as explained below.

B2.4.1 Applying the weighting factors

An overall impact rating for each of the two relevant visual sensitivity zones is arrived at by applying the weighting factors of VAC and Compatibility to the overall extent of visual impacts. An upweight increases the significance of the impact, while a down-weight decreases it.

B2.5 Analysis against relevant information/planning instruments/policies & master plans

The proposed redevelopment and its overall impacts on each of the visual sensitivity zones is analysed against the relevant criteria provided in the SEARs.

B2.7 Significance of residual visual impacts

Finally, after the visual effects of the mitigation factors are assessed, a relevant question is whether there are any residual visual impacts and whether they are acceptable in the circumstances. These residual impacts are predominantly related to the extent of permanent visual change to the immediate setting.

In terms of the urban component of the development, residual impacts relate to individuals' preferences for the nature and extent of change which cannot be mitigated by means such as colours, materials and the articulation of building surfaces. These personal preferences are also a result of people's resistance to or resilience towards change to the existing arrangement of views. Individuals or groups may express strong preferences for either the existing, approved or proposed form of urban development.

The significance of these residual impacts is assessed based on the relative sensitivity of viewing places that may experience these impacts. Whether overcoming these impacts would result in undermining of the potential capacity of the development site to economically support the intended use is not the focus of a visual impacts assessment.

View Place Data Sheet

Location 1	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Hambledon Cottage	IMG_319	X		

Expansive	Restricted	Panoramic	Focal	Axial

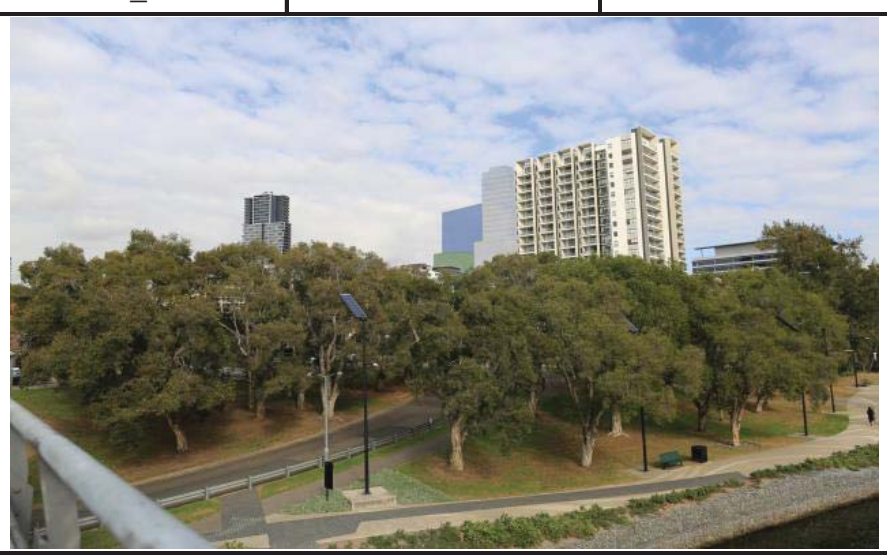
Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewer numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 2	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Gasworks Bridge	IMG_320		x	



Expansive	Restricted	Panoramic	Focal	Axial

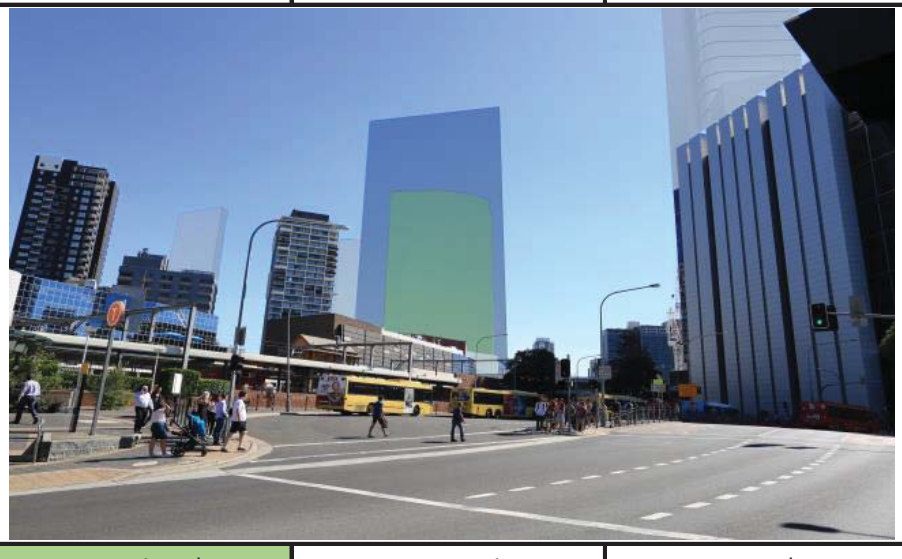
Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewer numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 4	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Lancer BarracksGate	IMG_261			X



Expansive	Restricted	Panoramic	Focal	Axial

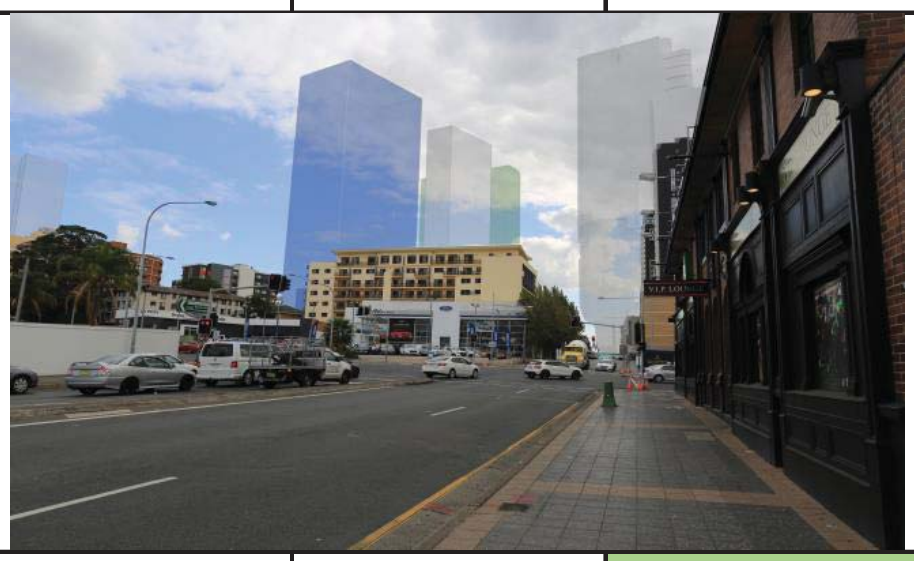
Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views		X	
	Heritage Views			X
	View Place amenity	X		
	Potential viewer numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 5	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Church Street near Great Western Highway	IMage No.321		X	



Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewing numbers			X

View Place Data Sheet

Location 6	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Centenary Square	IMage No.266			X

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level		X		
Effect of Viewing Period			X	
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Medium		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts				X
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Medium		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views		X	
	Heritage Views			X
	View Place amenity		X	
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 7	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Church Street near DCP historic view 3	IMage No.267			X

Expansive	Restricted	Panoramic	Focal	Axial

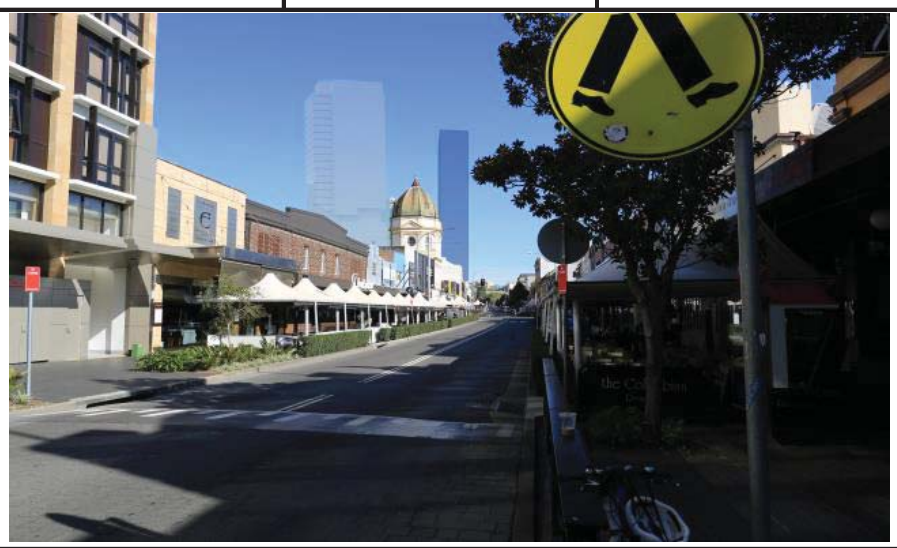
Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts				X
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views		X	
	Heritage Views		X	
	View Place amenity		X	
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 8	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Church Street DCP historic view 5	IMage No.266		X	



Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views		X	
	Heritage Views		X	
	View Place amenity	X		
	Potential viewing numbers			X

View Place Data Sheet

Location 9	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Horwood Place and George Street	IMage No.276		X	

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 10	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Church Street and Victoria Street	IMage No.290		X	

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 11	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Church Street and Fennel Street	IMage No.287	X		

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity (N/A*)				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 12	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Marsden Street Bridge	IMage No.329		X	

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 13	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
OGH carriage loop	Image No.332		X	

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views			X
	Heritage Views			X
	View Place amenity			X
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 14	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
OGH near bath house	Image No.336		X	

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views			X
	Heritage Views			X
	View Place amenity			X
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 15	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Parramatta Park Dairy Precinct	Image No.302	X		

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views			X
	Heritage Views			X
	View Place amenity			X
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 16	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Parramatta Park River views	Image No.303	X		

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts			X	
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views			X
	Heritage Views		X	
	View Place amenity			X
	Potential viewing numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 17	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Fitzwilliam Street	Image No.347			X

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential view numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

View Place Data Sheet

Location 1 8	Public Domain	Viewing Distance		
Address/Location	Image No.	>1000m	500-1000m	<500m
Argyle Street	Image No.348			X

Expansive	Restricted	Panoramic	Focal	Axial

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		Low		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Visual Absorption Capacity/Cumulative Impacts		X		
Compatibility with Concept Approval		X		
Compatibility with Urban Features		X		
Overall Extent of Visual Impact		Low		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Documented Views	X		
	Heritage Views	X		
	View Place amenity	X		
	Potential view numbers			X

** Documented view is required by SEARs, recorded in PLEP or DCP or the Technical Report*

Appendix 4. Methodology for photomontages

Principles of verification of photomontages

For the certification of photomontages, the fundamental requirement is that there is a 3D computer model of the proposed development that can be accurately located and merged with representative photographs taken from key viewing places to produce a photomontage.

The key to being able to certify the accuracy of the photomontage resulting from merging the 3D model and photographs is being able to demonstrate that the 3D model of the proposed building has a good fit to known surveyed markers on the existing building and on fixed features of the site or locality which are shown on the survey plan. The second level of fit is the fit of the model to a realistic photographic representation of the site in its context.

Woods Bagot Architects prepared the 3D models of the proposed tower form on detailed survey and architectural design in CAD. The location and height of the 3D model of the proposal must be verified with respect to surveyed features of the existing development site and the location of features of the surrounding environment either surveyed or interpolated from aerial imagery.

Photographs were taken by RLA using a professional quality 35mm format full-frame camera (Canon EOS 5D Mark 3 DSLR). The locations and RLs of the lens of the camera for photographs used to prepare photomontages were established by survey by Urbanex Pty Ltd registered surveyors, consistent with the requirements of the practice note for use of photomontages in evidence by the Land and Environment Court of New South Wales.

The 3D models were then merged with digital photographic images of the existing environment by Woods Bagot. As per the SEARs requirements the photomontages show the massing of the Approved Concept Plan and the MOD 1 proposed built forms. The approved and proposed building masses are shown as translucent blocks of colour, the green indicates the Concept Approval and the blue indicates the proposed built forms included in MOD 1. Photographic plates of the existing view and a photomontage from each view location (view point VP) inspected are included in Appendix 1.

Focal length of lens for photographs

The camera images for the photomontages need to be of sufficient resolution taken with a lens of low distortion. The focal length of the lens used needs to be appropriate for the purpose and the focal length of the lens used to take the single frame photographs has to be known and standardised so that every photograph used in that regard has the same horizontal field of view.

The reasons for using a specific focal length is determined by the vertical and horizontal scale of the subject of the view as well as the need to minimise apparent distortion of the images. The subject of the views commonly contains elements of vastly different horizontal and vertical scale, all of which must ideally be visible in each photograph.

It is conventional to use a ‘normal’ lens to take landscape photographs, for example a 50mm lens on a full-frame 35mm format film camera, as when reproduced in large format (eg. A3 size prints), the objects in the image appear of ‘normal’ scale. However, in photographing streetscapes and individual buildings, that convention cannot be adopted other than for relatively distant views, as the horizontal and vertical scale of the buildings particularly from close locations when seen from parts of Church Street, Centenary Square and medium range locations in Parramatta, is such that they cannot be accommodated in a single frame of 50mm focal length. The Land and Environment Court of New South Wales practice note does not require a specific focal length to be used, but requires that the characteristics of the camera, focal length of the lens and field of view of the lens are specified. A fixed focal length lens should be used in preference to a variable (“zoom”) lens as there is no need to manually ‘register’ the focal length on the lens when taking photographs. For this project the majority of photographs in the close and medium distant ranges were taken using a 24mm focal length lens.

Two distant views taken from Parramatta Park that represent documented views in the Technical Report were taken with a 50mm focal length lens. The angle of view of the 50mm photographs are approximately 40^0 and for 24mm photographs, approximately 74^0. Neither of this angles of view equate to the SEARS requirement of 46^0.

It is a common problem in architectural photography that in close views a building cannot be encompassed in a single image, for the reasons above. That is, the subject of the view is too large or too close to be captured in a single image. It is critical however, in preparing 3D images, for example for use in photomontages, that the subject can be captured in a single image. This is because a composite image, such as one 'stitched together" electronically out of separate images which can encompass the whole field of view (for example a panorama), has un-reconcilable distortions in it.

As a practical matter, it is not possible to represent the composition of the views from close range without using a wider angle lens. The horizontal and vertical scale relationships are such that a 'normal' lens could not capture the appropriate context.

Checking the montage accuracy

The purpose of the detailed surveying/modelling, and precisely recorded photography is to enable a 3d version of the actual physical site to be created in CAD software. If this has been done accurately, it is then possible to insert the selected photo into the background of the 3d view, position the 3d camera in the surveyed position and then rotate the camera around until the surveyed 3d points match up with the correlating real world objects visible in the photo. This is a self-checking mechanism – if the camera position or the survey data is out by even a small distance then good fit becomes impossible.

It is however important to note that it is not possible for a 100% perfect fit to occur for the following reasons:

- Variance between measured focal length compared to stated focal length,
- Minor lens distortion which varies from lens to lens and manufacturer to manufacturer,
- Absence of a suitable range of reference points on site/visible through lens

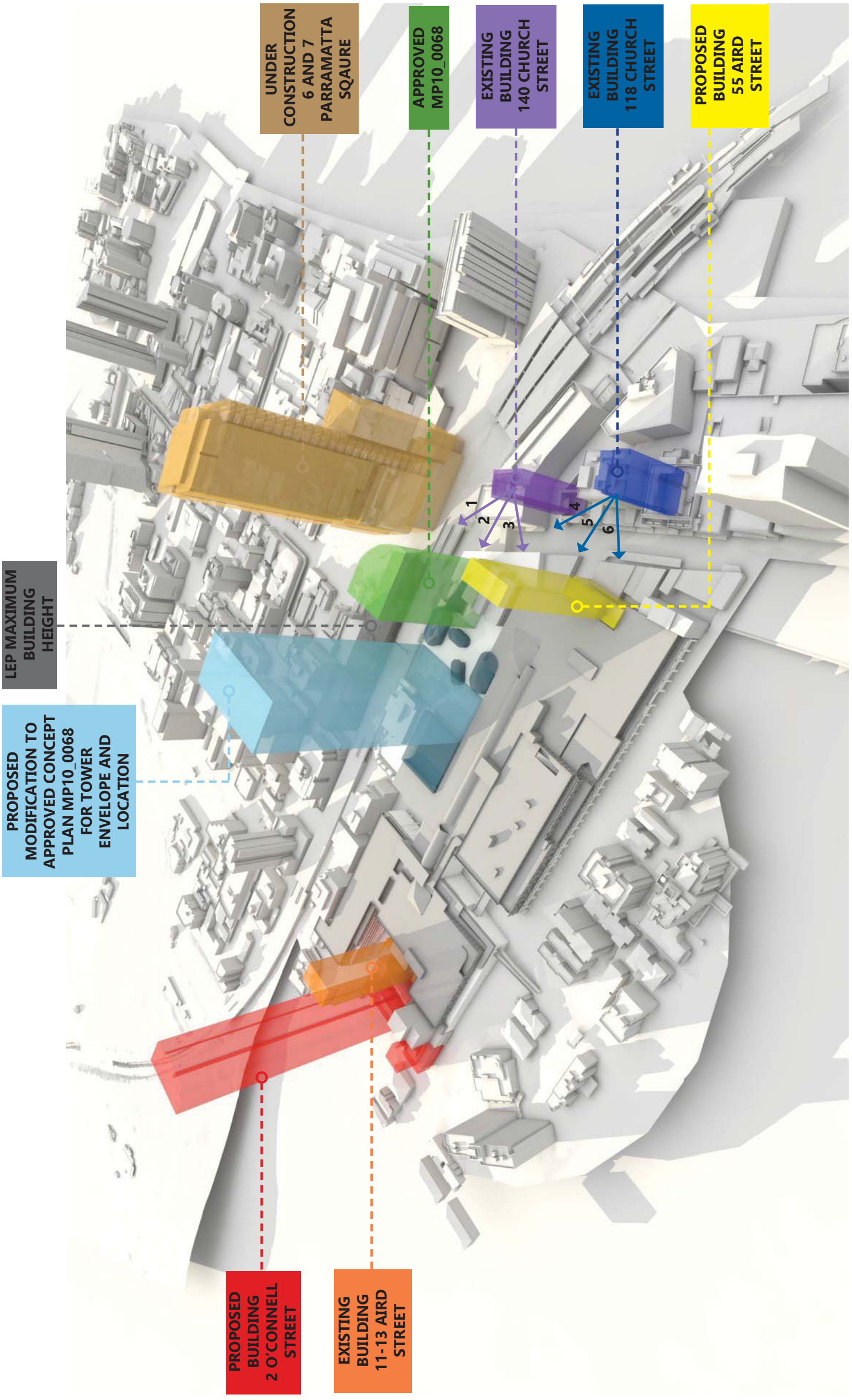
Allowing for these limitations, Woods Bagot has reported that the alignment was achieved to a high degree of accuracy, within an acceptable tolerance.

Certification

The above requirements were met and RLA can certify, based on the methods used and taking all relevant information into account, that the photomontages are as accurate as is reasonably possible in the circumstances and that they comply with the Land and Environment Court of New South Wales practice note concerning the use of photomontages in the Court, as required in the SEARs

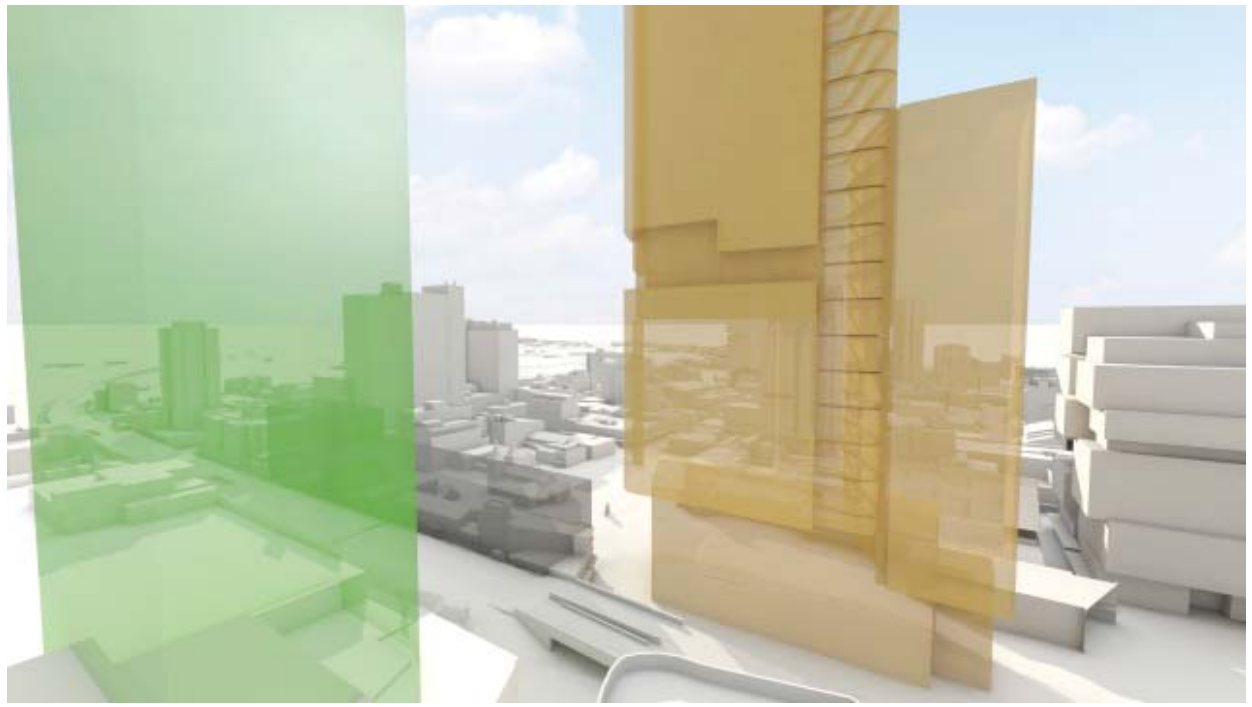
ewers, predominantly viewing from private residences, would perceive the effects of the proposal. Residences from which there would be close or medium distance range views affected, particularly those which are available over extended periods from places such as the living rooms and outdoor recreational spaces, are considered to be places of medium and high viewer sensitivity respectively.

Appendix 5: Private View Sharing Analysis



PARRAMATTA AERIAL

VIEW 1



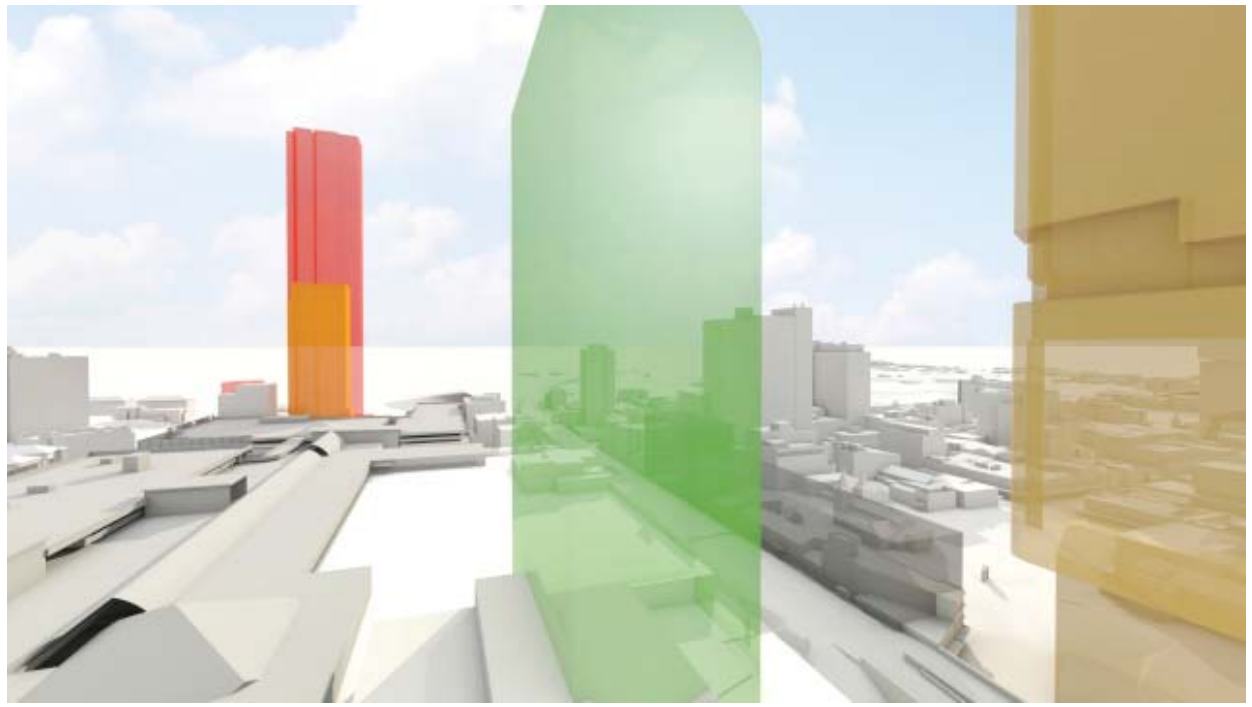
APPROVED MP10_0068 CONCEPT PLAN

PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

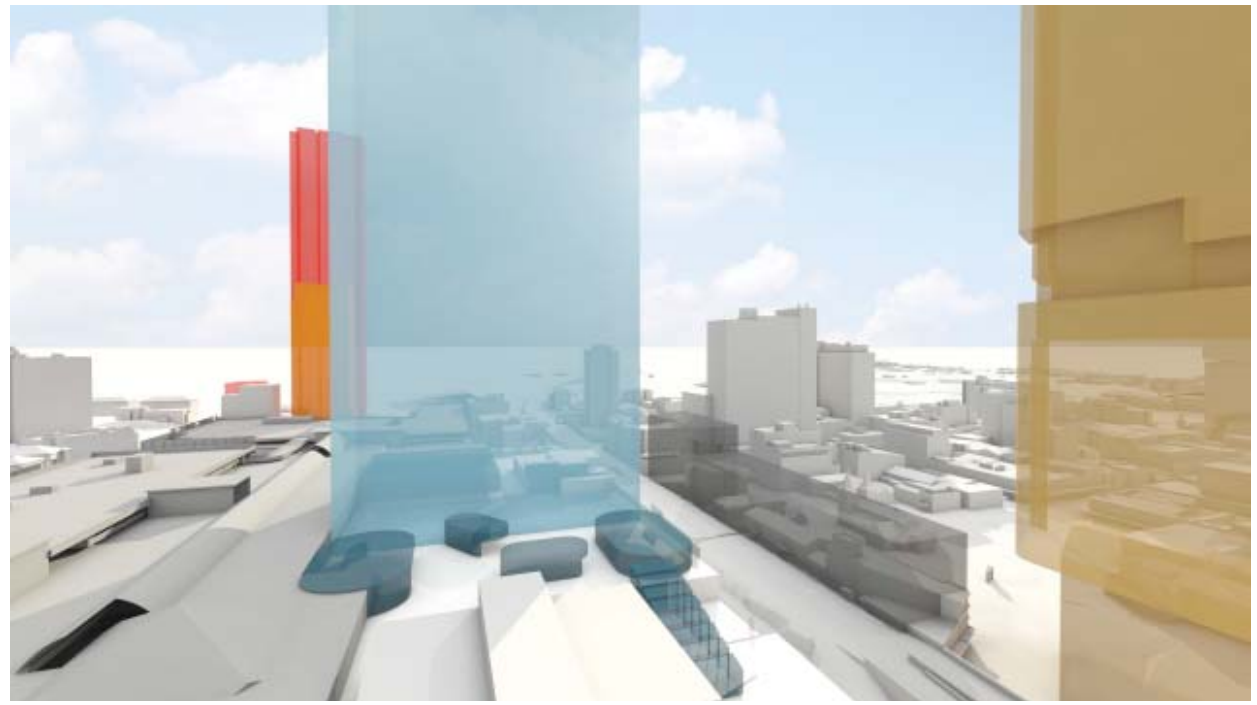
BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

VIEW 2



APPROVED MP10_0068 CONCEPT PLAN

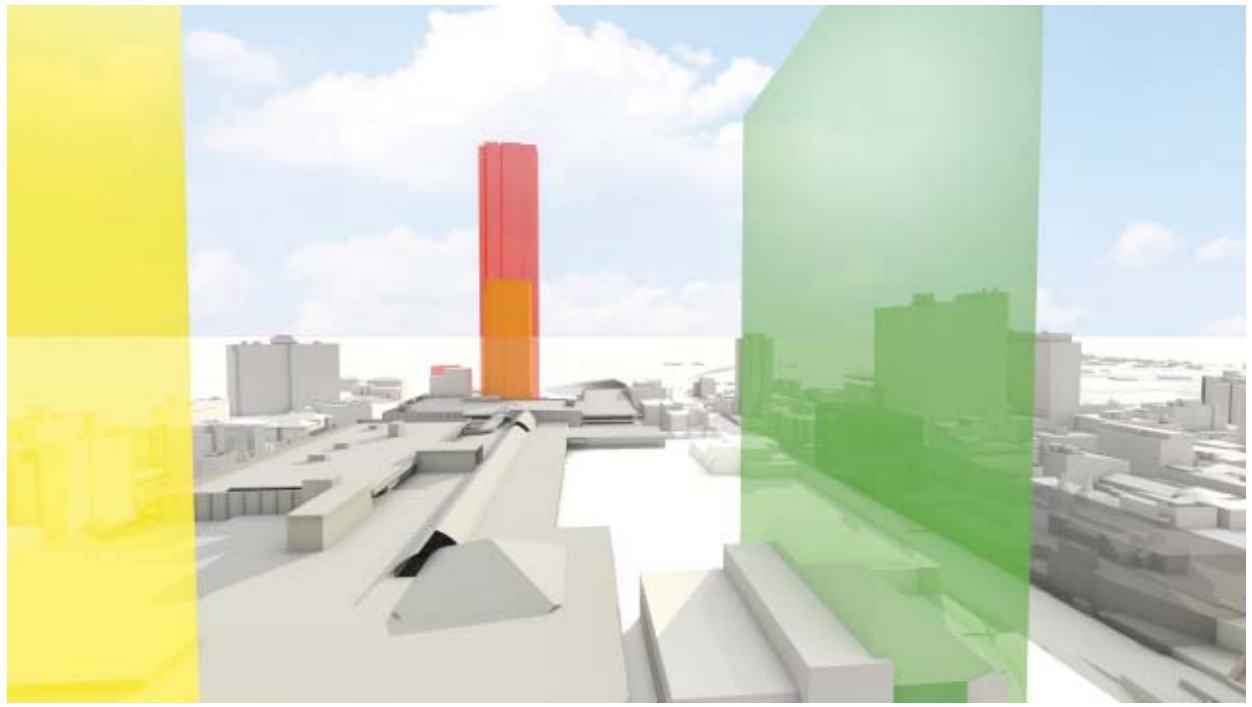


PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

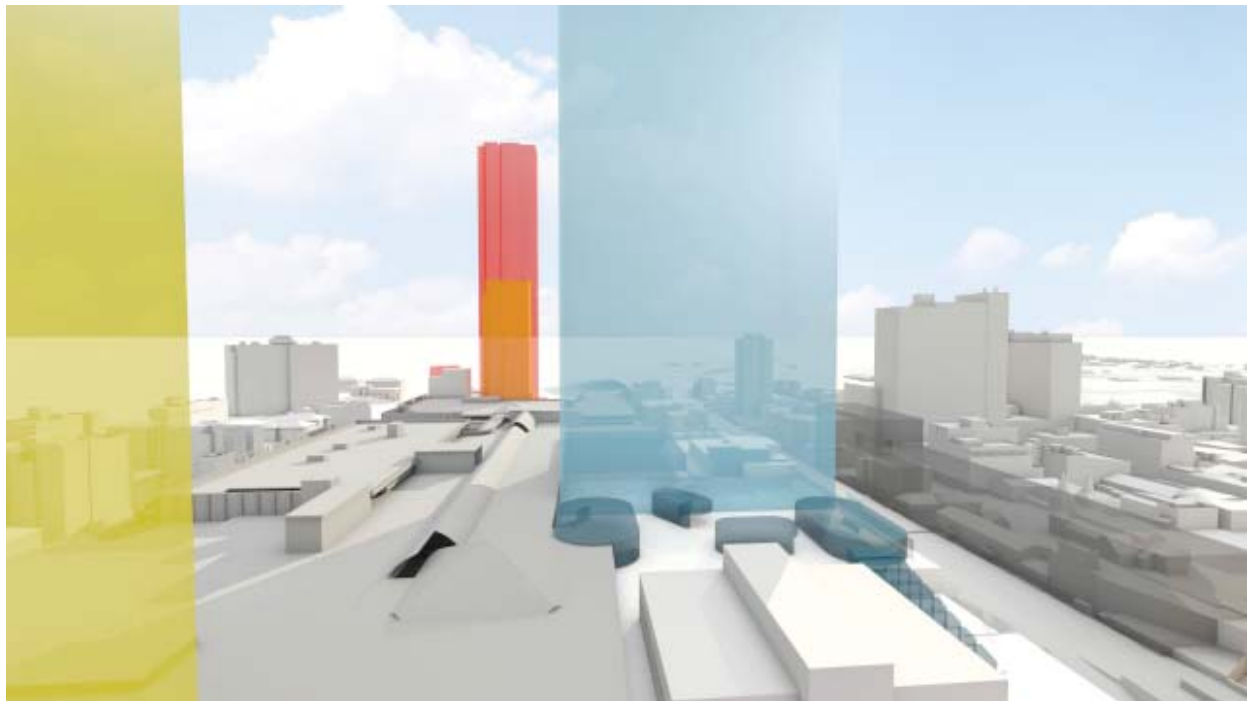
BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

VIEW 3



APPROVED MP10_0068 CONCEPT PLAN

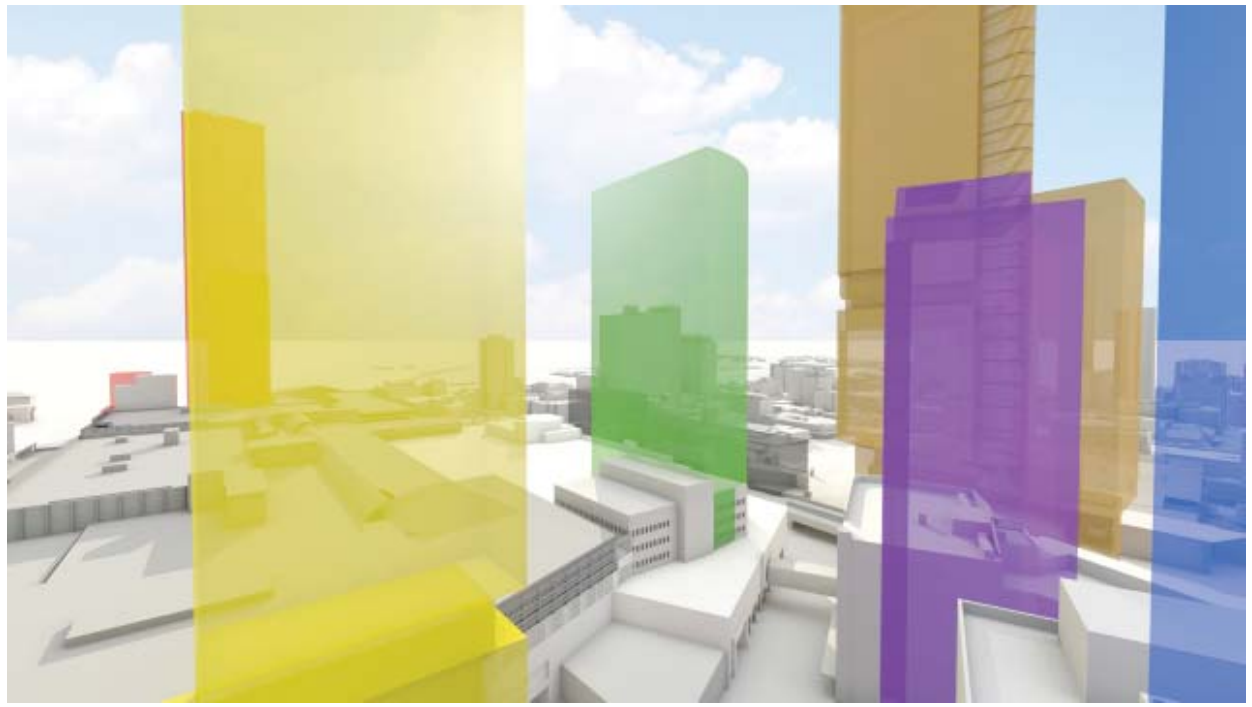


PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

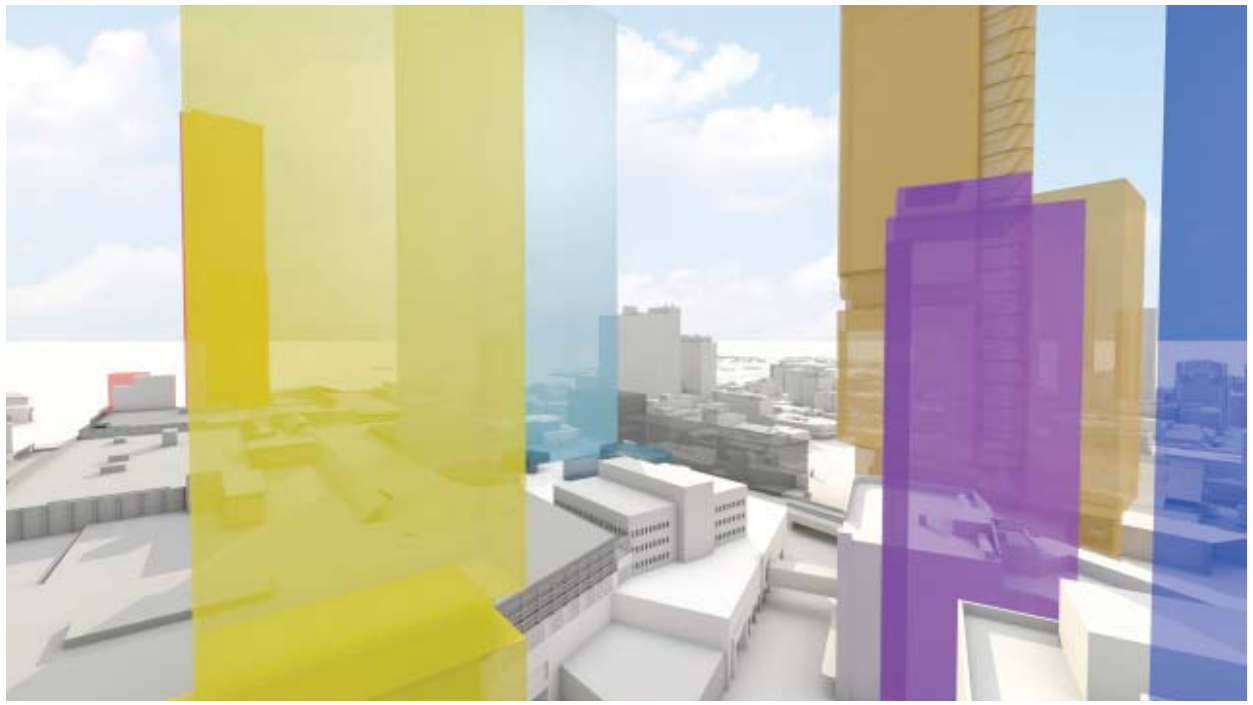
BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

VIEW 4



APPROVED MP10_0068 CONCEPT PLAN

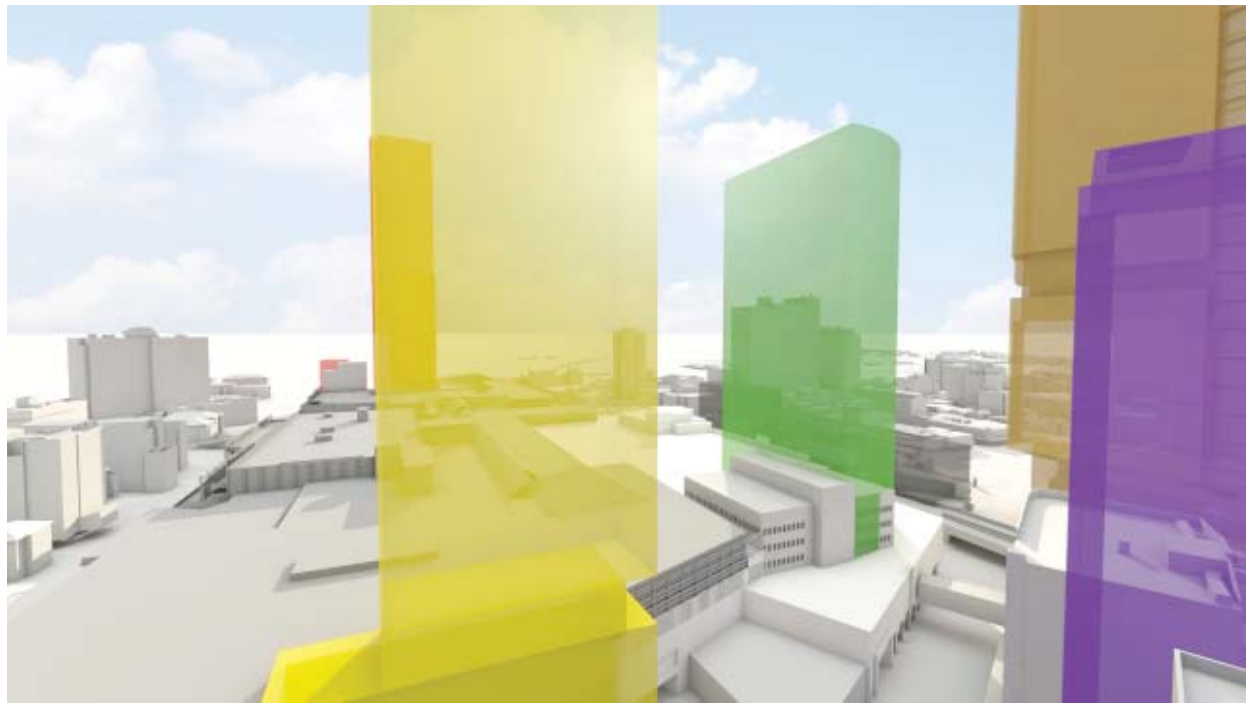


PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

VIEW 5



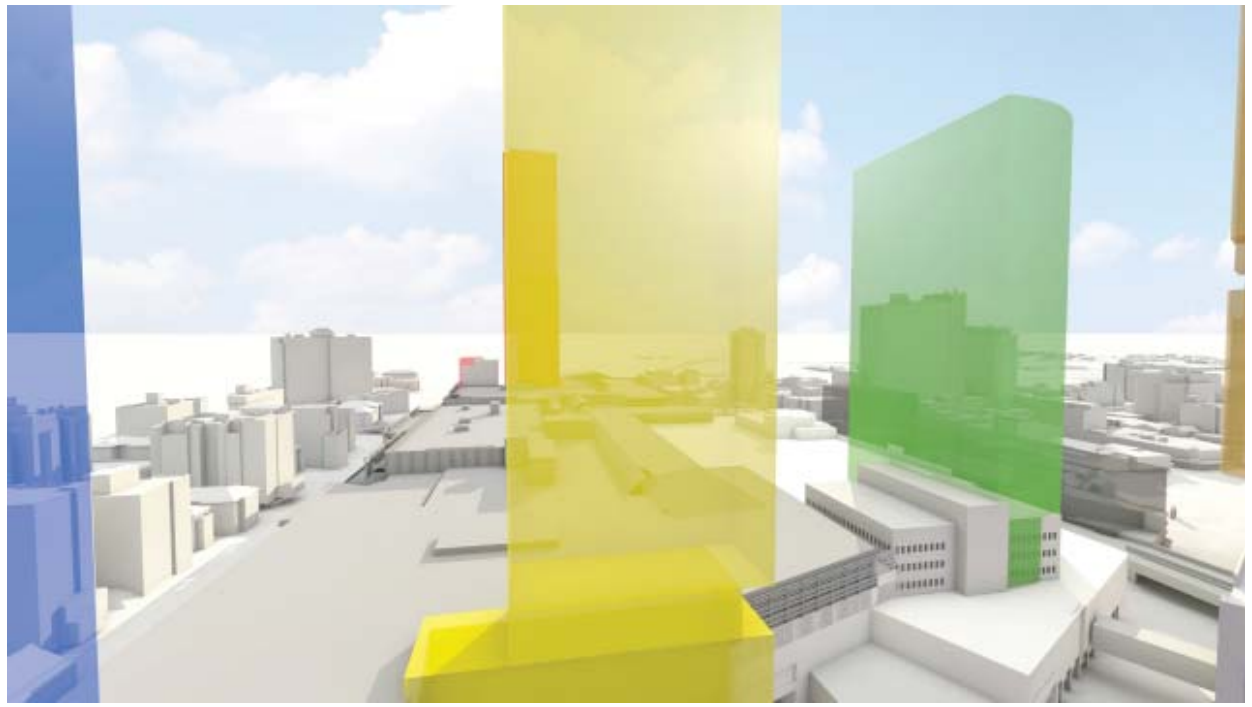
APPROVED MP10_0068 CONCEPT PLAN

PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

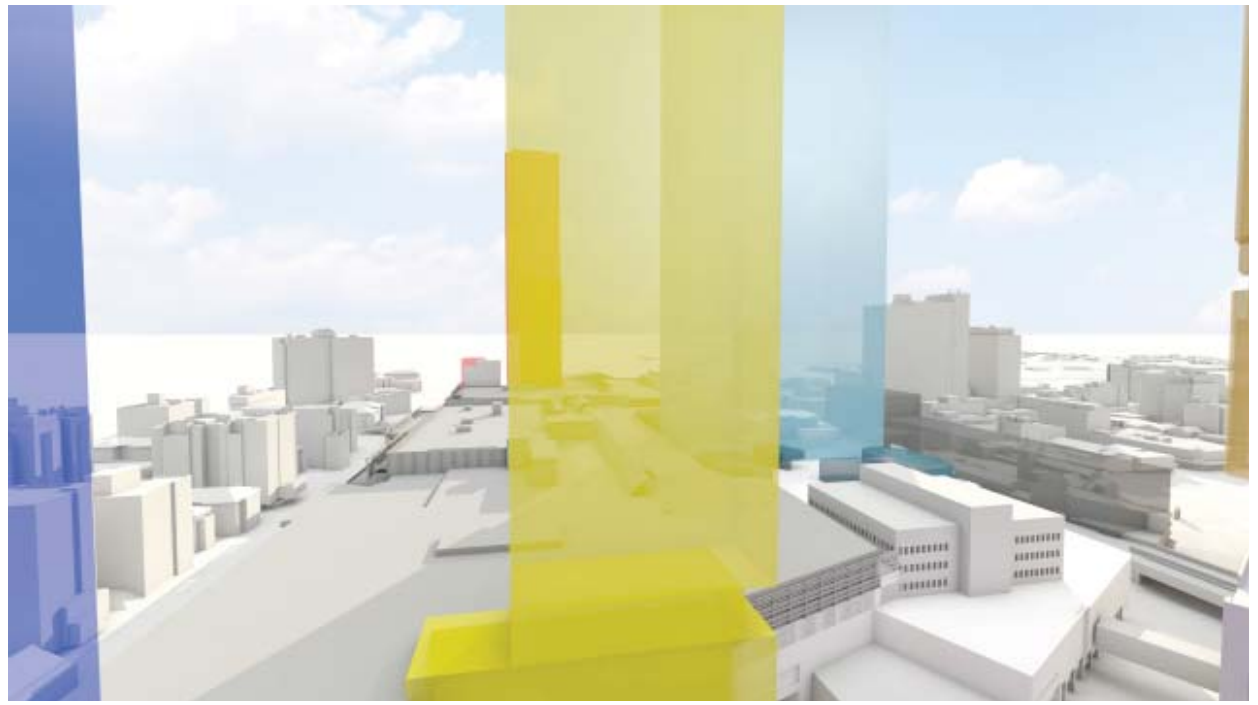
BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

VIEW 6



APPROVED MP10_0068 CONCEPT PLAN



PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10_0068 FOR TOWER ENVELOPE AND LOCATION

BUILDING LEGEND

- APPROVED MP10_0068 CONCEPT PLAN
- PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN
- UNDER CONSTRUCTION 6 AND 7 PARRAMATTA SQAURE
- PROPOSED BUILDING 2 O'CONNELL STREET
- EXISTING BUILDING 140 CHURCH STREET
- EXISTING BUILDING 11 - 13 AIRD STREET
- EXISTING BUILDING 118 CHURCH STREET
- PROPOSED BUILDING 55 AIRD STREET
- LEP MAXIMUM BUILDING HEIGHT

Appendix 6: Curriculum Vitae Dr Richard Lamb

Summary

- Qualifications
  - Bachelor of Science - First Class Honours, University of New England in 1969
  - Doctor of Philosophy, University of New England in 1975

- Employment history
  - Tutor and teaching fellow – University of New England School of Botany 1969-1974
  - Lecturer, Ecology and environmental biology, School of Life Sciences, NSW Institute of Technology (UTS) 1975-1979
  - Senior lecturer in Landscape Architecture, Architecture and Heritage Conservation in the Faculty of Architecture, Design and Planning at the University of Sydney 1980-2009
  - Director of Master of Heritage Conservation Program, University of Sydney, 1998-2006
  - Principal and Director, Richard Lamb and Associates,1989-2017

- Teaching and research experience
  - visual perception and cognition
  - aesthetic assessment and landscape assessment
  - interpretation of heritage items and places
  - cultural transformations of environments
  - conservation methods and practices

- Academic supervision
  - Undergraduate honours, dissertations and research reports
  - Master and PhD candidates: heritage conservation and environment/behaviour studies

- Professional capability
  - Consultant specialising in visual and heritage impacts assessment
  - 30 year's experinence in teaching and research in environmental impact, heritage and visual impact assessment.
  - Provides professional services, expert advice and landscape and aesthetic assessments in many different contexts
  - Specialist in documentation and analysis of view loss and view sharing
  - Provides expert advice, testimony and evidence to the Land and Environment Court of NSW on visual contentions in various classes of litigation.
  - Secondary specialisation in matters of landscape heritage, heritage impacts and heritage view studies
  - Appearances in over 250 Land and Environment Court of New South Wales cases, submissions to Commissions of Inquiry and the principal consultant for over 1000 individual consultancies concerning view loss, view sharing, visual impacts and landscape heritage