



601 PACIFIC HIGHWAY

St Leonards, NSW

Visual Impact Assessment

Prepared for
Stockland Development

MARCH 2026
Final



Acknowledgement of Country

We acknowledge the Traditional Owners of the lands we operate on. We acknowledge their continuing connection to Country through culture and community and we pay our respects to Elders past and present.

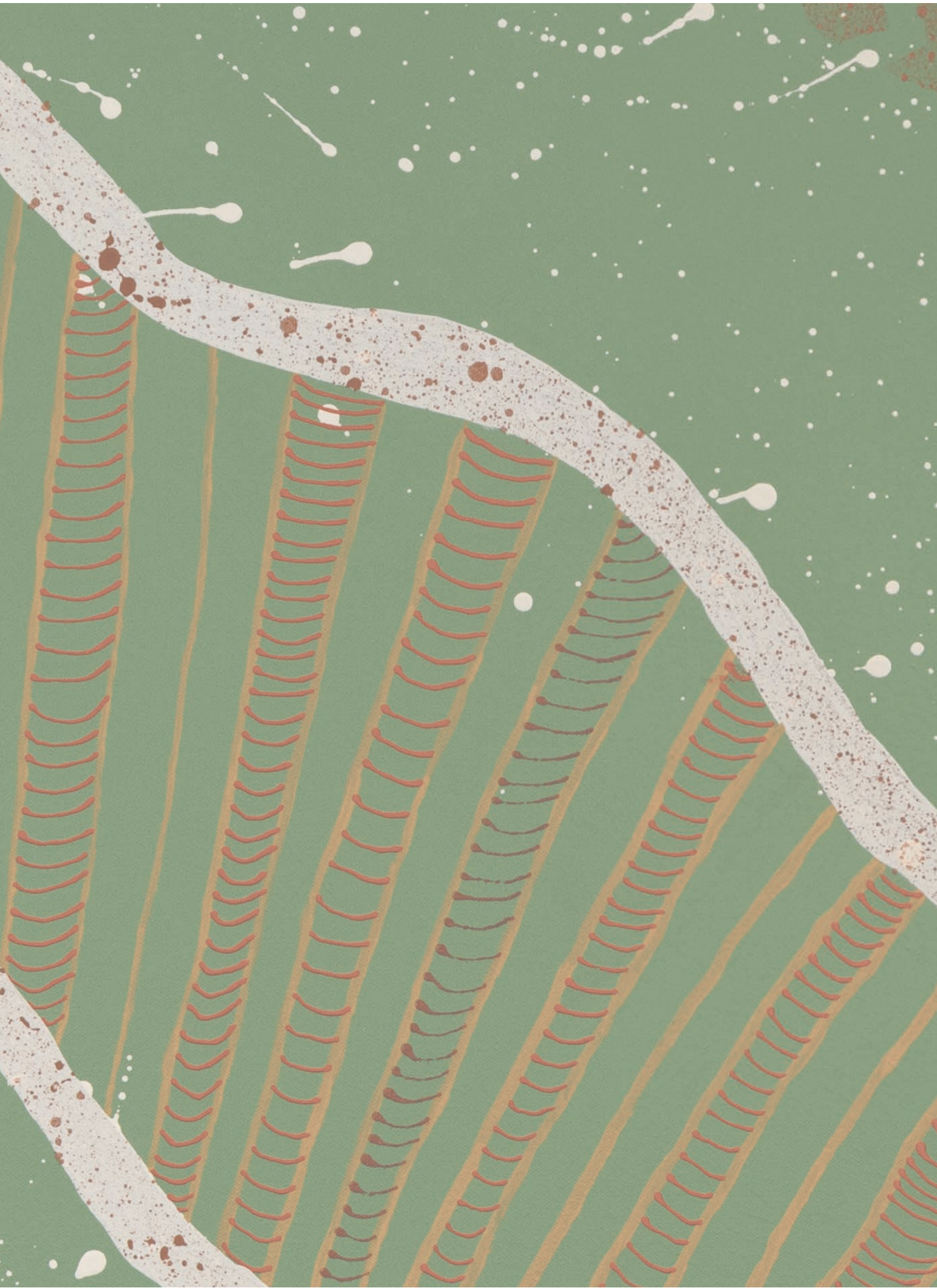
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Executive summary

This Visual Impact Assessment (VIA) has been prepared by Urbis on behalf of Stockland Development Pty Ltd (Stockland) to support a State Significant Development Application (SSDA) for 601 Pacific Highway, St Leonards (the site). This report relates to the assessment of the potential visual effects and impacts of the future tower form proposed on the subject site.

Key findings from the assessment are;

- The built form proposed in the Architectural drawing package is compatible with the cluster of towers that currently exist in the immediate and wider visual context and others that are approved or are currently under construction. In this regard, the height and form of the tower proposed reflects and is highly compatible with the desired future character for this part of St Leonards.
- The proposed built form sits within the approved envelope except for the roof plant and equipment on level 52 which will be subject of a Clause 4.6 application. The proposed plant above the height control would have no material affect on views and all other potential view loss or sharing is anticipated by the development approval.
- In the majority of medium distance views across the visual catchment, visibility is constrained to mid and upper level sections of the proposal.
- The upper part of the tower form would be visible from distant locations predominantly to the north, west and east but will be visible in the context of the St Leonards skyline that is characterised by towers.
- The proposal has a potentially large visual catchment, however direct views to the built form proposed are limited to the closest neighbouring locations and streets where all or part of the built form may be visible above and in the context of other development.
- The built form proposed provides the potential for a high-quality development and publicly accessible high amenity spaces that would enhance the adjoining Atchison streetscape and the Mitchell Street Plaza.
- Views from mid and upper floor apartments at The Landmark apartments will likely be affected by partial view loss to the north however the proposal would not block views to scenic features, areas of high scenic quality or character as dwellings do not have access to compositions that include scenic value of merit in *Tenacity* terms.
- For private domain views to the south from the Quest Apartment Hotel, the new tower will introduce a new form into the existing skyline that is already comprised of other tall tower forms.
- Views from low and mid-level locations in neighbouring residential flat buildings, such as on Atchison Street, are unlikely to be significantly affected by potential view loss.
- Public domain views from parks and reserves would include the proposed development within a visual context that is characterised by other tower forms

01 Introduction



1.1 Background and purpose

Stockland Development (Stockland) submitted an EOI for an SSDA and concurrent rezoning proposal on 17th January 2025 through the Housing Delivery Authority Pathway (HDA). At its Briefing on 19th February 2025, the HDA recommended to the Minister that the applicant’s project be declared SSD, for the reason that it sufficiently satisfied the objectives and criteria of the HDA. The project was declared as SSD in the State Significant Development Declaration Order 2025 (No 2) (26 February 2025).

A request for SEARs was lodged on the 6th of June 2025 with SEARS received on the 4th of July 2025.

Relevant SEARs

This Visual Impact Assessment (VIA) has been prepared to address the following relevant Secretary’s Environmental Assessment Requirements (SEARs) set out in the Table 1 below

Table 1 SEARs compliance

Description of Requirement	Section Reference
7. Environmental Amenity Assess amenity impacts on the surrounding locality, including solar access, visual privacy, view loss and view sharing, as well as wind, lighting and reflectivity impacts. A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated.	Section 3.10
8. Visual Impact - Provide a visual analysis of the development from key viewpoints, including photomontages or perspectives showing the proposed and likely future development. - If the proposal would result in significant visual impact not anticipated by the planning controls, provide a visual impact assessment that addresses the visual impacts of the development on the existing catchment.	Section 5.0

The VIA follows an objective, logical process to determine the importance of the extent of the change relating to the local and wider visual context.

This VIA includes a statement regarding the preparation method and accuracy of photomontages. The photomontages prepared by Urbis included in this report have informed the analysis of visual effects and impacts.

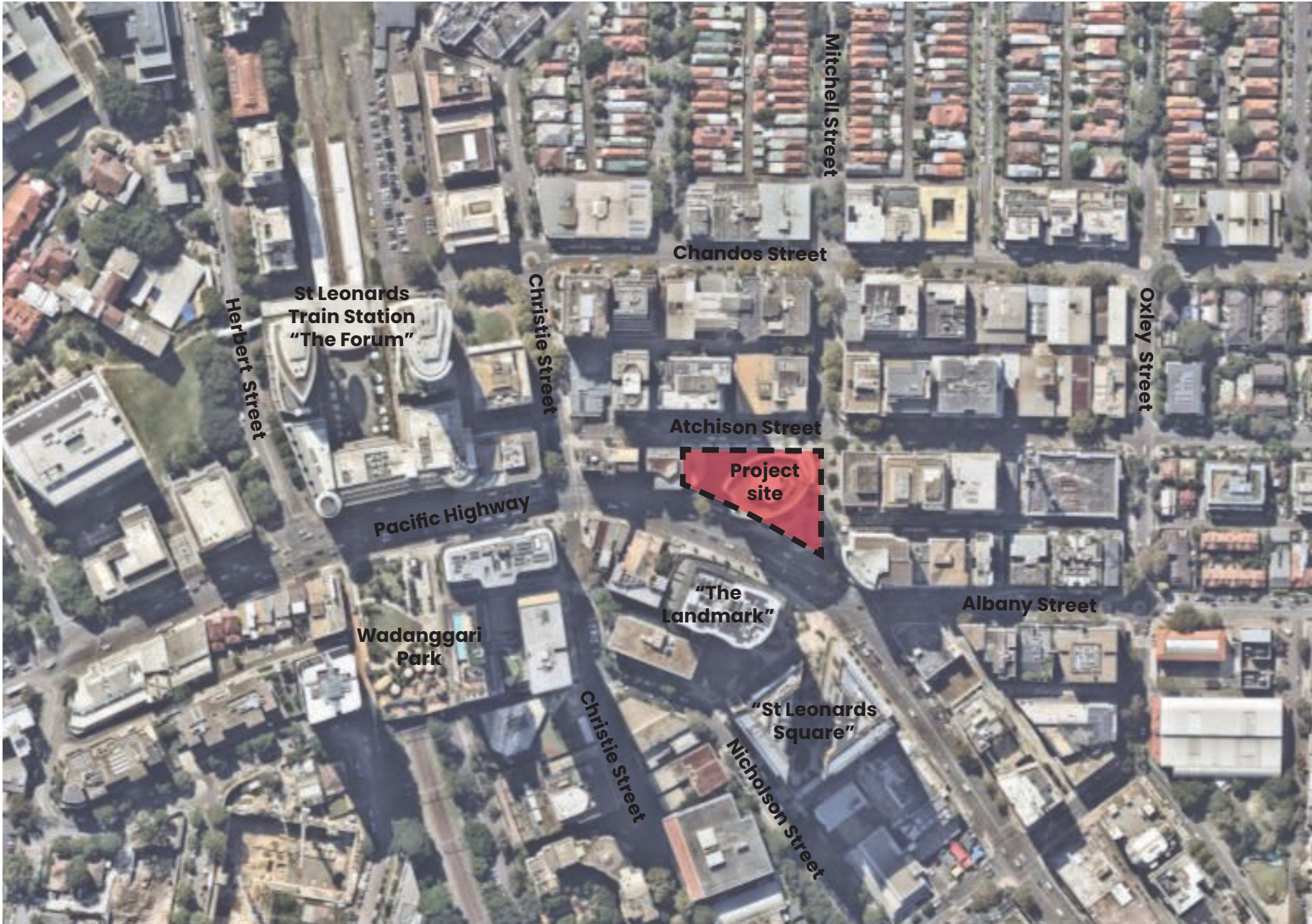


Figure 1 Site location | Urbis.

1.2 Site location and context

The site is located on Cammeraygal country at 601 Pacific Highway, St Leonards within North Sydney (LGA). The site is legally described as Lot 71 in DP749690 and has a total area of 2,844m². The site is 4.5 km north of the Sydney CBD, 3 km from the North Sydney CBD, and within proximity to the centres of St Leonards, Chatswood, and Macquarie Park. The site is located 350 metres (walking distance) from St Leonards train station and approximately 400m (walking distance) from the Crows Nest Metro station.

A site aerial and location plan is provided at Figure 1

1.3 Proposed development

This VIA has been prepared by Urbis and is submitted to the Department of Planning, Housing and Infrastructure (DPHI) in support of a State Significant Development Application (SSDA) (SSD-85848713) and concurrent rezoning proposal for a new mixed-use development at 601 Pacific Highway, St Leonards (the site).

The proposal seeks consent for the following:

- An amendment to the North Sydney Local Environmental Plan 2013 (NLEP 2013) to rezone the site from E2 Commercial Centre to MUI Mixed Use and to amend the minimum non-residential floor space ratio development standard under Clause 4.4A from 20:1 to 1:1.
- Demolition of the existing 14 storey commercial office building that is currently on the site.
- Site excavation, remediation and other preparatory works.
- Construction and operation of a new 52 storey (RL264.500) mixed use shop top housing development, with a FSR of 20:1 (maximum GFA of 56,880m²), comprising:
 - 538 dwellings including 508 Build-to-Sell apartments and 30 Affordable Housing apartments across a mix of apartment typologies.
 - A contribution of 5% of the residential GFA toward Affordable Housing.
 - Retail and commercial land uses at the ground and podium levels
 - Internal and external residential amenities provided throughout the building.
 - Six levels of basement carparking, comprising a total of 300 car spaces, bicycle parking, loading bays, waste areas, plant, and back of house
- Vehicular access to the basemen via Atchison Street.
- Landscaping and Public Domain works.
- Reticulation of site services and infrastructure (electricity, telecommunication, water, and sewer connections).



Figure 2 General Arrangement Plan Level 01 | Bates Smart

1.4 Documents consulted

This VIA has been prepared with regard for the following documentation:

- Urban Design Report - Bates Smart Architects
- Architectural Drawing Package prepared by Bates Smart Architects
- North Sydney LEP 2013 and DCP 2025
- St Leonards and Crows Nest 2036 Plan 2020 - DPIE

1.5 The proposed development in visual terms

The site is bound by Pacific Highway, a major arterial road, to the south. Atchison Street is located to the north and Mitchell Street to the east which include high-quality public domain public plaza areas extending from the site's ground level.

The proposed development can best be thought of in terms of layers as follows;

- Basement levels - 6 levels of underground parking.
- Ground (level 1) including an open floorplate, building setbacks and interfaces with the adjacent streets such as Mitchell Street and Atchison Street. Commercial lower entry door access from Pacific Highway.
- Podium levels 2-5 on a similar shape floorplate as level 1 with mixed residential, commercial uses and amenities.
- Slender residential tower form from levels 6-52 with primarily residential apartment dwellings, plant and equipment on level 52.

From public domain vantage points, perception of the ground level to upper tower levels diminishes in proximity and conversely, views of the middle and upper sections increases the further the viewer is from the site subject to other factors such as topography and intervening built forms.

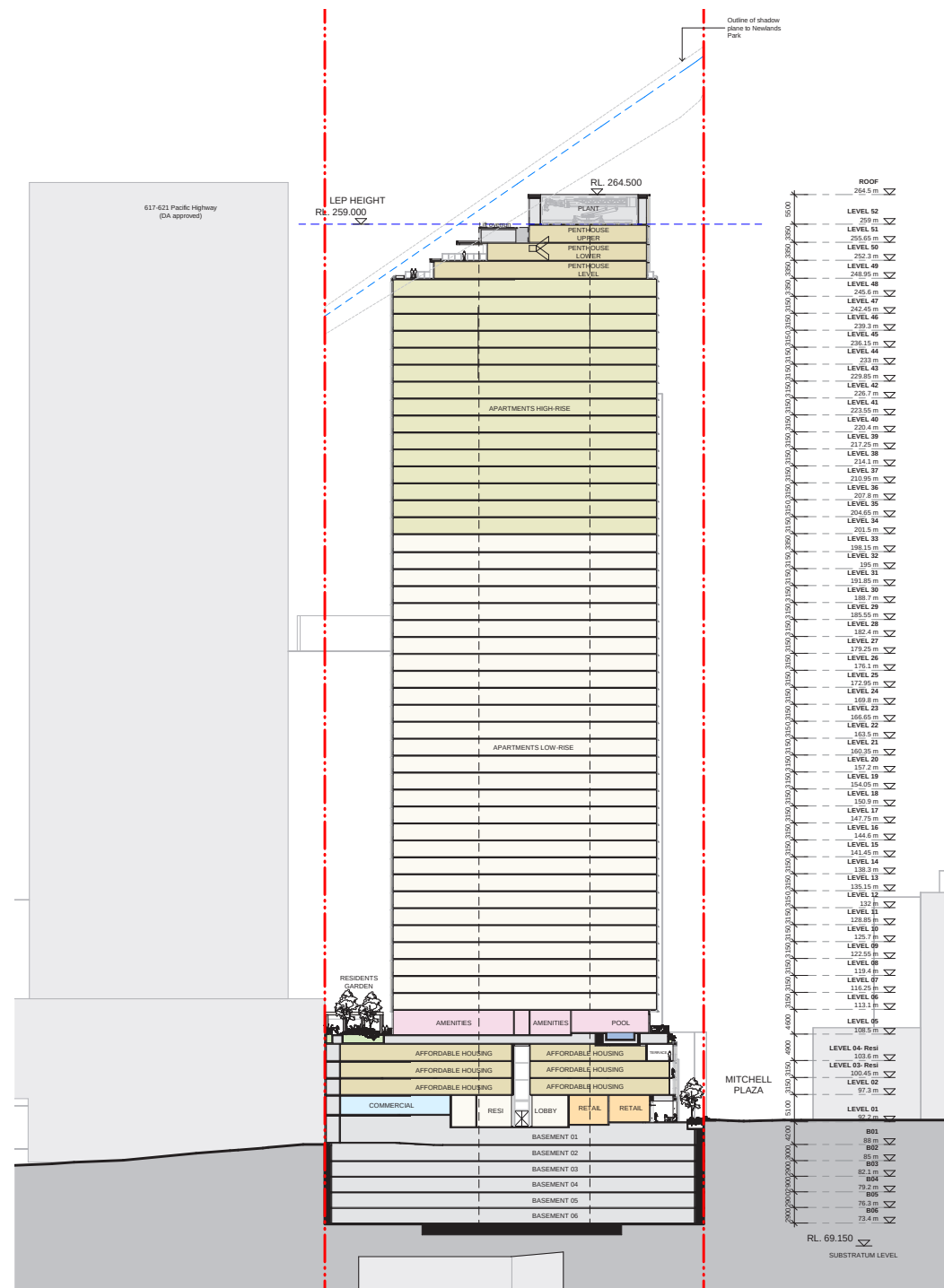


Figure 3 Building east-west elevation | Bates Smart

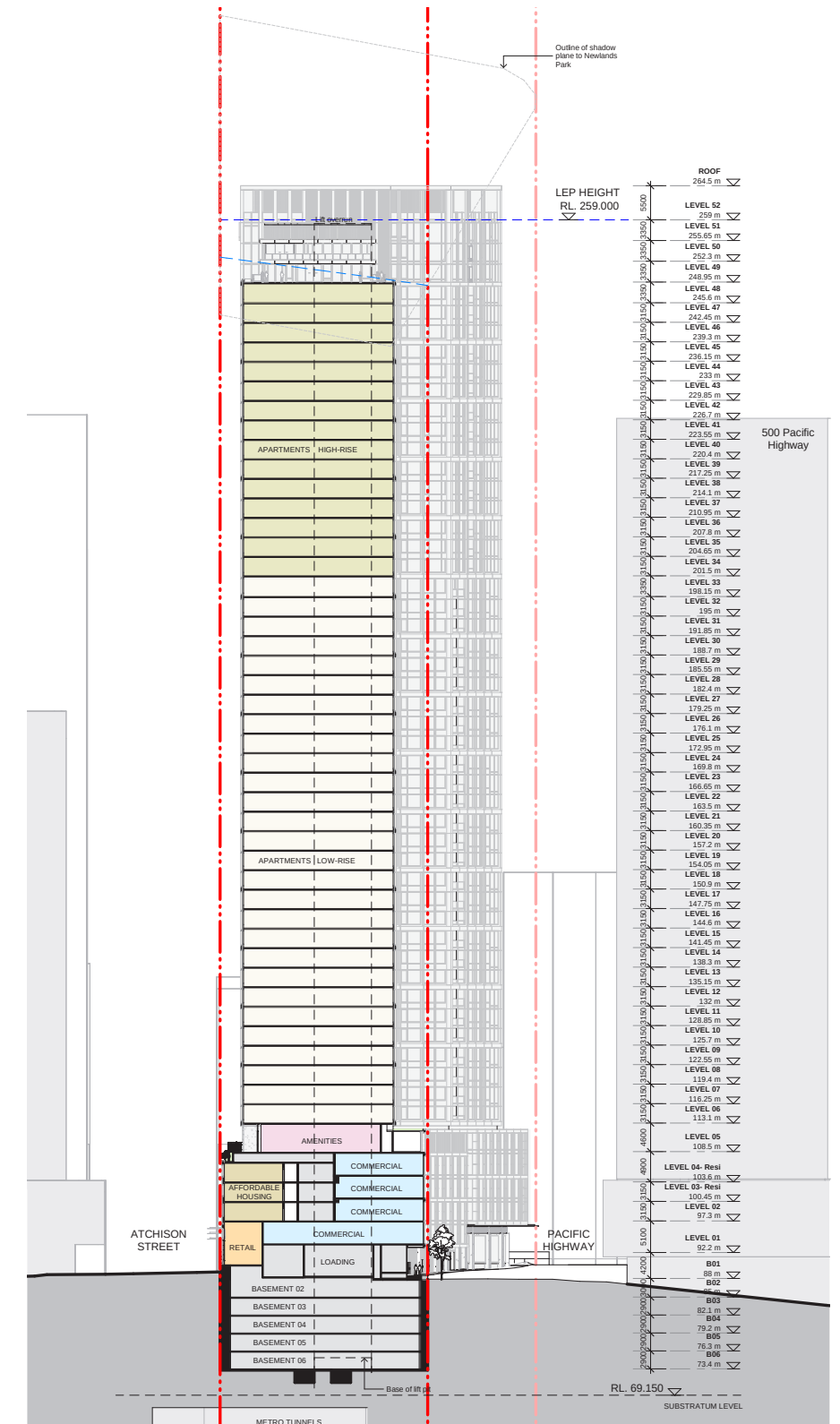


Figure 4 Building north-south elevation | Bates Smart



02 Methodology

2.1 Urbis methodology

The methodology employed by Urbis to assess visual impacts is based on a combination of established methods used in NSW. It is based on widely adopted concepts and terminology included in multiple Visual Impact Assessment (VIA) methods, guidelines and objectives.

In addition the Urbis VIA method draws on 30 years of academic research and publications by industry leaders who have considered a more tailored response to assess the visual impacts of built forms in urban settings rather than Landscape Character Visual Impacts Assessments (LCVIA).

An LCVIA takes a more holistic approach to changes proposed to the physical and visual landscape, which in our opinion is more appropriate to assess the impacts of development in greenfield locations or sites that are predominantly characterised by rural or open, less developed landscapes.

The Urbis methodology identifies objective ‘visual baseline’ information about the site and surrounds, analyses the extent of visual effects or quantum of change using visual aids from key locations, and considers the importance of that change. The significance of the extent of visual effects is explained and determined in the visual impact assessment section of the method and this report.

The Urbis method takes into consideration other relevant factors such as the underlying strategic planning intent of the site and its immediate or wider setting. For example other methods do not consider visual compatibility with the existing or desired future character for the site or area which may allow for transformational visual change.

The Urbis method also distinguishes and places ‘weight’ on key factors such as view place and viewer sensitivity, physical absorption capacity etc. and considers impacts on unique settings near the site that could be potentially affected, including for example heritage items, conservation areas, views to icons and areas of high scenic quality.

Separating objective facts from subjective opinion provides a robust and comprehensive matrix for analysis and final assessment of visual impacts.

The sequence of steps and logic flow is shown graphically in the method flow chart.

Our method also has regard to:

- *Guidelines for Landscape and Visual Impact Assessment* (3rd ed.) Landscape Institute and Institute of Environmental Management & Assessment (2013).
- *Visual representation of development proposals, Technical Guidance Note 02/17* (Landscape Institute 2017)
- *Guidance note for Landscape and Visual Assessment* (AILA 2018)
- *Guideline for landscape character and visual impact assessment Environmental impact assessment practice note EIA-N04* (TfNSW 2023).

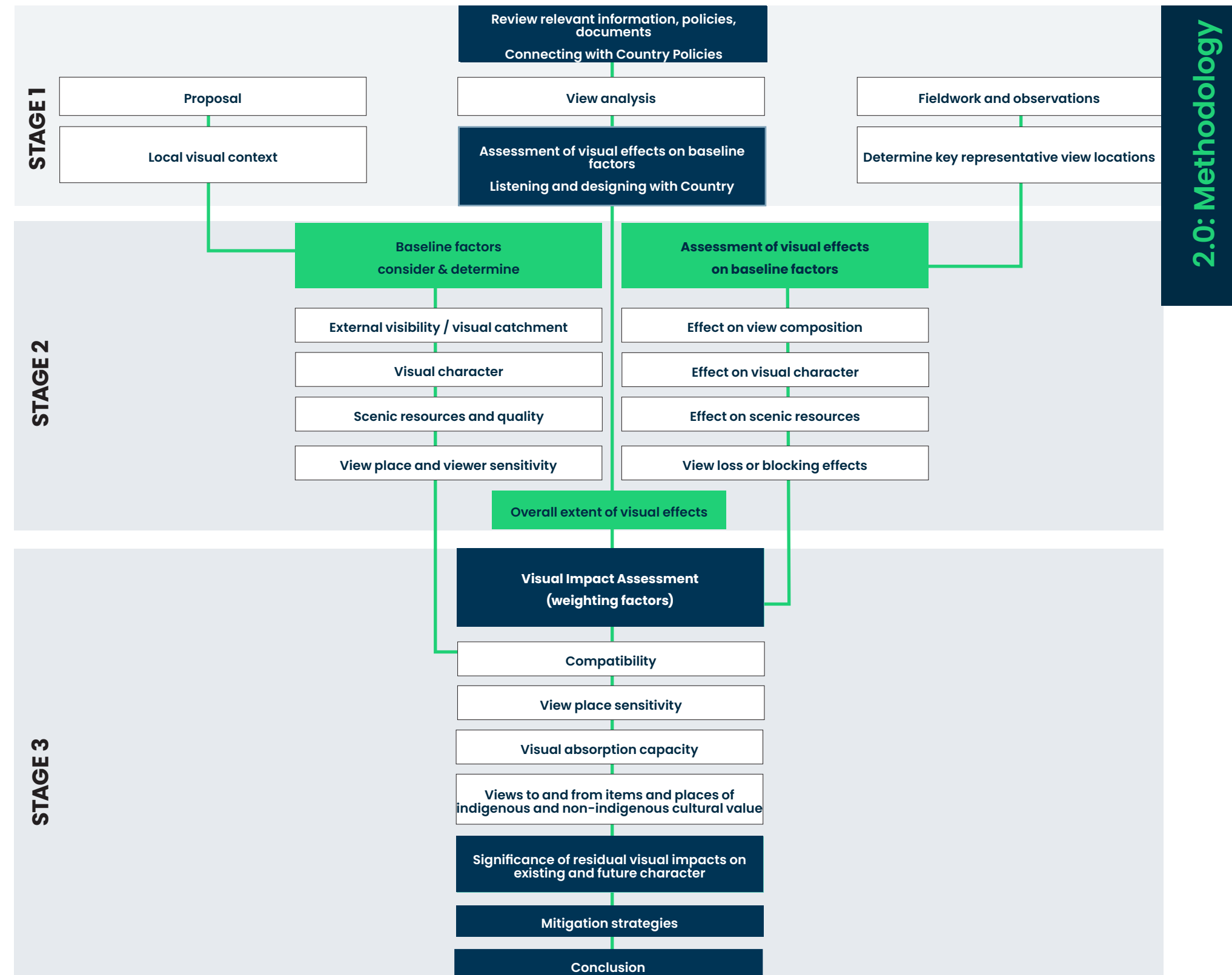


Figure 5 Urbis methodology flowchart.

The background of the slide features a photograph of modern architecture. On the left is a tall building with a curved glass facade. On the right is a building with a grid of windows and some balconies. At the bottom, a large, flat, copper-colored overhang is supported by several thick, white, V-shaped columns. The overall scene is in a cool, blue-toned color palette.

03 **Baseline visual analysis**

3.1 Inspected fieldwork locations

19 locations were reviewed as part of the initial fieldwork to better understand the potential visibility of the proposal from the surrounding area, refer Figure 6.

Fieldwork methodology involved identifying potential locations of visibility in the surrounding area up to one (1) km distance from the project site as part of Urbis's Preliminary Assessment (PA) of views.

All viewpoints visited were publicly accessible and are representative of a range of view types and distance classes. From the initial PA, a refined list of representative viewpoints were selected for further assessment.

View Number	Description
VP1	View NE Greenwich Road at Anglo Road
VP2	View N River Road overbridge near Lithgow Street
VP3	View NW Pacific Highway at Wiloughby Road
VP4	NW view from Pacific Highway at Crows Nest Metro
VP5	View W from Wiloughby Road and Albany Road
VP6	View W from St Thomas Rest Park western entry
VP7	View SW from St Leonards Church steps
VP8	View SSW from M1 overbridge at Naeremburn
VP9	View S from Mitchell and Ross Steets, Naremburn
VP10	View S from Naeremburn Park fields
VP11	View SSE from Christie and Northcote Streets
VP12	View S from Christie and Mitchell Streets
VP13	View NE from Wadangarri Park
VP14	View E from Pacific Highway WB bus stop
VP15	View E at the Pacific Highway Train Station entry
VP16	View EB from the Pacific Hwy at Portview Road
VP17	View E from the Gore Hill Oval
VP18	View E from the Gore Hill cemetery
VP19	View NW from Ernest Place, Crows Nest

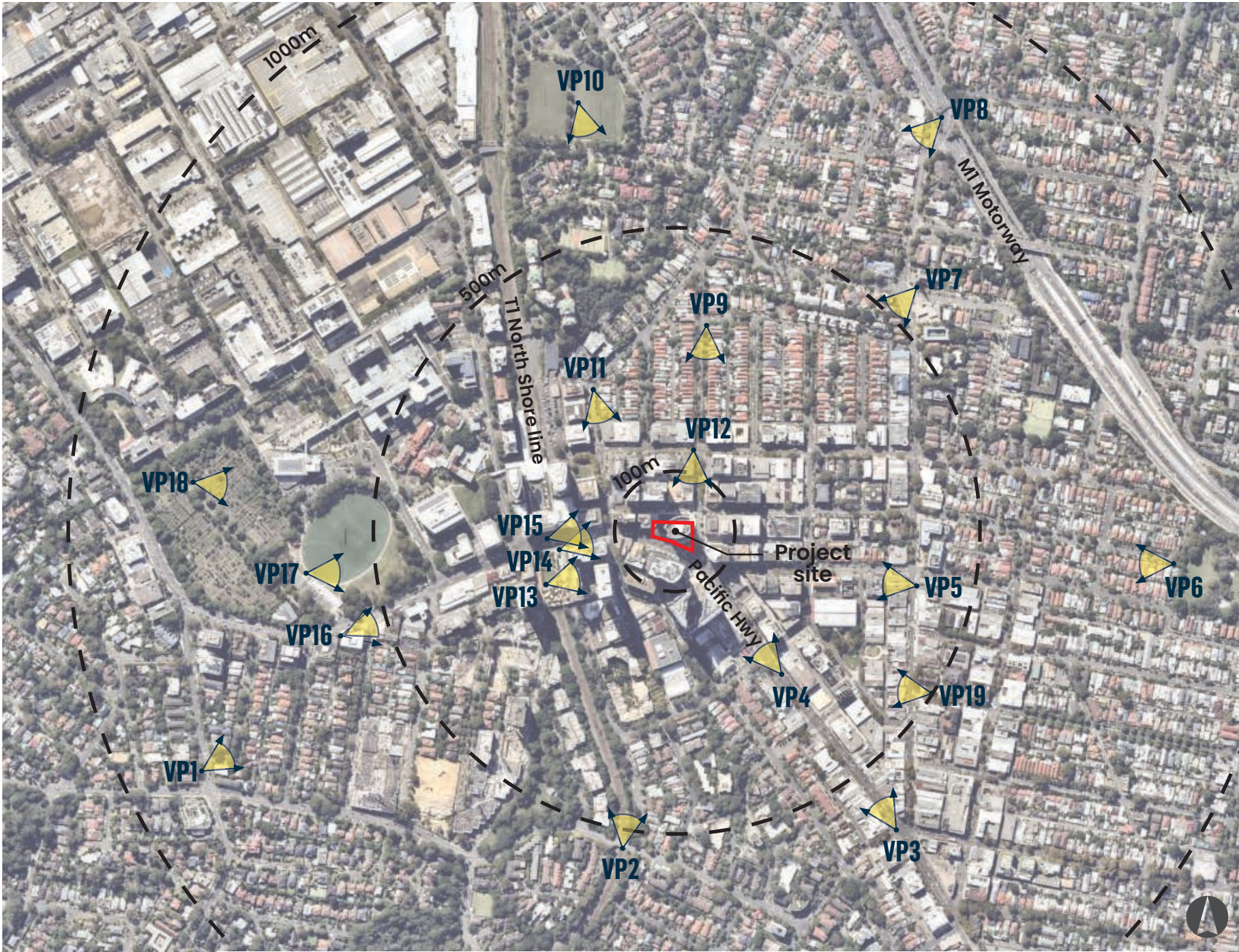


Figure 6 Locations inspected during fieldwork.



Photo 1. Viewpoint 1 Greenwich Road at Anglo Road



Photo 2. Viewpoint 2 River Road overbridge near Lithgow Street



Photo 3. Viewpoint 3 Pacific Highway at Wiloughby Road



Photo 4. Viewpoint 4 Pacific Highway at Crows Nest Metro



Photo 5. Viewpoint 5 Wiloughby Road and Albany Road



Photo 6. Viewpoint 6 St Thomas Rest Park western entry



Photo 7. Viewpoint 7 St Leonards Church steps



Photo 8. Viewpoint 8 M1 overbridge at Naeremburn



Photo 9. Viewpoint 9 Mitchell and Ross Steets, Naremburn



Photo 10. Viewpoint 10 Naeremburn Park fields



Photo 11. Viewpoint 11 Christie and Northcote Streets



Photo 12. Viewpoint 12 Christie and Mitchell Streets

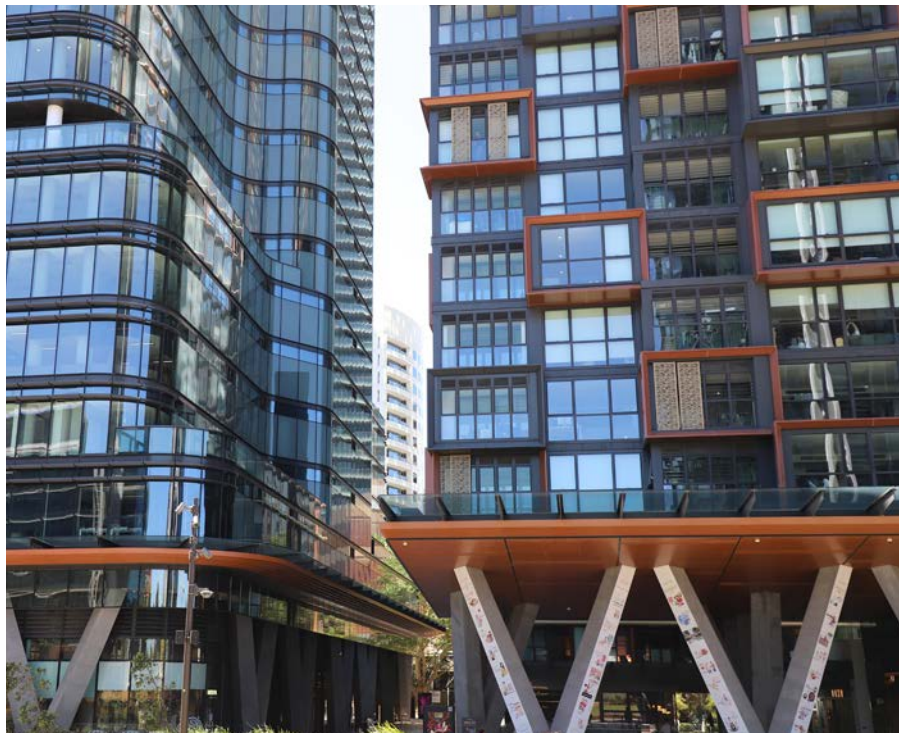


Photo 13. Viewpoint 13 Wadangarri Park



Photo 14. Viewpoint 14 Pacific Highway WB bus stop



Photo 15. Viewpoint 15 Pacific Highway Train Station/Forum entry



Photo 16. Viewpoint 16 Pacific Hwy at Portview Road



Photo 17. Viewpoint 17 Gore Hill Oval



Photo 18. Viewpoint 18 Gore Hill Cemetery



Photo 19. Viewpoint 19 Ernest Place, Crows Nest

3.2 Visual character of the site

The site comprises primarily the existing commercial building and ground level plaza areas surrounding. The commercial building on the subject site occupies the triangular-shaped block formed by Atchison and Mitchell Streets and the Pacific Highway. This commercial building is approximately equivalent to 17 residential storeys in height and is characterised by curved façades which present to the north-west and south-east. Its corner setting and the underlying topography mean that the site is visually prominent from Pacific Highway. The subject site is located near the crest of a high point associated with the local ridgeline followed by the Pacific Highway. In this regard, Mitchell Street falls in elevation north of the site and Atchison Street falls towards the east. To the west, Atchison Street falls gently towards St Leonards Station and then rises slightly to meet the Pacific Highway ridgeline.

There are no existing visually significant features on the site, such as large mature trees, that would be considered of value. In our opinion, the intrinsic visual quality of the site in the context of Atchison Street and the Mitchell Street Plazas is moderate. Pacific Highway and minimal pedestrian amenity reduces the visual quality to low on the southern side. The amenity and public domain of these streets will be enhanced to improve the existing visual quality of the streetscapes in alignment with the proposal design and desired future character of St Leonards.

3.3 Scenic quality

Scenic quality relates to the likely expectations of viewers regarding scenic beauty, attractiveness, or preference. Scenic preferences typically relates to the variety of features that are present, and the uniqueness or combination of those features. Scenic quality of the visual setting of the subject site is a baseline factor against which to measure visual effects. Criteria and ratings for preferences of scenic quality and cultural values of aesthetic landscapes are based on empirical research undertaken in Australia and internationally.

Therefore, analysis of the existing scenic quality of a site or its visual context and understanding the likely expectations and perception of viewers is an important consideration when assessing visual effects and impacts.

Comment:

The scenic quality of the subject site and surrounding area is considered as low. This part of St Leonards is currently subject to ongoing densification from recent and ongoing large scale tower development. The subject site does not include visually significant vegetation, unique or rare architecture, or any distinguishing features of scenic quality. The elements of the site do not combine to form scenic or highly valued compositions.

3.4 Public view place sensitivity

This factor relates to the likely level of public interest in a view of the proposed development. The level of public interest includes assumptions made about its exposure in terms of distance and number of potential viewers. For example, close and middle-distance views from public places such as surrounding roads and intersections that are subject to large numbers of viewers, would be considered as being sensitive view places. However, the level of sensitivity depends on the nature of the view and whether it is gained from either a moving viewing situation and the duration of exposure to the view for example for short periods of time or for sustained periods.

Comment:

Public parks, such as Gore Hill Park and Naremburn Park, are located within the surrounding visual context from which direct views to the proposal are available. The parks are of a local scale and therefore considered as a reduced sensitivity.

Potential visibility of the site was inspected and documented from the St Leonards Train Station and the Crows Nest Metro station entry. The stations are of a new, modern design and considered as having an increased sensitivity given their high use.

3.5 Private view place sensitivity

Viewer sensitivity is a judgement as to the likely level of private interest in the views that include the proposed development and the potential for private domain viewers to perceive the visual effects of the proposal. The spatial relationship (distance), the length of exposure and the viewing place within a dwelling are factors which affect the overall rating of the sensitivity to visual effects.

Comment:

- Potential visual impacts are possible from sensitive private domain apartment dwellings in towers from close distances, such as The Landmark site south of Pacific Highway and the Quest Apartment Hotel to the north.
- Potential views of the proposal are possible from sensitive private domain residential flat buildings (RFBs) or dwellings in medium and distant classes in elevated locations.
- Private domain impacts from heritage listed Naeremburn Conservation Area are possible but likely to be low given the predominant east-west alignment of dwellings.

3.6 Regulatory context

We understand the maximum permissible height for the site is RL 259m. A clause 4.6 variation request to amend the maximum building height control is proposed for a minor non-compliance associated with the roof plant and equipment on level 52 reaching up to RL 264.5m.

The overrun has been indicated in the photomontages as a red dashed line. We note that the minor non-compliance creates no material visual effects or visual impacts in public domain views. Where visible, it will be relatively imperceivable in the overall context of the views from its height.

3.7 Visual context

The surrounding area is in a highly urbanised environment with tightly spaced tower forms of differing heights including mid to high rise commercial and apartment buildings and associated ground level plazas.

Development immediately north of the subject site is characterised by low height commercial and retail development along both sides of Chandos Street. The north side of Chandos Street includes two-storey development the rear of which fronts to Henry Lane. This two-storey built form provides a transition in height to lower residential development within the Naremburn Conservation Area.

The Naremburn Conservation Area is predominantly characterised by single-storey federation-era bungalows, semi-detached dwellings and closely spaced long narrow 'gunshot' style dwellings. Street trees are also present along these residential streets.

Atchison Street east of the site includes mixed-use developments typically between 5 and 12 storeys in height. The east corner of Atchison and Mitchell Streets is occupied by a five-storey commercial building.

Part of Mitchell Street immediately south of the subject site has been transformed into public plaza space and is characterised by seating areas, timber decks, paved open space, a play area and street tree planting which contribute positively to the visual quality of the streetscape.

A Mirvac twin tower mixed-use development at 494 Pacific Highway (St Leonards Square) is located south-east of the subject site and includes 36 residential storeys and has axial views north along Mitchell Street.

The Quest Apartment hotel at 6-16 Atchison Street (40 Atchison Lane) is located immediately to the northwest across Atchison Street. It includes a tower approximately 25 storeys above a five-storey podium. The tower is massed in two rectangular shaped floorplates joined by a central core.

South of the subject site at 500 Pacific Highway is a high-rise development, the "Landmark", is a 57-storey residential apartment tower on a four-level curved podium with ground level retail outlets and landscaped plaza spaces.

Nicholson Place, currently under construction, is a mixed-use precinct comprising Build-to-Rent apartments, commercial office space, ground floor retail and community areas.

Immediately west of the site at 617-621 Pacific Highway, there is current approval for a 50-storey mixed use residential development (comprising retail and commercial uses within the podium and residential apartments in the tower above).

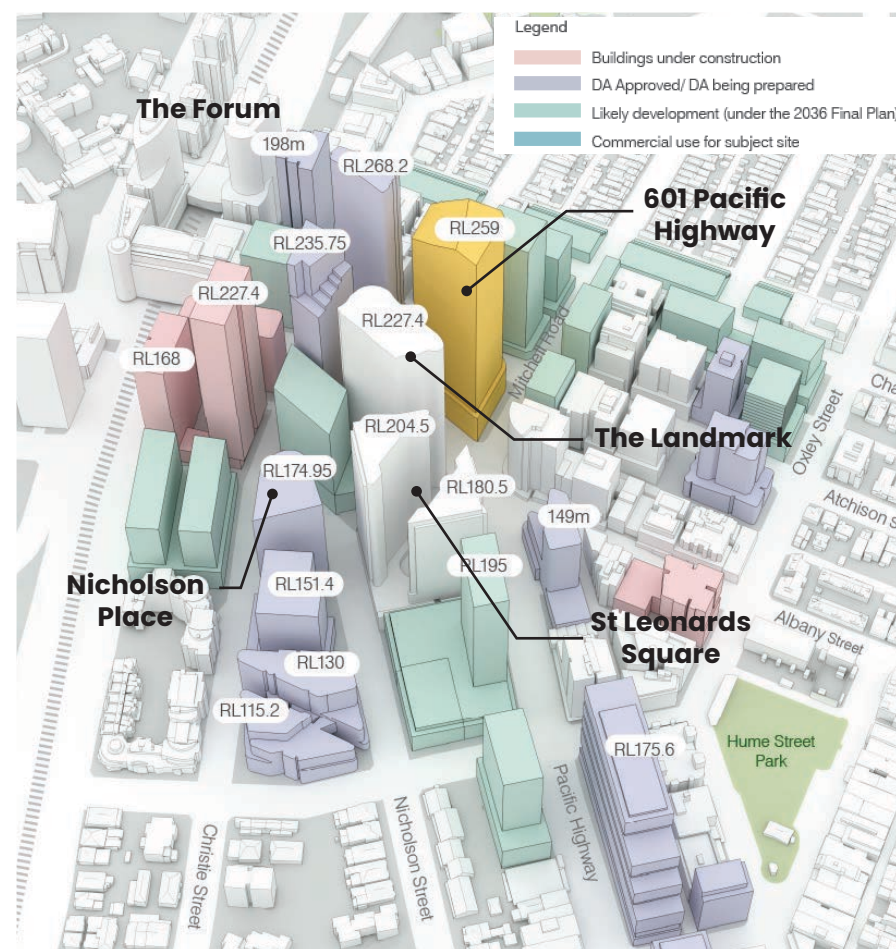


Figure 7 Building envelope with development context | Architectus

3.8 Heritage items

The subject site does not include heritage listed items although there are State and Locally listed heritage items in proximity of the subject site. The nearest State Heritage Item within visual context is the Electricity Powerhouse No 187 (no. 00931) located approximately 200m southeast at 23 Albany Street (near Oxley Street) Crows Nest. The Gore Hill Cemetery, State Heritage listed (no. H01491), is located approximately 500m to the west. View impacts from these items currently contain views of the existing tall built forms in the same location.

The nearest Heritage Conservation Area is located approximately 150m to the north with the southern boundary located along Henry Lane. Although there are likely to be views of the mid to upper sections of the proposal from north-south aligned streets and laneways, such as Mitchell Street, the views currently include tall building forms. Residential lots however are typically oriented east-west thereby limiting visibility from internal dwelling areas.

3.9 Documented views

There are no documented views identified within North Sydney Council or the Willoughby Council DCPs that would need to be considered as part of this VIA.

3.10 Visual catchment

Prior to undertaking fieldwork, Urbis undertook a desktop review of all relevant statutory and non-statutory documents, an analysis of aerial imagery and topography to establish the potential visual catchment to inform fieldwork inspections.

Potential visibility of the proposal was further investigated by Urbis during fieldwork observations of the site from a range of distance classes (close, medium and distant views) and an indicative visual catchment from Google Earth. Using the existing site commercial building as a visual marker, the subject site was inspected from surrounding public domain locations. The building provided an approximate guide as to the potential visibility of the subject site including from more distant locations.

Given the elevated location of the subject site and lower elevation to the north, north-east and west the potential visual catchment of the proposed development is extensive. In other words, the tower form would be potentially visible for some kilometres from the site in these directions where its form would contribute to the cluster of existing towers and approved towers some of which are under construction in St Leonards.

The proposed development would be visible from medium-distant views from the north including from the large open space at Naremburn Park, parts of Gore Hill Expressway, Willoughby Road and from other elevated locations along Sailors Bay Road and Northbridge to the north-east. Medium distant views are available from isolated locations within the Naremburn Conservation Area for example from the corner of Northcote Street and Dalles Road.

Residential development in Naremburn to the north may have access to some views of the proposed development but no access to scenic views beyond St Leonards to the south or south-west due to its low relative elevation to the Pacific Highway ridgeline. Views of the built form proposed are predominantly available from residential roads from moving, viewing situations. Potential axial and focal views from within the Conservation Area, for example along Corbett Lane and the north section of Mitchell Street, are also available.

Beyond Lawson Lane north of the Conservation Area the road layout becomes more curvilinear and undulating in places and includes larger blocks and dwellings. The presence of street trees and intervening two-storey residential development in this vicinity limits external visibility towards the subject site and to the proposed development.

3.10 Visual catchment (cont.)

To the east the marker building is visible from some axial views in Crows Nest including from Chandos Street, Atchison Street and Holtermann Street. Views from parts of the Crows Nest commercial and retail core are isolated and limited from locations along Willoughby Road by two to three storey commercial built form located along its western side and by taller buildings to the west. Similarly views from Ernest Place and close views from the south-east toward the site are partial and limited to the upper section of the tower due to intervening built forms.

The underlying topography west of the Pacific Highway ridgeline falls steeply in elevation to the west and south-west so that potential views exist towards the tower cluster in St Leonards for example from Newlands Reserve, Shirley Road and from parts of Greenwich.

The potential visual catchment extends along the Pacific Highway ridgeline to the south approximately to the intersection of Alexander Street and the Pacific Highway. North and south of this location views from the Pacific Highway to the north are intermittent depending on the curvilinear route of the road and its orientation towards the subject site and gaps in development along it.

Private domain visibility

Residential development exists within the immediate context to the north-west, east, north-east and south of the subject site. Views from residences located to the north in Naremburn including from within the Conservation Area are likely to be constrained due to the north-south grid layout of roads, where dwellings are closely spaced and orientated to the west or east so that there are limited opportunities from which to view the proposed development. Access to sustained focal views towards the subject site from residential dwellings is likely to be limited and constrained by intervening vegetation and taller built form for example those buildings located along Henry Lane.

The Quest St Leonards Apartment Hotel (6-16 Atchison Street)

Located north-west of the proposed development, the Quest hotel includes 79 serviced apartments over approximately 24 levels with north and south elevations characterised by large windows appearing to be virtually floor to ceiling in height. It is likely therefore that views from these windows could be considered as main views.

500 Pacific Highway, St Leonards (The Landmark)

The building has a broadly rectangular shaped floorplate and is the nearest residential neighbour to the south. The development comprises a 57-storey residential and commercial tower with a four-level podium including retail spaces. The north and south elevations are characterised by floor to ceiling windows and balconies with expansive views over Sydney Harbour to the south and towards Middle Harbour to the north from mid and upper level dwellings. A review of a typical floorplate indicates apartment dwellings with deep balconies, primary living areas and bedrooms, the views from which could be considered as main views.

A real estate image from an upper level apartment is indicative of a high-level view to the north with a foreground of low-density residential development, tree canopy and distant views to the Blue Mountains.

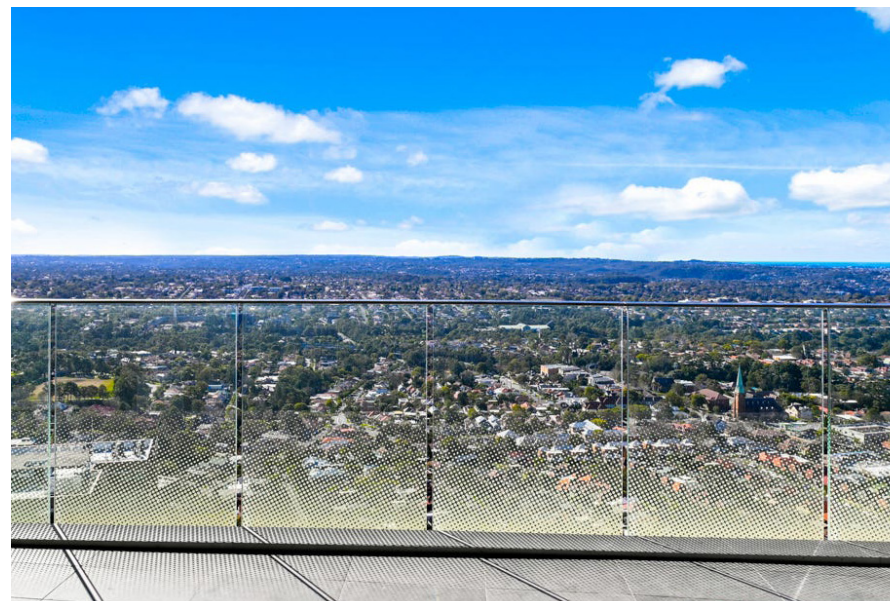


Figure 8 Indicative realestate view from upper level in The Landmark

38 Atchison Street

This building has a broadly rectangular shaped floorplate and is the closest north-eastern residential neighbour to the site. The development includes 83 units within a podium and tower of approximately 11 residential storeys where the north and south elevations are characterised by floor to ceiling windows and balconies.

5 Atchison Street

An existing 12-storey mixed-use development located east of the subject site on the south side of Atchison Road and includes 11 levels of residential accommodation and approximately 60 units above ground-level retail. The south elevation includes recessed external balconies where views would be available directly to the west from upper levels.

617-621 Pacific Highway

This location, immediately west of the site, includes an approved 50-storey tower with mixed-use development of commercial offices, retail and residential development on a six-storey podium and 190 residential units in the tower above.

The development will include approximately 41 levels of residential apartments (including 2 levels of plant at levels 24 & 49) and a sky garden for residents on the top of the podium (Level 6).

3.11 View sharing / view loss

The Quest St Leonards Apartment Hotel (6-16 Atchison Street)

Oblique views from south facing windows of the subject site may be possible noting that existing views up to approximately level 15 currently include views of the subject site's commercial building. Potential views from upper level windows are likely to currently include tower development to the south and south east such as The Landmark tower and the residential tower at 88 Christie Street. The proposal will therefore introduce a new tower form into a skyline that already includes tower forms within an approved building envelope.

500 Pacific Highway, St Leonards (The Landmark)

Views from the Landmark to the south, east and west would not be affected. Existing views to the north up to approximately Level 14 currently include views of the subject site's building and are therefore currently restricted. Higher level units with views to the north can be broadly categorised as vernacular district views that are predominantly characterised by low height and scale residential (R2) development, continuous tree canopy and isolated distant views to water bodies and undulating topography for example to the east and to the western reaches of Middle Harbour. Views however are not predominantly characterised by scenic or highly valued compositions in Tenacity terms. Any potential view loss for this development is already contemplated by the approved envelope up to level 52. Potential views of Level 52 (plant and equipment) would only block sky thereby having no material impact.

38 Atchison Street

The west elevation is orientated with oblique south-westerly views towards the site from smaller, high-level windows that are likely to be associated with bedrooms or bathrooms. It is therefore unlikely that there are any direct view impacts to the site or to distant scenic features beyond it from west elevation windows.

5 Atchison Street

Views to the west from the upper level windows are possible however views would currently include the existing, taller commercial building located on the project site. The visual effects on these views would therefore be similar to existing being that a tower form that will be replaced hence potential additional view loss is likely to be limited and immaterial and is contemplated by the controls.

617-621 Pacific Highway

The building comprises a broadly triangular floorplate with the wider eastern end adjoining the site boundary. Approved plans indicate two end units typically with solid (concrete) screen panels from ground up to level 44 blocking views to the east. Balconies are proposed at north-east and south-east corners providing for views to the north and south. For dwellings above level 44, panoramic landscape views in are provided through full height windows to maximise view opportunities. The proposal would therefore be visible to the east noting that primary and more scenic view opportunities are to the north and south. Any potential view loss for this development is already contemplated by the approved envelope up to level 52. Potential views of Level 52 (plant and equipment) would only block sky thereby having no material effect.

The background image shows a city street scene. In the foreground, there are several cars parked along the side of the road. The middle ground is filled with lush green trees. In the background, a city skyline is visible, featuring several tall buildings and a construction crane. The sky is clear and blue. The overall scene is bright and sunny.

04 Visual effects analysis

4.1 Selection of views for analysis

Urbis undertook a desktop review of all relevant statutory and non-statutory documents, an analysis of aerial imagery and topography and LiDAR data to establish the potential visual catchment to inform fieldwork inspections. Following fieldwork Urbis selected and recommended five (5) public view locations for further analysis.

No.	Photomontage location
VP04	View north-west from Pacific Highway near Oxley Street
VP09	View south from Mitchell Street and Ross Street
VP10	View south-east from Naeremburn Park
VP15	View east from Pacific Highway near Herbert Street
VP17	View north-west from Gore Hill Oval

4.2 Photomontage methodology

The method of preparation is outlined in Appendix 3 of this report.

The accuracy of the locations of the 3D model (prepared by the project architects) of the proposed development inserted into digital photographs has been checked by Urbis in multiple ways:

1. The placement and location of the 3D architectural model was checked against surveyed visible fixed features using LiDAR data.
2. The location of the camera in relation to the model was established using the survey model and the survey locations, including map locations and RLs. Focal lengths and camera bearings in the meta data of the electronic files of the photographs are known.
3. Reference points from the survey were used for cross-checking accuracy in all images.
4. No significant discrepancies were detected between the known camera locations and those predicted by the computer software. Minor inconsistencies due to the natural distortion created by the camera lens, were reviewed by Urbis and were considered to be within reasonable limits.

Urbis is satisfied that the photomontages satisfy the intent of the Land and Environment Court of New South Wales photomontage policy.



Figure 9 Photomontage view location map

4.3 Viewpoint Analysis

Viewpoint 04 (VP04) Crows Nest Metro

Distance class

- Medium
- 100m-1000m

Existing composition of the view

This is a near-axial view north-west along Pacific Highway near Oxley Street approximately 260m from the site. The Highway corridor is generally wide and open in the foreground but diminishes at the site where it bends west and disappears from view. The south-east facing tower of the St Leonards Square development at 472-486 Pacific Highway is a prominent visual element in the view along with other lower built forms and a street tree in the foreground.

Visual effects of the proposal on the composition as modelled

This focal view is available for a short section of the Pacific Highway south of St Leonards. Most of the tower form is visible between existing high-rise tower forms on either side of the view while the lower podium levels are generally screened by foreground built form and vegetation. The new tower will introduce a new form into the existing skyline and partially block views of open sky. Furthermore, the height and form of the proposed tower is compatible with the desired future character for this part of St Leonards, the strategic context of the site and does not block views to scenic features, areas of high scenic quality or character.

Visual effects of Proposal (quantum of change) on existing view attributes

Visual character	low
Scenic quality	low
View composition	high
View blocking of scenic elements	low

Overall rating of effects on baseline factors

low

Weighting factors

Public domain view place sensitivity	low-medium (neutral)
Visual absorption capacity	medium (neutral)
Compatibility with urban context and visual character	high (down-weight)
Viewing period	short (down-weight)
Viewing distance	medium (neutral)

See section 5.7 for overall visual impact rating



Figure 10 Viewpoint 04 location



Figure 11 Viewpoint 04 from Crows Nest Metro entrance

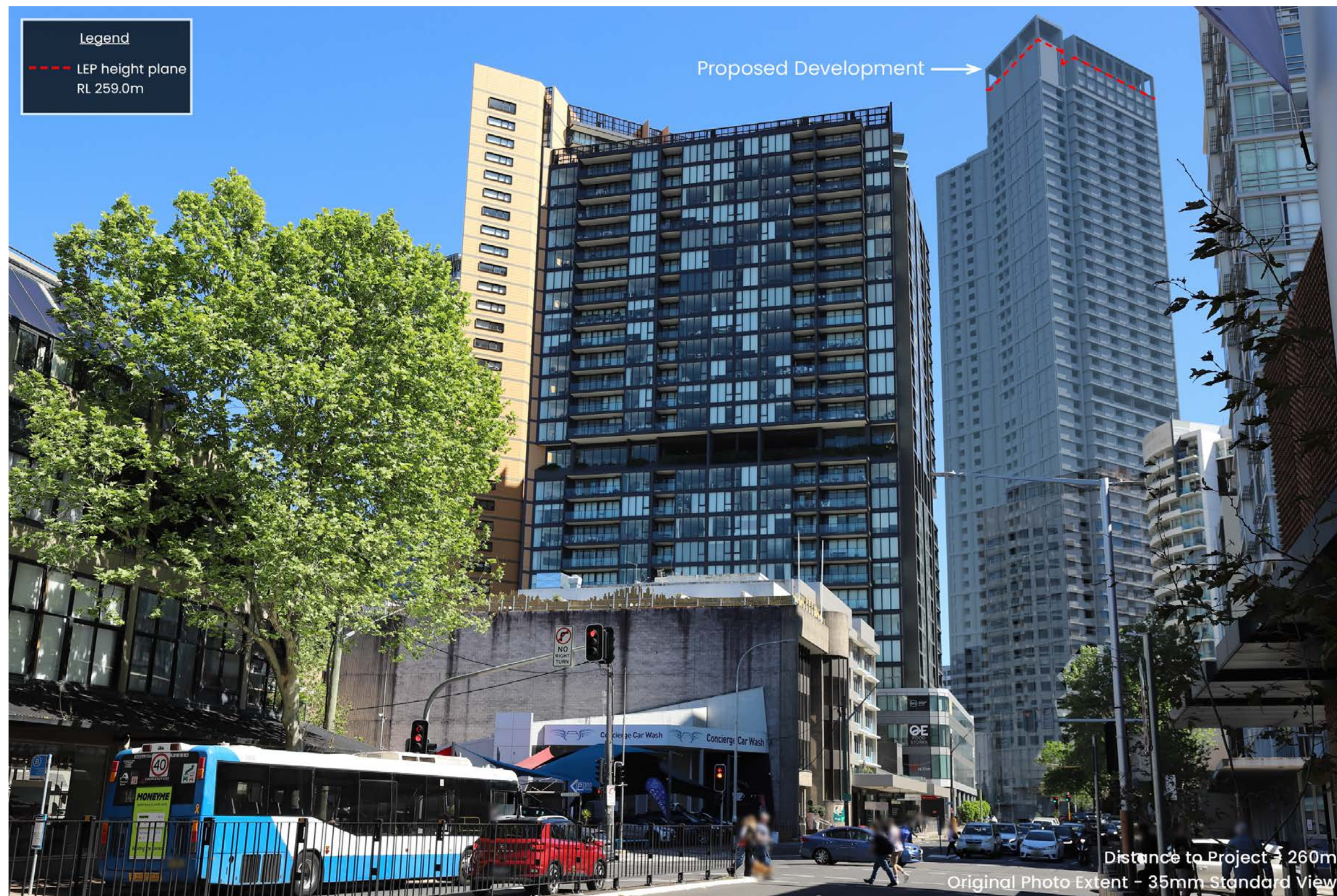


Figure 12 Viewpoint 04 photomontage.

4.3 Viewpoint Analysis

Viewpoint 09 (VP09) Naeremburn Conservation Area

Distance class

- Medium
- 100m-1000m

Existing composition of the view

The view is south along Mitchell Street at the corner of Ross Street. The existing site commercial (white) building marker is visible in the centre of the view as well as transitional, medium height built form and tall towers forming a cluster towards the background of the view. The Naeremburn Conservation Area, located in the foreground of the view, is typical of traditional Sydney low density suburban residential development with one-storey tiled roof structures, grassed verges, street tree planting, footpaths, street signs and overhead power lines on power poles.

Visual effects of the proposal on the composition as modelled

This view provides a useful indication of the existing tower cluster typology of St Leonards and is considered to be a moderately sensitive public domain view as it is located in a heritage listed conservation area. This view includes tower forms that reflect the desired future character for St Leonards. The proposed development is visible in this view and its height, form and character are considered to be compatible with the existing and emerging desired future character of St Leonards. There is a minor non-conformance visible at the roof level above the approved LEP height however there would be no material impact on the view.

Visual effects of Proposal (quantum of change) on existing view attributes

Visual character	low-medium
Scenic quality	low
View composition	medium
View blocking of scenic elements	low

Overall rating of effects on baseline factors

low

Weighting factors

Public domain view place sensitivity	medium (neutral)
Visual absorption capacity	medium (neutral)
Compatibility with urban context and visual character	medium-high (neutral)
Viewing period	short (down-weight)
Viewing distance	medium (neutral)

See section 5.7 for overall visual impact rating.



Figure 13 Viewpoint 09 location



Figure 14 Viewpoint 09 From Mitchell and Ross Streets

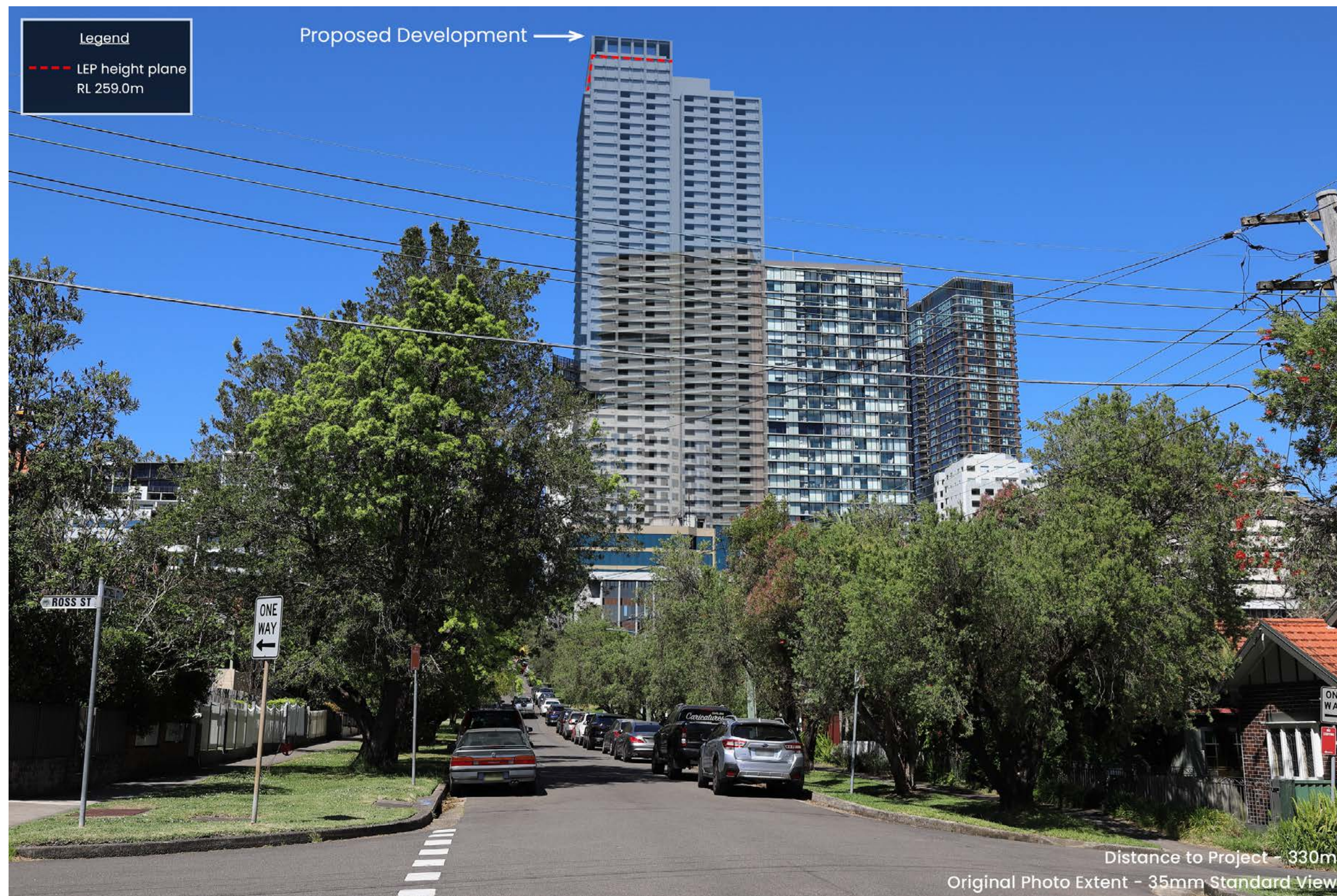


Figure 15 Viewpoint 09 photomontage.

4.3 Viewpoint Analysis

Viewpoint 10 (VP10) Naeremburn Park

Distance class

- Medium
- 100m-1000m

Existing composition of the view

The view is south-east from the Naeremburn playing fields located approximately 700m from the subject site. The view is comprised of the open grassed sports fields in the foreground with trees and vegetation forming a screen across the middle ground of nearby residential development and lower levels of built form within St Leonards. Upper sections of taller high-rise tower development is visible in the background with the IBM (white) site marker building located in centre of the view.

Visual effects of the proposal on the composition as modelled

The tower is a novel feature visible above foreground vegetation and will block views of other built forms and open sky. Views to the proposed tower will be seen in the context of existing towers and potentially other new and approved developments such as; 617-621 Pacific Highway, 20-22 Atchison Street and 88 Christie Street. The proposed development is similar in height, form and character to existing and approved forms and in this regard is compatible with the desired future character for this part of St Leonards, the strategic context of the site and does not block views to scenic features, areas of high scenic quality or character. There is a small non-conformance visible at the roof level above the approved LEP height however there would be no material impact on the view.

Visual effects of Proposal (quantum of change) on existing view attributes

Visual character	low-medium
Scenic quality	low
View composition	low-medium
View blocking of scenic elements	low

Overall rating of effects on baseline factors

low

Weighting factors

Public domain view place sensitivity	med-high (up weight)
Visual absorption capacity	medium (neutral)
Compatibility with urban context and visual character	medium-high (down-weight)
Viewing period	short (down-weight)
Viewing distance	medium (neutral)

See section 5.7 for overall visual impact rating.

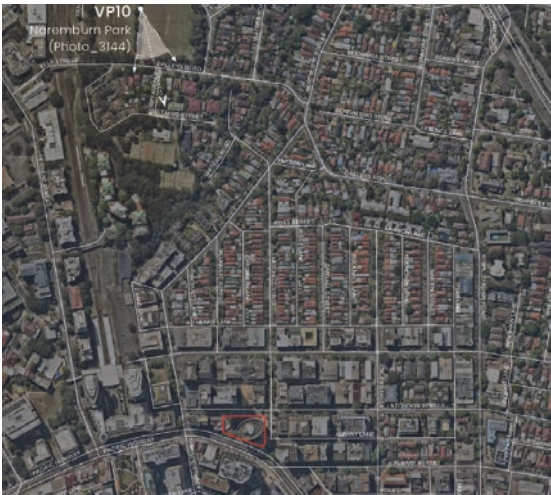


Figure 16 Viewpoint 10 location



Figure 17 Viewpoint 10 from Naeremburn Park



Figure 18 Viewpoint 10 photomontage.

4.3 Viewpoint Analysis

Viewpoint 15 (VP15)– St Leonards Train Station

Distance class

- Medium
- 100m-1000m

Existing composition of the view

An axial, easterly view along Pacific Highway of the site has been framed by the existing tower forms on either side of the highway. The view is comprised of urban elements including tall building forms with glazing, balconies and the existing site IBM commercial building in the centre of the view and open sky above.

Visual effects of the proposal on the composition as modelled

This is a close view from approximately 200m west of the subject site. Views to the proposed tower will be seen in the context of existing towers and potentially other new and approved developments such as; 617-621 Pacific Highway. The built form will not block public domain views to any important scenic features or items and will not generate any significant negative visual effects on the streetscape character or quality. In addition, the proposed development is compatible with other approved podium and tower forms that may be present in the streetscape. The non-conformance visible at the roof level above the approved LEP height would be no material impact on the view. There is a minor non-conformance visible at the roof level although there would be no material impact on the view.

Visual effects of Proposal (quantum of change) on existing view attributes

Visual character	low
Scenic quality	low
View composition	medium
View blocking of scenic elements	low

Overall rating of effects on baseline factors	low
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Weighting factors

Public domain view place sensitivity	medium (neutral)
Visual absorption capacity	medium (neutral)
Compatibility with urban context and visual character	high (down-weight)
Viewing period	short (down-weight)
Viewing distance	medium (neutral)

See section 5.7 for overall visual impact rating.



Figure 19 Viewpoint 15 location.

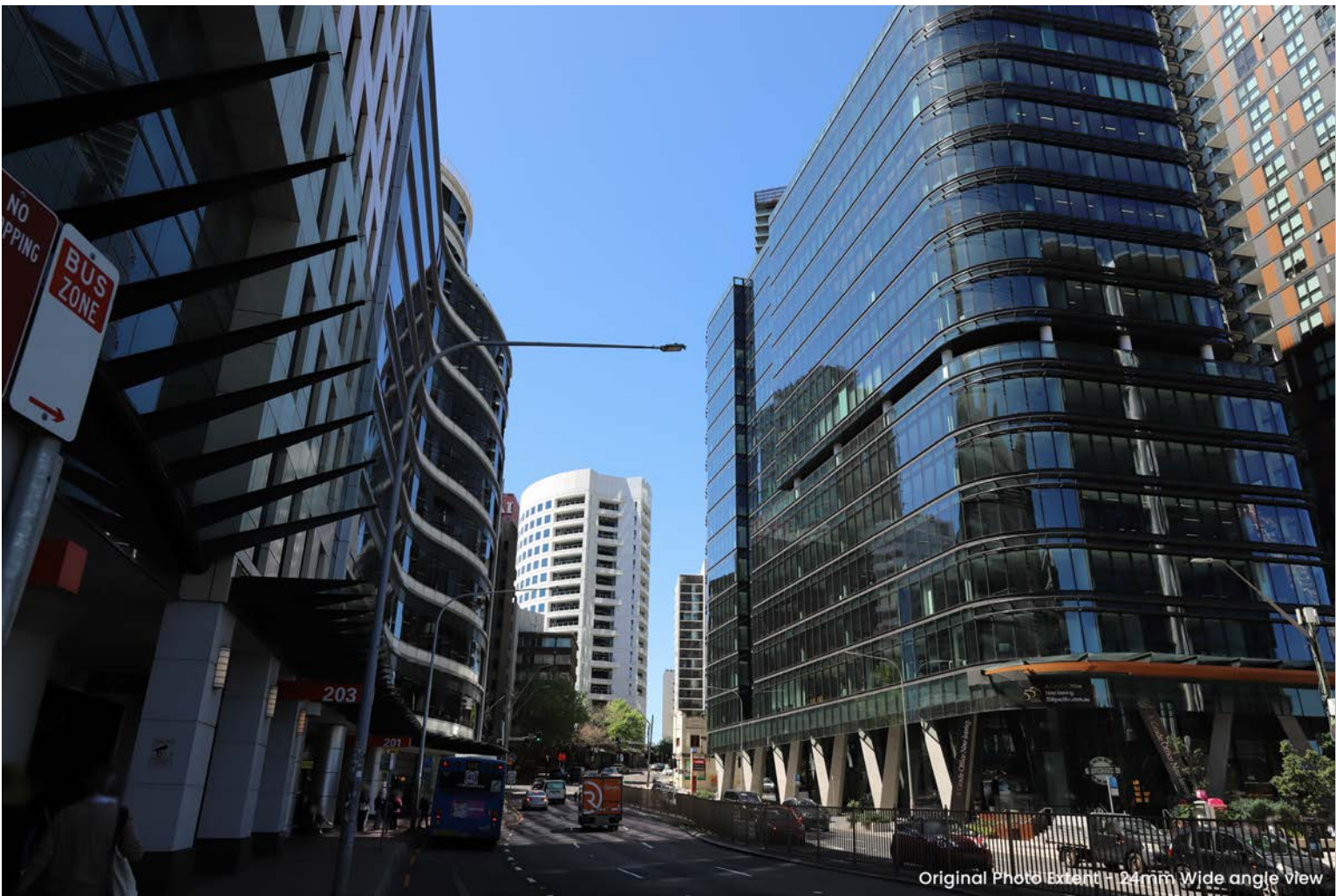


Figure 20 Viewpoint 15 From St Leonards Train Station

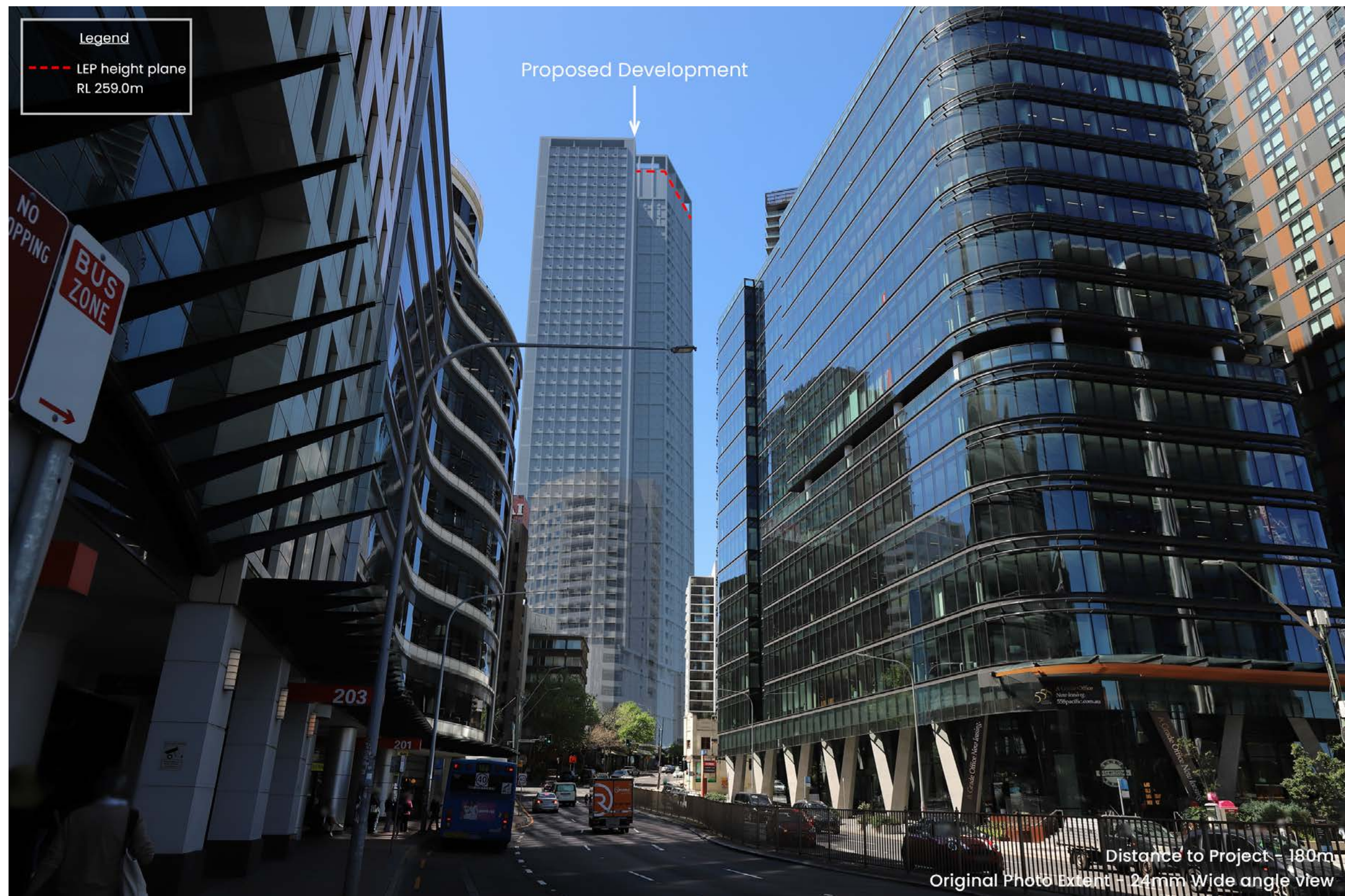


Figure 21 Viewpoint 15 photomontage.

4.3 Viewpoint Analysis

Viewpoint 17 (VP17) Gore Hill Oval

Distance class

- Medium
- 100m-1000m

Existing composition of the view

This view is easterly from the Gore Hill Reserve at approximately 600m south-west of the subject site. The view is predominantly characterised by the open reserve, semi-continuous tree canopy and high-density urban development.

Visual effects of the proposal on the composition as modelled

The middle and upper part of the tower contribute a novel feature above a foreground characterised by institutional buildings and commercial towers. The visible portions of the tower will partially block views of open sky. Views to the proposed tower will be seen in the context of existing developments in St Leonards and will contribute to the skyline and tower cluster typology of the precinct. These forms are not dissimilar in character, height or form to that proposed. Therefore the height and form of the proposed development is compatible with the existing and desired future character for this part of St Leonards and does not block views to scenic features, areas of high scenic quality or character. There is a relatively minor non-conformance visible at the roof level although there would be no material impact on the view.

Visual effects of Proposal (quantum of change) on existing view attributes	
Visual character	low-medium
Scenic quality	low
View composition	low-medium
View blocking of scenic elements	low
Overall rating of effects on baseline factors	low

Weighting factors

Public domain view place sensitivity	medium (neutral)
Visual absorption capacity	med-high (down-weight)
Compatibility with urban context and visual character	high (down-weight)
Viewing period	short (down-weight)
Viewing distance	medium (neutral)

See section 5.7 for overall visual impact rating.



Figure 22 Viewpoint 17 location.



Figure 23 Viewpoint 17 from Gore Hill Reserve



Figure 24 Viewpoint 17 photomontage.



05 Visual impact assessment

Having determined the extent of the visual change based on the representative modelled views (photomontages), Urbis have applied relevant weighting factors to determine the overall level of visual impacts or importance of the visual effects. The factors have been considered in relation to the visual effects to provide up-weight or down-weights and to determine a final impact rating.

The weighting factors include sensitivity, visual absorption capacity and compatibility with urban features.

5.1 Sensitivity

The overall rating for view place sensitivity was weighted according to the influence of variable factors such as distance, the location of items of heritage significance or public spaces of high amenity and high user numbers.

Comment: The vast majority of views in the public domain are limited to road reserve areas where viewer sensitivity is considered to be low. Viewers of this type are typically either motorists or pedestrians and have short viewing times typically only seconds or minutes. Sensitivity however increases to moderate at train and metro station entries where there are high numbers of viewers.

Viewing times to the proposal within parks and reserves may be more sustained however the proposal is visually compatible with existing surrounding development which currently characterize other views from parks, and are therefore consistent with viewer expectations.

There are two State heritage items identified from which the proposal may be partially visible, the Gore Hill Cemetery (no. H01491) and the Electricity Powerhouse No 187 (no. 00931). Viewers would be pedestrians and have short viewing times.

The southern boundary of the Naeremburn Conservation Area, located approximately 150m to the north, is the nearest conservation area to the proposal however the majority of viewers would be further away and would likely have views of the mid to upper sections of the proposal from north-south aligned streets and laneways, such as Mitchell Street. Viewers would be either motorists or pedestrians and have short viewing times however a moderate rating for sensitivity is attributed due to the proximity and heritage listing.

5.2 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.

VAC 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 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.

Comment: The existing visual environment has a moderate to high capacity to absorb the visual changes proposed. Topography and existing surrounding built form will limit visibility to the middle and upper section of the proposal from virtually all of the visual catchment.

The effects of existing and future anticipated density however, will increase VAC and reduce overall long term visual effects of the proposal, providing a down-weight to the final rating of impact.

In the majority of views, the proposal will be of relatively high prominence, viewed as part of a wide and varied composition and characterised by similar scale built highrise forms.

5.3 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.

Comment: 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 intended changes to the future character can guide the likely future compatibility of the proposal in its setting.

The proposal is compatible with parts of the existing surrounding visual character including highrise tower development along Pacific Highway and generally within the St Leonards town centre. There are also examples of emerging density evident in existing approvals and pending development applications for high-rise tower form development. In the majority of views from the wider visual catchment, the proposal is consistent with viewer expectations and would not appear as a novel feature.

5.4 Viewing period

Viewing period in this assessment refers to the influence of time available to a viewer to experience the view to the site and the visual effects of the proposed development. Longer viewing periods, experienced either from fixed or moving viewing places such as dwellings, roads or waterways, provide for greater potential for the viewer to perceive the visual effects.

Comment: Visual effects of the proposal with respect to viewing periods are low. The majority of views to the proposal are from moving viewing situations where visibility is intermittent and fleeting. Longer viewing periods are possible from public park locations such as Gore Hill Park, Naeremburn Park and Ernest Place however we note that more sustained viewing opportunities from public domain places are limited and will be contextualised by other, similar built form within St Leonards.

We note sustained private viewing opportunities from dwellings are generally limited and will be contextualised by other, similar built form within St Leonards.

5.5 Viewing distance

Viewing distance can influence 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.

Comment: The proposal is visible in a limited number of close views from within the visual catchment due to existing urban built form. In the majority of medium distance views across the visual catchment, visibility is constrained to mid and upper level sections of the proposal.

5.6 Significance of residual visual impacts

The final question to be answered after the mitigation factors are assessed, 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.

Comment:

The residual impacts are low and acceptable given the limited visual effects in the majority of views across the visual catchment, which will further reduce with anticipated future density planned as part of the St Leonards Town Centre development.

5.7 Applying the ‘weighting’ factors

To arrive at a final level of significance of visual impact, the weighting factors are applied to the overall level of visual effects.

Table 3 – Summary of Visual Effects and Weighting Factors.

Visual Effect Rating	VP04	VP09	VP10	VP15	VP17
Visual character	low	low-med.	low-med	low	low-med
Scenic quality	low	low	low	low	low
View composition	high	med.	low-med	med	low-med
View blocking of scenic elements	low	low	low	low	low
Weighting Factors	VP04	VP09	VP10	VP15	VP17
Public Domain View Place Sensitivity	low-med.	med	med	med	med
Visual Absorption Capacity	med	med-high	med-high	med	med-high
Compatibility with Urban & Visual Context	high	med-high	med-high	high	high
Viewing Period	short	short	short	short	short
Viewing Distance	med	med	med	med	med
Visual Impact Rating	VP04	VP09	VP10	VP15	VP17
	low	medium	medium	low	low

5.8 Overall visual impacts

The overall visual impact rating for each assessed view location after assessing the visual effects (quantum of change) in Section 5.0 and the weighing factors, the overall visual impact ratings are:

VP04 – low

VP09 – medium

VP10 – low

VP15 – low

VP17 – low

Taking into consideration the existing visual context and baseline factors against which to measure change, the level of visual effects of the proposed development and in the context of additional weighting factors, the visual impacts of the proposed development were found to be acceptable.

5.9 Conclusion

- The character of the subject site and immediate visual context is transitioning to taller mixed-use towers in line with the strategic planning context and desired future character for this part of St Leonards.
- The proposal has a potentially large visual catchment, however direct views to the built form proposed are limited to the closest neighbouring locations and streets where all or part of the built form may be visible above and in the context of other development.
- Direct views to the built form proposed are limited to the closest neighbouring locations and streets where all or part of the built form may be visible above and in the context of other development.
- Sustained viewing opportunities from public domain places are limited and will be contextualised by other, similar built form within St Leonards.
- There is limited view access and likelihood of sustained views towards the subject site from public and private domain locations within the Naremburn Conservation Area due to existing built form, dwelling orientation and trees in the foreground.
- The photomontages show that in the majority of public domain views, visibility is constrained to mid and upper level sections of the proposal and would be visible within a cluster of existing towers that are not dissimilar in character or form to that proposed.
- In medium-distance and distant views, the upper part of the tower will potentially block views of other built forms, open areas of sky but does not block views to scenic features, areas of high scenic quality or character.
- The proposal is highly compatible in terms of height, form and character with existing, approved and developments under construction.
- Apart from the roof level comprising plant and equipment, the proposed built form sits wholly within the approved envelope and as such, all potential view loss or sharing is anticipated by the development approval.
- Existing views from The Landmark development to the north up to approximately Level 14 currently include views of the subject site’s building and are therefore restricted. Higher levels with views to the north would be impacted by full or partial view loss however these can currently be broadly categorised as vernacular district views that are predominantly comprised of low height and scale residential development and do not include features that are considered to be scenic or iconic. Views to the south, east and west would likely not be impacted.
- For private domain views to the south from the Quest Apartment Hotel, the new tower will introduce a new form into the existing skyline that is already comprised of other tall tower forms.
- Views from low and mid-level locations in neighbouring residential flat buildings, such as on Atchison Street, are unlikely to be significantly affected by potential view loss due primarily to building orientation creating oblique views typically from high-level windows that are likely to be associated with bedrooms or bathrooms.
- The proposed development is supported on visual impact grounds.

06 Appendix

Appendix 1

Analysis of visual effects

Published on the NSW Department of Planning, Housing and Infrastructure website via major projects tab (NSW DPHI). This information has been developed by Urbis and is acknowledged as being a comprehensive summary of typical descriptions regarding visual effects. The descriptions to the right have been used as a guide to make subjective judgements in relation to the effects and impacts of the proposed development on each modelled view.

Table 1 Description of visual effects

Factors	Low effect	Medium effect	High effect
Scenic quality	The 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, and the appearance of interfaces.	The proposal has the effect of reducing some or all of the extent of panoramic views, 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 the perception of the integrity of any of panoramic views 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	The proposal does not decrease the presence of or conflict with the existing visual character elements such as the built form, building scale and urban fabric	The proposal contrasts with or changes the relationship between existing visual character elements in some individual views by adding new or distinctive features but does not affect the overall visual character of the precinct's setting.	The proposal introduces new or contrasting features which conflict with, reduce or eliminate existing visual 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 and public domain areas 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 nearby roads and public domain areas 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 the visibility of the proposal or important features of the existing visual environment.	Feature or focal views significantly and detrimentally changed.
Viewing period	Glimpse (e.g. moving vehicles).	Few minutes to up to half day (e.g. walking along the road, recreation in adjoining open space).	Majority of the day (e.g. adjoining residence or workplace).
Viewing distance	Distant Views (>1000m).	Medium Range Views (100- 1000m).	Close Views (<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 including loss of views of scenic icons.

Table 2 Indicative Ratings Table of Visual Impact Factors

Factors	Low impact	Medium impact	High impact
Physical 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 surrounding setting and built form.	The proposal is of moderate visibility but is not prominent because its components, texture, scale and building form partially blend into the existing scene.	The proposal is of high visibility and it is prominent in some views. The project location is high contrast and low blending within the existing elements of the surrounding setting and built form.
Compatibility with urban/natural features	High compatibility with the character, scale, form, colours, materials and spatial arrangement of the existing urban and natural features in the immediate context. Low contrast with existing elements of the built environment.	Moderate compatibility with the character, scale, form and spatial arrangement 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 existing urban features in the immediate context which could reasonably be expected to be new additions to it when compared to other examples in similar settings.

Appendix 2

Analysis of visual impacts

In order to establish an objective assessment of the extent and significance of the likely visual changes in each view, Urbis has used the following descriptions of visual impacts on baseline factors sourced from Richard Lamb and Associates (RLA).

APPENDIX 3

Photomontage Preparation

PHOTOMONTAGES PREPARED BY:

URBIS, LEVEL 10, 477 COLLINS STREET, MELBOURNE 3000.

DATE PREPARED:

18 MARCH 2026

VISUALISATION ARTIST:

Ashley Poon, Urbis – Lead Visual Technologies Consultant
Bachelor of Planning and Design (Architecture) with over 20 years' experience in 3D visualisation

Location Photographer:

Kris Petersen, Urbis - Senior Consultant, National Design
under direction from Jane Maze-Riley, Urbis - Director, National Design

CAMERA:

CANON EOS 6D MARK II – 26 MEGAPIXEL DIGITAL SLR CAMERA (FULL-FRAME SENSOR)

CAMERA LENS AND TYPE:

CANON EF24-105MM F/4L IS II USM

SOFTWARE USED:

- 3DSMax 2023 with Arnold 5 (3D Modelling and Render Engine)
- AutoCAD 2025 (2D CAD Editing)
- Globalmapper 26.1 (GIS Data Mapping / Processing)
- Photoshop CC 2025 (Photo Editing)

Data Sources:

- Point cloud and Digital Elevation Models from NSW Government Spatial Services datasets (LAS and DEM) - Sydney 2020-05
- Aerial photography from Nearmap (geo-referenced JPG) - 2025-10-05
- Proposed architectural drawings received from Architect (AutoCAD DWG and PDF)
- Dated 2025-10-13
- Proposed 3D model received from Architect (AutoCAD DWG) - Received 2025-10-21
- Independent site survey from LTS Registered Surveyors (AutoCAD DWG) - Dated 2025-08-12

METHODOLOGY:

Photomontages provided on the following pages have been produced with a high degree of accuracy to satisfy the intent of the requirements as set out in the practice direction for the use of visual aids in the NSWLEC Policy: Use of Photomontages and Visualisation Tools, May 2024 (the Policy).

The process for producing these photomontages are outlined below:

- Photographs have been taken on site using a full-frame digital camera coupled with a quality lens in order to obtain high resolution photos whilst minimising image distortion. Photos are taken handheld at a standing height of 1.60m above natural ground level. Photos have generally been taken at a standard focal length of 50mm, or 35mm to show a slightly wider context. A photo taken using the 50mm focal length on a full-frame camera (equivalent to 40° horizontal field-of-view / 46.8° diagonal field-of-view) is an accepted photographic standard to approximate human vision.
- Using available geo-spatial data for the site, including independent site surveys, aerial photography, digital elevation models and LiDAR point-clouds, the relevant datasets are validated and combined to form a geo-referenced base 3D model from which additional information, such as proposed architecture, landscape and photographic viewpoints can be inserted.
- Layers of the proposed development are obtained from the designers as digital 3D models and 2D plans. All drawings/models are verified and registered to their correct geo-location before being inserted into the base 3D model.
- For each photo being used for the photomontage, the photo's GPS location, camera, lens, focal length, time/date and exposure information is extracted, checked and replicated within the 3D base model as a 3D camera. A camera match is created by aligning the 3D camera with the 3D base model against the original photo, matching the original photographic location and orientation.
- From each viewpoint, a reference 3D model camera match is generated to verify an accurate match between the base 3D model (existing ground survey/vegetation etc) and original photo. A 3D wireframe image of the 3D base model is rendered in the 3D modelling software and composited over the original photo using the photo-editing software.
- From each viewpoint, the final photomontage is then produced by compositing 3D rendered images of the proposed development into the original photo with editing performed to sit the render at the correct view depth. Photographic elements are cross-checked against the 3D model to ensure elements such as foreground trees and buildings that may occlude views to the proposed development are retained. Conversely, where trees/buildings may be removed as part of the proposal, these are also removed in the photomontage.



601 Pacific Highway, St Leonards – Visual Assessment

Photomontages – View Location Map

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_MAP
REV: -



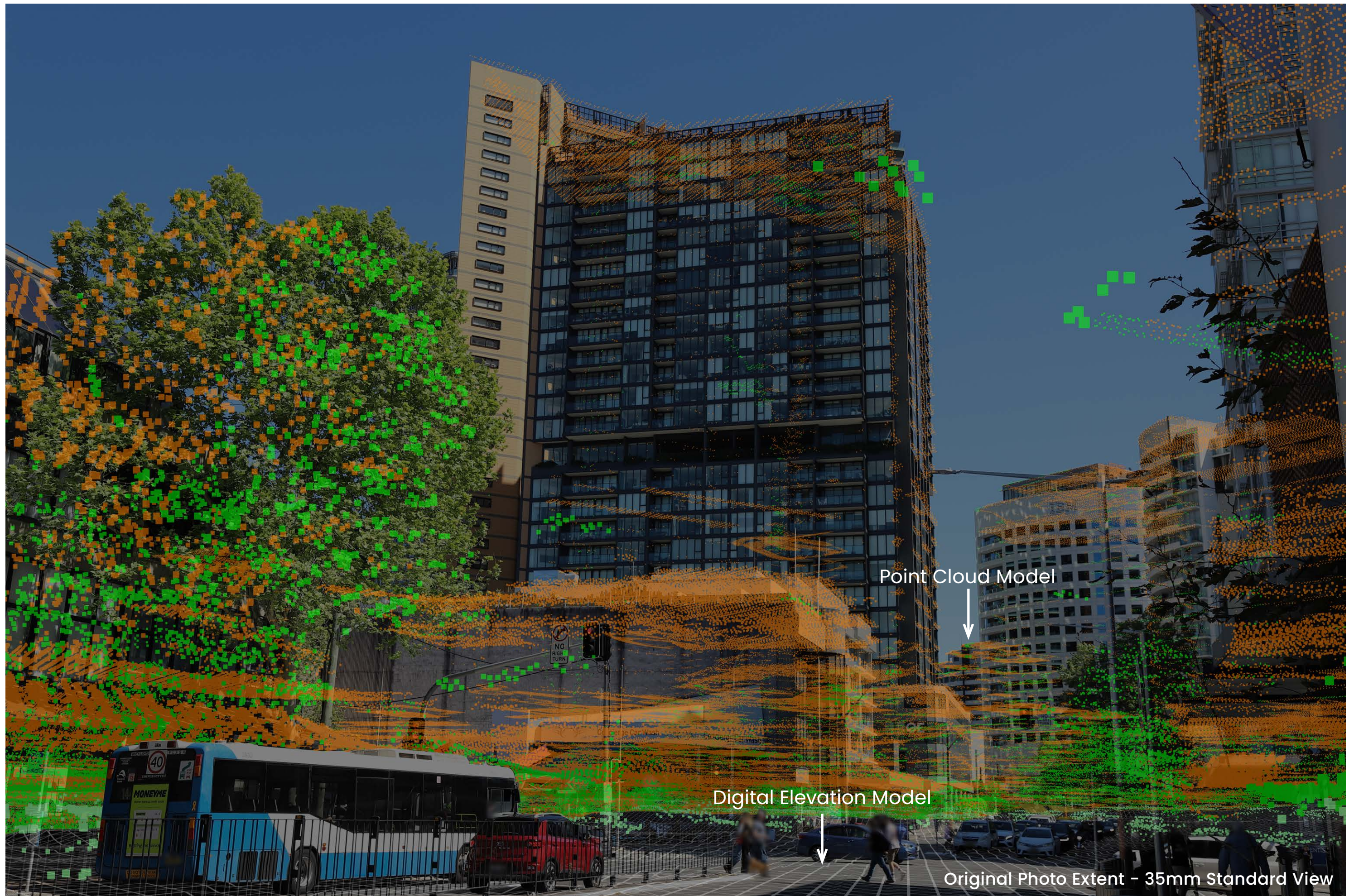
Original Photo Extent - 35mm Standard View



601 Pacific Highway, St Leonards - Visual Assessment

VP04 (Photo 3133): Looking NW Pacific Hwy, near Oxley St
Existing Conditions 2025-10-03 10:48 AEST

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_04A
REV: -





601 Pacific Highway, St Leonards – Visual Assessment

VP04 (Photo 3133): Looking NW Pacific Hwy, near Oxley St
Photomontage – Proposed Development

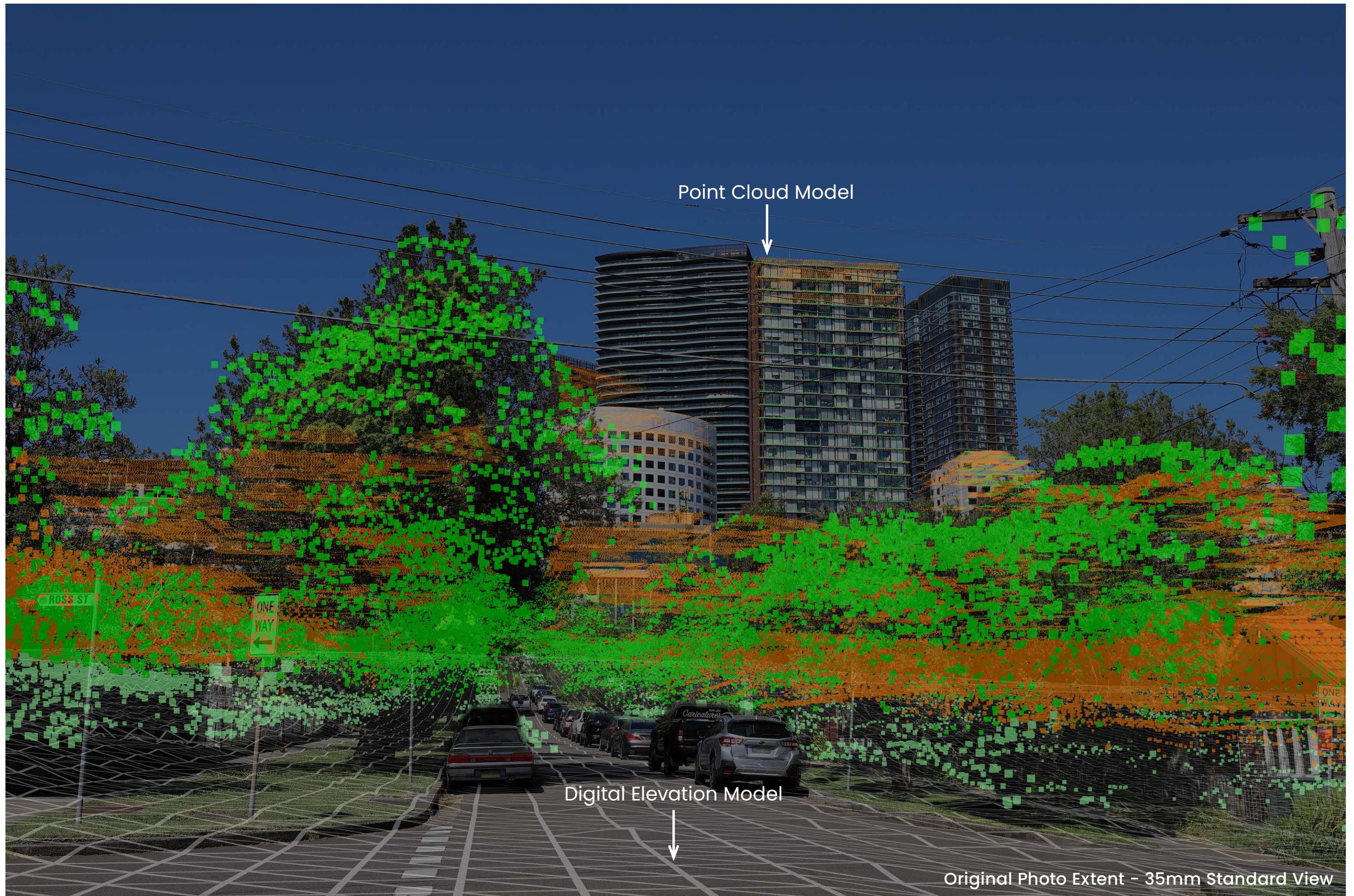
DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_04C
REV: -



601 Pacific Highway, St Leonards – Visual Assessment

VP09 (Photo 3141): Looking south from intersection of Ross and Mitchell St
Existing Conditions 2025-10-03 11:38 AEST

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_09A
REV: -



601 Pacific Highway, St Leonards – Visual Assessment

VP09 (Photo 3141): Looking south from intersection of Ross and Mitchell St
Camera Match 3D Model to Photo (Wire Frame)

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_09B
REV: -



Legend
--- LEP height plane
RL 259.0m

Proposed Development →

Distance to Project – 330m
Original Photo Extent – 35mm Standard View



601 Pacific Highway, St Leonards – Visual Assessment
VP09 (Photo 3141): Looking south from intersection of Ross and Mitchell St
Photomontage – Proposed Development

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_09C
REV: -



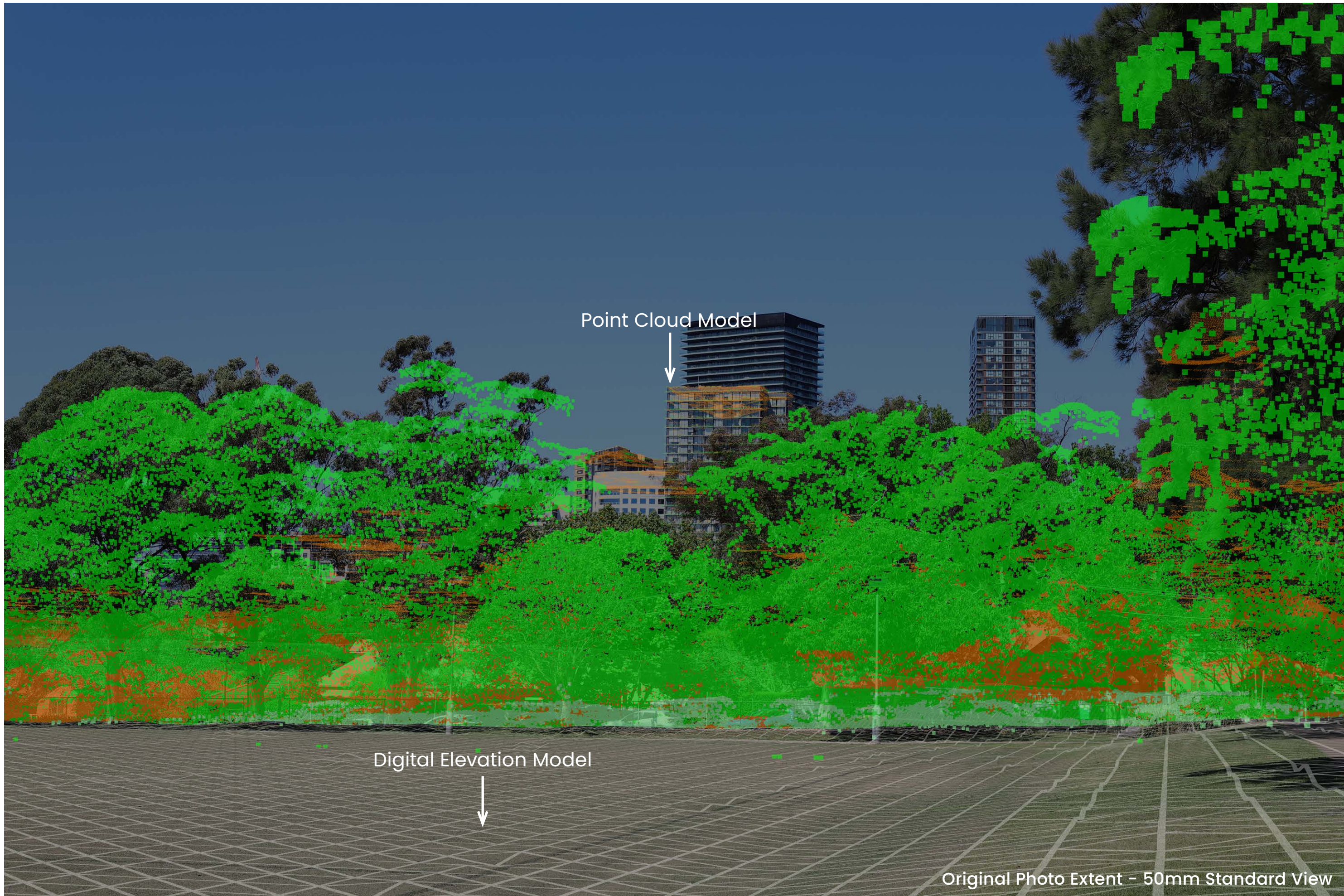
Original Photo Extent - 50mm Standard View



601 Pacific Highway, St Leonards - Visual Assessment

VP10 (Photo 3144): Looking SSE from Naremburn Park
Existing Conditions 2025-10-03 11:51 AEST

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_10A
REV: -



601 Pacific Highway, St Leonards – Visual Assessment

VP10 (Photo 3144): Looking SSE from Naremburn Park
Camera Match 3D Model to Photo (Wire Frame)

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_10B
REV: -

Legend

--- LEP height plane
RL 259.0m

Proposed Development →



Distance to Project - 700m
Original Photo Extent - 50mm Standard View



601 Pacific Highway, St Leonards - Visual Assessment

VP10 (Photo 3144): Looking SSE from Naremburn Park
Photomontage - Proposed Development

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_10C
REV: -



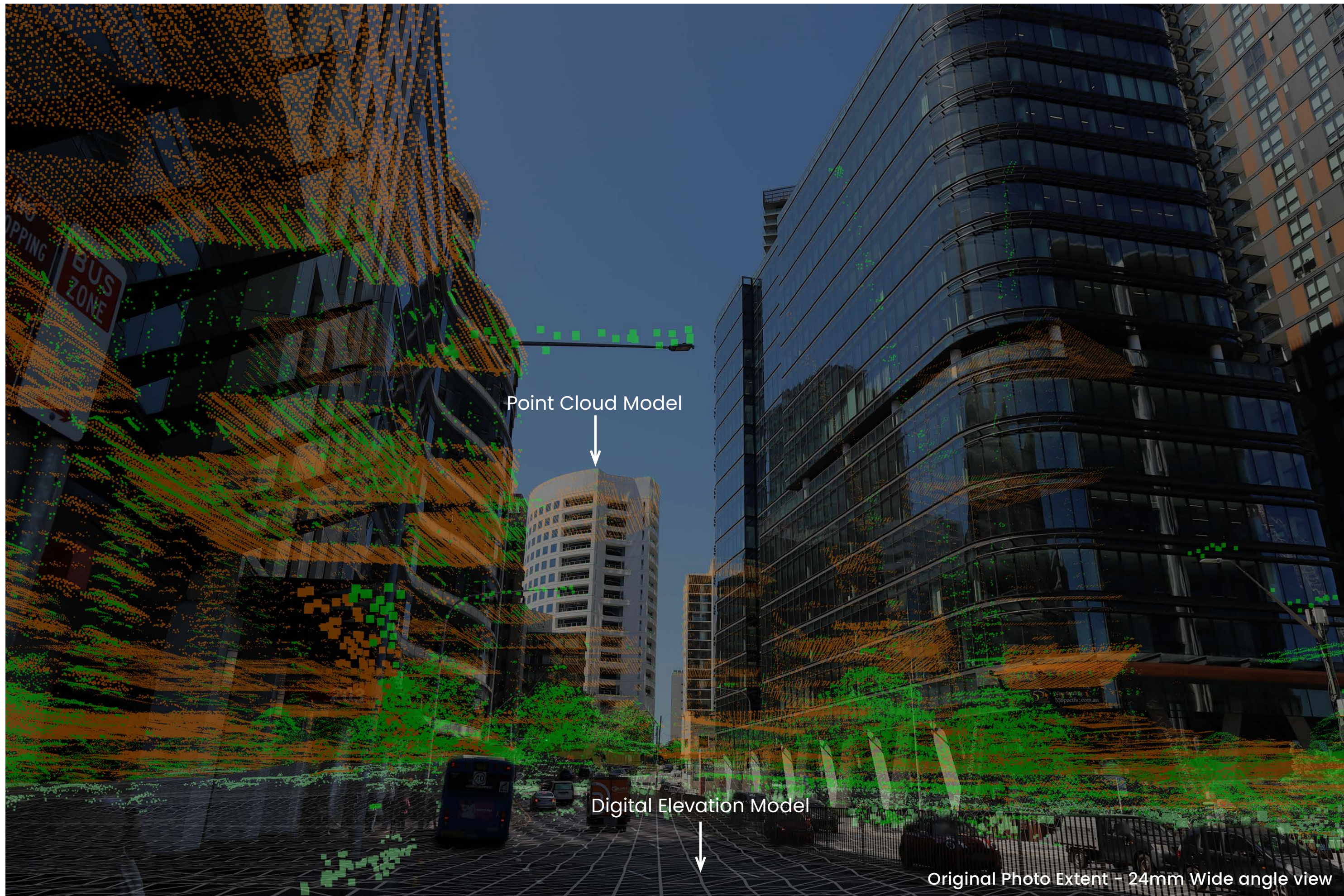
Original Photo Extent - 24mm Wide angle view



601 Pacific Highway, St Leonards – Visual Assessment

VP15 (Photo 3150): Looking east along Pacific Hwy, near Herbert St
Existing Conditions 2025-10-03 12:38 AEST

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_15A
REV: -





Legend
--- LEP height plane
RL 259.0m

Proposed Development

Distance to Project - 180m

Original Photo Extent - 24mm Wide angle view



601 Pacific Highway, St Leonards - Visual Assessment

VP15 (Photo 3150): Looking east along Pacific Hwy, near Herbert St
Photomontage - Proposed Development

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_15C
REV: -

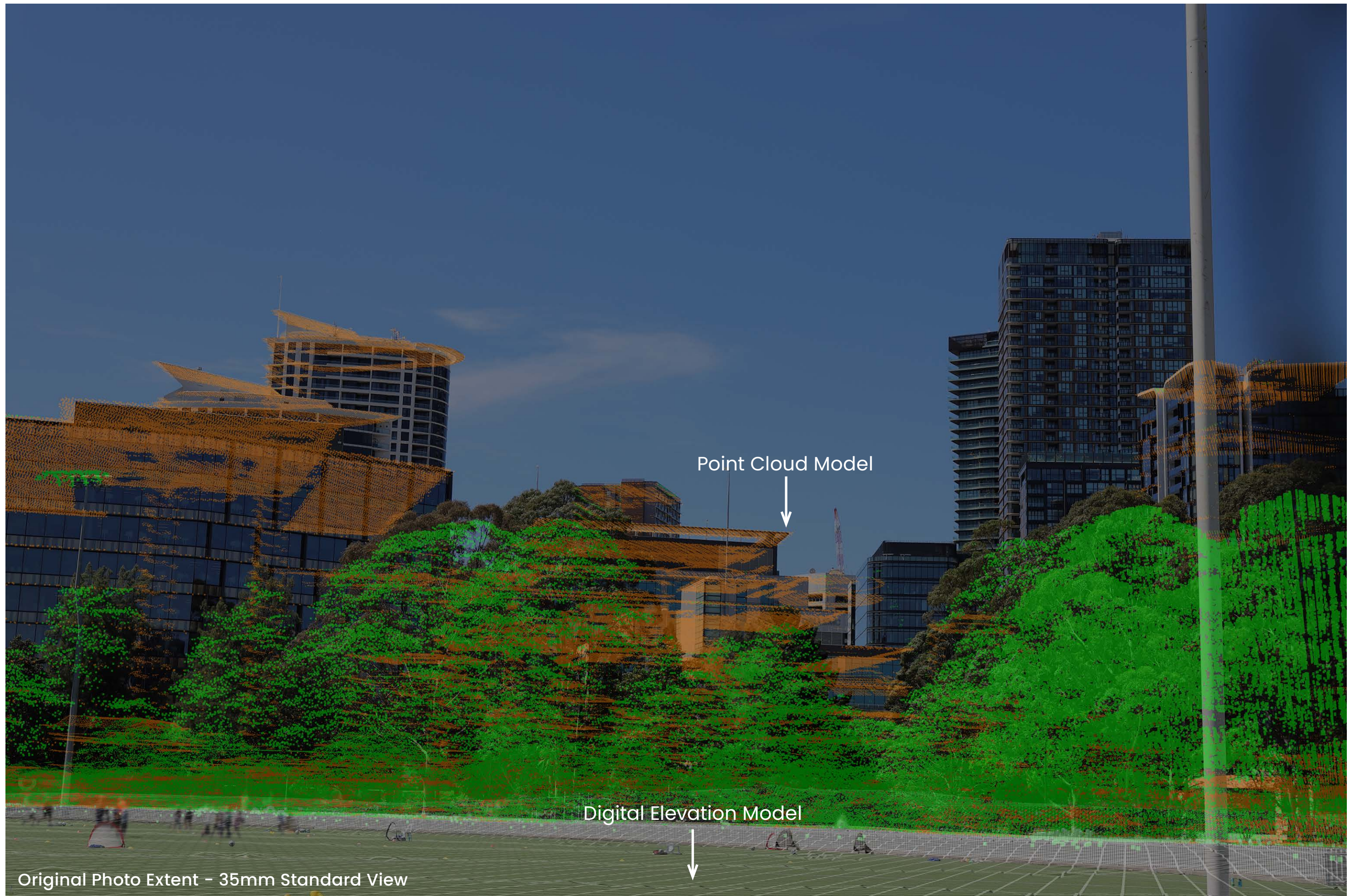


Original Photo Extent – 35mm Standard View



601 Pacific Highway, St Leonards – Visual Assessment
VP17 (Photo 3157): Looking ENE from Gore Hill Oval
Existing Conditions 2025-10-03 13:03 AEST

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_17A
REV: -



601 Pacific Highway, St Leonards – Visual Assessment

VP17 (Photo 3157): Looking ENE from Gore Hill Oval
Camera Match 3D Model to Photo (Wire Frame)

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_17B
REV: -

Legend

--- LEP height plane
RL 259.0m



Distance to Project – 550m
Original Photo Extent – 35mm Standard View



601 Pacific Highway, St Leonards – Visual Assessment
VP17 (Photo 3157): Looking ENE from Gore Hill Oval
Photomontage – Proposed Development

DATE: 2025-11-10
JOB NO: P0028339
DWG NO: VP_17C
REV: -