# View & Visual Impact Assessment

Proposed Health Research Facility

74-108 Botany Road and 86-100 Wyndham Street, Alexandria

Prepared by Ethos Urban

Submitted to the Department of Planning, Housing and Infrastructure

On behalf of Kurraba Group Pty Ltd

17 September 2024 | 2230347

Ethos Urban



**'Gura Bulga'**
Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.



**'Dagura Buumarri'**
Liz Belanjee Cameron

'Dagura Buumarri' – translates to Cold Brown Country. Representing Victoria.



**'Gadalung Djarri'**
Liz Belanjee Cameron

'Gadalung Djarri' – translates to Hot Red Country. Representing Queensland.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We pay our respects to their Elders past, present and emerging.

In supporting the Uluru Statement from the Heart, we walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people for a better future.


| | | |
|---|---|---|
| **Contact:** | Chris Bain<br>Director – Strategic Planning | cbain@ethosurban.com<br>02 9956 6962 |


| **This document has been prepared by:** | | **This document has been reviewed by:** | |
|---|---|---|---|
| Chris Bain | 8 July 2024 | Mercedes Janecek | 17 September 2024 |

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# Executive Summary

Kurraba Group Pty Ltd (the applicant) has submitted a State significant development application (SSDA) (SSD-63067458) seeking development consent from the Department of Planning, Housing and Infrastructure (DPHI) to construct a new health research facility (the proposal) on land located at 74-108 Botany Road and 86-100 Wyndham Street, Alexandria (the site).

To support the proposal, Ethos Urban in collaboration with Virtual Ideas and CMS Surveyors were engaged to prepare a visual impact assessment (VIA) to identify and determine the acceptability of the proposal's likely visual impact by addressing the secretary's environmental assessment requirements (SEARS) issued by DPHI for the proposal.

That part of the visual catchment where the proposal is likely to be most visible is generally bound by:

- **north**: where Botany Road pivots from a south-east direction to a more southerly direction in the vicinity of Chapel Lane, Alexandria
- **east**: eastern side of Botany Road, Waterloo
- **south**: where Botany Road crest a small rise between McEvoy Street and John Street, Alexandria / Waterloo
- **west**: western end Wyndham Street, Alexandria.

Survey aligned photomontages were prepared for 8 viewpoints in the public domain that represent the pattern of viewing. Informed by these photomontages, the VIA determined the proposal would have the following significance of visual impact:

- **Botany Road and Chapel Lane**: low significance of visual impact
- **Botany Road and Raglan Street**: low significance of visual impact
- **Botany Road and Wellington Street**: low significance of visual impact
- **Botany Road and John Street**: low significance of visual impact
- **Wyndham Street**: high significance of visual impact
- **Alexandria Park**: high significance of visual impact
- **Cope Street**: low significance of visual impact
- **Gerard Street**: low significance of visual impact.

A finding of a significant visual impact is not determinative of the acceptability of a proposal. It is considered that the proposal has an acceptable visual impact for the following key reasons:

- it has a visual impact that is consistent with what can be expected under the intent for this part of the Botany Road Corridor
- it will not have a high significance of visual impact when seen from much of the more sensitive residential area to the west of the site
- while visible from parts of this area, its impact will be acceptable due to it appearing only in part and above and behind lower scale building as well as vegetation, and in front of the taller Waterloo Metro Quarter will reduce this impact to an appropriate level
- it has the capacity to incorporate appropriate visual impact mitigation measures such as elements that project or recess from the main façade that will mitigate impact on properties on the western side of Wyndham Street.

As such, it is the conclusion of this VIA that the proposal can be supported on visual impact grounds.

# Glossary

## Abbreviations

Table 1 Abbreviations

| Abbreviation | Meaning |
|---|---|
| Applicant | Kurraba Group Pty Ltd |
| DPHI | Department of Planning, Housing and Infrastructure |
| FSR | Floor space ratio |
| GLVIA3 | Guidelines for Landscape and Visual Impact Assessment (Third Edition) |
| LEC | Land and Environment Court of New South Wales |
| LGA | Local government area |
| Proposal | Health Research Facility |
| Rose Bay | Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor [2013] NSWLEC 1046 |
| Site | 74-108 Botany Road and 86-100 Wyndham Street, Alexandria |
| SSDA | State significant development application |
| Tenacity | Tenacity Consulting v Waringah [2004] NSWLEC 140 |
| VVIA | View and visual impact assessment |

## Key Terms

Table 2 Key terms

| Term | Meaning | Source |
|---|---|---|
| Characteristics | Elements, or combinations of elements, which make a contribution to distinctive landscape character | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Elements | Individual parts which make up the landscape, such as, for example, trees, hedges and buildings | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Feature | Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |

| Term | Meaning | Source |
|---|---|---|
| Key characteristics | Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Landscape | An area, as perceived by people, the character of which is the result of the action and interaction of natural and / or human factors | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Landscape character | A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Magnitude | A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Sensitivity | A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Significance | A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Visual impact | Effects on specific views and on the general visual amenity experienced by people | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |
| Visual receptors | Individuals and/or defined groups of people who have the potential to be affected by a proposal | Landscape Institute and the Institute of Environmental Management & Assessment, 2013 |

# 1.0 Introduction

Kurraba Group Pty Ltd (the applicant) has submitted a State significant development application (SSDA) (SSD-63067458) seeking development consent from the Department of Planning, Housing and Infrastructure (DPHI) to construct a new health research facility (the proposal) on land located at 74-108 Botany Road and 86-100 Wyndham Street, Alexandria (the site).

## 1.1 Purpose of this visual impact assessment

The purpose of this visual impact assessment (VIA) is to support this SSDA by identifying and determining the acceptability of the proposal's likely visual impact by addressing the secretary's environmental assessment requirements (SEARS) issued by DPHI for the proposal as shown in the below table.

Table 3 Secretary's environmental assessment requirements

| Issue | Assessment Requirements | Documentation |
|---|---|---|
| 5. Environmental Amenity | • Assess amenity impacts on the surrounding locality, including…visual amenity, view loss and view sharing… A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated | • View Analysis |
| 6: Visual Impact | • Provide a visual analysis of the development from key viewpoints, including photomontages or perspectives showing the proposed and likely future development<br>• Where the visual analysis has identified potential for significant visual impact, provide a visual impact assessment that addresses the impacts of the development on the existing catchment | • Visual Analysis<br>• Visual Impact Assessment |

## 1.2 Structure of this visual impact assessment

This VIA has the following structure:

- **Part 1 – Introduction**: identifies the purpose and structure of this VIA
- **Part 2 – The site and its context**: identifies and describes the site and its context
- **Part 3 – The proposal**: outlines the proposal
- **Part 4 – Planning framework**: identifies relevant parts of the planning framework to VIA
- **Part 5 – Method**: outlines the methodology used in the VIA
- **Part 6 – View and visual analysis**: identifies and describes the visual catchment, including its visual characteristics and the pattern of viewing, as well as the key issues affecting the proposal
- **Part 7 – Visual impact assessment**: identifies and assesses the proposal's potential visual impact
- **Part 8 – Discussion of key issues**: discusses key issues
- **Part 9 – Mitigation measures**: recommends mitigations measures
- **Part 10 – Conclusion**: identifies whether the proposal can be supported on visual impact grounds
- **Appendices**: provides a copy of the visual impact evidence upon which this VIA relies.

This VIA forms part of a larger suite of documents prepared to support the proposal. It does not repeat matters that are more appropriately covered in these documents. As such, it should be read together with these other documents, in particular planning and urban design documentation.

# 2.0 The site and its context

The site is located at 74-108 Botany Road and 86-100 Wyndham Street, Alexandria (commonly referred to as 100 Botany Road). The site is made up of 6 different allotments and has a total approximate area of 5,350.6sqm. The following lots make up the site:

- Lot 2 DP 136012
- Lot 11 DP 219505
- Lot 11 DP 135914
- Lot 2 DP 659166
- Lot 1 DP 510091
- Lot 3 DP 1146614.

The site has frontage to Botany Road to the east and Wyndham Street to the west. Part of Wyndham Lane runs through the middle of the site. Refer to the below figure for an aerial photograph of the site.




Figure 1 Aerial photograph of site

Source: Nearmap and Ethos Urban

Note: site boundaries are shown in red

The site forms part of the recently rezoned Botany Road Precinct which is intended to be transformed into a vibrant mixed-use precinct that will accommodate employment growth in the Redfern-Waterloo area. Refer to the below figures for an aerial photograph of the boundaries of the Botany Road Corridor.



Figure 2 Aerial photograph of the boundaries of the Botany Road Corridor

Source: City of Sydney

# 3.0 The proposal

The proposal is for redevelopment of the site for a new health research facility. Specifically, the SSDA seeks approval for:

- demolition of all existing buildings, site preparation and remediation works
- bulk excavation to create 2 levels of basement with access from Wyndham Street, including allowance for a below ground Proton Therapy Cancer Treatment Centre, car parking, loading and services
- construction and use of two (2) new health research buildings. One (1) building is proposed along Botany Road which has a stepped built form and is between seven (7) and eleven (11) storeys in height. One (1) building is proposed along Wyndham Street which is five (5) storeys in height. The two (2) buildings will include the following:
  - ground floor lobby and retail uses fronting Botany Road and Wyndham Street
  - Proton Therapy patient lobby from Wyndham Street
  - various laboratories, write up areas and office spaces
  - a series of outdoor landscaped terraces within the Botany Road building
  - One (1) rooftop plant level on each building
- landscaping and public domain works including:
  - construction and extension of Wyndham Lane as a shared laneway

  - construction of a pedestrian network including 2 pathways from Botany Road and an east-west through-site link
- extension and augmentation of services and utilities to the development, as required.

Refer to the Environmental Impact Statement (EIS) for a detailed description of the proposed development. The following figures show artist impressions of the proposal.



Figure 3 Artist impression of the proposal as seen from Botany Road

Source: Gensler

# 4.0 The planning framework

As detailed local planning provisions, sections 2.13.13 'Botany Road Precinct' and section 5.10 'Botany Road Precinct' of the Sydney Development Control Plan 2012 (SDCP 2012) are the parts of the planning framework of greatest relevance to visual impact matters. While under the Environmental Planning and Assessment Act 1979 (EP&A Act) development control plans do not apply to SSDA, it is best practice to consider their provisions.

Overall, the SDCP 2012 seeks the transformation of the precinct. Section 5.10.2 'Land use' states:

- 'The Precinct is an area in transition and will evolve into a vibrant commercial precinct, supporting a diverse range of businesses and employment generating land uses'.

As can be seen in Figure 5.256 'Street Cross Section – Botany Road (North)', development of considerable scale is envisaged. This intent can also be seen in the 'Botany Road Corridor Vision' contained in the Botany Road Corridor Urban Design Study prepared by Tonkin Zulaikha Greer Architects (March 2021) on behalf of the City of Sydney and publicly exhibited as part of the planning proposal.



Figure 4 Botany Road Corridor Vision

Source: Tonkin Zulaikha Greer Architects

# 5.0 Method

As has been noted, the purpose of VIA is to identify and determine the acceptability of a proposal's likely visual view impact by addressing the SEARS.

VIA is a highly complex area that involves qualitative and professional value judgements. While there is a wealth of guidance documents, there is currently no universally agreed, national level guideline for VIA in Australia (AILA, 2019). As noted by the Land and Environment Court of New South Wales in Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor [2013] NSWLEC 1046 (Rose Bay), the key to addressing this challenge is to adopt a rigorous methodology.

With reference to its purpose, the method used by this VIA has the following key steps:

1. Undertake visual analysis
2. Prepare survey aligned photomontages
3. Assess significance of visual impact
4. Determine acceptability of visual impact.

## 5.1 Visual analysis

This stage involves the following key steps:

- identify the visual catchment (the area in which the proposal may be seen in whole or in part)
- identify the visual characteristics of the visual catchment, including its social and cultural value
- identify visual receptors (people who ordinarily use the visual catchment), including the number of people, the type of people and they type of activities they ordinarily engage in
- identify the pattern of viewing
- identify the key issues to be addressed by the VIA
- identify viewpoints in the visual catchment's public domain that enable the key issues to be addressed.

The methodological basis underpinning this stage is derived from the international standard 'Guidelines for Landscape and Visual Impact Assessment – third edition' (GLVIA3) (Landscape Institute and Institute of Environmental Management & Assessment, 2013). The GLVIA3 is widely referenced in VIA in Australia (AILA, 2019). It is more versatile for a range of contexts in particular those of an urban nature compared to other commonly referenced but more highly specialised guidance such as that prepared by the US Forestry Service. Where appropriate, the VIA also has regard to other VIA guidance including the planning principle established by the NSW Land and Environment Court in Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor [2013] NSWLEC 1046 (Rose Bay),'Topic Paper 6 – Techniques and criteria for judging capacity and sensitivity' (the Countryside Agency and Scottish Natural Heritage, 2014) and the 'Guideline for landscape character and visual impact assessment' (TfNSW, 2023).

## 5.2 Survey aligned photomontages

To inform the qualitative and professional value judgements made in this VIA, an evidence base of survey aligned photomontages for viewpoints representative of the site were prepared in accordance with the NSW Land and Environment Court 'Photomontage Policy'. This represents the highest possible standard of accuracy for visual representation, and is based on on-site survey and photographic and specialist software work. Appendix A provides further detail on the methodology used. Where appropriate, reference has also been made to 3D simulated views and other photography taken by others are readily available in the public domain. Due to their approved status, the photomontages include development within the adjacent Waterloo Metro Quarter. Where the capture of horizontal context is important to informing a judgement about acceptability of visual impact, a 24mm camera lens focal length has been selected for the photomontages. Where this is less important, a 50mm camera lens focal length has been selected.

## 5.3 Significance of visual impact

As with visual analysis, the methodological basis for this stage is derived from the GLVIA3. This is focussed on the significance of visual impact based on the factors of sensitivity of the visual catchment to the nature of change proposed and the magnitude of the nature of change proposed.

To assist in providing a level of consistency to the assessment of sensitivity, magnitude and significance, the VIA uses a series of matrix tables. The following table identifies the considerations that inform the factors of sensitivity magnitude.

Table 4 Factors of sensitivity and magnitude

| Sensitivity | Magnitude |
|---|---|
| • Cultural and social value of the view<br>• The prevailing type of people ordinarily exposed to the view<br>• The prevailing number of people ordinarily exposed to the view | • Scale of change (eg, compatibility with existing visual character)<br>• Geographical extent of the area influenced<br>• Duration and / or reversibility of the change |

No pre-determined weighting is given to each factor. Rather, where one factor strongly influences the assessment, weighting is be discussed in the context of a particular view.

Significance is expressed in terms of how the proposal may ordinarily be perceived by people on a five-point qualitative scale:

- negligible significance of impact
- low significance of impact
- moderate significance of impact
- high significance of impact
- major significance of impact.

There is no pre-determined definition of what the difference between each of these findings. Rather, as has been noted, it is inherently subjective and varied according to the nature of each view. In this regard the GLVIA3 makes the following observation:

- 'There are no hard and fast rules about what makes a significant effect, and there cannot be a standard approach since circumstances vary with the location and context and with the type of proposal. In making a judgement about the significance of visual effects the following points should be noted:
  - Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant
  - Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant
  - Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view'.

## 5.4 Determine acceptability of visual impact

Determination of significance does not automatically equate to unacceptability. Rather, acceptability is determined by consideration of a broader range of matters, in particular the key issues identified as part of this VIA, the scope of the SEARS and with reference to relevant parts of the planning framework.

## 5.5 Assumptions, limitations and exclusions

In addition to any others expressed in the relevant part of this VIA, the following key assumptions, limitations and exclusions apply to this VIA:

- it is assumed that all inputs from other parties, including the urban design team, are accurate
- as the proposal is not for strata titled residential uses or involve extensive alteration of natural landform or removal of native bushland, for the purposes of magnitude assessment the proposal is considered to be ongoing but capable of being reversed (ie, demolished and the land remediated to its current or near its current state)
- to enable a focus on assessment of scale and form, architectural and landscaping detail has not been included in the photomontages
- as with all VIA, there is considerable interplay between planning, design and visual impact matters. As such, while the VIA touches on matters such as character, size and scale, due regard should be given to other relevant documents for full address of these matters
- while photomontages provide an indication of likely future visual environment, they can only provide an approximation of the rich visual experience enabled by the human eye. As they are based on photographs, the same limitations that apply to photography, including optical distortion, apply (refer to Attachment A for further detail)
- detailed consideration of heritage, including impact on values and significance, is excluded

- consideration of impact on Aboriginal cultural heritage values associations is excluded. This is only appropriately undertaken by a member or member or qualified representative of the Aboriginal community
- consideration of night-time impact, including lighting, is excluded.

# 6.0 View and visual analysis

## 6.1 The site

The visual character of sites are shaped by the interplay of the following attributes:

- natural environment
- built environment.

### 6.1.1 Natural environment

#### Topography

The site is generally level.

#### Vegetation

As it is entirely occupied by buildings and hardstand, the site does not contain vegetation.

### 6.1.2 Built environment

#### Public domain

The site is bordered to the east by Botany Road and to the west by Wyndham Street. It also contains part of Wyndham Lane, which is a narrow, U-shaped laneway that has access to and from Wyndham Street.



Figure 5 Wyndham Lane

Source: Ethos Urban

## Land use and built form

The site is occupied by commercial, retail, office and light industrial uses.

Buildings are single and double storey brick buildings dating from the 20th century. They are not identified in the SLEP 2012 as heritage items or within a heritage conservation area.

The buildings fronting Botany Road are 1-2 storeys in height. The Wyndham Street frontage is occupied by single and double storey buildings and features a range of commercial and.

The following figure shows buildings fronting Botany Road.




Figure 6 The site as seen from Botany Road

Source: REA Group Ltd

## 6.2 Visual catchment

The visual catchment is that part of the public domain from where the proposal may ordinarily visible by people, either in totality or in part, and as such has a visual connection with the site.

The extent of the visual catchment is influenced by an interplay of a number of factors including topography, buildings and structures and vegetation.

That part of the visual catchment where the proposal is likely to be most visible is generally bound by:

- **north**: where Botany Road pivots from a south-east direction to a more southerly direction in the vicinity of Chapel Lane, Alexandria
- **east**: eastern side of Botany Road, Waterloo
- **south**: where Botany Road crest a small rise between McEvoy Street and John Street, Alexandria / Waterloo
- **west**: western end Wyndham Street, Alexandria.

While it is possible that parts of the proposal may be visible outside these boundaries, it is likely to not be prominent in the landscape.

## 6.3 Visual characteristics of the visual catchment

As with sites, the visual character of the visual catchment is also shaped by the interplay of the natural environment and built environment. The Botany Road Corridor Urban Design Study (Tonkin Zulaikha

Greer Architects, March 2021) provides a comprehensive and detailed overview of the overall character of much of the visual catchment.

### 6.3.1 Natural environment

#### Topography

The immediately surrounding part of the visual catchment is largely level. Land slopes upwards from the level of the site to the north in the vicinity of Chapel Lane and to the south in the vicinity of John Street. This establishes the visual boundaries of this particular part of Botany Road.

#### Vegetation

Most vegetation in the visual catchment comprises street tree plantings and plantings within private property.

### 6.3.2 Built environment

#### Public domain

The visual catchment is dominated by Botany Road. In this location Botany Road comprises 4 travel lanes and adjoining bitumen paved footpath areas with minimal street tree plantings.

#### Land use and built form

At present, surrounding development along Botany Road comprises commercial developments, including food and drink, offices, retail and light industrial buildings (refer below figure). Shop top housing developments and residential developments are located further away from the site towards Redfern Station and Green Square Station. Building heights vary between 1 and 3 storeys for commercial buildings and up to 5 storeys for residential and shop top housing developments.




Figure 7 Existing development on Botany Road

Source: REA Group Ltd

One and two storey terrace dwellings are located to the south of the site along Wyndham Street.

To the west of Wyndham Street is the Alexandria Park Heritage Conservation Area which consists of low density detached and semi-detached terraces, generally one or two storeys in height (refer below figure).




Figure 8 Development adjacent the site on the western side of Wyndham Street

Source: Domain Group

Land opposite the site to the east has been approved and is under construction for the Waterloo Metro Quarter (refer below figure). This will transform the built scale if this part of the Botany Road Corridor.




Figure 9 Artist impression of the Waterloo Metro Quarter as seen from Cope Street

Source: Hassell

## 6.4 Visual receptors

### 6.4.1 Type of people

There are a number of different types of people exposed to views:

- residents at home
- communities where views contribute to the landscape setting enjoyed by residents in the area
- people, whether residents or visitors, who are engaged in outdoor recreation, including use of public footpaths, whose attention or interest is likely to be focused on the landscape and on particular views
- travellers on road, rail or other transport routes
- travellers on road, rail or other transport routes where travel involves recognised scenic routes
- visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience
- visitors to facilities or services (eg, shops, offices, cafes) that meet their day to day needs
- people engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape
- people at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of working life.

While ultimately a personal matter and as such variable, for the purposes of visual analysis each type of person can be considered to have a different level of overall sensitivity to change in their visual environment on a spectrum ranging from higher to lower as shown in the below table.

Table 5 Visual receptor sensitivity

| Level of likely sensitivity to change | Type of visual receptor |
|---|---|
| Higher | • Residents at home<br>• People, whether residents or visitors, who are engaged in outdoor recreation, including use of public footpaths, whose attention or interest is likely to be focused on the landscape and on particular views<br>• Travellers on road, rail or other transport routes where travel involves recognised scenic routes<br>• Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience<br>• Communities where views contribute to the landscape setting enjoyed by residents in the area |
| Lower | • Travellers on road, rail or other transport routes<br>• Visitors to facilities or services (eg, shops, offices, cafes) that meet their day to day needs<br>• People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape<br>• People at their place of work whose attention may be focused on their work or activity, not on their surroundings, and where the setting is not important to the quality of working life |

The below table identifies the prevailing type of person in the visual catchment and their sensitivity to the nature of change proposed.

Table 6 Prevailing type of person in the visual catchment and their sensitivity to the nature of change proposed

| Direction | Prevailing type of person | Sensitivity to the nature of change proposed |
|---|---|---|
| North | Travellers on Botany Road | Low |
| South | Travellers on Botany Road | Low |
| West | Residents at home | High |
| East | Travellers using the Waterloo Metro Station and visitors to facilities or services within the future Cope Street activity centre (note as the opening of the Metro Station imminent, the future condition he been selected as the baseline) | Low – medium |

### Number of people

The below table identifies the prevailing number of people in the visual catchment.

Table 7 Prevailing number of people in the visual catchment

| Direction | Prevailing type of person | Prevailing number |
|---|---|---|
| North | Travellers on Botany Road | High |
| South | Travellers on Botany Road | High |
| West | Residents at home | Medium |
| East | Travellers using the Waterloo Metro Station and visitors to facilities or services within the future Cope Street activity centre (note as the opening of the Metro Station imminent, the future condition he been selected as the baseline) | High |

## 6.5 Pattern of viewing

The way in which visual receptors typically experience the visual catchment is called the 'pattern of viewing'.

Views can typically be seen at closer or longer range. There are not universal standards as to what constitutes the numerical boundaries between these ranges. Rather, they are relative to each other.

It is considered that the pattern of viewing for the proposal is generally as follows:

- in the closer to longer range to the north and south by travellers on Botany Road
- in the closer to medium range to the west by residents at home
- in the closer to medium range to the east by travellers using the Waterloo Metro Station and visitors to facilities or services within the future Cope Street activity centre.

## 6.6 Significance of visual impact

The SEARS require that the visual analysis:

- identify whether the proposal has potential for significant visual impact
- where this occurs, provide a visual impact assessment that addresses the impacts of the development on the visual catchment.

Under the GLVIA3 significance is defined as:

- 'a measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic'.

The significance criteria adopted are sensitivity and magnitude, including their component factors.

The proposal is considered to have the potential for significant visual impact when considered against these criteria and factors as follows:

### Sensitivity

- Number of people: although their level of interest or attention in views and visual amenity is likely to be low, the proposal will nonetheless ordinarily be seen by a large number of people travelling on Botany Road and the Waterloo Metro Station and visitors to facilities or services within the future Cope Street activity centre

### Magnitude

- Size and scale: while comparable or lesser than buildings within the Waterloo Metro Quarter, the proposal nonetheless inherently has considerable size.

As such, based on the SEARS, a VIA is justified.

It is noted that significance:

- is not absolute but rather relative on a qualitative spectrum corresponding to perception in the view and ranging from negligible to dominant
- does not automatically equate to an adverse impact, with higher significance impacts having the potential to be positive
- does not automatically equate to unacceptability of impact, as this is determined through assessment against relevant parts of the planning framework.

### 6.6.1 Private domain views

There is unlikely to be the presence of views from the private domain within the visual catchment to iconic or highly valuable landscape elements as understood by Tenacity (eg, Sydney Harbour, the Sydney Harbour Bridge)due to:

- distance to these elements
- a largely flat, relatively lower lying topography compared to locations that include these elements
- most private dwellings being located in lower rise forms (eg, terraces, lower-rise apartment buildings) which does not overcome this topography.

The arrangement of the public domain, built form and vegetation means that views from the private domain within the visual catchment are highly likely to be local.

In particular, the arrangement of streets running parallel to Botany Road together with the dense arrangement of built form and frequency of mature trees west of Wyndham Street means that views are highly localised in this area. The exception to this are properties fronting the western side of Wyndham Street that will have views across the street to the site.

Existing higher-rise apartment buildings within the Waterloo Estate and the under construction or approved higher-rise apartment buildings within the Metro Quarter will have views over the site generally in a western direction. From lower levels these are likely to be local views to Alexandria and surrounds. From higher levels they are likely to extent further west to include other parts of western Sydney. towards western parts of Sydney. These views will not take in iconic or iconic or highly valuable landscape elements as understood by Tenacity. The main impact of the proposal will be to block parts of these views from lower levels. It is noted that due to the proposal's high-level compliance with planning controls these impacts could reasonably be expected.

As such, the level of view impact to these properties is considered acceptable and further more detailed assessment is not considered necessary.

## 6.7 Key issues

Based on review of the site, its context, the proposal, the planning framework and the SEARS, the following are the key issues that need to be considered by the VIA:

1. Impact on the Botany Road Corridor
2. Impact on the residential area to the west of Wyndham Street
3. Impact on the future Cope Street activity centre.

## 6.8 Viewpoints

The nature and extent of visual impact changes with a person's location in the landscape (viewpoint) based on factors such as direction, distance and angle of viewpoint and duration of visibility (eg, static or moving). As there is a near infinite number of viewpoints, a selection of viewpoints to form the basis of the VIA is required. In this regard, the GLVIA3 provides the following guidance:

- 'The viewpoints used need to cover as wide a range of situations as is possible, reasonable and necessary to cover the likely significant effects. It is not possible to give specific guidance on the appropriate number of viewpoints since this depends on the context, the nature of the proposal

and the range and location of visual receptors. The emphasis must always be on proportionality in relation to the scale and nature of the development proposal and its likely significant effects'.

As can be seen, the focus is on achieving a balance between adequacy of coverage and reasonableness.

Informed by this the following table identifies the viewpoints that have been selected for assessment as part of this VIA, including the reason for this selection.

Table 8 Viewpoints

| Ref. | Location | Reason |
|---|---|---|
| 1. | Botany Road and Chapel Lane | Compatibility with desired future character of the Botany Road Corridor |
| 2. | Botany Road and Raglan Street | Compatibility with desired future character of the Botany Road Corridor |
| 3. | Botany Road and Wellington Street | Compatibility with desired future character of the Botany Road Corridor |
| 4. | Botany Road and John Street | Compatibility with desired future character of the Botany Road Corridor |
| 5. | Wyndham Street | Impact on Wyndham Street, which includes lower density residential dwellings |
| 6. | Alexandria Park | Impact on heritage listed Alexandria Park |
| 7. | Cope Street | Impact on planned future activity street |
| 8. | Gerard Street | Impact on Alexandria heritage conservation area |




Figure 10 Viewpoints

Source: Virtual Ideas

# 7.0 Visual impact assessment

## 7.1 Viewpoint 1: Botany Road and Chapel Lane

### 7.1.1 Existing view




Figure 11 Existing view

Source: Virtual Ideas

### 7.1.2 Likely future view




Figure 12 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.1.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 9 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | Considerable | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | **Noticeable** | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.1.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 10 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | Low | **Low** | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.2 Viewpoint 2: Botany Road and Raglan Street

### 7.2.1 Existing view




Figure 13 Existing view

Source: Virtual Ideas

### 7.2.2 Likely future view




Figure 14 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.2.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 11 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | **Considerable** | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | Noticeable | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.2.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 12 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | **Low** | Low | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.3 Viewpoint 3: Botany Road and Wellington Street

### 7.3.1 Existing view




Figure 15 Existing view

Source: Virtual Ideas

### 7.3.2 Likely future view




Figure 16 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.3.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 13 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | **Considerable** | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | Noticeable | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.3.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 14 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | **Low** | Low | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.4 Viewpoint 4: Botany Road and John Street

### 7.4.1 Existing view




Figure 17 Existing view

Source: Virtual Ideas

### 7.4.2 Likely future view




Figure 18 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.4.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 15 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | Considerable | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | **Noticeable** | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.4.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 16 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | Low | **Low** | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.5 Viewpoint 5: Wyndham Street

### 7.5.1 Existing view




Figure 19 Existing view

Source: Virtual Ideas

### 7.5.2 Likely future view




Figure 20 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.5.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 17 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | **Dominant** | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | Considerable | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | Noticeable | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.5.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 18 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | **High** | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | Low | Low | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.6 Viewpoint 6: Alexandria Park

### 7.6.1 Existing view



Figure 21 Existing view

Source: Virtual Ideas

### 7.6.2 Likely future view




Figure 22 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.6.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 19 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | **Considerable** | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | Noticeable | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.6.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 20 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | **High** | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | Low | Low | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.7 Viewpoint 7: Cope Street

### 7.7.1 Existing view




Figure 23 Existing view

Source: Virtual Ideas

### 7.7.2 Likely future view




Figure 24 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.7.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 21 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | Considerable | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | **Noticeable** | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | Perceptible | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.7.4 Significance of visual impact

The following table assesses the significance of visual impact.

Table 22 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | Low | Negligible |
| | **Low** | Moderate | Low | **Low** | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.8 Viewpoint 8: Gerard Street

### 7.8.1 Existing view




Figure 25 Existing view

Source: Virtual Ideas

### 7.8.2 Likely future view




Figure 26 Likely future view

Source: Virtual Ideas

Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

### 7.8.3 Magnitude of the nature of change proposed

The following table assesses the magnitude of the nature of change proposed.

Table 23 Magnitude of the nature of change proposed

| | | Duration and reversibility | | | |
|---|---|---|---|---|---|
| | | Ongoing and irreversible | Ongoing capable of being reversed | Limited life (5 – 10 years) | Limited life (< 5 years) |
| **Size and scale of change** | Major change over wide area | Dominant | Considerable | Considerable | Noticeable |
| | Major change over restricted area, or Moderate change over wide area | Considerable | Considerable | Noticeable | Noticeable |
| | Moderate change over restricted area; or Minor change over a wide area | Considerable | Noticeable | Noticeable | Perceptible |
| | Minor change over a restricted area; or Insignificant change | Perceptible | **Perceptible** | Perceptible | Imperceptible |
| | Imperceptible change | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

### 7.8.4 Significance of visual impact

The following table assesses the significance of visual impact.

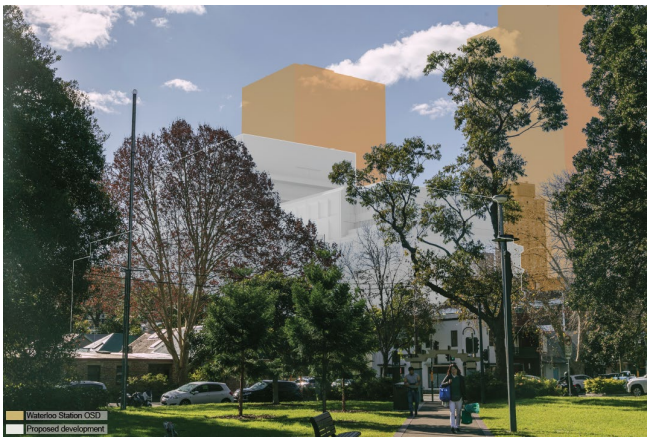
Table 24 Significance of visual impact

| | | Magnitude | | | | |
|---|---|---|---|---|---|---|
| | | **Dominant** | **Considerable** | **Noticeable** | **Perceptible** | **Imperceptible** |
| **Sensitivity** | **High** | Major | High | Moderate | Low | Negligible |
| | **Medium** | High | Moderate | Low | **Low** | Negligible |
| | **Low** | Moderate | Low | Low | Negligible | Negligible |
| | **Negligible** | Low | Low | Negligible | Negligible | Negligible |

## 7.9 Summary of visual impact

For ease of reference, the following table consolidates the photos and photomontages for each of the viewpoints. Note: white represents the proposal, and yellow represents approved development on the Waterloo Metro Quarter

| | |
|---|---|
| **Viewpoint 1: Botany Road and Chapel Lane** | |
|  |  |
| Existing view | Likely future view |
| **Viewpoint 2: Botany Road and Raglan Street** | |
|  |  |
| Existing view | Likely future view |
| **Viewpoint 3: Botany Road and Wellington Street** | |
|  |  |

| Existing view | Likely future view |
|---|---|
| **Viewpoint 4: Botany Road and John Street** | |
|  |  |
| Existing view | Likely future view |
| **Viewpoint 5: Wyndham Street** | |
|  |  |
| Existing view | Likely future view |
| **Viewpoint 6: Alexandria Park** | |
|  |  |
| Existing view | Likely future view |
| **Viewpoint 7: Cope Street** | |

| | |
|---|---|
|  |  |
| Existing view | Likely future view |
| **Viewpoint 8: Gerard Street** | |
|  |  |
| Existing view | Likely future view |

Figure 27 Consolidated photographs and photomontages

Source: Virtual Ideas

## 7.10 Consolidated assessment of sensitivity, magnitude and significance of this visual impact

For ease of reference, the following table consolidates assessment of sensitivity, magnitude and significance of visual impact.

Table 25 Findings of sensitivity, magnitude and significance of visual impact

| Viewpoint no. | Viewpoint name | Sensitivity | Magnitude | Significance |
|---|---|---|---|---|
| 1. | Viewpoint 1: Botany Road and Chapel Lane | Low | Noticeable | Low |
| 2. | Viewpoint 2: Botany Road and Raglan Street | Low | Considerable | Low |
| 3. | Viewpoint 3: Botany Road and Wellington Street | Low | Considerable | Low |
| 4. | Viewpoint 4: Botany Road and John Street | Low | Noticeable | Low |
| 5. | Viewpoint 5: Wyndham Street | Medium | Dominant | High |
| 6. | Viewpoint 6: Alexandria Park | High | Considerable | High |
| 7. | Viewpoint 7: Cope Street | Low | Noticeable | Low |
| 8. | Viewpoint 8: Gerard Street | Medium | Perceptible | Low |

# 8.0 Discussion of key issues

## 8.1 Impact on the Botany Road Corridor

As is evidenced in the photomontages for viewpoint 1: Botany Road and Chapel Lane and viewpoint 4: Botany Road and John Street), the proposal will be noticeable within this part of the existing Botany Road Corridor. This impact increases the closer the viewer gets to the proposal as can be seen in viewpoint 2: Botany Road and Raglan Street and viewpoint 3: Botany Road and Wellington Street.

While greater than existing development, it will achieve a scale and form that is consistent with that envisaged for the future of the corridor under the SDCP 2012. It also achieves a 'step down' from the taller Waterloo Metro Quarter to the east and the lower scale residential area to the west.

## 8.2 Impact on the residential area to the west of Wyndham Street

As can be seen in the photomontage prepared for Viewpoint 8: Gerard Street, the proposal will be perceptible when seen from most of the lower scale residential area to the west. Only its upper parts will be visible above a foreground and midground of buildings and trees. It will also be seen against a backdrop of the taller Waterloo Metro Quarter.

It will appear dominant in the view from the closer Viewpoint 5: Wyndham Street. The use of elements that project or recess from the main façade such as those proposed around the windows as well as high quality materiality and appropriate, lower impact colours will be key to reducing visual impact on this viewpoint and residential uses on the western side of Wyndham Street in general. Co-ordinated, well-spaced street tree plantings can further assist is mitigating impact.

The proposal will have a high significance of impact on Alexandria Park. However, being seen above existing lower scale development and against a backdrop of the taller Waterloo Metro Quarter will mitigate this impact. The dominance of the park setting in the foreground will further soften visual impact.

## 8.3 Impact on the future Cope Street activity centre

As can be seen in Viewpoint 7: Cope Street, the proposal will have a low significance of visual impact on the future Cope Street activity centre. It will only be visible from gaps between buildings in the Waterloo Metro Quarter, in particular adjacent to the Waterloo Congregational Church.

# 9.0 Mitigation measures

There are three broad types of mitigation measures:

1. avoid
2. minimise
3. offset.

This is generally consistent with the principles for the management of environmental impacts in the GLVIA3 (part 3.37).

Under the GLVIA3 (part 4.21), there are a number of stages in the development process when mitigation measures should be considered. Of relevance to this proposal are the following:

- **primary measures**: considered as part of design development
- **secondary measures**: considered as part of conditioning a development consent.

As has been outlined in the EIS, the proposal has been the subject to a Competitive Design Alternatives process undertaken in accordance with an endorsed Design Excellence Strategy. . This has resulted in the incorporation of a number of primary measures that seek to avoid and minimise any potential significant adverse visual impacts. On this basis, it is not considered necessary to make further fundamental or otherwise large-scale amendments to the proposal in its current form to satisfactorily manage visual impact.

# 10.0 Conclusion

The proposal has acceptable visual impact for the following key reasons:

- it has a visual impact that is consistent with what can be expected under the intent for this part of the Botany Road Corridor
- it will not have a high significance of visual impact when seen from much of the more sensitive residential area to the west of the site
- while visible from parts of this area, its impact will be acceptable due to it appearing only in part and above and behind lower scale building as well as vegetation, and in front of the taller Waterloo Metro Quarter will reduce this impact to an appropriate level
- it has the capacity to incorporate appropriate visual impact mitigation measures such as elements that project or recess from the main façade that will mitigate impact on properties on the western side of Wyndham Street.

As such, it is the conclusion of this VIA that the proposal can be supported on visual impact grounds.

# Appendix A Visual impact evidence

# 100 Botany Road, Alexandria, NSW

Visual impact renderings and methodology report

12th September 2024

VIRTUAL IDEAS

# 1. INTRODUCTION

This document, created by Virtual Ideas, aims to showcase the visual impact of the proposed developments for 100 Botany Road, Alexandria, NSW, in comparison to the existing built form and site conditions.

# 2. VIRTUAL IDEAS EXPERTISE

Virtual Ideas is a reputable architectural visualisation company with over 15 years of expertise in crafting visual impact assessment content and reports for projects of significant magnitude, aligning with the standards set by local and state planning authorities.

Our reports have served as evidence in proceedings before both the Land and Environment Court and the Supreme Court of NSW. Our director, Grant Kolln, has provided expert testimony in visual impact assessment in the Supreme Court of NSW.

Virtual Ideas' methodologies and outcomes have undergone thorough scrutiny by court-appointed experts in relation to previous visual impact assessment submissions, consistently garnering recognition for their precision and reliability.

# 3. RENDERINGS METHODOLOGY

The following outlines the meticulous process employed by Virtual Ideas to produce the renderings that underpin this report.

### 3.1 DIGITAL 3D SCENE CREATION

Our initial stage involves crafting a precise, true-to-life digital 3D environment using Autodesk 3ds Max software, accurately scaled to real-world dimensions, and aligned to a standardised reference point utilising the MGA 56 GDA 2020 coordinate system.

To construct this environment, we combine various data sources, encompassing existing, approved and proposed building 3D models, along with site survey data. Further information regarding the origins of these data sources is provided in Appendices A, B, C, and D.

In cases where data sources lack alignment with the MGA-56 GDA 2020 coordinates, we employ identifiable features common across datasets, such as site boundaries and building outlines, which can be aligned with those already situated in the MGA-56 GDA 2020 framework.

Detailed accounts of the alignment processes for each data source are elaborated upon in Section 3.3.

### 3.2 SITE PHOTOGRAPHY

The site photography was captured by Virtual Ideas, with the respective viewpoint locations delineated on the viewpoint map in Section 4 of this document.

The choice of camera lenses for photography was made after careful consideration of multiple factors. Paramount among these were the distance of the camera position from the site and the scale of the proposed development in relation to the surrounding built environment and landscape.

For certain scenarios, employing a 50mm lens may produce the most effective photomontage for assessing visual impact. The 50mm lens is often favoured for its close approximation to the human eye perception of distance. However, in instances where a 50mm lens fails to encompass an adequate surrounding context for comprehensive visual impact assessment, opting for a wider lens becomes imperative.

For these public domain photomontages, a combination of 24, 35 and 50mm lens's was considered optimal. These choices ensure adequate visibility of both the proposed development and the immediate surrounding context, facilitating a thorough assessment of the proposed development's visual impact.

Comprehensive metadata, including date, time, and lens information, is recorded during site photography. This critical data enables precise analysis and documentation of each photograph's attributes.

### 3.3 ALIGNMENT OF 3D SCENE

To accurately position the 3D scene within its geographical context, we employed the following data:

1. Site Survey Alignment: Utilising a provided site survey, we aligned the boundaries of the proposed buildings with geo-referenced data, ensuring precise positioning within the digital environment.

2. Camera Alignment: Cameras were aligned to surveyed positions supplied by CMS Surveyors, adhering to the MGA-56 GDA 2020 coordinate system. This meticulous alignment ensured that viewpoints captured within the 3D scene accurately reflected real-world perspectives.

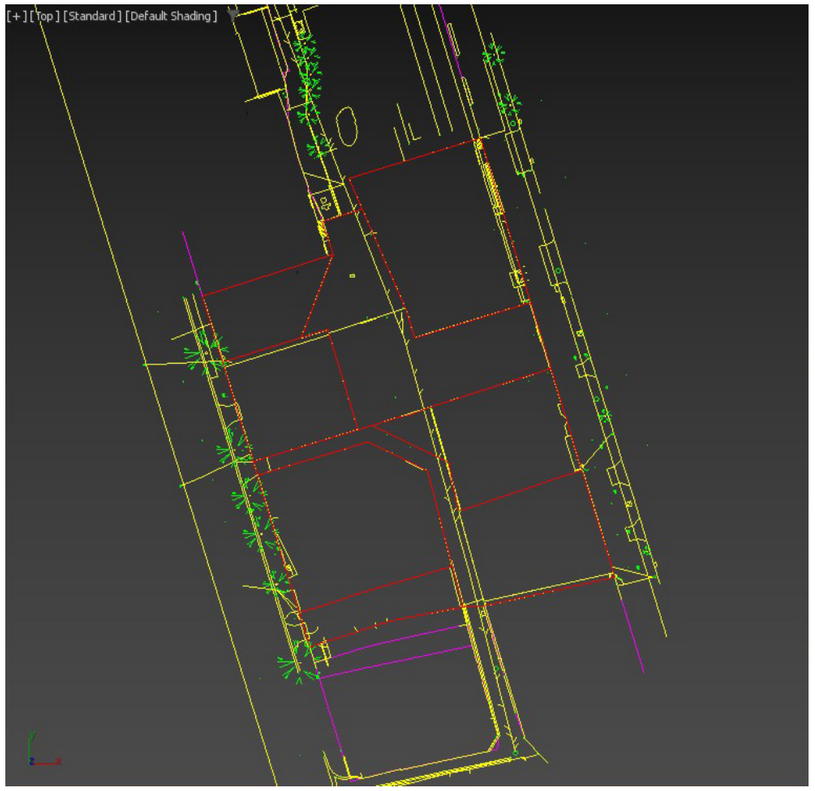



Image showing the site boundaries from the survey drawing supplied by Total Surveying Solutions at MGA 56 GDA2020

### 3.4 RENDERING CREATION

Following the completion of the camera alignment, we proceeded to integrate lighting into the 3D scene.

To replicate natural lighting conditions accurately, a digital sunlight system was incorporated into the 3D environment. This system emulates the directional lighting of the sun leveraging location data, as well as time and date information. Implemented through specialised software, the sunlight system ensures precise alignment with the sun's angle, enhancing realism within the scene.

For rendering, we applied a basic chalk white material. This aids in visual clarity and enhances the presentation of the proposed developement.

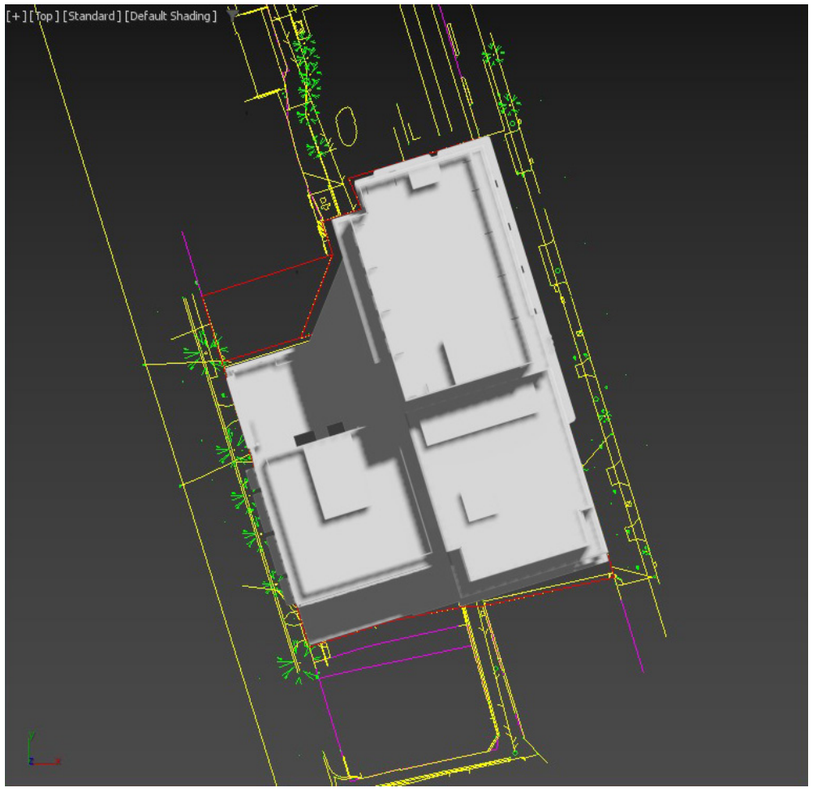



Image showing the site boundaries from the survey drawing supplied by Total Surveying Solutions at MGA 56 GDA2020 and the 3D model of the proposed development supplied by Genler aligned to the site boundary

## 4. MAP OF CAMERA LOCATIONS




1. Botany Road and Chapel Lane
2. Botany Road and Raglan Street
3. Botany Road and Wellington Street
4. Botany Road and John Street
5. Wyndam Street
6. Alexandria Park
7. Cope Street
8. Gerard Street

# 5.1 VIEWPOINT POSITION 01 - BOTANY ROAD AND CHAPEL LANE

### PHOTOGRAPH SHOWING CURRENT CONDITION



### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




### PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 50mm |

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




### VIEWPOINT LOCATION



## 5.2 VIEWPOINT POSITION 01 - BOTANY ROAD AND CHAPEL LANE

### PHOTOGRAPH SHOWING CURRENT CONDITION



## 5.3 VIEWPOINT POSITION 01 - BOTANY ROAD AND CHAPEL LANE

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



# 5.4 VIEWPOINT POSITION 01 - BOTANY ROAD AND CHAPEL LANE

## SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 6.1 VIEWPOINT POSITION 02 - BOTANY ROAD AND RAGLAN STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION



### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




### PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 24mm |

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




### VIEWPOINT LOCATION



## 6.2 VIEWPOINT POSITION 02 - BOTANY ROAD AND RAGLAN STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION



## 6.3 VIEWPOINT POSITION 02 - BOTANY ROAD AND RAGLAN STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



# 6.4 VIEWPOINT POSITION 02 - BOTANY ROAD AND RAGLAN STREET

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 7.1 VIEWPOINT POSITION 03 - BOTANY ROAD AND WELLINGTON

## PHOTOGRAPH SHOWING CURRENT CONDITION



## PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




## PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 24mm |

## SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




## VIEWPOINT LOCATION



## 7.2 VIEWPOINT POSITION 03 - BOTANY ROAD AND WELLINGTON

### PHOTOGRAPH SHOWING CURRENT CONDITION



## 7.3 VIEWPOINT POSITION 03 - BOTANY ROAD AND WELLINGTON

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



## 7.4 VIEWPOINT POSITION 03 - BOTANY ROAD AND WELLINGTON

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 8.1 VIEWPOINT POSITION 04 - BOTANY ROAD AND JOHN STREET

## PHOTOGRAPH SHOWING CURRENT CONDITION




## PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




## PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 24mm |

## SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




## VIEWPOINT LOCATION



## 8.2 VIEWPOINT POSITION 04 - BOTANY ROAD AND JOHN STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION



## 8.3 VIEWPOINT POSITION 04 - BOTANY ROAD AND JOHN STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



## 8.4 VIEWPOINT POSITION 04 - BOTANY ROAD AND JOHN STREET

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 9.1 VIEWPOINT POSITION 05 - WYNDAM STREET STREET

## PHOTOGRAPH SHOWING CURRENT CONDITION



## PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




## PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 50mm |

## SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




## VIEWPOINT LOCATION



# 9.2 VIEWPOINT POSITION 05 - WYNDAM STREET STREET

## PHOTOGRAPH SHOWING CURRENT CONDITION



## 9.3 VIEWPOINT POSITION 05 - WYNDAM STREET STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



## 9.4 VIEWPOINT POSITION 05 - WYNDAM STREET STREET

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 10.1 VIEWPOINT POSITION 06 - ALEXANDRIA PARK

### PHOTOGRAPH SHOWING CURRENT CONDITION



### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




### PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 50mm |

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




### VIEWPOINT LOCATION



## 10.2 VIEWPOINT POSITION 06 - ALEXANDRIA PARK

**PHOTOGRAPH SHOWING CURRENT CONDITION**



## 10.3 VIEWPOINT POSITION 06 - ALEXANDRIA PARK

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



## 10.4 VIEWPOINT POSITION 06 - ALEXANDRIA PARK

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 11.1 VIEWPOINT POSITION 07 - COPE STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION




### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




### PHOTOGRAPH DETAILS

| | |
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| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 35mm |

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




### VIEWPOINT LOCATION



# 11.2 VIEWPOINT POSITION 07 - COPE STREET

## PHOTOGRAPH SHOWING CURRENT CONDITION



## 11.3 VIEWPOINT POSITION 07 - COPE STREET

**PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT**



## 11.4 VIEWPOINT POSITION 07 - COPE STREET

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



# 12.1 VIEWPOINT POSITION 08 - GERADE STREET

## PHOTOGRAPH SHOWING CURRENT CONDITION



## PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT




## PHOTOGRAPH DETAILS

| | |
|---|---|
| Photo Date: | 18th June 2024 |
| Camera Used: | Canon EOS 5DS R |
| Camera Lens: | EF24-105mm |
| Focal length in 35mm Film: | 24mm |

## SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT




## VIEWPOINT LOCATION



## 12.2 VIEWPOINT POSITION 08 - GERADE STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION



## 12.3 VIEWPOINT POSITION 08 - GERADE STREET

### PHOTOGRAPH SHOWING CURRENT CONDITION AND PROPOSED DEVELOPMENT



## 12.4 VIEWPOINT POSITION 08 - GERADE STREET

### SURVEY POINTS USED FOR 3D CAMERA ALIGNMENT



## 13.1 3D SCENE DATA SOURCES

**1a - 3D Model of the proposed 100 Botany Road  - refer to Appendix A**

File Name: 240904_Kurraba_Base/ 240904_Kurraba_Bldg1/ 240904_Kurraba_Bldg2
Author: Gensler
Format: fbx
Alignment: Aligned to MGA 56 GDA2020 via Appendix C and D

**1b - 3D Model of the proposed Waterloo Station OSD - refer to Appendix B**

File Name: Stamped Plans - SSD 9393 Waterloo
Author: Turner
Format: pdf
Alignment: Aligned to MGA 56 GDA2020 via Appendix C and D

**2 - Site Survey - refer to Appendix C for details**

File Name: 23525Photolocation 2
Author: CMS Surveyors
Format: Autocad DWG
Alignment: MGA 56 GDA2020

**3 - Existing Site Survey - refer to Appendix D for details**

File Name: 230697-1_Detail Survey_Rev 1_240301
Author: Total Surveying Solutions
Format: Autocad DWG
Alignment: MGA 56 GDA2020

## 13.2 APPENDIX A: 3D MODEL OF PROPOSED DEVELOPMENT SUPPLIED BY GENSLER

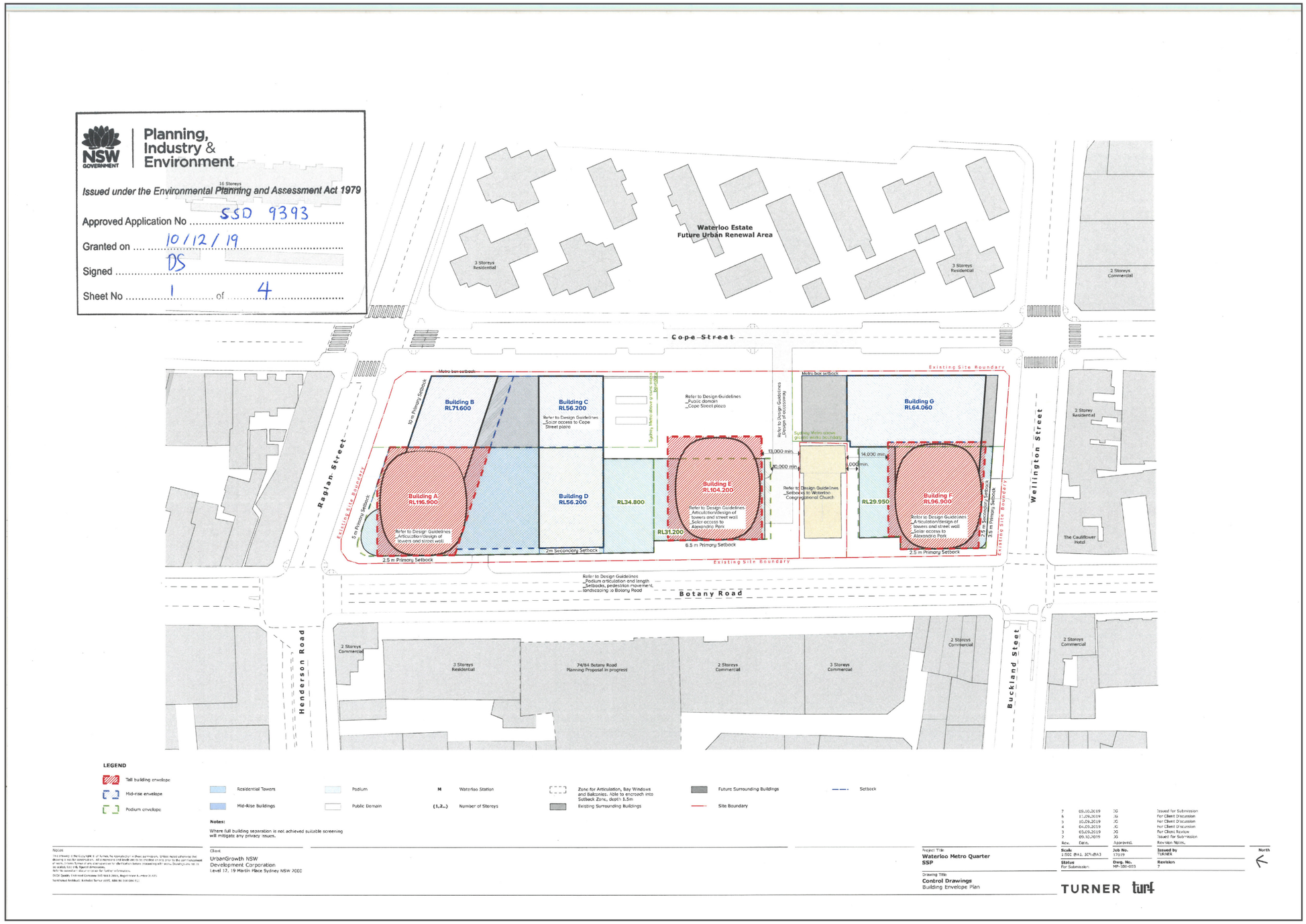



CURRENT CONDITION




PROPOSED DEVELOPMENT

# 13.3 APPENDIX B: 3D MODEL OF WATERLOO STATION OSD CREATED BY VIRTUAL IDEAS FROM SUPPLIED DRAWINGS FROM TURNER



# 13.4 APPENDIX B: 3D MODELS CREATED BY VIRTUAL IDEAS FROM SUPPLIED DRAWINGS FROM TURNER

NSW GOVERNMENT | Planning, Industry & Environment

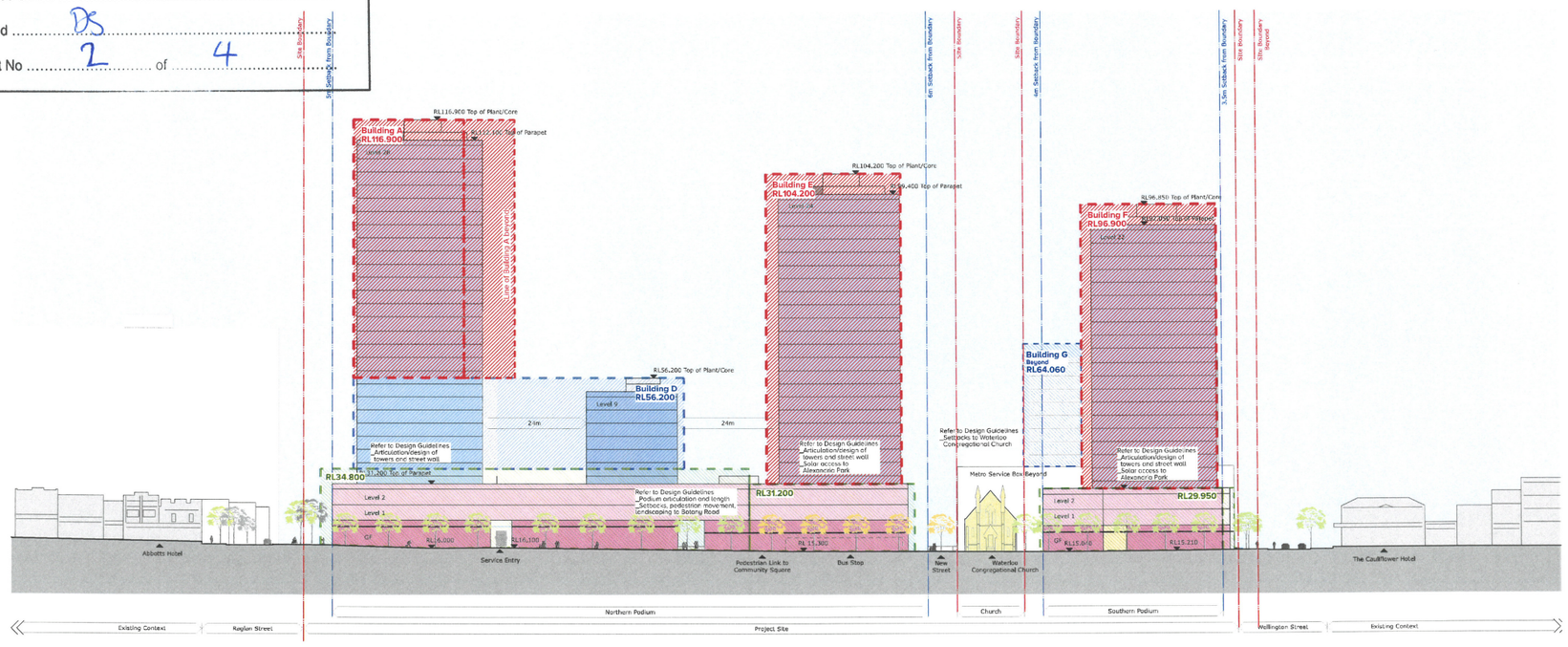
*Issued under the Environmental Planning and Assessment Act 1979*

Approved Application No SSD 9393

Granted on 10/12/19

Signed DS

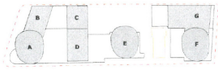
Sheet No 2 of 4




**Botany Road Elevation**

LEGEND

- Tall building envelope
- Mid-rise envelope
- Podium envelope
- Ground Level - Retail
- Podium - Non-Residential
- Residential Towers
- Mid-Rise Buildings
- Building Beyond
- Community Building
- Surrounding Buildings
- Plant / Lift Overrun
- Transfer




Notes

Client
UrbanGrowth NSW
Development Corporation
Level 17, 19 Martin Place Sydney NSW 2000

Project Title
**Waterloo Metro Quarter**
**SSP**

Drawing Title
**Envelope Elevations**
West Elevation_Botany Road

| | | | |
|---|---|---|---|
| 9 Rev. | 03.10.2019 Date. | JG Approved. | Issued for Submission Revision Notes. |
| Scale 1:500 @A1, 50%@A3 | | Job No. 17019 | Issued by TURNER |
| Status For Submission | | Dwg. No. WP-ZSC-02 | Revision 9 |

TURNER turf

# 13.5 APPENDIX B: 3D MODELS CREATED BY VIRTUAL IDEAS FROM SUPPLIED DRAWINGS FROM TURNER




**Cope Street Elevation**

LEGEND

- Tall building envelope
- Mid-rise envelope
- Podium envelope
- Ground Level - Retail
- Podium - Non-Residential
- Residential Towers
- Mid-Rise Buildings
- Building Beyond
- Community Building
- Surrounding Buildings
- Plant / Lift Overrun
- Transfer

Notes

Client
UrbanGrowth NSW
Development Corporation
Level 17, 19 Martin Place Sydney NSW 2000

Project Title
**Waterloo Metro Quarter**
**SSP**

Drawing Title
**Envelope Elevations**
East Elevation_Cope Street

9 09.10.2019 JG Issued for Submission
Rev. Date. Approved. Revision Notes.

Scale: 1:500 @ A1, 50%@A3
Status: For Submission
Job No. 17219
Dwg. No. MP-350-201
Issued by TURNER
Revision 9

TURNER turf

# 13.6 APPENDIX B: 3D MODELS CREATED BY VIRTUAL IDEAS FROM SUPPLIED DRAWINGS FROM TURNER

Planning, Industry & Environment

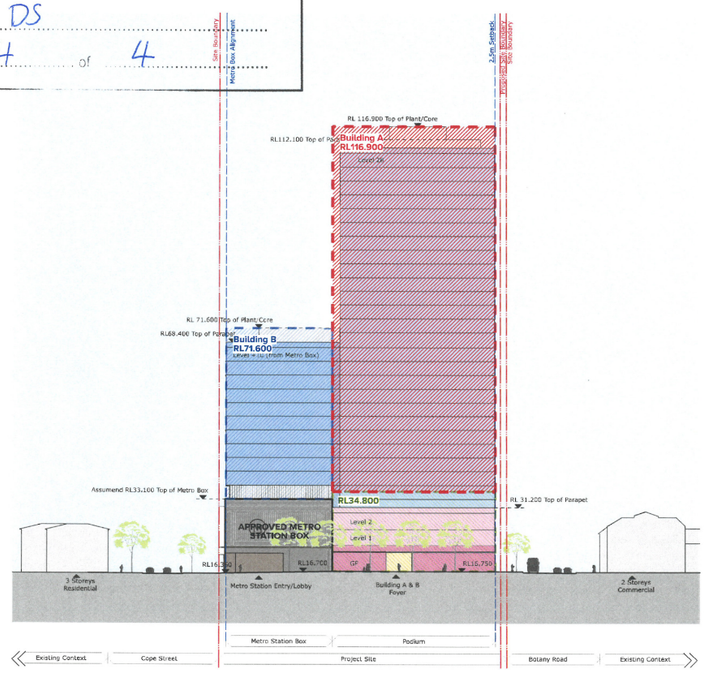
*Issued under the Environmental Planning and Assessment Act 1979*

Approved Application No SSD 9393

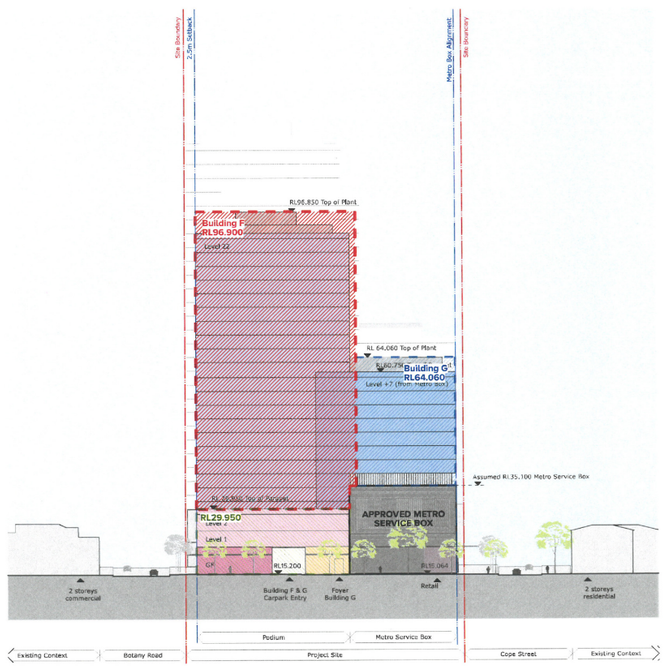
Granted on 10/12/19

Signed DS

Sheet No 4 of 4



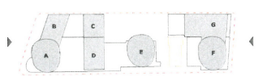

**Raglan Street Elevation**




**Wellington Street Elevation**

LEGEND

- Tall building envelope
- Mid-rise envelope
- Podium envelope
- Ground Level - Retail
- Podium - Non-Residential
- Residential towers
- Mid-Rise Buildings
- Building Beyond
- Community Building
- Surrounding Buildings
- Plant / Lift Overrun
- Transfer




Client
UrbanGrowth NSW Development Corporation
Level 12, 19 Martin Place Sydney NSW 2000

Project Title
Waterloo Metro Quarter
SSP

Drawing Title
Envelope Elevations
North & South Elevation_Raglan & Wellington Street

B Rev. 09.10.2019 Date. JG Approved. Issued for Submission Revision Notes.
Scale: 1:500 @A1, 1:1000 @A3
Job No. 17019
Status: For Submission
Dwg. No. MP-250-301
Issued by TURNER
Revision B

TURNER turf

# 13.7 APPENDIX C: SITE SURVEY SUPPLIED BY CMS

A0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# 13.8 APPENDIX C: SITE SURVEY SUPPLIED BY CMS

CMS Surveyors Pty Limited
A.B.N. 79 096 240 201
LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

CMS SURVEYORS



Date: 21-06-2024
Our Ref: 23525 Photo Locations

Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

Dear Rick Mansfield,

**RE: PHOTO LOCATIONS – 100 Botany Road, Waterloo**

As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations along 100 Botany Road, Waterloo.

Co-ordinates are MGA 56 **(GDA 2020)** and elevation to Australian Height datum (AHD).

Measurements were taken using Leica MS50 and GNSS measurements by CORSNET. The measurements are verified with PM59542 and SSM66011.

DWG of locations has also been supplied.

| Point Number | Easting | Northing | Reduced Level (RL) | Photo Point |
|---|---|---|---|---|
| 1 | 333457.307 | 6247962.211 | 19.05 | PHOTO 1 |
| 2 | 333507.038 | 6247832.575 | 16.44 | PHOTO 2 |
| 3 | 333571.463 | 6247622.923 | 15.19 | PHOTO 3 |
| 4 | 333620.725 | 6247462.129 | 16.20 | PHOTO 4 |
| 5 | 333430.649 | 6247711.639 | 14.96 | PHOTO 5 |
| 6 | 333440.289 | 6247526.205 | 14.20 | PHOTO 6 |
| 7 | 333639.413 | 6247717.019 | 15.45 | PHOTO 7 |
| 8 | 333271.704 | 6247679.036 | 14.60 | PHOTO 8 |
| 100 | 333445.690 | 6247566.901 | 28.21 | Sewer vent |
| 101 | 333445.283 | 6247541.090 | 15.12 | Seat |
| 102 | 333480.929 | 6247605.602 | 20.04 | Window |
| 103 | 333472.746 | 6247574.112 | 18.17 | Sign |
| 104 | 333445.703 | 6247566.883 | 14.41 | Sewer vent |
| 105 | 333447.663 | 6247594.658 | 16.66 | Window |
| 106 | 333557.056 | 6247623.255 | 23.25 | Power pole |
| 107 | 333556.589 | 6247625.099 | 15.16 | Sign |
| 108 | 333552.842 | 6247635.908 | 17.95 | Sign |
| 109 | 333536.396 | 6247687.537 | 15.12 | Light pole |
| 110 | 333549.566 | 6247655.801 | 25.87 | Light pole |

Consulting Surveyors NSW
ISNSW THE INSTITUTION OF SURVEYORS NSW INC

HEAD OFFICE
2/99A South Creek Rd, DEE WHY NSW 2099
PO Box 463, DEE WHY NSW 2099
Ph: 02 9971 4802 Fax: 02 9971 4822
Email: info@cmssurveyors.com.au
Web: www.cmssurveyors.com.au

INCORPORATING
A.C.GILBERT & Co.
(Roseville)
MBS GREEN & ASSOCIATES
(Mona Vale)

COOTAMUNDRA
Incorporating PENGELLY & GRAY
90 Wallendoon St, COOTAMUNDRA NSW 2590
Ph: 02 6942 3395 Fax: 02 6942 4046
Email: coota@cmssurveyors.com.au

ISO 9001:2008 REGISTERED FIRM



| Point Number | Easting | Northing | Reduced Level (RL) | Photo Point |
|---|---|---|---|---|
| 111 | 333532.991 | 6247672.579 | 21.48 | Building |
| 112 | 333538.177 | 6247655.121 | 19.87 | Sign |
| 113 | 333597.572 | 6247491.154 | 15.65 | Tree |
| 114 | 333595.270 | 6247509.555 | 23.95 | Light pole |
| 115 | 333563.992 | 6247600.503 | 19.50 | Traffic light |
| 116 | 333619.302 | 6247474.649 | 21.13 | Sign |
| 117 | 333619.358 | 6247478.099 | 16.15 | Building |
| 118 | 333577.238 | 6247529.328 | 30.10 | Roof |
| 119 | 333634.999 | 6247712.483 | 17.67 | Top of gutter |
| 120 | 333586.969 | 6247694.960 | 28.07 | Parapet |
| 121 | 333522.376 | 6247689.817 | 24.82 | AC unit |
| 122 | 333633.930 | 6247714.296 | 16.53 | Post |
| 123 | 333618.093 | 6247715.380 | 25.00 | Light pole |
| 124 | 333608.487 | 6247714.968 | 19.27 | Sign |
| 125 | 333511.244 | 6247826.783 | 18.83 | Top of fence |
| 126 | 333508.982 | 6247829.178 | 17.08 | Bolt |
| 127 | 333508.759 | 6247790.827 | 26.80 | Light pole |
| 128 | 333500.525 | 6247808.627 | 19.67 | Sign |
| 129 | 333491.412 | 6247807.923 | 19.90 | Window |
| 130 | 333468.683 | 6247908.995 | 27.36 | Light pole |
| 131 | 333460.355 | 6247935.831 | 27.25 | Light pole |
| 132 | 333456.135 | 6247955.404 | 21.93 | Awning |
| 133 | 333499.721 | 6247857.328 | 21.31 | Traffic light |
| 134 | 333458.164 | 6247942.698 | 21.64 | Sign |
| 135 | 333458.720 | 6247922.284 | 27.43 | Parapet |
| 136 | 333448.779 | 6247710.802 | 26.47 | Post |
| 137 | 333448.483 | 6247712.107 | 22.05 | Window |
| 138 | 333448.320 | 6247712.617 | 17.46 | Window |
| 139 | 333447.714 | 6247703.483 | 17.59 | Sign |
| 140 | 333462.763 | 6247655.030 | 17.14 | Sign |
| 141 | 333456.295 | 6247686.660 | 16.46 | Window |
| 142 | 333453.146 | 6247696.825 | 23.35 | Parapet |
| 143 | 333337.023 | 6247689.991 | 28.93 | Roof ridge |
| 144 | 333328.355 | 6247678.962 | 24.00 | Parapet |
| 145 | 333291.804 | 6247673.291 | 18.50 | Top of wall |
| 146 | 333291.806 | 6247673.364 | 14.81 | Bottom of wall |
| 147 | 333298.748 | 6247667.864 | 23.93 | Chimney |
| 148 | 333294.930 | 6247663.037 | 18.45 | Fence |
| 149 | 333285.383 | 6247683.420 | 17.65 | Post |

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HEAD OFFICE
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Email: info@cmssurveyors.com.au
Web: www.cmssurveyors.com.au

INCORPORATING
A.C.GILBERT & Co.
(Roseville)
MBS GREEN & ASSOCIATES
(Mona Vale)

COOTAMUNDRA
Incorporating PENGELLY & GRAY
90 Wallendoon St, COOTAMUNDRA NSW 2590
Ph: 02 6942 3395 Fax: 02 6942 4046
Email: coota@cmssurveyors.com.au

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# 13.9 APPENDIX C: SITE SURVEY SUPPLIED BY CMS



Note: R.L. shown on the report for photo locations are ground levels. Camera height should be added to the supplied RL of each corresponding photo location.

Yours faithfully,
CMS Surveyors Pty Limited
Hyeokseong Son,
Bachelor of Spatial Science (Honours) with major in Surveying

HEAD OFFICE
2/99A South Creek Rd, DEE WHY NSW 2099
PO Box 463, DEE WHY NSW 2099
Ph: 02 9971 4802 Fax: 02 9971 4822
Email: info@cmssurveyors.com.au
Web: www.cmssurveyors.com.au

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(Mona Vale)

COOTAMUNDRA
Incorporating PENGELLY & GRAY
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Ph: 02 6942 3395 Fax: 02 6942 4046
Email: coota@cmssurveyors.com.au

## 13.10 APPENDIX C: SITE SURVEY SUPPLIED BY CMS

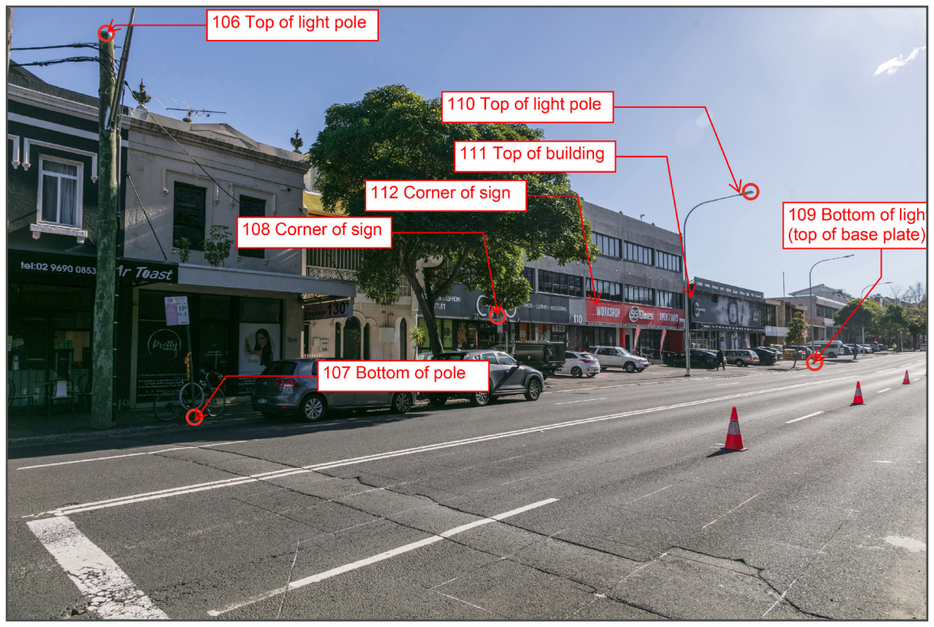
### VIEWPOINT 01




### VIEWPOINT 02




### VIEWPOINT 03

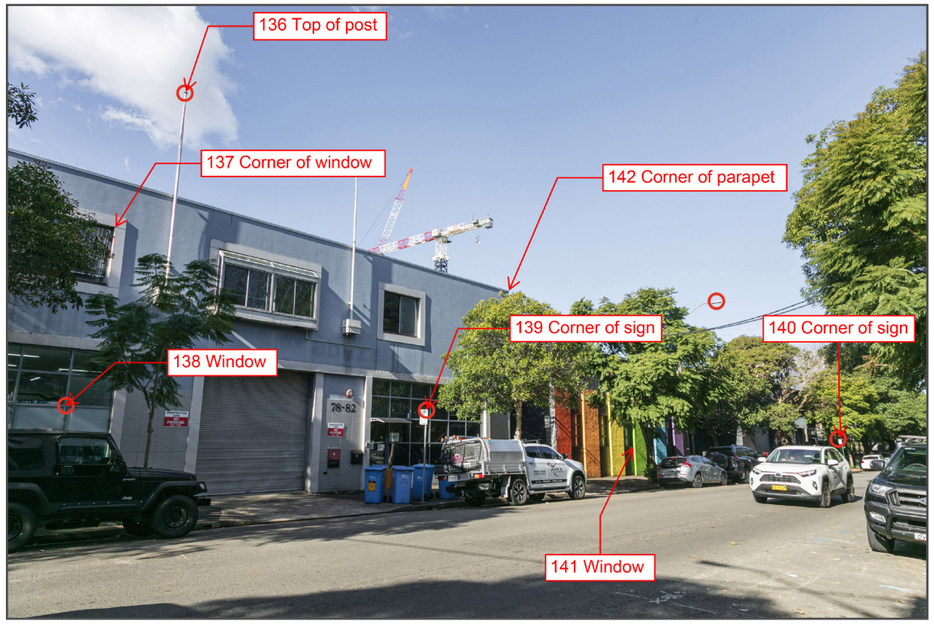



### VIEWPOINT 04



## 13.11 APPENDIX C: SITE SURVEY SUPPLIED BY CMS

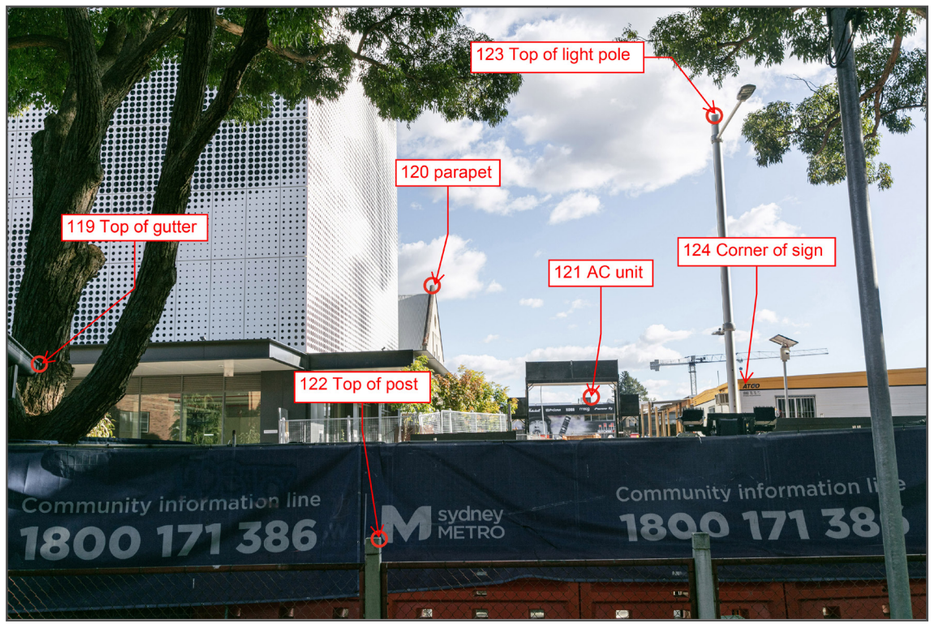
### VIEWPOINT 05



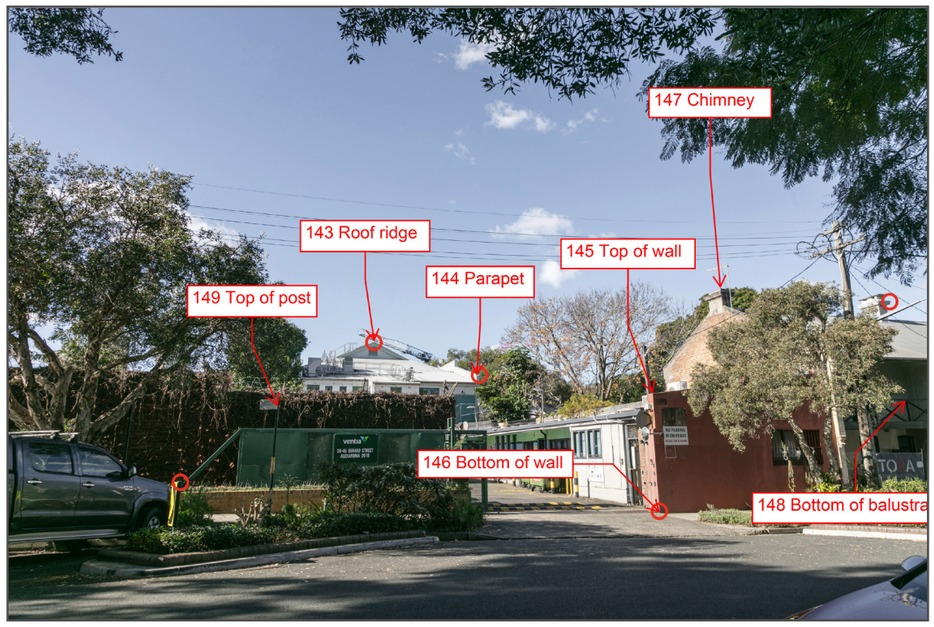

### VIEWPOINT 06



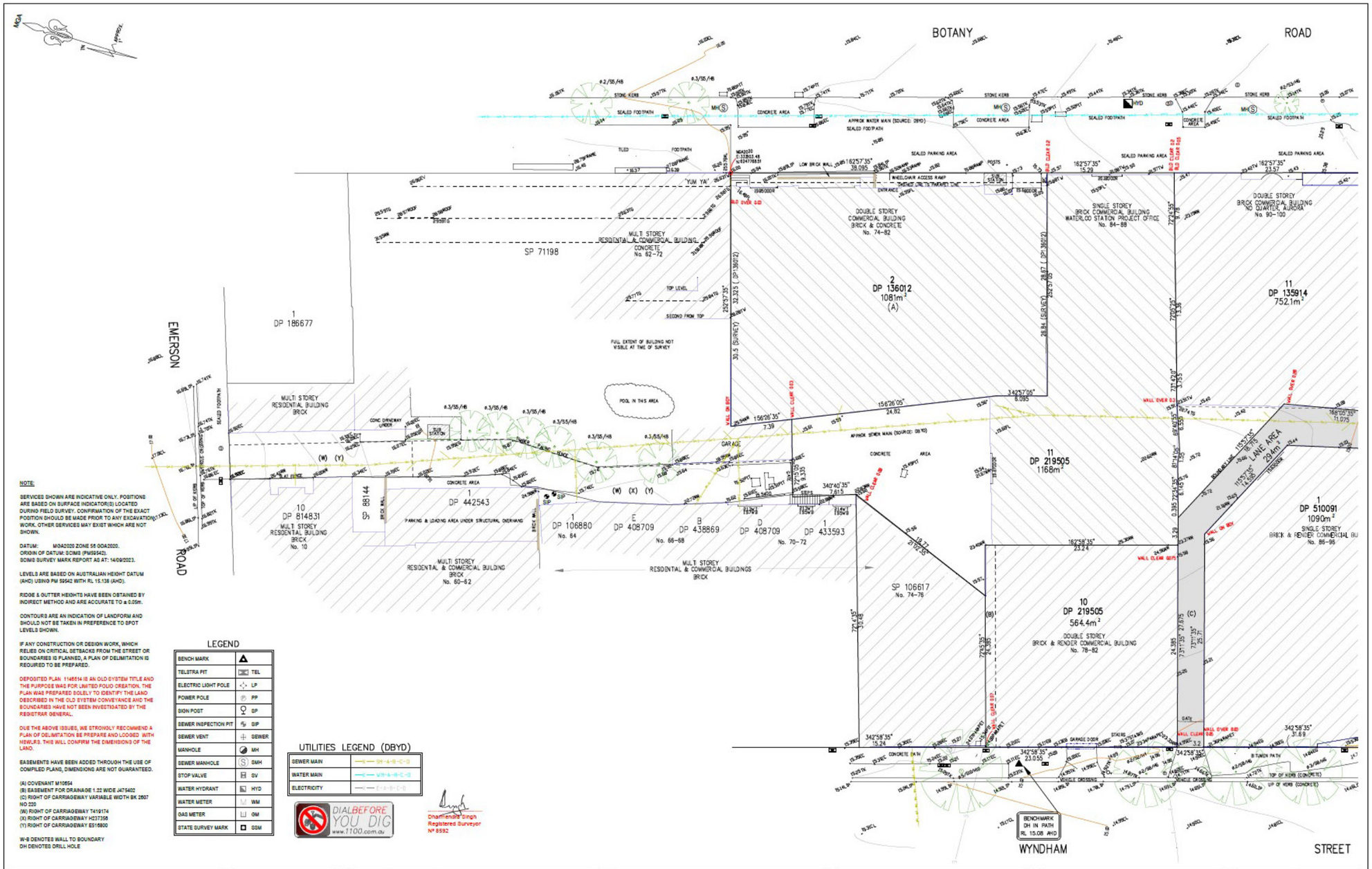

### VIEWPOINT 07




### VIEWPOINT 08



## 13.12 APPENDIX D: EXISTING SITE SURVEY OF 100 BOTANY ROAD SUPPLIED BY TOTAL SURVEYING SOLUTIONS



## 13.13 APPENDIX D: EXISTING SITE SURVEY OF 100 BOTANY ROAD SUPPLIED BY TOTAL SURVEYING SOLUTIONS

