VISUAL IMPACT ASSESSMENT REPORT

APPENDIX M

Sydney Metro City & Southwest: Waterloo Over Station Development

Visual Impact Study Report

Applicable to:	Sydney Metro City & Southwest
Author:	John O'Grady
Owner	Sydney Metro
Status:	Final
Version:	7
Date of issue:	11 November 2018
Review date:	11 November 2018

© Sydney Metro 2018

Table of Contents

1.0 Introduction 4
1.1 Purpose of this report 4
1.2 Overview of the Sydney Metro in its context 5
1.3 Nominated State Significant Precinct - Waterloo 8
1.4 Planning relationship between Waterloo Station and the OSD 8
1.5 The site 10
1.5.1 Location 10
1.5.2 Site context 11
1.6 Overview of the proposed development 14
2.0 Scope of assessment 18
2.1 Existing Conditions 18
2.2 Implementation Plan 19
2.3 Visual Impact Assessment 19
3.0 Baseline Investigations 20
3.1 Process 20
3.2 Urban planning background 20
3.2.1 Planning strategies 20
3.2.2 Statutory Planning 21
3.3 Metro Quarter – Existing Conditions 22
3.4 Metro Quarter – Constraints and Opportunities (Visual Quality) 24
3.4.1 Opportunities 24
3.4.2 Constraints 25
4.0 Implementation Plan 26
4.1 The Metro Quarter – Vision Statement (Visual Quality) 26
4.2 Visual / Urban Quality Plan 26
4.2.1 Planning / Design Objectives 26
4.2.2 Regional views 27
4.2.3 Local Views 29
4.2.4 Heritage Conservation Areas 30
5.0 Visual Impacts Analysis 32
5.1 Viewpoint Analysis 32
5.2 Close Views 34
5.2.1 Visual environment 41
5.2.2 Capacity to absorb change 46
5.2.3 Amount of change resulting from the proposal 46
5.2.4 Verification Statement for photography and photomontages 46
5.3 Medium Distant Views from within the Waterloo Estate 55

5.3.1 Visual environment 61
5.3.2 Capacity to absorb change 61
5.3.3 Amount of change resulting from the proposal 61
5.4 Photomontages – Medium Distant Views outside the Waterloo Estate 63
5.4.1 Visual environment 71
5.4.2 Capacity to absorb change 71
5.4.3 Amount of change resulting from the proposal 73
5.5 Distant Views 77
5.5.2 Capacity to absorb change 79
5.5.3 Amount of change resulting from the proposal 79
5.6 Summary of assessment outcomes 80
5.7 Review of conclusions against relevant Court planning principles *(Rose Bay Marina Pty Ltd v Woollahra Council and Anor [2013] NSWLEC 1046)*82
5.8 Recommendations 84
6.0 Conclusion 85

1.0 Introduction

1.1 Purpose of this report

This report accompanies a concept State Significant Development Application (concept SSD Application) submitted to the Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The concept SSD Application is made under Section 4.22 of the EP&A Act.

This report should be read in conjunction with the Nominated State Significant Precinct (SSP) Study – Waterloo Metro Quarter, submitted to the Minister for Planning (the Minister) in July 2018. That study proposes new planning controls to facilitate the development proposed.

Sydney Metro is seeking to secure concept approval for over station development (OSD) above and adjacent to Waterloo Station including a podium and three taller buildings which include commercial, residential, and community land uses. The concept SSD Application seeks consent for a building envelope and use for residential, retail, commercial, entertainment, community and recreational purposes, maximum building height, maximum gross floor area (GFA), pedestrian and vehicular access, circulation arrangements and associated car parking and the strategies and design parameters for the future detailed design of development.

Sydney Metro proposes to procure the construction of the OSD as part of an integrated station development package, which would result in the combined delivery of the station, OSD and public domain improvements. The station and its public domain elements form part of a separate planning approval for Critical State Significant Infrastructure (CSSI) approved by DPE on 9 January 2017.

As the development is within a rail corridor, is associated with railway infrastructure and is for "commercial premises or residential accommodation" with a Capital Investment Value of more than $30 million, the project is identified as State Significant Development (SSD) pursuant to Schedule 1, 19(2)(a) of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP).

This report has been prepared to outline the visual impacts and specifically respond to the Secretary's Environmental Assessment Requirements (SEARs) issued for the concept SSD Application on 29th June 2018 which states that the Environmental Impact Statement (EIS) is to address the following requirements:

Reference	SEARs Requirement	Where Addressed in Report
SEAR No. 8	The EIS shall: • Address solar access, acoustic impacts, visual privacy, views and visual impacts, reflectivity,	Section 5

Reference	SEARs Requirement	Where Addressed in Report
	overshadowing and noise and vibration impacts to the surrounding area, including neighbouring properties and the public domain	
	• Provide a view analysis to and from the site from adjoining developments, key vantage points and streetscape locations including photomontages or perspectives of the proposed development. The view locations and methodology for the analysis must be prepared in consultation with the Department and the City of Sydney	Section 5

1.2 Overview of the Sydney Metro in its context

Sydney Metro is Australia's biggest public transport project. A new standalone metro railway system, this 21st century network will deliver 31 metro stations and 66km of new metro rail for Australia's biggest city — revolutionising the way Sydney travels. Services start in the first half of 2019 on Australia's first fully-automated railway.

Sydney Metro was identified in *Sydney's Rail Future*, as an integral component of the *NSW Long Term Transport Master Plan*, a plan to transform and modernise Sydney's rail network so it can grow with the city's population and meet the future needs of customers. In early 2018, *the Future Transport Strategy 2056* was released as an update to *the NSW Long Term Transport Master Plan* and *Sydney's Rail Future*. Sydney Metro City & Southwest is identified as a committed initiative in the *Future Transport Strategy 2056*.

Sydney Metro is comprised of three projects:

Sydney Metro Northwest — formerly the 36km North West Rail Link. This $8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Sydney Metro City & Southwest — a new 30km metro line extending the new metro network from the end of Sydney Metro Northwest at Chatswood, under Sydney Harbour, through the CBD and south west to Bankstown. It is due to open in 2024 with an ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro West – a new underground railway connecting the Parramatta and Sydney central business districts. This once-in-a-century infrastructure investment will double the rail capacity of the Parramatta to Sydney CBD corridor and will establish future capacity for Sydney's fast growing west. Sydney Metro West will serve five key precincts at Westmead, Parramatta, Sydney Olympic Park, The Bays and the Sydney CBD. The project will also

provide an interchange with the T1 Northern Line to allow faster connections for customers from the Central Coast and Sydney's north to Parramatta and the Sydney CBD.

Sydney's new metro, together with signalling and infrastructure upgrades across the existing Sydney suburban rail network, will increase the capacity of train services entering the Sydney CBD – from about 120 an hour currently to up to 200 services beyond 2024. That's an increase of up to 60 per cent capacity across the network to meet demand.

Figure 1 Sydney Metro alignment map

Sydney Metro City & Southwest includes the construction and operation of a new metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and on to Bankstown through the conversion of the existing line to metro standards.

The project also involves the delivery of six (6) new metro stations, including at Waterloo, together with new underground platforms at Central. Once completed, Sydney Metro will have the ultimate capacity for a train every two minutes through the CBD in each direction - a level of service never seen before in Sydney.

On 9 January 2017, the Minister approved the Sydney Metro City & Southwest - Chatswood to Sydenham application lodged by TfNSW as a CSSI project (reference SSI 15_7400).

The CSSI Approval includes all physical work required to construct the CSSI, including the demolition of existing buildings and structures on each site. Importantly, the CSSI Approval also includes provision for the construction of below and above ground structures and other components of future OSD (including building infrastructure and space for future lift cores, plant rooms, access, parking and building services, as relevant to each site). The rationale for this delivery approach, as identified within the CSSI application is to enable the OSDs to be more efficiently built and appropriately integrated into the metro station structure.

The EIS for the Chatswood to Sydenham alignment of the City & Southwest project identified that the OSD would be subject to a separate assessment process.

Since the CSSI Approval was issued, Sydney Metro has lodged four modification applications to amend the CSSI Approval as outlined below:

- Modification 1 – Victoria Cross and Artarmon Substation which involves relocation of the Victoria Cross northern services building from 194-196A Miller Street to 50 McLaren Street together with inclusion of a new station entrance at this location referred to as Victoria Cross North. The modification also involves the relocation of the substation at Artarmon from Butchers Lane to 98 – 104 Reserve Road. This modification application was approved on 18 October 2017.
- Modification 2 – Central Walk which involves additional works at Central Railway Station including construction of a new eastern concourse, a new eastern entry, and upgrades to suburban platforms. This modification application was approved on 21 December 2017.
- Modification 3 – Martin Place Station which involves changes to the Sydney Metro Martin Place Station to align with the Unsolicited Proposal by Macquarie Group Limited (Macquarie) for the development of the station precinct. The proposed modification involves a larger reconfigured station layout, provision of a new unpaid concourse link and retention of the existing MLC pedestrian link and works to connect into the Sydney Metro Martin Place Station. It is noted that if the Macquarie proposal does not proceed, the original station design remains approved. This modification application was approved on 22 March 2018.
- Modification 4 – Sydenham Station and Sydney Metro Trains Facility South which incorporated Sydenham Station and precinct works, the Sydney Metro Trains Facility South, works to Sydney Water's Sydenham Pit and Drainage Pumping Station and ancillary infrastructure and track and signalling works into the approved project. This modification application was approved on 13 December 2017.

The CSSI Approval as modified allows for all works to deliver Sydney Metro between Chatswood and Sydenham Stations and also includes upgrade of Sydenham Station.

The remainder of the City & Southwest alignment (Sydenham to Bankstown) proposes the conversion of the existing heavy rail line from west of Sydenham Station to Bankstown to metro standards. This part of the project, referred to as the Sydenham to Bankstown upgrade, is the subject of a separate CSSI Application (Application No. SSI 17_8256) for which an EIS was exhibited between September and November 2017. A Response to

Submissions and Preferred Infrastructure Report was submitted to DPE in June 2018 for further exhibition and assessment. This application is subject to assessment and determination by DPE, taking into consideration a further Response to Submissions Report which was submitted to DPE in September 2018.

1.3 Nominated State Significant Precinct - Waterloo

Following the decision to locate a metro station in Waterloo, the Minister determined that parts of Waterloo are of State planning significance which should be investigated for urban renewal through the SSP process. Study requirements for such investigations were issued by the Minister on 19 May 2017.

Investigation of the Precinct is being undertaken by UrbanGrowth NSW Development Corporation (UrbanGrowth NSW), in partnership with Sydney Metro and the Land and Housing Corporation (LAHC). The outcome of the SSP process will be new planning controls that will enable future development applications for renewal of the Precinct.

The Precinct includes two separate but contiguous and inter-related parts:

- The Waterloo Metro Quarter (the Metro Quarter)
- The Waterloo Estate (the Estate)

A separate SSP Study for the Metro Quarter was lodged in July 2018 in advance of the SSP Study for the Estate to provide a planning framework for the construction of OSD within the Metro Quarter. The staged submission of the Metro Quarter SSP Study also facilitates the proposed development to be delivered concurrently with the metro station, as an integrated station development.

As this concept SSD Application relies upon the planning framework proposed in the Metro Quarter SSP Study, it is anticipated that the SSP Study and the EIS for the SSD Application will be exhibited concurrently.

1.4 Planning relationship between Waterloo Station and the OSD

While Waterloo Station and the OSD will form an integrated station development, the planning pathways defined under the EP&A Act require separate approval for each component of the development. In this regard, the approved station works (CSSI Approval) are subject to the provisions of Part 5.1 of the EP&A Act (now referred to as Division 5.2) and the OSD component is subject to the provisions of Part 4 of the EP&A Act.

For clarity, the approved station works under the CSSI Approval included the construction of below and above ground structures necessary for delivering the station and also enabling construction of the integrated OSD. This includes but is not limited to:

- demolition of existing development
- excavation
- integrated station and OSD structure (including concourse and platforms)
- lobbies

- retail spaces within the station building
- public domain improvements associated with the station
- access arrangements including vertical transport such as escalators and lifts
- space provisioning and service elements necessary to enable the future development of the OSD, such as lift cores, plant rooms, access, parking, retail, utilities connections and building services.

The vertical extent of the approved station works above ground level is defined by the 'transfer level' level (which for Waterloo is defined by approximately RL 33.1 over the northern station box and RL 35.1 over the southern station box), above which would sit the OSD. An example of this delineation is illustrated in **Figure 2**.

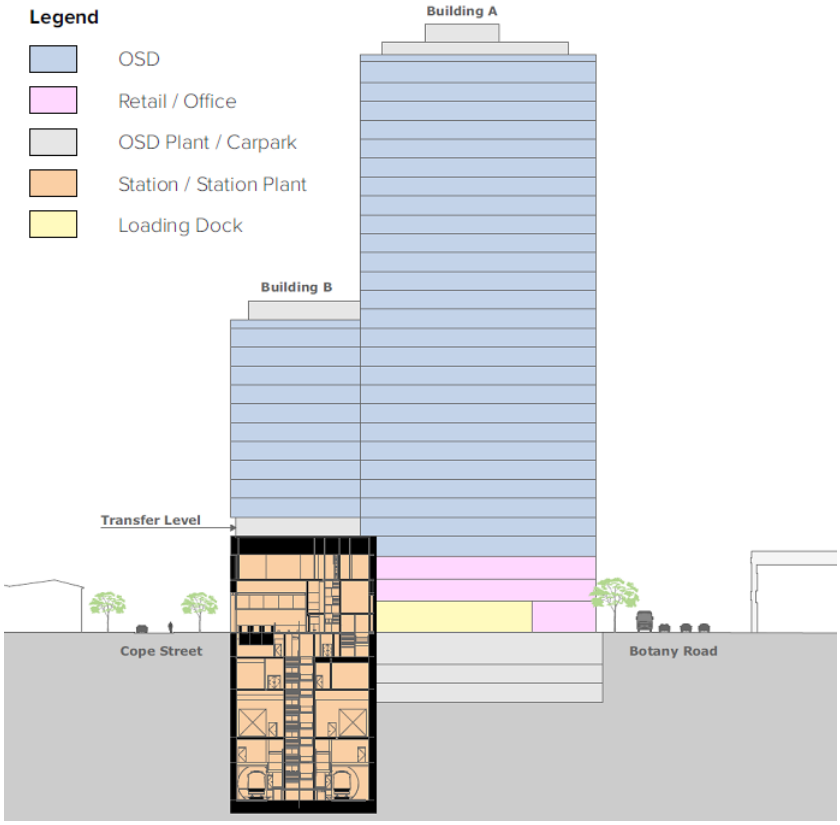


Figure 2 Delineation between the metro station and OSD

It is noted that the structural and service requirements and space provisioning to support OSD vary from station to station. For example, based on the current level of design, Waterloo Station is not expected to provide for OSD lobbies, end of trip facilities and plant rooms. However, the detailed design may be amended to incorporate these elements as part of the integrated station development.

The CSSI Approval also establishes the general concept for the ground plane of Waterloo Station including access strategies for commuters, pedestrians and workers. In this regard, the main pedestrian access to the station would be via an entry located at the corner of Raglan and Cope Streets. The station design has continued to be developed having regard

to its integration with the Metro Quarter OSD, and as a result, a second entrance to the station is to be provided from a proposed public plaza adjacent to Cope Street. Retail uses (approved under the CSSI Approval) would be located on the ground floor of the station development along the Cope Street frontage of the site.

Since the issue of the CSSI Approval, Sydney Metro has undertaken design work to determine the technical requirements for the structural integration of the OSD with the station. This level of design work, together with the planning and design undertaken for the remainder of the Metro Quarter has informed the concept proposal for the OSD. It is noted that ongoing design development of the works to be delivered under the CSSI Approval would continue with a view to developing an Interchange Access Plan (IAP) and Station Design Precinct Plan (SDPP) for Waterloo Station to satisfy Conditions E92 and E101 of the CSSI Approval. The detailed design for the Metro Quarter would continue to evolve having regard to the IAP and SDPP.

Public domain improvement works immediately adjacent to Waterloo Station would be delivered as part of the CSSI Approval to support pedestrian movements between transport modes (including to new and relocated bus stops, bike parking on Cope Street, and taxi and kiss-and-ride bays on Cope Street), while other public domain works within the Metro Quarter are proposed as part of the OSD. Final details of public domain works for the OSD will be provided with the detailed SSD Application(s) following finalisation of the SDPP and IAP for the CSSI Approval.

1.5 The site

1.5.1 Location

The site is located within the City of Sydney Local Government Area (LGA).

The Metro Quarter comprises land to the west of Cope Street, east of Botany Road, south of Raglan Street and north of Wellington Street. The heritage listed Waterloo Congregational Church located at 103–105 Botany Road is within this block but is not part of the site.

The site has an approximate area of 1.287 hectares (refer to **Figure 3**).

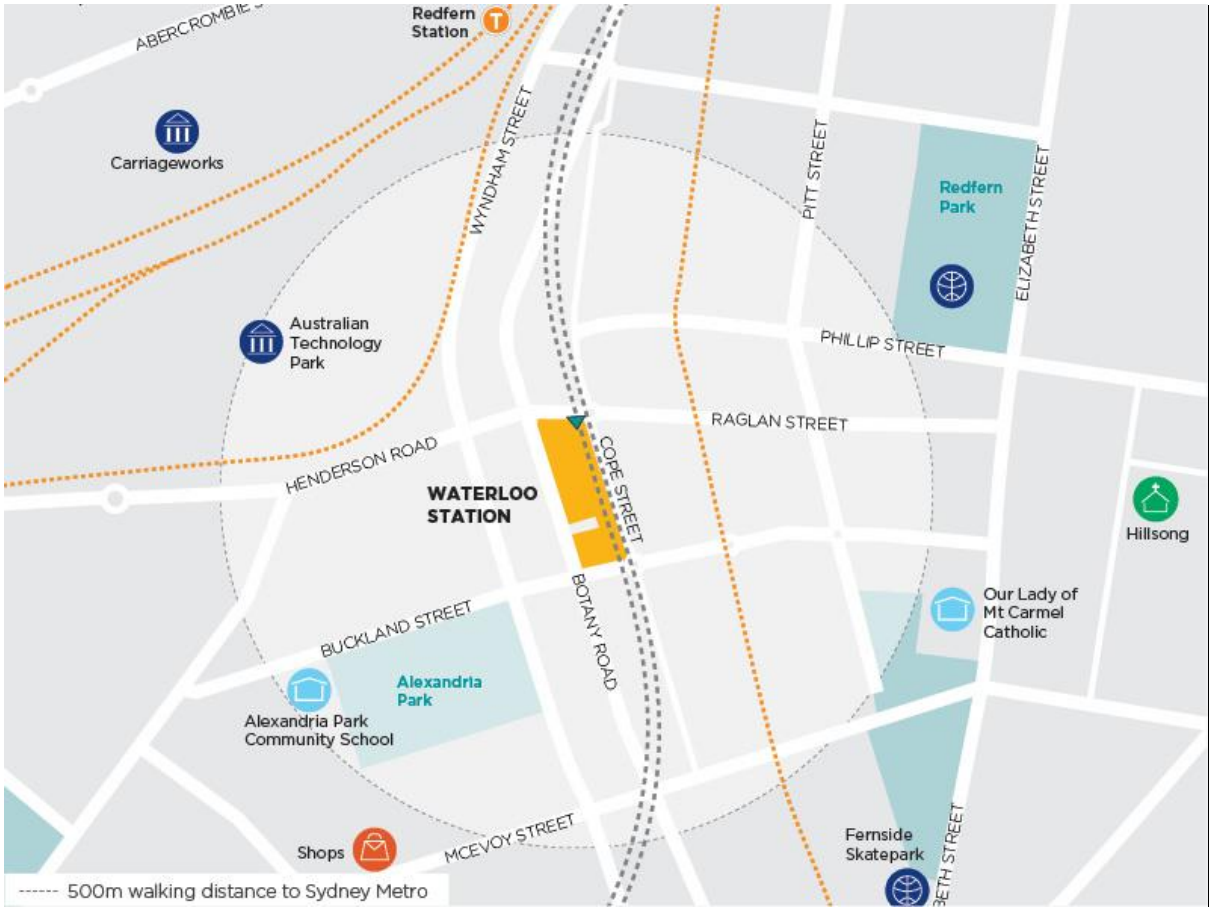


Figure 3 Waterloo Station location plan

1.5.2 Site context

The Metro Quarter is located in Redfern Street Village (see Figure 4) in the City of Sydney LGA approximately 3.3 kilometres south of Sydney CBD, 1 kilometre north of Green Square and less than 1 kilometre south of Redfern Station.

Directly east is Waterloo Estate, which is owned by the NSW Government and is under the management of NSW LAHC. The Waterloo Estate comprises 2,012 social housing dwellings and a small number of private dwellings in medium and high density forms, ranging from single storey attached dwellings to apartment buildings of up to thirty storeys.

The Metro Quarter is less than 1 kilometre south-east of the Australian Technology Park (ATP), a technology micro-cluster that currently contains around 3,000 – 3,500 workers with a range of businesses in technology and creative industries; and a start-up/business incubator hub. It is set to grow into a business park that will soon accommodate new premises currently under construction (i.e. Commonwealth Bank Australia (CBA) has committed to two major office towers).

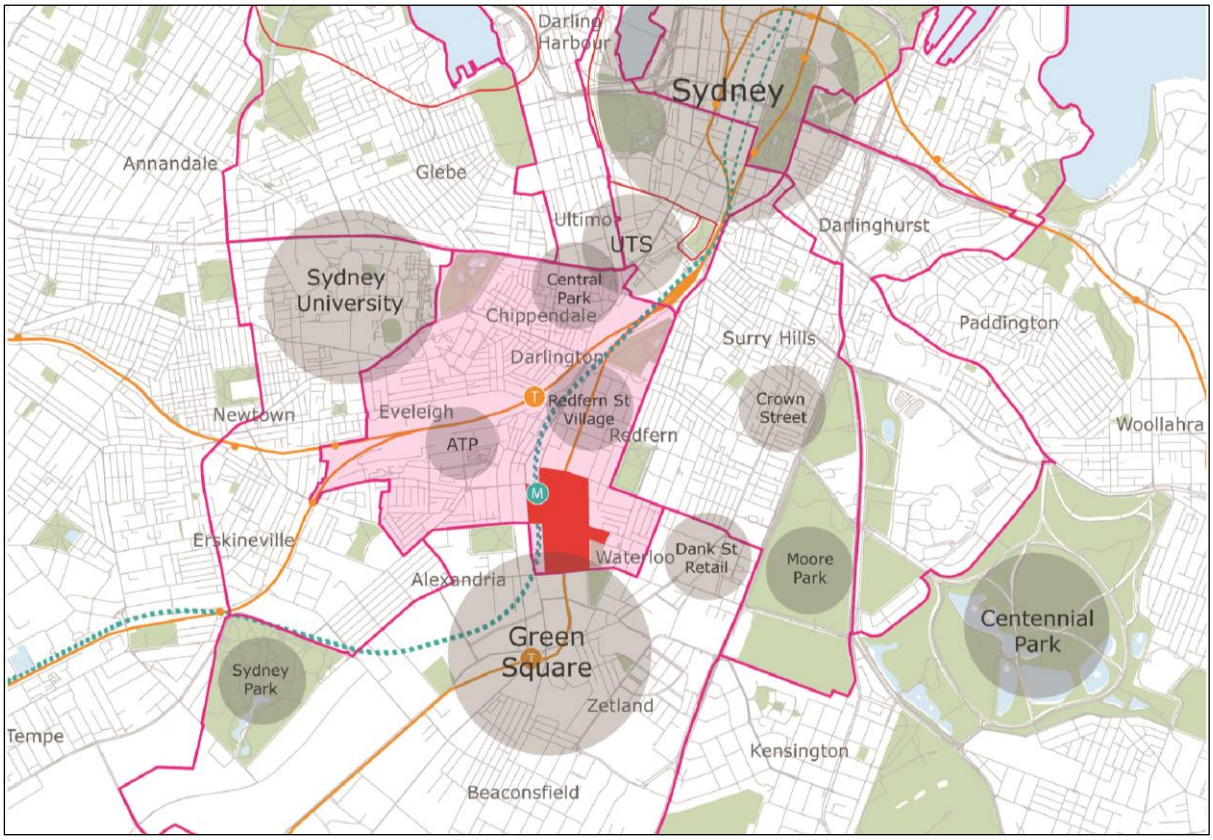


Figure 4 Location and site plan of the Waterloo State Significant Precinct (in red) and Redfern Street Village (in pink)

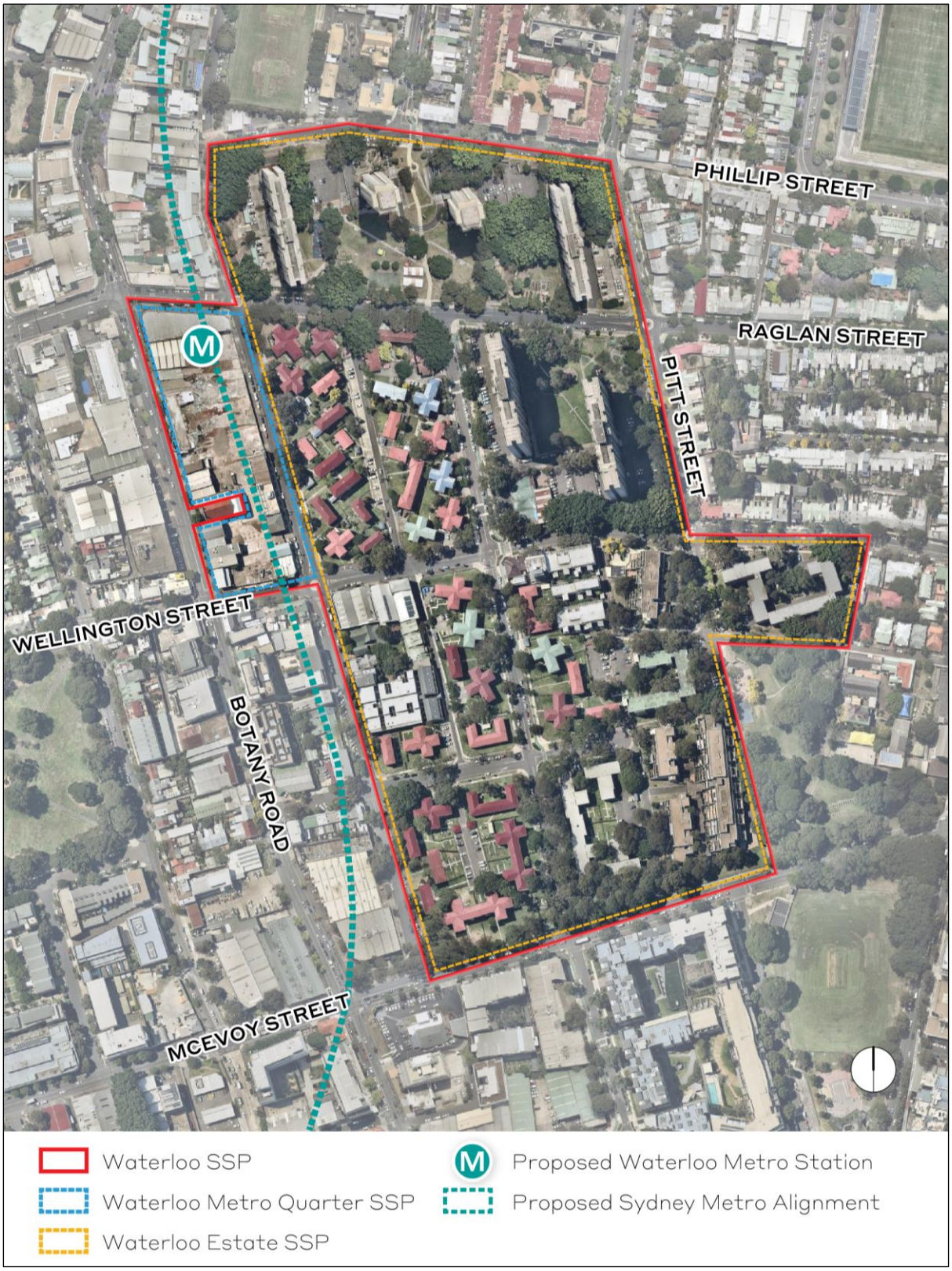


Figure 5 Nominated State Significant Precinct - Waterloo

The site comprises the following properties:

- 136B Raglan Street — Lot 4 DP 215751
- 59 Botany Road — Lot 5 DP 215751
- 65 Botany Road — Lot 1 DP814205
- 67 Botany Road — Lot 1 DP228641
- 124-128 Cope Street — Lot 2 DP228641
- 69-83 Botany Road — SP75492
- 130-134 Cope Street — Lot 12 DP399757
- 136-144 Cope Street — Lots A-E DP108312
- 85 Botany Road — Lot 1 DP27454
- 87 Botany Road — Lot 2 DP27454
- 89-91 Botany Road — Lot 1 DP996765
- 93-101 Botany Road — Lot 1 DP433969 & Lot 1 DP738891
- 156-160 Cope Street — Lot 31 DP805384
- 107-117A Botany Road — Lot 32 DP805384 & Lot A DP408116
- 119-121 Botany Road — Lot 1 DP205942 & Lot 1 DP436831
- 170-174 Cope Street — Lot 2 DP205942

The buildings and structures on the site are now demolished in accordance with the CSSI Approval with the exception of one building which is being used to support construction.

1.6 Overview of the proposed development

This concept SSD Application follows the submission of a SSP Study which supports a proposal to amend existing controls to facilitate the proposed development. The concept SSD Application will in turn comprises the first stage of seeking SSD development consent for the Metro Quarter OSD project. It will be followed by a future detailed SSD Application(s) for the design and construction of the OSD built form.

This concept SSD Application seeks approval for the planning and development framework and strategies to inform the future detailed design of the OSD. It specifically seeks approval for:

- maximum building envelopes, including maximum building heights, street-wall heights and ground and upper level setbacks.
- a maximum gross floor area (GFA) of 68,750 square metres, comprising:
  - approximately 56,200 square metres GFA of residential accommodation, providing for approximately 700 dwellings, including 5 to 10 percent affordable housing and 70 social housing dwellings.
  - approximately 3,905 square metres GFA of retail premises and entertainment facilities.

  - approximately 8,645 square metres GFA for business and commercial premises and community, health service and recreational facilities (indoor), including at least 2,000 square metres of floor space for community uses.

- a three storey podium and a free standing building located within a public plaza, accommodating non-residential land uses.
- residential uses above podium level in various building forms including three buildings of 23, 25 and 29 storeys (Relative Level (RL) 96.9, 104.2 and 116.9 metres Australian Height Datum (AHD) respectively).
- use of OSD space provisioning within the footprint of the CSSI Approval.
- public domain works, including open spaces, through-site links, footpaths, provision for cycle facilities and enhanced pedestrian crossings and roads.
- car parking for up to 427 vehicles.
- loading, vehicular and pedestrian access arrangements.
- strategies for utilities and services provision.
- strategies for managing stormwater and drainage.
- a strategy for the achievement of ecologically sustainable development.
- a public art strategy.
- provision for future signage zones
- a design excellence framework.
- the future subdivision of parts of the OSD footprint (if required).

It is noted that the Sydney Metro site comprises GFA of approximately 8,415 square metres, approved under CSSI Approval. The total GFA for the integrated station development, including the station GFA is approximately 77,165 square metres, which is equivalent to an FSR of approximately 6:1.

Key parameters of the concept proposal based on the current level of design development are indicated at **Figure 6** and **Figure 7**.

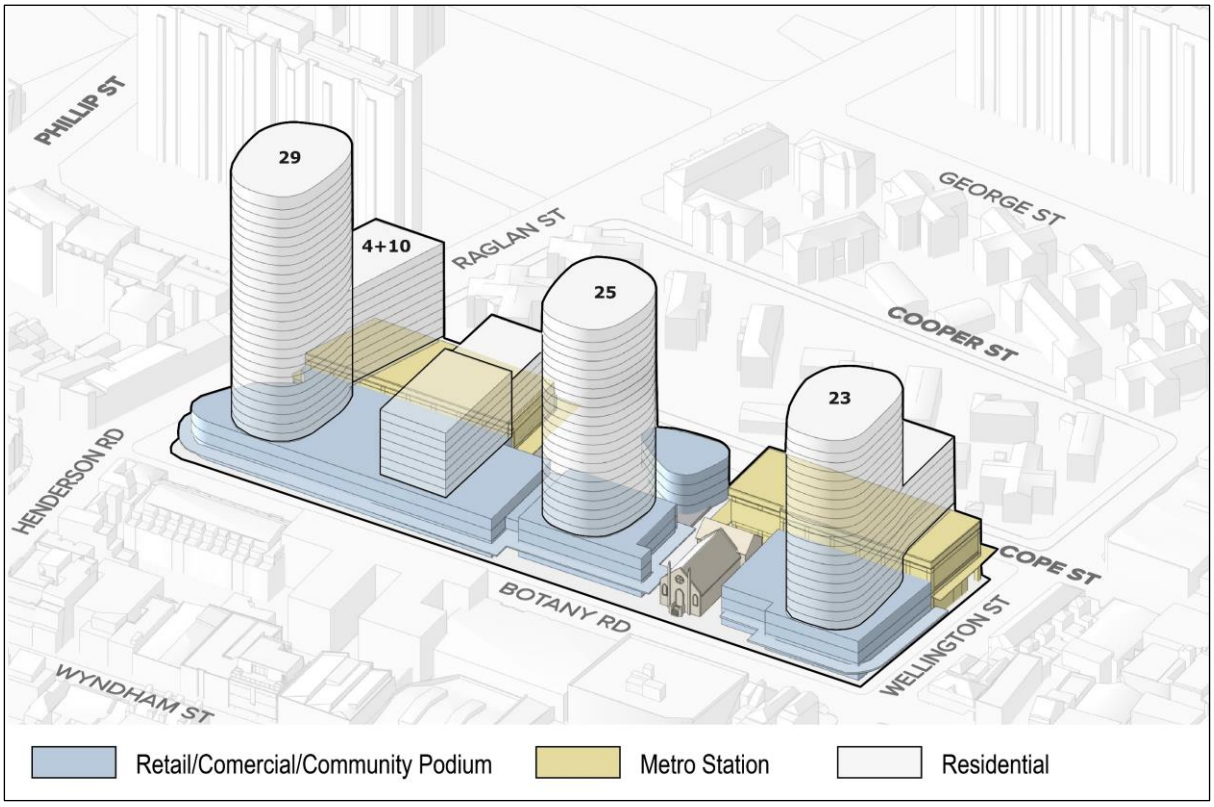


Figure 6 Proposed massing, viewed from the west

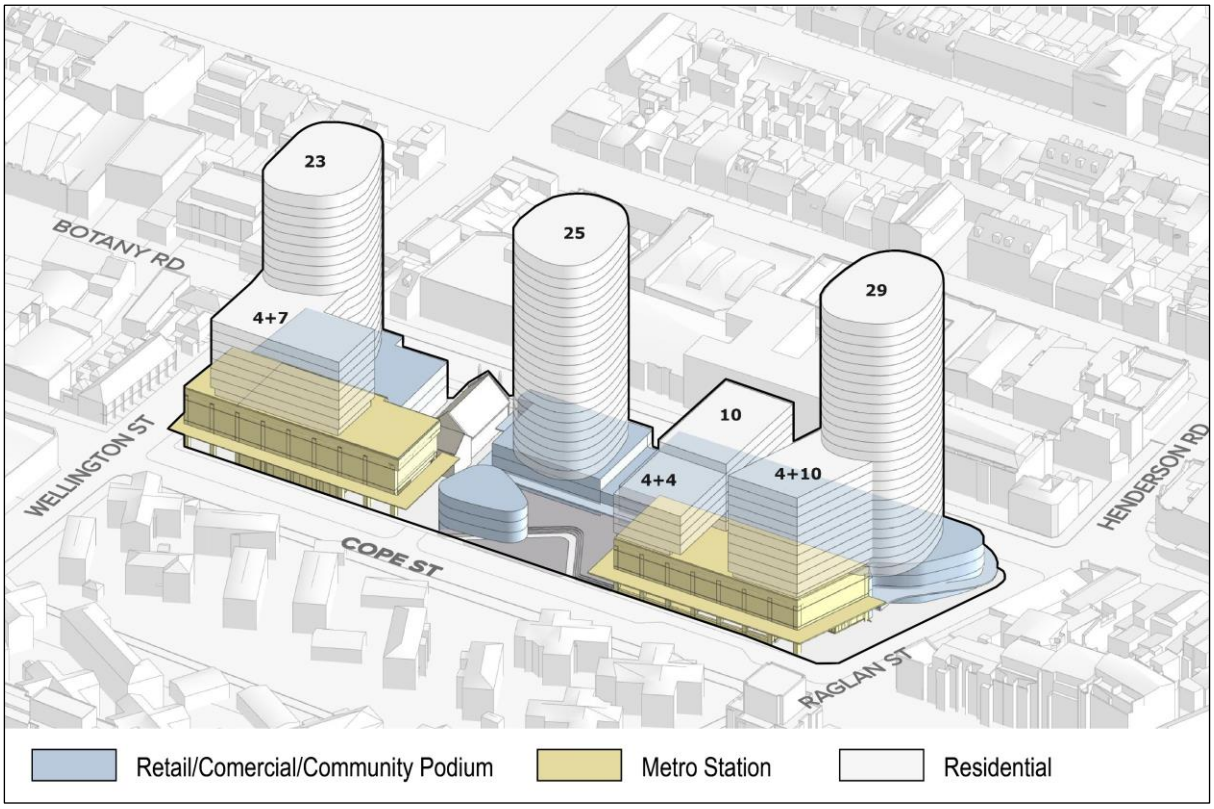


Figure 7 Proposed massing, viewed from the east

The proposal is a significant opportunity to contribute to the urban renewal process for the Waterloo SSP. The objective to deliver the Metro Quarter project as soon as reasonably possible after completion of the Sydney Metro works (earmarked to open 2024) would ensure buildings within the Metro Quarter are occupied to support maximum patronage of the proposed metro station.

The Metro Quarter would contain a mix of uses including residential, commercial, retail, community facilities and services and cultural opportunities sufficient for daily life to be provided for within the wider neighbourhood and to support the activation of the precinct. This would help make Waterloo one of the most connected and attractive inner-city places to live, work and visit.

2.0 Scope of assessment

The visual impact assessment prepared to satisfy the SEARs has been carried out on conventional lines for visual impact assessment via a combination of electronic modelling and ground truthing and has included:

- Identification of the critical visual attributes of the environs of the Metro Quarter that contribute to the visual character and quality of the locality. This work has been done with reference to relevant strategic planning documents and by visits to and photographic survey of the locality.
- Identification of the areas within the locality from which the developed site would potentially be visible – the site's visual catchment.
- Identification of locations within the visual catchment that are considered representative of views towards the site (these locations have been identified in consultation with the City of Sydney planning and urban design teams and have been selected with the objective of assessing impacts on views to the site from the public domain).
- Testing of impacts on the selected view locations via professional photography and preparation of photo accurate photomontages consistent with Land and Environment Court practice guidelines for visual impact assessment.

The critical visual attributes of the Metro Quarter that contribute to its visual character and quality are included in Section 5.

The study has been an iterative process through the development of the concept plan for which consent is now being sought. The study has been competed using the following process:

2.1 Existing Conditions

- Review all background documentation, strategies and plans to understand context and key outcomes.
- Undertake a site visit and prepare a photographic record.
- Identify visual catchment areas and existing conditions in terms of topography / terrain modelling, and insert existing buildings and landscapes into the model to provide an accurate assessment of existing conditions
- Assess the visual character of the locality with regard to:
  - Existing built form
  - Open space
  - Existing tree stock
  - Building to open space relationship
  - Streetscape
  - View lines, both internal and to / from the study area
  - Permissible future development in the vicinity, which will impact on local visual quality.

- Identify elements of the current visual character that should be retained in the development along with elements that are detrimental to a high visual quality or could be changed without negative impact.
- Prepare a succinct description of the local visual character with the aid of maps, and aerial and ground level photography. The description, among other things, identifies elements within the character that pose challenges and/or opportunities for its future development.

2.2 Implementation Plan

Following the work undertaken to establish the site context, visual quality objectives were developed to guide the planning framework for the future development of the site. The objectives articulate specific components of the visual quality of the precinct that are to be preserved and enhanced in its development. These were developed as part of the SSP Study process.

2.3 Visual Impact Assessment

Identify key viewpoints towards the site within the greater Waterloo Precinct and surrounding areas. This work has been carried out with aid of viewshed analysis using GIS data. Critical views within the view shed of the precinct have been identified through ground truthing with the aid of photography. Views within and towards the site have been evaluated for their perceptual (scenic) quality. Views that have cultural, historic or community values have also been identified.

Key viewpoints have been identified in consultation with officers of the City of Sydney (CoS). The methodology adopted for the assessment, also accepted by CoS, involved the following steps:

- Take professional quality photographs from each of the identified key viewpoints and certify the location of each photograph using survey technology.
- Liaise with Urban Designers to integrate each photo into the 3D model to generate accurate photomontages.
- Prepare a Verification Statement as to the accuracy of the photomontages in accordance with the relevant Land and Environment Court Planning Principles.
- Carry out and document a detailed visual impact assessment of the concept proposal.

The visual impact assessment explicitly addresses the relevant sections of SEAR No. 8, included below:

8. Amenity

The EIS shall:

- *address solar access, acoustic impacts, visual privacy, views and visual impacts, reflectivity, overshadowing and noise and vibration impacts to the surrounding area, including neighbouring properties and the public domain*
- *provide a view analysis to and from the site from adjoining developments, key vantage points and streetscape locations including photomontages or perspectives of the*

proposed development. The view locations and methodology for the analysis must be prepared in consultation with the Department and the City of Sydney.

The assessment of impacts on views from the public domain has been informed by relevant planning principles for assessment of such impacts set by the Land and Environment Court of NSW, specifically in *Rose Bay Marina Pty Ltd v Woollahra Council and Anor [2013] NSWLEC 1046.* A summary of the impacts against these principles is provided in the conclusion to the report.

3.0 Baseline Investigations

3.1 Process

Baseline investigations for visual quality have been derived via examination of the combined Waterloo Estate and Metro Quarter. The baseline investigations have been aimed at identifying issues, opportunities and constraints with respect to visual quality to be explored through the master planning process for the Metro Quarter.

3.2 Urban planning background

3.2.1 Planning strategies

The following planning strategies are of relevance to visual quality for the proposed Metro Quarter.

State Government

A Plan for Growing Sydney, NSW Government, December 2014

With regard to visual quality, the plan aims to create a city connected with green spaces and high conservation value land by investing in green corridors and protecting native vegetation. Direction 3.2 from the plan is:

"Create a network of interlinked, multipurpose open and green spaces across Sydney"

This Direction has its basis in provision of open space and protection of ecological values in the City, but it is also critical to protection of visual quality and character.

Eastern City District Plan, Greater Sydney Commission, 2018

The Eastern City District Plan sets out the priorities and actions for the 'Eastern Harbour City' of Sydney, including the LGAs of Bayside, Burwood, Canada Bay, CoS, Inner West, Randwick, Strathfield, Waverley and Woollahra. The Plan has been developed by the Greater Sydney Commission.

The Plan builds on the concept of the Sydney Green Grid, regarding it as a major legacy for future generations. Planning Priority E17 of the Plan is "increasing urban tree canopy cover and delivering Green Grid connections".

Relevant to this assessment, the Plan specifies the important role that street trees play in creating public spaces, including enhancement of the visual aesthetic of the urban landscape.

Better Placed – A Design led Approach: Developing an Architecture and Design Policy for NSW, NSW Government Architect's Office

The Policy sets out the NSW Government's position on design in the urban environment. It establishes objectives and expectations in relation to design and creating good places, provides principles and direction to achieve these, and outlines a framework for examining places and reviewing proposals from a design perspective.

The seven principles outlined in the policy aim to capture the key considerations and measures relating to the built environment, and address the broad range of issues, considerations and parameters that should be taken into account. They include, amongst others, ensuring design excellence is pursued to achieve the visual quality that allows high quality development to be achieved. Retaining visual quality and durability is noted as essential to creating spaces that are visually appealing and engaging.

Draft Redfern Waterloo South Eveleigh Urban Design Study, NSW Government Architect, 17.04.2014

This report analyses the planning and urban design issues for the potential urban renewal of Redfern, Waterloo and South Eveleigh in order to develop a plan to guide the renewal of the sites and inform the preparation of planning controls.

The Waterloo Precinct, as described in the report, forms the subject site for this project.

Of relevance to this assessment, the Structure Plan included in the Study proposes that tall buildings should be located so they are offset from important street level view lines.

Redfern / Waterloo Urban Renewal Study, Sydney Metropolitan Development Authority, February 2014;

This Study focuses on social housing sites for renewal and new planning controls across the same three precincts as the Draft Redfern / Waterloo / South Eveleigh Urban Design Study.

An anticipated outcome of the proposed urban renewal is the provision of building forms that ensure high quality visual amenity through tall, slim towers, and variation in street wall heights and setbacks to create diversity and visual interest in streetscapes.

Local Government

Open Space, Sports and Recreation Needs Study 2016, City of Sydney, November 2016;

The study identifies the quality and quantity of the existing open space resource within the City, describes the specific needs for recreation and open space in the developing and growing city, provides high level strategic information on how the identified needs can be met, including specific forms of open space that will be in demand in the future city and describes a program of future works for new parks and renewal of existing parks.

With regard to aesthetics and visual character, the Study identifies visual quality as one priority for open space development. Of relevance to the Waterloo Precinct, connected open space networks are identified as means of enhancing access to other parks and community facilities and improving visual amenity via view corridors. Small lineal open spaces are identified as having primary functions as visual amenity or means of access rather than as destinations for recreation.

3.2.2 Statutory Planning

A review of the statutory planning controls that apply to the Metro Quarter has been carried out in order to identify controls of relevance to visual / landscape quality. The relevant controls are:

City of Sydney Local Environmental Plan, 2012 (LEP)

The land that incorporates the Metro Quarter is currently zoned B4 – Mixed Use under the LEP.

Objective (b) under Clause 5.10 (1) of SLEP 2012 requires development to "*conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views.*"

City of Sydney Development Control Plan, 2012 (DCP)

The DCP also contains no specific controls relevant to visual quality or scenic protection.

South Sydney Development Control Plan, 1997 – Urban Design

The former South Sydney City Council DCP includes specific controls and guidelines for urban design within the former LGA, which incorporates the Metro Quarter site. The DCP includes a series of urban design principles, one of which has some relevance to protection of visual quality:

Urban Design Principle 1 – Reinforce and protect the City's urban form.

The principle includes the following performance based controls of relevance to visual quality:

- *Maintain vistas along streets to buildings and places of heritage, architectural or landscape significance.*
- *Reinstate and enhance existing vistas where possible.*
- *Enhance the City skyline (silhouette).*

3.3 Metro Quarter – Existing Conditions

At the time of preparation of this report the majority of existing buildings on the Metro Quarter site have been demolished in accordance with the CSSI Approval. A remnant commercial building on the corner of Wellington Street and Botany Road has been retained for use as a construction site office, however this building will also be demolished as part of the CSSI Approval.

Prior to demolition, the visual character of the Metro Quarter was typical of this part of Botany Road, consisting of remnant commercial offices / showrooms fronting Botany Road on the western boundary and warehouse / light industrial premises fronting Cope Street to the east. One small block of residential apartments with retail at ground level addressed Botany Road as did the local heritage listed Waterloo Congregational Church (the latter retained as it does not form part of the CSSI Approval). The quality of the visual environment of the Metro Quarter was low with many of the existing premises being vacant. There was little or no incentive for streetscape pedestrian activity and the area appeared in need of renewal.

Figure 8 View facing north on Cope Street between Raglan Street & Wellington Street (prior to demolition)

Figure 9 View facing north from corner Wellington Street & Botany Road (prior to demolition)

Figure 10 View facing south from corner Raglan Street and Cope Street (prior to demolition)

Figure 11 View of heritage church on Botany Road (prior to demolition)

Figure 12 View facing north near corner Botany Road and Henderson Road (prior to demolition)

Figure 13 View facing south on Botany Road near heritage church (prior to demolition)

Figure 14 View facing south on Botany Road (prior to demolition)

3.4 Metro Quarter – Constraints and Opportunities (Visual Quality)

The Metro Quarter presents a good opportunity for urban renewal of this part of Botany Road which does not currently demonstrate high levels of visual amenity. Design decisions about the height and architectural form of the proposed new buildings need to account for how they will affect local and regional views. Critical views identified in the report include views to the city from Sydney Park, and views to the Waterloo Estate from Redfern Park and its neighbourhood, Alexandria Park and its neighbourhood, and Waterloo Park and its neighbourhood.

Maps showing the identified critical viewpoints can be found at **Figures 16** and **17**.

Based on the identified need to protect the quality of these views, constraints and opportunities with respect to visual quality have been identified in the *Waterloo State Significant Precinct Study – Metro Quarter Visual Impact Study* (Cardno 14 September 2018)

3.4.1 Opportunities

Essentially the opportunities provided by the site with respect to visual quality are:

- Creation of a new urban centre around a regional transport node. The development of the site provides a unique opportunity to develop a sense of place in this part of Waterloo through a new centre for community, residential and commercial activity.
- The introduction of towers to act as markers that will position the Metro Quarter and enhance its legibility a new urban centre in the regional landscape.
- Replacement of streetscapes of depleted visual quality and amenity with a contemporary urban form incorporating a high quality ground plane that is conducive to street level pedestrian activity.
- Enhancement of the visibility and setting of the locally heritage listed Waterloo Congregational Church and its curtilage.
- Opening up of view corridors between Botany Road and the Waterloo Estate as a positive measure in advance of its upcoming redevelopment.

3.4.2 Constraints

Development of the site would need to be carried out with due consideration to:

- Building bulk and scale and its potential impacts on the streetscape visual experience. Street level quality needs to be maintained. An open, tree dominated character at the street should be a contributing component of the future character of the developed Metro Quarter.
- Impacts on identified local / regional significant views and view corridors with particular regard to height, bulk and scale and changes to the character of these views.
- Impacts on views towards / from local heritage items and heritage conservation areas (HCAs).

4.0 Implementation Plan

4.1 The Metro Quarter – Vision Statement (Visual Quality)

The SSP Visual Impact Assessment (VIA) included a vision statement aimed at protection, improvement and enhancement of the visual quality of the Metro Quarter and its locality. The agreed vision statement, quoted below, has been used as a basis for assessment of the performance of the proposal with respect to local and regional visual impacts.

The Metro Quarter urban renewal will contribute to a high quality local and regional visual environment by:

- *Incorporating built form, architectural design and finishes that respect and respond appropriately to local and regional visual character.*
- *Enhancing the visual quality of the ground plane within the site and in its immediate vicinity.*
- *Creating visual connections between Botany Road and the Waterloo Estate.*
- *Respecting and enhancing the visual values of heritage items and conservation areas within and in the locality of the site.*

4.2 Visual / Urban Quality Plan

4.2.1 Planning / Design Objectives

The SSP VIA also included objectives to guide the development of the Metro Quarter to produce a form consistent with the visual quality vision statement. They are:

- The redevelopment of the site is to be a catalyst for major improvement to the visual quality of Botany Road. The redevelopment is to set a standard for future urban renewal of the Botany Road public domain incorporating generous pavement widths with allowance for boulevard scale street trees well separated from vehicular carriageways.
- Ensure that the built form of the new development responds appropriately to its local and regional context with particular regard to:
  - Close views from surrounding and nearby suburban streets;
  - Views from significant local open space (notably Waterloo Park, Alexandria Park and Redfern Park); and
  - Regional views including from Sydney Park.
- Enhance the heritage values of the site and its locality. Specifically, ensure that the redevelopment retains, protects and enhances the visibility of the Waterloo Congregational Church and reinforces its visual presence in the Botany Road streetscape. In addition, ensure that the development does not impact negatively on the heritage values of local listed HCAs.
- Develop and enhance at least one cross site visual link between Botany Road and the Waterloo Estate.
- Ensure that taller buildings are slender in form and well separated in skyline views so that a high percentage of sky remains visible between the built elements.

4.2.2 Regional views

A GIS based generation of a visual catchment for the Waterloo Estate has been prepared, incorporating its existing residential towers, within a 2 kilometres radius (Figure 16). This diagram provides an indication of the visibility of the existing buildings within the Waterloo Estate which informs the likely extent of the visual catchment of the developed Metro Quarter.

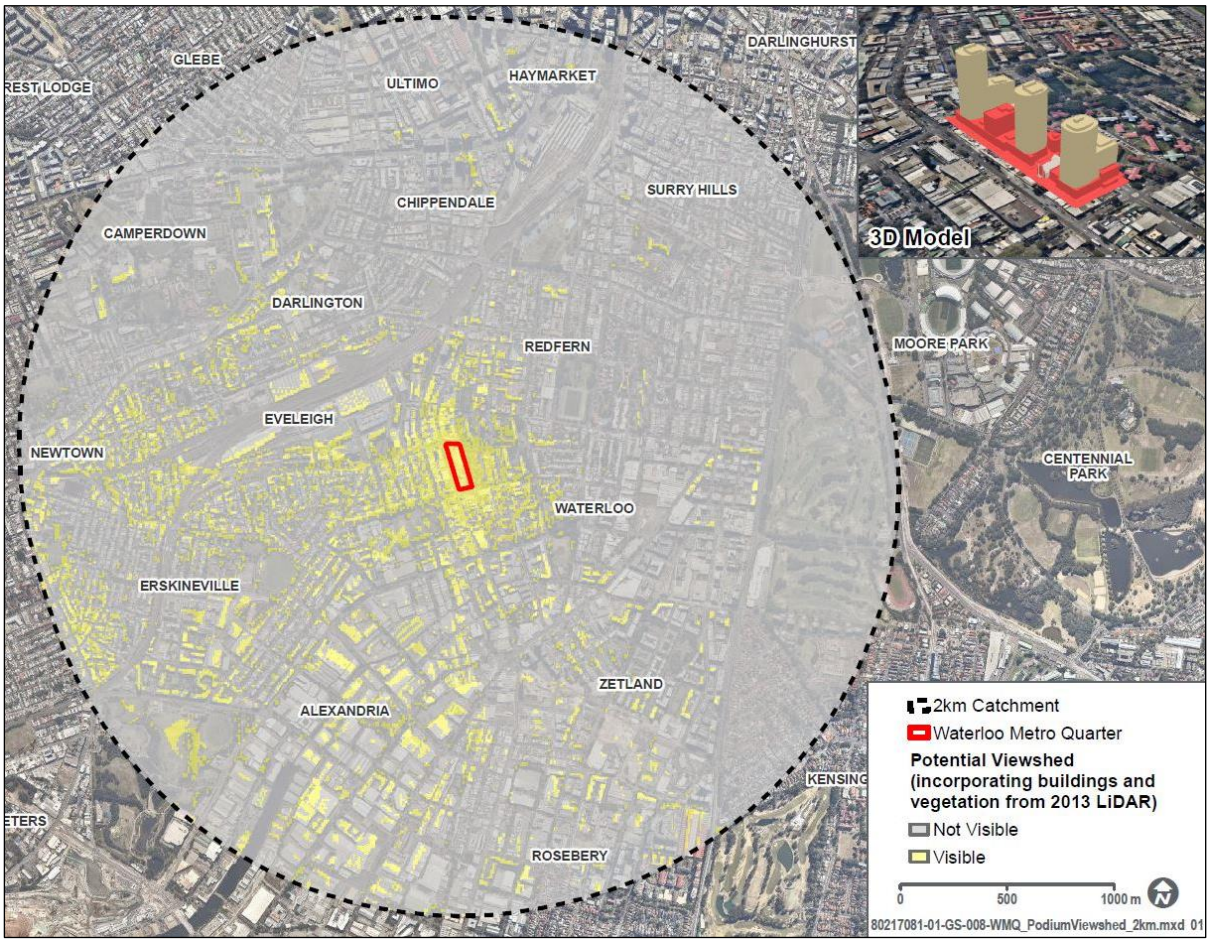


Figure 15 – Catchment Plan

The visual catchment diagram indicates that as an obvious function of their height, the existing buildings on the Waterloo Estate are likely to be visible from broad areas within the visual catchment. Notwithstanding this, a representative sample of regional viewpoints within the catchment was selected for the Metro Quarter proposal in consultation with CoS on the following basis:

- They are from broad open public places where it would be expected that views and visual quality would be highly valued by visitors.
- They include views towards the site that would be representative of the types of views that would be available from private places in the same vicinity.

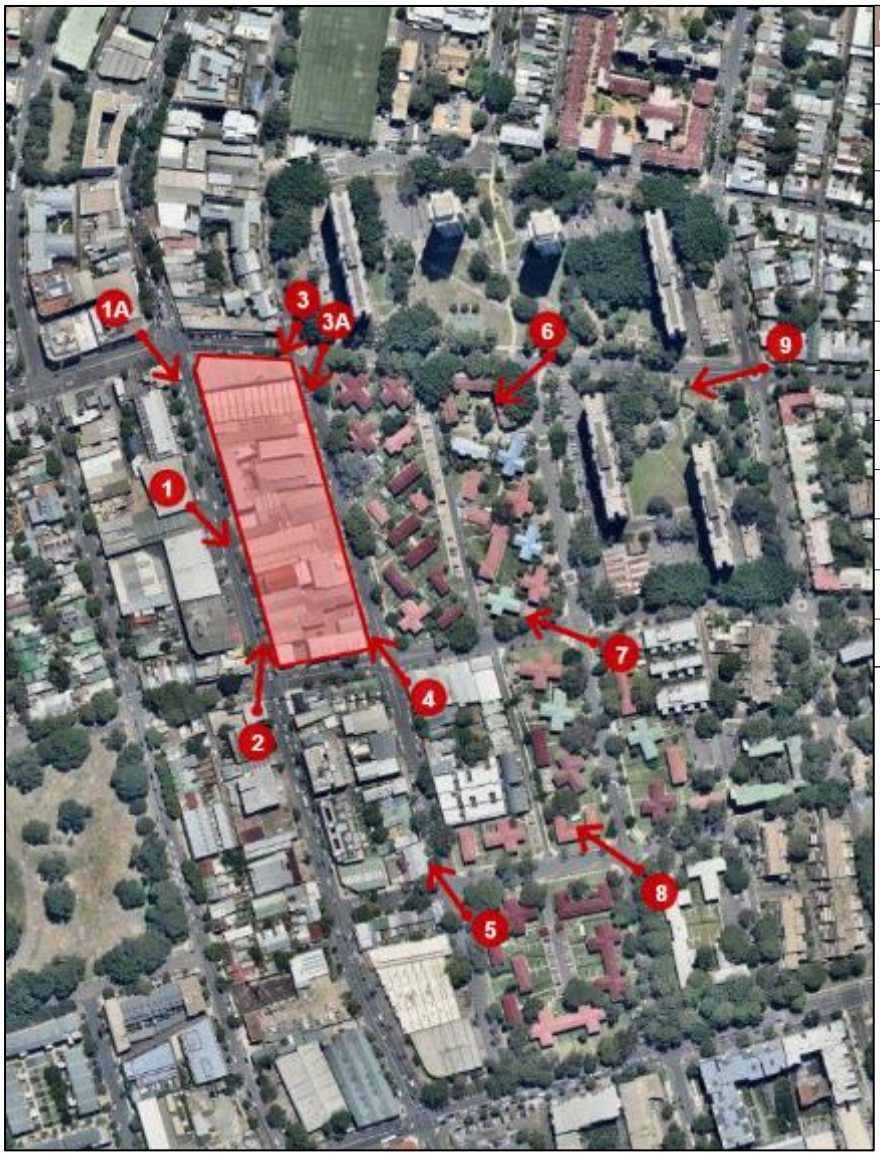
The agreed regional views are indicated at **Figure 16**.

Figure 16 Regional Views external to the Waterloo Precinct

Key	Viewpoint
	Waterloo Estate
	Waterloo Metro Quarter
A	Redfern Oval (adjacent to north eastern edge of oval)
B	Redfern Oval (south western edge of oval)
C	Waterloo Oval
D	Alexandria Park (south western corner of park)
D1	Alexandria Park (western side of playing fields)
E	Sydney Park (hill top)
F	Hollis Park, Erskineville
G	Henderson Road / Gerard Street (view from the carriageway)
H	Alexandria Park (north eastern edge)
I	Redfern Park (north eastern edge)

4.2.3 Local Views

Local viewpoints were selected from within the greater Waterloo Precinct and along Botany Road in order to give a good representation of views to the Metro Quarter from local streets and other public places. Local views were also selected in consultation with CoS.



Key	Viewpoint
	Waterloo Metro Quarter
1	Botany Road near intersection with Henderson Rd and Raglan St facing south-east
1A	Corner Botany Rd and Raglan St facing south-west
2	Corner Botany Rd and Wellington St facing north
3	Corner Cope St and Raglan St facing south
3A	Corner Cope St and Raglan St facing south
4	Corner Cope St and Wellington St facing north-west
5	Corner Cope St and John St facing north-west
6	Corner George St and Raglan St facing south-west
7	Corner George St and Wellington St facing north-west
8	Corner George St and John St facing north-west
9	Corner Pitt St and Raglan St facing south-west

Figure 17 Critical Viewpoints (Local)

4.2.4 Heritage Conservation Areas

The Study Requirements that were issued for the SSP Study required the visual study to include, among other things, an assessment of the impacts of the proposal on the visual quality of local HCAs. HCAs in the vicinity of the Metro Quarter are indicated on the extract from the *Sydney Local Environmental Plan, 2012* (SLEP 2012) Heritage Map at **Figure 18**. HCAs in the vicinity of the Metro Quarter include:

- the Redfern Estate HCA (incorporating Redfern Park and adjacent residential streets)
- the Alexandria Park HCA (incorporating Alexandria Park and adjacent streets); and
- the Waterloo HCA (incorporating Waterloo Park and Oval, the Our Lady of Mt Carmel Church and School and adjoining residential streets.

It is also noted that the SEARs separately require the EIS to address heritage related impacts on heritage items and HCAs. To ensure a comprehensive assessment, impacts on views from these conservation areas have been assessed as part of the more general local area assessment that follows and conclusions specific to the HCAs are provided in the Conclusion at Section 6.

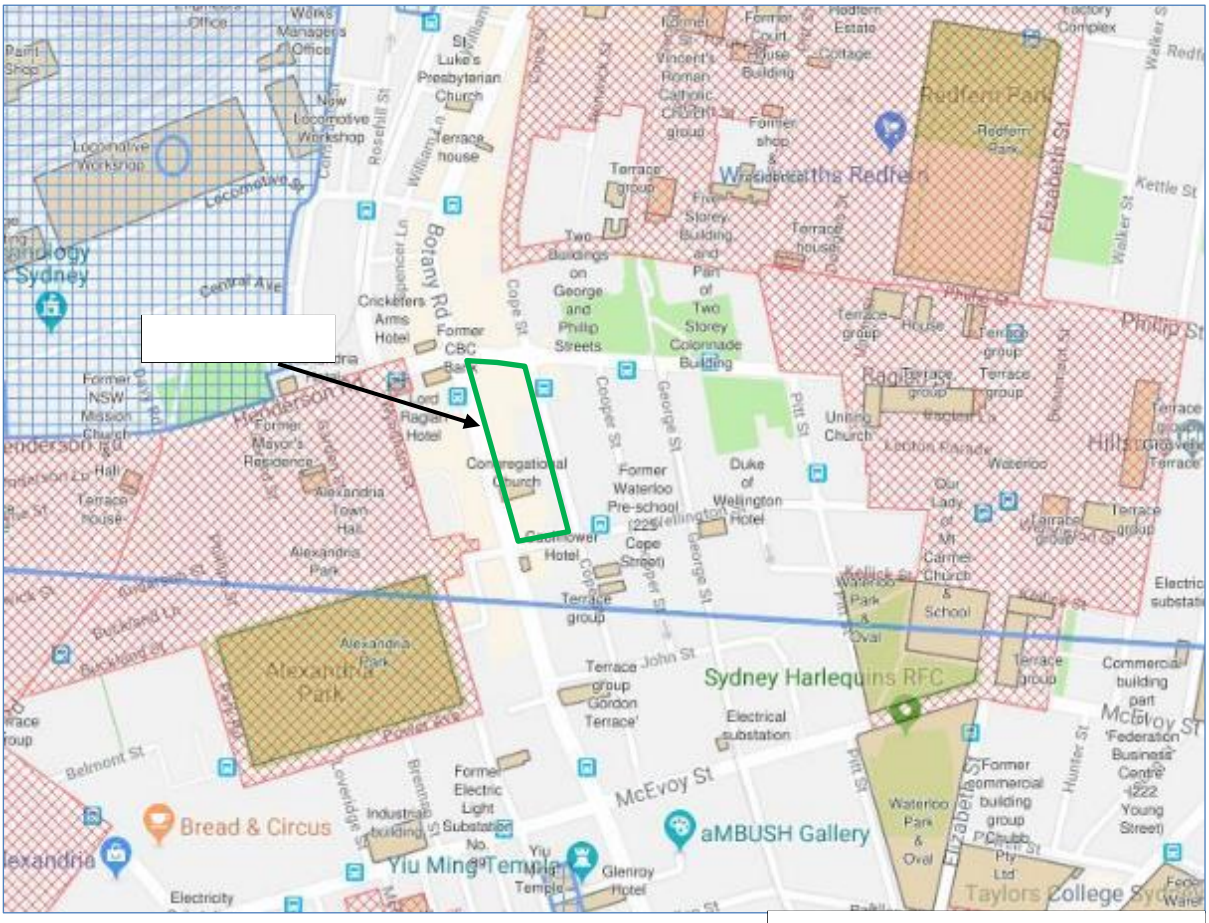


Figure 18 Sydney LEP Heritage Map

5.0 Visual Impacts Analysis

This visual impact assessment applies to the components of the Metro Quarter that are within the OSD proposal. Works subject to the existing CSSI Approval (comprising the two above ground station boxes associated with Waterloo Station) are not covered by the assessment except with respect to their potential cumulative impact in combination with the OSD.

5.1 Viewpoint Analysis

Views towards the subject site have been investigated via conventional means including use of GIS data to determine the visual catchment of the site – the area from which the site, when developed as proposed, would be likely to be visible – and then identification of viewing locations within the identified catchment that would provide a representative sample of views towards the developed site. Representative view locations for assessment of the concept proposal have been identified by:

- identification of the visual catchment of the site and likely critical view locations within the catchment relevant to the Metro Quarter development;
- a site and area inspection to test the critical view locations and identify further local and regional viewpoints that should be investigated;
- liaison with the UrbanGrowth NSW and other stakeholders (notably CoS) to agree on view locations for detailed investigation;
- further investigations to agree on which of the critical view locations should be selected as points for production of photomontage views illustrating the potential built form on the developed site;
- preparation of photomontages using Land and Environment Court accepted best practice in electronic simulation of views of development proposals.

The analysis of the potential visual impacts of the concept proposal has also been carried out along conventional lines for visual assessment of built developments and has included qualitative assessment of:

- the existing visual environment (as viewed from the agreed critical viewing points);
- the capacity of the visual environment to absorb change (as viewed from the agreed critical viewing points);
- the amount of change that would be experienced as a result of the implementation of the proposal (carried out with the aid of survey accurate photomontages prepared from agreed critical viewing points);
- the visual quality of the changed visual environment in comparison with the environment prior to development.

The above described exercise has been carried out for the following categories of views:

- close views – streets adjacent to the site
- medium distant views – streets and open spaces within the Waterloo Estate
- medium distant views - streets and parks outside of the Waterloo Estate and between 200 and 700 metres from the development site

- distant views – significant viewpoints up to 2 kilometres from the site.

The outcome of the assessment follows.

[Page intentionally left blank]

5.2 Close Views

Figure 19 Viewpoint 1 (Post-demolition) – Botany Road near intersection with Henderson Road and Raglan Street facing south-east

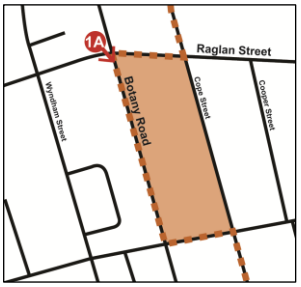


Figure 20 Viewpoint 1A (Post-demolition) – Corner Botany Road and Raglan Street facing south-west

Figure 21 Viewpoint 1 (Photomontage) – Botany Road near intersection with Henderson Road and Raglan Street facing south-east

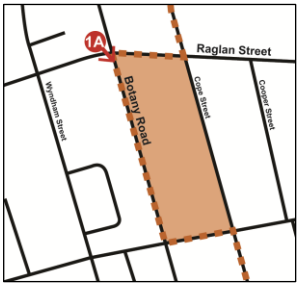


Figure 22 Viewpoint 1A (Photomontage) – Corner Botany Road and Raglan Street facing south-west

Figure 23 Viewpoint 2 (Post-demolition – Corner building to be retained in short term) – Corner Botany Road and Wellington Street facing north

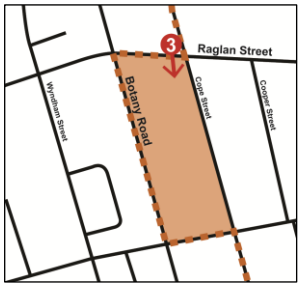


Figure 24 Viewpoint 3 (Post-demolition) – Corner Cope Street and Raglan Street facing south

Figure 25 Viewpoint 2 (Photomontage) – Corner Botany Road and Wellington Street facing north

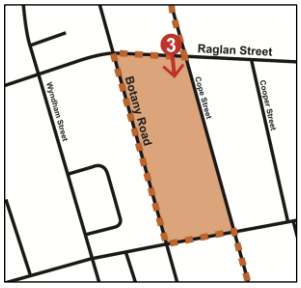


Figure 26 Viewpoint 3 (Photomontage - this view includes above ground components of the currently approved Waterloo Station and above podium buildings which are subject to the OSD SSD Application. Specifically, the corner structure in the image is approved under the CSSI Approval) – Corner Cope Street and Raglan Street facing south

Figure 27 Viewpoint 4 (Post-demolition) – Corner Cope Street and Wellington Street facing north-west

Figure 28 Viewpoint 4 - Photomontage. This view includes above ground components of the currently approved Waterloo Station and above podium buildings which are subject to the OSD SSD Application. Specifically, the corner structure in the image (the station box) is approved under the CSSI Approval. The taller buildings and the retail / commercial podium – fronting Cope and Wellington Streets – are subject to this concept SSD Application) – Corner Cope Street and Wellington Street facing north-west

5.2.1 Visual environment

Streets immediately surrounding the site can be roughly described in two categories with respect to their existing visual character:

Botany Road

Botany Road is an arterial road carrying traffic from the Sydney CBD through the inner southern suburbs to the Port of Botany and its surrounding low to medium density residential suburbs. The stretch of the road between Raglan Street to the north and McEvoy Street to the south is arguably most likely to be influenced by development of the metro station and the broader Waterloo Precinct. The Metro Quarter site occupies the eastern side of Botany Road between Raglan Street and Wellington Street. Apart from the heritage listed Waterloo Congregational Church and a building on the corner of Botany Road and Wellington Street, all structures on Metro Quarter site have been demolished at the time of preparation of this report. The section of Botany Road outside of the Metro Quarter is characterised by semi industrial / commercial uses with a small number of low rise mixed residential / commercial apartments. Built form consists generally of non-descript 2 storey warehouse and display buildings circa 1950s and 60s. Some unbuilt sites support on-grade carparks, equipment hire outlets and the like. The carriageway is two lanes in either direction and buildings tend to be built to the street boundary with walkways being relatively narrow at around 3 metres width. In general terms the visual environment of this portion of Botany Road is of low quality, dominated by private and industrial vehicular traffic, buildings of low architectural quality that do not present well to the street and generally low pedestrian amenity.

Photos of Botany Road demonstrating the visual environment are included in Section 3.2 of this report.

Streets adjacent to the Waterloo Estate

Streets on the other three boundaries of the Metro Quarter site are of a significantly different character to Botany Road. They are less urban and are influenced by their proximity to residential and traditional fine grain retail uses. Vehicular traffic is recessive and there is a relatively high level of pedestrian amenity. Street trees are also significant components of the visual environment.

Figure 29 below shows Wellington Street between Cope Street and Botany Road. Traditional terrace housing and street trees are significant in the visual character.

Figure 29 View facing west along Wellington Street from corner Cope Street (prior to demolition)

Figure 30 post demolition view

Figure 31 below shows Raglan Street between Cope Street and Botany Road. Traditional shopfronts opposite the Metro site are remnants of the traditional retail character of this part of Waterloo.

Figure 31 View facing west along Raglan Street from corner Cope Street (prior to demolition)

Figure 32 post-demolition view

Figure 33 below shows Cope Street looking southward from the Raglan Street/Cope Street intersection – the street is relatively open in character, influenced by the presence of three storey residential "walk-up" units in landscape settings with significant street setbacks. Mature street trees are also a significant feature in the visual character.

Figure 33 View facing south along Cope Street adjacent to the corner of Raglan Street (photo source: NearMap)

Figure 34 Post-demolition view

5.2.2 Capacity to absorb change

The land adjoining the Metro Quarter site will vary in its capacity to absorb change depending on the character and quality of its existing visual environment.

Botany Road has a high capacity for change and the proposed development represents an opportunity for major improvement to visual quality at street level. The principle constraint for Botany Road with regard to visual quality is the requirement that the development must respond appropriately to the heritage values of the Waterloo Congregational Church.

The streets to the north, south and west of the site display built form and landscape elements that contribute to a relatively intact visual character of medium quality. The streets are considered to have a moderate capacity to absorb change.

5.2.3 Amount of change resulting from the proposal

The amount of likely change for close views was assessed via preparation of montages from Viewpoints 1,1A, 2, 3, and 4. Anticipated change to the existing visual environment is assessed below with reference to each of these viewpoints.

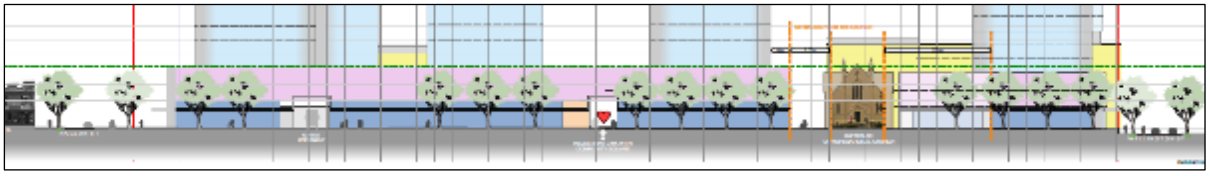


Figure 35 Botany Road elevation – the figure indicates a consistent street podium and retention of the Waterloo Congregational Church with a setback of built form to its northern side.

The proposed building envelope (illustrated in elevation form at Figure 36) would present to Botany Road as a 3 storey (approximately 13 to 18.5 metre high) podium with a predominantly 2.5 metre setback, with 6.5 metre setbacks for building elements on either side of the Waterloo Congregational Church.

Setbacks of approximately 8.5 metres to the northern side of the Church, and 5.75 metres to the southern side of the Church, provide an unbuilt curtilage and a through site link between Botany Road and Cope Street to the north of the Church. Higher building structures above the podium would step down in elevation from north to south with two additional lower building elements near to the northern most building. It is noted that Waterloo Station forms the street level podium on the corners of Cope Street with Raglan and Wellington Streets and has been approved under the CSSI Approval. Impacts of Waterloo Station were addressed as part of the CSSI Approval, however it is included as context for the proposed development of the remainder of the Metro Quarter which is the subject of this assessment.

5.2.4 Verification Statement for photography and photomontages

Consistent with the NSW Land and Environment Court Policy on photomontages and the Australian Institute of Landscape Architects' *Guidance Note for Landscape and Visual Assessment*, all base photographs used for preparation of photomontages have been taken using a single lens reflex camera with 55mm focal length.

Locations of base photos and heights of the observer have been surveyed and all photomontages have been prepared to be accurately located within the base photos from these surveyed points.

Viewpoint 1 – Botany Road near the intersection of Henderson Road and Raglan Street, facing south-east.

Figure 36 Viewpoint 1 (Prior to demolition)

Figure 37 Post-demolition view

The Botany Road street frontage consisted of continuous built form with zero setback to the street and heights of two storeys with some isolated three to four storey elements. Views to the Waterloo Congregational Church were constrained by zero setback development to all but its street boundary.

Viewpoint 1A – Corner Botany Road and Raglan Street facing south-west.

Figure 38 Viewpoint 1A (Prior to demolition)

Figure 39 Viewpoint 1A Post-demolition view

Viewpoint 2 – Corner Botany Road and Wellington Street facing north.

The built form prior to demolition substantially screened views towards the Waterloo Congregational Church in typical views from the south on Botany Road.

This view would change significantly with the introduction of development as proposed by the building envelope which is the subject of the concept SSD Application. The corner podium is higher than the existing corner element, but at a similar height to the former development between the corner and the existing Waterloo Congregational Church. The new buildings would read as continuous built form from these angles to the south. Design quality will be critical to the success of the proposal in transforming the urban environment in this locality. Setbacks controls for the podium in the draft Waterloo Metro Quarter Development Control Plan (DCP) would provide visibility of the Church in these views, and are also reflected in the concept SSD Application.

Figure 40 Viewpoint 2 (Prior to demolition – the corner building has been temporarily retained post-demolition but it will not be a part of the OSD proposal)

Figure 41 Post demolition view

The portion of the Botany Road corridor that includes the Metro Quarter would change significantly as result of this proposal. This change to the visual environment of Botany Road is expected to be positive in that:

- The former built environment (prior to demolition), comprising an incoherent mix of buildings of variable architectural quality, would be replaced by a resolved collection of buildings that address the street and, subject to design development, would be of a coherent, contemporary architectural form.
- As part of design development, the public domain at street level would be expanded and would allow more room for street trees, taking into consideration utilities infrastructure, as part of a coordinated public domain plan.
- The existing heritage listed Waterloo Congregational Church would become a more visible element in the Botany Road streetscape, enhancing its contribution to the heritage of Waterloo and the sense of place of Botany Road.

Viewpoint 3 – Corner Cope Street and Raglan Street facing south

The Cope Street streetscape would undergo significant change with the development envisaged by the concept proposal and its integration with the Waterloo Station approved under the CSSI Approval. In this regard, station boxes at the corner of Cope and Raglan Streets have been designed with accents at the corners. The podium is consistent in its setback and form for the full length of the Raglan Street frontage.

At mid-block on Cope Street, a public plaza is proposed which would provide visual relief and interest and further accentuate the corner built form. The development would be in

significant contrast to the existing relatively open residential precinct on the eastern side of Cope Street. The planting of large scale street trees to the Cope Street public walkway and to the new public domain will be important to maintaining a human scale in the existing residential environment, and would be planned having regard to utility infrastructure locations.

Figure 42 Viewpoint 3 (Prior to demolition)

Figure 43 Post-demolition view

Viewpoint 4 – Corner Cope Street and Wellington Street facing north-west

Wellington Street displays a relatively traditional residential character incorporating continuous period terrace housing for much of its length opposite the Metro Quarter frontage.

Figure 44 Viewpoint 4 (Prior to demolition)

Figure 45 Post-demolition view

The photomontage for Viewpoint 4 illustrates a significant change to the corner site. The portion of the metro box on the corner of Wellington Street and Cope Street is subject to existing CSSI Approval. The taller buildings above, which are subject to this SSD Application, are set back from Wellington Street consistent with its existing medium-density residential character, and are the same setback as the metro box on Cope Street. These design measures are generally consistent with the local existing and future character of these streets. Judicious planting of street trees would soften the impact of the (previously approved) metro box. The remaining above ground development (which is the subject of this SSD Application) would have an acceptable impact on views from the nearby public domain.

5.3 Medium Distant Views from within the Waterloo Estate

Figure 46 Viewpoint 7 (Current View) – Corner George Street and Wellington Street facing north-west

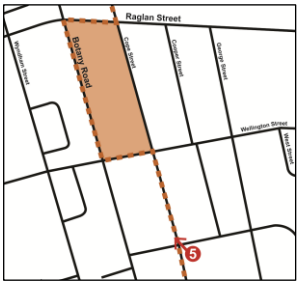


Figure 47 Viewpoint 5 (Current View) – Corner Cope Street and John Street facing north-west

Figure 48 Viewpoint 7 (Photomontage) – Corner George Street and Wellington Street facing north-west

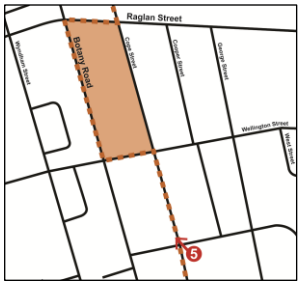


Figure 49 Viewpoint 5 (Photomontage) – Corner Cope Street and John Street facing north-west

Figure 50 Viewpoint 8 (Current View) – Corner George Street and John Street facing north-west

Figure 51 Viewpoint 6 (Current View) – Corner George Street and Raglan Street facing south-west

Figure 52 Viewpoint 8 (Photomontage) – Corner George Street and John Street facing north-west

Figure 53 Viewpoint 6 (Photomontage) – Corner George Street and Raglan Street facing south-west

Figure 54 Viewpoint 9 (Current View) – Corner Pitt Street and Raglan Street facing south-west

Figure 55 Viewpoint 9 (Photomontage) – Corner Pitt Street and Raglan Street facing south-west

5.3.1 Visual environment

The Waterloo Estate forms an important component of the visual character of the neighbourhood that includes the Metro Quarter. The main elements that contribute to the existing visual character of the locality include:

- A mix of residential buildings including 29-storey apartment blocks in the northern portion of the site, residential flats up to around 6 storeys in height in the south east, and circa 1950 vintage "3 storey walk-ups" in the western portion.
- Wide streets, many of which are lined with large street trees.
- Buildings that are well set back from the streets resulting in a feeling of spaciousness, particularly in comparison to the more densely developed surrounding neighbourhoods.
- Many large "forest scale" trees in the streets and around the existing buildings.

5.3.2 Capacity to absorb change

The following principles are relevant to the capacity of the Waterloo Estate to absorb change to its visual environment, with particular regard to the development of the Metro Quarter:

- Street level visual quality should be maintained in the redevelopment. An open, tree dominated character at the street should be investigated as a contributing component of the future character of the developed Precinct, subject to spatial provisions allowed by utilities infrastructure. This is of relevance to the development of the Metro Quarter where it interfaces with the Waterloo Estate (Raglan Street, Cope Street and Wellington Street).
- The broad streets with buildings well set back from the street boundaries are a consideration, particularly where taller buildings are proposed. In this regard, the proposed taller buildings within the Metro Quarter are setback from their boundaries with Raglan, Cope and Wellington Streets. The existing taller buildings in the Waterloo Estate are prominent in close, medium and distant views. Because they are existing and people are used to seeing them, they provide an opportunity to develop buildings of a similar scale within the Metro Quarter that would continue the established theme of dramatic sculptural elements in the local and regional townscape.

From these principles, the locality of the Metro Quarter has a moderate capacity to absorb change, contingent on:

- Retention of the existing streetscape quality and open character with buildings set back from the street. This constraint is of less significance at the interface of the Metro Quarter with the more urban character of Botany Road and its environs.
- The Metro Quarter has the capacity to support taller buildings, provided they do not result in continuous skyline elements and that they exhibit architectural design excellence.
- Taller buildings appearing as sculptural elements, as proposed in the building envelopes, would be appropriate in the redevelopment of the Metro Quarter.

5.3.3 Amount of change resulting from the proposal

Likely change for visual character in the Waterloo Estate was assessed via montages from a series of representative street intersections within the Estate (Viewpoints 5, 6, 7, 8 and 9).

The montages illustrate that, in general terms, only the taller buildings of the proposed Metro Quarter are likely to form new elements in the visual environment of the Waterloo Estate.

Podium and lower built form elements would only be visible above existing foreground buildings from locations within the two blocks directly to the east of the Metro Quarter (east of George Street between Wellington and Raglan Streets). Typical views likely to be available from these locations are illustrated in the montage from Viewpoint 7 at the corner of George Street and Wellington Street facing north-west.

Future buildings within the proposed building envelope would be prominent new elements in the landscape in views within two blocks of the Metro Quarter. Their impact would be mitigated, however, by the substantial stock of foreground trees and in context with the existing taller buildings in the Estate.

In views from the southern parts of the Estate, represented by montages from Viewpoints 5 and 8 (Corner Cope Street and John Street facing north-west and Corner George Street and John Street facing north-west), the taller buildings would appear as skyline elements above the existing lower scale 2 and 3 storey “walk up” residential blocks that characterise the built environment in this locality. The form and separation of the proposed buildings would result in them reading as distinct and separate elements in these views. Subject to high quality architectural outcomes, the resulting level of change to these views would be acceptable.

The proposed building envelope would enable the introduction of new sculptural elements in views from the southern part of the Estate, again mitigated by existing foreground tree stock.

From locations in the northern portion of the Estate, illustrated by the montages from Viewpoints 6 and 9 (Corner George Street and Raglan Street facing south-west and Corner Pitt Street and Raglan Street facing south-west) again only the taller buildings would be visible and these would be largely obscured by the existing very tall buildings and the substantial stock of tall, forest scale trees in this part of the Estate.

In summary, the developed Metro Quarter would be variably visible and would result in moderate levels of change to the visual environment of the Waterloo Estate. Existing built form and large trees would be mitigating factors on the impact of the development on views from within the Estate. Maintaining slender plan forms and separation distances between the buildings the subject of the concept proposal would be critical to acceptable impacts, as would ensuring high quality architectural outcomes. Such outcomes would be incorporated into design guidelines for the ongoing development of the Metro Quarter and be managed via assessment by the Design Review Panel as part of the Design Excellence Strategy at critical points in the design process.

In the northern portions of the Estate, the Metro Quarter proposed development would be largely obscured by existing tall buildings and street trees. The appearance of the new buildings in axial views such as illustrated is considered acceptable in the context of the immediate built environment provided that architectural design excellence is achieved. This would be achieved via the aforementioned mechanism of Design Guidelines and the Design Excellence Strategy.

5.4 Photomontages – Medium Distant Views outside the Waterloo Estate

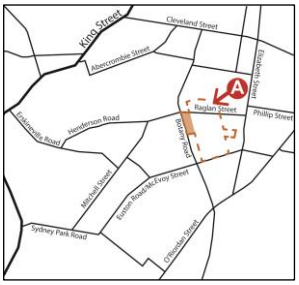


Figure 56 Viewpoint A (Current View) – Redfern Oval – on path

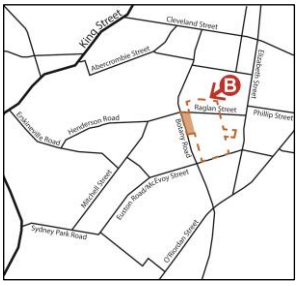


Figure 57 Viewpoint B (Current View) – Redfern Oval – on step

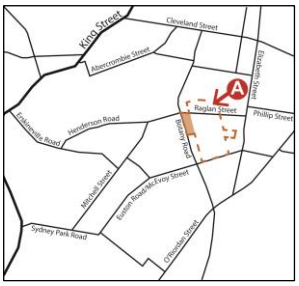


Figure 58 Viewpoint A (Photomontage) – Redfern Oval – on path

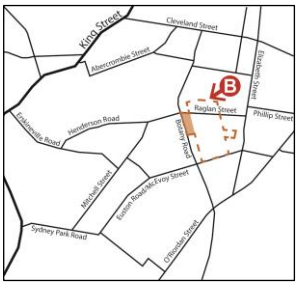


Figure 59 Viewpoint B (The view includes an electronic model of the Metro Quarter accurately overlaid on the photograph as a "Wire Diagram". The overlay indicates that the developed Metro Quarter would be obscured by existing foreground development and would not be visible from this viewpoint) – Redfern Oval – on step

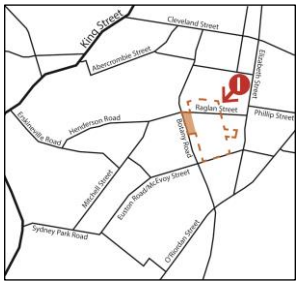


Figure 60 Viewpoint I (Current View) – Redfern Park (City of Sydney Recommendation) – on path near gun

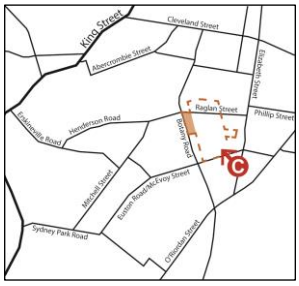


Figure 61 Viewpoint C (Current View) – Waterloo Oval – on fence post

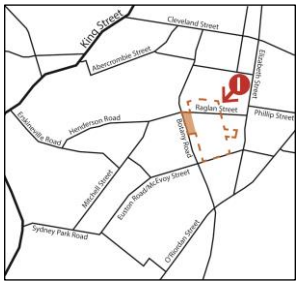


Figure 62 Viewpoint I (Wire Diagram - CoS Recommendation – The City has requested that the view to the developed Metro Quarter be tested from this part of Redfern Park. The montage illustrates that, similar to Viewpoint B, the developed site would be screened by existing foreground vegetation and buildings and would not be visible in this view) – on path near gun

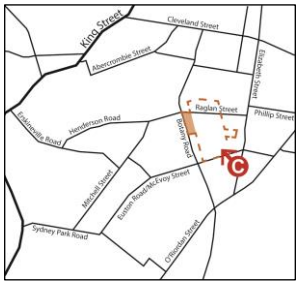


Figure 63 Viewpoint C (Wire Diagram - Again, the developed Metro Quarter would be screened by buildings and foreground vegetation and would not be visible from Waterloo Park) – Waterloo Oval – on fence post

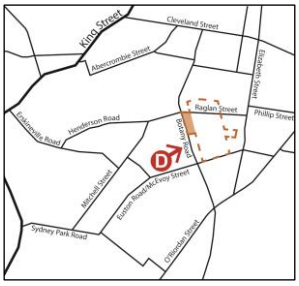


Figure 64 Viewpoint D (Current View) – Alexandria Park – on path at south-west corner of park

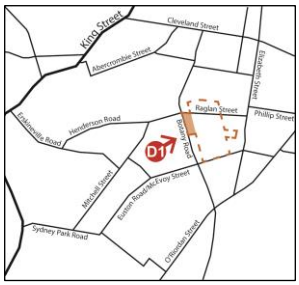


Figure 65 Viewpoint D1 (Current View) – Alexandria Park – western side of playing fields

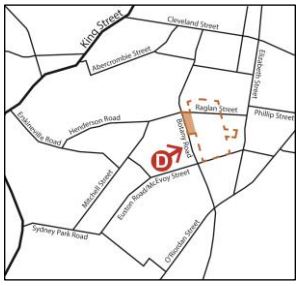


Figure 66 Viewpoint D (Photomontage) – Alexandria Park – on path at south-west corner of park

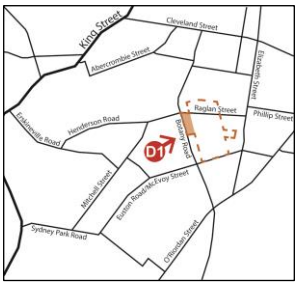


Figure 67 Viewpoint D1 (Photomontage) – Alexandria Park – western side of playing fields

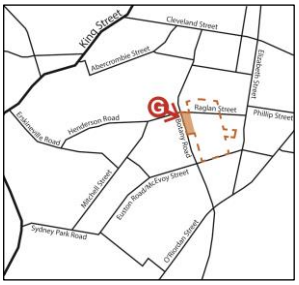


Figure 68 Viewpoint G (Current View) – Henderson Road/Gerard Street – 2 points – on path/on median strip near traffic lights

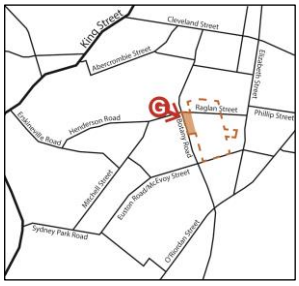


Figure 69 Viewpoint G (Photomontage) – Henderson Road/Gerard Street – 2 points – on path/on median strip near traffic lights

5.4.1 Visual environment

Views towards the Metro Quarter and greater Waterloo Precinct from the largely medium density suburban environments in the medium distance generally include the existing Waterloo Estate buildings and residential blocks as prominent visual elements.

Substantial parcels of open space in close proximity to the Waterloo Estate include:

- Redfern Oval and Park;
- Waterloo Park (north and south); and
- Alexandria Park.

These generally well designed and managed parcels of open space provide visual relief and contrast in the generally densely developed existing environment. They are critical to the visual amenity and character of the region.

5.4.2 Capacity to absorb change

Due principally to the dominance of the existing large scale development within the Waterloo Estate, views from locations at middle distances from the Metro Quarter are considered to have a high capacity to absorb change. Specifically, in views from the north-west (Viewpoints A and B), the existing Waterloo Estate built form dominates the skyline as an almost continuous wall, providing a screen between the viewer and the Metro Quarter. From the south (Viewpoint C) the Waterloo Estate built form is less visible largely due to the screening properties of the local topography and existing trees within the southern sector of the Waterloo Estate. From the west (Viewpoints D and D1), the taller buildings within the Waterloo Estate are isolated. However, significant skyline elements appear above a foreground of large trees. From some closer locations to the west (Viewpoint G) axial view lines towards the Metro Quarter are available along road corridors. Built form in the northern part of Waterloo is dominant in these views and forms a precedent for the appearance of additional taller buildings in views that include the Metro Quarter.

The Alexandria Park HCA is located near to the western edge of the Metro Quarter (see Figure 7-4). As an urban form, the area is comprised of a mosaic of traditional terrace housing on a grid street pattern and parklands (principally Alexandria Park). Large forest scale trees constitute a further significant element in the landscape. Views out of and into the HCA are contained by this structure of dense housing and mature trees so that the area has a high capacity to absorb change in its surroundings. Specifically, views in the direction of the Metro Quarter are substantially screened by these elements.

Figure 70 View facing east toward Metro Quarter adjacent to northern edge of Alexandria Park

Figure 71 View facing east toward Metro Quarter from intersection of Gerard St and Buckland Ln

5.4.3 Amount of change resulting from the proposal

Change to the visual environment in these views was tested via montages from each of the above described viewpoints.

Views from the north

Redfern Park is within the Redfern Estate HCA. An assessment of views from the Park provides an indication of the general visibility of the Metro Quarter from the Estate. From Redfern Park (Viewpoints A, B and I) the montage assessment revealed that the future development of the Metro Quarter would be barely visible with only small portions of the northern and southern buildings (within the building envelope proposed) appearing above the line of existing large apartment blocks in Waterloo in views from the western side of Redfern Oval (Viewpoint A). At the southern edge of Redfern Oval and the north eastern edge of the adjoining Redfern Park (Viewpoints B and I) accurately located wire diagram outlines of the Metro Quarter electronic model indicate that development as proposed on the site would be below the line of sight and would not be visible.

In other areas within the Redfern Estate, the future development on the site (within the proposed building envelope) would be similarly screened by existing buildings on the Waterloo Estate. The visual impacts on this HCA would therefore be very low.

Views from the south

The wire diagram overlaid onto the photo from Viewpoint C (Waterloo Oval on fence post) illustrates that the future development of the Metro Quarter would also not be visible from locations adjacent to the southern boundary of the Waterloo Precinct, including Waterloo Oval and its environs.

Views from the west

The Alexandria Park HCA includes land to the west of the Metro Quarter site, one block west of Botany Road. It incorporates Alexandria Park and several blocks of traditional medium density housing, largely as terrace housing. The impacts of the concept proposal on views from this area have been assessed via selected viewing points within Alexandria Park and along Henderson Road, at the southern and northern edges of the HCA respectively.

The montages illustrate that from the western edge of Alexandria Park (Viewpoints D and D1), the future development of the Metro Quarter would read as three new taller building elements on the skyline above a foreground of large established trees. The change to these views is considered to be acceptable largely due to the mitigating impact of the foreground tree line but also because the arrangement of the proposed building envelopes have the potential, subject again to high quality design outcomes to create interesting sculptural forms on the skyline.

From the north eastern portion of Alexandria Park (Viewpoint H) the Metro Quarter concept proposal would be almost entirely screened by existing trees and buildings. The development would have a negligible impact on the visual environment from this location.

In views towards the site from nearby roads (Viewpoint G), the taller buildings would again be the only element of the proposal that would be visible above existing foreground buildings. These new elements in the skyline would be variably visible from within the grid of streets of the Alexandria Park HCA. However, the uninterrupted axial view to Waterloo available from Henderson Road would be truncated by existing housing in these suburban streets.

The impact of the proposal on views from Alexandria Park and the Alexandria Park HCA is considered acceptable, contingent on achievement of design excellence in the proposed taller buildings via the proposed Design Guidelines and the Design Excellence Strategy.

From the north-eastern portion of Alexandria Park (Viewpoint H) the future development as proposed by the Metro Quarter concept plan would be almost entirely screened by existing trees and buildings. The proposed development would have a negligible impact on the visual environment from this location.

Figure 72 Viewpoint H – Current View

In views towards the site from nearby roads (Viewpoint G, Henderson Road / Gerard Street – on path / median strip near traffic lights), the taller buildings would again be the only element of the proposal that would be visible above existing foreground buildings. The new skyline created by the towers would clearly change the character of these views, chiefly by decreasing the amount of visible sky. However, with high quality design the new visible building elements would not impact negatively on the quality of these views. Rather, they would function as visual markers that would enhance wayfinding in the neighbourhood and contribute to the presentation of the Metro Quarter as a new regional node of activity.

Views from the east

Views towards the Metro Quarter from within the Waterloo HCA were tested via a visit to the locality. The visit revealed that the area is tightly developed, incorporating narrow streets and almost exclusively terrace style housing of single and two storeys. The nil or very small setbacks of prevailing building forms and the presence of a substantial stock of trees both within properties and the public domain significantly screen views towards the Metro

Quarter. Moreover, large fig trees to the west of the HCA screen all views towards the Metro Quarter from the southern part of the area. In the northern portions of the area, existing buildings screen all views to the west. The outcome of the investigation is that there are no views to the Metro Quarter site available from the parks and streets within the Waterloo HCA, as demonstrated in the photos below.

Figure 73 – View facing west toward Metro Quarter from Waterloo Park Playground

Figure 74 – View facing west toward Metro Quarter from corner of Pitt Street and Phillip Street

Figure 75 – View facing west toward Metro Quarter from Lenton parade

5.5 Distant Views

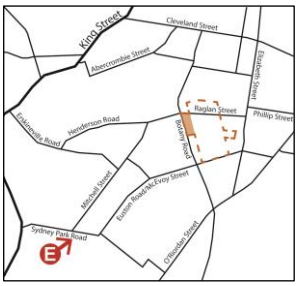


Figure 76 Viewpoint E (Current View) – Sydney Park – on hill top

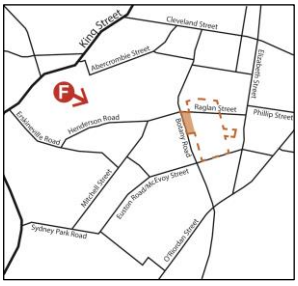


Figure 77 Viewpoint F (Current View) – Hollis Park – on central path midway through park

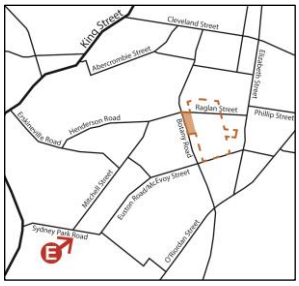


Figure 78 Viewpoint E (Photomontage) – Sydney Park – on hill top

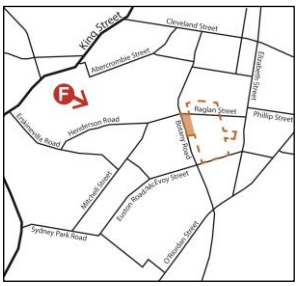


Figure 79 Viewpoint F (Wire Diagram - the diagram positionally overlaid onto the photograph indicates that the developed Metro Quarter would be screened by foreground buildings and vegetation and would not be visible from this viewpoint) – Hollis Park – on central path midway through park

5.5.1.1 Visual environment

In the highly developed regional environment that incorporates the Metro Quarter and Waterloo Estate sites, opportunities for panoramic long views towards the sites are limited. The only open distant view from a public place that incorporates both of these areas is from the hilltop at Sydney Park. Given the Sydney Park hilltop provides a relatively rare publically available 360° panorama that includes the Sydney CBD, this view is considered to be critically important at a regional level.

5.5.2 Capacity to absorb change

In distant views, notably from Sydney Park, the existing buildings within the Waterloo Estate are distinctive and prominent elements in the landscape. The building group, including the taller buildings and the other large building blocks, in combination with other residential blocks of similar form off the site, result in an almost continuous line of buildings as a prominent skyline element in this view. The uniformity and lack of relief of this existing built element is considered to be a negative element in this view. The view also illustrates the critical role played by the mature trees on and adjacent to the study area as elements that mitigate the impacts of built form in regional views such as this.

However, the continuous built wall in this view essentially constitutes a backdrop to the proposed development on the Metro Quarter. The further foreground development that would result from the concept proposal for the Metro Quarter would not be likely to increase the impact of this element on the view. Moreover, the Metro Quarter site forms a small component of this very broad and expansive view and a change on the site would only impact on this small portion of the panorama. With the Waterloo Estate building wall as a backdrop, the view has a high capacity to absorb change.

5.5.3 Amount of change resulting from the proposal

The investigation of the visual catchment of the Metro Quarter has concluded that the Sydney Park view line is the most representative publically available regional view to the site. Our assessment of distant views is therefore constrained to Viewpoint E.

The montage from Viewpoint E indicates that the three taller building elements and some lower building elements at the northern part of the Metro Quarter would be the only new elements in this view post construction. The buildings would be foreground elements in the highly built portion of the view that incorporates high rise housing in Waterloo, both within the Waterloo Precinct and further to the north east in Redfern. Forest scale trees within Alexandria Park and on the western side of the Waterloo Estate read as a continuous bank of foreground vegetation which softens the impact of the built wall behind and, as indicated by the montage, would also screen lower level development on the Metro Quarter site. In the context of this highly built component of the very broad and expansive view available from the Sydney Park hill, the proposed Metro Quarter development would be an acceptable addition to the view.

In response to a request from CoS Council as part of the SSP process, the impact of the proposal from Hollis Park, a suburban park in Erskineville approximately 1.5 kilometres west of the Metro Quarter site has also been assessed. This small park is slightly elevated above Wilson Street, Erskineville and has an easterly aspect which is in the direction of the Metro Quarter and Waterloo Estate precincts. The Park supports a continuous row of mature trees along its eastern and north eastern borders and these screen all skyline views in those

directions. This effect is supported by the wire diagram at View F which indicates that the proposed Metro Quarter development would not be visible in views from the Park.

In summary, the impact of the development on distant views would be acceptable.

From Hollis Park and its neighbourhood, the proposed development on the Metro Quarter would be obscured from view by existing buildings and vegetation.

5.6 Summary of assessment outcomes

A series of visual quality based Planning Principles proposed to guide the development of a Precinct masterplan for the Metro Quarter has been derived out of this visual quality assessment. The Planning Principles have been used as a basis for a summary assessment of the suitability of the proposal in its locality with respect to changes to the local and regional visual environment. The Planning Principles and the outcomes of this assessment are:

- PRINCIPLE – *The development of the Metro Quarter should occur in a manner that maintains the remaining visually significant elements on the Quarter site; as well as the unique visual character of the adjoining Waterloo Estate and the distinctive visual qualities that differentiate it from its neighbourhood*

  RESPONSE – It has been established through this assessment that the pre-demolition visual character of the Metro Quarter site was relatively non-descript with the only built element of particular value to local visual quality being the heritage listed Waterloo Congregational Church. With the approved demolition works now complete, with the exception of one building used as a site office, the Church is the only remaining built element within the Metro Quarter block of any visual value. The proposal protects the Waterloo Congregational Church and improves its significance as a local landmark by setting it within a more open context incorporating increased setbacks of adjacent development to Botany Road, inclusion of a new pedestrian "street' connection along its northern boundary and developing a new public plaza addressing the proposed residential precinct adjacent to the Church.

  Aside from the constraint of the Waterloo Congregational Church, this Principle is relevant to the Metro Quarter only in how it relates to the character of the greater Waterloo Estate precinct. Notwithstanding that the Metro Quarter concept proposal would constitute a major change to the visual character of its locality, this assessment has concluded that at the local level, the developed site would only be substantially visible from its surrounding streets and from residential blocks immediately to its east. The immediate street frontages would change significantly in character. However the net change would be positive in that it would result in a major increase in amenity for the existing and future residential community. Detailed design, particularly of the new public domain, would be critical to the success of the development in its immediate locality. Large scale street trees would be a requisite to maintain human scale and to reinforce a visual connection with the residential precinct. Achievement of these requirements would be facilitated via Design Guidelines and scrutiny by the Design Review Panel as part of the Design Excellence Strategy.

- PRINCIPLE – *Build upon the precedent of tall buildings in a landscape setting to create a visually distinctive built environment*

  RESPONSE – The proposal is positively consistent with this principle. It incorporates tall, slender and well separated building forms that, subject to design excellence in their delivery, would contribute to a distinctive and interesting urban skyline that would create distinctive

local place markers and contribute positively to the local built environment. The inevitable flipside of the introduction of tall buildings into the visual environment would be a reduction in the amount of open sky that appears in the view. This reduction would be more pronounced in closer views where the new built form would occupy a larger percentage of the view and would correspondingly screen more open sky (Viewpoints 1-4). With movement away from the site, the amount of sky lost in the view decreases. From within the Waterloo Estate (Viewpoints 5-9) the impact of the proposal is generally restricted to the intrusion of the proposed tall towers on the skyline. The amount of visible sky lost in these views varies from view to view but it is only small portions of the sky that are lost in all of these views.

- PRINCIPLE – *Retain the open internal qualities and legibility of the Precinct that result from its existing development pattern of broad streets in a clear grid pattern.*

  RESPONSE – The development would contribute positively to the open character of the locality due largely to the proposed treatment of the ground plane which would include a new public plaza and two through site pedestrian connections from Botany Road to Cope Street. The introduction of a series of tall, slender and well separated buildings above a coherent podium with substantial new ground plane, open community spaces and connections is considered positively consistent with this Principle.

- PRINCIPLE – *Retain the dominance of large forest scale trees at street level.*

  RESPONSE – A consistent grid of street trees supplemented by additional trees in the new public plaza and through site link is included in the indicative concept. The success of the indicative concept in satisfying this principle will be contingent on tree species selection and provision of sufficient space for trees to develop to maturity. A street tree plan has been provided as part of the Urban Design and Public Domain Report which generally includes:

  - Alternating Robinia and Brush Box trees on Botany Road;
  - Lilly Pillies on Wellington Street;
  - Yellow Bloodwoods on Cope Street; and
  - Norfolk Island Pines on Raglan Street.

  This planting scheme would be consistent with this principle.

- PRINCIPLE – *Avoid continuous "walls" of built form in local and regional views.*

  RESPONSE – As illustrated in this assessment, continuous building walls are existing elements in the built environment of Waterloo. The assessment has also found that the development of the metro site as proposed would not extend this negative characteristic. In views that include the existing "development walls", the proposed Metro Quarter taller buildings would either be hidden behind the "walls" (in views from north / north east) or would appear as foreground elements that protrude above the "wall" line (views from the south west). By creating distinctive slender architectural forms, the new buildings would serve as visual relief to these currently unbroken building forms.

  The proposal would contribute positively to the regional visual environment with respect to this Principle.

5.7 Review of conclusions against relevant Court planning principles *(Rose Bay Marina Pty Ltd v Woollahra Council and Anor [2013] NSWLEC 1046)*

In this matter in the NSW Land and Environment Court the Commissioners established principles specifically to guide assessment of visual impacts of development on the public domain. A brief review of the visual impact of the proposal against these principles follows.

Identification stage

Nature and scope of views

"The first step of this stage is to identify the nature and scope of the existing views from the public domain."

The views identified in the assessment of this proposal are composed exclusively of man-made elements – buildings, roads and pavement, planted vegetation and constructed open space and recreation areas. The open sky is the only natural element in the views. Trees and green spaces are naturalistic elements in the views that provide visual relief. As such they are important contributors to the visual quality of the locality. The elements in the views are all static and only subject to change as a result of further human interventions such as development. In turn, the quality of the views is contingent on the aesthetic quality of the individual man-made elements and their composition in relation to one another. Impacts of changes to these views would be contingent on the design quality of the new elements of any development. With respect to the natural (or naturalistic) elements, whether impacts of change are positive or negative will depend, among other things, on the extent to which the natural and naturalistic elements are obscured or enhanced by the change. Consequent to an approval of this concept SSD Application, design quality of the built outcome would be managed through the design development process via testing of future proposals against the Design Guidelines and review by the Design Review Panel.

Location

The second step is to identify the locations in the public domain from which the potentially interrupted view is enjoyed.

Locations of views have been determined via the process described in Section 7.2.2 of this report. A logical process was followed involving identification of the visual catchment of the site and ground truthing by site inspection to identify critical view locations within the catchment that are representative of general views towards the site from the public domain. (The SEARs also requires assessment of views from the site but this assessment has established that, given that all buildings on the site have been demolished prior to this concept SSD Application, there are no existing views from the site to be considered). The view locations identified were agreed with officers of the CoS.

"The third step is to identify the extent of the obstruction at each relevant location."

The principle maintains that views from the public domain should not be defined at any specific eye height. Viewers may be seated or standing. Visual interpretations for the purposes of this assessment have been prepared from height of a standing person. This is appropriate in the circumstances of this case as it can be assumed that close viewers would most likely be walking or standing in local streets. The exception would be viewers in cars or people seated in public spaces. However, views of the site in its developed state would not change appreciably from a seated or standing position.

"The fourth step is to identify the intensity of public use of those locations where that enjoyment will be obscured, in whole or in part, by the proposed private development."

The intensity of the public use of the locations studied would vary. With respect to close viewing locations, the intensity of public use would inevitably increase significantly as a result of the proposed development of the Waterloo Station and the Metro Quarter. In the case of more distant locations (parks and streets in the surrounding neighbourhood) the intensity of public use is moderate, typical of residential and recreational locations in an inner city location and the level of use would not be likely to change dramatically as a result of implementation of the proposal.

"The final step to be identified is whether or not there is any document that identifies the importance of the view to be assessed."

Views from the HCAs within the visual catchment of the site are subject to protection under the *SLEP 2012*. Aside from this, there are no controls in the planning policies that pertain specifically to protection of views from the public domain.

Analysis of impacts

The Court guidelines go to quantitative and qualitative evaluations of impacts of development on views. With respect to quantitative evaluation the fundamental question to be posed is:

"If the view remaining (if the development were to be approved) will be sufficient to understand and appreciate the nature of the existing view."

Some factors to be considered in qualitative assessment of visual impacts include, among other things:

- *Is any significance attached to the view likely to be altered?*
- *If so, who or what organisation has attributed that significance and why have they done so?*
- *Is the present view regarded as desirable and would the change make it less so (and why)?*
- *Should any change to whether the view is a static or dynamic one be regarded as positive or negative and why?*
- *If the present view attracts the public to specific locations, why and how will that attraction be impacted?*
- *Is any present obstruction of the view so extensive as to render preservation of the existing view merely tokenistic?*
- *However, on the other hand, if the present obstruction of the view is extensive, does that which remains nonetheless warrant preservation (it may retain all or part of an iconic feature, for example)?*
- *If the change to the view is its alteration by the insertion of some new element(s), how does that alter the nature of the present view?*

Existing views to the site from surrounding streets have been found to be of variable quality so that with respect to close views, the "nature of the existing view" is not a critical consideration in assessment of the impacts of the proposal. In more distant views from local and regional parks such as Alexandria Park and Sydney Park, this assessment has found

that the more expansive views across the site available from these locations would change but would remain intact with regard to their “nature”. The proposed buildings within the Metro Quarter would present as new elements in these views but they would not alter the fundamental composition of the views that currently include built elements, vegetation and sky.

With regard to the Court’s principles for qualitative assessment, the following observations are made:

- Only views from Sydney Park would have any generally recognised significance. This is the only location within the identified visual catchment of the site that people would visit with the specific intention of observing the view. It is understood that the significance of this view is popular rather than being formally recognised. Sydney Park attracts visitors to observe its panoramic city views at moderate levels in general times and in substantial numbers during special events such as New Year’s fireworks. This assessment has found that the quality of the view from Sydney Park would not be changed substantially by the proposed development and the enjoyment by visitors would not be noticeably impacted.

The change to the majority of views assessed is the result of the future insertion of new built elements comprising podium and buildings within the proposed building envelope on the Metro Quarter site. The views would alter as a result to varying degrees from very significant in close proximity where the proposal would replace the current metro station construction site to moderate to minor with distance away from the site where only the future higher buildings would appear as new elements in views that are currently dominated by other built elements as well as trees and sky. Contingent on achievement of high quality design outcomes, the proposal would result in improvements to the quality of all of the views assessed. This will be achieved through the proposed Design Excellence Strategy and review by the Design Review Panel.

5.8 Recommendations

The following recommendations for design development to ameliorate any potential visual impacts of his proposal are offered:

- Detailed design, particularly of the new public domain, would be critical to the success of the development in its immediate locality. Large scale street trees should be investigated to maintain human scale and to reinforce a visual connection with the residential precinct. The street tree investigation should be facilitated via appropriate inclusions in the Metro Quarter Design Guidelines and assessment of consequent planning applications by the Design Review Panel.
- Maintaining slender plan forms and separation distances between the buildings the subject of the concept proposal would also be critical to acceptable impacts, as would ensuring high quality architectural outcomes. The Metro Quarter Design Guidelines are to incorporate guidance to ensure that the tall buildings on the site read as well separated, slender forms in views towards the site. Detailed designs are to be reviewed by the Design Review Panel at critical points in the design process in accordance with Sydney Metro’s Design Excellence Strategy.

6.0 Conclusion

The study has been prepared to accompany a concept SSD Application for the Metro Quarter Precinct. It specifically addresses the SEARs, quoted in Section 3 of the report.

The assessment has been carried out with the aid of electronically generated photomontages over photos from surveyed locations taken with a 55mm focal length lens.

In summary, the conclusions of the visual impacts of the proposal with respect to the SEARs are:

- The proposal would impact on views from streets immediately surrounding the Metro Quarter site and from street blocks to the east of the site within the Waterloo Estate. Mitigation measures to address these impacts would include design development to result in a high quality ground plane including allowance for healthy growth of forest scale trees in the street and other propose public places.
- The proposal would significantly improve the visibility of the Waterloo Congregational Church building by setting back new built form from the northern and southern boundaries of the Church, creating a broad through site link on the northern side of the Church and increasing street setbacks to Botany Road on either side of the Church to align with its street building line. The net result of the proposed development will be to open up new view lines to the Church and provide it with an open curtilage that will enhance its heritage values.
- The proposal would be only moderately visible from other parts of the Waterloo Precinct and from the west. Its success as a new element in views from these locations will be contingent on achievement of design excellence in the completed development, with particular regard to the architectural design of the proposed taller buildings.
- From the north and south, at locations outside of the Waterloo Precinct, the proposal would be almost completely screened from view by vegetation and existing buildings in the line of view.
- In distant regional views, the proposal would appear in the context of the existing tall and visually bulky buildings and the substantial tree canopy within and adjacent to the Waterloo Precinct. If designed having regard to the principles of design excellence, the taller buildings in the proposal would potentially improve the quality of these existing views by creating architectural relief to the continuous building “walls” in these views. This would be achieved by punctuations in height created by the taller buildings in the Quarter that would relieve the continuous wall of tall buildings in regional views. Changes in materials and design form would also contribute to variation in the new building group and a more visually interesting skyline than currently exists.
- The proposal has been found to have an acceptable impact on the conservation values of all local HCAs including specifically, Redfern Estate, Alexandria Park and the Waterloo HCAs.
- The proposal has been found to be consistent with the visual quality Planning Principles for development of the Waterloo Estate and Metro Quarter and is considered to be worthy of support with regard to its effects on the existing visual environment of the site and its locality.