Sydney Metro West

Environmental Impact Statement

Hunter Street East – Over Station Development

Environmental Impact Statement

Sydney Metro West

Hunter Street East Over Station Development

Concept State Significant Development Application

Contents

List of Figures

List of Tables

Declaration

Project details
Project name: Hunter Street East – Over Station Development
Application number: SSD-46246713
Project address: 28 O'Connell Street, 48 Hunter Street, 33 Bligh Street and 37 Bligh Street, Sydney.
Applicant details
Applicant Name: Sydney Metro
Applicant Address: Sydney Metro West, PO Box K659, Haymarket, NSW 1240.
Details of person by whom this EIS was prepared
Name: Toni Walter **Professional qualifications:** Bachelor of Liberal Arts and Science from Sydney University and Master of Planning (UNSW)
Name: Rosie Sutcliffe **Professional qualifications:** Bachelor of Planning (UNSW)
Address: Urbis Level 8,123 Pitt Street Sydney, NSW, Australia
Declaration by registered environmental assessment practitioner
Name: Ashleigh Ryan
Registration number: 59156
Organisation registered with: Planning Institute of Australia

Declaration	The undersigned declares that this EIS: • Has been prepared in accordance with Clause 192 of the Environmental Planning and Assessment Regulations 2021 • Contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates • Does not contain information that is false or misleading • Addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project • Identifies and addresses the relevant statutory requirements for the project including any relevant matters for consideration in environmental planning instruments • Has been prepared having regard to the Department's State Significant Development Guidelines – Preparing an Environmental Impact Statement • Contains a simple and easy to understand summary of the project as a whole having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development • Contains an accurate summary of the findings of any community engagement • Contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole
Signature	
Date	24 November 2022

Glossary and abbreviations

Term	Definition
BCA	Building Code of Australia
BC Act 2016	*Biodiversity Conservation Act 2016*
Biodiversity and Conservation SEPP	*State Environmental Planning Policy (Biodiversity and Conservation) 2021*
CBD	Central Business District
CIV	Capital investment value
Concept SSDA	A concept development application as defined in section 4.22 the EP&A Act, as *a development application that sets out concept proposals for the development of a site, and for which detailed proposals for the site or for separate parts of the site are to be the subject of a subsequent development application or applications*
Council	City of Sydney Council
CSPS	Central Sydney Planning Strategy 2016-2036
CSSI	Critical State Significant Infrastructure
Concept and Stage 1 CSSI Approval	SSI-10038 including all major civil construction works between Westmead and The Bays, including station excavation and tunnelling, associated with the Sydney Metro West railway line
Detailed SSDA	The SSD Application(s) to be made after the Concept SSDA, to seek consent for the design and to physically carry out the proposal
DEX Strategy	Sydney Metro West Design Excellence Strategy
DPE	Department of Planning and Environment
Draft Design Guidelines	Draft Hunter Street Station OSD Design Guidelines
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2021*
FSR	Floor Space Ratio as defined in the *Sydney Local Environmental Plan 2012*
GANSW	Government Architect New South Wales
GFA	Gross Floor Area as defined in the *Sydney Local Environmental Plan 2012*
Heritage item	An item of environmental heritage listed in Schedule 5 of the *Sydney Local Environmental Plan 2012* or on the State Heritage Register under the *Heritage Act 1977*
Integrated station development	Combined station, over station development and public domain works
LSPS	Local Strategic Planning Statement

Term	Definition
NLA	Net lettable area
OSD	Over station development
Planning Proposal request	A request to Council as a planning proposal authority to prepare a Planning Proposal to amend the planning controls within the *Sydney Local Environmental Plan 2012*
Planning Systems SEPP	*State Environmental Planning Policy (Planning Systems) 2021*
Resilience and Hazards SEPP	*State Environmental Planning Policy (Resilience and Hazards) 2021*
Scoping Report	A report prepared by the applicant to inform the setting of project-specific SEARs for a State significant development application
SDCP 2012	*Sydney Development Control Plan 2012*
SEARs	The Planning Secretary's environmental assessment requirements for the preparation of an Environmental Impact Statement for a State significant development application
SEPP	State Environmental Planning Policy
SSD	State significant development as defined by section 4.36 of the *Environmental Planning and Assessment Act 1979*
SSDA	State significant development application
SLEP 2012	*Sydney Local Environmental Plan 2012*
Stage 2 CSSI Application	SSI-19238057 for major civil construction and enabling works between The Bays and the Sydney CBD, including demolition, tunnelling, and station excavation for new metro stations.
Stage 3 CSSI Application	SSI-227-65520 to carry out rail infrastructure, including fit-out of tunnels, construction, fit-out, and operation of metro stations and surrounding precincts and operation of the Sydney Metro West line
Sydney Metro	The applicant for this State significant development application
Sydney Metro West	Construction and operation of a metro rail line and associated stations between Westmead and the Sydney CBD as described in section 1.1.1
Transport and Infrastructure SEPP	*State Environmental Planning Policy (Transport and Infrastructure) 2021*
TfNSW	Transport for New South Wales

Summary of EIS

Introduction

Sydney is expanding and the NSW Government is working hard to deliver an integrated transport system that meets the needs of customers now and in the future. Sydney Metro is Australia's biggest public transport program. Services on the North West Metro Line between Rouse Hill and Chatswood started in May 2019 on this new stand-alone metro railway system, which is revolutionising the way Sydney travels.

The Sydney Metro West program of works is shown in and includes:

- Sydney Metro North West – opened in May 2019
- Sydney Metro City & Southwest – currently under construction with services to begin in 2024
- Sydney Metro West – currently under construction and due to open in 2030
- Sydney Metro – Western Sydney Airport – currently under construction and due to open when the airport opens for passenger services.

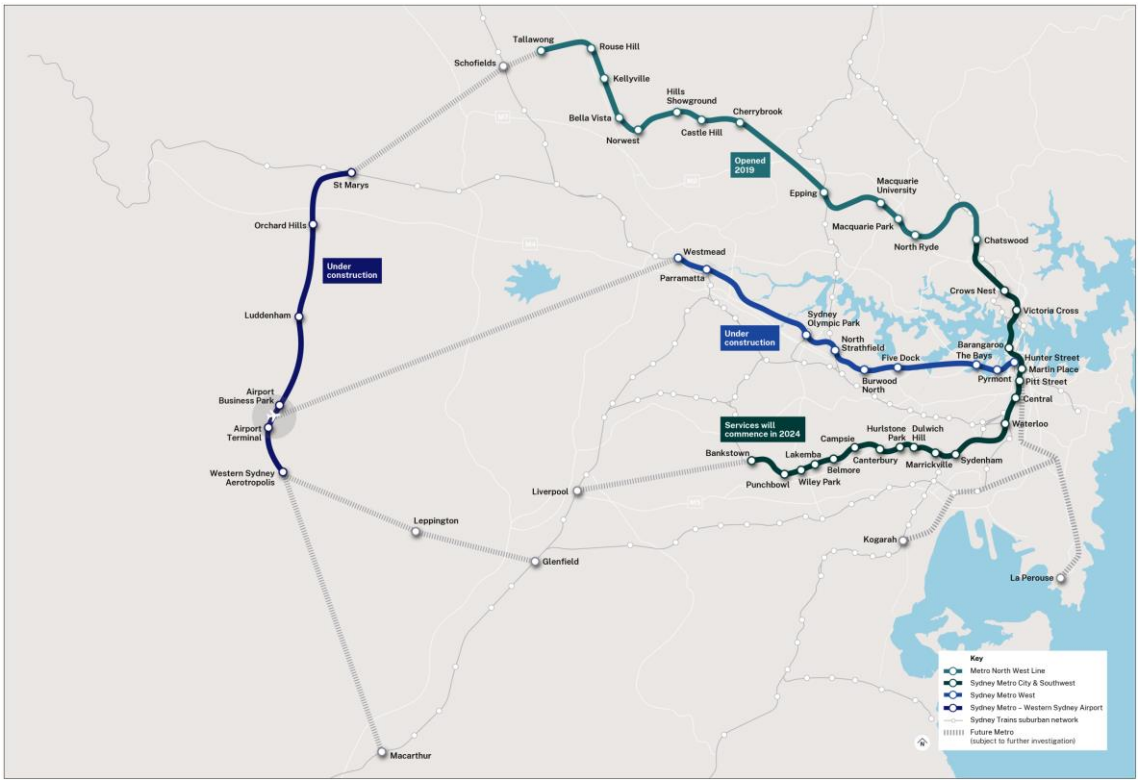

Figure 0-1 Sydney Metro network map

The delivery of Sydney Metro West is critical to keeping Sydney moving, and will:

- comprise a new 24-kilometre metro line with stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street
- have a target travel time of about 20 minutes between Parramatta and the Sydney CBD
- link new communities to rail services and support employment growth and housing supply
- relieve the congested T1 Western Line, T9 Northern Line, and T2 Inner West & Leppington Line

- double the rail capacity between Parramatta and the Sydney CBDs
- significantly boost economic opportunities for Greater Parramatta
- support new residential and employment zones along the Greater Parramatta to Sydney CBD corridor, including at Sydney Olympic Park and The Bays – providing improved transport for the additional 420,000 new residents and 300,000 new workers forecast to be located within the corridor over the next 20 years
- allow customers fast and easy transfers with the T1 Western Line at Westmead, T9 Northern Line at North Strathfield, and the Sydney Trains suburban rail network and Sydney Metro in the Sydney CBD
- allow for transfers with the future Parramatta Light Rail Stage 1 at Westmead and Parramatta, as well as the planned Parramatta Light Rail Stage 2 at Sydney Olympic Park
- create an anticipated 10,000 direct and 70,000 indirect jobs during construction. Figure 0-2 below shows the network map.

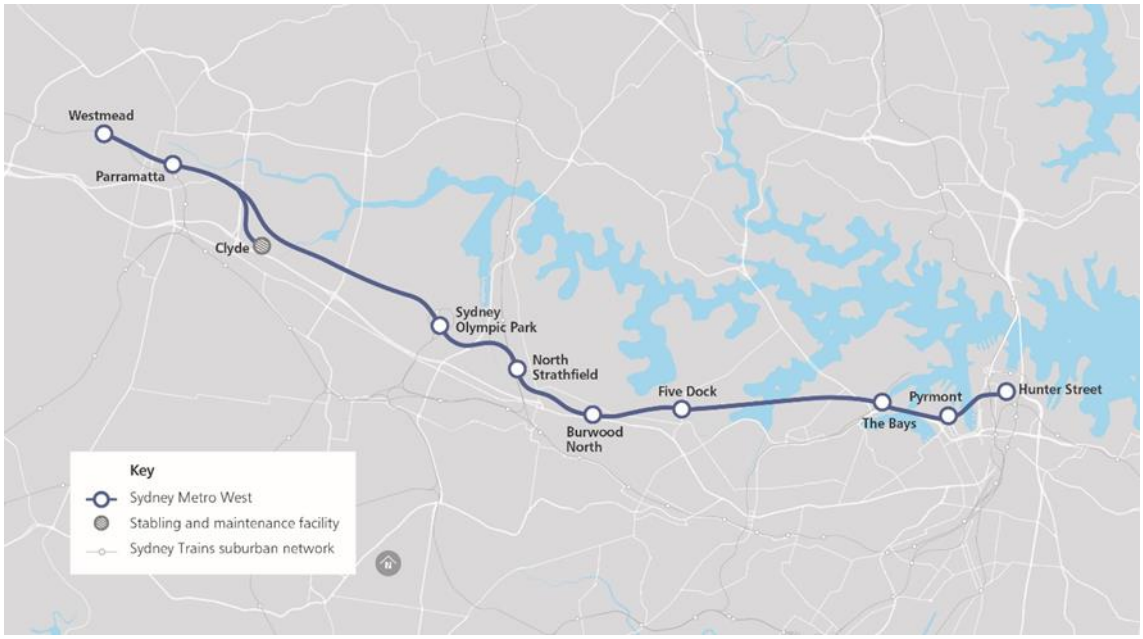

Figure 0-2 Sydney Metro West map

Sydney Metro West is being assessed as a staged critical State Significant Infrastructure (CSSI) application under section 5.20 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and comprises the following applications:

- the Concept and major civil construction work for Sydney Metro West between Westmead and The Bays, including station excavation and tunnelling, associated with the Sydney Metro West railway line (Concept and Stage 1 CSSI Approval) was approved on 11 March 2021.
- all major civil construction and enabling works between The Bays and the Sydney CBD, including demolition, tunnelling, and station excavation for new metro stations associated with the Sydney Metro West railway line (CSSI Stage 2 Application) was approved on 24 August 2022.
- rail infrastructure, including fit-out of tunnels, construction, fit-out, and operation of metro stations and surrounding precincts and operation of the Sydney Metro West line (Stage 3 CSSI Application).

Integrated station and precinct development

All Sydney Metro West stations are being designed to integrate with their surrounding areas to make vibrant and attractive places that reflect the unique context and future aspirations for each place.

The CSSI Concept and Stage 1 Approval foreshadowed integrated station and precinct developments, however the details of future over station developments (OSDs) were not included in CSSI Concept Approval. The Stage 3 CSSI approval will construct the station boxes that include physical provisions to enable future OSDs.

The vision is for integrated station and precinct development that could provide a range of uses. Integrating a mix of uses and development into the station precinct would contribute to the success of places by:

- encouraging precinct activation and use of Sydney Metro West across different times of the day and week
- creating opportunities to provide facilities which meet customer and community needs, attracting people to stations
- allowing stations to successfully integrate into their urban context and to contribute positively to the character of places at the stations.

Sydney Metro is proposing over and/or adjacent station developments at Westmead, Parramatta, Sydney Olympic Park, Burwood North, The Bays, Pyrmont and Hunter Street stations. Sydney Metro will continue working closely with the local community and stakeholders so that station precincts become welcoming hubs that build on the local character.

Planning approval approach

This Environmental Impact Statement (EIS) has been prepared to accompany a Concept State Significant Development application (Concept SSDA) for OSD at the Hunter Street Station east site. This EIS has been prepared on behalf of Sydney Metro and is submitted to the NSW Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This Concept SSDA seeks consent for a concept proposal, within the meaning of section 4.22 of the EP&A Act for the proposed land uses, maximum building envelope, maximum building height, maximum gross floor area, and car parking. The proposed development will comprise commercial premises within a new building to be constructed above the Hunter Street Station eastern site, and commercial and retail premises within the podium. A separate Concept SSDA will be undertaken for the proposed OSD at the Hunter Street station western site.

Figure 0-3 illustrates the planning approval processes relevant to Hunter Street Station and development. The proposed development would be subject to a Detailed SSDA post the determination of this Concept SSDA. The detailed building design will respond to the design considerations established by this Concept SSDA. The *Sydney Local Environmental Plan 2012,* as sought to be amended by the concurrent Planning Proposal - Sydney Metro West Hunter Street Station Sites, Sydney (PP-2022-867), guides the planning decisions for Hunter Street Station precinct.

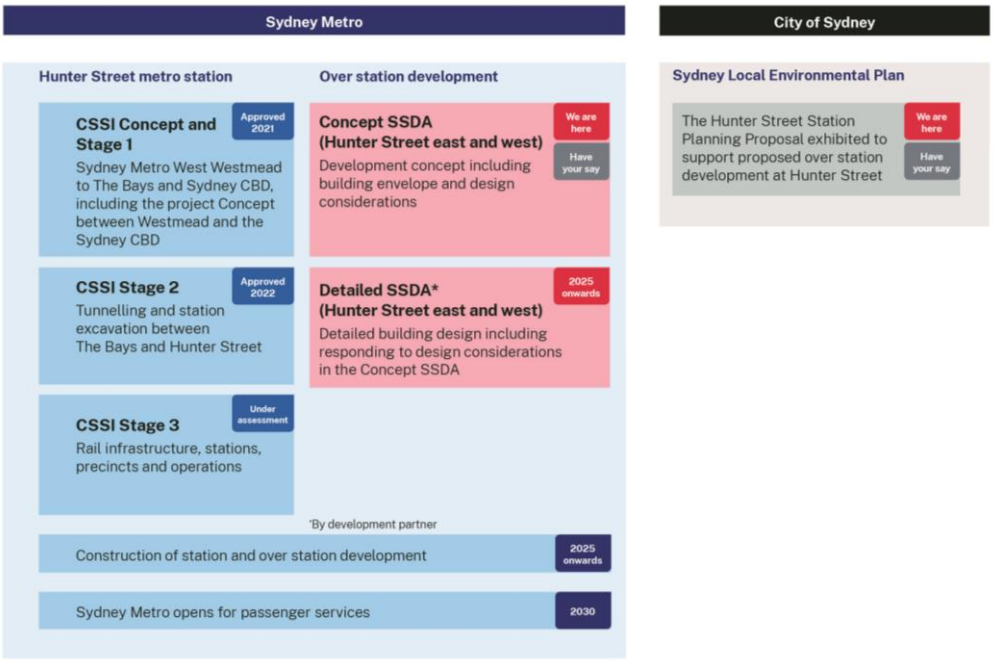

Figure 0-3 Planning approval pathways

Site location and context

The Hunter Street Station is in the northern part of the Sydney CBD, within the commercial core precinct of Central Sydney and within the Sydney local government area (LGA). The Hunter Street Station includes two sites – the west site and the east and separate Concept SSDAs are being prepared for the OSD associated with each station. This Concept SSDA relates to the east site only (refer to Figure 0-4).

The proposed development is on the corner of O'Connell Street, Hunter Street and Bligh Street in proximity to the new Martin Place Station which forms part of the Sydney Metro City & Southwest due to open in 2024.

The OSD for the eastern Hunter Street Station site relates to the properties at 28 O'Connell Street, 48 Hunter Street, 33 Bligh Street and 37 Bligh Street, Sydney. The total site area is 3,694sqm.

The site is currently partially occupied for the Sydney Metro City & Southwest construction site. The remainder of the site is currently occupied by commercial office buildings and a range of ground floor business premises including retail, restaurants and cafes, all of which will be demolished to facilitate building the Hunter Street Station.

The northern part of the Sydney CBD is a highly developed commercial core with commercial, retail, health, government, and community-based uses, as well as high density residential developments.

The site is located within the Sydney CBD commercial core, surrounded with commercial, retail, health, government, and community-based uses.

The site is located in close proximity to several items on the State Heritage Register including the Former NSW Club Building at 31 Bligh Street the Former Bank of NSW at O'Connell Street the Former Wales House at the junction of Pitt and O'Connell Streets (I1915 in SLEP 2012), the Former Rofe Chambers on O'Connell Street the Former City Mutual Life Assurance Building on the corner of Hunter and Bligh Streets and the Former Perpetual Trustee building on Hunter Street.

The site is also located adjacent to the local heritage listed Richard Johnson Square.

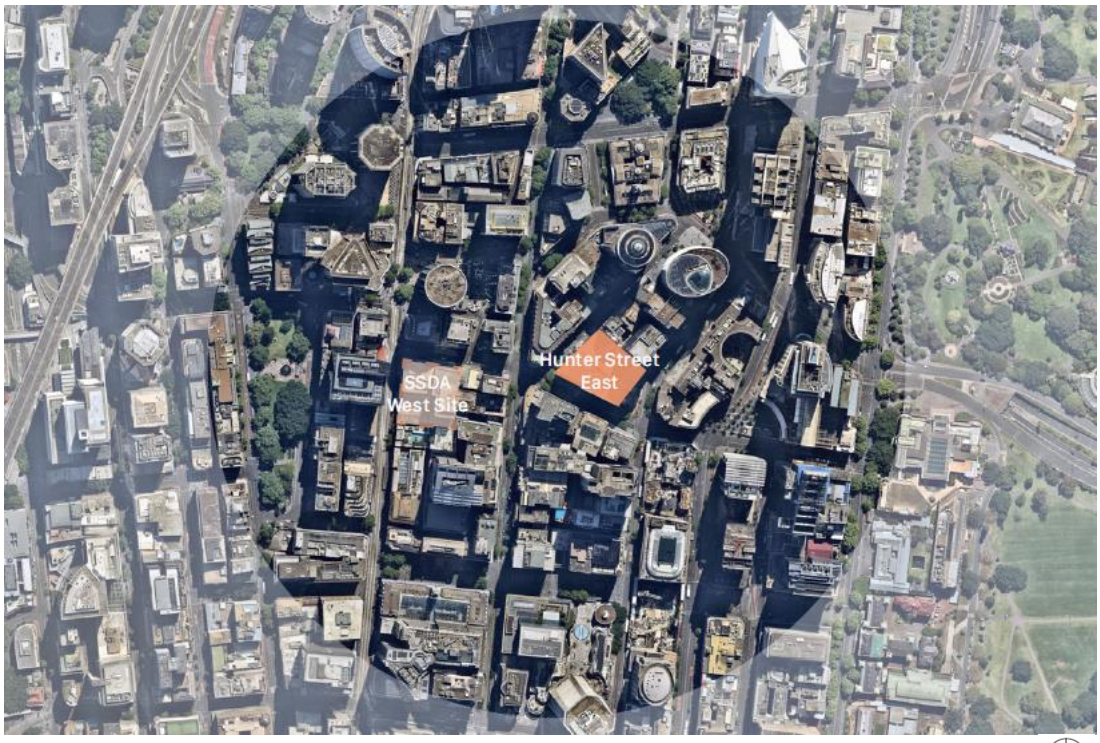

Figure 0-4 Aerial map of Hunter Street Station east site

The proposal

The Concept SSDA seeks development consent for a building envelope above the Hunter Street Station eastern site, that includes:

- maximum building envelope and built form parameters (including tower envelopes and building setbacks)
- maximum building height of between RL 238.9 and RL 269.1, as it varies to comply with the relevant sun access plane controls (about 58 storeys)
- land uses within the OSD building envelope and podium including:
- commercial land uses within the tower building envelope
- commercial and retail land uses within the building envelope for the podium
- provision for up to 70 car spaces on the site
- maximum gross floor area (GFA) of 84,223m^2.

The location of any car parking spaces on the site to support the OSD is anticipated to be within the podium, however the exact location of car parking spaces, including any accessible and car share spaces will be the subject of future detailed design within a future Detailed SSDA.

The proposed building envelope for the OSD is a concept proposal only. Pursuant to section 4.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), further approval(s) will be sought for the detailed design and construction of the proposed development. The future approval(s) will be required to be consistent with the Concept SSDA development parameters.

An indicative concept reference design has been prepared illustrating how the site could potentially be developed within the proposed building envelope, which is included at Appendix H of this EIS.

Project needs and benefits

The construction of Sydney Metro West represents an exciting opportunity to incorporate global best practice for placemaking and environmentally sustainable development, and to apply innovative thinking to create new city icons. The delivery of integrated station development enables Sydney Metro to be more than just a transport project, but also a defining city building opportunity that revitalises precincts and communities, leaving a legacy, and shaping Sydney for generations to come.

The proposed development will create a place-based outcome that successfully integrates transport infrastructure, ground level retail and commercial land uses.

The Hunter Street Station acknowledges growth opportunities within Central Sydney and seeks to establish parameters to attract more businesses in a well-connected location reducing reliance on private transport modes whilst continuing to ensure the growth of Sydney CBD.

The Concept SSDA proposal provides for an optimised outcome at the site and a balanced and feasible option as it will:

- establish the maximum gross floor area and land uses for the site
- recognise growth opportunities within Sydney Olympic Park and seek parameters to attract more businesses and residents in a well-connected location reducing reliance on private transport modes
- protect key view corridors from ground level from the town centre to the heritage precinct and to the aquatic centre
- encourage activated street frontages to increase the level of ground plane interaction and vibrancy.

Key impacts and mitigation measures

The key issues identified in the SEARs have been assessed in detail, with specialist reports underpinning the key findings and recommendations identified in the assessment of environmental impacts in section 6 of the EIS. It has been demonstrated that for each of the likely impacts identified in the assessment of the key issues will either be positive or can be appropriately mitigated.

A summary of the key impacts and mitigation measures is outlined below.

Built form and urban design

The proposed building envelope has been designed to provide an appropriate response to the surrounding context, while also enabling the delivery of a high-quality development at the site.

The future Detailed SSDA for the OSD would need to propose buildings consistent with the building envelope prescribed in this Concept SSDA. The detailed design of the OSD would also be guided by the Draft Design Guidelines and Design Excellence Strategy endorsed as part of the concurrent Planning Proposal [PP-2022-867] submitted for the site.

Solar and daylight access

The Built Form and Urban Design Report (Appendix E) includes sky view factor analysis, which assesses the proposed envelope for the impact on daylight levels in the public domain surrounding the site against a base case massing as per Schedule 12 of the Sydney Development Control Plan 2012 (SDCP 2012). The sky view factor analysis demonstrates that the proposed building envelope for the site results in an improved sky view factor of 0.018256 compared to a ‘base case building envelope’.

The proposed building envelope is consistent with the equivalence testing requirements outlined in the Central Sydney Planning Strategy (CSPS), SDCP 2012

for tower cluster sites, and the Design Guideline demonstrating the proposed controls will result in an acceptable amenity outcome for pedestrians and the public realm.

Wind impact

A Pedestrian Wind Environment Impact Assessment has been provided at Appendix N. The report provides a qualitative assessment to evaluate the wind conditions at the site and nearby surrounding environment. This included an assessment of a total of 54 locations within and around the site as part of the wind tunnel testing.

The results of the assessment indicate that wind speeds are generally compliant with the intended usage of each area of the proposed development. All the locations comply with the safety and comfort criteria outlined by the City of Sydney.

Overshadowing

The Built Form and Urban Design Report includes a solar and overshadowing analysis (Appendix E). The analysis details that the proposed building envelope would result in a larger extent of overshadowing compared to the existing buildings on the site due to their increased built form between 9:00am and 3:00pm during the winter solstice, equinox, and summer solstice.

It is noted that at 3:00pm during the winter solstice additional overshadowing is cast from the building envelope to a small portion of The Domain. The majority of additional overshadowing is not however to the public domain and instead to rooftops of existing buildings. The additional shadows do not result in a significant decrease in amenity for a large component of The Domain, affecting only a small portion of The Domain, adjacent to other areas of shadowing. Further, this shadow impact is for a small portion of the day and not within the time period protected by The Domain sun access plane provisions (9:00am – 2:00pm, all year round).

As a result of the proposed building envelope for the eastern site a small portion of additional overshadowing at Chifley Square is proposed at 3:00pm on 21 December. This area of public domain is not protected from overshadowing in the planning controls; however, it is noted that this additional overshadowing is in the mid-summer afternoon for a short period of time only.

The overshadowing analysis demonstrates that the proposed building envelopes for the Hunter Street Station OSDs would retain an acceptable level of solar access to the residential apartments at 1 Hosking Place between 12:15pm and 2:45pm on 21 June (more than two hours in duration).

Visual impact

A Visual Impact Assessment has been prepared (Appendix O) which assess a series of photomontages from 10 key vantage points in the public domain. Of the ten views analysed, eight were rated as a low, one was rated as medium, and one was rated as a medium-high level of visual impact.

The regulatory context of the site, with or without the changes contemplated in the Planning Proposal request, provides for tall tower forms similar to the envelope proposed, and as such the commensurate level of visual effects and impacts are contemplated by the controls. Therefore, the proposal can be supported on visual impacts grounds.

Transport and access

The traffic modelling undertaken shows that impacts to future intersection performance are anticipated to be negligible, and the future load road network will operate within acceptable level of service thresholds. The number of car trips generated by the proposed development is negligible. The proportion of trips made by public transport is expected to significantly increase and become the primary form of travel to and from the site.

Sydney Metro is seeking approval for provision of up to 70 car spaces between the eastern and western sites. The number on each site will be determined in a future Detailed SSDA. Vehicular access to the proposed development including to a ground floor loading dock would be provided from O'Connell Street. The proposed car parking, bicycle parking and end of trip facilities on the east site is anticipated to be provided within Level 3 of the podium.

An assessment of construction vehicles movements associated with the proposal and will be undertaken as part of the future Detailed SSDA.

Noise and vibration

An Acoustic and Vibration Impact Assessment Report has been prepared to assess the potential construction and operation noise and vibration impacts associated with the OSD, and to consider the amenity of future occupants of the buildings.

The highest construction noise levels were predicted at the closest receivers surrounding the site during construction. It is expected that the construction noise levels would frequently be lower than predicted at the most exposed receivers. Further, with appropriate noise mitigation it is expected to achieve the required criteria. Such mitigation measures would be incorporated as part of a comprehensive Construction Noise and Vibration Management Plan once more specific information regarding the proposed construction methodology, equipment and staging is known. This would be undertaken as part of the detailed design and future Detailed SSD Application(s).

Noise intrusion into the future OSD during operation from noise sources such as mechanical equipment, road traffic, and the metro, would be able to be sufficiently mitigated and would be subject to further detailed design works. It is considered that the proposal is capable of achieving compliance with the relevant acoustic criteria.

Heritage

A Historic Heritage Impact Assessment has been prepared (Appendix Z) which assesses the impact of the proposed development on the heritage items within and in the vicinity of the site. Overall, the proposed development has little to no heritage impact on heritage items within the site boundary and in the vicinity. The design is responsive to potential impacts caused by its scale and function and incorporates built form response (such as setback) to balance those impacts by improvement to the streetscape permeability and sightlines.

The assessment also recommends provision for the interpretation of archaeological findings from the surface demolition and excavation proposed in Stage 2 CSSI as public art in the proposed development. This integration of archaeological findings, if appropriate, into public art can be detailed in future Detailed SSD Application(s).

Construction Management

A Construction Management Statement (CMS) has been prepared to address how construction of the project would manage impacts to surrounding public domain, developments, pedestrians, existing road network and public transport and Sydney Metro users. The potential impacts associated with the two potential staging scenarios for construction of the integrated station development are considered, with the CMS providing mitigation measures for the impacts of each stage. Detailed consideration of construction related impacts would occur as part of the Detailed SSD Application(s).

Other environmental impacts

The EIS also assesses the impact of the proposed development with reference to the following environmental issues and finds the expected impacts to be acceptable:

- streetscape and public domain
- integration with Sydney Metro station infrastructure
- reflectivity
- utilities, infrastructure and services
- geotechnical and contamination
- crime prevention through environmental design (CPTED)
- waste
- accessibility
- social and economic impacts
- biodiversity
- stormwater and flooding

No major risk or consequences were identified. Measures have been identified in Appendix D to manage and mitigate any minor potential impacts.

Conclusion and justification

This EIS provides a comprehensive assessment of the environmental, social, and economic impacts of the concept development envisaged within this Concept SSDA. This EIS has addressed the requirements of the SEARs (Appendix A), as well as the relevant requirements contained at the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation 2021).

The proposed development can be supported and approved for the following reasons:

- The proposed development demonstrates consistency with the strategic planning framework governing the Greater Sydney Region and Sydney CBD and specifically, the CSPS. The CSPS seeks additional commercial floor space capacity in Central Sydney while also delivering improved public domain outcomes.
- The proposed development will generate jobs both during construction and operation which will have flow on effects to the local and broader domestic economy.
- The proposed development supports planned growth within the Sydney CBD, expanding the 30-minute cities, and increasing all-day accessibility to the Sydney CBD.

By enhancing amenity and activation of the street frontages and existing through-site links compared to existing development, the proposal will enhance the public domain surrounding the site.

- The proposed development will create a place-based outcome that successfully integrates transport infrastructure, open space, ground plane retail and commercial land uses.
- The proposed development provides for a future built form to ensure that setbacks respond to surrounding buildings including proximate heritage items.
- The proposed development encourage activated street frontages to increase the level of ground plane interaction and vibrancy.

- The proposed development will not have any major environmental or built form impacts. Management and mitigation measures have been identified in Appendix D to minimise any potential impacts.

Next steps

Sydney Metro is seeking approval from the Minister for Planning for the proposed building envelope for the OSD at the Hunter Street Station east site. Next steps in the process include:

- exhibition of this EIS for a minimum of 28 days and invitation for the community and stakeholders to make submissions
- consideration of submissions – submissions received by the Secretary of the NSW Department of Planning and Environment would be provided to Sydney Metro who may then be required to prepare and submit:
- a Submissions Report, responding to issues raised in the submissions
- an Amendment Report (if applicable), outlining any proposed changes to the proposal to minimise its environmental impacts or to deal with any other issues raised
- determination by the Minister for Planning including, if approved, any conditions of approval.

Consultation with the community and stakeholders would continue throughout the detailed design and construction phases.

1 Introduction

1.1 Background

1.1.1 Sydney Metro West

Sydney is expanding and the NSW Government is working hard to deliver an integrated transport system that meets the needs of customers now and in the future.

Sydney Metro is Australia's biggest public transport program. Services on the North West Metro Line between Rouse Hill and Chatswood started in May 2019 on this new stand-alone metro railway system, which is revolutionising the way Sydney travels.

The Sydney Metro West project forms part of the broader Sydney Metro network which includes:

- Sydney Metro North West – opened in May 2019
- Sydney Metro City & Southwest – currently under construction with services to begin in 2024
- Sydney Metro West – currently under construction and due to open in 2030
- Sydney Metro – Western Sydney Airport – currently under construction and due to open when the airport opens for passenger services.

The Sydney Metro network is shown in the Figure 1-1.

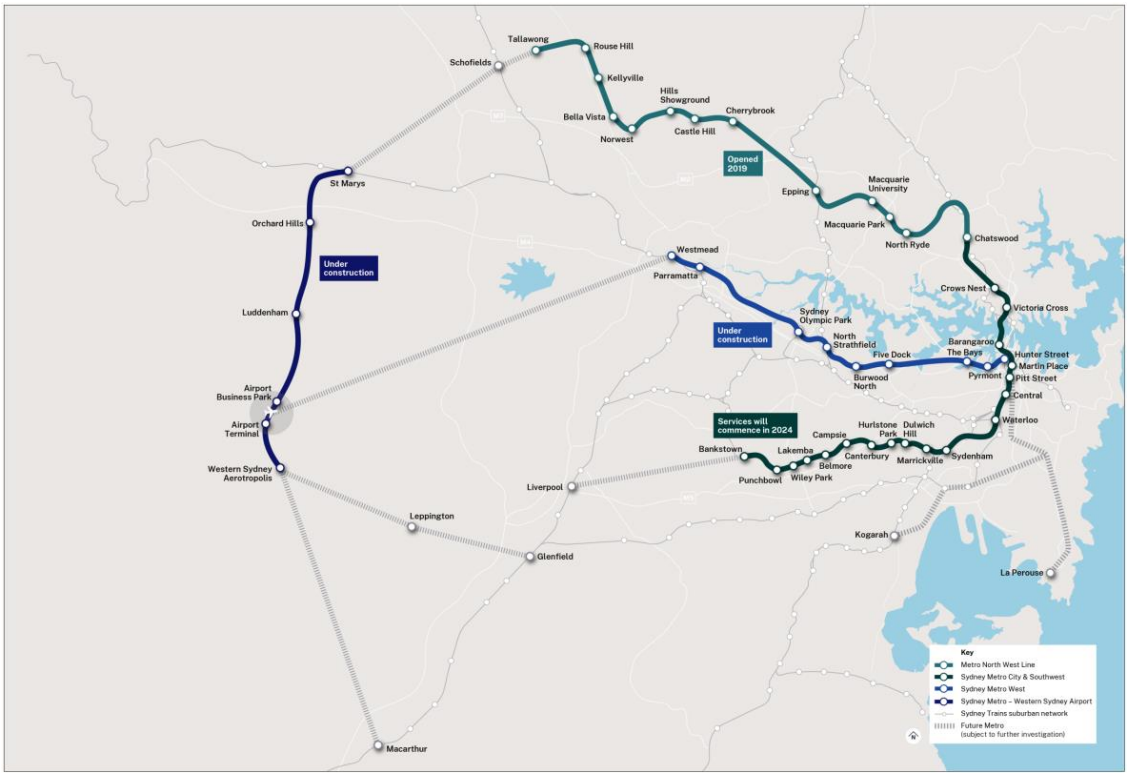

Figure 1-1 Sydney Metro network map

The delivery of Sydney Metro West is critical to keeping Sydney moving, and will:

- comprise a new 24-kilometre metro line with stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street.

- have a target travel time of about 20 minutes between Parramatta and the Sydney CBD
- link new communities to rail services and support employment growth and housing supply
- relieve the congested T1 Western Line, T9 Northern Line, and T2 Inner West & Leppington Line
- double the rail capacity between Parramatta and the Sydney CBDs
- significantly boost economic opportunities for Greater Parramatta
- support new residential and employment zones along the Greater Parramatta to Sydney CBD corridor, including at Sydney Olympic Park and The Bays – providing improved transport for the additional 420,000 new residents and 300,000 new workers forecast to be located within the corridor over the next 20 years
- allow customers fast and easy transfers with the T1 Western Line at Westmead, T9 Northern Line at North Strathfield, and the Sydney Trains suburban rail network and Sydney Metro in the Sydney CBD
- allow for transfers with the future Parramatta Light Rail Stage 1 at Westmead and Parramatta, as well as the planned Parramatta Light Rail Stage 2 at Sydney Olympic Park
- create an anticipated 10,000 direct and 70,000 indirect jobs during construction.

The main elements of Sydney Metro West are shown in Figure 1-2.

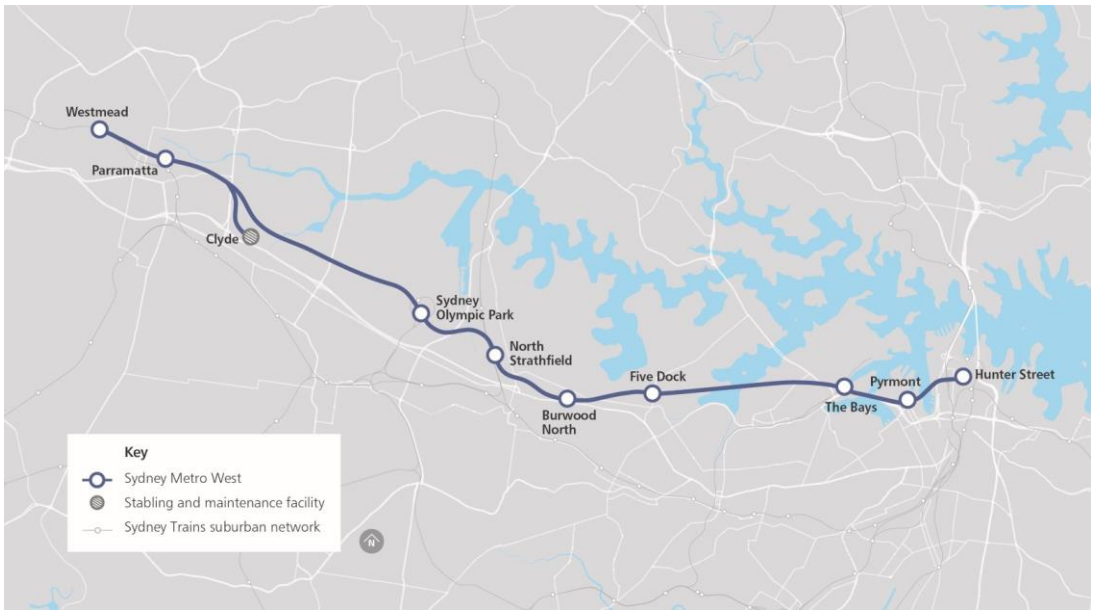

Figure 1-2 Sydney Metro West network map

Sydney Metro West is being assessed as a staged critical State Significant infrastructure (CSSI) application under section 5.20 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and comprises the following applications:

- The Concept and major civil construction work for Sydney Metro West between Westmead and The Bays, including station excavation and tunnelling, associated with the Sydney Metro West railway line (CSSI Concept and Stage 1 approval) was approved on 11 March 2021.
- All major civil construction and enabling works between The Bays and the Sydney CBD, including demolition, tunnelling, and station excavation for new metro

stations associated with the Sydney Metro West railway line (CSSI Stage 2 Application) was approved on 24 August 2022.

- Rail infrastructure, including fit-out of tunnels, construction, fit-out, and operation of metro stations and surrounding precincts and operation of the Sydney Metro West line (Stage 3 CSSI Application).

Integrated station and precinct development

The CSSI Concept and Stage 1 Approval foreshadowed integrated station and precinct developments, however the details of future OSDs were not included in CCS1 Concept Approval. The Stage 3 CSSI approval will construct the station boxes that includes physical provisions to enable future OSDs.

The vision is for integrated station and precinct development that could provide a range of uses. Integrating a mix of uses and development into the station precinct would contribute to the success of places by:

- Encouraging precinct activation and use of Sydney Metro West across different times of the day and week.
- Creating opportunities to provide facilities which meet customer and community needs, attracting people to stations.
- Allowing stations to successfully integrate into their urban context and to contribute positively to the character of places at the stations.

Sydney Metro is proposing over and/or adjacent station developments at Westmead, Parramatta, Sydney Olympic Park, Burwood North, The Bays, Pyrmont and Hunter Street stations. Sydney Metro will continue working closely with the local community and stakeholders so that station precincts become welcoming hubs that build on the local character.

Planning approval approach

This Environmental Impact Statement (EIS) has been prepared to accompany a Concept State Significant Development application (Concept SSDA) for over station development (OSD) at Hunter Street Station. This EIS has been prepared by Sydney Metro and is submitted to the NSW Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The SSDA seeks consent for a concept proposal, within the meaning of section 4.22 of the EP&A Act. It seeks consent at a conceptual level for the proposed land uses, maximum building envelope, maximum building height, maximum gross floor area, and maximum car parking provision. The proposed development will comprise commercial premises within a new building to be constructed above the Hunter Street Station eastern site, and commercial and retail premises within the podium built form (the podium built form up to the transfer slab level is not part of this Concept SSD and is under the Stage 3 CSSI approval).

1.1.2 Hunter Street Station

The Hunter Street Station is in the northern part of the Sydney CBD, within the commercial core precinct of Central Sydney and within the Sydney local government area (LGA). The Hunter Street Station includes two sites – the west site and the east site. This EIS relates to the east site only.

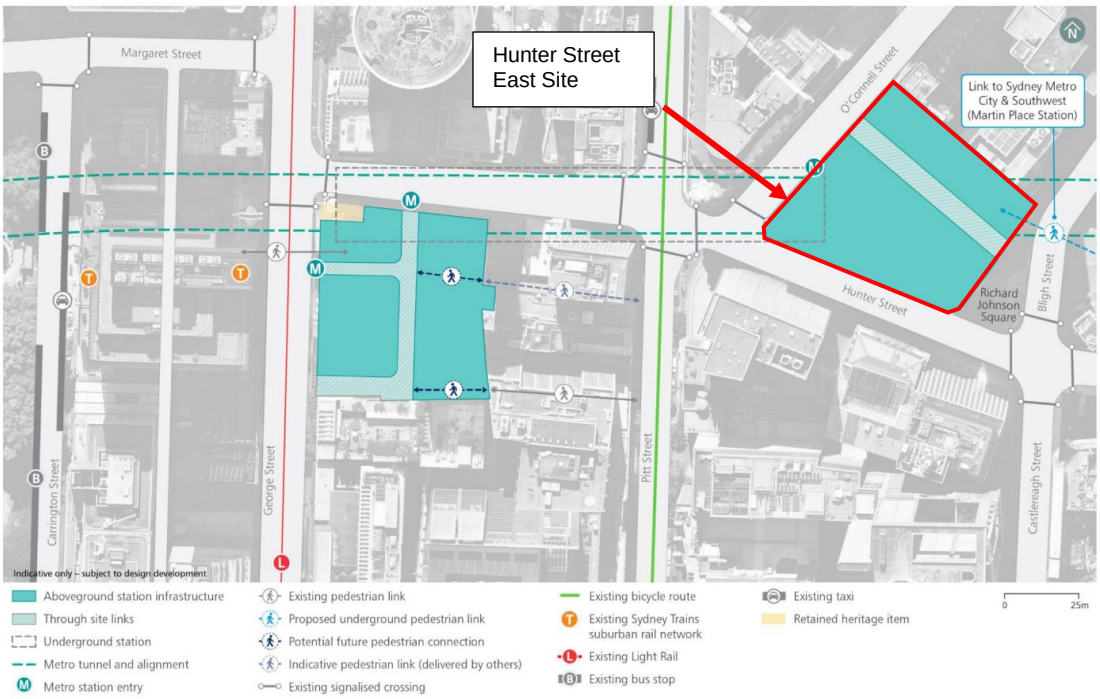

Figure 1-3 Indicative layout and key design elements – Hunter Street Station

The precinct surrounding Hunter Street Station is characterised by a broad mix of uses including offices, retail, hotels, entertainment and night-life, as well as open space such as The Royal Botanic Garden, the Domain and Hyde Park. The precinct supports the largest office sub-market in Australia, favoured by financial, legal, property and technology services. It is well connected to Greater Sydney through the network of suburban train lines, light rail, buses and ferries.

Hunter Street Station would provide direct access to the commercial core of the Sydney CBD. The metro station would also enable interchange with existing public transport networks, including Sydney Metro City & Southwest, the existing Sydney Trains suburban rail network, light rail and bus networks.

Major civil construction work including station excavation and tunnelling at Hunter Street Station was assessed and approved under the Stage 2 CSSI Application. The construction activities required to complete the Hunter Street Station and precinct ready for operation are currently under assessment under the Stage 3 CSSI Application.

The Stage 3 CSSI Application includes the following related to the Hunter Street Station:

- fit-out of tunnels including rail systems for metro train operations
- construction, fit-out and operation of metro station buildings and the surrounding metro precinct
- subdivision of the site
- space for non-station uses at the metro station (e.g. retail ,commercial and community)
- provisioning for over station development within the metro precinct
- the structural elements and provision for utilities and services for non-station uses (e.g. retail, commercial and community facilities)
- transport network modifications such as new interchange facilities and integration with other transport nodes

- operation and maintenance of the Sydney Metro West line.

Hunter Street Station would include a series of precinct and interchange elements such as:

- underground pedestrian connections to the Sydney Trains network at Wynyard and Sydney Metro City & Southwest at Martin Place
- through-site links at the proposed station entries
- built elements and provision of utilities and services to provide space for future non-station uses (e.g. retail, commercial and/or community facilities) including OSDs above the eastern and western sites. The OSDs are part of this Concept SSDA and fit out and use of the non-station uses within the OSDs would be subject to future detailed SSDAs.

Sydney Metro are continuing to investigate opportunities, in consultation with stakeholders, to upgrade the existing Richard Johnson Square at the corner of Bligh Street and Hunter Street.

The Stage 3 CSSI Application also includes the following to support the future OSD:

- structural elements to enable the construction of future over station development, up to a podium level that future development would be constructed above
- space for future lobbies, lift cores, access, parking, loading docks and building services for future over station development
- subdivision.

1.1.3 Planning Proposal request

A Planning Proposal request has been submitted to the City of Sydney Council to amend the planning controls that apply to both the eastern and western Hunter Street Station sites under the *Sydney Local Environmental Plan 2012* (SLEP 2012). The new controls are proposed to be included as site-specific provisions that address the following objectives:

- Contribute towards the establishment of an integrated transport hub within the Sydney CBD which strengthens Sydney's rail network improving connectivity.
- Facilitate future development that promotes design excellence and is consistent with the objectives of the Central Sydney Planning Framework.
- Deliver high quality employment generating floorspace that aligns with the objectives for development within the tower cluster areas identified within the Central Sydney Planning Framework.
- Deliver employment density alongside the delivery of significant new public transport infrastructure servicing the site and surrounding precinct.

The Planning Proposal request is required as the OSD at the Hunter Street Metro eastern site seeks to exceed SLEP 2012 floor space ratio (FSR) and height of building development standards and utilise a bespoke design excellence process in lieu of undertaking an architectural design competition. The Planning Proposal request includes new site-specific provisions to support this additional FSR and additional height above the existing Sydney LEP 2012 development standards, and to achieve other public benefits and built form outcomes including facilitating the delivery of a non-residential building that would:

- comprise maximum building heights of between RL 238.9 and RL 269.1 to comply with the relevant sun access plane controls
- include a maximum floor space ratio (FSR) of 22.8:1

- include site specific controls which ensure the provision of employment and other non-residential land uses
- require the mandatory consideration of site-specific Design Guidelines within the site specific SLEP 2012 controls to guide the assessment of the development consent sought under the future Concept SSDA (and subsequent Detailed SSDAs)
- limit the provision of up to a maximum of 70 car parking spaces on the site (a total of 70-spaces are to be provided between the eastern and western Hunter Street Station sites, with the number on each site to be determined in a future detailed SSDA)
- establish an alternative approach to design excellence that responds to the physical and procedural requirements for the integration of the OSD with the Hunter Street Station and broader Sydney Metro West project.

The Planning Proposal request was submitted to the City of Sydney Council in May 2022. The Planning Proposal report along with the draft Design Guideline for the Hunter Street OSDs (Design Guideline), Design Excellence Strategy, public benefit offer, and supporting information received Gateway Determination on 28 October 2022

The proposed Concept SSDA is consistent with the draft site-specific provisions under the Planning Proposal. The detailed assessment of the Concept SSDA against the proposed provisions in the Planning Proposal is contained within Appendix B.

1.2 Proposal overview

This EIS has been prepared to accompany a Concept SSDA for the OSD at the Hunter Street Station eastern site. This EIS has been prepared by Sydney Metro (the applicant for SSD- 46246713) and is submitted to the NSW Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Concept SSDA seeks development consent for a building envelope above the Hunter Street Station eastern site, that includes:

- maximum building envelope and built form parameters (including tower envelopes and building setbacks)
- maximum building height of between RL 238.9 and RL 269.1, as it varies to comply with the relevant sun access plane controls (about 58 storeys)
- maximum gross floor area (GFA) of 84,223m2
- land uses within the OSD building envelope and podium including:
- commercial land uses within the tower building envelope
- commercial and retail land uses within the building envelope for the podium
- provision for up to 70 car spaces on the site
- Loading, vehicular and pedestrian access arrangements for the OSD
- Utilities augmentation and connections where required (subject to Detailed SSDA(s).

The site in its regional setting is provided in Figure 1-4 below, illustrating the proposed development site within the broader regional context of the Sydney CBD.

Figure 1-4 Regional setting map

The vision for Hunter Street Station and its surrounds is to create:

> *"A landmark station that reinforces the commercial heart of the global Eastern Harbour City, unlocking public transport capacity and catalysing new economic opportunities with Greater Parramatta (Central River City)."* (Stage 3 CSSI Application).

The Stage 3 CSSI Application identifies the following place and design principles for Hunter Street Station:

- reinforce Sydney's global standing by significantly improving public transport accessibility between the Eastern Harbour City and the Central River City, enhancing job-to-job connections and catalysing economic growth

- establish an integrated transport hub in this northern CBD precinct, strengthening Sydney's rail network and linking important destinations to deliver a more connected city
- deliver highly efficient interchanges between metro and other public transport modes, with capacity to support high volumes of pedestrians aboveground and underground, while delivering a high-quality customer experience
- facilitate integrated station developments that promote design excellence and contribute to the unique attributes and character of this CBD North location, aligned with the Central Sydney Planning Framework
- deliver a design that promotes active street frontages to support a vibrant public domain in the heart of the Sydney CBD, which delivers a high-quality station address to George Street – the CBD's north-south pedestrian boulevard.

The Concept SSDA supports the implementation of the place and design principles outlined in the Stage 3 CSSI Application, and the OSD will be well integrated with the design of the station.

This SSDA seeks consent for a concept proposal, within the meaning of section 4.22 of the EP&A Act. It seeks consent at a conceptual level for the proposed land uses, maximum building envelope, maximum building height, maximum gross floor area, and maximum car parking rate. Future development approvals would be sought for the detailed design and construction of the proposed development. The future approval will be required to be consistent with this Concept SSDA.

The detailed design and fit-out of the metro station infrastructure will be integrated with the proposed development to facilitate a cohesive station and precinct development. To enable this, the podium of the Hunter Street East site is included in the Stage 3 CSSI Application and approval for the podium envelope is not sought under this proposal. Approval for the land uses within the podium (commercial, retail and station uses) associated with the proposed development is sought under this Concept SSDA.

1.2.1 Proposal objectives

The objectives for the proposed development build upon the objectives of the Planning Proposal request prepared for the Hunter Street Station sites. The objectives for the proposed development are to:

- contribute towards the establishment of an integrated transport hub within the Sydney CBD which strengthens Sydney's rail network and improves connectivity.
- facilitate future development that promotes design excellence and is consistent with the objectives of the Central Sydney Planning Framework.
- deliver high quality employment generating floor space that aligns with the objectives for development within the tower cluster areas (identified within the Central Sydney Planning Framework).
- provide a robust framework to inform future Detailed SSDA(s) for the OSD, including site-specific Design Guidelines, established building envelope plans, and conceptual land uses for the site.

deliver employment density alongside the delivery of significant new public transport infrastructure which services the site and surrounding CBD precinct.

1.2.2 Interface with Hunter Street Station

The detailed design and fit-out of Hunter Street Station infrastructure will be integrated with the proposed development to facilitate a cohesive station and precinct development.

Approval for the podium envelope and land uses within the podium that directly relate to the operation and function of Hunter Street Station (including public domain work and future through-site links) is being sought in the Stage 3 CSSI Application.

The Stage 2 CSSI application will include the demolition, tunnelling, and station excavation for the Hunter Street metro station. The Stage 3 CSSI application includes the fit-out of the tunnels and the construction, fit-out, and operation of the station, station box and surrounding public domain. This Concept SSDA seeks consent for the proposed land uses (such as retail and commercial uses) within the podium that directly relate to the commercial tower OSD as illustrated in Figure 1-5. As such, the built form identified in orange at the lower levels of the building in Figure 1-5 is not the subject of this Concept SSDA and instead will be determined through the Stage 3 CSSI Application.

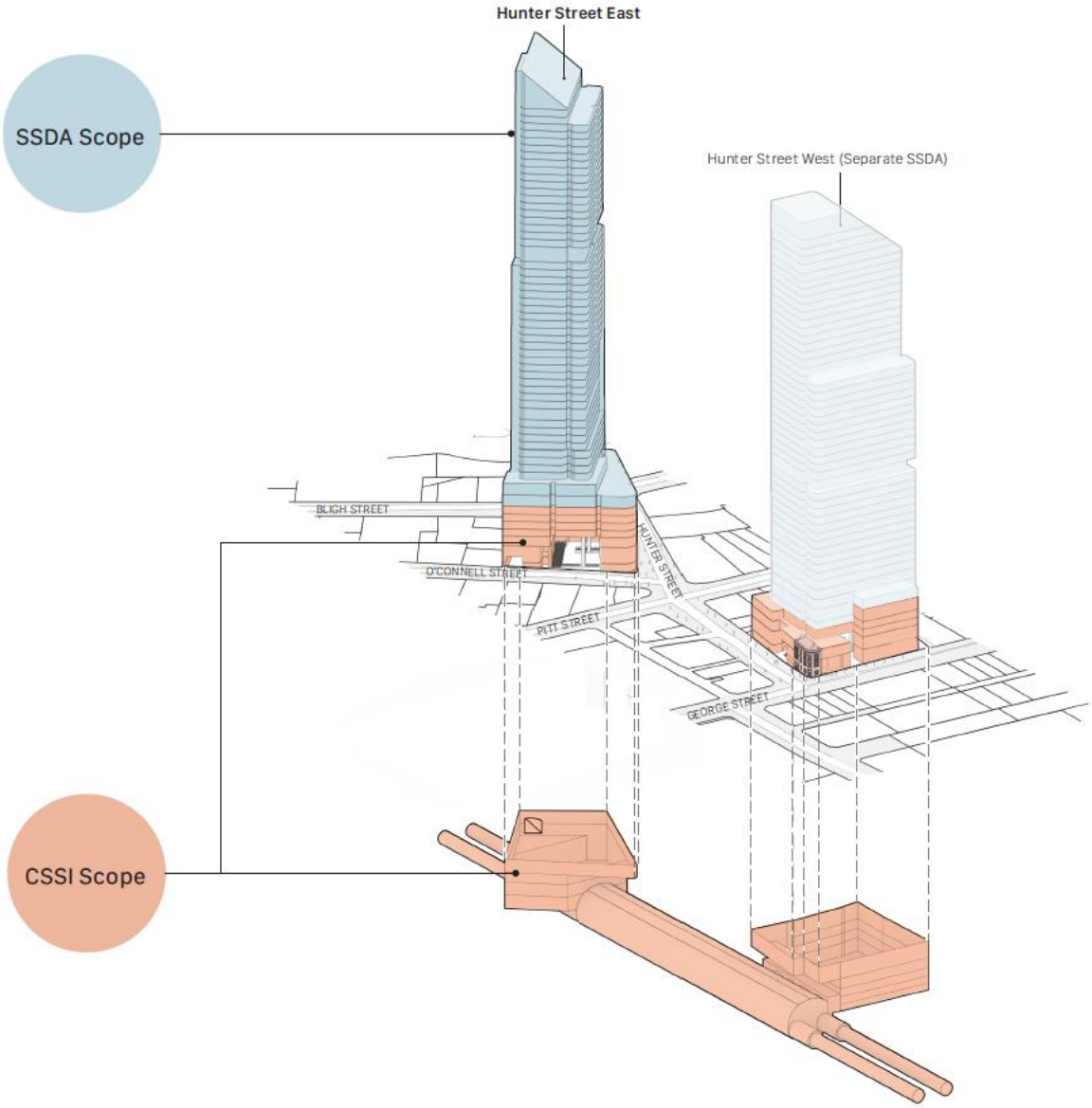

Figure 1-5 Overview of planning pathway and scope

1.3 Purpose and structure of this Environment Impact Statement

The purpose of this EIS is to support Sydney Metro's application to the Minister for Planning for approval of this proposal as State significant development under Part 4 of the EP&A Act. It addresses the environmental assessment requirements of the Secretary of DPE the Secretary's Environmental Assessment Requirements (SEARs) dated 8 August 2022.

The structure and content of this EIS are outlined in Table 1-1.

Table 1-1 Structure and content of this EIS

Chapter	Description
Chapter 1 Introduction (this chapter)	Outlines the key elements of Sydney Metro West and this proposal, including its strategic context and objectives, as well as the purpose of this Environmental Impact Statement.
Chapter 2 Strategic context	Provides justification of the proposed development and establishes the strategic context of the proposal
Chapter 3 Project description	Provides a description of the proposed development
Chapter 4 Statutory context	Provides an outline of the statutory approvals framework, including applicable legislation and planning policies.
Chapter 5 Engagement	Outlines stakeholder and community engagement carried out to date, including during the preparation of this Environmental Impact Statement.
Chapter 6 Assessment of impacts	Provides a detailed summary of the results of the assessment of potential impacts of the project.
Chapter 7 Justification of the project	Provides a conclusion including justification for this proposal and an assessment of whether this proposal has achieved the objectives of Sydney Metro West and met the objects of the EP&A Act.
Appendices	
Appendix A	SEARs Compliance Table
Appendix B	Statutory Compliance Table
Appendix C	Stakeholder and Community Engagement Table
Appendix D	Mitigation Measures
Appendix E	Built Form and Urban Design Report
Appendix F	Architectural Renders
Appendix G	Building Envelope Drawings

Chapter	Description
Appendix H	Reference Scheme Drawings
Appendix I	Demarcation Plans
Appendix J	Interim Clause 4.6 Request
Appendix K	Design Excellence Strategy
Appendix L	CPTED Report
Appendix M	Reflectivity Impact Assessment
Appendix N	Pedestrian Wind Assessment
Appendix O	Visual Impact Assessment
Appendix P	ESD Report
Appendix Q	Transport and Access Report
Appendix R	Biodiversity Development Assessment Report (BDAR) Waiver
Appendix S	Noise and Vibration Impact Assessment
Appendix T	Site survey
Appendix U	Integrated Water Management Plan
Appendix V	Flooding Assessment
Appendix W	Contamination Report
Appendix X	Waste Management Plan
Appendix Y	Aboriginal Cultural Heritage Assessment Report
Appendix Z	Historic Heritage Impact Assessment
Appendix AA	Social Impact Assessment
Appendix BB	Utilities and Infrastructural Servicing Assessment
Appendix CC	Construction Management Statement

2 Strategic context

2.1 Justification for the project

The construction of Sydney Metro West represents an exciting opportunity to incorporate global best practice for place-making and environmentally sustainable development, and to apply innovative thinking to create new city icons. The delivery of integrated station and precinct development enables Sydney Metro to be more than just a transport project, but also a defining city building opportunity that revitalises precincts and communities, leaving a legacy, and shaping Sydney for generations to come.

The development outcome sought by the Concept SSDA would support continued population and employment growth in the Sydney CBD over the coming decades. As part of this anticipated growth, the provision of commercial floor space would also facilitate a significant opportunity to amalgamate small and irregular allotments to deliver high quality commercial floor plates that otherwise would not be achievable on the site.

The Concept SSDA also facilitates the redevelopment of an existing site in Central Sydney which is currently underutilised and promote the efficient use of land, unlocking opportunities which support longer term economic and employment growth. The OSD would facilitate substantial improvements to amenity, public domain upgrades and activation of the surrounding streets.

The Hunter Street Station precinct would provide new places for people to work, shop and visit. This approach will support the NSW Government's planning strategies and objectives to grow high-value jobs, provide workers with better access to employment, and create liveable and sustainable centres.

2.2 Strategic context

The following table provides an overview of the consistency of the proposed development with the relevant strategic plans.

Table 2-1 Overview of the strategic policy framework

Strategy	Comment
NSW Premier's Priorities	The NSW Premier's Priorities comprise a set of 15 priorities that aim to deliver on key policy matters, including: • A strong economy • Highest quality education • Well-connected communities with quality local environments • Putting customer at the centre of everything we do • Breaking the cycle of disadvantage. Two of the priorities are particularly relevant to this concept proposal as detailed below. **A strong economy** The proposed development would create substantial additional employment during the construction phase of the development. Furthermore, the proposal will provide no more than 82,000m² of commercial floor space and up to1500m² of retail floor space that

Strategy	Comment
	will create employment spaces for a significant number of employees. **Well-connected communities with quality local environments** The site is in a highly accessible CBD location with excellent connectivity to public spaces and public transport links to Greater Sydney. The proposed development will help to deliver jobs and retail services within the Sydney CBD, and that is within 10 minutes' walk of a number of quality green, open and public spaces.
Greater Sydney Region Plan: A Metropolis of Three Cities	The *Greater Sydney Region Plan* (Region Plan) provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities - the Western Parkland City, Central River City and Eastern Harbour City. The proposed development responds to the Harbour CBD's focus on innovation and global competitiveness to underpin its continued growth, backed up by the significant Sydney Metro West project. The following objectives are relevant to the proposed development: ***Objective 1. Infrastructure supports the three cities*** The proposed development is located immediately above the transport infrastructure, in a location which would encourage use of the Sydney Metro project by future building occupants. ***Objective 4. Infrastructure use is optimised*** The proposed development would provide for employment opportunities in a location where use of the future metro line can be optimised, as well as the broader Sydney public transport network as principal modes of transport. ***Objective 12. Great places that bring people together*** The proposal would play a key role in the creation of a high quality commercial development and would contribute to the creation of a great future in the central business core of Sydney. ***Objective 14. A Metropolis of three cities – integrated land use and transport creates walkable and 30-minute cities*** The proposal integrates retail and commercial land uses which will deliver equitably enhanced opportunities through providing jobs and services within the CBD and as part of a highly connected network. The proposal will maximise opportunities presented by the Sydney Metro Hunter Street Station to improve business to business connections and support the 30-minute city. The proposed development will improve the extent of ground floor activation, by enabling station entrances on key building frontages that are directly accessible and visible by pedestrians, in addition to providing retail and other active uses at the public domain interfaces of the podium. This will support a diversity of uses for competitive services and entertainment opportunities, ensuring activity throughout the day and night. The proposal will deliver high sustainability outcomes generally consistent with the City of Sydney's expectations for high density development proposed within tower cluster areas in Central Sydney. The proposal will deliver improved sustainability outcomes

Strategy	Comment
	than the existing or previous building stock on the Hunter Street Station east site. ***Objective 22. Investment and business activity in centres*** The proposed development would facilitate business investment in Sydney CBD through the provision of retail and commercial services in a highly accessible and sought after location. ***Objective 24. Economic sectors are targeted for success*** The proposal provides a significant amount of office and retail floor space up to 82,000m² of commercial floor space and up to 1500m² of retail floor space) which strengthens the Harbour CBD's economy globally and nationally.
Our Greater Sydney 2056: Central City District Plan	The Eastern City District Plan covers the LGAs of Sydney, Woollahra, Waverley, Randwick, Bayside, Inner West, Burwood, Strathfield and Canada Bay. Planning Priorities that directly relate to the proposed development include: ***E1 – Planning for a city supported by infrastructure*** The proposal leverages the benefits from the development of the Hunter Street Station eastern site by locating commercial land uses above transport infrastructure. The development maximises the efficient use of existing infrastructure and the future new capacity of the new metro station and encourages active transit methods such as walking and cycling. ***E6 – Creating and renewing great places and local centres and respecting the District's heritage*** The proposed envelope provides podium heights, tower setbacks and heritage interface zones that respond sensitively to the local character and heritage items in and around the station precinct ***E7 – Growing a stronger and more competitive Harbour CBD*** The proposed development will help facilitate significant new premium quality commercial office space within Central Sydney to maximise the competitive advantage of this part of Sydney and attract high quality employment opportunities. ***E10 – Delivering integrated land use and transport planning and a 30-minute city*** By locating additional commercial land uses above Hunter Street Station, the proposal contributes to the vision for a 30-minute city. The proposal encourages trips by public transport to access employment and services. ***E11 – Growing investment, business opportunities and jobs in strategic centres*** The proposal will deliver a new commercial building in Sydney's CBD district that has the potential to accommodate up to 5,567 jobs once operational and will generate around 345 jobs during the construction phase. The site is in a highly accessible location with direct connection to the metro and other public transport modes. The scale of the commercial office floor space and floor plates proposed will enhance the viability of the Harbour CBD as the primary employment hub for the State.

Strategy	Comment
	E19 – Reducing carbon emissions and managing energy, water, and waste efficiently The proposal will facilitate a commercial office building with high sustainability outcomes, consistent with the City of Sydney's expectations for new commercial development in the tower cluster areas of Central Sydney. The proposed development will target the following minimum sustainability rating targets: • 6-star Green Star Buildings • 6-star NABERS Energy for Offices rating (base building) (Commitment Agreement) (without GreenPower) • 4.5-star NABERS Water for Offices. In combination with the Sustainability Rating Strategy, performance targets have been identified for the proposed development to align with the Green Star Climate Positive Pathway. Future detailed design of the OSD will aim to achieve ambitious ecological sustainable development targets including meeting the City's net zero energy requirements.
Future Transport Strategy	*Future Transport Strategy* sets the strategic directions for Transport to achieve world-leading mobility for customers, communities, businesses and guide land use and transport planning across NSW. The Future Transport Strategy takes the impact on COVID-19 pandemic, drought, bushfire, flood impact into account alongside population growth and global megatrends. It includes ground breaking ideas to revitalise the six cities (Lower Hunter and Greater Newcastle City, Central Coast City, Illawarra-Shoalhaven City, Western Parkland City, Central River City and Eastern Harbour City) and connect regional communities, encourage thriving local neighbourhoods, and build on our economic success. The vision and objectives relevant to the site and the proposed development are outlined below. ***Thriving places - Enhancing liveability for customers and communities*** The proposal is an urban renewal project that will revitalize commercial development in the CBD, providing modern and transport integrated development to improve place outcomes. ***Maximising the use of our network - Releasing the potential of our infrastructure*** The site benefits from being located directly above the future Hunter Street Station east which forms an important station in the Sydney Metro West project. The strategic location of high grade commercial floorspace delivers economic benefits for Sydney by enhancing connectivity between businesses, housing and people. The OSD boasts proximity to future public transport opportunities for site users/visitors, which supports public transport patronage and active modes of transport.
Building Momentum: State Infrastructure Strategy 2018-2038	*Building Momentum* is a strategy for the future delivery of infrastructure prepared by Infrastructure NSW. This strategy sets out a number of key directions for NSW, which aim to assist with

Strategy	Comment
	the development of high-quality infrastructure which meets the needs of Sydney over the next 20 years. The proposed development is aligned with the key recommendations of this strategy as it involves the efficient use of surplus development potential created through the Sydney Metro West project. Specifically, the following points are noted: • The proposal will deliver additional jobs in coordination with the new metro station beneath, so that capital investment keeps pace and aligns with new jobs. • Through the provision of bicycle storage and end of trip facilities, and the provision of minimal necessary car parking, the proposal will assist in promoting the use of the existing walking and cycling networks in the area, as well as encouraging the use of the heavy and light rail metro network. • The proposal has been designed with consideration of the life cycle of the asset so that the integrated station and OSD solution is 'futureproofed', and that the life, availability and use of railway infrastructure on the site are appropriately safeguarded. • The proposal has been designed with regard to flooding and other environmental considerations, thus, ensuring that the development is not vulnerable to natural hazards and human-related threats. • The proposal brings together the skills of the private sector in delivering the OSD. It represents an innovative approach that supports the NSW Government in funding the cost of this step change piece of public transport infrastructure.
Better Placed – An integrated design policy for the Built Environment of New South Wales	A response to the seven applicable objectives is described in detail in the Urban Design Report prepared by FJMT (Appendix E). The proposal will form part of a highly connected transport network, improving business to business connections and supporting the 30-minute city. Commercial uses are located above the transport infrastructure of the Hunter Street Station. The new commercial spaces will assist in increasing the employment floorspace within the CBD and together with the enhanced public domain, the proposal will be Better for People and Better Working. The provision of retail spaces, station and building entries on the ground level will positively contribute to the activation of the public domain. The proposal also considers and responds to the interface with George Street, enhancing opportunities for social interaction thereby making it Better for Community. The concept design has been the subject of an extensive design review that involved a collaborative, cyclical and iterative process. The concept building envelope will inform future detailed design outcome, which will accommodate a built form that is sustainable, functional, sensitive to its context and visually distinctive as encouraged by objectives of Better Placed.
Connecting with Country Draft Framework	The Connecting with Country Draft Framework is a system for developing connections with Country that will inform the planning, design, and delivery of projects in NSW. The framework seeks to improve the health and wellbeing of Country to achieve three strategic goals:

Strategy	Comment
	• Reduce the impacts of natural events such as fire, drought, and flooding through sustainable land and water use practices • Value and respect Aboriginal cultural knowledge with Aboriginal people co-leading design and development of all NSW infrastructure projects • Ensure Country is cared for appropriately and sensitive sites are protected by Aboriginal people having access to their homelands to continue their cultural practices. A response to the statement of commitment and principles for action (contained within the Connecting with Country Draft Framework) is provided below. • Connect with Country through first languages in collaboration with local community groups and their recognised Aboriginal knowledge-holders. Incorporate shared histories of cultural landscapes into project design principles. • Connect with Country by engaging with, and responding to, cultural practices led by community groups and their recognised Aboriginal knowledge holders with spiritual links to Country. • Include impacts to Country and culture when evaluating economic, environmental, and social benefits and disadvantages of the project. • Develop indicators to measure impacts to Country and culture during project formation.\
Designing with Country Discussion Paper	The *Designing with Country Discussion Paper* was finalised by the GANSW in March 2020. GANSW's research suggests three essential elements of designing with Country: nature, people, and design. Reflecting on Country and Heritage has been a fundamental design principle which underpins the concept SSDA. The Built Form and Urban Design Report (Appendix E), states the following in terms of connecting with Country: *Across Sydney Metro, the design and integration of stations and precincts should respect and respond to the culture and stories embedded within the land through which they pass.* *Sydney Metro is committed to develop a 'Designing with Country' strategy which can be implemented for the Hunter Street Metro Station site. Murawin Consultants have been engaged to develop this Strategy in partnership with Sydney Metro. Through this process, the ancient spiritual significance of this site can be celebrated.* *The Strategy will:* *- Outline the policy, site and social context of the project. The strategy will respond to the Transport for NSW Reconciliation Action Plan 2019-2021 deliverables* *- Inform the development and stewardship of appropriate Aboriginal Cultural Design Principles that will be incorporated into the design, public art and heritage interpretation of the project*

Strategy	Comment
	Murawin and the design team have worked closely to develop a strategy whereby First Nations knowledge holders are connected with via a reconciliatory process of collaborative design. Through this process, the ancient spiritual significance of this site can be celebrated.
City Plan 2036 Local Strategic Planning Statement	City Plan 2036 is the Local Strategic Planning Statement (LSPS) for the City of Sydney and links the state and local strategic plans with the planning controls to guide future development and the Local Environmental Plan review. The City Plan sets 13 priorities to achieve the City's Green, Global, Connected vision and guide future changes to the City's planning controls, of which the following are relevant: ***I1. Movement for walkable neighbourhoods and a connected city*** The proposed development is co-located with the Sydney metro and will directly facilitate the development of a place-based infrastructure and services which encourage active transit methods such as walking and cycling. By locating additional commercial land uses above the Hunter Street Station eastern site, the proposal contributes to the vision for a 30-minute city. Further, the proposal is considered sustainable as it increases the proportion of trips by public transport, walking and cycling trips to reduce emissions and heath. ***I2. Align development and growth with supporting infrastructure*** The proposal directly relates to the timely delivery of the new Hunter Street Station and in achieving the priority to provide infrastructure projects on-time and on-budget. The proposal will provide commercial floor space to encourage business growth and development that optimises the station infrastructure. ***E7: Growing a stronger, more competitive Central Sydney*** The proposal is located within the Sydney CBD and will provide for additional and contemporary commercial floor space to support business and enterprise activities to contribute to the creation of a world class city centre. ***S2. Creating better buildings and places to reduce emissions and waste, and use water efficiency*** The sustainability framework for the project implements both the Green Star rating scheme and the NABERS rating. The proposed development will target the following minimum sustainability rating targets: 6-star Green Star Buildings 6-star NABERS Energy for Offices rating (base building) (Commitment Agreement) (without GreenPower) 4.5-star NABERS Water for Offices. In combination with the Sustainability Rating Strategy, performance targets have been identified for the proposed development to align with the Green Star Climate Positive Pathway. The project minimum sustainability rating targets meet and exceed the best practice energy performance nominated in clause 7.25A of the SLEP 2012, which will help to achieve ambitious ecological

Strategy	Comment
	sustainable development targets including meeting the City's net zero energy requirements.
Central Sydney Planning Strategy	The Central Sydney Planning Strategy (CSPS) is a 20-year growth strategy for Central Sydney, focused on the delivery of a green, global, and connected city. The CSPS provides the strategic framework of planning policy applying across the Sydney CBD. The CSPS is focused on delivering additional floor space to accommodate employment growth and identifies the need to look beyond the traditional height and floor space controls of the Sydney CBD Core and explore opportunities for urban renewal within Central Sydney which are currently underdeveloped. The Strategy outlines 10 key moves, of which the following are relevant: ***1. Prioritise employment growth and increase capacity*** The proposed development prioritises employment floorspace and will deliver a significant amount of new commercial floor space which will contribute to the targeted increase in employment floorspace within the city centre. In addition, the proposed development will also facilitate genuine activation at street level in the lower podium levels via the provision of retail spaces. ***2. Ensure development responds to context*** The proposed building envelope has been designed to respond to the surrounding context and complies with all setbacks and design guidelines as required by the draft Hunter Street Station OSD Design Guideline (draft Design Guidelines) prepared as part of the Planning Proposal. The draft Design Guidelines were prepared having regard to the Central Sydney Planning Strategy, the City of Sydney Draft Guideline for Site-Specific Planning Proposals, Schedule 12 of the Sydney Development Control Plan 2012 (SDCP 2012), and the context of the site including nearby heritage items, tower alignments, and prevailing street wall heights. ***5. Ensure infrastructure keeps pace with growth*** The proposed development will facilitate the delivery of a critical piece of regional infrastructure. ***6. Move towards a more sustainable city*** Ecologically Sustainable Design (ESD) principles will be applied in the design, delivery and operation of the project. The proposal will achieve the ambitious sustainability targets as set out in the Design Guidelines, consistent with the City of Sydney's expectations for commercial buildings within the tower cluster areas. An Ecologically Sustainable Development Report has been prepared to support the sustainability targets of the proposed development. ESD is discussed further in section 6.7. ***7. Protect, enhance and expand Central Sydney's heritage, public places and spaces*** The proposed development complies with the Martin Place sun access plane requirements, and as outlined in section 6.15 the proposed development positively responds to the character and features of heritage items in the vicinity of the site. The site is not located within a designated special character area.

Strategy	Comment
	8. Move people more easily The proposed development is located above the new Hunter Street Station eastern site and in proximity to multi-modal transport options. The future development will include bicycle parking spaces/lockers for workers and visitors.
Sustainable Sydney 2030-2050	Sustainable Sydney 2030-2050 is a long-term plan prepared by the City of Sydney to achieve a green, global and connected city. It contains six guiding principles and ten strategic directions and targets, of which the following are relevant and will be delivered by the proposal: ***4. Design excellence and sustainable development*** The proposal will deliver ecological sustainable development on the site by establishing minimum sustainability targets for future development that aligns with the City's ambitious targets of achieving net zero energy. The planning proposal request clarifies that clause 6.21C of the SLEP 2012 continues to apply to this Concept SSDA, however in lieu of a competitive design process as required by clause 6.21D and clause 6.21E of the SLEP 2012 a design excellence strategy has been prepared to establish an alternative design excellence process for the Hunter Street Station OSDs. Further discussion of design excellence is contained in section 6.1. ***5. A city for walking, cycling and public transport*** The Concept SSDA will help to realise the vision for a greener global city that will improve the places, spaces and buildings serving the greater community and the visitors that it serves by providing an energy-efficient building, providing workers and visitors with access to public transport in a location that provide active transport and recreational activity workers to walk and cycle to places of interest including Hyde Park and nearby cultural and entertainment hubs. ***9. A transformed and innovative economy*** The proposal will support future high quality urban design outcomes above the Hunter Street Station eastern site that will provide new employment opportunities. Investment into the site for premium quality office floor space will help contribute to make Central Sydney attractive for global investors and a range of tenants. The proposal will contribute to reaching the employment target to 700,000 jobs by 2036.
Guide to Traffic Generating Developments (RMS)	The RMS *Guide to Traffic Generating Developments* (RMS Guide) prescribe the traffic generation considerations relating to major developments. The RMS Guide establishes the grounds for traffic impact assessment in terms of daily traffic volumes and peak traffic volumes for residential, retail and commercial land uses. This Concept SSDA is accompanied by a Transport and Access Report (Appendix T) which considers the strategic context of this guidelines and the statutory context of the Transport and Infrastructure SEPP as the basis for assessment. Traffic generation impacts are also discussed in further detail in section 6.8.
Development near Rail Corridors and	*Development Near Rail Corridors and Busy Roads* aims to facilitate the effective planning, design and assessment of development in or adjacent to rail corridors and busy roads. This guideline has been

Strategy	Comment
Busy Roads – Interim Guideline	addressed in the Noise and Vibration Impact Assessment at Appendix V, which demonstrates that the proposed design is capable of meeting the requirements of the guidelines.
NSW Planning Guidelines for Walking and Cycling	These guidelines function to improve the consideration of walking and cycling and their role in the creation of sustainable neighbourhoods and cities. The proposed development will align with these guidelines by improving walkability and bicycle access across Sydney CBD through the provision of the through site pedestrian route (delivered under the CSSI), bicycle storage and end-of-trip facilities. This will contribute to a high-quality pedestrian and cycling environment, which is conducive to the use of active transport options by future OSD visitors. Details regarding the provision of bicycle infrastructure would be further developed through subsequent Detailed SSDA(s).

2.3 The site and surrounding context

2.3.1 Site location

The Hunter Street Station is in the northern part of the Sydney CBD, within the commercial core precinct of Central Sydney and within the Sydney LGA. The Hunter Street Station includes two sites – the eastern site and the western site. This EIS relates to the eastern site only.

The eastern Hunter Street Station site is on the corner of O'Connell Street, Hunter Street and Bligh Street and in proximity to the new Martin Place Station which forms part of the Sydney Metro City & Southwest due to open in 2024.

The site location is shown in Figure 2-1.

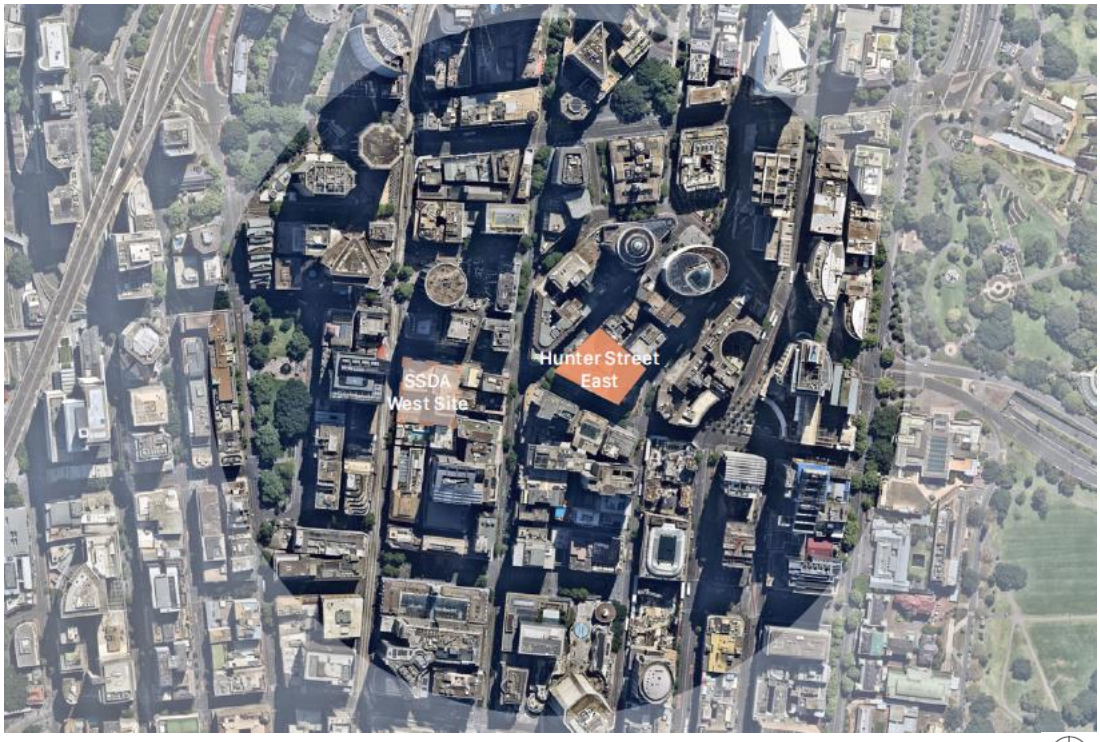

Figure 2-1 Aerial map of Hunter Street Station precinct

2.3.2 Site description

The Hunter Street east site relates to the properties at 28 O'Connell Street, 48 Hunter Street, 33 Bligh Street and 37 Bligh Street, Sydney.

Table 2-2 Site legal description sets out the address, and legal description of the parcels of land that comprise the site that is the subject of this EIS. The total site area is 3,694sqm.

The site has frontages of around 72m to Hunter Street, 43m to Bligh Street and 66m to O'Connell Street.

Table 2-2 Site legal description

Address	Lot and DP
28 O'Connell Street, Sydney	Lot 1, DP217112
28 O'Connell Street, Sydney	Lot 1, DP536538
28 O'Connell Street, Sydney	Lot 1, DP1107981
48 Hunter Street, Sydney	Lot 1, DP59871
48 Hunter Street, Sydney	Lot 2, DP217112
33 Bligh Street, Sydney	Lot 1, DP626651
37 Bligh Street, Sydney	CP and Lots 1-14, 21-31, 33-36, and 40, SP58859
37 Bligh Street, Sydney	CP and Lots 41-49, SP61852
37 Bligh Street, Sydney	CP and Lots 50-57, SP61922
37 Bligh Street, Sydney	CP and Lots 58-65, SP61923
37 Bligh Street, Sydney	CP and Lots 66 and 67, SP63146
37 Bligh Street, Sydney	CP and Lots 67-70, SP63147
37 Bligh Street, Sydney	CP and Lot 72, SP74004
37 Bligh Street, Sydney	CP and Lots 75-82, SP87437
37 Bligh Street, Sydney	CP and Lots 73-74, SP87628
	TOTAL SITE AREA – 3,694sqm

The site is currently partially occupied for the Sydney Metro City & Southwest construction site. The remainder of the site is occupied by commercial office buildings and a range of ground floor business premises including retail, restaurants and cafes, all of which will be demolished to facilitate building the Hunter Street Station (as approved in the Stage 2 CSSI Application).

The existing buildings occupying the site comprise a mix of commercial buildings as follows.

- 28 O’Connell Street – A 19 storey commercial office building which was completed in 1972. It is currently occupied by a range of boutique office tenants.
- 48 Hunter Street – A 13 storey commercial office building completed in 1961.
- 33 Bligh Street – Demolished in late 2015 to be utilised as a construction site for the Sydney Metro City & Southwest.
- 37 Bligh Street – A 14 storey strata-titled commercial office building which includes several retail tenancies at the ground floor.

The lots comprising the site currently have 41 parking spaces distributed as follows:

- 48 Hunter Street – 6 parking spaces
- 28 O’Connell Street – 35 parking spaces.

An additional 45 parking spaces existed in the buildings at 33 Bligh Street before it was demolished in late 2015. In total, there were 86 parking spaces on the lots allocated to the eastern site.

To provide a visual point of reference for this EIS, a series of photographs demonstrating the current site conditions at the site is included in Figure 2-2 Existing office building at 28 O'Connell St through Figure 2-7 View of 48 Hunter Street, facing south-west.

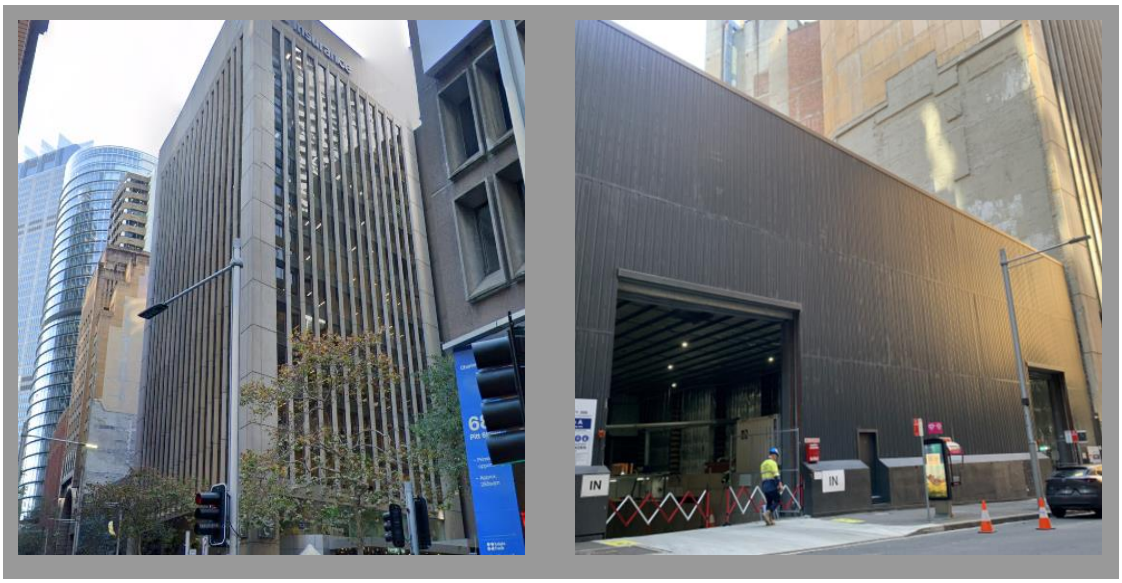

Figure 2-2 Existing office building at 28 O'Connell St

Figure 2-3 Construction site at 33 Bligh Street and existing office building at 37 Bligh Street

Figure 2-4 Existing office building at 37 Bligh Street

Figure 2-5 Existing office building at 48 Hunter Street

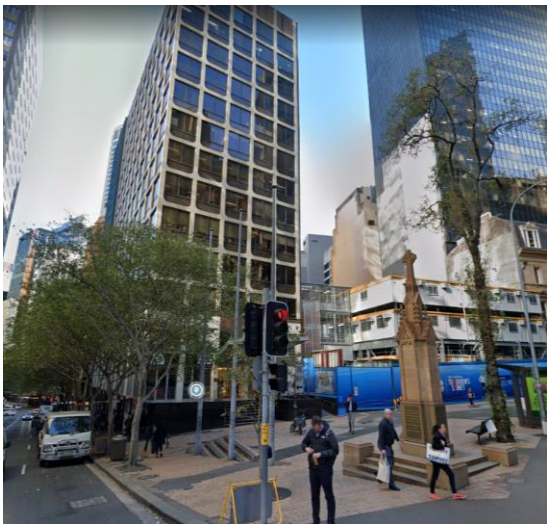

Figure 2-6 Richard Johnson Square and 48 Hunter Street

Figure 2-7 View of 48 Hunter Street, facing south-west

2.3.3 Surrounding development

The northern part of the Sydney CBD is a highly developed commercial core with commercial, retail, health, government, and community-based uses, as well as high density residential developments.

Key buildings located in or around the Sydney CBD, include educational facilities, historic buildings and structures, law courts, public gathering spaces and places of worship. Significant areas of open space, such as the Botanical Gardens, the Domain and Hyde Park are also located within or near the Sydney CBD area, as well as the Sydney Opera House and the iconic Sydney Harbour Bridge.

The site is adjacent to an item on the State Heritage Register, the Former NSW Club Building at 31 Bligh Street (SHR 00145) and the local heritage listed item Former Bank of NSW at O'Connell Street (I1903 in SLEP 2012). It is also located opposite a number of items listed on the State Heritage Register including the Former Wales House at the junction of Pitt and O'Connell Streets (SHR 00586), the Former Rofe Chambers on O'Connell Street (SHR 01019), the Former City Mutual Life Assurance Building on the corner of Hunter and Bligh Streets (SHR 00585) and the Former Perpetual Trustee building on Hunter Street (SHR 00678).

The site is also located adjacent to the local heritage listed Richard Johnson Square (I1673 in SLEP 2012).

North

The adjacent sites immediately to the north on O'Connell Street are local heritage-listed items under Schedule 5 of the SLEP 2012. These include the former Manufacturers House at 12-14 O'Connell Street (I902 in SLEP 2012) and the former Bank of NSW at 16 O'Connell Street (I1903 in SLEP 2012).

The adjacent sites immediately to the north on O'Connell Street are local heritage listed items under Schedule 5 of the SLEP 2012. These include the former Manufacturers House at 12-14 O'Connell Street (I902 in SLEP 2012) and the former Bank of NSW at 16 O'Connell Street (I1903 in SLEP 2012) (Figure 2-8).

The former NSW Club building at 31 Bligh Street is an existing 4storey building listed on the State Heritage Register (I1676 in SLEP 2012) that is located to the north-east of the eastern Hunter Street Station site. It is currently occupied by the Lowy Institute (Figure 2-9).

Figure 2-8 Existing heritage listed buildings at 12-14 and 16 O'Connell Street

Figure 2-9 Heritage listed NSW Club Building at 31 Bligh Street

East

Richard Johnson Square is located to the immediate east of the site and is located at the north-western corner of Bligh and Hunter Streets (). The Square 'including monument and plinth' is a heritage item of local significance (I1673 in SLEP) under Schedule 5 of the SLEP 2012. The square includes a four-sided sandstone obelisk installed in 1925 in memory of Richard Johnson (appointed 'Chaplain to the Settlement' of NSW in 1786 and sailed with the First Fleet).

Constructed in 1936, the former City Mutual Life Assurance building is an existing 11 storey commercial building at 10 Bligh Street and is listed on the State Heritage Register (I1675 in SLEP 2012). This building is located opposite Richard Johnson Square on the northeast corner of Hunter and Bligh Streets (Figure 2-11).

The south-eastern corner of Hunter and Castlereagh Streets is currently being utilised as a construction site for the Sydney Metro City & Southwest as part of the integrated station development for Martin Place Station (Figure 2-12).

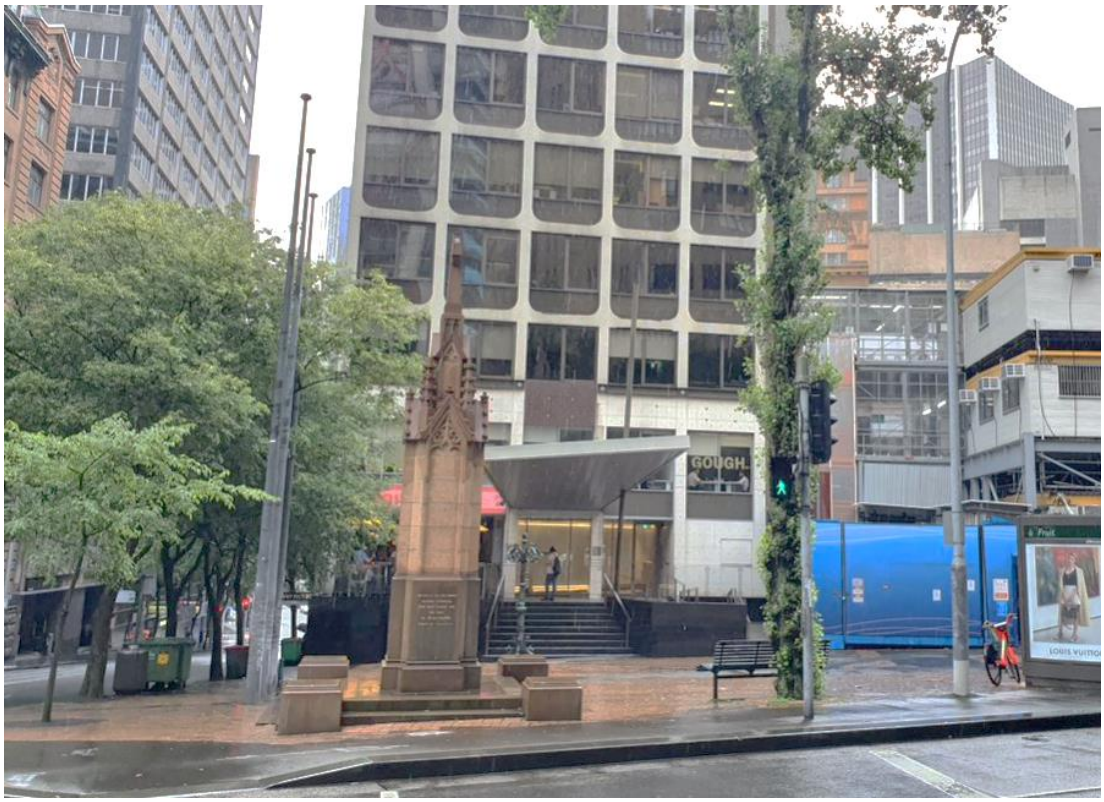

Figure 2-10 Heritage listed Richard Johnson Square

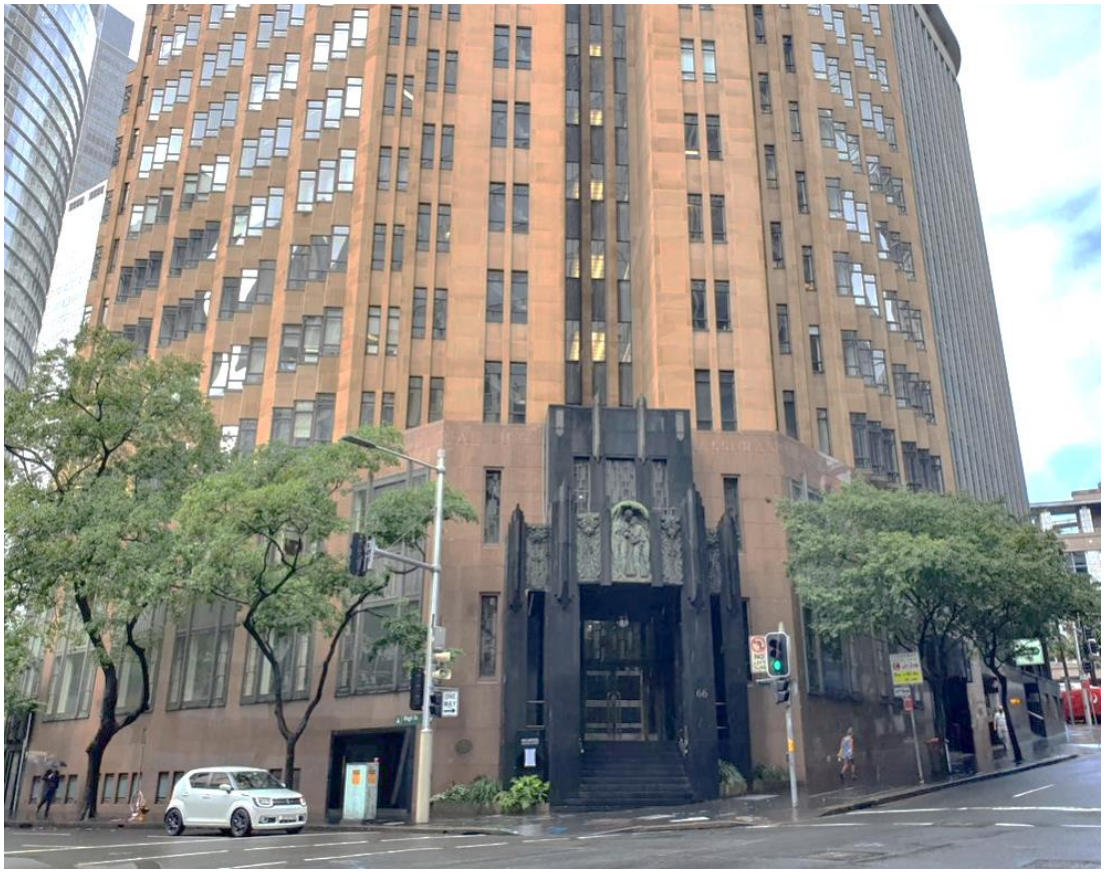

Figure 2-11 Heritage listed City Mutual Life Assurance Building at 10 Bligh Street

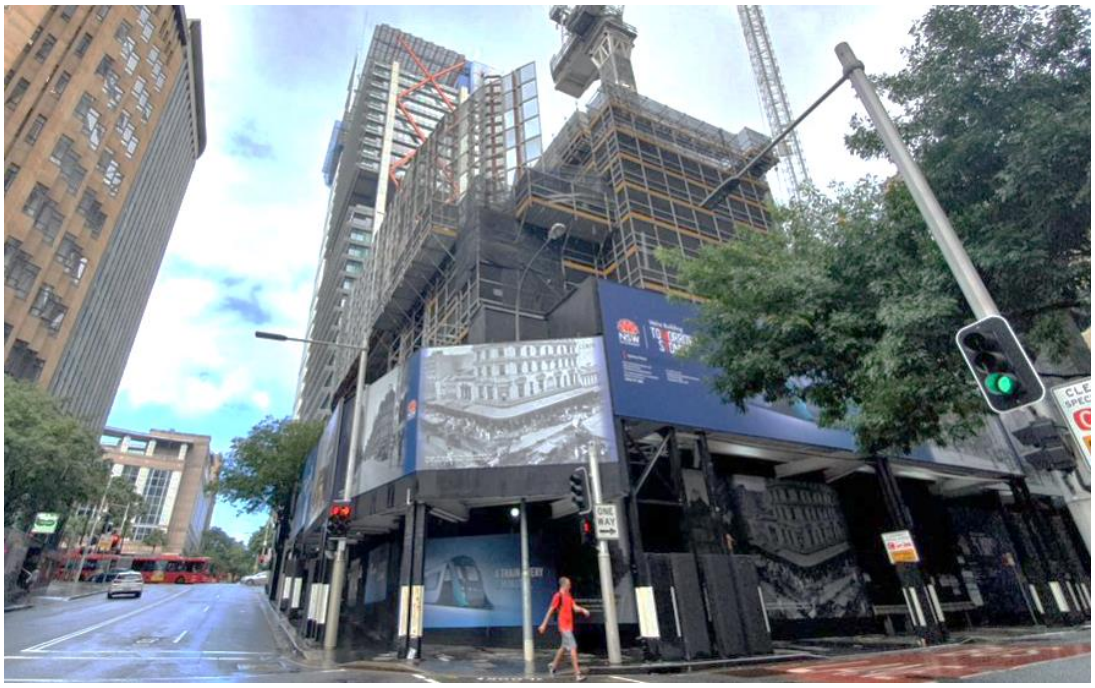

Figure 2-12 Sydney Metro City & Southwest construction site at corner of Hunter and Castlereagh Streets

South

39 Hunter Street is an 8 storey commercial office building with a single basement level known as the former “Perpetual Trustee” building (Figure 2-13). The building was constructed in 1917 and is listed on the State Heritage Register (I1810 in SLEP 2012). The building is occupied by a single commercial tenant.

Figure 2-13 Heritage listed commercial building at 39 Hunter Street

West

To the west of the site at 27 O'Connell Street is the 10 storey Radisson Blu Plaza Hotel which comprises traditional heritage architecture and a sandstone façade (2-15). This building is located at the intersections of Pitt, Hunter and O'Connell Streets and includes a total of 338 hotel rooms and 26 suites.

This building is listed on the State Heritage Register (located at 64-66 Pitt Street) and is known as the former Wales House (I1915 in SLEP 2012). It was built in the early 1920s by the Fairfax family to house the offices of their newspapers.

Figure 2-14 Radisson Blu Plaza Hotel at 27 O'Connell Street

2.3.4 Transport and accessibility

The site is bounded by the following roads:

- O'Connell Street to the north-west
- Bligh Street to the east
- Hunter Street to the south.

Hunter Street is currently a four-lane, two-way undivided local road with a posted speed limit of 40km/h. Parking and loading zones are provided on both kerbside lanes, reducing capacity to a two-lane, two-way road during weekday business hours. Although classified as a local road, Hunter Street supports high volumes of traffic between George Street and Pitt Street. The configuration and movements on Hunter Street have changed over recent years with the development and operation of the CBD and South East Light Rail.

In October 2022, the NSW Government and the City of Sydney announced a trial period closure of George Street between Hunter Street and Grosvenor/Bridge Street to vehicular traffic from 9 January 2023.

O'Connell Street is a four-lane, one-way undivided local road with a posted speed limit of 40km/h. A bus layover facility, coach drop-off zone (for surrounding hotels), parking zone and loading zone occupy kerbside space on both kerbside lanes, reducing capacity to a two-lane, one-way road during weekday business hours. O'Connell Street is used by several public transport bus services and through traffic.

Bligh Street is a one-lane, one-way undivided local road with a posted speed limit of 40km/h. Parking and loading zones are provided on both shoulders, though the wide cross section of the roadway does not impact general traffic flow. Bligh Street is used by several public transport bus services and as a layover for terminating bus routes.

The site is well located in proximity to a number of high frequency public transport services and multi-modal interchanges as shown in Figure 2-15.

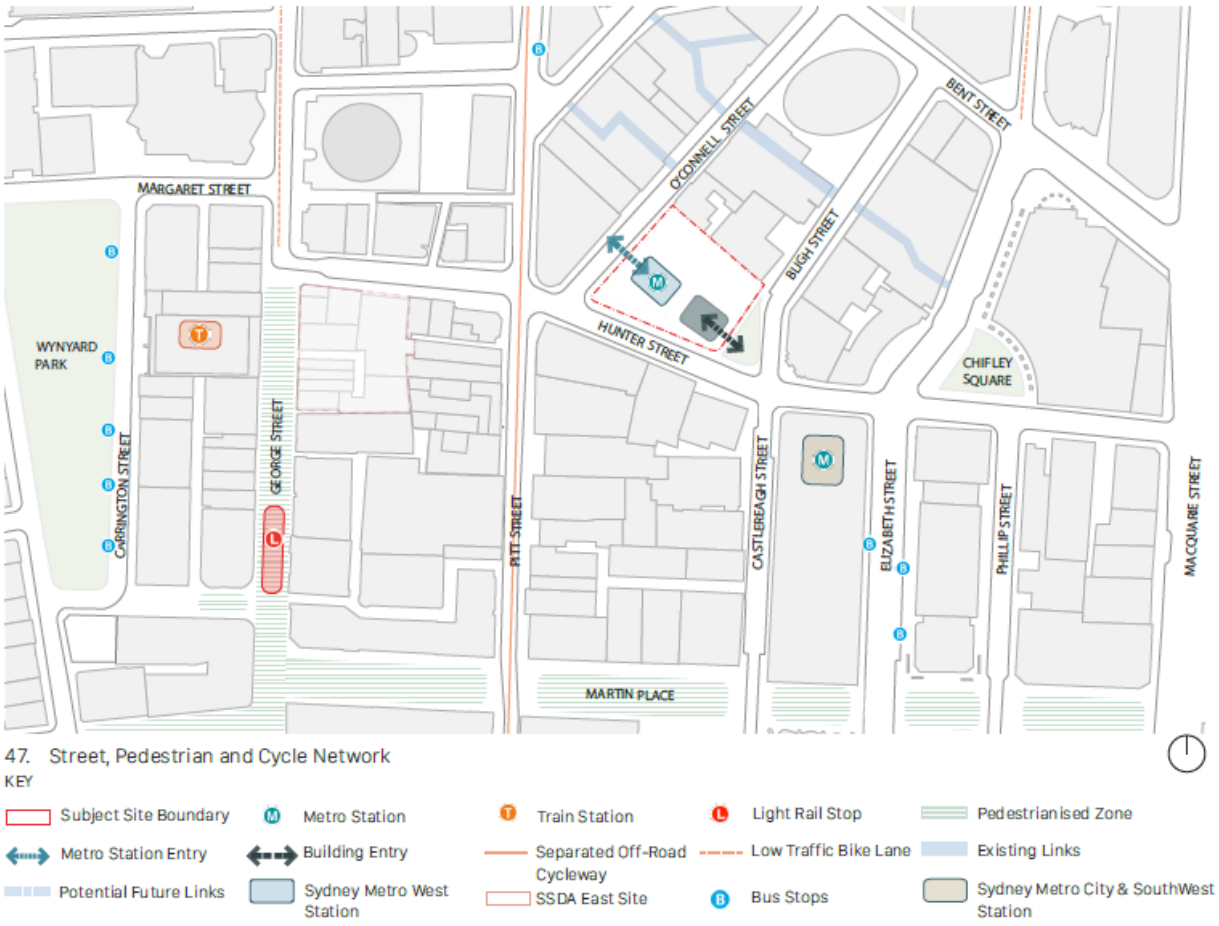

Figure 2-15 Existing public transport infrastructure

Bus services

Existing bus stands on Carrington Street and York Street outside Wynyard Station form the largest and nearest bus interchange near the Hunter Street sites. These bus stands service bus routes to and from Gore Hill, Chatswood, Mascot, Walsh Bay and Mona Vale. Bus stops are also located around the Hunter Street Station eastern site on Castlereagh Street and Elizabeth Street, servicing routes to and from North Bondi, Little Bay, Coogee, South Maroubra and Kingsford.

As a major transport hub, the bus stands at Wynyard Station are serviced by 74 bus routes. A number of these services include school routes and express peak hour services or operate outside of peak hour periods, such as night only services.

Light rail services

Light rail services operate on George Street. Two stops are located at the intersection of Bridge Street and Wynyard Station, and within walking distance (<5 minutes) of the site. The stop at Wynyard Station is within 250 metres of Hunter Street Station East access point.

Rail services

Wynyard Station is located 400 metres west of the Hunter Street Station east site and is served by the T1, T2, T3, T8, and T9 rail services. The station allows for universal access from the York Street entrance via lifts which provide access to the station platforms. There are no bicycle racks or facilities for cyclists to securely store bicycles at Wynyard Station.

2.3.5 Active transport network

Walking

Pedestrian connectivity around the Hunter Street Station sites is satisfactory with footpaths on both sides of all roads. Hunter Street accommodates high pedestrian volumes.

Several roads in the surrounding area are pedestrianised including George Street (south of Hunter Street), Martin Place, Angel Place, Ash Street and De Mestre Place. It is also noted that the precinct includes a number of through-site links at varying levels, including the existing underground and above ground through-site link connecting Pitt Street and Wynyard Station via the Hunter Connection development. High levels of pedestrian activity are generated in north-south and east-west directions on Hunter Street, Bligh Street, Pitt Street and George Street by a range of commercial and retail businesses.

Pedestrian movements within the pedestrianised area of George Street are not uniform and have been observed to be omnidirectional. When the Hunter Street Station is operational it is expected that these routes will remain heavily utilised for destination and through traffic trips by pedestrians.

Cycling

The Pitt Street cycleway is the closest main bicycle route and the only existing bicycle infrastructure that may be used by cyclists to access the Hunter Street Station. Currently, the north-south alignment of this route provides the main bicycle connection to and from the station precinct to the wider bicycle network on King Street.

2.3.6 Topography

The site features a steep gradient running from east down to west along Hunter Street, noting that there is an approximate 8m level difference between Bligh Street and O'Connell Street. The lowest point on the site at the corner of O'Connell and Hunter Street is at RL 11.31 while the highest point on the site at the north-eastern corner at Bligh Street is RL 19.0

2.3.7 Existing vegetation and street trees

The site is situated within an urban context and was historically used for commercial purposes. No vegetation remains on the site.

As shown in Figure 2-16 street trees currently exist along Hunter Street and O'Connell Street, and within Richard Johnson Square.

Figure 2-16 Location of street trees

2.3.8 Utilities and infrastructure

As the subject site is in Central Sydney, it is well served by the full range of public utilities including electricity, telecommunications, water, sewer, and stormwater. It is expected that these services would be upgraded where required as part of the future detailed SSDA.

2.4 Cumulative Impact Methodology

The building envelope for the OSD is a concept proposal only. As a result, no construction works are proposed, and further approval(s) will be sought for the detailed design and construction of the proposed development. Therefore, cumulative construction impacts will be assessed as part of a future detailed design and construction SSDA.

Given the site's location and proximity to future tower clusters within Central Sydney, as identified in the CSPS, it is anticipated that the proposed development will contribute to cumulative impacts with surrounding future development proposals. As such, cumulative built form impact from the proposed building envelope and the following nearby known and relevant significant projects (proposed, approved and to be constructed) have been considered in this EIS as follows:

- Hunter Street East OSD – Proposed Concept SSDA
- Martin Place North OSD – Approved Concept and Detailed SSDAs. Note that Martin Place OSDs will most likely be completed before Hunter Street OSD construction begins.

- Martin Place South OSD – Approved Concept and Detailed SSDAs. Note that Martin Place OSDs will most likely be completed before Hunter Street OSD construction begins.
- 2 Chifley Square – Planning Proposal
- 17-23 Hunter Street and 105-107 Pitt Street – Planning Proposal
- 4-6 Bligh Street – Approved building envelope as described under Section 6.3.14 of the Sydney Development Control Plan (SDCP) 2012.
- Works proposed with the Stage 2 CSSI Application and the Stage 3 CSSI Application for the Hunter Street Station.

Cumulative built form impact has been assessed for the following matters and discussed in section 6 of the EIS:

- Pedestrian volumes and pedestrian infrastructure
- Pedestrian wind safety and amenity
- Traffic and parking
- Overshadowing
- Visual and view impacts
- Noise and general construction impacts, noting that construction 'fatigue' due to prolonged construction on the site relating to works proposed for the Stage 2 CSSI and Stage 3 CSSI as well as this Concept SSDA will also need to be assessed and managed.

2.5 Feasible alternatives

Under Clause 192 the provisions of *Environmental Planning and Assessment Regulation 2021* (EP&A Regs), and in accordance with *the State Significant Development Guide* prepared by DPE, there is a requirement to analyse any feasible alternatives for SSDAs.

Table 2-3 outlines three feasible alternatives: 'Do Nothing', 'Alternative Design' and 'Proposed Design'.

Table 2-3 Project alternatives

Options	Assessment
Do Nothing	The 'Do Nothing' alternative would result in the existing buildings on the site being demolished and the new metro station at Hunter Street being constructed as per the CSSI without any OSD. 'Do Nothing' without any associated development would result in a poor placemaking outcome, inefficient use of land for employment generating outcomes, and decreased job opportunities in walking distance to high frequency transport services. It would also result in a missed opportunity to deliver a city shaping project in Central Sydney and would not meet the objective of the Central Sydney Planning Strategy to reinforce the primary of the commercial core of the Sydney CBD. The Sydney Metro West network will provide connectivity to and from the CBD and facilitates the metro station to enable interchange with existing public transport networks including Sydney Metro City & Southwest, the existing Sydney Trains

Options	Assessment
	suburban rail network, the Sydney Light Rail and bus networks. The 'Do Nothing' option would not result in the best design outcome, particularly in relation to the integration of the site with the station itself and public domain works.
Alternative Design	Alternative designs have been explored in consultation with the City of Sydney Council and the Sydney Metro Design Advisory Panel, and were also presented to the City of Sydney Design Advisory Panel. One such alternative is for a commercial OSD that adheres to the existing planning controls as outlined in the SLEP 2012. It is noted that under the existing SLEP 2012, the site is located within a 'tower cluster area' which enables up to 50% additional FSR on the site subject to the completion of an Architectural Design Competition. The alternative design scenario would therefore be a proposal with a FSR of 12.5:1 plus a portion of the available design excellence bonus. However, the delivery of a scheme that adheres to the existing planning controls would deliver less commercial floor space than would be able to be achieved under the proposed building envelope. This scheme would also not necessarily be delivered with higher public amenity, as the proposed building envelope for the OSD achieves appropriate impacts on the public domain in terms of wind safety and comfort, daylight and sky view, and visual and view impacts among other matters. Further, an alternative design excellence strategy (Appendix K) is proposed within the planning proposal request to ensure design excellence is achieved on the site. Restricting a future OSD on the site to the existing FSR provisions would not acknowledge and optimise the significant investment in infrastructure servicing the site provided by Sydney Metro West. A reduced scale building alternative for the OSD would also result in the site being restricted from achieving its full development potential to promote the efficient use of land and support economic and employment growth. This alternative was ultimately ruled out as it would be inconsistent with the strategic planning context which seeks to unlock opportunities for employment generating floor space on existing sites in Central Sydney.
Proposed Design	The proposed design presents a balanced and feasible option as it will: • maintain the competitiveness and global status of the Sydney CBD by significantly enhancing the employment generating capacity of the site • provide an appropriate balance between commercial uses and pedestrian connectivity within and around the site whilst being sympathetic to adjoining heritage items • establish the land uses, maximum indicative floor space and maximum car parking spaces for the site • provide a building envelope which complies with the existing sun access plane controls.

3 The proposal

This chapter provides a detailed description of the Concept SSDA and sets out the planning and development framework for future Detailed SSDA(s). This section articulates what Sydney Metro is seeking to achieve for the future OSD at the site, including its integration with the Hunter Street Station eastern site.

This chapter is informed by the Building Envelope Drawings and Reference Scheme Drawings at Appendix G and Appendix H and the Built Form and Urban Design Report at Appendix E, as well as other supporting information appended to this EIS.

3.1 Overview of the proposal

This Concept SSDA seeks consent for a building envelope above the Hunter Street Station east site. The Concept SSDA specifically seeks consent, pursuant to section 4.22 of the EP&A Act, for the following:

- a maximum building envelope, including maximum building height and ground and upper-level setbacks
- maximum building height of between RL 238.9 and RL 269.1, as it varies to comply with the relevant sun access plane controls (about 58 storeys)
- conceptual land use for the OSD building which, subject to future detailed applications could include:
- commercial land uses within the tower building envelope
- commercial and retail land uses within the building envelope for the podium
- maximum GFA of 84,223m2, comprising:
    - around 81,769m² of commercial premises
    - around 1454m² of retail premises
    - around 1000m² of station uses (subject to Stage 3 CSSI Application)
- provision of up to 70 car parking spaces within the podium or tower envelope (total of 70 spaces across western and eastern sites with the final allocation subject to separate Detailed SSDA)
- loading, vehicular and pedestrian access arrangements for the OSD
- utilities augmentation and connections where required (subject to Detailed SSDA(s).

In addition, this Concept SSDA seeks approval the following strategies and guidelines for consideration in subsequent Detailed SSDA(s):

- ESD sustainability targets
- strategies for utilities and service provision
- strategies for the management of stormwater and drainage.

An indicative concept reference design has been prepared illustrating how the site could potentially be developed within the proposed building envelope. As this is a concept development pursuant to section 4.22 of the EP&A Act, future approval would be sought for the detailed design and construction of the OSD.

An overview of the proposed key parameters of the scheme is summarised in Table 3-1.

Table 3-1 Key parameters

Parameter	Proposal
Site Area	3,694sqm
Site Address	28 O'Connell Street, 48 Hunter Street, 33 Bligh Street and 37 Bligh Street, Sydney.
Lot Description	Table 2-2Site legal description sets out the legal description of the parcels of land that comprise the western Hunter Street Station site.
FSR	22.8:1
Primary uses	Commercial premises including retail premises
Vehicular access	Vehicular access to and from the site including the loading dock is proposed via a driveway from O'Connell Street. The driveway from O'Connell Street will provide access to/from the ground floor loading dock.
Tree removal	No tree removal is proposed under this application.
Development timing	For the purposes of the Concept SSDA, two possible staging scenarios have been identified for delivery of the integrated station development. Anticipated construction timelines for each staging scenario are discussed in section 3.11.
Lot Resolution	Lot consolidation, boundary adjustment and stratum subdivision are to form part of the Stage 3 CSSI Application and future development application(s) if required in the future.

3.2 Building envelope

The proposed building envelope defines the three-dimensional volume within which future development can occur. The proposed development includes a tower envelope and podium elements to be constructed above the built form sought under the CSSI Stage 3 application.

The building envelope has been designed to enable full integration of the OSD with the Hunter Street Station and the podium. Figure 3-1 shows the proposed development envelope (blue) above the station and podium (orange), and the surrounding built form context, providing a view of the development in the existing context of the locality.

The proposed development envelope and associated building setbacks have been defined by a careful analysis of the urban context including:

- ground plane amenity
- street wall alignment and heritage context
- station constraints
- sun access and daylight access to the public domain
- wind conditions in the public domain.

The proposed floor plate is regularised with area balanced setbacks to O`Connell and Bligh Streets. The regularisation of the form improves the flexibility for the future fit out and detailed design and access to natural daylight for the commercial floor plates. The additional tower setback to Hunter Street allows for additional view corridors towards Australian Square from Hunter Street.

The rounded corners of the proposed building envelope reduce the diagonal dimension of the floor plate, increasing the slenderness of the tower and improving natural daylight access to the surrounding public domain.

The height of the proposed planning envelope is RL269.1 (257.7m above ground), which is below the Martin Place Sun Access Plane and the Pitt Street Mall No Additional Overshadowing plane.

The proposed floorplate includes an articulation zone of 15 per cent, which will allow for architectural articulation and external facade elements such as sun shading and roof features to be included within the building envelope. The articulation zone will provide sufficient flexibility to enable a high-quality design response to be considered as part of the future detailed design application.

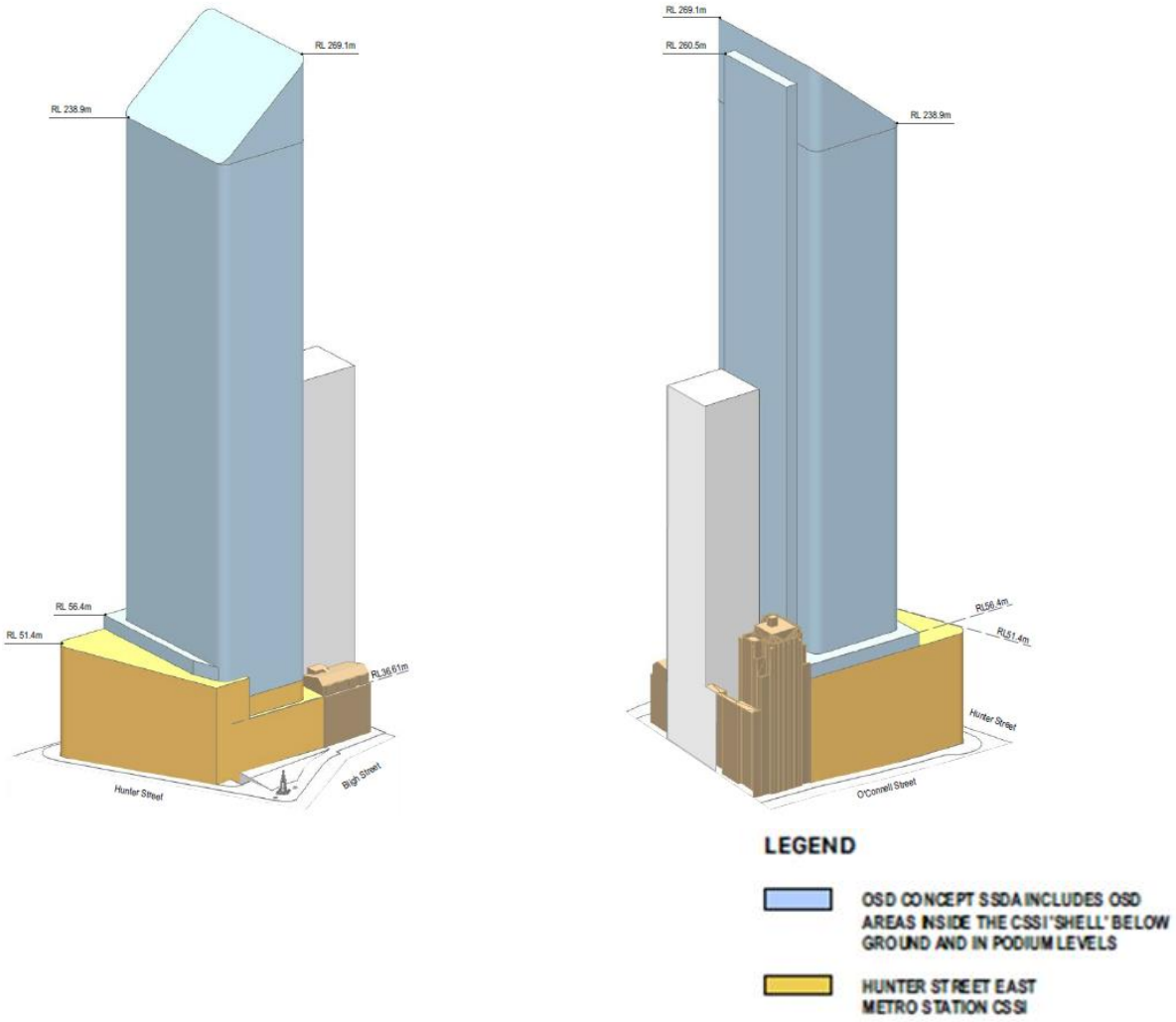

Figure 3-1 Proposed development building envelope

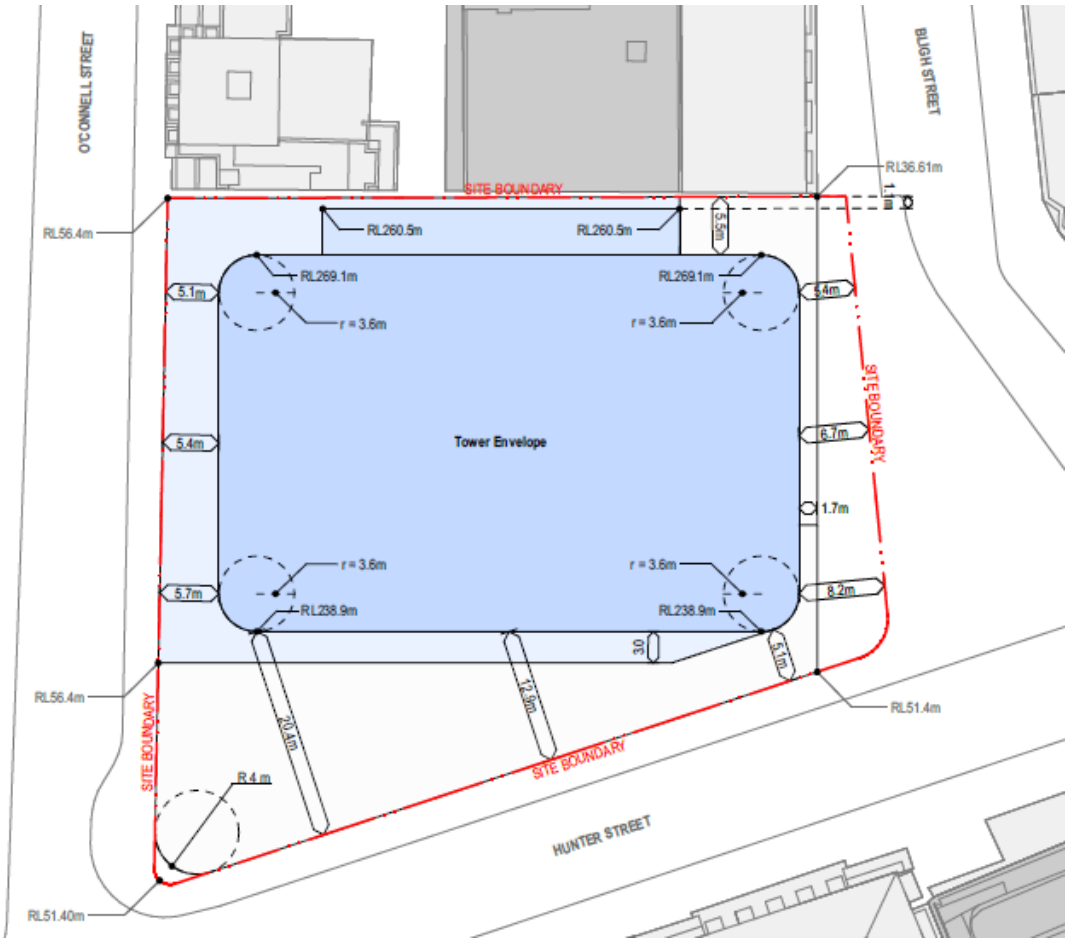

Figure 3-2 Plan view of the proposed building envelope

3.3 Gross floor area

The proposed building envelopes accommodate a maximum GFA of 84,223m^2 above ground level, which includes about 1000m^2 of station floor space required to be delivered within the podium under the Stage 3 CSSI Application.

A breakdown of the different land use elements which contribute to the GFA proposed has been provided at Table 3-2 and a detailed GFA schedule of the indicative design is provided at Appendix E. The total floor space for station, retail and commercial uses is subject to detailed design and is provided for demonstration purposes.

Table 3-2 Indicative Gross Floor Area summary

Component of integrated station development	Development Component	Indicative OSD design GFA (m^2)
Tower OSD (concept SSD Application)	Commercial	81,769m^2 Of which 9352m^2 is to be constructed under the CSSI Approval
	Retail	1454m^2 to be constructed under Stage 3 CSSI Approval.
Sydney Metro (station uses) (CSSI Approval)	Station	1000m^2
	Total above ground GFA:	84,223m^2

As per the planning proposal request, any GFA proposed within a basement for station purposes is to be excluded from the calculation of FSR under the SLEP 2012 and therefore has not been included in the table above.

3.4 Indicative reference scheme

An indicative reference scheme has been prepared and is detailed in the Reference Scheme Drawings (Appendix H).

The intent of this indicative reference scheme is to demonstrate how a building could be established within the proposed envelope while maintaining reasonable environmental amenity outcomes, achieving a functional floor plate for future commercial tenants and enabling a positive streetscape presentation and integration with structural and servicing requirements of a metro station. It is noted that no approval is sought for the indicative concept reference design as part of the Concept SSDA, as this would be sought through a future Detailed SSDA.

Key features of the indicative reference scheme include:

- Provision of up to 1500m² of retail GFA at ground floor and mezzanine level
- Provision of up to 82,000m² of commercial GFA within level 1 to level 55
- Up to approximately 70 car spaces are proposed to be accommodated within the podium of the development, and end of trip facilities including bicycle parking is provided at level 3. Plant and building services for the OSD are proposed on the roof and within a mid rise level of the development.

Podium

As noted previously, the design and construction of the podium will be determined under the Stage 3 CSSI Application. Sydney Metro is not able to define an RL to delineate station and over station development at this point due to ongoing station design development as part of the CSSI approval. The eastern station building (including the station services, space for non-station use and concourse) would be, subject to design development, indicatively around 15 metres above O'Connell Street at the station entry, with station services around 30 metres above O'Connell Street.

The station related elements within the podium include pedestrian and vehicle egress and access, underground station concourse and station platforms, and essential services to operate and maintain the station. In addition to the station related component, the indicative reference scheme for the Concept OSD proposal includes indicative podium plans for how the retail and commercial uses of the future over station development would integrate with the station podium for the Hunter Street station.

Figure 3-3 illustrates indicatively how the proposed ground level will accommodate:

- public access to the underground station concourse and station platforms and access to commercial office lobbies
- activated retail frontages to both the street and the through-site links
- vehicular access to the site for car parking and service vehicles.

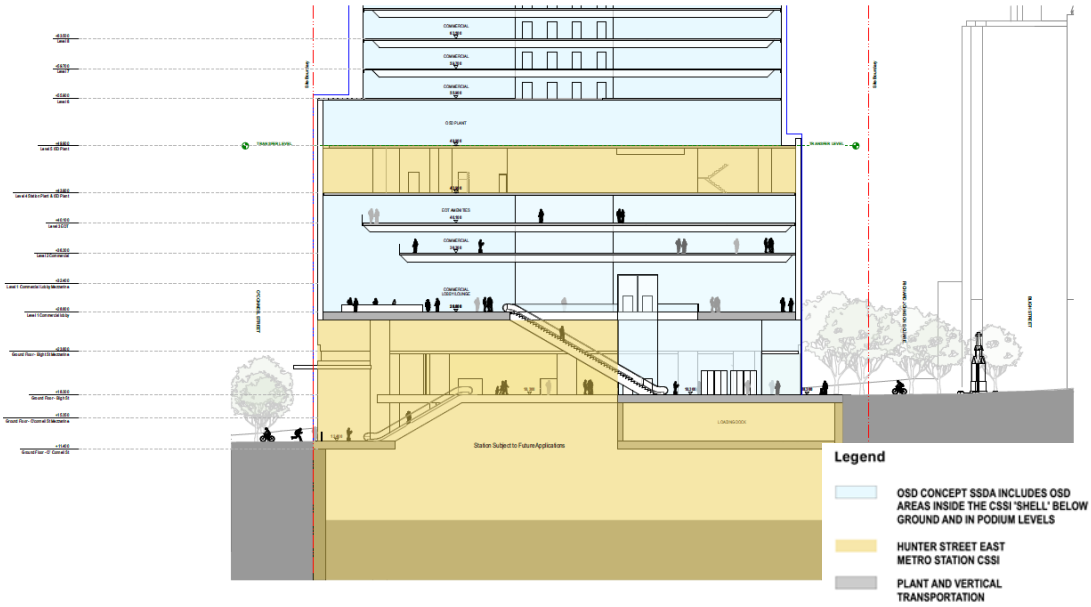

Figure 3-3 Indicative reference section plan

Tower

The indicative concept refence design for the proposed development includes detailed tower plans to illustrate how the proposed development can deliver a premium quality commercial office tower. Refer Figure 3-4 below and the concept reference design in Appendix H for details.

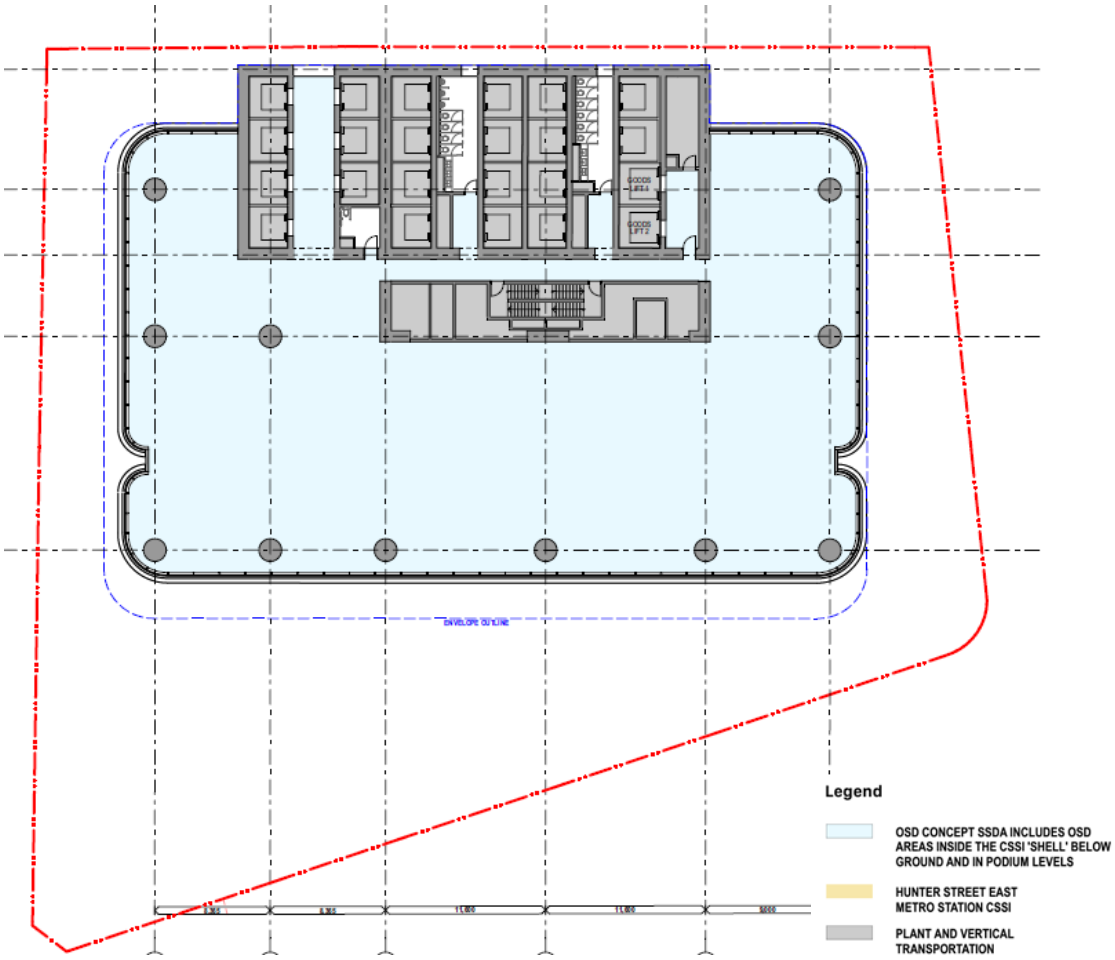

Figure 3-4 Typical tower (mid-rise) indicative reference plan

3.5 Pedestrian access and connectivity

A through-site link is proposed within the CSSI Stage 3 Application between O'Connell Street and Bligh Street, parallel to Hunter Street. This through-site link will provide pedestrian access through the site and to the future OSD commercial lobby.

The indicative reference scheme shows that the future OSD tower would be accessed from a lobby situated above the station and accessed via escalators and lifts from the Bligh Street level.

The Hunter Street Station eastern site entrance faces O'Connell Street, however a secondary entrance is provided from Bligh Street via a through-site-connection that runs in an east-west direction. Pedestrian access to the site is illustrated in Figure 3-5.

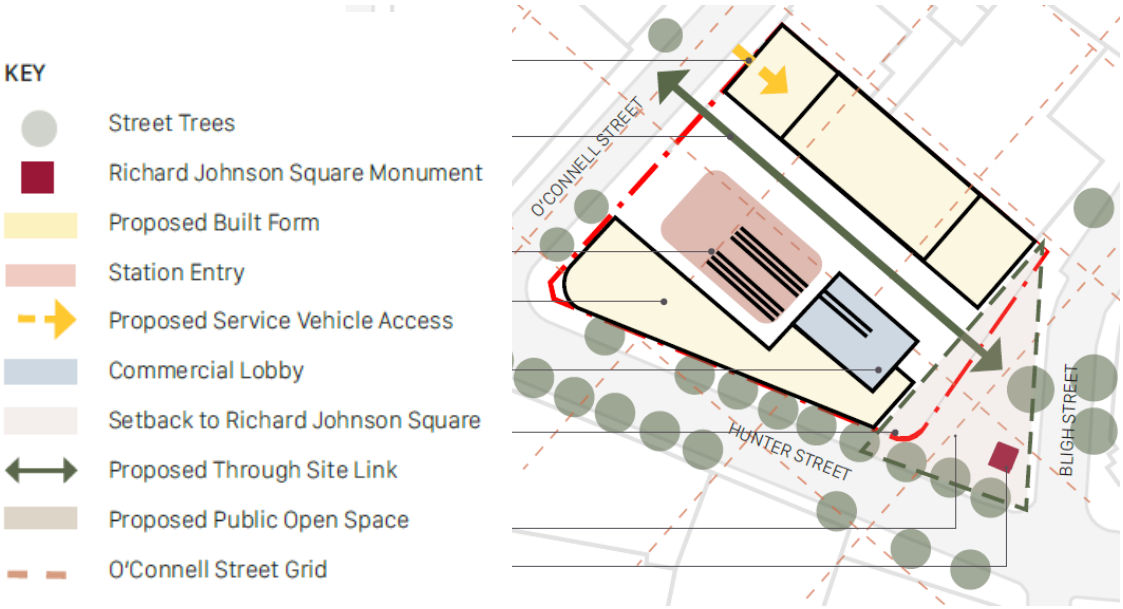

Figure 3-5 Indicative pedestrian access diagram

3.6 Vehicular access and parking

Vehicular access

Vehicular access will be provided from a driveway on O'Connell Street which will provide access to the loading dock and basement. Access would be confined to left-in, left-out arrangement.

Car parking provision

A total of 70 spaces are intended to be provided as part of the SSDA across both western and eastern Hunter Street Station sites, as such a maximum 70 car parking spaces could be accommodated on the east site. The location of any car parking spaces on the site is anticipated to be within the podium, however the exact location of car parking spaces, including any accessible and car share spaces will be the subject of future detailed design within a future Detailed SSDA.

A concept layout for this has been provided at Figure 3-6 which illustrates vehicle access at the ground floor.

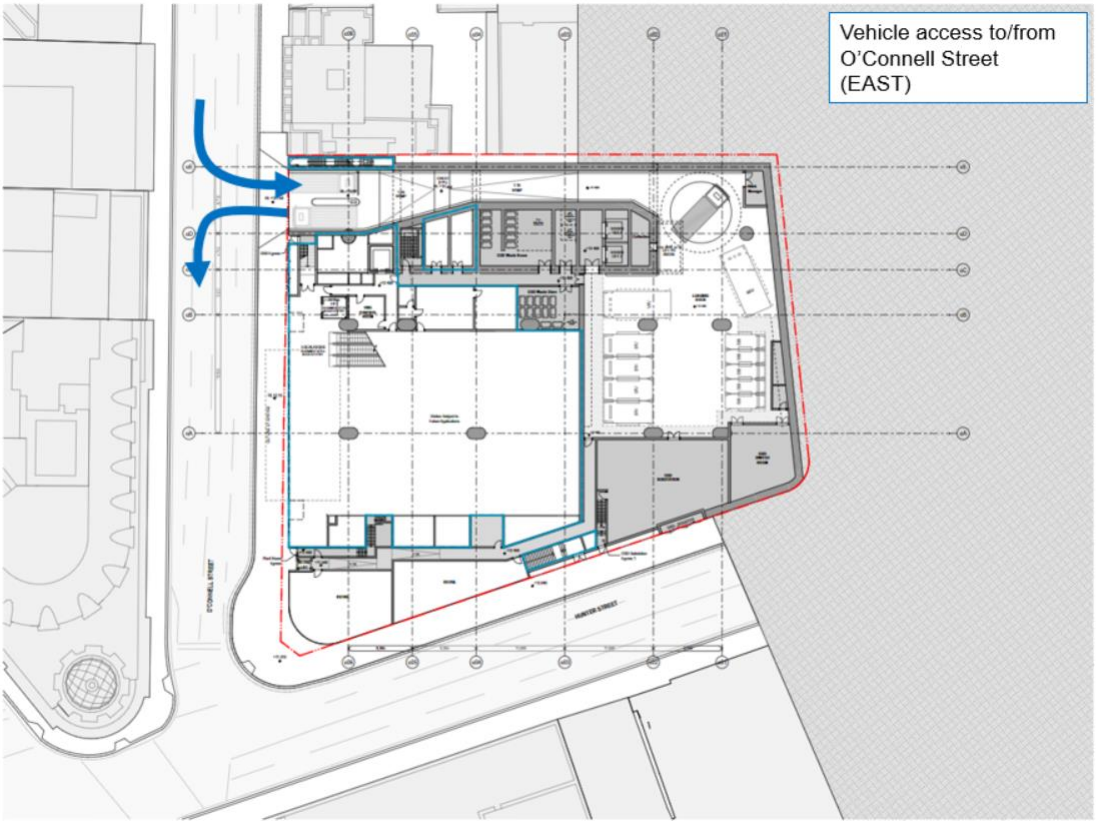

Figure 3-6 Vehicle access to and from the site

The indicative reference scheme shows that a total of 11 loading bays are proposed, including six bays for B99 vehicle, four bays for SRVs and one bay for MRVs. These bays would be for the use of the proposed development and not for use by the metro station. The loading dock will include a turntable to enable larger service vehicles to undertake turns.

3.7 Infrastructure and services

Servicing is available to the proposed development with indicative connections for each service being:

- stormwater flows utilising existing connections to City of Sydney catch pits and drains along Bligh Street and O'Connell Streets.
- wastewater servicing through DN225 sewer in O'Connell Street and DN150 along Hunter Street.
- potable water servicing via existing reticulation network along O'Connell, Hunter Street and Bligh Street
- existing telecommunications infrastructure and service pits in footpaths surrounding the proposed OSD, providers include Telstra, NBN TPG and Optus. Existing assets would suffice to service the site
- gas reticulation for the precinct is provided by Jemena. There are no gas connections to the proposed OSD in line with the development's sustainability strategy.

Any required upgrades to the site infrastructure would be undertaken based on the demand created by the maximum services demand generated by the concept proposal (i.e. as determined by the land uses and the maximum GFA proposed). The service reticulation throughout the OSD would be the responsibility of the OSD

developer and use of this additional service capacity would form part of the future Detailed SSD Application(s).

This is discussed in further detail at Section 6.17. It is noted however that stormwater and sewer may be delivered as part of the CSSI works to provide both integration and efficiencies in delivery. Also refer to the Utilities and Infrastructure Servicing Report at Appendix BB.

3.8 Interface levels

The proposed development has been designed to integrate with the Hunter Street Station to ensure a cohesive station and precinct development.

To allow for this integration, the podium would be delivered under the Stage 3 CSSI Application. However, while the physical podium would be delivered under the Stage 3 CSSI Application, non-station spaces within the podium which are related to the proposed development are sought under this Concept SSDA.

The Stage 3 CSSI Application will include the structural elements, utilities and services for non-station uses (e.g. commercial and/or retail) within the metro station. The fit-out and use of these spaces is subject to approval under the future Detailed SSDA(s).

The Stage 3 CSSI Approval makes provision for OSD including structural elements up to the podium level to enable the construction of future over station development and space for future lobbies, lift cores, access, parking, loading docks and building services. The interface between the station and the proposed development is conceptual in nature and would be resolved through further design refinement.

Figure 3-3 illustrates the delineation of indicative OSD associated retail and commercial uses within the podium envelope (which is part of this Concept SSD) and the integration with OSD tower envelope above. Demarcation plans have been provided in the Built Form and Urban Design Report at Appendix E and separately at Appendix I.

3.9 Design Excellence

Sydney Metro has prepared a Sydney Metro West Design Excellence Strategy (DEX Strategy) (Appendix K) to guide the design of the proposed development.

This document provides a consistent framework to deliver design excellence across the Sydney Metro West project. It applies to stations, precincts, OSD and selected ancillary infrastructure facilities. The DEX Strategy was endorsed by the NSW Government Architect on 19 August 2022.

The City of Sydney have also prepared a draft of the Hunter Street Station OSD Design Guidelines (the draft Design Guidelines) which were endorsed by Council on 19 September 2022. The Council draft Design Guidelines received Gateway Determination on 28 October 2022 and will be placed on public exhibition as part of the Planning Proposal request process.

Details of the draft Design Guidelines and DEX Strategy are discussed separately below.

3.9.1 Draft Design Guidelines

The draft Design Guidelines have been prepared with consideration to the relevant Government Architect NSW Guidelines, detailed site analysis and the strategic planning and development objectives.

The draft Design Guidelines are intended to guide the detailed design of the future OSD and assist the evaluation of design quality and excellence of the OSD.

The draft Design Guidelines set out site-specific guidance to inform future integrated station development related to the Sydney Metro Hunter Street Station development OSD. The Guidelines will effectively replace the Sydney Development Control Plan 2012 (SDCP 2012) and provide for the assessment of future Detailed SSDA(s).

While the draft Design Guidelines are not a relevant matter for consideration for the CSSI applications, it addresses how over station development should be integrated with the station design. In the case of any inconsistency between the draft Design Guidelines and the Sydney Metro West Station and Precinct Design Guidelines, the latter will prevail.

It is anticipated that the draft Design Guidelines will be finalised as part of the finalisation of the Planning Proposal that applies to the site. Any future Detailed SSDA(s) will need to consider the final Design Guidelines to ensure that future development achieves the vision for the site as established in this Concept SSDA.

The draft Design Guidelines propose provisions relating to the built form, heritage, integration with the public domain and Sydney Metro station, movement and connectivity and legacy outcomes of the development.

The draft Design Guidelines will facilitate the following:

- building envelopes with setbacks that respect the local context, deliver acceptable public domain wind conditions and daylight amenity;
- provision of high-quality through-site links and pedestrian connections between the Metro station, adjacent streets and future connections to adjoining sites;
- delivery of improved public domain conditions, including; an expanded Richard Johnson Square and extensive activation through fine-grain retail and CPTED considerations;
- deliver heritage interpretation and public art that is appropriate and responsive to its setting;
- encourage greater use of active and public transport through equitable pedestrian access, bicycle parking, end of journey facilities;
- ensure sufficient servicing and loading space is provided to meet the needs of future development, prior to the allocation of private parking;
- include best practise provisions for water and flood management and waste;
- achieve a high standard of ecological sustainable development, including 6 star GreenStar rating, 6 star NABERS Energy and 4.5 star NABERS Water for offices; and
- a design excellence strategy

3.9.2 Sydney Metro West Design Excellence Strategy

The Sydney Metro West Design Excellence Strategy (DEX Strategy) (Appendix K) has been prepared to establish a consistent framework for how Sydney Metro would deliver design excellence across the whole Sydney Metro West project. The DEX Strategy builds on Sydney Metro's existing design development and review processes and has been developed in consultation with and endorsed by the NSW Government Architect on 19 August 2022.

The DEX Strategy draws from the NSW Government Architect's Better Placed and is consistent with the underlying principles of the NSW Government Architect's Design Excellence Competition Guidelines.

The endorsed DEX Strategy is structured around the operation of independent design review panels that support the design development process for the architectural, urban design and infrastructure elements of each precinct throughout three phases of the project:

- Phase 1: Defining expectations
- Phase 2: Reference design and competitive selection
- Phase 3: Design integrity

The DEX Strategy includes the establishment of three independent design review panels chaired by the NSW Government Architect:

- Design Advisory Panel (DAP) covers Phase 1 applies to all station precincts to guide concept design of stations, precincts and development. It is during Phase 1 that CSSI applications and Concept SSD applications are developed, and approvals sought.
- Design Excellence Evaluation Panel covers Phase 2 and applies during the competitive selection process for the ISD
- Design Review Panel (DRP) covers Phase 3 and applies as follows.

Phase 2 guides reference designs for stations, precincts and development; facilitates a competitive process for Sydney Metro's procurement strategies for detailed design of stations, precincts and development; responds to statutory requirements for design excellence in environmental planning instruments and implements a rigorous design evaluation process. During this phase designs for the proposed development will progress to Detailed SSDA(s) for approval.

Phase 2 also includes the establishment of separate Sydney Metro managed panels that may comprise select DRP members to review and provide advice on the design evaluation of tender submissions. The Design Excellence Evaluation Panel (DEEP) will facilitate the achievement of design excellence as part of the competitive selection process for ISD/OSD applications.

Phase 3 ensures design integrity is achieved and demonstrated in the design and delivery of stations and development following contract award.

The adoption of Sydney Metro West Design Excellence Strategy and the included competitive design review process is consistent with precedents established for other major infrastructure projects including Sydney Metro City & Southwest Project.

Sydney Metro proposes to use its Design Excellence Evaluation Panel (DEEP) process as an alternative design excellence process to demonstrate that 'design excellence' has been achieved under clause 6.21C of the SLEP 2012.

3.10 Ecologically sustainable development strategy

An ESD Report (Appendix P) has been prepared to set out an ESD framework to guide the future Detailed SSDA(s).

The report identifies minimum ESD requirements and world best practice sustainability opportunities for the proposed development. Sydney Metro is seeking to ensure that the future detailed design achieves appropriate high environmental ratings for commercial land use component of the future OSD.

The ESD Report sets out options in detailed design that are capable of supporting the attainment of the sustainability rating targets outlined below:

- 6 star Green Star Buildings

- 6 star NABERS Energy for Offices rating (base building) (Commitment Agreement) (without GreenPower)
- 4.5 star NABERS Water for Offices.

In combination with the Sustainability Rating Strategy, the following performance targets have been identified for the proposed development to align with the Green Star Climate Positive Pathway. Reductions in carbon emissions are in comparison to a reference building:

- 40 per cent reduction in upfront carbon emissions
- 20 per cent reduction in energy use
- 100 per cent renewable energy
- 100 per cent elimination / offset of other emissions
- 40 per cent reduction in potable water use
- 30 per cent reduction in life cycle impacts.

The proposal will minimise greenhouse gas emissions by:

- implementing a Climate Positive Pathway
- taking advantage of proven emissions reduction technologies to reduce operational costs
- driving credible reductions compared to a reference building in Upfront Carbon and Operational Carbon
- avoiding locking in fossil fuels and empowering businesses to make sustainable choices by investing in the electrification of space heating and hot water services
- maximising onsite renewable energy
- purchasing 100 per cent renewable electricity for base building and shared services operations
- installing systems that use low impact refrigerants
- making allowance for 25 per cent of the total electrical demand of EV charging for all car parking spaces to support future EV charging capacity.

Additionally, the following will be adopted to reduce water consumption, minimise waste and encourage active transport

- A water strategy for the site has been developed which will delivers at least a 45 per cent reduction compared to a reference building in annual water consumption. This can be supported by the integration of 25 kL rainwater tank and treatment systems for rainwater harvesting and reuse to meet a proportion of the non-potable water demands.
- The development of a waste management plan that addresses waste management during construction and operation where at least 95% of construction and demolition waste will be diverted from landfill.
- Sustainable transport initiatives have been defined to reduce the emissions attributed to private vehicle use by 40 per cent and VKT by 20 per cent and improve active mode uses by 90 per cent.

3.11 Timing, stages and sequencing

Separate delivery packages are proposed by Sydney Metro to deliver the excavation of the temporary station boxes/shafts ahead of the proposed development delivery

package, and line-wide systems (e.g. track, power, ventilation) and operational readiness works prior to the Sydney Metro West system being able to operate.

Sydney Metro is seeking to retain flexibility in the timing and staging of the proposed over station development so that its delivery by a future developer can appropriately respond to property market conditions. Two possible staging scenarios have been identified for delivery of the project.

- Scenario 1: Continuity of construction works from station to proposed development. Station work complete and station operational in 2030. Proposed development start after 2026.
- Scenario 2: Gap between completion of station (with full de-mobilisation) and commencement of proposed development works at a later stage. Station work complete and station operational in 2030. Proposed development start after 2030.

It is expected that staging will be resolved during subsequent Detailed SSDA(s) process. The developer awarded the development rights will determine the timeframe for construction of the proposed development.

The planning process and indicative timing for the various work streams under the preferred staging scenario are outlined in Table 3-3 below.

Table 3-3 Preferred staging and indicative timing

Works Stream	Indicative Timing
Hunter Street Station excavation and tunnelling works	2023-2025
Hunter Street Station box construction and fit out works (below and above ground, including building grids, column loading, building infrastructure and services to enable the construction of the proposed development)	2025-2028
Proposed development works (above station)	To be determined by a future developer(s)
Proposed development fit out works	To be determined by a future developer(s)
Public domain works	Prior to 2030
Sydney Metro West opens for passenger services	2030

3.12 Subdivision

The Stage 3 CSSI Application sought approval for the subdivision of the station and the airspace for the future OSD. The CSSI Application will allow subdivision to create lots for the station, the development sites, the public domain and the public roads. The CSSI application does not allow strata or stratum subdivision within the proposed development buildings, and this requires separate approval in the detailed SSDA.

Subdivision may be further considered in the Detailed SSDA(s) (but not necessarily limited to):

- Strata subdivision of any basement levels located beneath public roads or public open space which is to be dedicated
- Strata subdivision of the commercial tower.

Subdivision is not sought under this Concept SSDA.

3.13 Public Art

A Public Art Plan will be developed as part of the Detailed SSDA(s) to be generally consistent with the City of Sydney's Public Art Strategy, Public Art Policy, Guidelines for Public Art in Private developments and Guidelines for Acquisitions and Deaccessions.

The Public Art Plan will set a platform to activate the site, and give creative voices to the local community, its artists and diverse audiences as part of the future detailed design of the site.

The Public Art Plan will outline the principles, objectives and opportunities for the future delivery of public art and place activation. The plan will also include methodology for the selection, commission and the delivery of public art to support subsequent SSDA(s) for the proposed development.

Potential locations for public art opportunities have been identified as follows:

- Sculptural art in the south-eastern setback area fronting Richard Johnson Square
- Commercial lobby art.

As outlined in the Planning Proposal request, it is anticipated that 0.5% of the Capital Investment Value (CIV) will be provided as a public art contribution to be detailed in the future Detailed SSDA.

New public art facilitated by the future OSD will provide new creative and cultural experiences and opportunities for engagement with the public.

4 Statutory context

4.1 Key statutory requirements

This chapter describes the statutory planning process for the proposed development and identifies relevant State and local legislation and planning instruments which may apply to the Concept SSDA.

The following are the key relevant legislation and planning instruments that apply to the proposed development:

- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Biodiversity Act 2016 (NSW) (BC Act 2016)
- National Parks and Wildlife Act 1974
- Water Management Act 2000
- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Environmental Planning and Assessment Regulation 2021 (the Regulations)
- State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)
- State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP)
- State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP)
- Sydney Local Environmental Plan 2012 (SLEP)
- *State Environmental Planning Policy (Sustainable Buildings) 2022* - The SEPP was notified on 29 August 2022 and will come into effect on 1 October 2023

Consideration is also required to be given to the following matters:

- Concurrent Planning Proposal - Sydney Metro West Hunter Street Station Sites, Sydney [PP-2022-867]

This section identifies the key statutory matters which are addressed in detail within the EIS, including the power to grant consent, permissibility, and other approvals.

Pre-conditions and mandatory considerations are addressed in the subsequent section 4.2 and section 4.3. Pre-conditions reference any pre-conditions to exercising the power to grant approval for the project and includes any mandatory conditions that must be satisfied before the consent authority may grant approval. Whereas ‘mandatory considerations’ are those matters which a consent authority is required to consider in deciding whether to grant approval.

Table 4-1 categorises and summarises the relevant requirements in accordance with the DPE *State Significant Development Guidelines*. A detailed statutory compliance table for the project is provided at Appendix B.

Table 4-1 Key statutory requirements

Matter	Guidance
Power to grant approval	In accordance with clause 19(2) of schedule 1 of the Planning Systems SEPP, development for commercial premises or residential premises that has a CIV of more than $30 million and is located within a rail corridor or is associated with railway infrastructure is assessed as SSD: *(2) Development within a rail corridor or associated with railway infrastructure that has a capital investment value of more than $30 million for any of the following purposes—* *(a) commercial premises or residential accommodation,* *(b) container packing, storage or examination facilities,* *(c) public transport interchanges.* The proposed works have a total CIV of more than $30 million (excl. GST) and is within a railway corridor being the Sydney Metro West line. In addition, as the development is not permissible without development consent under Part 4 of the EP&A Act, it is therefore declared to be SSD under the Planning Systems SEPP. The Minister is the consent authority for SSDAs made by or on behalf of a public authority. The Minister may delegate this function to staff within the DPE. Pursuant to section 4.22 of the EP&A Act, a concept development application may be made setting out concept proposals for the development of a site, and for which detailed proposals for the site or for separate parts of the site are to be subject of a subsequent development application(s). The proposed development is for a Concept SSDA in accordance with section 4.22 of the EP&A Act.
Permissibility	The site is located on land zoned B8 Metropolitan Centre under the SLEP 2012. The proposed commercial and retail land uses are permissible with consent in the B8 Metropolitan Centre zone. The proposed commercial and retail land uses are also consistent with the zone objectives which aim to promote employment-generating land uses which support Sydney's global status and Australia's participation in the global economy.
Other approvals	Clause 7.9 of the *BC Act 2016* applies to SSDA and requires SSDA to be accompanied by a Biodiversity Development Assessment Report (BDAR) report unless it is determined the proposal is not likely to have any significant impact on biodiversity values. A BDAR Waiver is provided at Appendix U, which confirmed that the development is not likely to have any significant impact on biodiversity values.
Other approvals	An application for a water use approval under Chapter 3, Division 2 of the *Water Management Act 2000* is not proposed for this development, as the below ground level construction and any dewatering for the metro line or station will be under the Stage 3 CSSI Application. Refer to further discussion in section 6.13 .

Matter	Guidance
Other approvals	*The National Parks and Wildlife Act 1977* aims to prevent the unnecessary or unwarranted destruction of relics and the active protection and conservation of relics of high cultural significance. The provisions of the Act apply to both indigenous and non-indigenous relics. Pursuant to section 4.41 of the EP&A Act, SSD is exempt from the need for a section 90 permit for the removal of items of Aboriginal heritage. Notwithstanding, an Aboriginal Cultural Heritage and Archaeology Report (ACHAR) has been prepared and is provided at Appendix BB and discussed in section 6.15.

4.2 Pre-conditions

Table 4-2 outlines the pre-conditions to exercising the power to grant approval which are relevant to the project and the section where these matters are addressed within the EIS. These are conditions that must be satisfied before the approval authority may grant approval.

Table 4-2 Pre-conditions

Statutory Reference	Pre-Condition	Relevance	Section in EIS
Concept development consent (see section 4.24 of EP&A Act)	Determination of any further development application in respect of the site cannot be inconsistent with the consent for the concept proposals for the development of the site.	This application proposes a concept development consent which will apply to future development on the land. No other existing concept development consent applies to the site. Therefore section 4.24 of the Act does not apply to this application.	N/A
EP&A Regulations Part 8 Infrastructure and environmental impact assessment	An EIS must be prepared in accordance with the SEARs issued for the project, and contain the relevant information identified in section 190 and 192 of the EP&A Regulations.	This EIS has been prepared in accordance with Part 8 of the EP&A Regulations. This EIS addresses the SEARs issued by the Secretary as per section 175 of the EP&A Regulations and contains the detailed information identified in section 190 and 192 of the EP&A Regulations. Specifically, this includes a statement prepared by a Registered Environmental Assessment Practitioner. The development is consistent with the	Signed Declaration on Page viii of this EIS SEARs Compliance Table at Appendix A section 6.7

Statutory Reference	Pre-Condition	Relevance	Section in EIS
		principles of ecologically sustainable development as per section 193 of the EP&A Regulations as discussed in section 6.7 of this EIS. This application will be placed on public exhibition on the NSW Major Projects Portal as per section 194 of the EP&A Regulations.	
Resilience and Hazards SEPP - clause 4.6(1)	A consent authority must be satisfied that the land is suitable in its contaminated state - or will be suitable, after remediation - for the purpose for which the development is proposed to be carried out.	The proposed development will sit upon the station shaft and podium and no additional excavation proposed. Any contamination issues on the site will be resolved with the excavation and the construction of the station box under the relevant CSSI Application. Further it is noted that the historic use of the land is for commercial purposes, and this is not proposed to be altered by the proposal. Therefore, in accordance with the Resilience and Hazards SEPP, it is considered likely that the Concept SSDA site can be made suitable for its proposed use.	Appendix W

4.3 Mandatory considerations

Table 4-3 outlines the relevant mandatory considerations to exercising the power to grant approval and the section where these matters are addressed within the EIS.

Table 4-3 Mandatory considerations under the EP&A Act and Regulation

Statutory Reference	Mandatory Consideration	Section in EIS
Section 1.3	Relevant objects of the EP&A Act	Appendix B
Section 4.15		
4.15(1)(a)(i)	Resilience and Hazards SEPP – Remediation of land	Appendix B
4.15(1)(a)(i)	Biodiversity and Conservation SEPP	Appendix B
4.15(1)(a)(i)	Sydney Local Environmental Plan 2012	Appendix B
4.15(1)(a)(ii)	State Environmental Planning Policy (Sustainable Buildings) 2022 The SEPP was notified on 29 August 2022 and will come into effect on 1 October 2023, therefore it is not yet in effect and does not apply to this proposal. Consideration under the SEPP will need to be addressed as part of the Detailed SSD(s) if it is lodged after the 1 October 2023.	Appendix B
4.15(1)(a)(iii)	Development control plans Clause 2.10 of the Planning Systems SEPP states that development control plans (DCPs) do not apply to SSD. Site specific Design Guidelines have been prepared and submitted with the planning proposal request for both the eastern and western Hunter Street Station sites. Specifically, these Design Guidelines are proposed to inform the building envelope in relation to tower setbacks, building separation, street wall heights, the interface with heritage items, building articulation, and measures to mitigate wind impact. The Design Guidelines also include objectives and guidance relating to urban design strategies, station podium and massing, design excellence, landscaping, wind conditions, heritage interpretation, public art, the pedestrian and bicycle network, vehicular access, flooding and stormwater, waste management and ESD.	Draft design guideline has been prepared as part of the Planning Proposal
4.15(1)(a)(iiia)	Relevant planning agreement or draft planning agreement: None yet relevant to the proposal. It is noted that the Planning Proposal [PP-2022-867] is accompanied by a Public Benefit Offer to enter into a future Voluntary Planning Agreement. The proposal is consistent with the commitments made in the Public Benefit Offer submitted by Sydney Metro to the City of Sydney Council.	

4.15(1)(a)(iv)	The Regulations	REAP declaration section 6.7
4.15(1)(b)	The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	section 6
4.15(1)(c)	The suitability of the site for the development	section 7.5
4.15(1)(d)	The submissions	section 5
4.15(1)(e)	The public interest	section 7.6

Table 4-4 Mandatory considerations under other Legislation

Statutory Reference	Mandatory Consideration	Section in EIS
Biodiversity Act – Section 7.9	Section 7.9 of the BC Act 2016 requires preparation of a biodiversity assessment for SSD that is assessed under Part 4 of the EP&A Act. This concept SSD Application would be assessed under Part 4 of the EP&A Act, and, therefore, would normally be required to include a biodiversity development assessment report. However, section 7.9(2) of the BC Act allows for exemption from the requirement where the development is not likely to have any significant impact on biodiversity values. A waiver under section 7.9(2) of the Biodiversity Conservation Act was issued on 3 August 2022 and is available at Appendix R. Accordingly a full biodiversity assessment has not been submitted with this EIS.	A BDAR Waiver was issued on 3 August 2022 and is available is provided at Appendix R Accordingly, a BDAR is not required to be submitted with this EIS.
BC Act Section 7.14	The likely impact of the proposed development on biodiversity values as assessed in a Biodiversity Development Assessment Report (BDAR). The Minister for Planning and Homes may (but is not required to) further consider under that BC Act 2016 the likely impact of the proposed development on biodiversity values.	A BDAR Waiver was issued on 15 August 2022 and is available is provided at Appendix R

Table 4-5 Mandatory considerations under EPIs

Statutory Reference	Mandatory Consideration	Section in EIS
Transport and Infrastructure SEPP	Section 2.102 Major development within Interim Metro Corridor The consent authority must consider any response to a written notice issued to the Secretary of the Department of Transport that is received within 21 days.	Statutory Compliance table at Appendix B
Transport and Infrastructure SEPP	Section 2.122 Traffic generating development The consent authority must consider any response to a written notice issued to TfNSW that is received within 21 days, the accessibility of the site concerned, and any potential traffic safety, road congestion or parking implications of the development.	section 6.8 Transport and Access Report at Appendix Q Statutory Compliance table at Appendix B
State Environmental Planning Policy (Biodiversity and Conservation) 2021	The site does not comprise remnant native vegetation and the proposal will be constructed above the station box, therefore will not impact on ground conditions. The proposed development is not located within a Local Government Area to which the Biodiversity and Conservation SEPP applies in relation to Koalas. The site is not identified as bushfire prone area. Accordingly, the Biodiversity and Conservation SEPP does not apply to this proposal.	Appendix B
Sydney Local Environmental Plan 2012	Objectives and land uses under the B8 Metropolitan Centre zone Part 4 – Principal development standards Part 5 – Miscellaneous provisions Part 6 – Local provisions—height and floor space Part 7 – Local provisions—general	Appendix B
Draft Sydney Local Environmental Plan 2012 [PP-2022-867	Draft provisions under the Concurrent Planning Proposal seeking to introduce site-specific provisions for the site.	Appendix B

5 Engagement

This chapter provides an outline of the consultation and engagement activities carried out and how the proposal has been informed by this engagement. It identifies who has been consulted, how the consultation was carried out, the issues raised and the project response.

5.1 Consultation during the preparation of this Environmental Impact Statement

5.1.1 Overview of Engagement for Hunter Street Station East

Sydney Metro has been engaging with the community, stakeholders and industry on Sydney Metro West since 2017. Feedback gathered has helped shape the project, including station locations. Early engagement with the community and stakeholders began in June 2017 and continued into 2018.

In May 2021, the Scoping Report for Stage 2 CSSI Application was lodged with DPE which included the location of Hunter Street Station.

In November and December 2021, the Stage 2 CSSI Application was exhibited for public comment, including proposed major civil construction at Hunter Street Station and tunnelling between The Bays and Sydney CBD as well as consideration of over station development as part of a future planning approval.

Specifically, community consultation has occurred at the following stages:

- Prior to lodgement of the Stage 2 CSSI Application
- During public exhibition of the Stage 2 CSSI Application
- Prior to lodgement of the Stage 3 CSSI Application
- During public exhibition of the Stage 3 CSSI Application

Consultation has proactively sought feedback and comments on Sydney Metro West through different forums and channels to inform the development phase and the scope of issues to be assessed as part of the environmental assessment process.

Key stakeholders for Sydney Metro West include (but are not necessarily limited to):

- State government agencies (including but not limited to Department of Planning and Environment, Greater Cities Commission, other sections of Transport for NSW, NSW Environment Protection Authority, Heritage NSW, Port Authority of NSW and Schools Infrastructure NSW).
- Local government (Cumberland City Council, City of Parramatta, Burwood Council, Strathfield Council, City of Canada Bay, Inner West Council and the City of Sydney).
- Public utilities and business and industry groups near the project.
- Special interest groups including Local Aboriginal Land Councils, Aboriginal stakeholders, and sporting associations and groups.
- The broader community.

5.1.2 Scoping Report

In July 2022, the Scoping Report for this proposal was made available to the public on the NSW Department of Planning and Environment's Major Projects website.

Sydney Metro sent an email to registered stakeholders, and distributed flyers to properties within 500m of the site, informing them of the release of the Scoping Report. Details were also published on the Sydney Metro website and the project's interactive portal.

5.1.3 Key stakeholder engagement

Engagement with public authorities and key stakeholders was undertaken to inform this EIS and is summarised in the table below. A stakeholder engagement table is provided as Appendix C which details how these issues are addressed in the EIS.

Table 5-1 Engagement carried out

Stakeholder	Issues Discussed/ Raised	Project Response
City of Sydney	The following items have been discussed with City of Sydney: • Spatial and structural interfaces with the station • Podium alignment • Tower setbacks • Planning envelope articulation zones • Flooding impacts • Visual and view impacts • Wind assessment, and wind safety and comfort environment • Skyview factor assessment • Building massing and GFA • Urban design and built form impacts • Car parking provision and site access • Pedestrian movement • Haulage routes, traffic, noise and construction impacts	Environmental impacts of the matters raised by City of Sydney are provided at section 6 of the EIS and detailed in the specialist reports appended to the EIS.
City of Sydney Design Advisory Panel	Sydney Metro briefed the City of Sydney Design Advisory Panel in relation to the Planning Proposal. As a result of this preliminary consultation, the proposed maximum planning envelope controls have been amended and refined to respond to this feedback.	No response has been required.
Department of Planning and Environment	DPE had no matters for consideration at this stage.	No specific project response has been required.
Sydney Metro Design Advisory Panel	A number of items were discussed with DAP relating to: • Built form • Wind analysis • OSD core space • Benchmarks	Environmental impacts of the matters raised by the DAP are provided at section 6 of the EIS and detailed in the specialist reports

Stakeholder	Issues Discussed/ Raised	Project Response
	• Tower typologies • Transitions between ground level, podium and tower • Consider benchmark building	appended to the EIS.
Transport for NSW	The following items were discussed: • overall planning approval for the OSD at the Hunter Street east site. • the methodology for required traffic studies • proposed parking and access to the site • requirements for a Construction Traffic Management Plan and Green Travel Plan	Refer to section 6.8 and the Transport and Access Report at Appendix Q.
Utilities services	The following items were discussed: • capacity of existing utilities and services within the vicinity • new utility and service connection requirements	Refer to section 6.17 and the Utilities and Servicing Assessment at Appendix BB.

5.2 Community views

The key issues raised by the community and key stakeholders are summarised in Table 5-2 below. A detailed community engagement table is provided as Appendix C which details the way in which these issues have been addressed in the EIS.

Table 5-2 Community views

Stakeholder	Issues discussed/raised	Project response
Stage 2 CSSI and **Stage 3 CSSI Application**	Key issues raised by the community that are directly related to this Concept SSDA have included: • Need for Hunter Street to accommodate future metro extension • Need for ongoing consultation with adjoining land owners • Noise and construction impacts • Business impacts relating to closure of Hunter Street Connection	The EIS and all specialist reports adequately addressed the key concerns raised by the community during the Stage 2 and Stage 3 CSSI Application stage.
Local Aboriginal community and knowledge holders, including an Aboriginal Focus Group	A summary of the feedback received from the RAPs is provided below: • Four RAPs provided comment on the ACHAR methodology and were supportive of the methodology. • One RAP provided comment on the draft ACHAR and was supportive of the report's recommendations.	An ACHAR has been prepared at Appendix Y.

Stakeholder	Issues discussed/raised	Project response
Community and customer insights	A summary of the feedback received during preparation of the Concept SSDA is provided below: • General view of Sydney CBD as the place to encourage development • General positive sentiment that Hunter Street Station would improve the local area • Positive sentiment towards future development at Hunter Street Station including the location and proposed heights • Support for increased and more diverse retail such as hardware stores • Parking and the need for future development at Hunter Street to include parking. • How people want to be engaged post-COVID-19 lockdowns.	This feedback along with future engagement opportunities will continue to inform the project and be considered during the Detailed SSDA process.

5.3 Public exhibition of this Environmental Impact Statement

The NSW Department of Planning and Environment has placed this EIS on public exhibition for a minimum of 28 days (as per Schedule 1 of the *Environmental Planning and Assessment Act 1979*). During the exhibition period, government agencies, stakeholders and the community can review this Environmental Impact Statement and make a written submission to the NSW Department of Planning and Environment for consideration in its assessment of this proposal.

Sydney Metro has advised stakeholders and the community of public exhibition of this EIS through a range of print and digital communication channels including a newsletter delivered to properties, emails to registered parties and information provided on the Sydney Metro website and interactive portal.

Consultation activities have met the relevant statutory requirements.

5.3.1 Submissions Report

Sydney Metro will prepare a submissions report that responds to the relevant issues raised in submissions to this EIS. The submissions report will be made publicly available on the DPE website. Anyone making a public submission will receive a letter notifying them of the publication of the submissions report on the DPE website.

If changes are required as a result of the issues raised in submissions or to minimise environmental impact, these will be set out in the project amendment report accompanying the submissions report (if required) If this is required, Sydney Metro would prepare the report to address the changes to the design and submit this for review to DPE. This report will be made available for public review.

5.4 Ongoing engagement

Sydney Metro will continue to work with key stakeholders (including local communities) so that they are informed about this proposal and have opportunities to provide feedback.

During the planning and development phase of the project, Sydney Metro would continue to engage the local community and stakeholders via dedicated place managers. Place managers play a vital role in building and maintaining strong relationships with local communities and businesses during the planning and delivery of the project. Their key role is to engage with the community, address concerns and provide accurate and transparent information to ensure the community's understanding of Sydney Metro West and any potential impacts.

Future engagement and consultation would be guided by Sydney Metro's Overarching Community Communications Strategy (OCCS) and any statutory requirements of the SSD. The OCCS includes details on the approach to:

- ongoing consultation with key stakeholders, local councils and other government agencies
- approaches and communication tools to support consultation with diverse communities; people who come from culturally and linguistically diverse backgrounds; speak languages other than English; vulnerable communities; and Aboriginal and Torres Strait Islander communities
- provision of regular updates to the nearby community and development and implementation of a community complaints and response management system.

6 Assessment of impacts

In accordance with clause 192 of the EP&A Regulation, the Secretary of the DPE issued the SEARs for the preparation of this EIS on 8 August 2022.

This section of the EIS provides an assessment of the environmental impacts of the proposed development, in response to the matters for consideration outlined within the SEARs. A detailed summary of the individual matters listed in the SEARs and the location of where each requirement is addressed is provided at Appendix A.

This assessment also considers and incorporates a cumulative impact assessment guided by the DPE's *Cumulative Impact Assessment Guidelines for State Significant Projects*, noting the concurrent construction activities in the immediate surrounding area as outlined in section 2.4.

Further detailed information is appended to the EIS, including:

- SEARs compliance table identifying where the SEARs have been addressed in the EIS (Appendix A).
- Compliance table identifying where the relevant statutory requirements and detailed guidance have been addressed (Appendix B).
- Community engagement table identifying where the issues raised by the community during engagement have been addressed (Appendix C).
- Proposed mitigation measures for the project which are additional to the measures built into the physical layout and design of the project (Appendix D).

The technical reports and plans prepared by specialists and appended to the EIS are individually referenced within the following sections.

6.1 Design quality and design excellence

This section demonstrates how the development will achieve:

- desired design quality in accordance with the draft Design Guidelines
- design excellence in accordance with the Sydney LEP 2012.

6.1.1 Design quality

Design parameters are proposed for built form, heritage, integration with the public domain and Sydney Metro station, movement and connectivity and legacy outcomes of the proposed development to ensure design quality.

The design outcome for the proposed development is underpinned by the following design objectives:

- ensuring an easy customer experience
- being part of a fully integrated transport system
- being a catalyst for positive change
- being responsive to distinct context and communities
- delivering an enduring and sustainable legacy for Sydney.

Design quality is also supported by the GANSW's Better Placed framework which aims to deliver good design outcomes through desired architecture, public places and environments across NSW. The framework provides best practice design processes which align with a clear set of established objectives to achieve the best possible outcomes.

The Design Guidelines provide place and design principles in accordance with the GANSW's Better Placed framework, including:

- Reinforce Sydney's global standing by significantly improving public transport accessibility between the Eastern Harbour City and the Central River City, enhancing 'job-to-job' connections and catalysing economic growth.
- Establish an integrated transport hub in this northern CBD precinct, strengthening Sydney's rail network and linking important destinations to deliver a more connected city.
- Deliver highly efficient interchanges between metro and other public transport modes, with capacity to support high volumes of pedestrians above ground and underground, while delivering a high quality customer experience.
- Facilitate integrated station developments that promote design excellence and contribute to the unique attributes and character of this northern CBD location, aligned with the Central Sydney Planning Strategy.
- Deliver a design that promotes active street frontages to support a vibrant public domain in the heart of the Sydney CBD, and which delivers a high-quality station address to Richard Johnson Square and George Street - the CBD's north-south pedestrian boulevard.

A response to the seven applicable objectives of Better Placed is outlined below.

Better Fit: Contextual, local and of its place

The proposed development responds by establishing place and design principles that seek to reinforce Sydney's global standing, deliver a highly efficient interchange between metro and other public transport modes, contribute to the unique attributes and character of this northern CBD location, and promote active street frontages to support a vibrant public domain in the heart of the Sydney CBD, including a high-quality station address to Richard Johnson Square.

Better Performance: Sustainable, adaptable and durable

Development on the site is to provide adequate protection to environmental hazards including flood planning. The future development will be required to achieve the sustainability targets outlined in the Design Guidelines that will be approved under this EIS.

Better for Community: Inclusive, connected and diverse

The urban design strategies provide opportunities to tell our First Nations story.

The OSD and the use of the podium for non-station uses are to deliver clear wayfinding with legible station entries, and establish accessible through site connections, enable a high-quality subterranean connection to Martin Place, and retain established subterranean connection to Wynyard.

Better for People: Safe, comfortable and liveable

Development on the site is to integrate walkable urban environments contribute to safe, permeable and well-connected station precincts. The development is to provide a series of spaces at the ground level that are activated and are safe. These spaces are to create opportunities to enhance pedestrian activity and amenity. The OSD towers are to be designed to achieve comfortable street environments for pedestrians with high levels of daylight, appropriate scale, sense of enclosure and which deliver comfortable wind conditions at street level.

Better Working: Functional, effective and fit for purpose

The development of OSD on the site is not to adversely impact the delivery of station infrastructure on the site, and the functional and effective operation of the Sydney

metro. The OSD is to identify uses that support and contribute to the delivery of unique, attractive and vibrant urban centres that provide a sense of connection and identity for local communities and visitors, and deliver new employment jobs growth within Central Sydney.

Better Value: Creating and adding value

Quality architecture, good urban design and a user friendly and interconnected transport system are to be delivered to ensure that Sydney Metro meets customer needs and expectations and maximises its city-shaping potential and broader urban and economic benefits.

Better Look and Feel: Engaging, inviting and attractive

The development is to deliver active uses at Bligh Street fronting onto Richard Johnson Square, to align with the role and programming of this public space. The proposed street wall heights are designed to respond in scale and orientation to neighbouring heritage buildings and to protect streetscape vistas to heritage facades along Hunter Street. Further, development on the site is to be set back from Bligh Street to align with the adjoining heritage building (Lowy Institute Building) to celebrate this heritage façade and promote a visual connection to Richard Johnson Square.

In summary, the Design Guidelines and the GANSW's frameworks provide robust guidance to achieving high quality design responses. Any future Detailed SSDA(s) will need to consider these Design Guidelines to ensure that future development achieves the vision for the site as established in this Concept SSDA.

6.1.2 Design excellence

Under Part 6, Division 4 of SLEP 2012, a consent authority must not grant consent to a development unless the proposed development exhibits 'design excellence'.

The proposed building envelope has been prepared with consideration of the matters listed in clause 6.21C(2) of the SLEP 2012, which will continue to apply to the development. Specifically, the proposed building envelope can contribute to the achievement of design excellence as outlined in Table 6-1.

Future Detailed SSDA(s) will be undertaken in accordance with the Sydney Metro West Design Excellence Strategy to ensure design integrity and 'design excellence' has been achieved under clause 6.21C of the Sydney LEP.

Table 6-1 Consideration of proposed building envelope against design excellence provisions

Matter for Consideration	Proposed Planning Envelope
Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	The detailed design of the proposed development will be the subject of a future Detailed SSDA. Notwithstanding, the design guidelines include requirements for the scale, massing, and articulation of tower forms to respond appropriately to the streetscape context, in particular the heritage items, and to achieve high sustainability targets through the building design and material selection (among other matters).
Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain	The detailed design of the proposed development will be the subject of a future Detailed SSDA. Notwithstanding, it is noted that the proposed building envelope for the podium has been designed to respond to the maximum height and key

Matter for Consideration	Proposed Planning Envelope
	architectural features of surrounding heritage buildings, and to provide an appropriate interface with the public domain.
Whether the proposed development detrimentally impacts on view corridors	The site is not affected by any identified sensitive view corridors from the public or private domain. The planning controls for the site and surrounding tower cluster sites allows for tall tower forms similar to the envelope proposed, and as such the commensurate level of visual effects and impacts are contemplated by the controls. Refer to the assessment at section 6.4 of this EIS.
How the proposed development addresses the following matters— (i) the suitability of the land for development,	The proposed development is positioned above future high frequency public transport infrastructure, maximising the utilisation of the infrastructure, and contributing to the achievement of a 30 minute city.
(ii) the existing and proposed uses and use mix,	The Indicative Concept Reference design is for a commercial office building with podium level retail above a metro station. This land use is consistent with the existing use of the land. The proposed land uses are entirely consistent with the objectives of the B8 Metropolitan Centre zone, including prioritising employment generating floor space in the commercial centre of the Sydney CBD, above future high frequency public transport.
(iii) any heritage issues and streetscape constraints,	The proposed development responds to its immediate context and heritage buildings in the vicinity with a consistent application of high density. The podium responds to the parapet heights of adjacent heritage items and reinforces dominant sightlines along Bligh, O'Connell and Hunter Streets. The podium height and tower design will respond to the intimate character of each street frontage and not dominate nor detract from the significant heritage items. Refer to the assessment at section 6.15 of this EIS.
(iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers, existing or proposed, on the same site or on neighbouring sites in terms of separation, setbacks, amenity, and urban form,	The proposed tower location has been assessed against a range of considerations including sky view factor assessment, wind environment, building separation and privacy considerations, and view and visual impacts. The proposed setbacks specifically consider how the proposed tower will relate to existing towers on neighbouring sites, the broader city structure and prevailing street alignments.
(v) the bulk, massing, and modulation of buildings,	The detailed design of the proposed development will be the subject of a future Detailed SSDA. Notwithstanding, the design guidelines include requirements for the scale, massing, and articulation of tower forms.

Matter for Consideration	Proposed Planning Envelope
(vi) street frontage heights,	While the podium is part of the Stage 3 CSSI Application, the massing and layout of the podium has informed the OSD parameters as well as the internal layout planning for the future retail and commercial uses proposed under this SSDA. Refer to assessment at section 6.2.1 of this EIS.
(vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,	Refer to assessment at section 6.7.1 for sustainable design, section 6.3.2 for overshadowing and solar access, and section 6.3.5 for wind impacts. The detailed design of the tower will need to consider visual and acoustic privacy, noting that the proposed setbacks and core location included in the reference scheme provide a defensive floor plate that can guide lines-of-sight towards the surrounding streets and not into adjacent properties. Reflectivity will be considered as part of the material selection to be outlined in future detailed SSDAs.
(viii) the achievement of the principles of ecologically sustainable development,	No threat of serious or irreversible environmental damage is posed by the proposed development. The proposed development will maintain the health, diversity and productivity of the environment for future generations by minimising the consumption of energy and water, and waste generation. The proposal would not result in any significant effect on the biological diversity and ecological integrity of the study area. A BDAR Waiver has been sought in relation to the proposal as demonstrated at Appendix R.
(ix) pedestrian, cycle, vehicular and service access, and circulation requirements, including the permeability of any pedestrian network,	Pedestrian and cycle access is facilitated from O'Connell and Bligh Streets and a through site link is provided as part of Stage 3 CSSI to facilitate pedestrian permeability through the station. Vehicular access is provided via O'Connell Street. Refer to the assessment at section 6.8 and section 6.6 of this EIS.
(x) the impact on, and any proposed improvements to, the public domain,	The construction and operation of the future Hunter Street Metro station, including surrounding public domain, is subject to approval through the Stage 3 CSSI Application. The proposed ground level will accommodate: • public access to the underground station concourse and station platforms and access to commercial office lobbies • activated retail frontages to both the street and the through-site links • vehicular access to the site for car parking and service vehicles.
(xi) the impact on any special character area,	The site is not located within a special character area. It is adjacent to the Chifley Square special

Matter for Consideration	Proposed Planning Envelope
	character area. The proposed development does not result in any overshadowing to Chifley Square and will not detract from the distinctive character of this space.
(xii) achieving appropriate interfaces at ground level between the building and the public domain,	Interface at the ground level to the public domain has been addressed as part of the Stage 3 CSSI Application. The Sydney Metro West Station and Precinct Design Guidelines form part of the EIS for the Stage 3 CSSI Application and establish design standards to guide the design of stations and interface outcomes between stations and their surrounding locality.
(xiii) excellence and integration of landscape design.	The proposed draft design guidelines includes objectives and guidance to enable the landscape design of publicly accessible spaces on the site to be of high quality and complement and integrate with the development.

The proposed building envelope within this Concept SSDA have also been informed by feedback from the Sydney Metro Design Advisory Panel in accordance with the Sydney Metro West Design Excellence Strategy for Hunter Street Station.

6.2 Built form and urban design

6.2.1 Response to context and streetscapes

An Urban Design and Built Form Report is attached at Appendix E. The study provides a comprehensive site analysis including review of the existing and future constraints including the indicative design of the metro station and associated passenger rail infrastructure.

The outcome of these investigations includes establishing six urban design principles to guide the future development of the site including:

- Principle 1 – Movement and connectivity
- Principle 2 – Connecting with Country
- Principle 3 – Heritage and place character
- Principle 4 – Public space
- Principle 5 – Street wall scale and articulation
- Principle 6 – Amenity and Landscape

These principles have informed the proposed building envelope sought via this Concept SSDA, which reflect existing site characteristics and optimises site opportunities and enabling the provision of an OSD without compromising the amenity of surrounding properties and heritage item. The following section provides a context and urban design assessment of the proposal.

Podium and street wall height

Sydney Metro is not able to define an RL to delineate station and over station development at this point due to ongoing station design development as part of the CSSI approval, however, this proposal acknowledges the relationship of the defined street wall in assessing an appropriate urban design response. The eastern station building (including the station services, space for non-station use and concourse)

would be, subject to design development, indicatively around indicatively around 15 metres above O'Connell Street at the station entry, with station services around 30 metres above O'Connell Street.

While the podium is part of the Stage 3 CSSI Application, the massing and layout of the podium has informed the OSD parameters as well as the internal layout planning for the future retail and commercial uses proposed under this SSDA. Therefore, it is important to consider the urban design context of the podium and its relationship with the OSD tower above.

The indicative design of the podium includes consideration of the interface with the street and local character of the northern precinct of the Sydney CBD, including alignment with key heritage buildings in the immediate context of the site and streetscape characteristics. As the design of the Stage 3 CSSI develops, these considerations would continue.

- The podium identified in the indicative reference scheme (and subject to design development as part of the CSSI) provides for variation in heights which respond to the existing street wall and key datum lines of the following surrounding context.
- Hunter Street: the podium massing steps up in scale to align with the street wall height of the Former Wales House (64-66 Pitt Street) at 40m.
- Bligh Street: the podium massing steps back along Bligh Street to align with the existing street wall of the Former NSW Club (31 Bligh Street).
- O'Connell Street: the podium steps up to respond to the key datum lines of adjacent heritage item, Former Bank of NSW (16 O'Connell Street).

The indicative built form at the ground plane supports the expansion of Richard Johnson Square and provides clear sight lines for the through site link.

This is shown in Figure 6-1 and Figure 6-2 which show how the podium responds to varying streetscapes across each site.

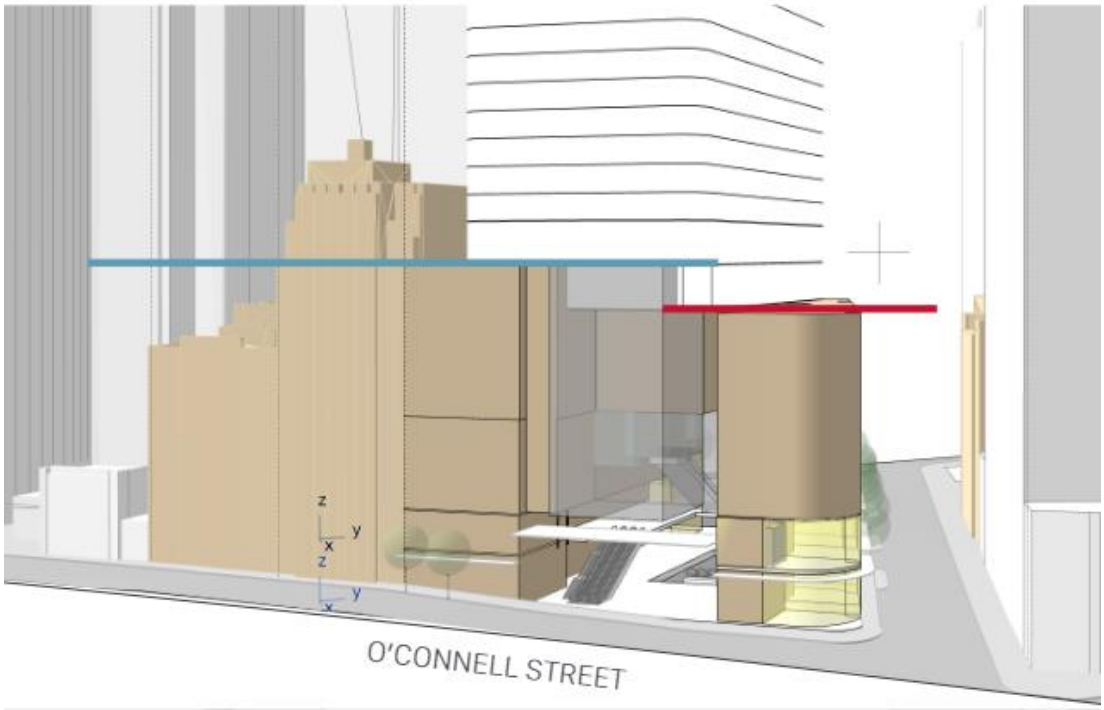

Figure 6-1 Responsive wall height – O'Connell Street

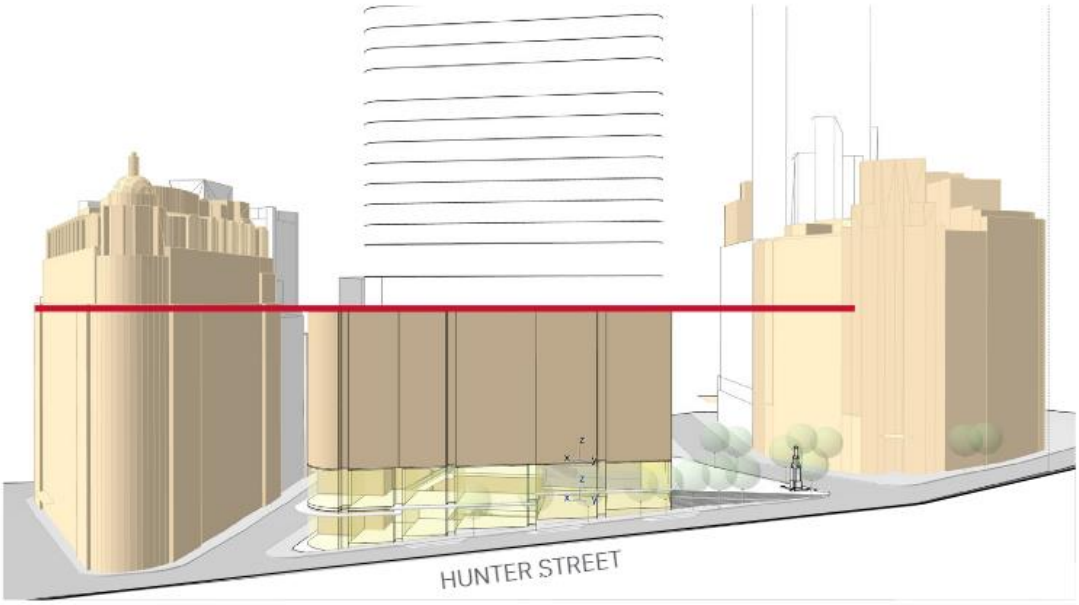

Figure 6-2 Responsive wall height – Hunter Street

Tower form and setbacks

The tower envelope is consistent with the principles, objectives and controls of the CSPC and the concurrent Planning Proposal request and site-specific Draft Design Guidelines. Consistent with the approach to the podium, the proposed tower envelope is responsive to context and the constraints established by the station. The maximum horizontal dimension of the proposed building envelope is less than 80m which is consistent with the maximum massing controls for non-residential buildings set out in the SDCP 2012.

The tower envelope has been determined based on following factors:

- the podium envelope
- prevailing street alignment
- emerging urban context by taking into consideration the alignment of the surrounding towers and 1 Bligh Street
- alignment to heritage item onsite
- regularised floorplate
- sun access
- daylight access
- wind conditions
- proposed core locations, which is heavily constrained by the spatial requirements of the station below.

The proposed setbacks for the tower have been balanced against the required Sky View Factor analysis described in section 6.3.3, and equivalent wind safety and wind amenity testing described in section 6.3.5. These assessments confirm that an equivalent outcome is achieved with regards to varying minimum street setbacks and side and rear setbacks, building form separations and tapering provisions.

The proposed Bligh Street and O'Connell Street setbacks are consistent with the surrounding context and nearby buildings. The proposed tower is significantly setback from Hunter Street in the southwestern corner of the site. This provides not only a regular floorplate for tenants with a high degree of daylight and amenity, but it also significantly reduces the visual impact of the proposal from Hunter Street (refer Figure 6-3). The proposed tower envelope responds to the surrounding context, the heritage item and enable the building to be seen as a unified composition from all street frontages, without compromising views to the sky, wind conditions and public domain amenity.

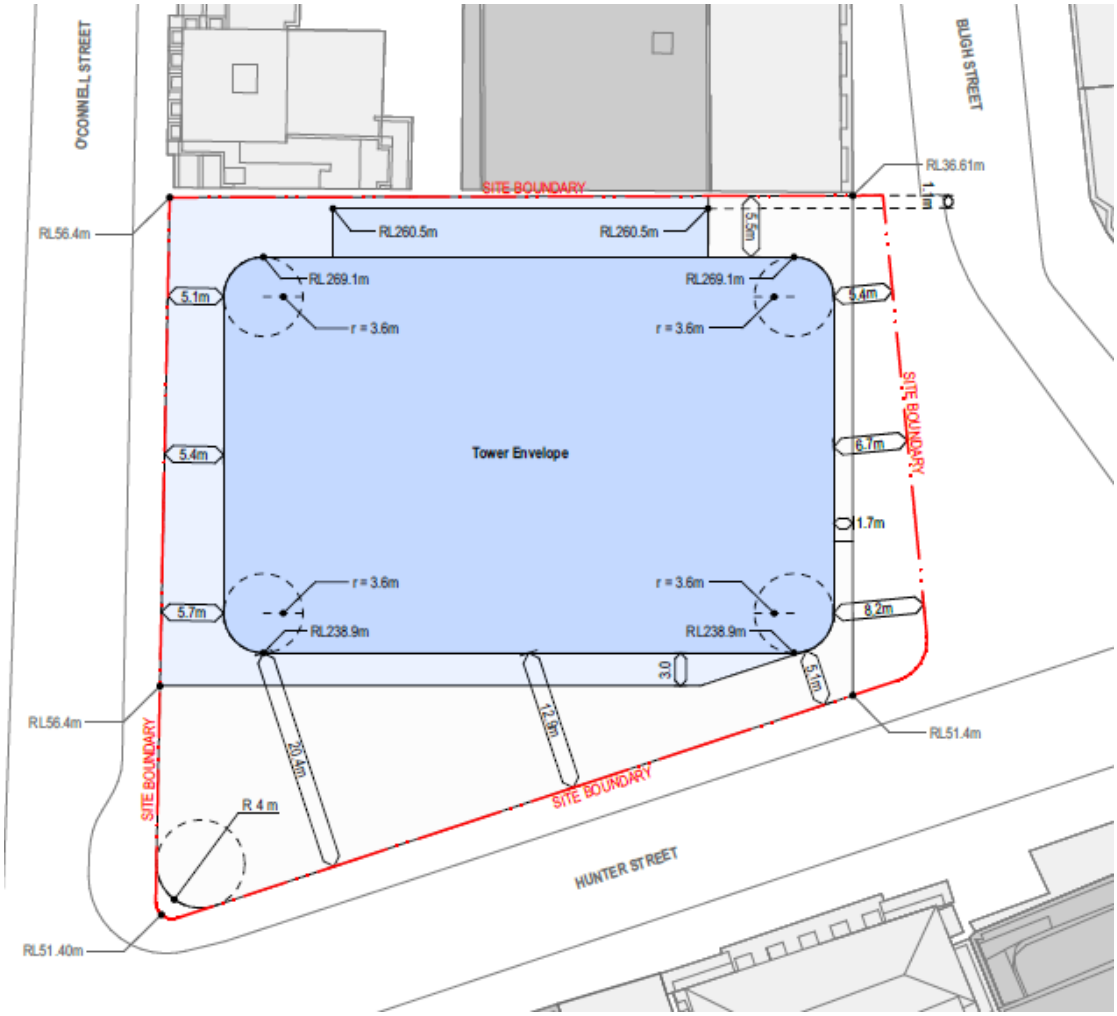

Figure 6-3 Proposed tower envelope and setback

The proposed tower setbacks result in variations to the side setback requirements under the SDCP 2012, which is reflective of the two maximum sun protection planes affecting the maximum height of the tower. The variation to the setbacks is proposed utilising the equivalence testing as outlined in the SDCP 2012 provisions for tower cluster areas, justification is provided in Table 6-2.

Table 6-2 Proposed tower setbacks

Frontage	Tower Setback	SDCP 2012 tower cluster provisions	Justification
Bligh Street	Min. 5.4m – 8.2m	Min. 8m	The design approach to the Bligh Street setback aims to achieve a consistent setback with the tower context along Bligh Street. With an average 6.7m it is varied to provide a regular tower floor plate for efficiency and flexibility. The proposed eastern tower façade is slightly setback from the heritage item at 31 Bligh Street. The alignment is also proposed to be equidistant to the O'Connell Street setback, providing alignment and symmetry with 1 Bligh Street.
Hunter Street	Min. 5.1m – 20.4m	Min. 8m	Providing an increased setback and greater visibility to the sky and of the Australia Square tower (heritage item) from Hunter Street is a priority in the setback strategy for the site. The proposed setback opens toward the west from a minimum of 5.1m on the corner of hunter and Bligh to a maximum of 20.4m on the corner of Hunter and O'Connell Streets. The average setback on Hunter Street is approximately 13m. The lesser setback in the south-eastern corner is sufficiently balanced by significant increase in setback at the O'Connell Street corner in addition to additional podium setbacks at Richard Johnson Square. This tapered setback also results in a regular tower floor plate which is ideal for efficient and flexible employment space.
O'Connell Street	Min. 5.1m – 5.7m	Min. 8m	The O'Connell Street setback aims to achieve an approximate 6m setback (consistent with the tower context along O'Connell Street). The proposed average setback on O'Connell Street is 5.4m and it varies to provide a regular tower floor plate for efficiency and flexibility. The alignment is also proposed to be approximately equidistant to Bligh Street, providing alignment and symmetry with 1 Bligh Street. The proposed setback also provides a regular and logical floorplate for the commercial building.
Northern side setback	Min. 1.1m to core	Min. 8m	The proposed northern setback consists of two elements: 1. The core is proposed to be as close as practical to the northern boundary consistent with the approved DA for 33-35 Bligh Street,

Frontage	Tower Setback	SDCP 2012 tower cluster provisions	Justification
	Min. 5.5m to tower face		to accommodate the station constraints and respond to the existing blank wall at Mulpha House. 2. To the east and west of the core, the setback to the north is based on a 6m setback from the side boundary to the glass line. An allowance of 500mm has been included for external architectural features and sun-shading, resulting in a minimum setback of 5.5m.

6.2.2 Detailed design

The articulation is 16 per cent of the envelope outline measured on a floor by floor basis. This articulation zone provides sufficient area within the proposed building envelope for architectural articulation, external façade depth and external sun shading (not occupied by floor space), which will be considered and incorporated as part of the future Detailed SSDA.

The indicative reference scheme attached at Appendix H has considered the future layout planning and internal amenity of the OSD. The indicative floorplates demonstrate how visual connectivity, daylight, sub divisibility and efficiency can be achieved in the future.

Overall, the indicative reference design scheme and proposed FSR provide significant opportunity for a range of architectural and urban design outcomes to ensure quality design can be achieved for the future Detailed SSDA.

6.2.3 Landscape design

The landscaping of the public domain surrounding the site will be the subject of the Stage 3 CSSI Application. The proposed envelope accommodates future terraces and awning which provides opportunities for landscaping. As part of the future Detailed SSDA, podium landscaping and landscaping of the building will be considered to create visual interest and be well integrated with the development. Public art, integrated interpretation of country and heritage and integrated wayfinding will also be incorporated in the landscape design as part of the Detailed DA.

6.2.4 Accessible design

A detailed accessibility assessment is to be submitted with the future Detailed SSDA. The future OSD will comply with the Building Code of Australia. The future detailed design will ensure access provisions are achieved in accordance with the following policies and guidelines:

- the Disability Discrimination Act 1992 (DDA)
- the Building Code of Australia 2016 and referenced Australian Standards
- the Disability Access to Premises (Buildings) Standard 2010

All aspects of the proposed development will be required to comply with the relevant aspects of the above standards and Act.

6.3 Environmental amenity

This section assesses any potential amenity impacts on the surrounding locality, including shadow impact to public domain areas, sky view factors in public spaces, reflectivity and wind impact.

6.3.1 Ventilation

The proposed building envelope considers ventilation by having setbacks to all building facades proposed, and that air can circulate around the tower envelopes, rather than built with zero boundaries.

Ventilation will be further enhanced through façade design (including window opening) and internal configuration (dual aspect layouts, etc) as part of the future Detailed SSDA.

6.3.2 Overshadowing

The concurrent Planning Proposal request seeks an amendment to the SLEP 2012 to increase the maximum height of building standard that applies on the Hunter Street east site from 235m to a varied height across the site that complies with the relevant sun access planes and no additional overshadowing public spaces provisions.

Within the Planning Proposal documentation, the planning envelope facilitated by the proposed maximum FSR and maximum height of building standards has been assessed against the objectives and standards of the sun access planes. The City of Sydney in their documentation note that while the additional building height proposed for the east site within the Planning Proposal does increase overshadowing to public spaces compared to the current height of building standard in the SLEP 2012, the proposal is considered acceptable as the small amount of additional overshadowing is not within the time period protected by the controls.

The building envelope proposed within this concept SSD has been designed to comply with the existing overshadowing provisions of the SLEP 2012 and the maximum height of building standard proposed within the Planning Proposal and as such includes a tapered form on the upper levels to ensure compliance.

Methodology

Clauses 6.17 and 6.18 of the SLEP 2012 prevents new buildings from creating additional overshadowing to certain public places, which includes Martin Place. The proposal does not include changes to the Martin Place sun access plane nor to the ‘No Additional Overshadowing’ provisions with the indicative reference design fully compliant with these controls.

The Built Form and Urban Design Report that accompanies this EIS includes a solar and overshadowing analysis (Appendix E). The analysis details that the proposed planning envelopes would result in a larger extent of overshadowing compared to the existing buildings on the site due to their increased built form between 9:00am and 3:00pm during the winter solstice, and summer solstice.

As illustrated in the figures below, the additional overshadowing resulting from the proposed building envelope predominantly falls on the rooftops of existing buildings in mid-winter.

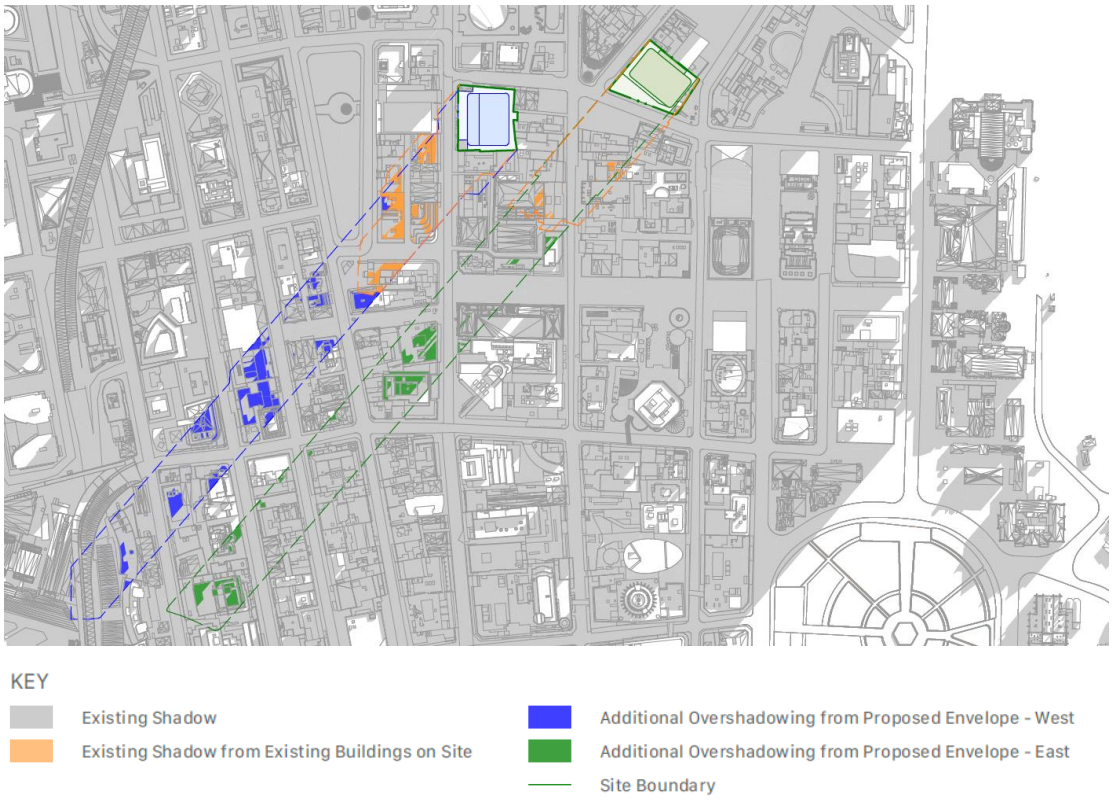

Figure 6-4 Overshadowing impacts at 9:00am, 21 June

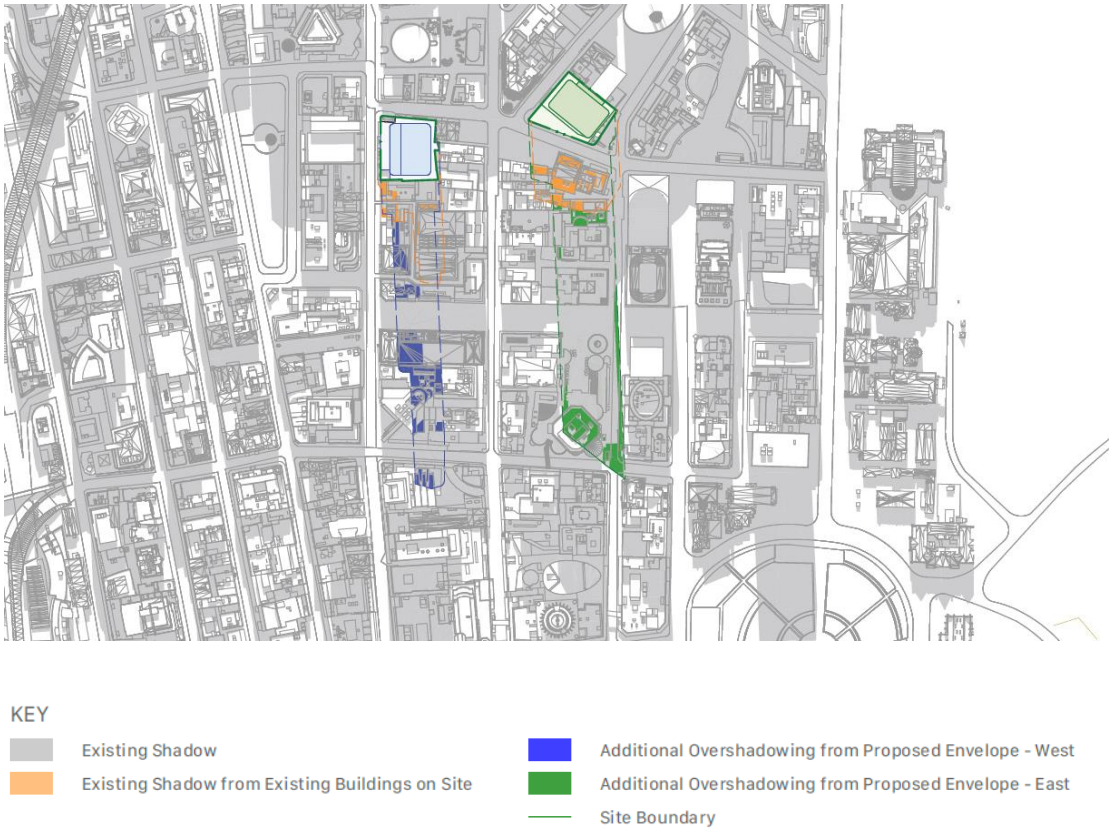

Figure 6-5 Overshadowing impacts at 12:00pm, 21 June

Figure 6-6 Overshadowing impacts at 3:00pm, 21 June

Assessment

The Domain

It is noted that at 3:00pm during the winter solstice additional overshadowing is cast from the eastern site building envelope to a small portion of The Domain. The majority of additional overshadowing is not however to the public domain and instead to rooftops of existing buildings.

This additional shadowing to The Domain includes a series of elongated shadows resulting from CBD scale towers on the eastern edge of the CBD. The additional shadows do not result in a significant decrease in amenity for a large component of The Domain, affecting only a small portion of The Domain, adjacent to other areas of shadowing. Further, this shadow impact is for a small portion of the day and not within the time period protected by The Domain sun access plane provisions (9:00am – 2:00pm, all year round).

Chifley Square

As a result of the proposed building envelope for the eastern site a small portion of additional overshadowing at Chifley Square is proposed at 3:00pm on 21 December. This area of public domain is not protected from overshadowing in the planning controls; however, it is noted that this additional overshadowing is in the mid-summer afternoon for a short period of time only.

Residential development

There is one building comprising residential apartments near the site that has the potential to be impacted by overshadowing from the proposed building envelope on

the eastern site. This building is located at 1 Hosking Place between Pitt and Castlereagh Streets, and consists of both serviced apartments (49 one-bedroom serviced apartments at Levels 1-7) and residential apartments (97 one-bedroom apartments on Levels 8-28).

The potential for overshadowing to nearby residential buildings was also considered within the following locations:

- The street block bound by Hunter Street to the north, Pitt Street to the east, Martin Place to the south and George Street to the west.
- The street block bound by bound by Hunter Street to the north, Elizabeth Street to the east, King Street to the south and Pitt Street to the west.
- The street block bound by Barrack Street to the north, Pitt Street to the east, King Street to the south and York Street to the west.
- The street block bound by Margaret Street to the north, George Street to the east, Barrack Street to the south and York Street to the west.

With the exception of the building at 1 Hosking Place, there are no other residential buildings located within the surrounding street blocks that will be overshadowed due to the building envelopes from the site.

An analysis of the proposed building envelope's overshadowing on the part residential building at 1 Hosking Place has been undertaken and is included within the Built Form and Urban Design Report (Appendix E). This sun eye analysis has considered against Objectives 3B-2 and 4A-1 of the Apartment Design Guide (ADG) and Section 4.2.3.1 of the SDCP 2012.

This sun eye analysis demonstrates that planning envelope for the eastern site overshadows the building at 1 Hosking Place between 12pm and 12:15pm on 21 June. It is also noted that the proposed building envelope for the concurrent SSD for the western site partially overshadows the building at 1 Hosking Place at a point between 2:45pm and 3pm on 21 June.

This analysis demonstrates that the proposed building envelopes for the Hunter Street Station OSDs would retain an acceptable level of solar access to the residential apartments at 1 Hosking Place between 12:15pm and 2:45pm on 21 June (more than two hours in duration).

Other development

Future development within the proposed building envelope has the potential to cause minor additional overshadowing over the roof of the heritage listed Hyde Park Barracks and within the buffer zone for approximately 30 minutes between 2:00pm and 4:00pm in mid-winter.

Detailed shadow diagrams were developed for the purposes of the Heritage Impact Statement (Appendix Z). The shadow diagrams (shown in 15-minute intervals) indicate the extent of additional overshadowing between 2.15 and 4.00pm within the National Heritage listed boundary of the Governors' Domain and Civic Precinct (which includes Hyde Park Barracks).

Table 6-3 Analysis of potential additional overshadowing to Governors' Domain and Civic Precinct

Time	Place	Extent of shadow
2.15 pm	Hyde Park Barracks	Shadow of Hunter Street East falls on western roof
2.30 pm	Hyde Park Barracks	Shadow of Hunter Street East falls on eastern roof and western roof
2.30 pm	Registrar General's Office (Land Titles)	Shadow of Hunter Street East falls on roof area to north
2.45 pm	Registrar General's Office (Land Titles)	Shadow of Hunter Street East falls on roof of more recent building to the east of Hyde Park Barracks
2.45 pm	The Domain	Shadow of Hunter Street East falls over roof of buildings near the corner of Prince Albert and St Marys Road (Phillip Precinct)
3.00 pm	The Domain	Shadow from Hunter Street East falls over the roof of works depot buildings near the corner of Prince Albert and St Marys Road (Phillip Precinct) and trees and lawn areas in Phillip Precinct
3.15 pm	The Domain	Shadow from Hunter Street East falls over the Domain Fields to the south east of the Carpark entry.
3.30 pm	N/A	No additional overshadowing
4.15 pm	N/A	No Additional overshadowing

As outlined within the Heritage Impact Statement at Appendix Z, the Hyde Park Barracks Conservation Management Plan (2018) does not address potential overshadowing. The Heritage Impact Statement confirms that this partial overshadowing to the roof of the heritage item and to the buffer zone is unlikely to cause significant impact to the heritage item.

Mitigation Measures

Future development should ensure that building footprint is contained within the proposed building envelope to protect the solar amenity of public domain areas, residential development and Governors' Domain and Civic Precinct.

6.3.3 Sky view

Methodology

The CSPS seeks to unlock additional employment-generating floor space in Central Sydney through opportunities for additional height and density that will not result in adverse impacts to public domain amenity including daylight access.

The CSPS provides for a ‘base case building envelope’ to establish the minimum performance benchmarks for daylight levels or sky view factor in public places adjacent to the site. The base case building massing is shown in Figure 6-7 below.

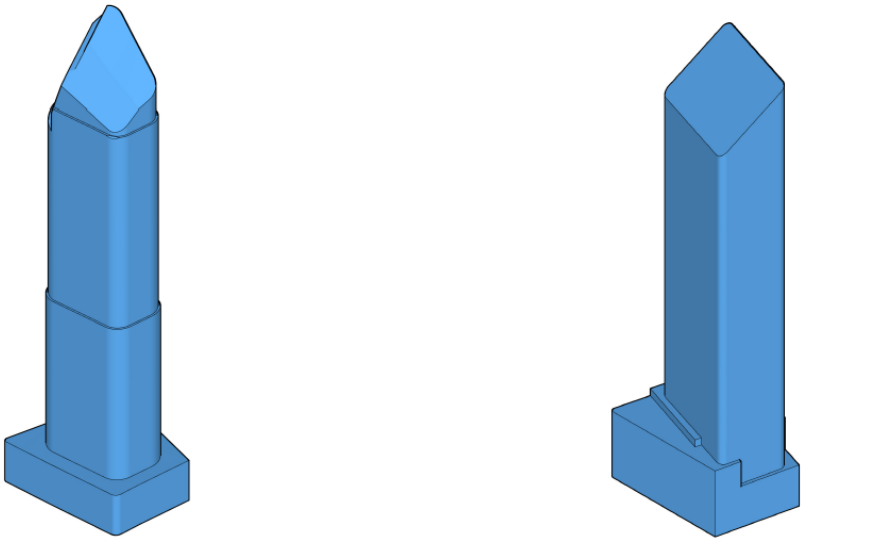

Figure 6-7 Base case massing and envelope massing comparison

Applicants may vary the planning controls that would otherwise apply to the site through a procedure to demonstrate how wind comfort, wind safety, and daylight levels in adjacent Public Places perform relative to the base case building massing (Schedule 12 methodology). The SDCP 2012 defines ‘equivalent’ results as “*very slightly ‘better than’ at a high level of accuracy”*.

The Built Form and Urban Design Report accompanying this SSDA (Appendix E) includes sky view factor analysis which is calculated as the proportion of sky visible when viewed from the ground, looking directly up. The testing analysed the extent of sky visible above various points within a 100m radius from the site as a proportion of the total possible sky hemisphere above the point, comparing the base case envelope (using assumption set out in Schedule 12 of the Sydney DCP 2012) with the proposed planning envelope.

The results of the sky view analysis are expressed as a numeric value between 0 and 1 and represent the average ratio of visible sky across the area. The difference between daylight levels reported for the proposed envelope is compared against the daylight levels reported for the base case envelope. The difference is also expressed as a numeric value.

The intent of the study is to demonstrate that the resulting daylight levels in the public domain surrounding the site is equivalent or greater, as expressed through a positive number, than the daylight levels that would otherwise be available in the public domain from a base case massing.

Assessment

The sky view factor analysis demonstrates that the proposed planning envelope for the site results in an improved sky view factor of 0.018256 compared to a ‘base case building envelope’. This result is illustrated in Figure 6-8, where green shows the increase in sky visible from the public domain due to the proposed building envelope compared to the ‘base case building envelope’ and yellow shows an adverse impact in sky visible compared to the ‘base case’.

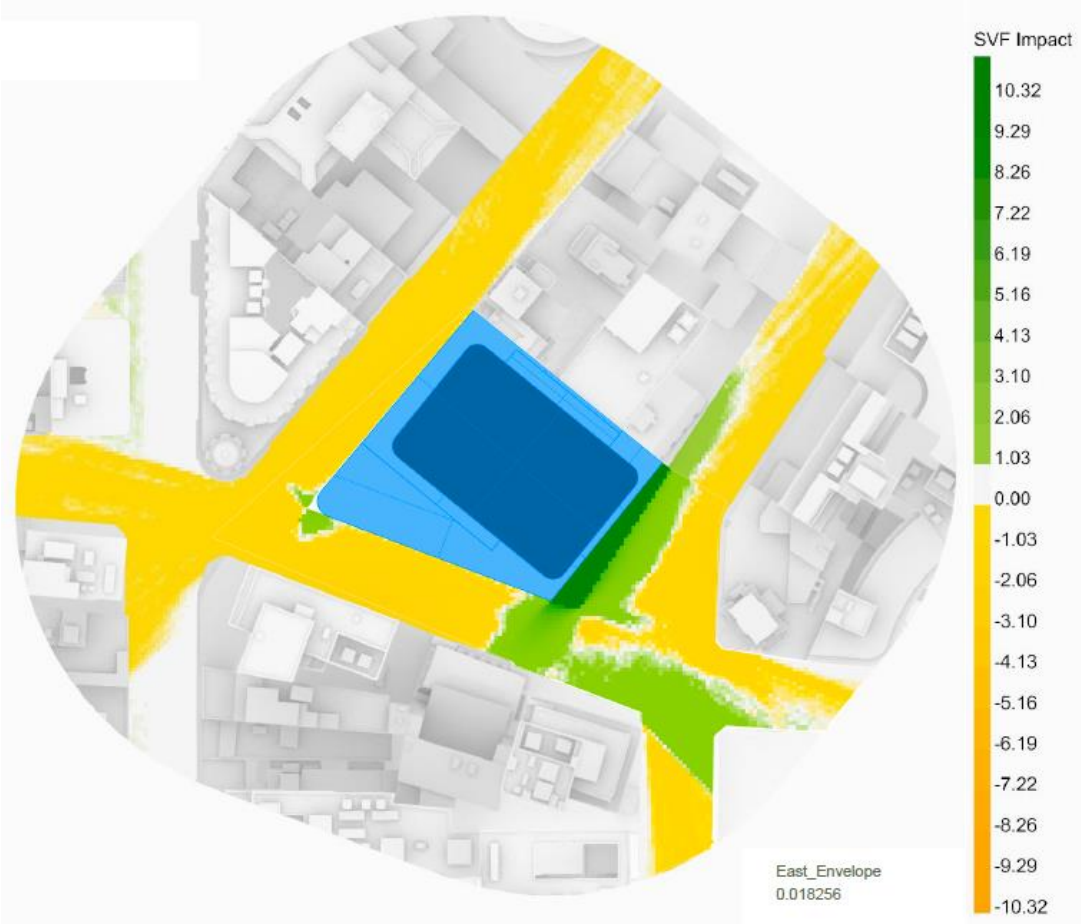

Figure 6-8 Sky view factor analysis – Hunter Street Station eastern site

The proposed building envelope is consistent with the equivalence testing requirements outlined in the CSPS, SDCP 2012 for tower cluster sites, and the Design Guideline demonstrating the proposed controls will result in an acceptable amenity outcome for pedestrians and the public realm.

Mitigation Measures

Future development should ensure that building footprint is contained within the proposed building envelope to protect the natural light levels in the public domain surrounding the site.

6.3.4 Reflectivity

A Reflectivity Impact Assessment (Appendix M has been completed to assess the impact of a future building on the site and resulting reflectance on the surrounding area.

Methodology

The Reflectivity Assessment has been prepared in accordance with the method outlined by Hassall (1991) of the University of New South Wales, which has been widely used to assess reflections off building projects in Sydney.

The analysis assumes the facades are entirely glass without any obstructions by way of external elements, to understand the risk of glare hazard on surrounding roads and pedestrians. Note that the SEARs does not require as assessment of glare impacts on surrounding buildings and therefore this has not been considered within the Reflectivity Impact Assessment.

Glare analysis simulations were completed for three routes:

- Route 1: Drivers travelling south Bligh Street
- Route 2: Drivers travelling east along Hunter Street
- Route 3: Drivers travelling west along Hunter Street.

For each assessment route, 11 locations equidistantly spaced along the route were assessed.

Luminescence values across the year are calculated and exceedances of the 500 cd/m2 (veiling luminance) threshold are identified for each route. The analysis has assumed a maximum specular reflectance of 20% for the glazed surfaces. Other façade elements, such as terracotta, have low specular reflectance.

Assessment

Only vehicles moving within the vicinity of the site were considered as adverse reflections will have the biggest impact on them. Impacts on neighbouring buildings were not considered as the risk was deemed to be minimal and these will be considered at a future detailed design stage when the materiality has been resolved.

Calculation of glare impact on pedestrians around the development was considered but deemed irrelevant as hazards introduced by glare risk to pedestrians is significantly lower compared to drivers.

For the three routes simulated, there was no disability glare/exceedances of 500cd/m^2 for drivers along those routes at any point during the day.

Mitigation Measures

As this application seeks concept approval only, the detailed façade design and materials would be subject to future Detailed SSD Application(s). The design and materiality of the façade which determine reflectivity would be resolved at the detailed design phase of the development and would be consistent with the recommendations provided within the Reflectivity Impact Assessment Report. Subject to the adoption of a maximum 20 per cent specular reflectance for the future detailed design of the glazed surfaces, there will be no adverse impacts caused by reflectivity on the surrounding environment.

6.3.5 Wind impacts

A Pedestrian Wind Assessment has been provided at Appendix N. The Pedestrian Wind Assessment provides a qualitative assessment of the likely impacts of the proposal on local pedestrian-level wind conditions. This included an assessment of a total of 54 locations within and around the site as part of the wind tunnel testing.

Methodology

The wind tunnel test was split into three stages:

- Baseline investigations – assessing the existing buildings (pre-demolition) on the site to determine the existing wind climate.
- Base case – assessing the base case (based on the ‘base case’ requirements of Scheduler 12 of the SDCP 2012) to determine the future baseline wind climate.
- Proposed building envelopes – assessing the planning envelopes to determine the anticipated future wind climate.

To enable a qualitative assessment of the surrounding wind environment, the Pedestrian Wind Environment Impact Assessment has used wind data, including wind frequency and wind direction, measured by the Bureau of Meteorology (BOM)

weather station at Sydney Airport, which is situated 8.5 km southwest of the site. Airport weather stations are generally the most reliable source of wind data as they are typically free from nearby obstructions and have uninterrupted, quality-controlled data for suitable time periods.

Wind tunnel testing has been undertaken in the three-quarter open-jet test section of the Monash University 1.4 MW Wind Tunnel. This model is based on the concept building envelope and therefore no detailed architectural or landscaping features have been included as part of this modelling.

Measurements are compared with the criteria for pedestrian comfort and safety, presented in the SDCP 2012.

Assessment

The results of the assessment indicate that wind speeds at all locations tested are compliant with the intended usage of each area of the proposed development when assessed against the Lawson comfort criteria. All locations fall below the City of Sydney safety criteria (as shown in Figure 6-9 and the indicated City of Sydney of comfort criteria (shown in Figure 6-10).

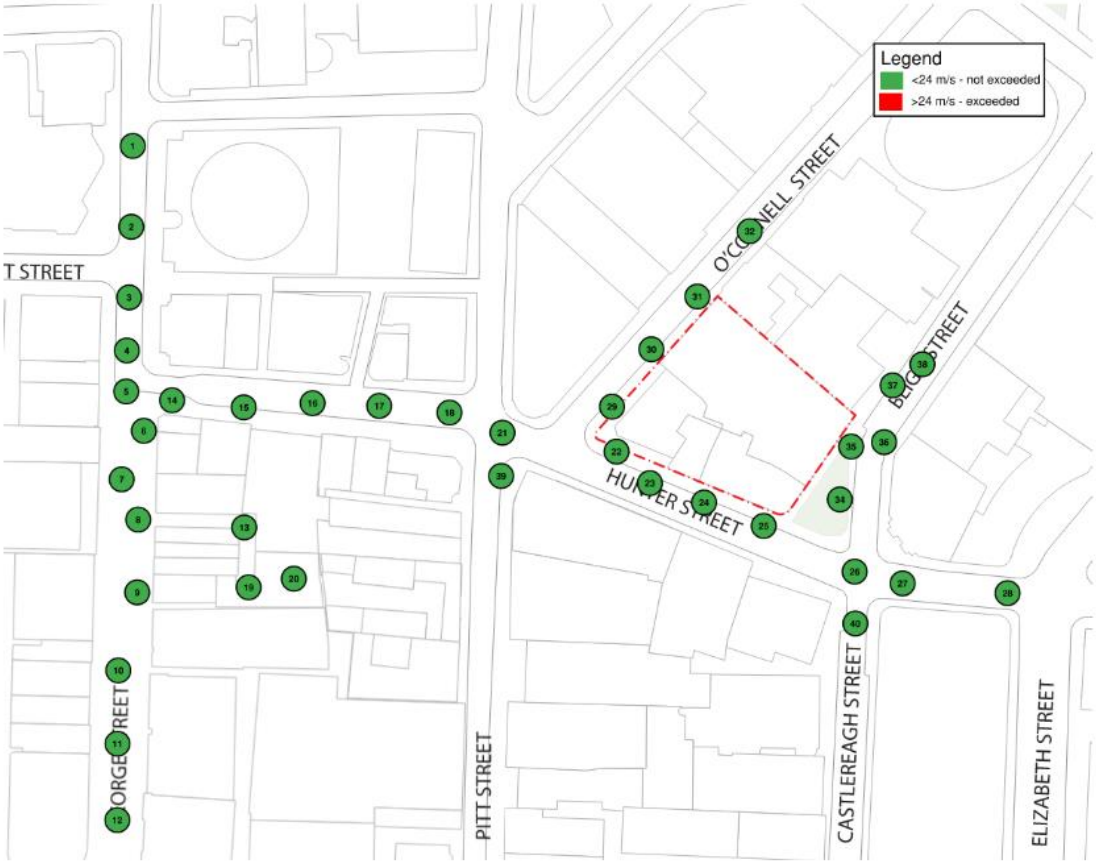

Figure 6-9 Wind safety results for proposed development

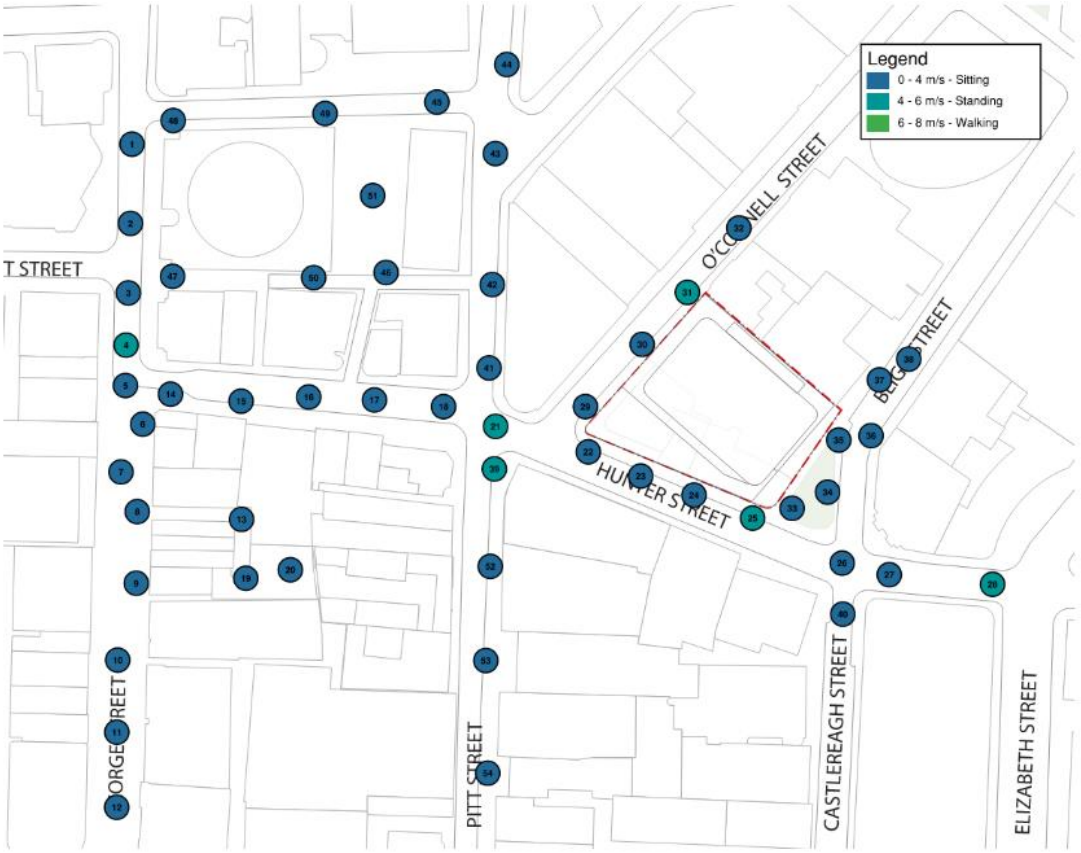

Figure 6-10 Wind comfort results for proposed development

Mitigation measures

It is recommended that further investigation of the wind conditions for the ground level and elevated areas within and around the development be undertaken during the design development and as part of the Detailed SSDA to verify the suitability of the relevant public domain areas. This would also include detailed wind tunnel testing of any proposed elevated and open communal areas in the OSD.

6.4 Visual impacts

Methodology

To determine the visual impact of the proposed building envelope compared to the existing site context (with buildings demolished on the site), a Visual Impact Assessment has been prepared (Appendix O) which includes a series of photomontages from 10 key vantage points in the public domain (refer to Figure 6-11). The views assessed include close, medium and distant views so that a representative sample of the types of views that are likely to be experienced by the public are considered.

The methodology employed for the VIA is based on a combination of established methods used in NSW including the Guideline for landscape character and visual impact assessment, Environmental Impact Assessment practice note EIA -NO4 prepared by the Roads and Maritime Services December 2018 (RMS LCIA) and research developed by Dr Richard Lamb (Richard Lamb and Associates (RLA)).

The methodology for the visual impact assessment includes determining the visual catchment using GIS mapping software (LiDar data) to determine potential views of the tallest built form proposed from the surrounding area, ground-truthed with particular high points and sensitive view places. Compared to the existing site

conditions, the extent and significance of the potential visual change was then assessed.

Figure 6-11 Photomontage view location map

Assessment

The visual catchment analysis identifies that the upper levels of the proposed tower will be visible from surrounding areas, consistent with the city skyline. The proposed tower is likely to be visible dependent on intervening-built form and vegetation, from distant locations including Sydney Harbour, lower North Shore, Pyrmont, Inner West and parts of Darlinghurst and Potts Point in the east.

However, it is noted that the visual catchment is limited to close locations including adjacent streets. Further built form along Macquarie Street and Elizabeth Street constrains views from important public domain spaces including The Domain and Royal Botanic Gardens to the east and north-east and from the north-west including Observatory Hill and Barangaroo Reserve.

Of the ten views analysed, eight were rated as a low, one was rated as medium and one was rated as a medium-high level of visual impact.

View 7 (the view east down Hunter Street from the George Street intersection) has been identified as medium- high visual impact.

The Concept SSDA introduces new contemporary built form into the foreground view of the George Street intersection with Hunter Street. The Hunter Street frontage of the proposed envelope is visible in the view and are adjacent to other tower forms. The

proposal does not block heritage facades or views to heritage items. The upper-most parts of the tower on the east site will blocks open areas of sky. The proposed building envelope however does not create any significant view blocking effects on baseline factors including existing visual character or scenic quality.

The proposed envelope is not dissimilar in form, height, or character to existing towers in the composition and wider visual context.

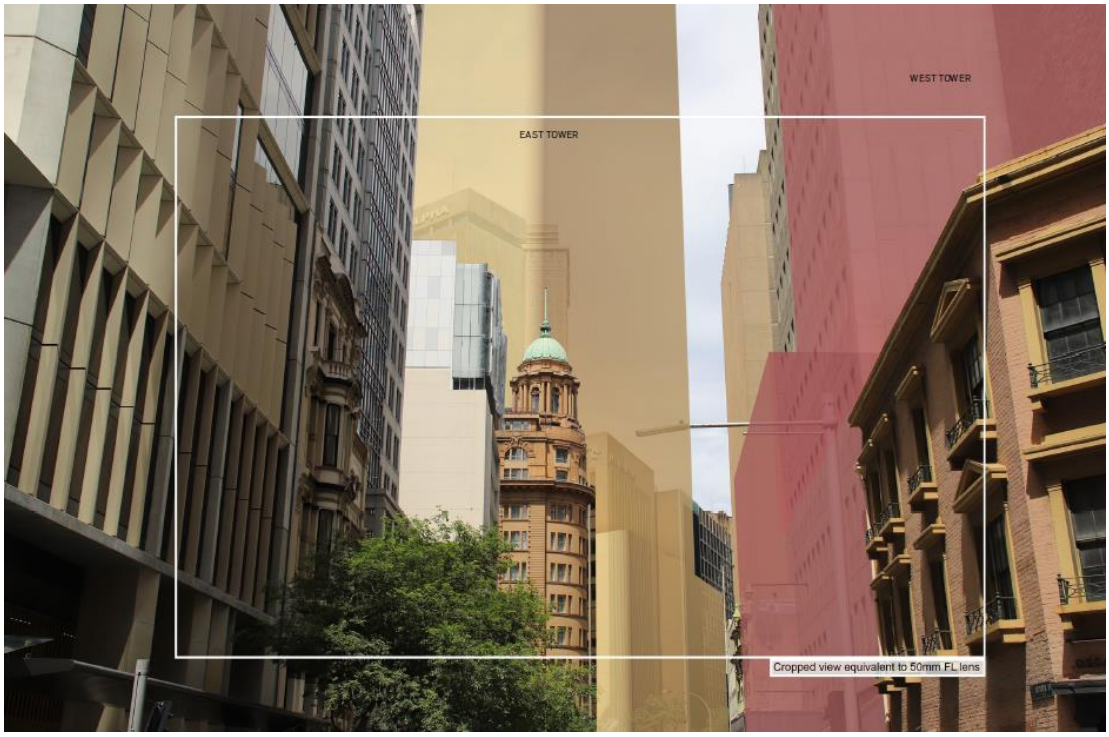

Figure 6-12 View 7 from George Street intersection down Hunter Street

In summary, the Visual Impact Assessment makes the following conclusions:

- the proposed envelope does not create any significant view blocking effects on baseline factors including existing visual character or scenic quality.
- the proposed envelope is not dissimilar in form, height or character to existing towers in the composition and wider visual context.
- the assessment shows that in the majority of views there is a high capacity to absorb physical change.
- the envelope proposed as modelled in all views, does not generate any significant visual impacts on the view compositions analysed.

The visual impact assessment demonstrates that the proposal can be supported on visual impacts grounds.

Private views

From a review of data from CityScope (RPData Product, 2019) the site is not located within close proximity to private residential apartments that would likely benefit from significant view corridors. Notwithstanding it is noted that private views are not protected within the Central Sydney Planning Framework from development that aligns with the strategic direction of the CSPS to provide for an increase in employment generating floorspace in tower cluster areas.

Mitigation Measures

Future development should ensure that building footprint is contained within the proposed building envelope and a suitable level of articulation is incorporated to minimise visual impact to public domain areas.

6.5 Integration with station and public realm

6.5.1 Integration with station infrastructure

Given the unique and complex nature of this project, it is important to delineate between the functioning of the metro station and associated elements (approved under the CSSI applications) and the OSD for which approval is sought under this application. Section 3.8 distinguishes between the approved metro station elements on the subject site and those elements for which approval is sought in this Concept SSDA, with physical demarcation drawings provided at Appendix I.

The following issues have been considered and it has been demonstrated that the proposed development can successfully integrate with the station box and podium:

- pedestrian amenity – addressed in section 6.6
- traffic and loading impacts – addressed at section 6.8
- noise and vibration impacts – addressed in section 6.9
- stormwater management – addressed in section 6.10
- flooding – addressed in section 6.11
- utilities, infrastructure and services – addressed in section 6.17
- construction program impacts – addressed at section 6.18

The proposed development would not result in any adverse impacts on railway infrastructure, and the station podium. The nature and acceptability of the development with regard to potential impacts has been provided below:

- The proposed development can facilitate retail uses within the ground floor or the station envelope, which provided activated retail frontages to Hunter Street, Bligh Street and the through site links for an improved public domain outcome.
- The proposed OSD lobby as shown on the indicative reference scheme is elevated above the station and located within the station podium accessed via escalators and lifts from the ground level entry located along the through-site link.
- The proposed development has been designed to accommodate the transport needs of Sydney Metro. The proposal, on this basis, has been undertaken with extensive direct input from Sydney Metro to ensure that, while completely integrated, the components are able to be constructed, maintained and operated separately from each other, both currently and into the future.
- Structural safety of potential OSD has been previously assessed under the Stage 3 CSSI Application and the infrastructure needs of the proposal have been assessed at section 6.17.
- The proposal would not adversely affect the operation of the future Hunter Street Station as the spatial and functional requirements have been integrated into the concept proposal design with direct input from Sydney Metro.

Mitigation measures

The future Detailed SSDA would need to propose a building which is architecturally and structurally integrated with the station structure beneath and would be guided by the Draft Design Guidelines.

6.5.2 Crime prevention through environmental design

A Crime Prevention Through Environmental Design (CPTED) assessment has been provided at Appendix L. The CPTED report provides a desktop assessment of the indicative reference scheme of the proposed development, including the assessment against the six key principles of CPTED, which are discussed in detail below.

Natural surveillance

The proposed commercial and retail land uses have an opportunity to create formal lobby areas with concierge/security personnel that can provide capable guardianship and surveillance of the OSD in addition to the adjacent public realm areas.

Future detailed design, including internal configuration for the ground floor areas, and immediate floors above, should maximise surveillance opportunities.

Natural access control

The urban nature of the station's location may restrict the opportunities for introducing new methods of natural access control; however, the development should seek to leverage the existing station-built environment to channel natural flow of pedestrian throughput.

Intuitive routes should direct legitimate traffic to appropriate areas with natural and electronic surveillance coverage.

Territorial reinforcement

Zoning, in the form of floor surfaces and perceptible architectural branding should be used to indicate passage from public to metro domains. Clear and unambiguous signage and wayfinding is required for the proposed development as effective wayfinding systems provide assurance, promote throughput, and help to reduce unnecessary pedestrian congestion or confusion.

Image management and maintenance

Ensure contractually the ongoing maintenance and upkeep of the proposed development by building management, to include vegetation, landscape and lighting maintenance, site cleanliness, repairing property damage and implementation of an effective Graffiti Management Plan should be incorporated into contractual service level agreements.

Activity support

Environmental designs should promote legitimate activity, particularly at non-peak times when opportunities for crime may increase. Encouragement of socially cohesive activities (e.g. food trucks, street entertainment) will increase the likelihood of desirable behaviour at traditionally quieter times and deter criminal activity.

Site/target hardening

Where possible, architectural and landscaping features should be used to harden the environment against vehicular incursion. Electronic security systems should be integrated within the environment to reduce the overt nature of security measures and the associated fear of crime. These will be addressed under the CSSI Stage 3 Application.

The CPTED Assessment makes recommendations relating to crime prevention elements and treatments to be incorporated in the development design to minimise risk or likelihood for crimes to occur.

Assessment

The assessment found that the Concept SSDA and the indicative reference scheme has already incorporated a number of CPTED principles and provides adequate opportunity for the implementation of further CPTED principles in the detailed design phase. The future Detailed SSDA will need to address how the final development scheme will implement the CPTED principles outlined above.

6.6 Pedestrian amenity

The construction and operation of the Hunter Street Station including the surrounding areas and public domain) will be subject to approval via the Stage 3 CSSI application.

A Transport and Accessibility Impact Study was prepared to support the Planning Proposal (which is also appended to the Traffic and Access Report (Appendix Y) that accompanies this application) This assessment included pedestrian impacts and accessibility of the site and OSD for pedestrians.

As the existing CBD area already experiences high flows of pedestrians, with or without the construction of the OSD, it is anticipated that for the passengers forecast for Hunter Street Station will add to the high flows.

Methodology

The Planning Proposal Transport and Accessibility Impact Assessment compares the impact of the proposed OSD FSR against a FSR that is compliant with the current SLEP (base case). A conservative FSR is assumed in the base case, being a total FSR of 12.83:1 per site. This base case figure does not include additional FSR design excellence bonuses under the existing clause 6.21D (10%) or the tower cluster provisions in clause 6.21E of SLEP 2012. Therefore, the actual impacts of a base case may be higher than reported in this assessment.

The person trip generation for both scenarios was determined based on an employee to net lettable area (NLA) ratio of 1 person per 10 sqm of NLA; an assumed attendance rate of 85%, and with 50% of trips occurring in the AM peak hour. Using this methodology trip generation has been based on a trip rate of 0.0361 persons per square metre of commercial GFA. This person trip generation is then used to assess the impacts to both the pedestrian network and traffic and transport network.

Assessment

The application of the rate above to the person trip generation for the proposed density on the eastern site is a total of 2954 persons, of which 2363 person trips are inbound and 591 are outbound.

Trips generated by the retail areas are not included as these will be food and beverage outlets and other supporting retail uses (such as convenience stores) with trips derived from persons already in the area.

Footpath density assessments have been carried out using the Fruin Outdoor Walkway density criteria for the year 2036. The results found that without the OSD, the existing footpaths will continue to operate generally at a level of service A and B, and at a minimum level of service D (Hunter Street between Pitt and George Streets).

It is estimated that the net additional trips attributed to the proposed development, as compared to a development compliant with the base case LEP, would be a total of 1257 comprising 1006 inbound and 251 outbound trips.

The impact on surrounding footpaths from people only walking is expected to be minimal once the distribution across the network is considered. The proposed development has direct access to the future Hunter Street Metro station and there will also be a paid underground connection under Hunter Street, to the City & Southwest Martin Place metro station. As a result, pedestrian movements will be contained within the site and diverted underground. The proposed development will manage significant pedestrian flows on-site and through new underground linkages.

Mitigation Measures

The increase in pedestrian flows from the OSD are negligible compared to the pedestrian flows and accessibility impacts resulting from the construction of the Hunter Street Station and accordingly no mitigation measures are required for the Concept SSDA. As part of the CSSI Applications, the City of Sydney and Transport for NSW are consulting on public domain improvements in the vicinity of the site.

6.7 Ecologically sustainable development (ESD)

An Ecologically Sustainable Development (ESD) Report (Appendix P) has been prepared to define principles that would be incorporated into the future design, construction and operation of the OSD.

This framework is established to address a number of different environmental targets and performance measures, to reflect best practice sustainable building principles including for energy and water efficiency and the use of renewable energy. The ESD framework will contribute to the goal of moving toward net zero carbon emissions under a range of Net Zero Buildings initiatives that leverage NABERS (embodied and operational GHG emissions), green finance mechanisms and BASIX enhancements that align with the trajectory for low energy buildings.

6.7.1 Principles of ecologically sustainable development

Section 192(f) of the EP&A Regs requires consideration of the principles of ecologically sustainable development. The principles of ecologically sustainable development are addressed in .

Table 6-4 Assessment against ESD principles

Principle	Proposal
(1) The principles of ecologically sustainable development are the following— (a) the precautionary principle,	No threat of serious or irreversible environmental damage is posed by the proposed development. Proactive measures to prevent environmental degradation will be included within the design, construction and operation phases of the proposed development. To deliver a high level of performance in operation, the buildings will pursue set environmental performance targets (in alignment with Green Star and NABERS targets) and be set up for optimum ongoing management that is supported by appropriate metering and monitoring systems.
(b) inter-generational equity,	The proposed development will maintain the health, diversity and productivity of the environment for future generations by minimising the consumption of energy and water, and waste generation. This could be achieved through the design integration of the proposed ESD strategy for the site.
(c) conservation of biological diversity and ecological integrity,	The proposal would not result in any significant effect on the biological diversity and ecological integrity of the study area. A BDAR Waiver has been sought in relation to the proposal as demonstrated at Appendix R.
(d) improved valuation, pricing and incentive mechanisms.	The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reducing, reusing, recycling and managing waste during construction and operation can be implemented to ensure resources are used responsibly through the future development.

An ESD Report has been included at Appendix P. The report identifies the design initiatives and features of the proposed development that hold the potential to reduce the overall environmental impact.

ESD strategy

The ESD strategy sets the following sustainability performance targets:

- 40 per cent reduction in upfront carbon emissions
- 20 per cent reduction in energy use
- 100 per cent renewable energy
- 100 per cent elimination / offset of other emissions
- 40 per cent reduction in potable water use
- 30 per cent reduction in life cycle impacts.

Minimising greenhouse gas emissions

The proposed development can minimise greenhouse gas emissions by:

- implementing a Climate Positive Pathway, as outlined in detail in the ESD Report at section 6.7
- maximising onsite renewable energy and purchasing 100 per cent renewable electricity for base building and shared services operations

- driving credible reductions in Upfront Carbon and Operational Carbon
- empowering businesses to make sustainable choices by investing in the electrification of space heating and hot water services
- installing systems that use low impact refrigerants
- providing 25 per cent EV charging for all car parking spaces.

Minimum sustainability rating requirements

Minimum sustainability rating targets for the proposed development are outlined in Table 6-5 below.

Table 6-5 Rating targets for the proposed development

Assets	Minimum rating targets
Proposed development – commercial office	6 star Green Star Buildings v1b
	6 star NABERS Energy for Offices (base building) (Commitment Agreement) (without GreenPower)
	4.5 star NABERS Water for Offices
	5 star NABERS Water for Offices (stretch target)

6.8 Transport, traffic and parking

The impact of traffic and parking on the surrounding locality has been considered in this SSDA submission. In accordance with SEARs Item 9, a Transport and Access Report (Appendix Q) has been prepared to evaluate the transport and traffic conditions at the site and nearby surrounding environment.

6.8.1 Traffic generation

Traffic generated by the proposal will be limited as the maximum number of car space provided between the eastern and western sites is 70 spaces. The estimated number of trips generated by commercial, retail and loading dock in the AM and PM peak period is provided in Table 6-6.

Table 6-6 Estimated AM and PM peak hour building vehicle trips

AM peak vehicle trips				PM peak vehicle trips			
In-bound	Out bound	Loading dock	Total	In-bound	Out bound	Loading dock	Total
56	14	25	95	14	56	25	95

These trips are assessed as having a negligible impact on the existing road network.

The road network performance has been modelled for the future year 2036. The traffic demand has been based on 2021 counts with an agreed growth factor applied, calculated using outputs extracted from the Public Transport Project Model, which includes the proposed development. An additional scenario, with Hunter Street Station but without the Concept SSDA was also assessed, by subtracting the traffic generation from the Concept SSD.

Modelled network performance for 2036 during the AM and PM peak hours for key intersections in the vicinity of the site are provided in Table 6-7.

Table 6-7 Future intersection modelled performance (2036)

Intersection	AM Peak				PM Peak			
	Without Metro		With Metro +SSD		Without Metro		With Metro +SSD	
	Ave delay (sec)	LOS	Ave delay (sec)	LOS	Ave delay (sec)	LOS	Ave delay (sec)	LOS
George Street and Hunter Street	35	D	33	C	37	D	40	D
Pitt Street, O'Connell Street and Hunter Street	131	F	125	F	50	D	58	E
Bligh Street and Hunter Street	54	D	57	E	90	F	82	F

Overall, the model showed that the road network is expected to remain at similar levels of service, with no notable change associated with the traffic generated by the development on the surrounding road network operation.

6.8.2 Car parking

While car parking spaces are not currently shown on the concept reference design, it is anticipated that a future developer of the OSD may propose innovative ways to include parking for private vehicles, most likely within the podium of the building. Access to these spaces and the design and provision of these spaces must be in accordance with the provisions outlined in the Draft Design Guidelines and must ensure they do not adversely impact the amenity of the public domain.

6.8.3 Vehicular access

The site is accessible by vehicles from O'Connell Street at the north-western corner of the site, where vehicles can service the ground floor loading dock. Future access to the loading dock from O'Connell Street would be confined to left-in, left-out given the current one-way configuration of O'Connell Street.

6.8.4 Bicycle parking and end of journey facilities

Future development on the site will include end of journey facilities to support active transport modes. The reference design includes bicycle parking and end of journey facilities to support the proposed development on Level 3 of the podium. This demonstrates that future development on the site can comply with the required end of journey facilities under the relevant Green Star Buildings Movement and Place Credit assessment tool.

Connectivity to the Hunter Street Station site for cyclists via the cycle network is adequate, with the Pitt Street cycle link providing a north-south cycle link through the middle of the station precinct.

This cycle link has turning facilities at its signalised intersection with Hunter Street, which would facilitate access to the site via a bicycle entrance on O'Connell Street (subject to future detailed design).

6.8.5 Loading facilities

The proposed loading dock is dedicated for the use of the proposed OSD. The loading dock will include spaces for MRV, SRV and B99 vehicles and the concept reference design demonstrates how an indicative loading dock on the site may be accessed and planned. Further details around the design and management of the loading dock including swept path analysis will be provided in a future Detailed SSDA. The total number of service vehicle spaces will be documented in the future SSDA and following further consultation with TfNSW Freight. The TfNSW Last Mile Toolkit identifies that the number of loading docks spaces currently proposed does not meet the calculated 95 per cent service level. The proposal achieves a service level of 82.3% and an additional three B99 and 1 x MRV spaces would be required to reach 95%.

The proposed number of loading dock spaces is considered acceptable provided that loading dock management measures are implemented. The loading dock management would consist of on-site management of the loading dock with a combination of an on-site dock manager and a dock management system (DMS). The DMS will enable the on-site management team to schedule truck delivery times and allocate docks. The major benefit of the implementation of such a system is the ability to moderate demand throughout the day. The allocation of deliveries to timeslots (with strict length of stay limits) reduces the risk the loading dock reaching capacity and manages traffic flow into the site during peak periods. The booking system also largely mitigates the risk of vehicle queues forming to enter the site and improving the flow of traffic on the adjacent streets.

As outlined in the Transport and Accessibility Report (Appendix Q), vehicular access to the site therefore can be accommodated under the proposed planning controls, while providing an appropriate level of street activation, retail and station services and uses.

Mitigation Measures

The following mitigation measure and recommendations are proposed for the Concept SSDA:

- provision of car share spaces to reduce individual car parking demands. Allocation and provision are subject to confirmation as the design evolves
- development of a loading dock management plan including measures such as a booking system, extended operating dock hours and or appointing a sole delivery contractor
- A detailed Construction Traffic Management Plan (CTMP) for adoption during the construction phase should be prepared as part of the future Detailed SSDA
- A travel plan should be created to reduce car trips and encourage the use of sustainable transport as part of the future Detailed SSDA.

6.9 Noise and vibration

A Noise and Vibration report has been provided at Appendix S. This Noise and Vibration report provides a preliminary assessment of operational and construction acoustic impacts from the proposal to neighbouring land uses and the impact to the proposed development from environmental sources. Feasible and reasonable noise

and vibration mitigation measures will be considered to reduce the impacts below the stipulated criteria.

The site is generally surrounded by commercial receivers. However, there is a sensitive hotel receiver located opposite the site (the Radisson Blu Hotel R-12 on the map,) context of the site. A site map identifying the sensitive noise receiver locations around the Hunter Street Station is provided in Figure 6-13.

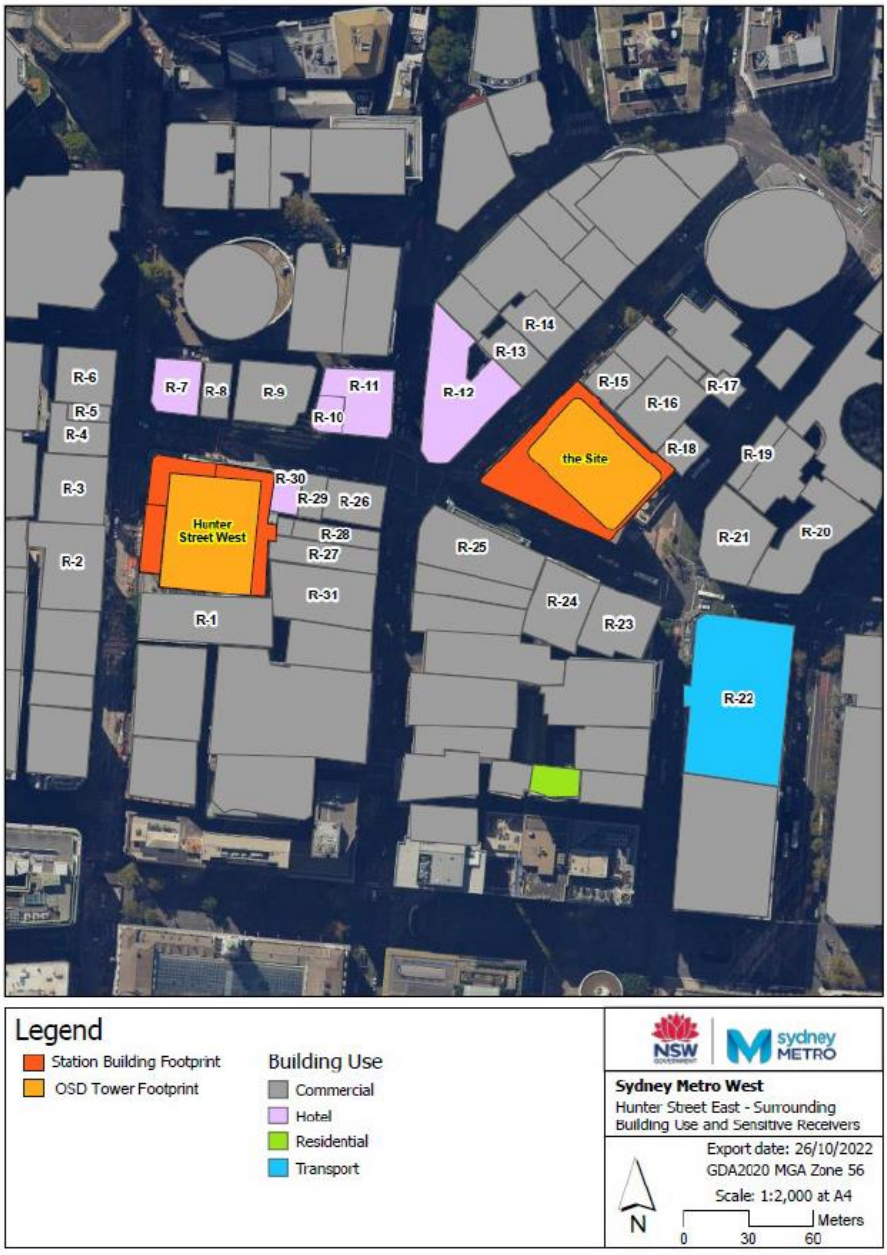

Figure 6-13 Site map identifying receiver locations around the site

Methodology

In order to assess the baseline noise levels at the site, baseline noise monitoring was undertaken via an unattended noise logger to the south of the site.- refer Figure 6-14 below. The existing ambient noise levels have been summarised in Table 6-8 below.

Figure 6-14 Unattended noise monitoring location in relation to the site

Table 6-8 Noise Logger results

Address	Background Noise (RBL), dB(A)			Ambient Noise Level (L_{Aeq}), dB(A)		
	Day	Evening	Night	Day	Evening	Night
50 Martin Place	64	61	58	66	64	62

Noise at sensitive receivers from construction activity at the site has been modelled based on Construction Programme Scenario 1 (refer to section 6.18), which is deemed to be the worst case scenario. Noise contribution from similar construction scenario (i.e., activity, equipment, and staging) has also been included in the modelling.

Assessment

Construction Noise and Vibration Impacts

Construction noise modelling indicated that an exceedance of up to 23dB has been predicted at some commercial receivers located closest to the proposed development. An exceedances of 23 dB has been predicted at location R-27 (107 Pitt Street) and a 22dB exceedance at location R-13 (23 Bligh Street).

The predicted noise level exceedances trigger a requirement to ensure that all feasible and reasonable noise management and mitigation measures are included in the contractors Construction Noise and Vibration Management Plan (CNVMP), to be prepared as part of the subsequent Detailed SSDA. The nearest residential receiver is around 100m south of the construction works, so construction noise impacts will be limited at this residential receiver.

Given the existing traffic volumes through the site and the ability of workers to use the existing public transport network, the traffic noise impacts from construction activities are likely to be negligible.

The predicted cumulative noise impact from the construction of both OSDs (Hunter Street West and East) has been constructed. There are predicted exceedances at a few commercial receivers with the highest exceedance being no more than 23dB. These impacts would be considered in more detail in the CNVMP to be prepared as part of the subsequent Detailed SSDA, with the identification of appropriate noise management and mitigation measures to limit impacts on the surrounding community.

In addition to the cumulative impact from the construction of Hunter Street West and East OSD, there is the potential for cumulative construction impacts with other future development. At this stage, detailed information of the activities during construction of the proposed development and other nearby potential future developments are not available and therefore an objective assessment cannot be conducted. Nevertheless, if significant noise generating construction activities are anticipated to occur at other sites near the development, consultation should be undertaken with the contractors to manage cumulative impacts on sensitive receivers within common areas. It is anticipated that community consultation measures will be sufficient to manage any cumulative impacts that could arise.

There are no high vibration producing equipment identified in the construction methodology. If any high vibration activities are proposed during construction, impacts of these activities will need to be managed to determine any potential human comfort impacts to receivers or structural/cosmetic damage to nearby structures. If the use of vibration intensive plant is proposed, management controls for the plant should be captured in the CNVMP as part of the subsequent Detailed SSDA.

Operational noise and vibration impact

Noise generated by the proposed development will be from plant equipment including:

- heat pumps
- cooling towers
- stair pressurisation fans
- generators.

The cooling towers are currently planned to be located on the roof of the building tower. Noise mitigation including acoustic louvres and attenuators on the exhaust fans are currently considered in the indicative reference design and should provide suitable noise attenuation to meet applicable noise criteria. Noise mitigation including ducted exhausts with an attenuator in the plenum must be considered to meet the applicable noise criteria.

Heat pumps on the tower may be located on the roof with suitable acoustic louvres and attenuators to meet the noise criteria. Acoustic louvres and absorption within the plant room have been incorporated in the indicative reference design to control noise breakout.

Stair pressurisation fans would generally be located on the roof. Suitable attenuators have been included in the design to meet the applicable noise criteria.

Generators would generally be located on the roof and require attenuators and acoustic louvres to attenuate noise associated with air flow paths.

As part of the Detailed SSDA, the cumulative impact of noise emissions from plant associated with the operation of the building would be assessed. Further information would be provided throughout the Detailed SSDA noise and vibration assessment to

confirm appropriate noise attenuation is included in the design to comply with the applicable noise criteria. Noise emissions from the proposal are controlled by the major mechanical plant discussed above. Compliance with the NPfI ambient noise criteria will also result in compliance with the sleep disturbance noise criteria.

Car parking at the proposed development will be contained within the building footprint and therefore noise associated with traffic movements will be able to be mitigated within the proposed built form.

The proposed loading dock will be enclosed within the building with access via O'Connell Street. Given that the loading dock will be enclosed, negligible noise impacts are expected to be generated by use of the loading dock.

Mitigation Measures

Construction stage

Prior to the commencement of major construction works, the future Detailed SSDA should develop a detailed CNVMP. The CNVMP should:

- Identify relevant construction noise and vibration criteria as detailed in the Noise and Vibration Report
- identify neighbouring land uses that are sensitive to noise and vibration
- summarise key noise and vibration generating construction activities and the associated predicted levels at neighbouring land uses
- identify reasonable and feasible work practices to be implemented during the works
- summarise stakeholder consultation and complaints handling procedures for noise and vibration.

Further investigation should be undertaken in detailed design to manage construction noise exceedances, including the following:

- the criteria for non-residential sensitive receivers are only applicable when the receiver is in use. Therefore, further investigation into the operation of these nearby sensitive uses should be undertaken to manage these impacts.
- the noise levels for these scenarios represent a typical worst-case with all equipment operating concurrently. These levels are considered conservative and as more detail about the construction methods and equipment is developed this can be refined further within the Detailed SSDA.

Operational stage

A summary of the noise and vibration mitigation measures relevant to the operation of the proposal is presented in Table 7-1 of the Noise and Vibration Report and key measures are identified below.

- Major noise and vibration emitting sources from the proposed development such as plant should be treated to meet the established criteria with the use of standard acoustic treatments.
- External noise intrusion will be controlled by the acoustic performance of the façade. External glazing recommendations have been provided and are considered achievable.
- Noise and vibration intrusion to the proposed development from the station and tunnel, from sources such as rail induced noise and vibration, public address systems, engine noise and emergency and ventilation equipment, is expected to be controlled at the source and within the station and tunnel envelopes, in

accordance with the relevant requirements stipulated for the Stage 3 CSSI Application.

- Opportunities to minimise future potential impacts should be considered as the design progresses, including incorporating noise reduction provisions in the loading dock management plan prepared as part of the Detailed SSDA.

The list of measures would be reviewed and refined as part of the Detailed SSDA to ensure the operational noise and vibration requirements are met.

6.10 Stormwater and wastewater

An Integrated Water Management Plan is provided at Appendix U and includes analysis of the existing stormwater quantity and quality conditions for the site. The report aims to provide a hydraulic and water quality analysis as well as design of on-site detention systems and water quality treatment measures to demonstrate the feasibility of the proposed development from a stormwater and water quality perspective.

Methodology

The baseline investigations involved analysing the existing drainage network, catchment and topography, and the existing stormwater performance.

Sydney Water was consulted as part of the investigation regarding the on-site detention and Permitted site discharge (PSD) for the site. A DRAINS model was set up to analyse the 5 per cent and 1 per cent AEP storm events including climate change and bypass.

The initial design of the on-site detention involved modelling the storage requirements set by Sydney Water and assessing PSD compliance.

Assessment

The modelling results indicated that the on-site detention tank would be required to account for the increase in rainfall from climate change to ensure post-development flows do not exceed the predevelopment state.

The proposed design of on-site detention for the site is for a capacity of 50m^3 with a 375mm orifice. The stormwater design is at a conceptual level and will ultimately be resolved as part of the future Detailed SSDA(s). The proposed stormwater drainage and runoff system for the site will comply with the main design considerations summarised below:

- post development stormwater runoff connections into existing drainage infrastructure will match predevelopment case where feasible
- on-site detention will be situated above the 100 year annual reoccurrence interval (ARI) flood levels to facilitate discharge into potentially fully charged stormwater pipes
- management of water quantity to ensure no increase in stormwater discharge rate from the sites for the 20 and 100 year ARI storms.
- The proposed development flows also show no adverse impacts on the stormwater system. The post flows are less than the pre flows for both the 5 per cent and 1 per cent AEP storm events including climate change when allowance is made from on-site detention system.

Proposed stormwater quality strategy

The stormwater quality strategy has been developed in accordance with the requirements of Green Star and City of Sydney's stormwater quality reduction targets

as well as the Local Planning for Healthy Waterways using NSW Water Quality Objectives (June 2006) and Managing Urban Stormwater – Harvesting and Reuse Guidelines (December 2006).

Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software was used to model the existing catchment for the site and design of the treatment train to meet City of Sydney water quality targets. MUSIC models the total amounts of gross pollutants and nutrients produced within various types of catchments. The proposed water quality treatment train involves treating stormwater runoff through filter cartridges within the on site detention tank. The bypass area will be treated by treatment channels before discharging to Council's stormwater system. The recommended water quality treatment train consists of:

- 16 x 690 mm Filter Cartridges within a 10.8 m² chamber inside the on-site detention tank, followed by 2 x Gross Pollutant Traps within pits and a 10m Treatment Channel.

The model results indicate that the design is compliant with Green Star and City of Sydney Water Quality reduction targets.

Subject to detailed design development as part of the Detailed SSDA, a suitable stormwater condition can be achieved onsite as a result of increased rainfall due to climate change and the high impervious area of the proposed site.

Mitigation Measures

As part of the future Detailed SSDA, the following is required to finalise the stormwater and water quality design:

- design of connection to the existing council drainage system
- final on-site detention requirements based on the finalised architectural scheme
- further authority coordination as required.

6.11 Flooding

A Flooding Assessment (Appendix V) summarises the assessment of flooding associated with the proposed development, including the identification of the pre-development and development scenarios in respect to hydraulic impacts and flooding immunity requirements. The Flooding Assessment also examines the potential effects of climate change and the relevant provisions of the NSW Floodplain Development Manual.

Methodology

The Flooding Assessment assesses the existing flooding conditions and details required upgrades, infrastructure and protection measures required to satisfy the identified flooding planning requirements. Assessment of the potential impacts of the proposed development on flooding considers selected flood events up to the Probable Maximum Flood (PMF), and focuses upon:

- compliance with relevant council flood planning guidelines and ability to evacuate safely in extreme flood events
- interaction with the Stage 3 CSSI Application which has the potential to adversely impact on metro flood immunity
- where required, mitigation and management measures have been identified.

The assessment analyses three scenarios:

- 5 per cent AEP climate change flood event

- 1 per cent AEP climate change flood event
- PMF event.

Each scenario has considered the impacts of climate change, including rainfall uplift and sea level rise.

Assessment

Construction noise impacts

The site is surrounded by both commercial receivers and hotels. The nearest sensitive hotel receiver is the Radisson Blu Hotel, which is situated directly opposite the site on the corner of O'Connell Street and Hunter Street. There are also hotels situated at 30 Hunter Street, 97-99 Pitt Street, 15-17 Hunter Street and on the corner of George Street and Hunter Street. The nearest sensitive residential receiver is Astra Apartments at 3 Hosking Place, Sydney, which is approximately 100m south of the site.

Noise levels have been predicted for the worst-case (highest impact) construction scenario. Noise contribution from similar construction scenario (i.e., activity, equipment, and staging) at the Hunter Street Station West site has also been included in the modelling.

The noise modelling within Table 6-2 of the Noise and Vibration Report (Appendix S) shows minor exceedances to surrounding offices and hotels. The highest exceedance is 13 dB at 4-6 Bligh Street, Sydney.

The integrated nature of the delivery of the proposed development may lead to concurrent construction of some components of the station and proposed development. A detailed construction itinerary would be developed by the development contractors for the proposed development as part of the Detailed SSDA which would include duration and timing of the construction.

Construction vibration impacts

There are no high vibration producing equipment identified in the construction stages. If the use of vibration intensive plant is proposed, management controls for the plant are to be captured in the contractor's Construction Noise and Vibration Management Plan (CNVMP) as part of the subsequent Detailed SSDA.

The CNVMP should also identify other vibration sensitive structures such as tunnels, fibre-optic cable, gas pipelines and other underground infrastructure. Specific vibration goals should be determined for these items to mitigate potential structural damage.

Operational noise and vibration impacts

Noise generated by the proposed development will primarily be from building services plant equipment including:

- heat pumps
- cooling towers
- stair pressurisation fans
- generators.

It is expected that operational noise impacts associated with vehicular movements from the carpark will be contained within the building footprint and therefore able to be mitigated by the building form. During the preparation of the Detailed SSDA, the cumulative impact of noise emissions from plant associated with the operation of the building will be assessed. This assessment will also consider potential operational noise impacts derived from emergency operation of the building and vehicular

movements. Appropriate noise mitigation will be included in the detailed design of the proposed development to meet all relevant noise criteria.

It is anticipated that operational vibration impacts associated with the development can be managed with standard mitigation measures. These measures would typically include vibration isolation of any vibration generating plant. A summary of the noise and vibration mitigation measures relevant to the operation of the proposal is discussed below.

Noise and vibration impacts from surrounding sources

A preliminary traffic noise intrusion assessment has been undertaken to assess the worst affected façade of the commercial land uses within the proposed development.

External noise intrusion will be controlled by the acoustic performance of the façade. The following indicative glazing options are recommended for the façade glazing construction for the OSD and should be considered as part of the future Detailed SSDA:

- single laminated glass at least 10.38 mm thick,
- IGU with 10mm / 12mm air gap/ 4mm glazing.

Note that the specified glazing thickness only considers acoustic requirements and does not consider other requirements such as thermal, wind/structural loading, or safety. The glazing recommendation is indicative only and would need to be reviewed during as part of the future Detailed SSDA.

Vibration generated from the operation of the Sydney Metro station can affect the proposed development through two transmission paths:

- structure-borne noise generated from the track and radiated up through the development above
- ground-borne noise generated by vibration radiating from the tunnel and through the soil into adjacent buildings.

These two transmission paths will be assessed and mitigated through track-form design under Stage 3 CSSI Application, to ensure adequate vibration mitigation is achieved at the source and amenity of the OSD is protected. No further vibration isolation of the proposed development is required.

Notwithstanding, the future Detailed SSDA should ensure that the final design and construction of the proposed development is fit for purpose of the intended use, considering the expected residual vibration impact from Sydney Metro West operations. Note that additional mitigation may be required if the use of the space within the building is more sensitive than allowed for by the track-form design.

Overall, it is expected that the implementation of standard acoustic mitigation measures would be sufficient to meet all operational noise and vibration criteria established in this report in line with the SEARs.

Assessment

The Stage 3 CSSI Application has previously considered the potential for an increase in flood risk at ground and podium levels of the building, in addition to flood affectation on adjacent properties, land use compatibility in relation to flood hazard, compatibility with council floodplain risk management and where required mitigation and management measures have been recommended.

The proposed tower envelope is elevated above the station podium, and as such these levels do not require flood mitigation measures. This Concept SSD proposes commercial and retail uses associated with the OSD to be contained within the station

podium form, which has been assessed against flood measures as part of Stage 3 CSSI.

The flood modelling is included at Appendix B of the Flooding Assessment at Appendix V. A summary of the flooding conditions at the proposed development and surrounding areas are as follows:

- 5 per cent AEP climate change flood event:
- flood depths up to 0.06 metres occur between the southern boundary and Bligh Street
- elsewhere, Hunter and O'Connell Streets experiences less than 0.02 metres of flooding
- all roads surrounding the site are within a H1 hazard category
- 1 per cent AEP climate change flood event:
- flood depths up to 0.25 metres occur between the southern boundary and Bligh Street
- elsewhere, Hunter Street is inundated up to 0.07 metres and O'Connell Street experiences up to 0.1 metres
- Hunter Street falls within a H5 hazard category whereas O'Connell Street and Bligh Street are both within the H1 hazard category
- PMF Event:
- Hunter Street and the southern portion of the site have flood depths up to 0.3 metres whilst O'Connell Street has depths up to 0.15 metres
- Hunter Street falls within a H5 hazard category whereas O'Connell Street and Bligh Street are both within the H1 hazard category.

The results demonstrate that the proposed development would not adversely affect flood behaviour resulting in affectation of other properties assets and infrastructure. Generally, the proposed development would provide an equivalent or better flood immunity to that of the Interim Floodplain Management Policy.

These results are premised on the basis that flood protection measures would be employed to provide the necessary immunity to critical infrastructure for the Hunter Street Station as part of the Stage 3 CSSI Application, and that the design and operation of the proposed development would not compromise metro station flood immunity.

Mitigation Measures

Further design refinement during detailed design is to ensure that floor levels will be situated at or above a level consistent with the following requirements:

- Any function which has the potential to compromise the flood immunity of the Stage 3 CSSI Application - PMF event, or the 1 per cent AEP climate change flood event level with an allowance for freeboard of 0.5 metres (whichever is greater)
- Critical facilities (including fire control room) - PMF event, or the 1 per cent AEP climate change flood event level with an allowance for freeboard of 0.5 metres (whichever is greater)
- Commercial uses - 1 per cent AEP climate change flood event level
- Retail opportunities - balance of protection from the 1 per cent AEP climate change flood event and achieving urban design outcomes.

These levels are consistent with the requirements of the City of Sydney Council's Interim Floodplain Management Policy. On-site flood risk, design solutions and operational flood emergency response plans are to be described in a future detailed SSDA.

The Flooding Assessment demonstrates that the proposed development would not adversely affect flood behaviour resulting in affectation of other properties assets and infrastructure.

6.12 Contamination and remediation

As outlined within the Contamination Report (Appendix W) prior to the development of the Hunter Street integrated station development on the east site will be demolished and station infrastructure and buildings constructed. The historic use of the land is for commercial purposes, and this is not proposed to be altered by the proposal. The OSD will sit upon the station shafts and no additional excavation is to be completed in order to construct the OSDs. Therefore, the contamination risk is considered very low for the construction of the commercial office tower on the site.

Contamination has been addressed as part of the Stage 2 and 3 CSSI Applications. These assessments investigated the baseline contamination within the Concept SSDA study area, including the impact from both construction and operation of the Hunter Street Station. These assessments presented recommendations and conclusions for contamination which have been used to determine the potential contamination risk for the proposed development.

In accordance with SLEP 2012, the site is classified 'Class 5 Acid Sulfate Soils'. Further, DPE online 'Acid Sulfate Soils risk maps' show a very low chance of acid sulfate soil occurring on the site.

Any issues with soil erosion, saline soils or acid sulfate soils will be managed during the Stage 3 CSSI Application for major civil and tunnelling construction works, and excavation and construction of the Hunter Street Station. Accordingly, the site is suitable for the proposed commercial and retail land use following the Stage 2 and Stage 3 CSSI Application works and no further contamination investigation is required for the Concept SSDA.

6.13 Waste management

A Waste Management Plan (WMP) has been prepared (Appendix X) to identify the waste requirements related to construction and operation, identify the relevant waste streams, and outline the relevant management strategies. This WMP is indicative and subject to revision upon detailed design.

The WMP outlines management measures to manage, reuse, recycle and safely dispose of construction and operational waste.

Methodology

The site-specific Design Guidelines introduce key waste management, servicing, and loading objectives and provision to guide the design and detail of a future loading dock and waste storage and facilities on the site. A loading dock to service the proposed OSD is proposed to be accessed via O'Connell Street.

The Waste Management Strategy assesses the waste management requirements relating to the construction and operational activities of the proposed development based on the area schedule and development mix of non-residential use (e.g., the proposed composition of commercial and retail use).

This Waste Management Strategy aligns with following principles from the NSW Circular Economy Policy Statement:

- sustainable management for all resources
- valuing resource productivity
- design out waste and pollution.

Assessment

Construction waste

The proposed development will require construction materials (such as concrete, steel and sheet piles) to be imported to the work site. However detailed specifications of materials to be used in the construction of the proposed development will be confirmed in the Detailed SSDA.

A high-level construction waste management plan is provided within Appendix B of the Waste Management Plan at Appendix X. The anticipated waste streams generated during the construction phase and management is summarised in the table below.

Table 6-9 Waste generation rate assumptions

Waste stream	Anticipated volume	Recovery potential	Onsite reuse/ recycling	Offsite reuse/ recycling	Disposal/ treatment
Timber	Low	High	Reused on site for formwork or bridging.	Sent to local recycling facilities.	Minimal disposal required.
Concrete	Low	High	Crushed concrete used in aggregate in pavements.	Sent to local recycling facilities.	No disposal required.
Bricks	Low	High	Used as clean fill or aggregate in pavements.	Sent to local recycling facilities.	No disposal required.
Metal	Low	High	Limited opportunities for onsite reuse.	Sent to local recycling facilities.	No disposal required.
Glass	Low	High	Limited opportunities for onsite reuse.	Sent to local recycling facilities.	No disposal required.
Hazardous/ special waste	Low	Low	Not applicable	Stored securely before removal for treatment off-site at a hazardous waste facility.	Send to disposal facility.

The construction waste assessment has concluded that eliminating waste at source is the best way to reduce the impact on the environment. This could be achieved through:

- careful procurement of materials
- better utilisation of materials already available on site

- reducing the amount of waste generated where it cannot be eliminated completely
- re-using and then recycling as much as practicably possible once it is not possible to reduce the waste any further.

Operational waste

Waste generation estimates have been made using the City of Sydney's Guidelines for Waste Management in New Developments 2018. The waste generation rates are summarised in the table below.

Table 6-10 Waste generation rate assumptions

Use	Units	General waste	Recycling	Food waste
Commercial	Litres/100m²/ day	15	25	5
Retail (non-food sales)	Litres/100m²/ day	50	250	10
Residential	Litres/100m²/ day	100	500	100

Table 6-11 Bin collection frequency

Use	Waste stream	Collection
Commercial	General waste	5 x weekly
	Recycling	5 x weekly
	Food waste	5 x weekly
Retail	General waste	5 x weekly
	Recycling	5 x weekly
	Food waste	5 x weekly

*Bulky waste and other wastes would be collected from the premises as required
Note: Collections per week are indicative only and may be subject to further development as part of future Detailed SSDAs.

Waste types and quantities for servicing 1,454m² of retail and 81,769m² of commercial space are provided in Table 6-12 below.

Table 6-12 Waste types and generation rates for the proposed development (day/week)

Use	GFA (m²)	General waste (litres)		Recycling (litres)		Food waste (litres)	
		Day	Week	Day	Week	Day	Week
Retail – convenience store	727	364	2,545	1,818	12,723	73	509

Use	GFA (m²)	General waste (litres)		Recycling (litres)		Food waste (litres)	
		Day	Week	Day	Week	Day	Week
Retail – restaurant	727	727	5,089	3,635	25,445	727	5,089
Commercial	81,769	12,265	61,327	20,442	102,211	4,088	20,442

This section outlines the infrastructure requirements for servicing the commercial and retail areas for the proposed development. Waste storage requirements for each stream are shown in Table 6-13 below.

Table 6-13 Waste storage and handling requirements

Use	Recommended area m² (including manoeuvring space)
Retail – convenience store	44 (plus 4m² bulky waste)
Retail – restaurant	
Commercial	125 (plus 24m² bulky waste)

The indicative concept reference design layout of the central waste rooms are located on the ground mezzanine floor and ground floor. The area allocated for waste storage and handling space requirements for the central waste room within both buildings is considered appropriate and meets the requirements outlined in the Sydney Council DCP 2012, as shown in Table 6-14 below.

Table 6-14 Area allocated for waste storage

Minimum area (m²)	Recommended area (m²)	Proposed area (m²)
125.2	169	238

It is noted that the reference design has considered waste management and waste storage provision for the station and OSD, and it is considered that with the scale of the site and vehicular access proposed from O'Connell Street (east site) that waste generated on the site can be adequately accommodated and effectively managed in a future development.

Mitigation Measures

Mitigation measures are provided for the construction and operational phases, as outlined below.

Construction phase:

It is recommended that the following measures considered and applied for the minimisation of construction waste:

- use of prefabricated elements where possible
- reuse materials such as concrete, tarmac, timber and landscaping features
- carefully store (and cover) any excavated materials in segregated piles for subsequent reuse on the site wherever possible such as deposition material for infilling or landscaping
- avoid over-purchasing and accurate delivery times, ensuring materials are

- ordered for delivery shortly before they are used on the project would also avoid possible damage and therefore wastage
- use of take back schemes, some suppliers offer a take back scheme, which should be utilised where practicable, particularly for packaging and pallets.

Operational phase

- Facilities management may consider engaging with City of Sydney or private contractors in delivery of waste handling training to increase awareness of waste avoidance activities for both staff, residents and visitors.
- Literature in waste storage rooms about waste avoidance activities (NSW EPA Love Food Hate Waste materials).
- Exploring the viability of small-scale organic waste treatment. Treatment via composting has the potential to recycle the organic waste into a product which may be used within the development green areas, offset the use of imported materials and reduce emissions due to transport and disposal.

Future detailed design should be generally consistent with the minimum waste area requirements proposed in this WMP. A detailed waste plan for the construction and operational phase of the development should be submitted with the future Detailed SSDA/s.

6.14 Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared (Appendix Y) to identify Aboriginal cultural heritage values within the study area, conduct consultation with Aboriginal stakeholder groups and to assess impacts to Aboriginal heritage that may result from the proposal.

Methodology

The methodology to assess the impacts to Aboriginal heritage that may result from the proposal include:

- Assessment of the Aboriginal cultural heritage values of the study area and identification of any specific areas of cultural significance. Some of these values are articulated in the Sydney Metro West Connect with Country report and include recognition that cultural values encompass more than the physical ground and consist of embedded in ongoing connections to place
- Assessment of archaeological potential for the study area
- Aboriginal stakeholder consultation
- Preparation of a methodology for archaeological management including test excavation and salvage where required.

Assessment

In summary, the assessment found that:

- No previously registered Aboriginal sites were identified on the Aboriginal Heritage Information Management System (AHIMS) register
- No previously unrecorded Aboriginal sites or objects were identified within the study area during the archaeological survey carried out for the Stage 2 ACHAR
- The proposed development does not involve ground disturbing work and would therefore not impact areas of Aboriginal archaeological potential

- Through the consultation process it was established that the RAPs supported the ACHAR and the area held significance for Aboriginal people through their ongoing connection to land.

Mitigation measures

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the standard industry SEARs, the following recommendations are made:

- As the proposed development would have no impact on the ground surface or subsurface ground it is recommended that further assessment is not required.
- If changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR, further assessment would be required.
- If any aboriginal objects, or potential objects, are uncovered during the proposed development, all work in the vicinity should cease immediately and The Sydney Metro Unexpected Heritage Finds Procedure followed. A qualified archaeologist should be contacted to assess the find.
- If human remains, or suspected human remains, are found during the proposed development, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified, and The Sydney Metro Unexpected Heritage Finds Procedure and Exhumation Management Procedure should be followed.

The proposed building envelope relates to development within and above the Hunter Street Station proposed within the Stage 3 CSSI Application on the site and additional excavations are not required to construct the OSD.

The proposed development does not propose additional excavation. Ground disturbance and Aboriginal archaeology are addressed as part of the Stage 2 CSSI Application. Overall, the proposal will not result in any significant additional impact on Aboriginal archaeological remains or artefacts within the site.

6.15 Environmental heritage

6.15.1 Archaeology

The proposed building envelope relates to development within and above the Hunter Street Station proposed within the Stage 3 CSSI Application on the site and additional excavations are not required to construct the OSD.

The proposal will not impact on any non-Aboriginal archaeology beyond that which will be assessed under the Stage 3 CSSI Application for the excavation and construction of the Hunter Street Station.

6.15.2 Built heritage

A Historic Heritage Impact Assessment has been prepared (Appendix Z) to address the extent of impact on heritage items in the vicinity of the site including built and landscape items, conservation areas, views and settings.

The Historic Heritage Impact Assessment assessed the potential impact of the proposed concept design on the heritage items in terms of response to context and legislative controls which serve to retain, protect and enhance heritage places.

Methodology

The Historic Heritage Impact Assessment has been prepared in accordance with the Heritage NSW guidelines for preparing Statements of Heritage Impact (‘*Statements of*

Heritage Impact' published in the New South Wales Heritage Manual by the Heritage Office (now Heritage NSW) and Department of Urban Affairs & Planning 1996, revised 2002) and the approach set out in the *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, *2013*.

The assessment utilises the 'heritage impact' definitions based on the Heritage NSW Materials Threshold Policy. These include:

- Total loss of significance: major adverse impacts to the extent the place would no longer meet the criteria for listing.
- Adverse impact: minor to major adverse impacts on the heritage item.
- Little to no impact: the alteration to the heritage item is so minor that it is considered negligible.
- Positive impact: alterations to an item that enhances the ability to demonstrate its cultural heritage values.

Assessment

The site is located in the vicinity of a number of local and state listed heritage sites and a subterranean structure listed on the Sydney Water Section 170 heritage inventory. There are no heritage items within the site. The Historic Heritage Impact Assessment identifies the following State and local heritage items in the vicinity of the site.

Table 6-15 Assessed heritage places

Register/ listing	Item name	Item number
Heritage items in the vicinity		
State Heritage Register	Former Perpetual Trustee Commercial Building, 33-39 Hunter St (SHR 00678)	I1810
	Former Wales House, 64-66 Pitt Street (SHR 00586)	I1915
	Former Rofe Chambers (Public Trust Office), 19-21 O'Connell Street (SHR 01019)	I1904
	Former NSW Club Building, 31 Bligh Street (SHR 00145)	I1676
	Former City Mutual Life Assurance building, 10 Bligh Street (SHR 00585)	I1675
	Former Qantas House, 68-96 Hunter Street (SHR 01512)	I1811
	Grand Hotel, 30–32 Hunter Street (SHR 1169)	I1809

Register/ listing	Item name	Item number
Heritage items in the vicinity		
Local Environmental Plan	Former Bank of NSW, 16 O'Connell Street	I1903
	Former Manufacturers' House, 12-14 O'Connell Street	I1902
	Richard Johnson Square including monument and plinth, Bligh Street	I1673
	Chifley Square, Hunter Street	I1708
	Wentworth Hotel including interiors - 2 Bligh Street (and 61– 101 Phillip Street)	I1674
S170 Register	Bennelong Stormwater Channel 29A (4570854)	

The location of these heritage items is shown in Figure 6-15 below. Heritage items are shaded brown, with State-listed items outlined in blue and the site is outlined in red. The (underground) Bennelong Stormwater Drain is shown in green.

Figure 6-15 Heritage items assessed for impact by the proposed development

Response to design principles

The Historic Heritage Impact Assessment assesses the proposal against the design principles contained in Design in Context, Guidelines for infill development in the Historic Environment, produced by NSW Heritage Office.

The opposite and adjacent heritage places form and define a strong masonry street edge. The podium height and tower design will respond to the intimate character of each street frontage and not dominate nor detract from the significant heritage items.

The Historic Heritage Impact Assessment recommends that the tower above should be set back from each frontage in response to longer views.

The Historic Heritage Impact Assessment concludes that the context of heritage places in the northern CBD has been subject to substantial and ongoing change. The proposed development adequately responds to the Design Principles of Design in Context. The podium responds to the parapet heights of adjacent heritage items and reinforces dominant sightlines along Bligh, O'Connell and Hunter Streets. The proposal responds to its immediate context and heritage buildings in the vicinity with a consistent application of high density. The tower envelope forms part of the contemporary city without adverse impact on the context of the surrounding heritage structures in the CBD.

Response to Sydney LEP 2012

The proposed development does not physically impact any heritage items in the vicinity. The proposal responds to the dual corner position by stepping the parapet around the site edge, which responds to the parapet heights of adjacent heritage buildings and reinforces dominant sightlines along the streets.

The tower sits back from the street edge and the podium provides the pedestrian interface. The rounded corner form of the tower reduces overshadowing and the perception of bulk. These features also improve streetscape permeability and sightlines.

The building envelope does not impact on any archaeological sites. Ground disturbance is addressed as part of the Stage 2 CSSI Application.

Response to Sydney DCP 2012

The proposed development is consistent with the SCDP 2012 objectives and provisions for development in Central Sydney. The reference design demonstrates that future development of the site can provide a sympathetic contemporary design response to the heritage context.

The site is also adjacent to the west boundary of Chifley Square Special Character Area. The proposal does not impact the distinct character of Chifley Square. Further, the tower envelope does not create any additional overshadowing over Chifley Square during lunchtime hours from mid-April to mid- August.

Potential Overshadowing

The potential overshadowing caused by the proposal was assessed in the Planning Proposal to amend the planning controls for both the Hunter Street East and Hunter Street West sites. The assessment concluded that there are no places subject to extensive potential additional overshadowing.

Mitigation Measures

The Historical Heritage Impact Assessment provides recommendations to guide the future detailed development to achieve an architectural outcome that respects the heritage character of the site and its surrounding location whilst minimising and or mitigating heritage impacts. These recommendations are set out as follows.

- Consider provision for the interpretation of archaeological findings from the surface demolition and excavation proposed in Stage 2 CSSI Application as public art in the proposed development where not incorporated into the station.

6.16 Social impact

A Social Impact Assessment (SIA) prepared in accordance with the S*ocial Impact Assessment Guidelines for State Significant Projects prepared by DPE* (SIA Guidelines) and is provided at Appendix AA. It involves a detailed and independent study to scope potential social impacts, identify appropriate mitigation measures and provide recommendations aligned with professional standards and statutory obligations.

Methodology

The approach to assessing social impacts in the SIA is guided by the DPE SIA Guidelines for State Significant Projects and the International Association for Impact Assessment. These guidelines require a risk assessment of the significance of potential impacts (based upon likelihood and consequence of the impact). Social impacts are considered before and after implementation of mitigation measures, which are to be incorporated in the planning, construction and operation of the project.

The assessment is informed by a review of the relevant State and local planning policies, and an assessment of the community profile, crime and safety data and the outcomes of the engagement conducted for the project (including with the Council social planning team).

Assessment

Table 6-16 below summarises the potential social impacts associated with the proposed development. There were no social impacts, positive or negative identified as having medium to high impacts.

Table 6-16 Summary of potential social impacts

Description of impact	Impacted groups	Overall impact rating
Temporary short-term closures to footpaths during construction will require pedestrian diversion to alternative routes.	Pedestrians travelling past the site. Businesses in the nearby area.	Negative minor impact. This negative impact will be reduced to neutral once footpath closures are concluded.
Potential for increased employment opportunities in an accessible location through the development of a greater commercial and retail building envelopes.	Working-aged residents in the professional, scientific and technical sector.	Low positive impact
Increased noise and vibration during construction.	Residents, businesses and workers nearby the site	Low negative impact

The Concept SSDA is likely to have a low positive impact on the community. The overall impact assessment is influenced by the likelihood of the proposal to increase employment opportunities in a highly accessible location. At this stage, and with the information available, it is difficult to determine the cumulative social impact of the two OSDs and Hunter Street Station development on pedestrian experience in the nearby area.

Based on the assessment in this report, the proposal will likely have the following impacts:

- Reduced travel experience for pedestrians:
- During construction, the proposed development will likely require temporary short-term closures to footpaths and therefore have a negative minor impact on pedestrians in the nearby area through delayed travel times.
- During operation, the Transport and Access Report found that the proposed development's generation of additional pedestrians will be negligible in comparison to the pedestrian flows and accessibility impacts resulting from the construction of Hunter Street Station. The Transport and Access Report also finds that the proposed development's impact on pedestrians will likely be minimal once pedestrian network is considered.
- At this stage, and with the information available, it is difficult to determine the cumulative social impact of the two OSDs and Hunter Street Station development on pedestrian experience in the nearby area.
- It is therefore recommended that this impact be reassessed as part of the detailed SSDA for the Hunter Street West OSD, once further information about the detailed design of the Hunter Street and West and East sites and their cumulative impact on pedestrian experience is available.
- Increased noise and vibration during construction:
- The proposal is expected to have a low negative impact on residents, businesses and workers nearby the site from noise exceedances during construction. To mitigate this negative impact, the recommendations made in the Noise and Vibration Assessment should be implemented in the future Construction Noise and Vibration Management Plan.
- Increased employment opportunities in high-quality and accessible spaces: The proposal is expected to have a low positive impact on working-aged residents in the professional, scientific and technical sector and the insurance and financial sectors connected by the Sydney Metro West line.

Based on this assessment and the recommendations provided, the Concept SSDA is likely to have a low positive impact on the community.

6.17 Infrastructure requirements and utilities

A Utilities and Infrastructure Servicing Assessment (Appendix BB) has been prepared to support this Concept SSDA. The assessment outlines the existing utility infrastructure that currently services the site as well as potential decommissioning and/or upgrade works required to service the future Detailed SSDA. This is set out within Table 6-17.

The report confirms that existing telecommunication, water, sewer and stormwater infrastructure can be augmented to meet the anticipated augmentation required to meet the increased demand generated by the future OSD on the site. As the site is located within the Sydney CBD it is well served by the full range of public utilities including telecommunications, water, sewer and stormwater. However Ausgrid has confirmed that currently there is no power supply available on the Ausgrid Triplex network without running new feeders to a zone substation. The following two options have been identified as being capable of supplying the requested loads:

- Option 1 – Belmore Park Zone Substation
- Option 2 - City North Zone Substation.

This would require installing new duct line from the zone substations to the development. Detailed discussions are ongoing with Ausgrid. There is the possibility of major utility works in the CBD required to facilitate the OSD power at Hunter Street.

As a part of the Stage 2 CSSI Application, utility protection, amendment or relocation works will be undertaken. These will take place prior to Stage 3 CSSI Application and this SSDA. There are no proposed upgrades to existing utility services as part of the proposal. New proposed connections to existing utility connections to be undertaken as part of the Concept SSDA are described in Table 6-17 below.

Table 6-17 Utility and services infrastructure

Service	Existing supply	Augmentation required
Stormwater	Overland flows are collected through City of Sydney road catch pits and carrier pipes to Sydney Water's local stormwater network (City Area 29 Catchment). The Site's stormwater network includes heritage assets Sydney Tank Stream and Bennelong drains.	New proposed stormwater connections for the OSD are part of this SSDA scope. The full details are contained within the Integrated Water Management Plan report (Appendix U). A summary of potential stormwater works is given below: • OSD drainage connections utilising existing City of Sydney carrier pipes from Bligh Street to the Bennelong drain • proposed new connection to O'Connell Street Bennelong drain • proposed stormwater attenuation tank for the OSD.
Wastewater	Wastewater servicing is provided by connections to Sydney Water's trunk sewers connected to the Bondi Wastewater Treatment Plant	Treatment to existing utilities would be part of the CSSI enabling works scope, involving decommissions, relocations and protections as part of the works. New proposed utility connections for the OSD are part of the SSDA scope, and proposed wastewater connections to vitrified clay pipes DN225 along O'Connell St and DN150 along Hunter Street. Sydney Water has advised that the existing sewer mains serving the site have sufficient capacity to accommodate the proposed development. Therefore there are no proposed upgrades to Sydney Water's sewer network due to the development, with the exception of a sewer vent to be installed.
Potable Water	Provided by connections to Sydney Water's trunk sewers connected to the Bondi Wastewater Treatment Plant	There are no proposed upgrades to Sydney Water's potable water network. It is proposed that the OSD will includes connections to existing watermains along footpaths on O'Connell, Hunter and Bligh Streets

Service	Existing supply	Augmentation required
		There is also a requirement for dual water supply to the fire services with each connection having a DN150 It is important to note that proposed connections are preliminary and further work is required in subsequent design phases to confirm the final decommissions and servicing arrangements in consultation with Sydney Water Corporation.
Communications	Various telecommunications providers service the site including Telstra, NBN TPG and Optus	New OSD telecommunications ducting and connections is proposed to the existing infrastructure including service providers pits along O'Connell, Hunter, and Bligh Streets No demand assessment has been undertaken for ICT services at this stage, however initial site utility survey indicates sufficient telecommunication service pits along George and Hunter Street for connections. Proposed telecommunication works, and potential new building connections are still under development. The final relocations and servicing arrangements will be identified in the future Detailed SSDA in consultation with the various utility providers.
Electrical	High and low voltage electrical supply is provided by Ausgrid, including the substations within the proposed site	Treatment to existing utilities would be part of the CSSI enabling works scope, involving decommissions, relocations and protections as part of the works. Further consultation with Ausgrid has been conducted since the preparation of the Utilities Assessment. Ausgrid has confirmed that currently there is no supply available on the Ausgrid Triplex network without running new feeders to a zone substation. Two options have been identified as being capable of supplying the requested loads: • Option 1 – Belmore Park Zone Substation • Option 2 - City North Zone Substation. This would require installing new duct line from the zone substations to the development. Detailed discussions are ongoing with

Service	Existing supply	Augmentation required
		Ausgrid. There is the possibility of major utility works in the CBD required to facilitate the OSD power at Hunter Street. Consultation with Ausgrid will continue post lodgement of the Concept SSDA.
Gas	Gas reticulation is provided by Jemena Gas West	There is no gas connection to the proposed OSD in accordance with the development's sustainability strategy.

The proposed OSD is subject to further design development as part of Detailed SSDAs, to ensure adequate servicing includes:

- further coordination with utility agencies on lead-in infrastructure connections and any amplifications of existing assets
- further utility investigation including slit trenching and obtaining Quality Level A survey information of existing utility assets
- implementation of selected sustainability initiatives in the building design and revised demand modelling to determine the impacts on the required lead-in infrastructure
- formal connection applications for utility services through appropriate channels such as Water Service Coordinators and Accredited Service Providers
- development of formal utility relocation and connection packages to the utility agencies including any protection details of existing utility assets.

Further utility information will be included as part of future Detailed SSDAs.

6.18 Construction, operation and staging

A Constructability Management Statement (CMS) (Appendix CC) has been prepared to address how future stages of the project would manage construction impacts to pedestrians, road network, public transport, emergency access and other developments nearby. The CMS also outlines preliminary mitigation measures to ensure the delivery of the project can comply with safety and environmental requirements.

Methodology

The CMS considers two possible staging scenarios outlined in section 3.11 which are:

- Scenario 1: Continuity of construction works from station to proposed development
- Scenario 2: Gap between completion of station (with full de-mobilisation) and commencement of proposed development works.

The anticipated construction timelines for each staging scenario are as follows:

- Scenario 1: Station work complete and station operational in 2030. Proposed development start: after 2026
- Scenario 2: Station work complete and station operational in 2030. Proposed development start: after 2030.

It is noted that these scenarios are indicative and subject to future developers and the Detailed SSDA(s).

The following construction projects are the subject of separate DAs and could be in delivery at the same time as the development:

- Hunter Street West Over Station Development
- Commercial redevelopment of 2 Chifley Square
- Mixed use redevelopment of 4-6 Bligh Street
- Commercial redevelopment of 17-23 Hunter Street and 105-107 Pitt Street

Cumulative construction impact

Information about the estimated number of construction vehicles that are associated with the construction of these projects is not publicly available. The number of construction vehicles mobilised within the road network for the above projects may have an impact on the road network and intersections in the vicinity of the development.

If required, cumulative construction traffic analyses would be undertaken at the Detailed SSDA stage to ensure that changes to traffic arrangements would not result in significant impact on network performance. Cumulative impacts on the public transport are not anticipated as a result of the construction of the projects. In addition, cumulative impacts on the pedestrian infrastructure are not anticipated as a result of the construction of the projects.

Mitigation Measures

The construction traffic management principles to be applied under CSSI Stage 2 will also apply to the construction of Hunter Street Station (CSSI Stage 3) and the proposed OSD development.

When the timeframe for construction of the OSD is determined at a later stage, the following management plans should be prepared to mitigate construction impact:

- a Construction Traffic Management Framework (CTMF) providing the overall strategy and approach for construction traffic management for proposed development as well as any cumulative traffic impacts. The CTMP will establish the traffic management requirements and processes and acceptable criteria to be considered and followed in managing roads and footpaths adjacent to the proposal.

The CTMF will address and mitigate impacts associated with:

- pedestrian and cyclist activity
- bus, bus stop and bus operations
- business and property access
- have regard to cumulative construction traffic from other developments.

The CTMF should include the following mitigation measures:

- Appropriate diversions would be established to safely guide pedestrians around work zones.
- Limited construction vehicle movements during major events.
- The mitigation measures would be detailed in future Construction Traffic Management Statements.

The implementation of CTMF will ensure that impacts on pedestrians, rail users, bus services and taxis are manageable during the construction of the proposal.

6.19 Contributions and public benefit

Contributions

Planning Agreement and Contribution

A Public Benefit Offer to enter into a Voluntary Planning Agreement (VPA) (with the City of Sydney) was prepared as part of the Planning Proposal and will be exhibited concurrently with the Planning Proposal.

The Planning Agreement applies to both the West and East sites. The following terms are outlined in the Public Benefit Offer submitted with the Planning Proposal:

- Monetary Contributions: The proposed offer commits to the payment of a monetary contribution towards the cost of local infrastructure equivalent to 3.0% of the cost of the proposed over station development per site which will be the subject of future SSDAs, calculated in accordance with the Central Sydney Development Contributions Plan 2020 (the Contribution Plan).

  No further contributions pursuant to section 7.11 or section 7.12 of the EP&A Act or under the City of Sydney Act 1988 will be payable as the VPA will satisfy the future developer's obligation in full. The payment of this contribution per site is proposed to be on or before the date of issue of the first Construction Certificate relating to the new development on that site (excluding demolition, excavation and early works).

- Sustainability Commitments: In accordance with the Planning Proposal Request, Sydney Metro is committed to delivering the over station development on each site that will be designed to achieve the following sustainability commitments:

- 6 star Green Star Buildings V1 Certified Rating or if that standard has been updated or replaced, a commensurate rating under the updated or replacement standard

- 6-star NABERS Energy for Offices rating (Base building) (Commitment agreement) (without Green Power)

- 4.5-star NABERS Water for Offices rating

These commitments exceed the best practice energy performance nominated in clause 7.25A of the SLEP 2012 (Amendment No. 64).

Certification of the target ratings will occur in accordance with standard commercial practice, having regard to reaching minimum levels of occupancy. The Planning Agreement (if executed) is not required to be satisfied at Concept stage, but rather prior to obtaining a construction certificate for the future Detailed SSDAs for physical works when details of the floor space mix are confirmed.

Public Benefit

Sydney is a global city and will experience significant population and employment growth in the coming decades. Public transport will play an important role supporting this growth, ensuring Sydney's future liveability and global competitiveness.

The key benefits of the proposal would include:

- Increased employment density integrated with the delivery of significant new public transport infrastructure servicing the surrounding precinct, contributing towards the establishment of an integrated transport hub within the northern end of the Sydney CBD which strengthens Sydney's rail network and improves connectivity.

- The delivery of high quality employment generating floorspace that aligns with the objectives for development within the tower cluster areas identified within the Central Sydney Planning Framework.
- The delivery of public art under the Critical State Significant Infrastructure application for the Hunter Street Station and the proposed future OSD.
- Improvements to the public domain to deliver:
- quality pedestrian connections linking key CBD blocks to improve pedestrian connectivity and delivering a cohesive ground plane, unlocking the strategic vision for laneways as outlined in the Sydney Development Control Plan 2012 (DCP).
- enhanced below ground linkages to Wynyard Station and Martin Place Station to enhance the accessibility of the transport infrastructure and overall connectivity of the city.
- enhanced interface with Richard Johnson Square including an extension to the public domain at the eastern entry to the site, adjacent to Richard Johnson Square.
- City-shaping – including supporting planned growth, expanding the 30-minute cities, and increasing all-day accessibility
- Transport benefits – increasing transport network capacity, reducing train and station crowding, increasing accessibility to key centres, increasing public network reach and use, improving travel times, and improving resilience to incidents on the network, opportunities to optimise the bus network, and road user and community benefits
- Productivity benefits – particularly enhanced competitiveness and creating productive jobs in knowledge-based industries and connectivity benefits by reducing travel times between businesses in the corridor.
- Enhanced amenity and activation of the street frontages and the delivery of through-site link on the eastern site between Bligh and O'Connell Streets for pedestrians.
- The provision of end of journey facilities and bicycle parking to the benefit of future tenants.

7 Justification of the proposal

This section provides a comprehensive evaluation of and justification for the project having regard to its economic, environmental, and social impacts, including the principles of ecologically sustainable development.

It assesses the potential benefits and impacts of the proposed development, considering the interaction between the findings in the detailed assessments and the compliance of the proposal within the relevant controls and policies.

In summary, this Concept SSDA seeks consent at a conceptual level for the proposed land uses, maximum building envelope, maximum building height, maximum gross floor area, and maximum car parking rate. Future Detailed SSDA(s) would be sought for the detailed design and construction. The proposed development has been carefully considered to minimise its potential impacts, as explored below.

7.1 Minimise impacts of the project

The potential environmental impacts of the proposed development are considered acceptable, subject to the appropriate mitigation and management measures, and further detailed design. The mitigation measures are outlined in detail in Appendix D and the key mitigation measures are summarised below:

- The future detailed SSD Application must implement the process outlined in the Sydney Metro West Design Excellence Strategy for Hunter Street Station and address the Design Guidelines to ensure design quality and design excellence.
- The future detailed SSD is to be consistent and contained within the proposed maximum building envelope (detailed in Appendices G) so as to ensure that the built form impacts (such as overshadowing, view, sky view, pedestrian amenity etc) are not worse than those assessed in this concept proposal.
- As part of the future Detailed SSDA/s, the design and materiality of the façade should adopt a maximum 20 per cent specular reflectance for the glazed surfaces and must not exceed a veiling luminance limit of 500 cd/m2 to drivers.
- Further investigation of the wind conditions for the ground level and elevated areas within and around the development must be undertaken as part of the Detailed SSDA to verify the suitability of the relevant public domain areas. This would also include detailed wind tunnel testing of any proposed elevated and open communal areas in the OSD.
- The future Detailed SSDA would need to propose a building which is architecturally and structurally integrated with the station structure beneath and be guided by the Draft Design Guidelines.
- In order to achieve a high level of ecological sustainability, the future Detailed SSDA/s should comply with the sustainability framework and strategies, including the minimum targets identified in the ESD Report (Appendix P).
- To reduce traffic impacts and encourage sustainable travel, a maximum of 70 car parking spaces is to be provided between the West and East sites. A green travel plan will also be developed to encourage sustainable travel.
- The future Detailed SSDA/s must address and meet the noise and vibration criteria established within the Acoustic and Vibration Impact Assessment Report at Appendix S.
- To ensure that floor levels would be situated at or above the flood planning level and provide requisite flood immunity at all access points, the mitigation measures

described in Appendix V should be incorporated within the design of the future Detailed SSDA.

- Consider provision for the interpretation of archaeological findings from the surface demolition and excavation proposed in Stage 2 CSSI Application as public art in the proposed development (where not incorporated into the station).
- A detailed Waste Management Plan should be prepared as part of the future Detailed SSDA to manage waste on site.
- A Construction Traffic Management Framework should be prepared to mitigate construction impacts from the future construction of the OSD.

7.2 Consistency with strategic context

The proposed development is consistent with the strategic planning objectives for the site as it would capitalise on the Government's investment in public transport infrastructure by locating additional jobs above a new metro station in Central Sydney.

Strategic context and policy have been assessed in section 2 of this EIS. The proposal will contribute to the achievement of planning objectives of the Region Plan, District Plan and Central Sydney Planning Strategy in the following ways:

- The proposed development is co-located with the new Sydney Metro Hunter Street Station east and will directly facilitate the development of a place-base infrastructure service which encourages active transit methods such as walking and cycling.
- By locating additional commercial land uses above the station, the proposal contributes to the vision for a 30-minute city. Further, the proposal is considered sustainable as it increases the proportion of trips by public transport, walking and cycling trips to reduce emissions and heath.
- The proposed development prioritises employment floorspace and will deliver a significant amount of new commercial floor space which will contribute to the targeted increase in employment floorspace within the city centre.
- The proposal is located within the Sydney CBD and will provide for additional and contemporary commercial floor space to support business and enterprise activities to contribute to the creation of a world class city centre.
- The proposed development will also facilitate genuine activation at street level and the lower podium levels via the provision of retail spaces.
- The proposal will achieve the ambitious sustainability targets as set out in the draft Design Guidelines, consistent with the City of Sydney's expectations for commercial buildings within the tower cluster areas.
- The indicative reference design has been the subject of an extensive design review that involved a collaborative, cyclical and iterative process. The concept building envelope will inform future detailed design outcome, which will accommodate a built form that is sustainable, functional, sensitive to its context and visually distinctive as encouraged by objectives of Better Placed.
- Reflecting on Country and Heritage has been a fundamental design principle which underpins the Concept SSDA and will continue to guide the future Detailed SSDAs. Sydney Metro is committed to develop a 'Designing with Country' strategy which can be implemented for the Hunter Street Metro Station site. Through this process, the longstanding and continuing spiritual significance of this site can be celebrated.

7.3 Consistency with statutory requirements

The proposed development is considered compliant with the statutory requirements for the following reasons:

- The proposed development has been assessed and designed in respect to the relevant objectives of the EP&A Act as defined in Section 1.3 of the Act and addressed in Appendix B.
- This EIS has been prepared in accordance with the SEARs as required by Schedule 2 of the EP&A Regulations.
- Consideration is given to the relevant matters for consideration as required under the BC Act 2016. A BDAR Waiver was issued on 15 August 2022 confirming that the SSD is not likely to have any significant impact on biodiversity values and therefore that a BDAR is not required
- This SSDA pathway has been undertaken in accordance with the Planning System SEPP as the proposed development is classified as SSD.
- The land is zoned B8 Metropolitan Centre under the SLEP 2012. The proposed development is permissible with consent and consistent with the land use objectives of B8 Metropolitan Centre zoning. The proposal complies with the relevant provisions under the Sydney LEP 2012 as detailed in Appendix B and is consistent with the zone objective.
- The proposed concept envelope seeks consent for a maximum GFA that exceeds the maximum 12.8:1 FSR available for the site under the existing SLEP 2012 (excluding a 10 per cent design excellence bonus). A request to consider a variation under clause 4.6 of SLEP 2012 has been submitted with this Concept SSDA (refer Appendix J), however it is intended to be withdrawn upon finalisation and gazettal of the Planning Proposal which seeks to increase the maximum permitted FSR of 22.8:1. The proposal will be consistent with the maximum FSR available for the site subject to gazettal of the Planning Proposal.
- The proposal has also been assessed under the draft Sydney LEP provisions under the Concurrent Planning Proposal(00-2022-867) and is consistent with the draft provisions.
- The proposed development has been assessed in accordance with Resilience and Hazards SEPP and can be made for suitable for the proposed commercial land use.
- The proposal generally accords the site specific Hunter Street Station OSD Design Guidelines, including requirements for the scale and massing of the OSD tower form. Future Detailed SSDA would need to respond to the guideline in more detail.

7.4 Economic, social and environmental outcomes

Economic

The delivery of the proposal is expected to make a significant positive contribution to Central Sydney by providing for additional direct and indirect employment, support additional economic activity in the retail services and office/business sectors.

Specifically, the OSD is expected to result in around 5,567 operational jobs and 345 direct jobs during the construction phase (subject to detailed design and future planning approval).

The proposal would help to meet the need for retail facilities and provide for contemporary and flexible commercial floor space, which overall will be a major

employment generator within Central Sydney to support further employment growth and economic activity within this area. Future retail occupants will also contribute to evening and night-time economies.

Through immediate proximity to employment within the CBD, as well as through convenient and timely access to other major employment centres along the Eastern Economic Corridor via the Sydney Metro, this project supports the '30-minute city' concept to support increased productivity and reduced congestion within Sydney.

Having regard to the above, it is considered that the OSD would not result in any significant economic impact and would result in several benefits.

Social

As detailed in section 6.16, the proposal provides the opportunity to capitalise on the influence of new transport infrastructure, to enable renewal and allow diverse and innovative businesses to grow in Central Sydney. The OSD would have a neutral impact through the delivery of an integrated station development that includes a variety of commercial uses, promote public activation to create a focal point for social activity within Sydney CBD.

The proposed commercial land uses will maximise the benefits arising from the future use of the site as part of the integrated station development. New retail and business will revitalise the site and support a range of activities and occupancy throughout the day and evening. This would contribute towards a vibrant transport precinct that is safe, well-utilised and which acts as a new focal point in the CBD in regard to both transport and land use.

The Design Excellence Framework and draft Design Guidelines would ensure that future detailed design of the OSD would provide a memorable landmark that is commensurate with the important role of the site within Central Sydney. The proposal facilitates the integration of public art during the detailed design stage and would contribute to the cultural qualities of the site and the locality, improving the social experience of future visitors to and occupants of the site.

Potential environmental impacts of the proposal have been identified throughout the EIS and demonstrated to be acceptable, with specific mitigation measures identified where necessary to ensure that future development is consistent with the expected benefits of the project and does not result in any significant adverse impacts on the community.

Having regard to the above, it is considered that the OSD would not result in any significant social impacts and would result in a number of social benefits.

Environmental

A full assessment has been undertaken of the environmental impacts of the proposal which demonstrates that potential impacts have been avoided, adequately justified or appropriately mitigated. On this basis, the proposed envelope, which represents a maximum potential building form, has been demonstrated to be appropriate within its context and the specific circumstances of the site.

7.5 Suitability of the site

The proposal comprises a key commercial development located within the commercial core precinct of Central Sydney. Based on the environmental assessment contained in section 6, the proposal has been subject to a substantial and thorough assessment of development suitability, which has confirmed the proposed uses as being the most suitable outcome at the site.

In this regard, the site is considered to be suitable for the concept proposal as:

- the proposal comprises a prime opportunity to take advantage of the Sydney Metro project, with the airspace created as part of the Hunter Street east site envisaged to be developed for the purposes of OSD under the CSSI Approval.
- the site provides for street and laneway frontages which is suitable and will be activated by the proposed commercial uses.
- the site's location within Central Sydney is well suited to retail, commercial office and business services uses, and is surround by cultural, entertainment and community facilities
- the ability to support commercial uses has been demonstrated through a well-developed indicative ground floor plane and the proposed envelope. It has been demonstrated through this assessment the proposal would result in the creation of a vibrant and modern commercial development to cater for emerging business.
- the proposed scale and density of the development is highly appropriate in the context of Central Sydney and will integrate with other Tower Cluster sites.
- the proposed envelope has been selected with the specific intention of ensuring that overshadowing of the proposed envelope is compliant with the requirements of the SDCP 2012.
- the proposed OSD envelope has allowed the proposal to be designed to ensure that the design and operations of Sydney Metro station is not inhibited.
- the proposal would contribute to the provision of additional employment opportunities in a location which reinforces the '30 minute city' concept, providing employment in a central location which is proximal to services, open space, transport and jobs.
- the development is appropriate with regards to matters such as flooding, contamination, air quality, noise and vibration, heritage and wind.

7.6 Public interest

The proposal is in the public interest as it would contribute to the evolution of Central Sydney in the creation of an integrated commercial development within the heart of the CBD.

Given the significance of this development within Sydney, the proposal is considered to be in the public interest as:

- the proposal would provide additional commercial floor space, ensuring that jobs located in business core and in an accessible location.
- The proposal also provides a substantial retail component, providing additional capacity to support future workers and visitors. This would have flow on positive economic impacts within the CBD and the Greater Sydney and NSW economies more broadly.
- the development would provide a variety of different commercial uses at the ground and podium levels, which would work to activate the station precinct, both within traditional business hours as well as during the evening, late night and weekend periods.
- the proposal would accommodate approximately 4,374 jobs on an ongoing basis, generated by the retail, business, office uses.
- additional economic benefits are also provided by workers and visitors using surrounding services within the CBD as part of the shared economy.

- The proposal under this concept SSD Application would work alongside the Stage 2 and 3 CSSI applications in order to create an overall station precinct which is integrated, high quality, enjoyable and safe for future public transport users
- the proposed building envelope would enable the delivery of a future OSD form which will landmark the Sydney skyline.
- the development has been designed in such a manner which ensures that sustainability requirements are achieved or exceeded throughout the development
- the proposal provides a framework which would ensure that future development at the site exhibits design excellence, integrated with the station to deliver a very high design quality building form outcome
- the proposal includes provision for future public art, which would contribute to the vibrancy and interest generated by the surrounding built environment.

7.7 Conclusion

This EIS provides a comprehensive assessment of the environmental, social and economic impacts of the concept development envisaged within this Concept SSDA. This EIS has addressed the requirements of the SEARs (Appendix A), as well as the relevant requirements contained at the EP&A Regulation 2021.

It is concluded that the proposed development can be supported and approved for the following reasons:

- The proposed development demonstrates consistency with the strategic planning framework governing the Greater Sydney Region and Sydney CBD and specifically, the Central Sydney Planning Strategy (CSPS). The CSPS seeks additional commercial floor space capacity in Central Sydney while also delivering improved public domain outcomes.
- The proposed development will leverage and optimise significant investment in public transport infrastructure.
- The proposed development will generate jobs both during construction and operation which will have flow on effects to the local and broader domestic economy.
- The proposed development supports planned growth within the Sydney CBD, expanding the 30-minute cities, and increasing all-day accessibility to the Sydney CBD.
- The proposed development enhances the amenity and activation of the street frontages and existing through-site links compared to existing development.
- The proposed development will create a place-based outcome that successfully integrates transport infrastructure, open space, ground plane retail and commercial land uses.
- The proposed development provides for a future built form that will be well integrated with surrounding buildings, with appropriate and considered setbacks to reflect adjacent development.
- The proposed development will encourage active street frontages to increase the level of ground plane interaction and vibrancy.
- The proposal will not have any major environmental or built form impacts. Measures to manage and mitigate any potential minor impacts have been identified in Appendix D.