Appendix Q

Design quality guidelines

Engineering Design Solutions

NSW GOVERNMENT | sydney METRO

PARRAMATTA OVER & ADJACENT STATION DEVELOPMENT DESIGN GUIDELINES

Sydney Metro West

SMWSTEDS-SMD-PTA-SN600-AT-RPT-044012

Parramatta

REV D - OCTOBER 2022

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Glossary

Term	Definition
ADG	Apartment design guide
BC Act 2016	*Biodiversity Conservation Act 2016*
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 Parramatta Council
CSSI	Critical state significant infrastructure
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
Draft PLEP 2020	Draft Parramatta local environmental Plan 2020
EIS	Environmental impact statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
FSR	Floor space ratio
PDCP 2011	Parramatta development control plan 2011
PLEP 2011	Parramatta local environmental plan 2011
SEPP	State environmental planning policy
SEPP 55	State environmental planning policy No 55 - Remediation of land
SEPP 65	State environmental planning policy No. 65 – Design quality of residential flat buildings
SRD SEPP	State environmental planning policy (state and regional development) 2011
SSDA	State significant development application
SEARs	Secretary's environmental assessment requirements
Concept and Stage 1 CSSI Approval	SSI-10038, approved 11 March 2021, including all major civil construction works between Westmead and The Bays, including station excavation and tunnelling, associated with the Sydney Metro West railway line
Stage 2 CSSI Application	Application (SSI-22765520) seeking approval to carry out major civil construction works between The Bays and Sydney CBD including station excavation and tunnelling, associated with the Sydney Metro West railway line
Stage 3 CSSI Application	Application (SSI-227-65520) seeking approval to carry out rail infrastructure, stations, precincts and operation of the Sydney Metro West line
Sydney Metro West	Construction and operation of a metro rail line and associated stations between Westmead and the Sydney CBD as described in Section 1.2

Executive Summary

This document has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) for a Concept State Significant Development Application (Concept SSDA) submitted to the Department of Planning, Industry and Environment (DPE) for the proposed over and adjacent station development at Parramatta metro station.

The Concept SSDA seeks approval for a mixed-use development comprising of three new commercial office buildings (Buildings A, C, D) and one residential accommodation building (Building B) above the Parramatta metro station. The Concept SSDA seeks consent for a building envelope and use for residential and commercial purposes, maximum building height, a maximum gross floor area (GFA), pedestrian and vehicular access, circulation arrangements and associated car parking and the strategies and design parameters for the future detailed design of development.
The Concept SSDA specifically seeks consent for the following land uses within the proposed development:

— Building A: Approximately 38 storeys. Commercial and retail
— Building B: Approximately 33 storeys. Residential accommodation and retail
— Building C: Approximately 26 storeys. Commercial and retail
— Building D: Approximately 24 storeys. Commercial and retail.

This report has been prepared by Bates Smart Architects Pty Ltd to accompany the Concept SSDA for the over and adjacent to Parramatta metro station.

1.0

Introduction

1.1 Purpose of the document

This document is called the Parramatta Metro Over and Adjacent Station Development Design Guidelines (the Design Guidelines).

The purpose of the Design Guidelines is to guide the detailed design of the development associated with the Sydney Metro at Parramatta and provide a reference document for the assessment of design outcomes.

These design guidelines provide a set of overarching principles and outcomes capable of interpretation irrespective of final land use. They have been formulated to ensure delivery of design excellence across all responses to the site.

These Guidelines apply to the Over Station Development (OSD) and Adjacent Station Development (ASD) identified as Buildings A, B, C & D in Figure 1-4.

Design parameters are included for built form, heritage, integration with the public domain and Metro station, movement and connectivity and legacy outcomes of the development. These have been prepared with reference to:

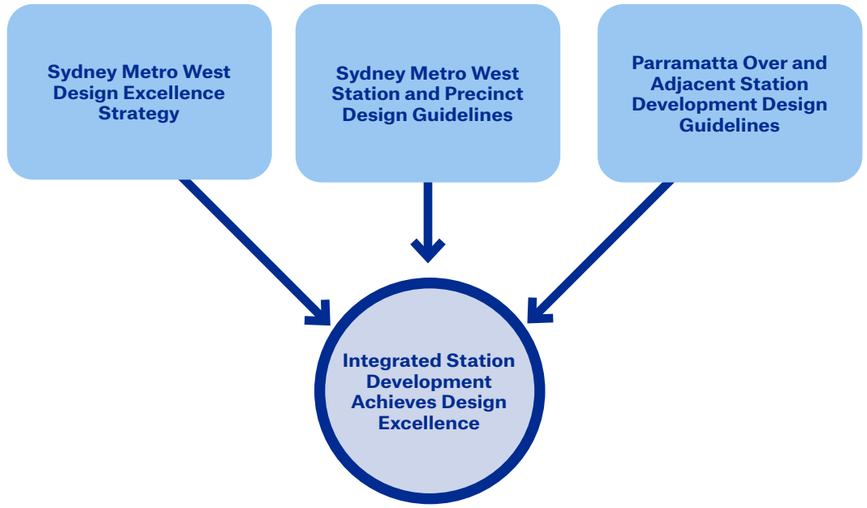


Figure 1-1 Design guidelines summary

— GANSW Better Placed
— GANSW Implementing Good Design
— GANSW Evaluating Good Design
— GANSW Greener Places
— GANSW Greener Places Design Guide
— GANSW Draft Guide for Heritage
— NSW Local Character and Place Guideline
— Design and Place SEPP (Draft).

Together with the Sydney Metro West Station and Precinct Design Guidelines, these Design Guidelines provide a consistent framework for design across the integrated station development and should be considered in conjunction with the Sydney Metro Design Excellence Strategy.

1.2 Vision

Parramatta metro station and its precinct will be the focal point and catalyst for the community that will drive success for the Central River City of Greater Sydney.

Exceptional design will reflect the local context, acknowledge its prominent location within Parramatta and address city-making and place-making principles.

A distinctive built form and generous public domain will reflect the site's prominent location at the heart of the City and provide a new urban destination between Parramatta Square and Parrmatta River.

The development will seamlessly integrate all building elements across the site, including the public domain, station and entrances (Figure 1-2).

Figure 1-2 Artists impression (indicative design only - subject to design development)

1.3 Site description

The site is located in the Parramatta CBD, approximately 24 kilometres west of the Sydney CBD, close to the banks of the Parramatta River.

The proposed development will sit in the heart of the existing Parramatta City centre bounded by George, Macquarie, Church and Smith Streets. The site will provide an additional piece of key transport infrastructure linking the Central River City to the Eastern Harbour City and will connect the new Civil Link from Parramatta Square to Parramatta River. The Parramatta metro station would be located to the north of the existing Parramatta station, within the commercial core of Parramatta CBD.

Parramatta metro station would serve and support the growth of Parramatta as Sydney's second CBD, including boosting jobs and improving connections to recreational and tourist attractions. The new metro station would improve customer experience at the existing Parramatta station by relieving demand in peak times.

The proposed mixed-use development site will be approximately 25,498m^2 and will be cleared of all buildings and utilities by Sydney Metro prior to commencement of station construction activities. The site is shown in Figure 1-3 and Table 1-1.

Street Address	Legal Description
41-59 George Street	Lot 10 in DP858392
45A George Street	Lot 2 in DP701456
61B George Street	Lot 1 in DP607181
71 George Street	Lot 100 in DP607789
220 Church Street	Lot 1 in DP1041242
222 Church Street	Lot 1 in DP702291
232 Church Street	Lot 1 in DP651992
236 Church Street	Lot 1 in DP128437
238 Church Street	Lot 2 in DP591454
48 Macquarie Street	Lot B in DP394050
58-60 Macquarie Street	Lot 1 in DP399104
62-64 Macquarie Street	Lot AY in DP400258
68 Macquarie Street	Lot 1 in DP711982
70 Macquarie Street	Lot E DP 402952
72 Macquarie Street	Lot 3 in DP218510
74 Macquarie Street	Lot H in DP405846

Table 1-1 Site legal description

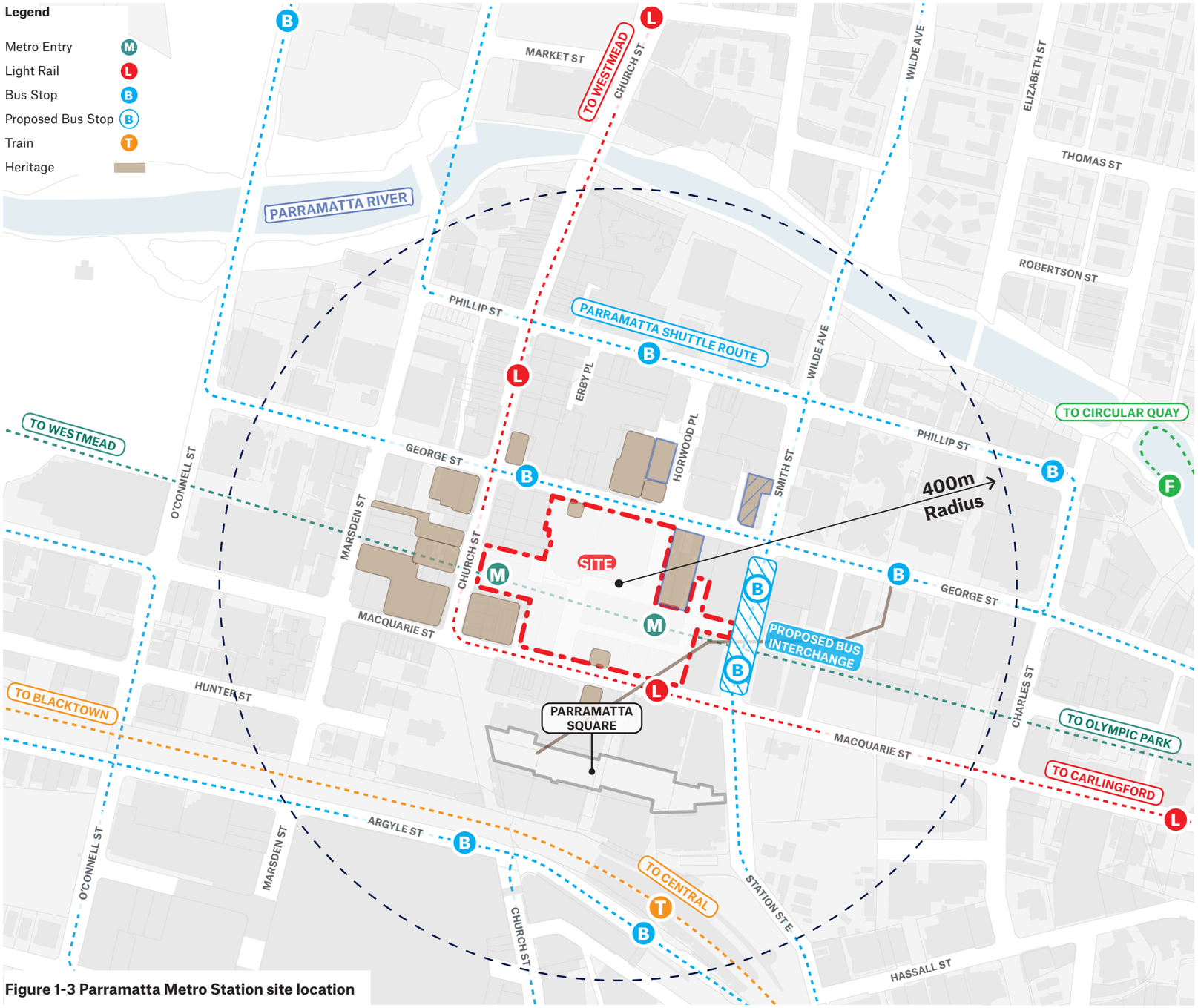


Figure 1-3 Parramatta Metro Station site location

1.4 Overview of the proposal

The Concept SSDA will seek consent for building envelopes over and adjacent to Parramatta metro Station. The proposed OSD will comprise three (3) new commercial office buildings (Buildings A, C, D), and one (1) residential accommodation building (Building B). The Concept SSDA specifically seeks consent for the following:

- Maximum building envelopes and built form parameters, including streetwall heights, podium envelopes and heights, and building setbacks informed by Parramatta Local Environmental Plan 2011 sun access planes:
  - Building A: Approximately 38 storeys
  - Building B: Approximately 33 storeys
  - Building C: Approximately 26 storeys
  - Building D: Approximately 24 storeys.
- Land uses within the building envelopes, including:
  - Building A: Commercial and retail
  - Building B: Residential and retail
  - Building C: Commercial and retail
  - Building D: Commercial and retail.
- Maximum gross floor area of approximately 190,000m² associated with proposed SSD development land uses, comprising:
  - Approximately 78,700m² in Building A, including approximately 75,200m² for commercial use and 3,500m² for retail use.
  - Approximately 20,000m² in Building B, including approximately 18,500m² for residential use and 1,500m² for retail use
  - Approximately 35,950m² in Building C, including approximately 35,200m² for commercial use and 750m² for retail use.
  - Approximately 55,350m² in Building D, including approximately 52,350m² for commercial use and 3,000m² for retail use.
- Maximum 455 car parking spaces across 3 basement levels
- Loading, vehicular, and pedestrian access arrangements
- The future subdivision of parts of the proposed SSD development built-form.

As the proposed development is for a concept approval only, pursuant to section 4.22 of the *EP&A Act*, further approval(s) will be sought for the detailed design and construction of the proposed SSD development elements. The future approval(s) will be required to be consistent with this Concept SSDA. Preliminary illustrations of the development are provided in Figure 1-4 and Table 1-2.

The total proposed GFA for the Parramatta metro station precinct comprises approximately 190,000 m² for the proposed SSD development. The proposed envelopes and land uses have been proposed in response to the site's fundamental opportunities and constraints, including:

- Overshadowing and view impacts
- The surrounding heritage context
- Alignment with the strategic and statutory planning considerations.

Preliminary illustrations of the development are provided in Figure 1-5.

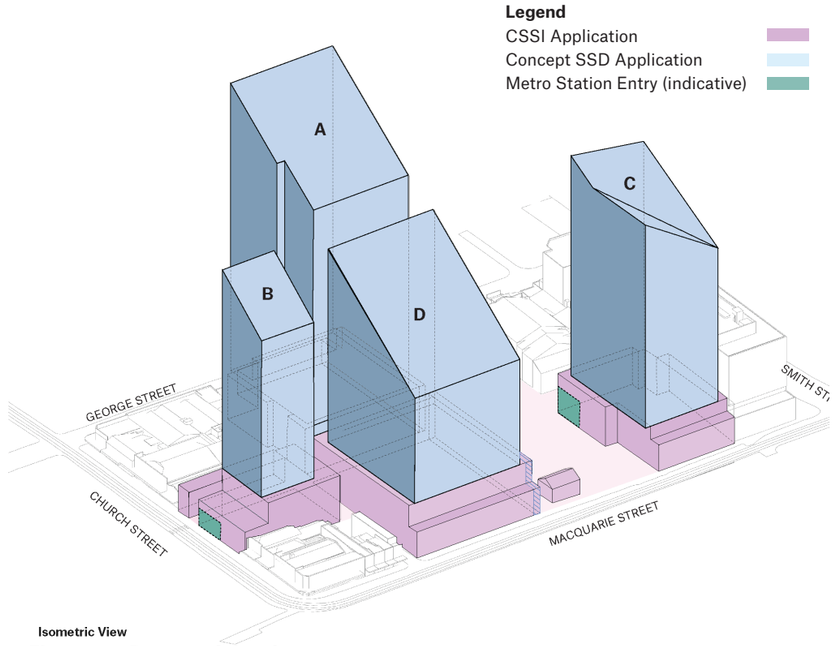


Figure 1-4 Proposed development

Site	Use	Storeys	Maximum GFA (m²)
Building A	Commercial	38	78,700
Building B	Residential	33	20,000
Building C	Commercial	26	35,950
Building D	Commercial	24	55,350

Table 1-2 Proposed OSD overview

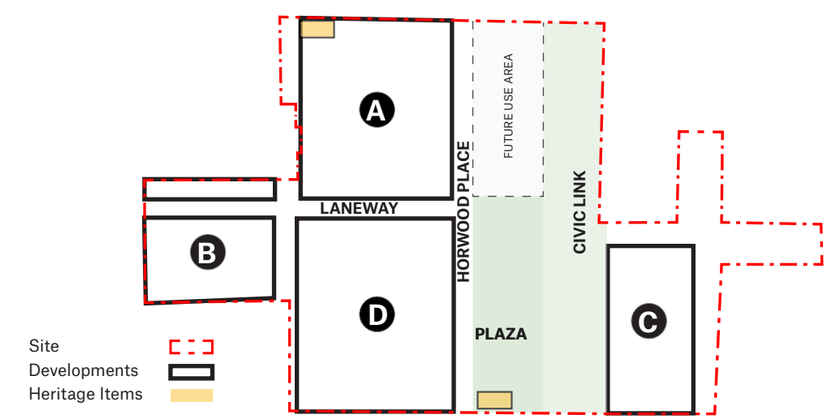


Figure 1-5 Key plan, development sites

1.5 Site features

1. Country

The site is located on Darug Country. For more than 60,000 years, the area surrounding present-day Parramatta has been occupied by the Burramattagal people, a clan of the Darug people, who first settled along the upper reaches of the Parramatta River and its tributaries. Their connection to Country continues.

2. An evolving CBD

Located at the heart of Parramatta CBD, an area undergoing significant change with major commercial and mixed-use development underway in the locality. Significant additional development is anticipated to the north of the site.

3. Proximity

Located within 400m of existing and proposed features including Parramatta Station, Parramatta Square, Westfield, the proposed Museum of Applied Arts and Sciences, Centenary Square, Arthur Philip High School, Western Sydney University, and Church Street 'eat street'.

4. Transport integration

A wide range of transport options are available in the immediate vicinity including bus, rail, and the future light rail and Metro. A new light rail stop will be located on Macquarie Street immediately adjacent the development and bus interchange on Smith Street.

5. Vibrant places

Key pedestrian areas and destinations, including Church Street, Centenary Square, Centenary Plaza and the Parramatta River, are vibrant places for the wider community at different times of the day and host a range of events through the year. Parramatta Square, once fully complete, will become a new mixed use, active place and focal point for Parramatta.

6. Heritage

The Parramatta metro precinct is situated in the fine-grained historic town centre of Parramatta and is located in the immediate vicinity of local and State listed heritage items including Church, Bank, Post Office, The site is also adjacent to Horse Parapet Façade and Roxy Theatre. The site contains Kia Ora (62-64 Macquarie Street), Shops (41-59 George Street) and is crossed below ground by Convict Drain.

7. Masonry

The density of heritage buildings in the vicinity feature face brick, sandstone and rendered masonry with a variety of decorative elements and styles representing the progressive development of Parramatta town centre. These materials and variety of building forms and typologies represent the diverse and identifiable character of the area.

8. Civic Link

The site will incorporate a portion of the proposed Civic Link - a green, pedestrianised public space and cultural spine that connects public and Civic life from the heart of Parramatta CBD (the Civic Heart) to the River. The proposed masterplan identifies opportunities to enhance Civic Link with an enlarged public space.

9. Streets and lanes

The Precinct masterplan establishes a series of new north-south and east-west pedestrian and/or vehicular connections. These new streets and lanes present a series of distinct spatial typologies and opportunities for active frontages to enliven the public domain.

10. Station entries

Two metro station entries are proposed - the primary entry located centrally along Civic Link and integrated into Building C, with a western entry located on Church Street, integrated into Building B.

1.6 Sydney Metro Design Objectives

The design outcomes for the Parramatta Station are underpinned by the design objectives for all Sydney Metro projects (Figure 1-6). Designs for the station, station precinct and the over station development must deliver on the following:

Ensuring an easy customer experience

Sydney Metro places the customer first. Stations are welcoming and intuitive with simple, uncluttered spaces that ensure a comfortable, enjoyable and safe experience for a diverse range of customers.

Being part of a fully integrated transport system

Sydney Metro is a transit-oriented project that prioritises clear and legible connections with other public and active transport modes within the wider metropolitan travel network that intersect with this new spine.

Being a catalyst for positive change

Sydney Metro is a landmark opportunity to regenerate and invigorate the city with new stations and associated development that engage with their precincts, raise the urban quality and enhance the overall experience of the city.

Being responsive to distinct contexts and communities

Sydney Metro's identity is stronger for the unique conditions of centres and communities through which it passes. This local character is to be embraced through internationally benchmarked high quality station architecture and public domain that is well integrated with the valuable inherited urban fabric of existing places.

Delivering an enduring and sustainable legacy for Sydney

Sydney Metro is a positive legacy for future generations. A high standard of design across the corridor, stations and station precincts, that sets a new benchmark, is vital to ensuring the longevity of the Metro system, its enduring contribution to civic life and an ability to adapt to a changing city over time.

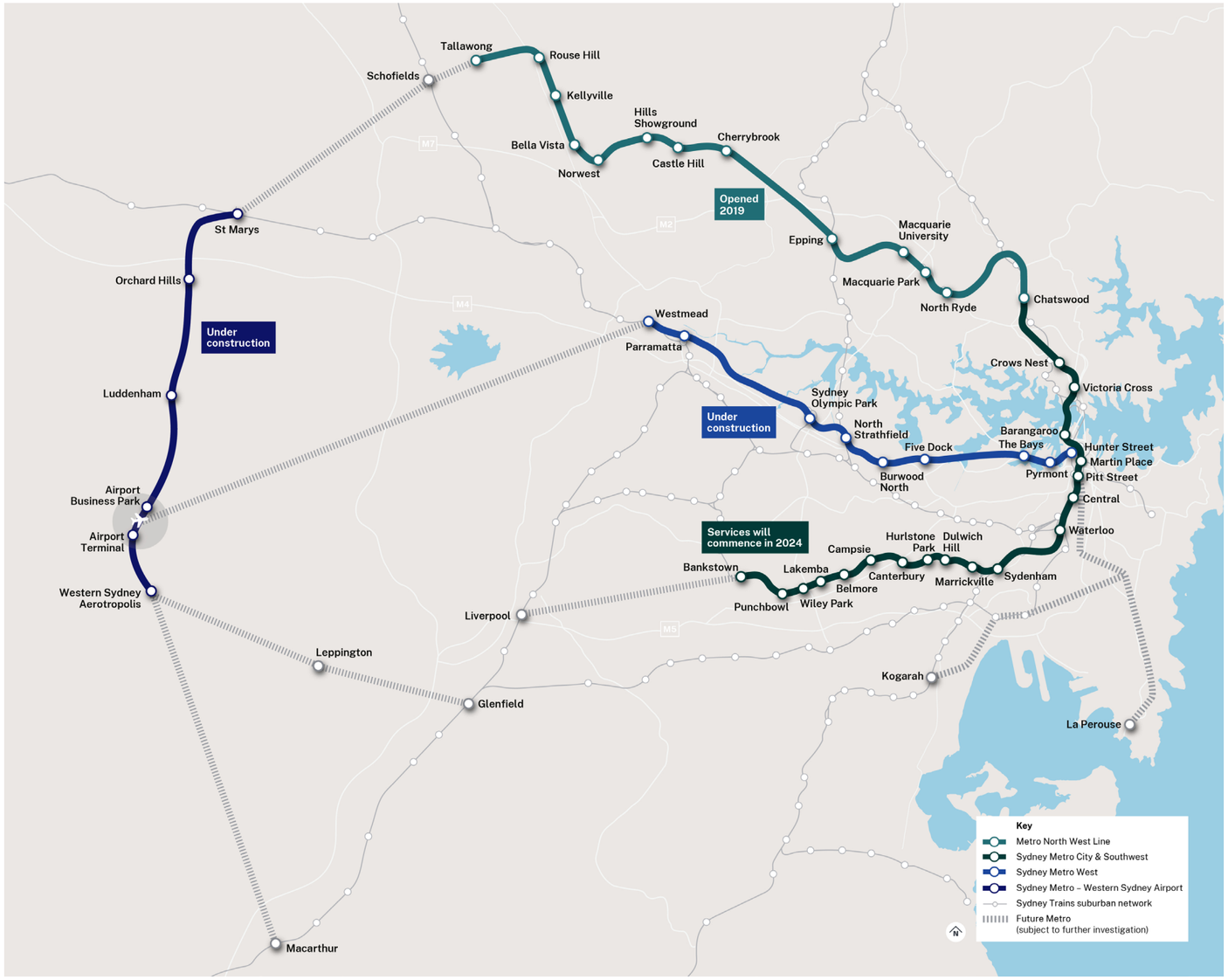


Figure 1-6 Sydney Metro project

2.0

Design Guidelines

2.1 Land use and function

Objectives

- Support the transformation, expansion and economic growth of the Parramatta CBD by facilitating a well-designed high-quality station, public domain and development.
- Provide predominantly commercial development, complemented by a component of residential use and associated retail uses, to create a safe and welcoming place activated by people at different times of day and night.
- Facilitate activation of the ground plane at the station and the surrounds, encouraging pedestrian movement in the area.
- Facilitate intuitive interchange with pedestrian and cycle transport, the future Parramatta Light Rail (Stage 1), and bus services with legible, safe and direct connections from the station entry.

Design criteria

2.1.1 Land uses

2.1.1.1 Development should accommodate commercial office and residential uses located generally in accordance with the building use diagrams opposite.

2.1.1.2 Commercial buildings are to provide for large, contiguous and efficient commercial floorplates suitable for achieving A-Grade office space.

2.1.1.3 A variety of housing tenures or types could be accommodated in the residential building.

2.1.1.4 Retail and other complementary uses that activate the public domain are encouraged.

2.1.2 Public Domain

2.1.2.1 Development should reinforce the role of the public domain and its function as a primary space for community and activity.

2.1.2.2 Provision of additional facilities that support community activity is encouraged.

2.1.3 Duration of activity

2.1.3.1 Located uses in a manner that supports the safety and enjoyment of the precinct during the day, evening, and night-time.

2.1.3.2 Prioritise active uses that extend into the evening around the main public space and east-west pedestrian lane to contribute to their vibrancy and perceived safety.

2.1.3.3 Consolidate any noise-generating activities to minimise any impacts on existing or future residential uses.

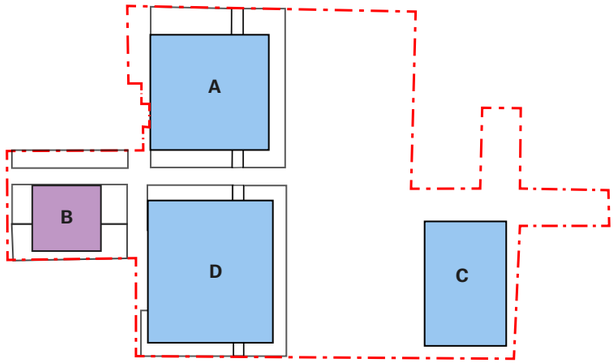


Figure 2-2 Land uses - Tower Levels

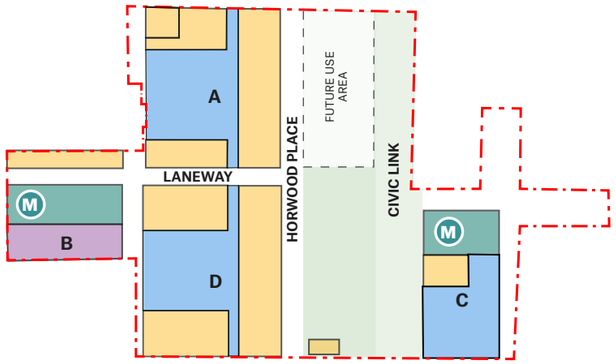


Figure 2-2 Land uses - Podium Levels

Legend

Site
Commercial
Retail
Residential
Metro
Open Space
Station Entry

2.2 Places and spaces

Objectives

- Ensure the scale, configuration, and elements of the development reflects existing and desired future character
- Ensure the development reflects the specific qualities of place and Country
- Reflect and build on opportunities to strengthen design and place outcomes for Aboriginal and environmental heritage
- Create a legible hierarchy of public spaces such as parks, plazas and pedestrian links for active and passive recreation
- Create places that provide safe, welcoming, and comfortable environments suited to the environmental conditions at Parramatta
- Understand and integrate the distinctive local context and historic development of the town centre and its remnant heritage buildings
- Ensure future development of the site respects and enhances the heritage significance of heritage items both on and in the vicinity of the site
- Create new buildings with setbacks, articulation and form which is compatible with maintaining a strong streetscape on Church Street, and enhances the prominence and opportunity for adaptive reuse of Kia Ora (62-64 Macquarie Street) and Shops (41-59 George Street)
- Understand and integrate the specific qualities and identity of Darug Country and the site's importance as a place of abundance and gathering for local people
- Create artworks, buildings, laneways and spaces which respond to this deep understanding of place and context
- Create places that respond to, and act to ameliorate, the environmental conditions in Parramatta and are safe and welcoming environments at all times of day.

Figure 2-3 Places and Spaces

2.2 Places and spaces

Objectives

— Podium form and articulation should aim to establish architectural order within the immediate precinct, demonstrating heritage and contextual sensitivity, with scale and massing that relates well at the human scale.

Design criteria

2.2.1 Podium and Street Wall

— Podium form and articulation should aim to establish architectural order within the immediate precinct, demonstrating heritage and contextual sensitivity, with scale and massing that relates well at the human scale.

— Buildings should generally include a podium, with tower forms setback in accordance with Figure 2-4. Alternative approaches may be contemplated where appropriate scale relationships and amenity can be demonstrated.

— Podium heights should relate to prevailing streetwall conditions and/ or important heritage items adjacent the proposed developments, as described in Figure 2.5 and summarised below:

- Horwood Place podia should be predominantly 3-4 storey.
- George Street podia should be 2 storey and relate to the height and alignments of the heritage building at 41-59 George Street.
- Church Street podia should be 2 storey and relate to the predominant street wall heights of existing buildings.
- Macquarie Street podia should be 2 storey and relate to the existing streetwall alignments as well as the heritage building 'Kia Ora' at 62-64 Macquarie Street.

— Future podium design will need to sensitively respond to significance of adjacent heritage buildings.

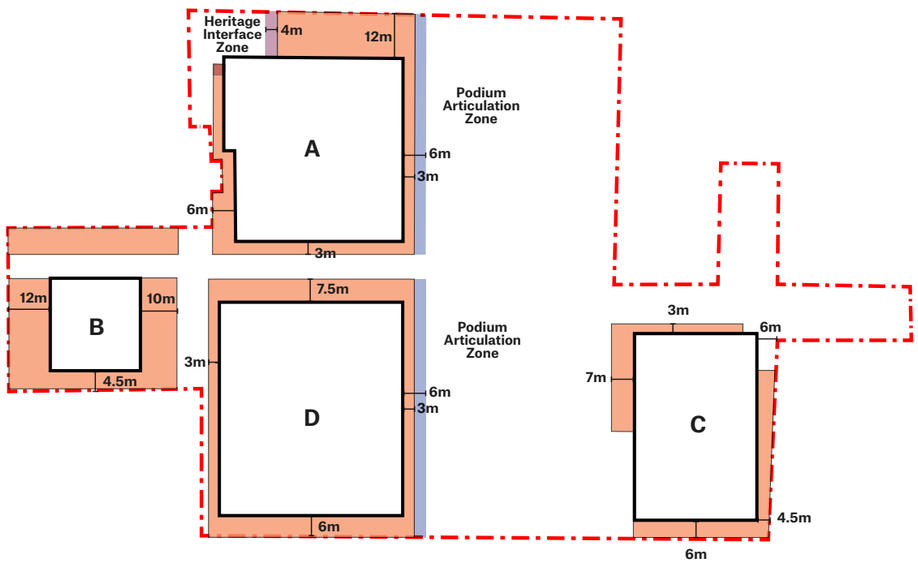


Figure 2-4 Tower setback plan

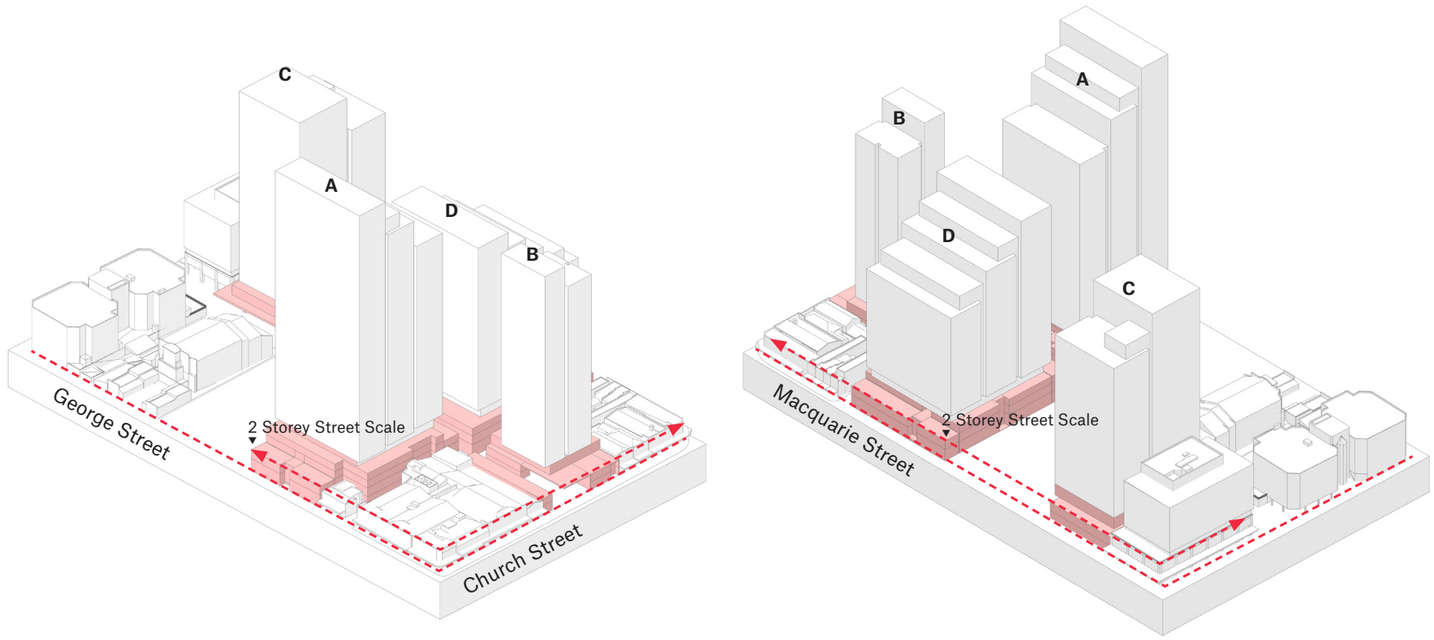


Figure 2-5 Streetwall alignments

2.2 Places and spaces

2.2.1 Podium and Street Wall

— Podium heights should relate to prevailing streetwall conditions and/ or important heritage items (shown in Figure 2-7) and adjacent the proposed developments, as described in the Figure 2-6 (adjacent).

Figure 2-6 Podium heights and alignments

Figure 2-7 Heritage references

1. Kia Ora
2. George Street shops
3. Roxy Theatre
4. Horse Parapet Macquarie Street.

2.2 Places and spaces

2.2.2 Tower Massing and Envelopes

1. Towers are to be designed to integrate with the Parramatta Metro Station so as not to compromise the operation or functionality of the metro
2. Towers are to be appropriately located to ensure good separation between tall buildings, maintain views to the sky and create a sense of openness in the street and adjacent public domain.
3. Towares are to be design to achieve comfortable street environments for pestestrians with high levels of daylight and comfortable wind conditions at street level and public spaces
4. Towers are to provide a positive contribution to the Parramatta City Skyline
5. Towesr are to respect and enhance the setting of heritage items

2.2.3 Tower setbacks

Towers are to be set back in accordance with Figure 2-4 Tower setback plan.

Towers for Building A and D are to achieve a tower setback between 3m and 6m form the street frontage of the podium to Horwood Place, and are to demonstrate that the development:

— achieves appropriate wind conditions in the adjacent street (Horwood Place) and public spaces to ensure a safe and comfortable environment for walking, and to encourage conditions that are comfortable for sitting
— maintains vistas and visual connections to surrounding significant heritage buildings Kia Ora and George Street shops
— achieves a scale which appropriately responds and contributes to the visual amenity and quality of Horwood Place and adjacent public domain

2.2.4 Articulation Zone

An articulation zone of 3 metres may be included where a 6 metre tower setback is achieved in accordance with 2.2.3 (as indicated in figures 2-8 and 2-9 below). The intent of the articulation zone is to enhance the quality and activation of the public domain.

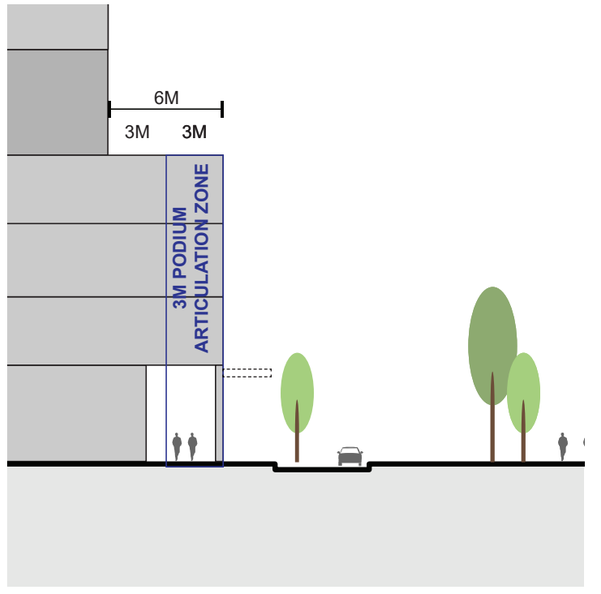


Figure 2-8 Podium Articulation Zone - Colonnade

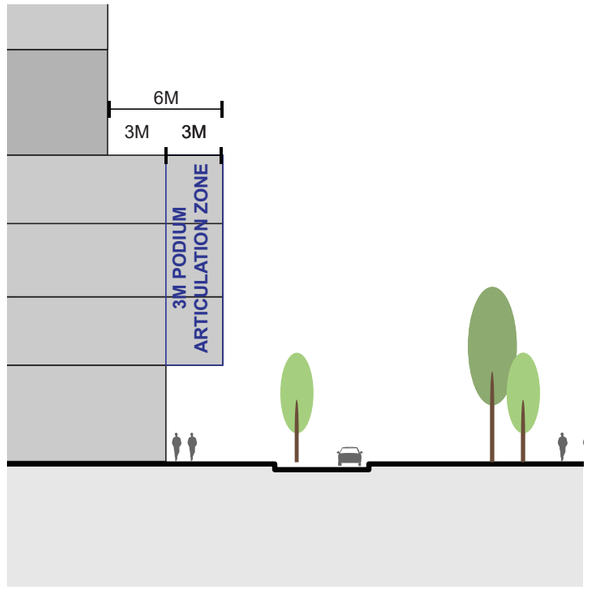


Figure 2-9 Podium Articulation Zone - Ground floor Setback

Figure 2-10 Colonnade - Novartis Campus, DCA Architects, Basel

Figure 2-11 Setback - Barangaroo, FJMT Architects

2.2 Places and spaces

2.2.5 Tower Heights

Provide exceptional and distinctive tower designs that respond to the evolving height, scale and character of the area.

— Tower heights should be generally in accordance with the diagram opposite (Figure 2-12)

— Tower forms must observe City of Parramatta's solar access provisions for Parramatta Square and Lancer Barracks and minimise overshadowing impacts on Civic Link, the new park and plaza areas, and the wider public domain

— Towers should be clearly differentiated from podia through design measures such as setbacks, recessed levels above podium datums, different forms and / or materials

— Tower forms should be articulated, through stepped forms, expression of distinct volumes of vertical proportions, or other measures, so as to reduce the perceived visual bulk and scale

— Tower forms and façade detailing should express the fine grained context of the historic Parramatta town centre

— Tower position and separation should facilitate reasonable outlook and view sharing

— Tower forms should assist to minimise adverse wind effects within the public domain, achieved through maintaining adequate tower separation, modelling of tower form, and use of building articulation / elements that disrupt velocity or turbulence.

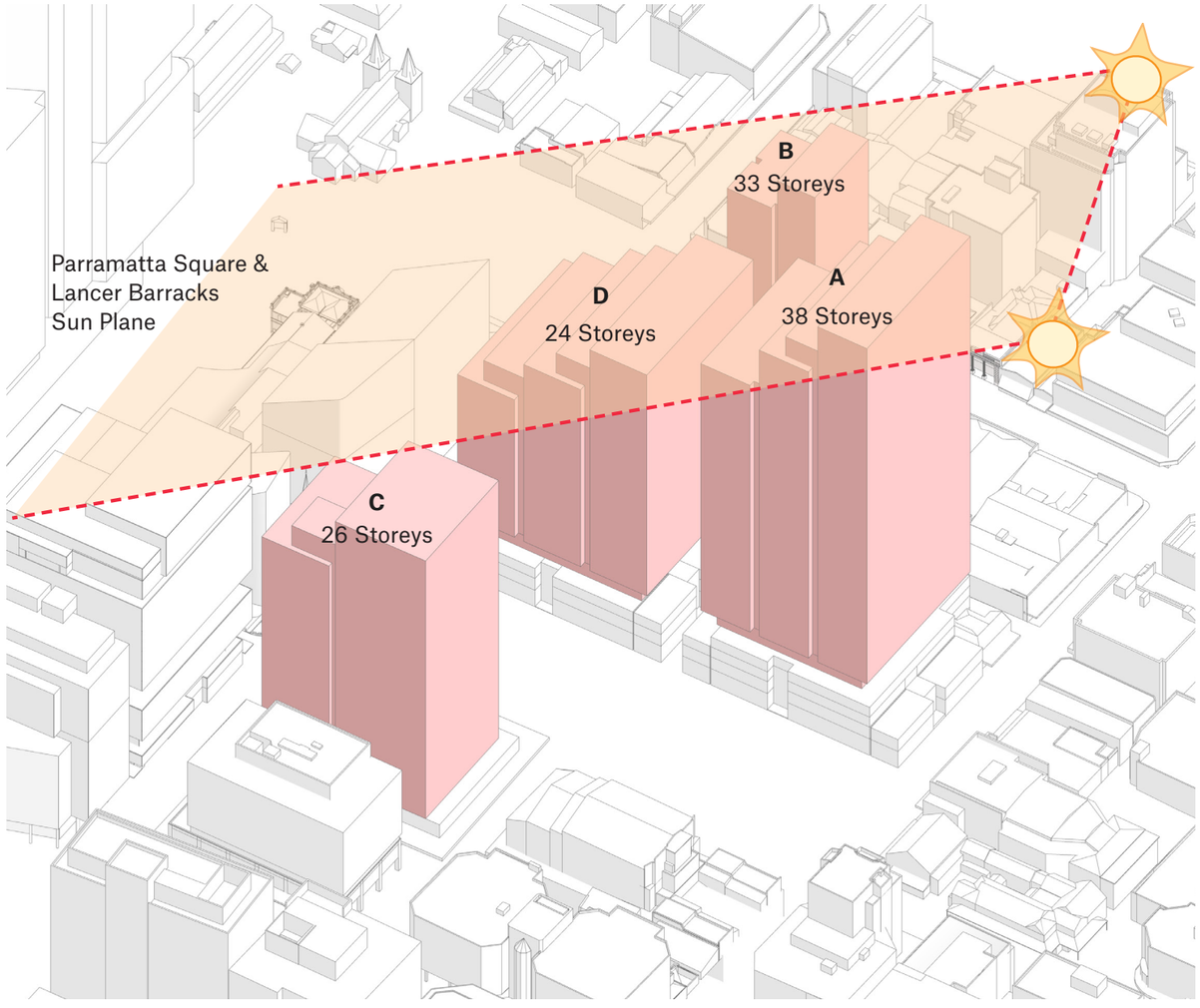


Figure 2-12 Tower form and heights diagram

2.2 Places and spaces

2.2.6 Frontages

— Provide active frontages (ground level and podium levels were practicable) to all principal frontages, including to any park or plaza, Civic Link, Horwood Place, and the new east-west pedestrian connection.

— The majority of ground level frontage should be dedicated to active uses. Uses that promote animation or surveillance over public spaces are encourage in the lower levels of all buildings.

— Fine-grain / narrow frontages are encouraged as a means of introducing visual interest, variety, and relating the new development to the character of Parramatta. The scale of frontages should relate to its urban condition – with smaller format spaces addressing the narrower pedestrian lanes, with larger 'civic' frontages addressing the new park.

— Articulate building podiums as separate elements from the towers above and use entries, access ways or cut-outs to break the overall length of the podiums, where appropriate.

2.2.7 Lighting and signage

— A coordinated approach to lighting and signage is encouraged across all development within the precinct.

— Signage opportunities are to respond to and complement the architectural design of the buildings and contribute positively to the appearance of the buildings, streetscape, and – where used – the skyline.

— Signage and lighting design approaches that reinforce connection to Country are encouraged. Opportunities for multi-language signage (English / Eora) should be explored with the Darug community.

2.2.8 Public Art

— Public art associated with individual developments should contribute to a precinct wide public-art strategy.

— Public art integrated with the architecture is encouraged.

— Public art is a critical part of responding to Country and recognizing the enduring connection of the Darug people to Parramatta. Public art that reinforces this narrative and does so in collaboration with First Nations artists and designers is strongly encouraged.

— Public art should be integral to the interpretation of the historic development and significance of the place.

2.2 Places and spaces

2.2.9 Materials and finishes

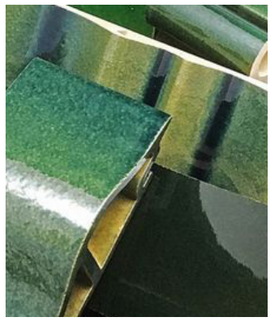
— Facade materials, colours, and tones, should demonstrate an identifiable relationship to Country and the landscapes of the Cumberland Plains, including sandstone and shale, earthen tones, and muted greens (Figure 2-13).

— Facade materials, colours, and tones, should respond to the predominant materials of the colonial heritage in the locality, including sandstone and sand stock bricks.

— Materials should be high quality, enduring, minimise ongoing maintenance, and avoid detrimental impacts such as glare. Highly reflective materials should be avoided.

— Selected materials should contribute to a low carbon footprint through low-embodied energy and their contribution to a high-performing building.

— Establish a cohesive ensemble of buildings within the precinct through a coordinated approach to materials for each building or component, with material selection or detailing reflecting the nature of the element as either a streetwall building, a building defining new civic space, a laneway building, or tower ‘sky building’.



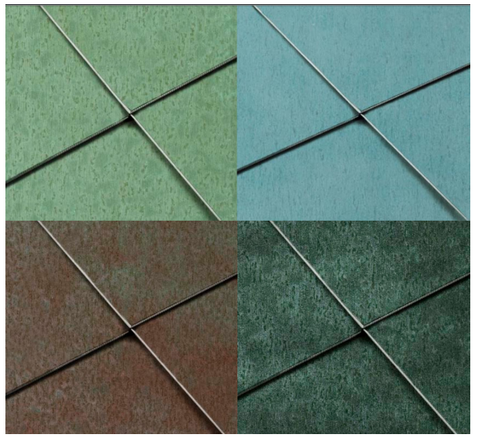


Figure 2-13 Indicative Material Palette

2.2 Places and spaces

2.2.10 Station integration

- Functional integration of the various permissible uses with the Sydney Metro component should be seamless, simplifying the vertical division and coordination of services wherever possible.
- Adjacent and over station development uses should be functionally separated as much as possible from station entries at ground level to assist in pedestrian circulation and serviceability (Figure 2-14).
- Back of house operations and services should be consolidated wherever possible while maintaining any required separation between the OSD and Sydney Metro (Figure 2-14).
- The design of the OSD and station should be unified through connecting the station entry, podium and over station development, as a single readable piece of architecture including to provide continuity and well considered transitions of bulk and scale between the station box and the over station development design.

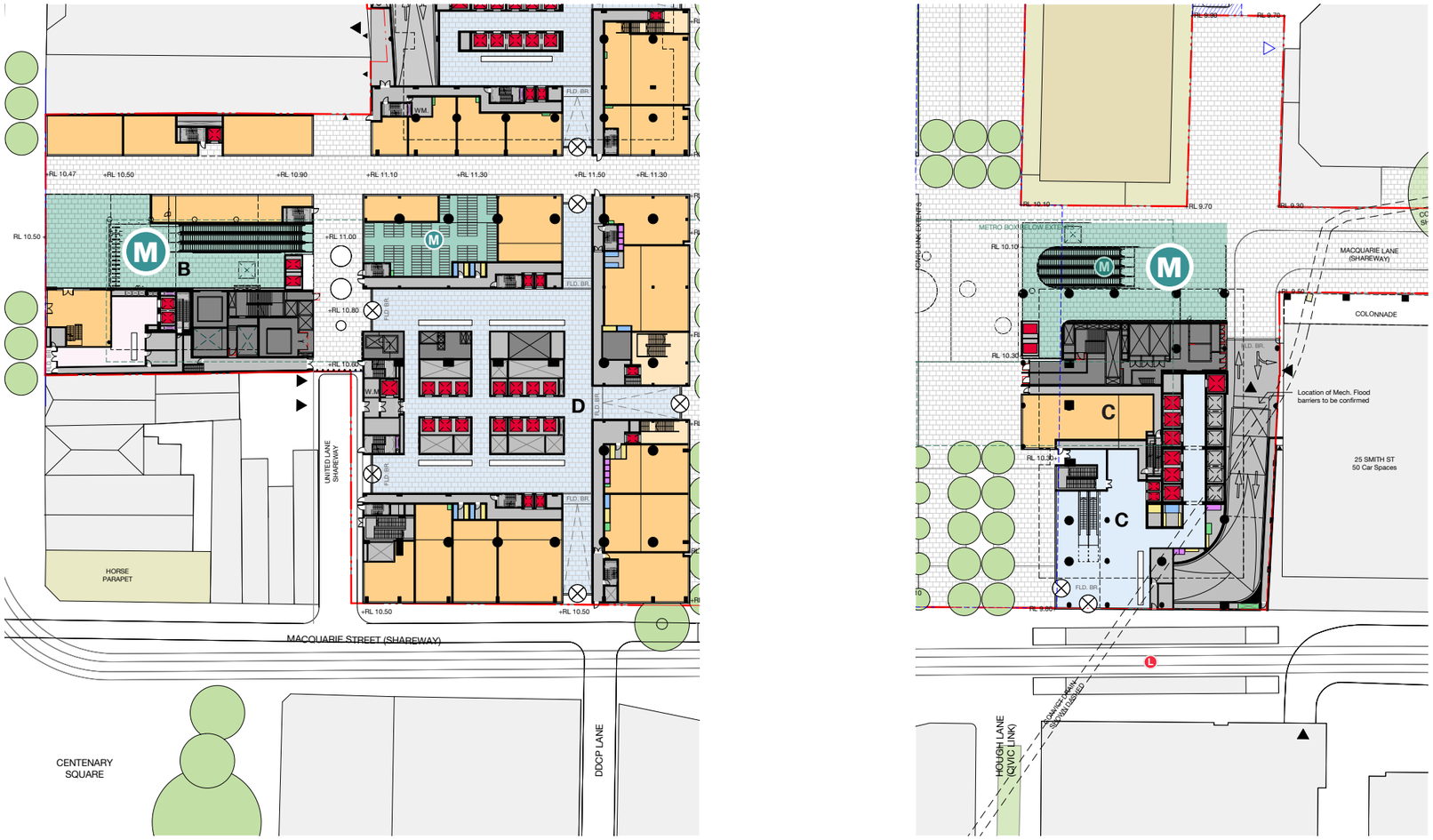


Figure 2-14 Functional Separation of Uses

Provision of pedestrian space in the station environments and separation of access to over-station development uses.

2.3 Access and connectivity

Objectives

- Prioritise walking and other modes of active transport in the design of stations, interchanges and associated developments
- Integrate walkable urban environments with the Green Grid to contribute to a safe, permeable and well-connected station precinct
- Manage the design of streets in accordance with Movement and Place principles
- Enable easy connections with other transport services
- Reinforce Civic Link as the principal north-south pedestrian spine connecting Parramatta Square and Parramatta River.

Design criteria

2.3.1 Streets and Lanes

- Establish a clear network of pedestrian and vehicular connections, including north-south and east-west linkages (Figure 2-15)
- Realign Horwood Place to support direct vehicle movement and maintain access to existing properties
- Design Horwood Place, Macquarie Lane and United Lane to accommodate low volumes of car and service vehicles moving at a slow traffic speed
- Consolidate basements for new development to minimise the number of vehicle entry points from the street
- Locate vehicle entries on George Street, United Lane, and/or Macquarie Lane (via Smith Street)
- Avoid vehicular entries along Horwood Place open space frontage.

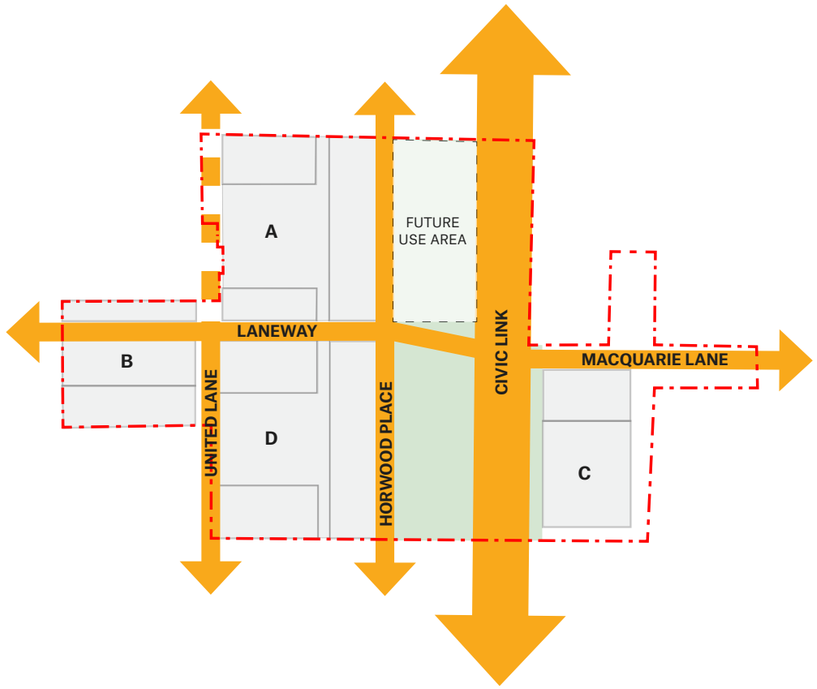


Figure 2-15 Pedestrian linkages

Legend

Ped. Connections
Future connections
Open Space

2.3 Access and connectivity

Design criteria

2.3.2 Pedestrian accessibility and safety

- Extend pedestrian access from United Lane to meet the new through-site east-west link to enhance permeability (Figure 2-16).
- Include active uses at ground level along laneways to encourage pedestrian activity and provide passive surveillance.
- Enhance permeability by introducing fine-grain pedestrian links between the station and surrounding streets, breaking down the large city block.
- Ensure streets and pedestrian linkages adhere to CPTED principles including clear sight-lines, passive surveillance, active uses, good lighting, and avoidance of dead-ends, alcoves and spaces susceptible to entrapment.
- Locate and design vehicular access to minimise potential conflicts with pedestrians and disruption to active frontages.
- Lobbies, arcades, or other semi-public linkages within developments should be integrated with the street and laneway network to reinforce a clear hierarchy of pedestrian connections within the precinct.

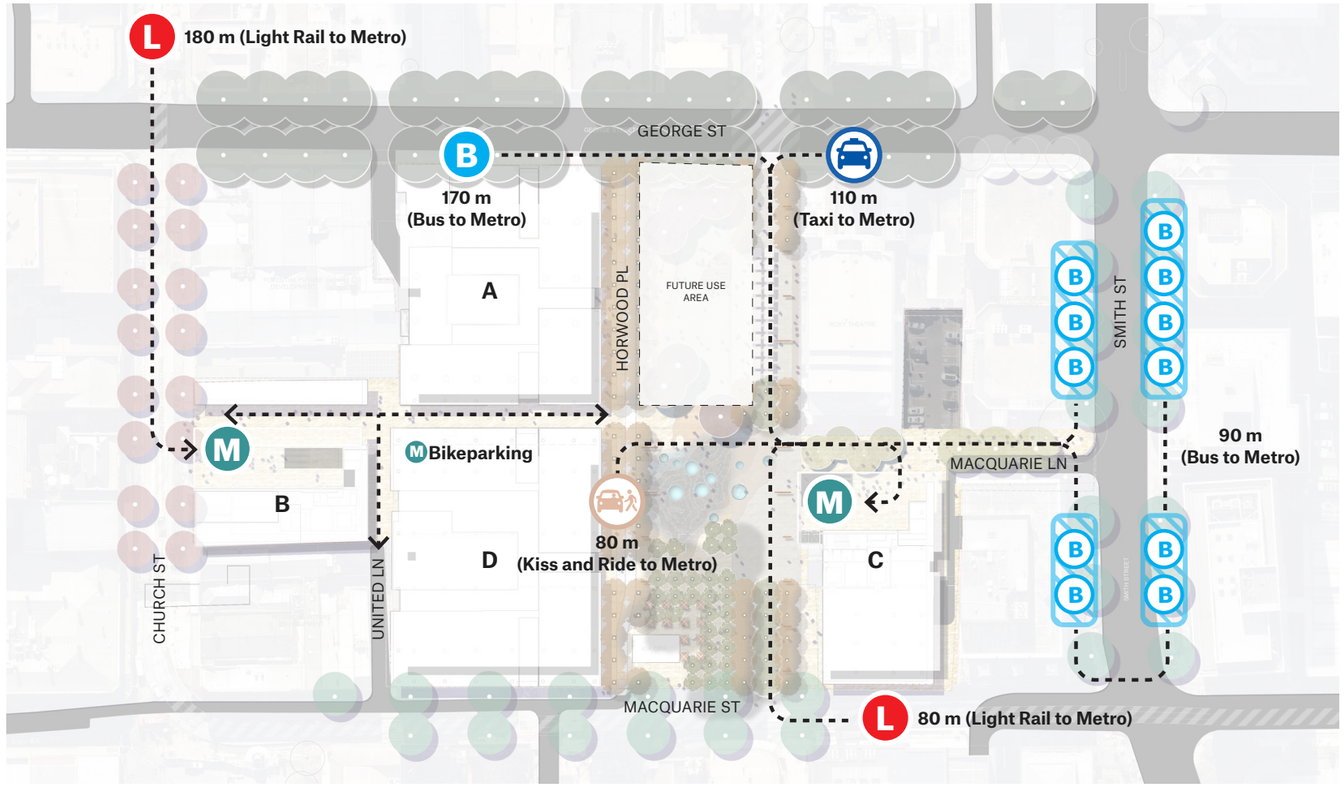


Figure 2-16 Transport integration opportunities

Legend

Metro Entry
Light Rail
Bus Stop
Proposed Bus
Taxi
Kiss and Ride
Walking Route

2.3 Access and connectivity

Design criteria

2.3.3 Building entries

- Station entries should be high-quality, prominent, and integrated seamlessly with the public domain.
- Clearly delineate building entries and circulation spaces from station entries.
- Locate principal building entries in prominent locations fronting Civic Link, new plazas, or primary streets being Church, George and Macquarie streets.
- Provide additional secondary building entries across the precinct to assist with dispersing high pedestrian volumes.
- Consolidate egress points at ground level to simplify their integration into high quality street frontages.
- Provide awnings / canopies to provide weather protection to building entries.

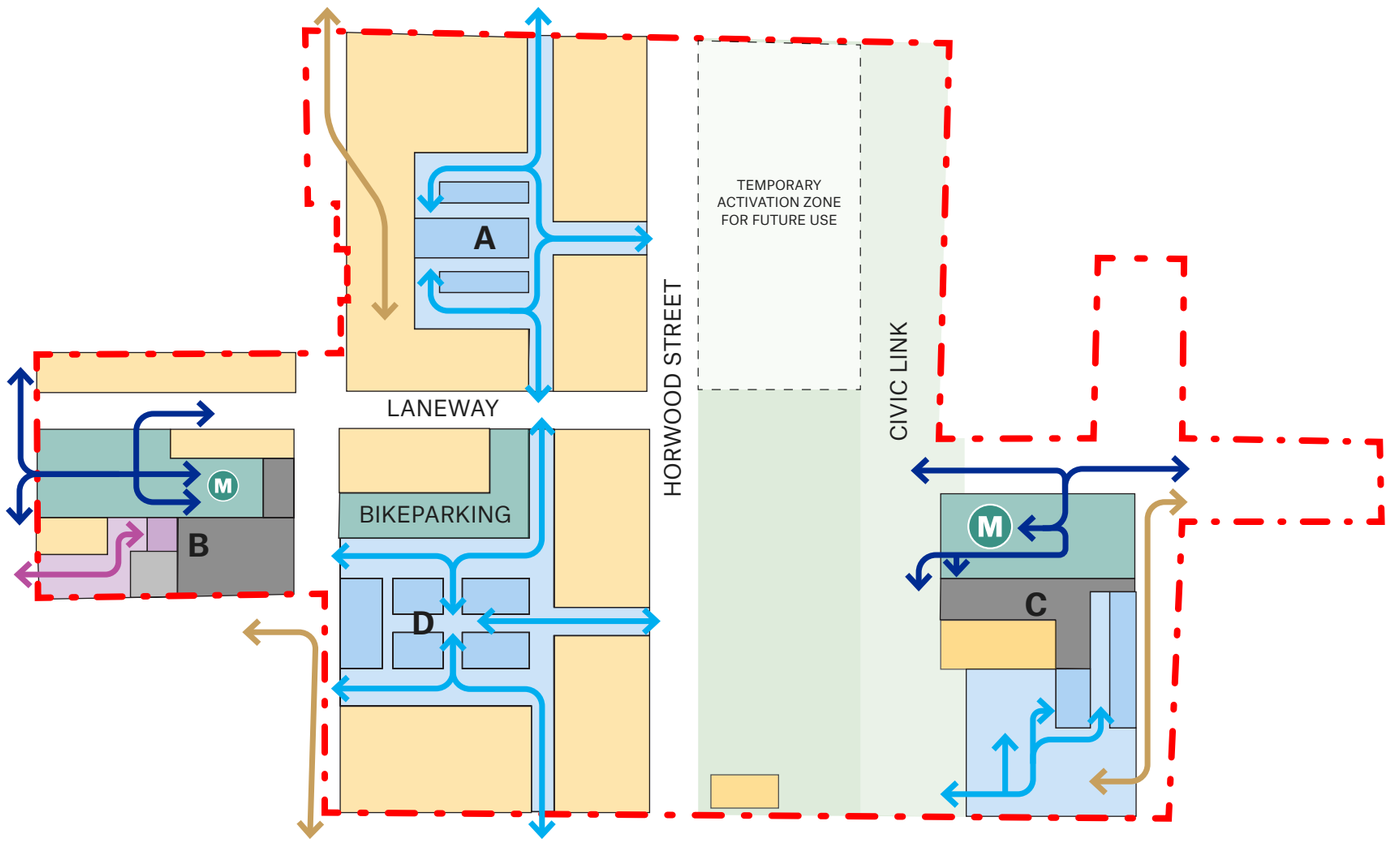


Figure 2-17 Building Entries and Internal Circulation

Legend

Site
Commercial
Retail
Residential
Metro
Plant
Station Plant
Station Entry
Office Entry
Resi Entry
Vehicle Entry

2.4 Environment and sustainability

Objectives

— Deliver a sustainable development, demonstrating excellence against national and international benchmarks and certification systems.

— Achieve high levels of environmental performance and contribute to positively addressing social issues relevant to the building use and precinct needs.

— Contribute to the evolution of a new urban development paradigm which incorporates environmentally sustainable elements, processes and designs.

— Contribute to climate resilience through delivering high-quality public spaces, significant tree canopy, and integrated green infrastructure.

— Contribute to social sustainability through inclusive consultation, engagement, and design processes, with particular regard to maintaining meaningful participatory engagement with local Aboriginal communities.

Design criteria

2.4.1 Sustainability ratings

— Commercial developments (Buildings A, C & D) should achieve the following minimum sustainability ratings and performance standards:

- 6 Star Green Star Buildings
- 5.5 star NABERS Energy for Offices base building
- 4.5 star NABERS Water for Offices

— Residential development (Building B) should achieve the following minimum sustainability ratings + performance standards:

- 5 Star Green Star Buildings
- 4.5 star NABERS Energy for Apartment Buildings
- 3.5 star NABERS Water for Apartment Buildings
- BASIX Energy 25
- BASIX Water 55

2.4.2 Passive design measures

— Building envelopes should achieve excellent thermal performance, with high levels of insulation whilst facilitating beneficial solar access.

— Adopt window to wall ratios of 50-60%

— Provide effective external shading systems to facades exposed to direct solar radiation

— Maintain adequate separation between buildings to allow beneficial airflows

— Design residential layouts to optimise beneficial solar access and natural ventilation, to minimise reliance on active heating and cooling.

— Consider use of high-albedo materials to minimise heat absorption while considering glare.

— Integrate on-structure planting in the form of intensive or extensive roof gardens or planters, to assist with thermal envelope and minimisation of heat-island, storm water management, contribution to biodiversity, and for beneficial cooling effects of transpiration.

— Maintain high levels of sunlight to public open spaces to enhance outdoor amenity and support vitality of trees and other planting.

— Integrate principles of biophilia, providing opportunities for building occupants to connect to nature.

2.4.3 Active design measures

— Provide all-electric buildings

— Utilise high-efficiency HVAC, vertical transportation, lighting, and fixtures and fittings

— Utilise HVAC systems providing 100% fresh-air cycles and / or integrating mixed-mode spaces in commercial buildings

— Consider opportunities for provision of photo-voltaic, battery storage, and EV charging points.

2.4.4 Materials and resources

— Optimise the design of structure and building fabric to minimise material consumption, embodied carbon, and waste.

— Use materials and resources prudently and sustainably, including utilising recycled content where possible.

— Prioritise the use of cladding and external materials that are durable, have integral finishes, require minimal ongoing maintenance, and are recyclable.

— Design buildings to enable adaptation and reclamation of elements for reuse or recycling in the future.

2.4 Environment and sustainability

Design criteria

2.4.5 Sustainable transport

- Create a highly permeable pedestrian network across the precinct to promote walk-ability
- Incorporate Electric Vehicle (EV) charging stations within the basements
- Incorporate car-share parking space associated with any residential car parking provisions.
- Provide high levels of bicycle parking for residents, commercial tenants, and visitors. Locate bicycle parking to be readily accessible and well integrated with bicycle routes through the precinct.
- Provide end-of-trip facilities in locations that are safe, accessible, and inclusive.

2.4.6 Social sustainability

- Maintain ongoing participatory engagement and Design with Country processes with the Aboriginal community and ensure the substance of that engagement is evident in the design of buildings, spaces and places.
- Design buildings to be 'pandemic resistant' with measures such as centralised HVAC filtration, contact-less movement in common areas, and allowing 100% fresh air cycles.

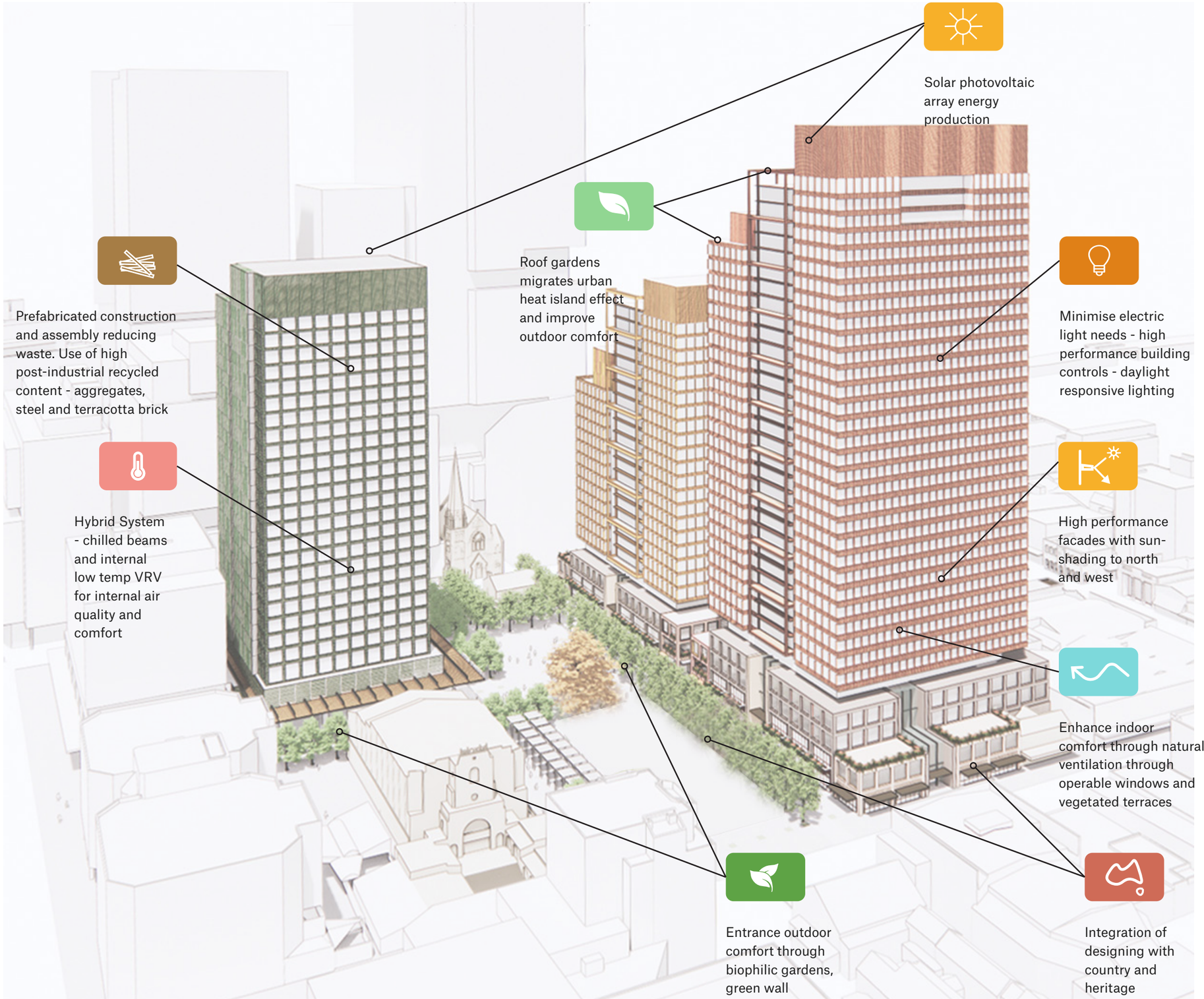


Figure 2-18 Illustration of ESD opportunities and initiatives

3.0

Heritage Design Guidelines

3.0 Heritage design guidelines

"Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.Places may have a range of values for different individuals or groups."

(Burra Charter, Australia ICOMOS 2013)

3.1 Heritage objectives

Heritage objectives

— The heritage context, including built and natural heritage places, Aboriginal and non-Aboriginal archaeology, is to be respected and enhanced through sensitive design.

— The Sydney Metro West heritage interpretation strategy is to guide design development and be accompanied by innovative and detailed interpretation plans.

— Where intervention with heritage places is required, design excellence is to be implemented to support sensitive, interpretive and contemporary design responses to heritage significance.

— The design of stations and associated precinct developments is to conserve heritage places, minimise and/or mitigate any negative impacts and respect and enhance its heritage context.

— New work to, or in the vicinity of heritage places is to be based on an understanding of heritage significance, and is to address:

— **Siting** - including urban grain, streetscape rhythm, setbacks, orientation and address of buildings, location of boundary walls, key views, significant built and natural features and archaeological remains

— **Scale** – including wall and floor to floor heights, modulation and façade rhythms, massing, density, proportions, relationship to ground plane, wall modulation including openings and roof planes

— **Form** – including proportion and number of openings, solid to void ratios, roof form, skyline and relationship between internal and external spaces

— **Materials and Colour** – giving consideration to characteristic materials, textures, colours, light and shadow, and retaining and interpreting significant fabric

— **Details** – creating complementary relationships between new and old elements to provide visual interest

3.2 Heritage design guidelines

— Provide setbacks and respond sensitively to the scale of heritage items within and adjoining the precinct to minimise visual impacts and enhance their setting.

— Provide a contextually sensitive interface with heritage buildings and the character of the local area through architectural treatments and strategies.

— Implement adaptive reuse strategies for Kia Ora (Macquarie Street), and the Shops (43-47 George Street) in accordance with their Conservation Management Plans.

— Articulate the bulk and scale of the new development to retain and enhance significant views of heritage items within and adjoining the precinct.

— Implement a sensitive design response that activates publicly accessible areas adjoining heritage items, including the Roxy Theatre

— Consider opportunities to reconstruct the town drain within a publicly accessible area of building C.

3.0 Heritage design guidelines

3.3 Shops (43-47 George St)

3.3.1 Envelope

Figure 3-1 (adjacent) indicates the area of building envelope identified as heritage interface zone. This zone applies to podium levels of building envelope.

3.3.2 Methodology

A heritage interface zone is proposed along the eastern and southern faces of the heritage building. This zone is intended to provide clear visibility of the eastern facade from George St, enhancing prominence of the heritage building within the street context and restoring the ability for it to be viewed in the round. (Figure 3-2 adjacent).

3.3.3 Precedents

Figures 3-3, to 3-6 depict potential architectural treatments within the heritage interface zone.

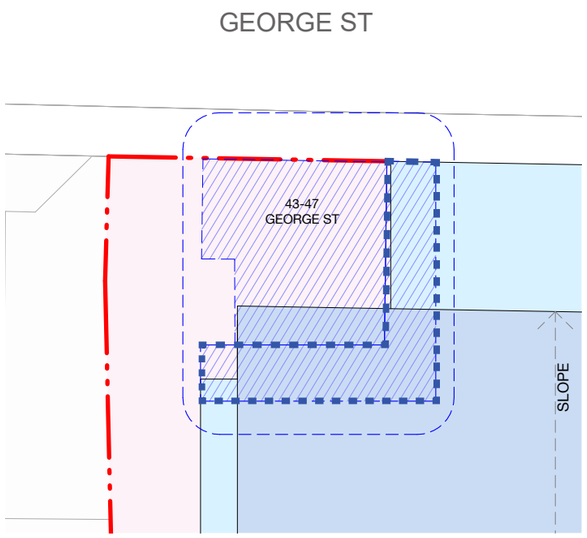


Figure 3-1 Envelope Plan with heritage interface zone outlined in Blue.

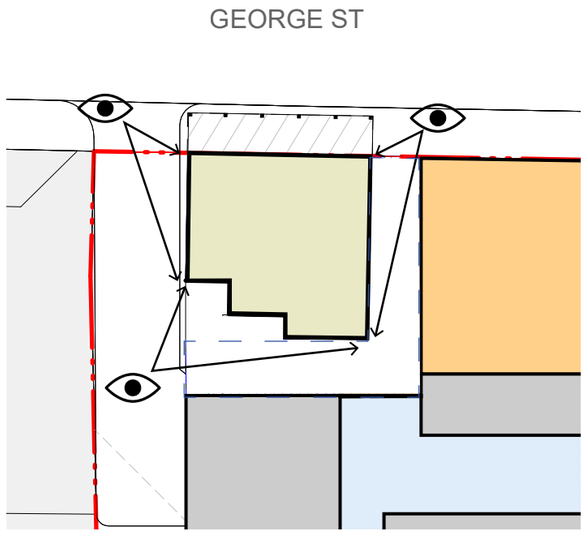


Figure 3-2 Heritage Interface Zone - Space around heritage item

Pictured
3-3. Customs House Lane, Studio Bright, Sydney
3-4. Pinacoteca do Estado de São Paulo, Paulo Mendes da Rocha + Eduardo Colonelli + Weliton Ricoy Torres
3-5. Former Rocks Police Station,Welsh + Major Architects, Sydney
3-6. The Mint, FJMT Architects, Sydney

Figure 3-3 - Customs House Lane

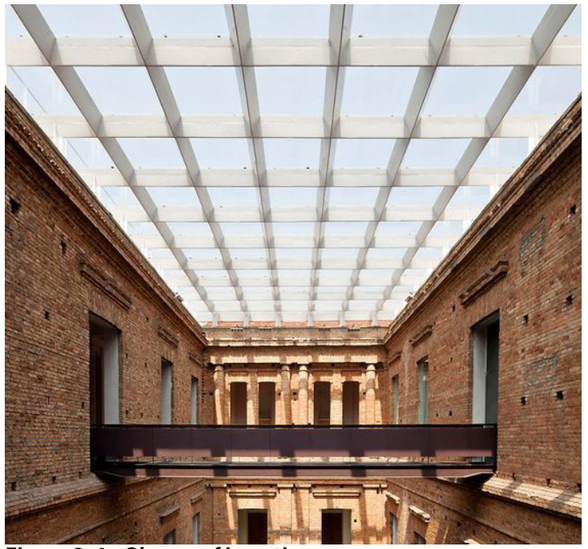


Figure 3-4 - Glass roof insertion

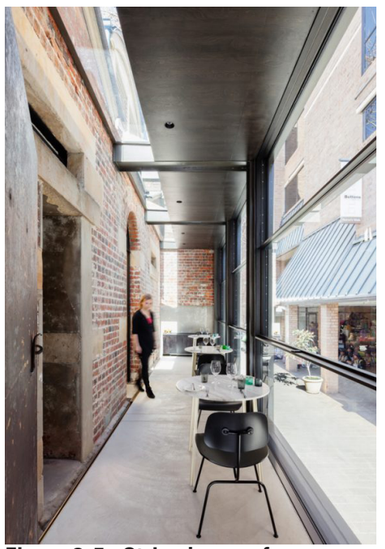


Figure 3-5 - Strip glass roof

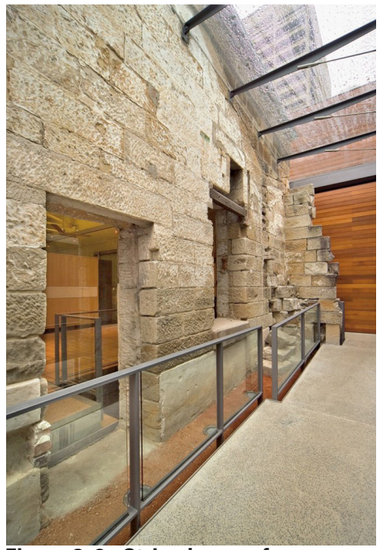


Figure 3-6 - Strip glass roof

3.0 Heritage design guidelines

3.4 Kia Ora

3.4.1 Envelope

Figure 3-7 (adjacent) indicates the area of building envelope identified as heritage interface zone.

3.4.2 Methodology

Future adaption within the heritage interface zone must activate and enhance the Kia Ora through sensitive design intervention that improves connectivity with the surrounding public domain. Options may include outdoor dining, public seating and recreation spaces, or finely detailed contemporary additions that maintain views of the northern façade.

3.4.3 Precedents

Figures 3-10 to 3-12 are examples of the adaptive reuse of heritage buildings in New South Wales.

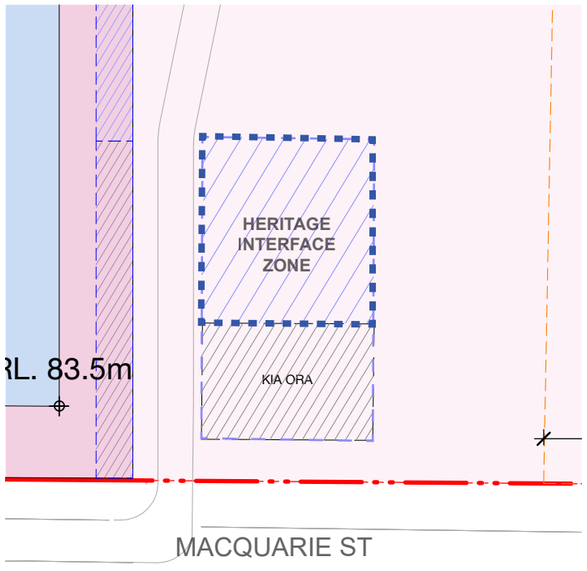


Figure 3-7 Envelope Plan with impacted area outlined in Blue.

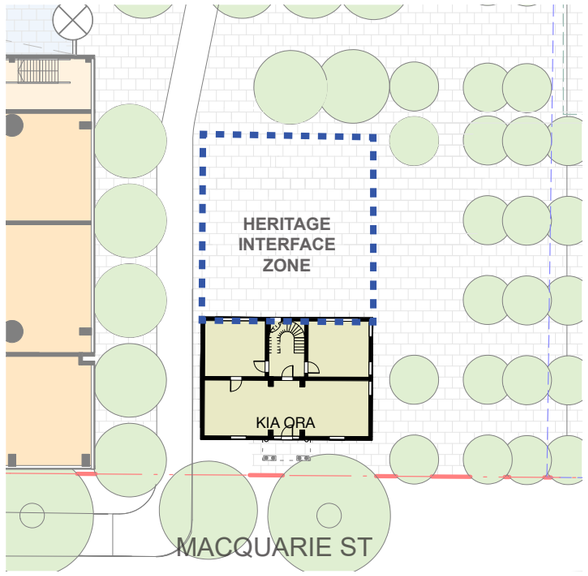


Figure 3-8 Heritage Interface Zone - Space around heritage item

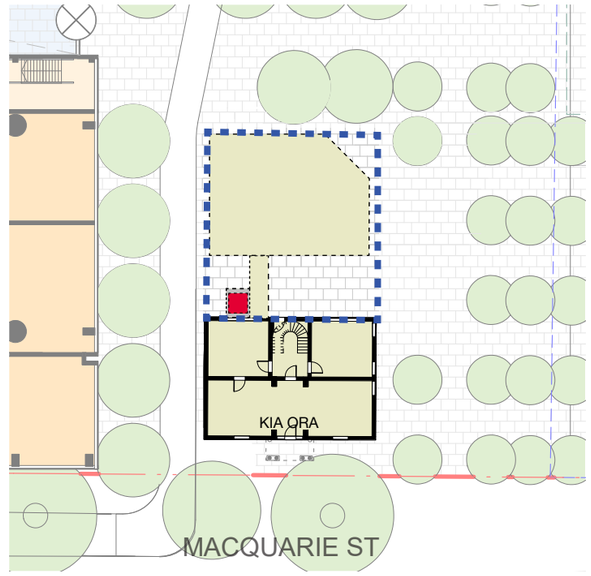


Figure 3-9 Heritage Interface Zone - Potential Pavilion addition supports function of Heritage building.

Pictured
3-10. The Mint, FJMT Architects, Sydney
3-11. The Rocks Dining Hall, Carter Williamson Architects, Sydney
3-12. The Gantry, Bates Smart Architects, Sydney

Figure 3-10

Figure 3-11

Figure 3-12

3.0 Heritage design guidelines

3.5 Convict Drain

3.4.1 Envelope

Figure 3-13 (adjacent) indicates the location of the heritage convict drain with respect to the envelope of building C.

3.4.2 Methodology

It is proposed that sections of the convict drain that cannot be retained in situ are relocated and displayed on site.

3.4.3 Precedents

Figures 3-15 to 3-17 are examples of the heritage interpretation areas where heritage items have been relocated and displayed within the same site.

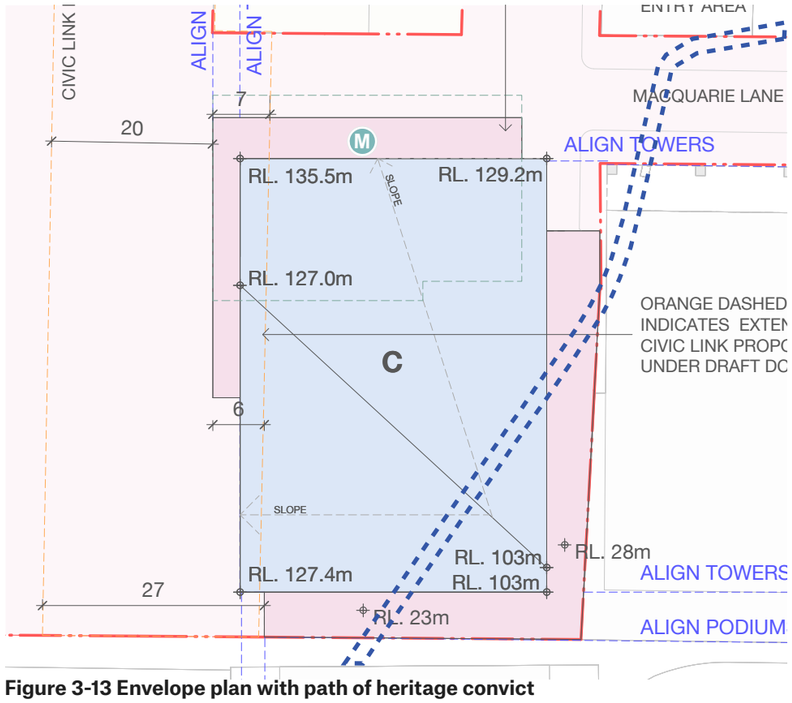


Figure 3-13 Envelope plan with path of heritage convict drain shown in dashed blue.

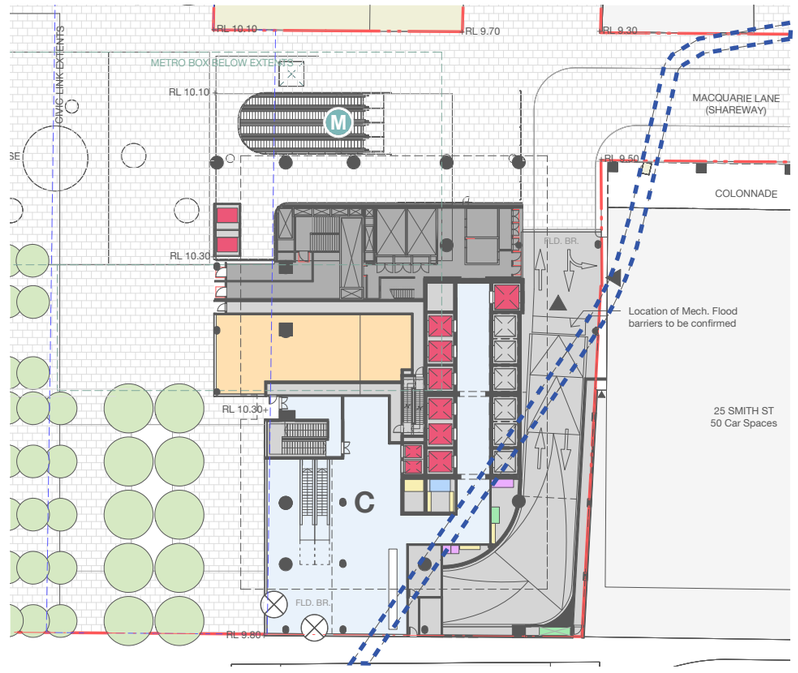


Figure 3-14 Indicative reference ground plan with heritage drain shown in dashed blue.

Figure 3-15

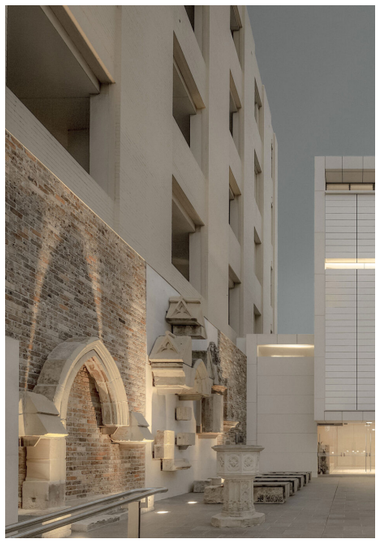


Figure 3-16

Figure 3-17

Pictured
3-15, 3-16. St Barnabas Church, FJMT Architects, Sydney
3-17. Justice Precinct, Bates Smart Architects, Parramatta

Sydney Metro West