WATERLOO METRO QUARTER OVER STATION DEVELOPMENT

Environmental Impact Statement
Appendix S – DA Accessibility Report

SSD-10438 Basement Car Park

Detailed State Significant Development
Development Application

Prepared for **Waterloo Developer Pty Ltd**

30 September 2020

Morris Goding
Access Consulting

Reference	Description
Applicable SSD Applications	SSD-10438 Basement Carpark
Author	Morris Goding Accessibility Consulting Anthony Leuzzi
Reviewed	Waterloo Developer Pty Ltd John Holland
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1. Glossary and abbreviations

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
ADG	Apartment Design Guide
AHD	Australian height datum
AQIA	Air Quality Impact Assessment
BC Act	Biodiversity Conservation Act 2016
BCA	Building Code of Australia
BC Reg	Biodiversity Conservation Regulation 2017
BDAR	Biodiversity Development Assessment Report
CEEC	critically endangered ecological community
CIV	capital investment value
CMP	Construction Management Plan
Concept DA	A concept DA is a staged application often referred to as a 'Stage 1' DA. The subject application constitutes a detailed subsequent stage application to an approved concept DA (SSD 9393) lodged under section 4.22 of the EP&A Act.
Council	City of Sydney Council
CPTED	Crime Prevention Through Environmental Design
CSSI approval	critical State significant infrastructure approval
CTMP	Construction Traffic Management Plan
DA	development application
DPIE	NSW Department of Planning, Industry and Environment
DRP	Design Review Panel
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	NSW Environment Protection Authority
EPA Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESD	ecologically sustainable design

Reference	Description
GANSW	NSW Government Architect's Office
GFA	gross floor area
HIA	Heritage Impact Assessment
IAP	Interchange Access Plan
LGA	Local Government Area
NCC	National Construction Code
OSD	over station development
PIR	Preferred Infrastructure Report
POM	Plan of Management
PSI	Preliminary Site Investigation
RMS	Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
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 Apartment Development
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2009
SREP Sydney Harbour	State Regional Environmental Plan (Sydney Harbour Catchment) 2005
SSD	State significant development
SSD DA	State significant development application
SLEP	Sydney Local Environmental Plan 2012
Transport for NSW	Transport for New South Wales
TIA	Traffic Impact Assessment
The proposal	The proposed development which is the subject of the detailed SSD DA
The site	The site which is the subject of the detailed SSD DA
VIA	Visual Impact Assessment

Reference	Description
WMQ	Waterloo Metro Quarter
WMP	Waste Management Plan
WSUD	water sensitive urban design

2. Executive summary

This planning report has been prepared by Morris Goding Access Consulting to accompany a detailed State significant development (SSD) development application (DA) for the Basement Car Park over station development (OSD) at the Waterloo Metro Quarter site.

This report has been prepared to address the relevant conditions of the concept SSD DA (SSD 9393) and the Secretary's Environmental Assessment Requirements (SEARs) issued for the detailed SSD DA SSD 10438.

This report concludes that the proposed Basement Car Park OSD is suitable and warrants approval subject to the implementation of the following mitigation measures.

Following the implementation of the above mitigation measures, the remaining impacts are appropriate.

3. Introduction

This report has been prepared to accompany a detailed State significant development (SSD) development application (DA) for the Basement Car Park over station development (OSD) at the Waterloo Metro Quarter site. The detailed SSD DA is consistent with the concept approval (SSD 9393) granted for the maximum building envelope on the site, as proposed to be modified.

The Minister for Planning, or their delegate, is the consent authority for the SSD DA and this application is lodged with the NSW Department of Planning, Industry and Environment (DPIE) for assessment.

The detailed SSD DA seeks development consent for the design, construction and operation of:

Basement Car Park

- 2-storey shared basement car park and associated excavation
- Ground level structure
- carparking for the commercial Building 1, residential Building 2, social housing Building 4, Waterloo Congregational Church and Sydney Metro
- service vehicle spaces
- commercial end-of-trip and bicycle storage facilities
- retail end-of-trip and bicycle storage facilities
- residential storage facilities
- shared plant and services.
- In ground OD tank for building 2 located in Church Square

4. The site

The site is located within the City of Sydney Local Government Area (LGA). The site is situated about 3.3 kilometres south of Sydney CBD and eight kilometres northeast of Sydney International Airport within the suburb of Waterloo.

The Waterloo Metro Quarter site comprises land to the west of Cope Street, east of Botany Road, south of Raglan Street and north of Wellington Street (refer to Figure 1). The heritage-listed Waterloo Congregational Church at 103–105 Botany Road is within this street block but does not form a part of the Waterloo Metro Quarter site boundaries.

The Waterloo Metro Quarter site is a rectangular shaped allotment with an overall site area of approximately 1.287 hectares.

The Waterloo Metro Quarter site comprises the following allotments and legal description at the date of this report. Following consolidation by Sydney Metro (the Principal) the land will be set out in deposited plan DP1257150.

- 1368 Raglan Street (Lot 4 DP 215751)
- 59 Botany Road (Lot 5 DP 215751)
- 65 Botany Road (Lot 1 DP 814205)
- 67 Botany Road (Lot 1 DP 228641)
- 124-128 Cope Street (Lot 2 DP 228641)
- 69-83 Botany Road (Lot 1, DP 1084919)
- 130-134 Cope Street (Lot 12 DP 399757)
- 136-144 Cope Street (Lots A-E DP 108312)
- 85 Botany Road (Lot 1 DP 27454)
- 87 Botany Road (Lot 2 DP 27454)
- 89-91 Botany Road (Lot 1 DP 996765)
- 93-101 Botany Road (Lot 1 DP 433969 and Lot 1 DP 738891)
- 119 Botany Road (Lot 1 DP 205942 and Lot 1 DP 436831)
- 156-160 Cope Street (Lot 31 DP 805384)
- 107-117A Botany Road (Lot 32 DP 805384 and Lot A DP 408116)
- 170-174 Cope Street (Lot 2 DP 205942).

The detailed SSD DA applies to the Basement Car Park of the Waterloo Metro Quarter site. The site has an area of approximately 5,700sqm. The subject site comprises the following allotments and legal description at the date of this report.

Basement Car Park DA

- 1368 Raglan Street (Lot 4 DP 215751) (Part)
- 59 Botany Road (Lot 5 DP 215751) (Part)
- 65 Botany Road (Lot 1 DP 814205) (Part)
- 67 Botany Road (Lot 1 DP 228641) (Part)
- 124–128 Cope Street (Lot 2 DP 228641) (Part)

- 69–83 Botany Road (Lot 1, DP 1084919)
- 130–134 Cope Street (Lot 12 DP 399757) (Part)
- 136–144 Cope Street (Lots A-E DP 108312) (Part)
- 85 Botany Road (Lot 1 DP 27454)
- 87 Botany Road (Lot 2 DP 27454)
- 89–91 Botany Road (Lot 1 DP 996765)
- 93–101 Botany Road (Lot 1 DP 433969 and Lot 1 DP 738891) (Part).

The boundaries of the overall site are identified at Figure 1, and the subject site of the detailed SSD DA is identified at Figures 2 and 3. The site is reasonably flat with a slight fall to the south.

The site previously included three to five storey commercial, light industrial and shop top housing buildings. All previous structures except for an office building at the corner of Botany Road and Wellington Street have been demolished to facilitate construction of the new Sydney Metro Waterloo station. As such the existing site is predominately vacant and being used as a construction site. Construction of the Sydney metro is currently underway on site in accordance with critical State significant infrastructure approval (CSSI 7400).

Figure 1 - Aerial image of the site
Source: Urbis

The area surrounding the site consists of commercial premises to the north, light industrial and mixed-use development to the south, residential development to the east and predominantly commercial and light industry uses to the west.

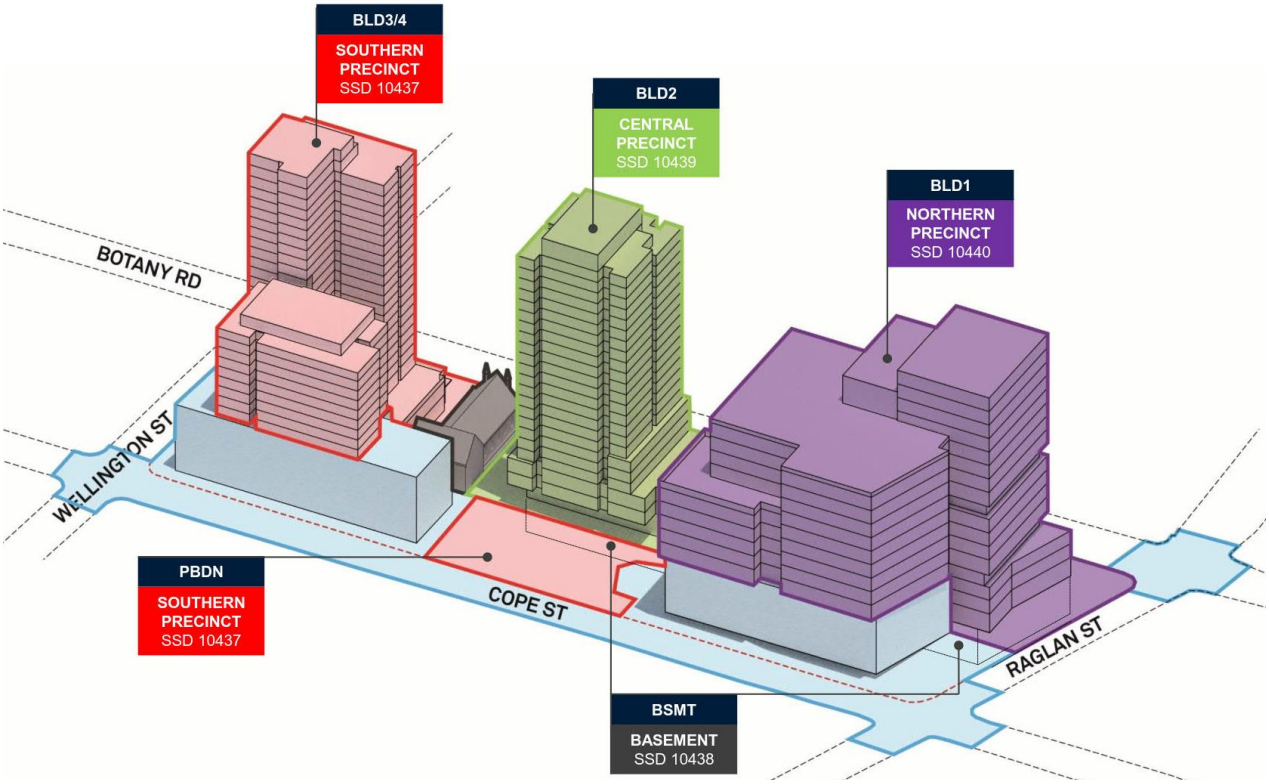


Figure 2 - Waterloo Metro Quarter site, with sub-precincts identified
Source: HASSELL

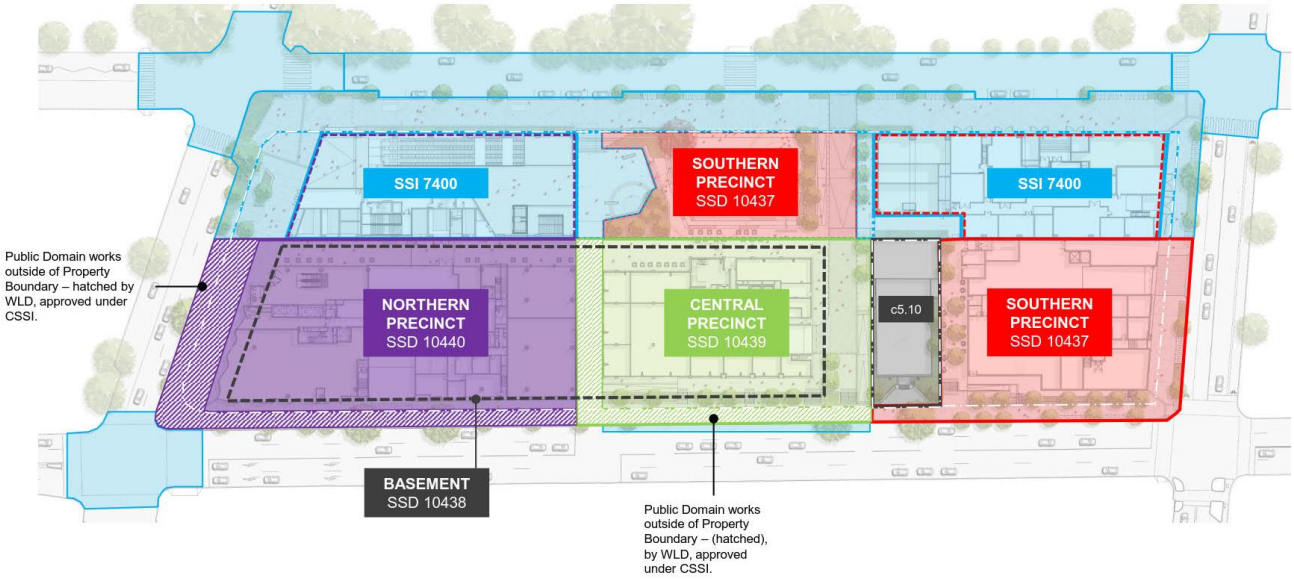


Figure 3 - Waterloo Metro Quarter site, with sub-precincts identified
Source: Waterloo Developer Pty Ltd

5. Background

5.1 About Sydney Metro

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. A new standalone railway, this 21st century network will revolutionise the way Sydney travels.

There are four core components:

5.1.1 Sydney Metro North West

This project is now complete and passenger services commenced in May 2019 between Rouse Hill and Chatswood, with a metro train every four minutes in the peak. The project was delivered on time and $1 billion under budget.

5.1.2 Sydney Metro City & Southwest

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

Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.

5.1.3 Sydney Metro West

Sydney Metro West is a new underground railway connecting Greater Parramatta and the Sydney CBD. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and supporting employment growth and housing supply between the two CBDs.

The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays.

The NSW Government is assessing an optional station at Pyrmont and further planning is underway to determine the location of a new metro station in the Sydney CBD.

5.1.4 Sydney Metro Greater West

Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service.

The Australian and NSW governments are equal partners in the delivery of this new railway.

The Sydney Metro project is illustrated below.

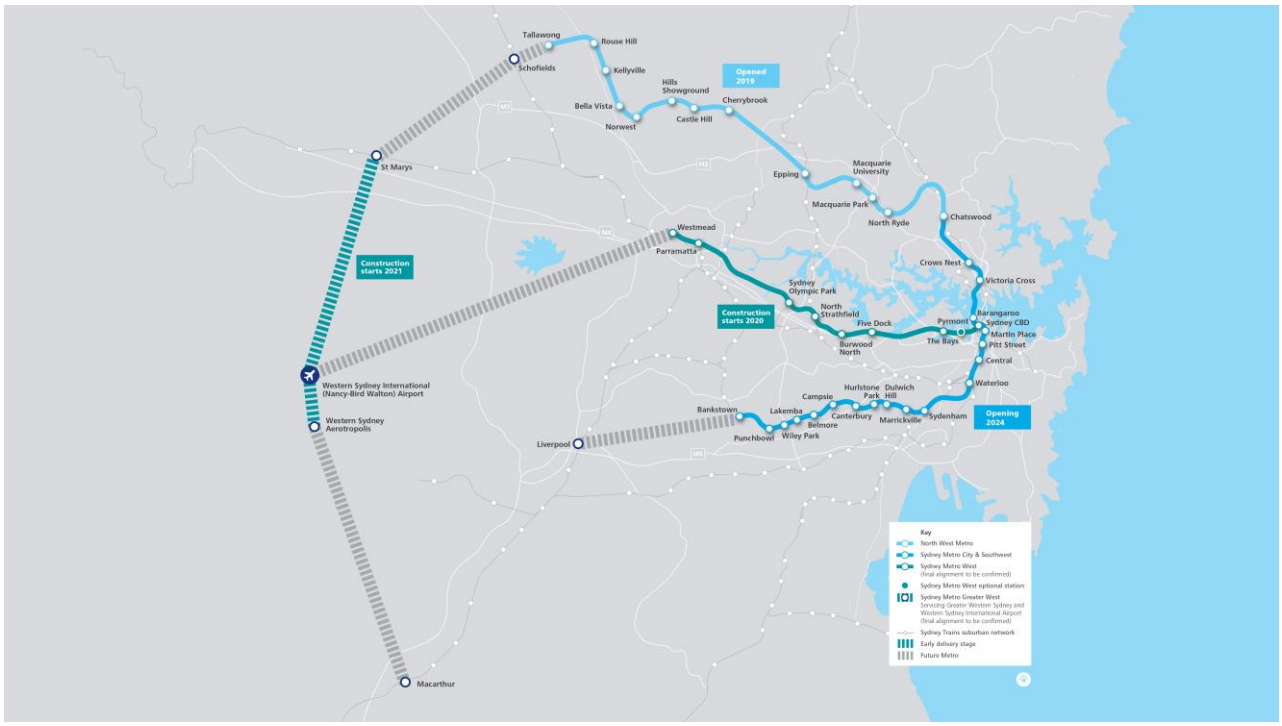


Figure 4 - Sydney Metro alignment map
Source: Sydney Metro

5.2 Sydney Metro CSSI Approval (SSI 7400)

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a critical State significant infrastructure (CSSI) project (reference SSI 7400) (CSSI approval). The terms of the CSSI approval includes all works required to construct the Sydney Metro Waterloo Station. The CSSI approval also includes the construction of below and above ground works within the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the 'metro station box' envelope and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the concept SSD DA or detailed SSD DA for the OSD.

Except to the extent described in the EIS or Preferred Infrastructure Report (PIR) submitted with the CSSI application, any OSD buildings and uses do not form part of the CSSI approval and will be subject to the relevant assessment pathway prescribed by the EP&A Act.

The delineation between the approved Sydney Metro works, generally described as within the two 'metro station boxes' and surrounding public domain works, and the OSD elements are illustrated in Figure 5.

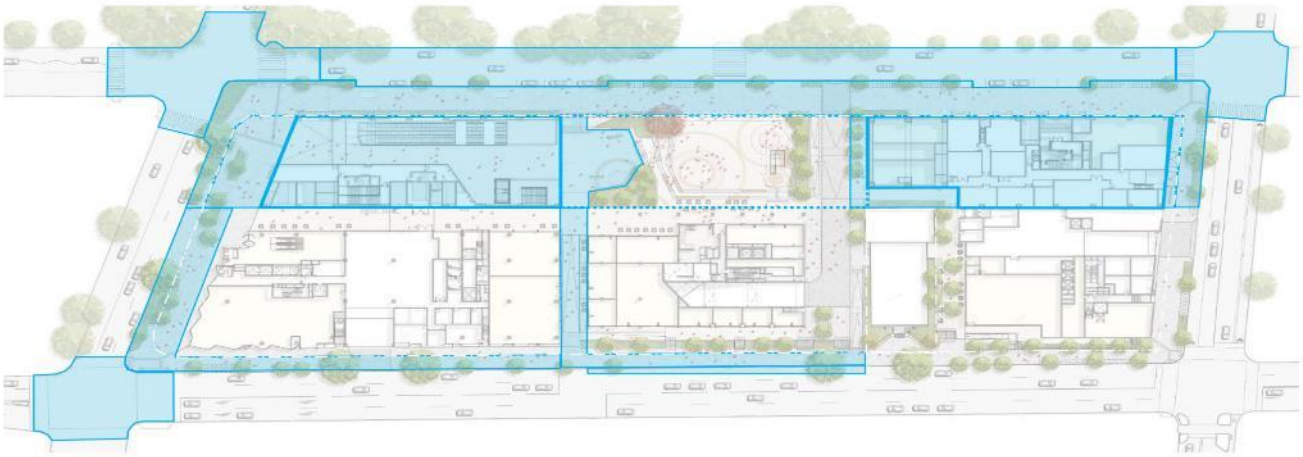


Figure 5 - CSSI Approval scope of works
Source: WL Developer Pty Ltd

5.3 Concept Approval (SSD 9393)

As per the requirements of clause 7.20 of the *Sydney Local Environmental Plan 2012* (SLEP), as the OSD exceeds a height of 25 metres above ground level (among other triggers), development consent is first required to be issued in a concept DA (formerly known as Stage 1 DA).

Development consent was granted on 10 December 2019 for the concept SSD DA (SSD 9393) for the Waterloo Metro Quarter OSD including:

- a maximum building envelope for podium, mid-rise and tower buildings
- a maximum gross floor area of 68,750sqm, excluding station floor space
- conceptual land use for non-residential and residential floor space
- minimum 12,000sqm of non-residential gross floor area including a minimum of 2,000sqm of community facilities
- minimum 5% residential gross floor area as affordable housing dwellings
- 70 social housing dwellings
- basement car parking, motorcycle parking, bicycle parking, and service vehicle spaces.

The detailed SSD DA seeks development consent for the OSD located within the Basement Car Park of the site, consistent with the parameters of this concept approval. Separate SSD DAs have been prepared and will be submitted for the basement car park proposed across the Waterloo Metro Quarter site.

A concurrent amending concept SSD DA has been prepared and submitted to the DPIE which proposed to make modifications to the approved building envelopes at the northern precinct and central building. This amending concept SSD DA does not impact the proposed development within the southern precinct.

6. Proposed development

6.1 Waterloo Metro Quarter Development

The detailed SSD DA seeks development consent for the design, construction and operation of:

- 2-storey shared basement and associated excavation comprising
- Carparking for the Commercial Building 1, Residential Building 2, social housing Building 4, Waterloo Congregational Church and Sydney Metro
- Commercial End of trip and bicycle storage facilities
- Residential storage facilities
- Shared plant and services.

The Waterloo Metro Quarter OSD comprises four separate buildings, a basement carpark and public domain works adjacent to the Waterloo Metro station.

Separate SSD DAs will be submitted concurrently for the design, construction and operation of each building in the precinct;

- Southern precinct SSD-10437,
- Basement Car Park SSD-10438,
- Central precinct SSD-10439, and
- Northern precinct-SSD-10440.

An overview of the Development is included below for context. This detailed SSD DA seeks development consent for the design, construction and operation of the Basement Car Park:

6.1.1 Basement Car Park (subject DA)

The Basement Car Park comprises:

- 2-storey shared basement car park and associated excavation comprising
- Ground level structure
- Carparking for the Commercial Building 1, Residential Building 2, social housing Building 4, Waterloo Congregational Church and Sydney Metro
- Service vehicle bays
- commercial end of trip and bicycle storage facilities
- Retail end of trip and bicycle storage facilities
- residential storage facilities
- shared plant and services.
- signage zone locations
- utilities and service provision
- stratum subdivision (staged).

7. Methodology

7.1 General

The assessment methodology considers operational modes and user groups in relation to the WMQ Southern Precinct Project.
The assessment attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

- People with sensory impairment
- People with mobility impairments
- People with dexterity impairments

The assessment seeks to provide compliance with the DDA. In doing so, it attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Right Commission is the governing body who control and enforce DDA compliance.

Since the 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

7.2 Universal Design

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximized, without adding on specialized 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1:Equitable Use

- Principle 2:Flexibility in Use
- Principle 3: Simple and Intuitive Use
- Principle 4:Perceptible Information
- Principle 5:Tolerance for Error
- Principle 6:Low Physical Effort
- Principle 7:Size and Space for Approach and use

7.3 Standards & Regulations

The statutory and regulatory guidelines that will be encompassed in the design to ensure effective, appropriate and safe use by all people including those with disabilities will be in accordance with:

- Federal Disability Discrimination Act (DDA);
- Disability (Access to Premises – Buildings) Standards 2010;
- Building Code of Australia (BCA) Part D3, F2, E3;
- AS 1428.1:2009 - (General Requirement of Access);
- AS 1428.4.1:2009 - (Tactile Ground Surface Indicators);
- AS 2890.6:2009 - (Parking for People with Disabilities);
- AS 1735.12:1999 - (Lift Facilities for Persons with Disabilities);

Please note that there are also additional advisory standards (not currently referenced by BCA or DDA Premises Standards) as well as other relevant guidelines that will be considered, as relevant to promote equity and dignity in line with over-arching DDA principles and aspirational objectives. These include:

- Universal Design Principles;
- Human Rights Commission (HEREOC)
- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture;
- AS1428.2:1992 Enhanced and Additional requirements;
- AS1428.4.1 Draft Way-finding Standard;
- AS3745:2010 – Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance)

8. Assessment and findings

Results of the technical assessment.

8.1 Emergancy Egress

BCA 2016 Part D2.17 has requirements for all fire-isolated egress stairs from areas required to be accessible (not communication stairs) to include at least one continuous handrail designed to be compliant with AS1428.1 Clause 12. Provision of an off-set tread at the base of stair flights or an extended mid-landing that will allow a 300mm extension clear of egress route is considered appropriate for achieving a consistent height handrail (without vertical or raked sections). Such an off-set tread configuration has been shown at the majority of stairs and would appear to be possible elsewhere, subject to further detail design.

Where fire-isolated egress stairs will also be used for communication stair purposes between levels, they should be designed to meet AS1428.1:2009. Confirmation is required on the likely use of certain stairs for this purpose.

There is currently no mandatory requirement within BCA or DDA Premises Standards for provision of independent accessible egress for people with a disability in accordance AS1428.1 and this remains an important DDA issue. Consideration of an accessible egress strategy with emergency evacuation plan will be needed as a minimum starting point.

Consideration of waiting spaces within fire-stairs should be strongly considered for people with mobility impairment. The current configuration of stairs suggests the spatial requirements would not be incorporated without layout amendments, but if provided with future design development these would generally require:

- 850mm min. clear width egress door and 510mm min. external door circulation area, compliant with AS1428.1:2009.
- Wheelchair space (800mm W x 1300mm L min. dimensions) within fire-isolated stair, outside of the required egress path, that can be accessed on a continuous path of travel.
- Alternative evacuation means eg. emergency passenger lift/s could be provided instead of/or only in addition to ‘waiting spaces’ in line with ABCB Handbook and/or consideration of stair evacuation devices (with appropriate storage and staff training) within fire stairs.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

8.2 Paths of travel

The BCA and DDA Premises Standards contain requirements for circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair passing bays (1800mm width x 2000 length) are also required when a direct line of sight is not available and are to be provided at 20m max. intervals along access-ways.
- Turning spaces (at least 1540mm W x 2070mm L) are required within 2m of every corridor end and at 20m.max intervals along all access-ways. This is needed for wheelchairs to make a 180 degree turn, compliant with AS1428.1:2009.
- All common-use doors (ie. not excluded under Part D3.4) to have 850mm min. clear width opening (each active door leaf) and suitable door circulation area, compliant with AS1428.1:2009.
- All common-use corridors and accessible paths of travel to be at least 1000mm min. width when travelling in linear direction Note: Increased clear width paths of travel required for doorway circulation, turning areas etc.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

8.3 Passenger Lifts

The BCA and DDA Premises Standards contain requirements for passenger lifts and circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Passenger lifts to have min. internal size at floor of 1400mm width x 1600mm depth, compliant with BCA/DDA Access Code Part E3.6 and AS1735.12.
- All lift lobbies and main corridors on each level to have 1800mm min. clear width to allow two wheelchairs ability to space pass each other.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

8.4 Sanitary Facilities

The BCA and DDA Premises Standards contain requirements for sanitary facilities suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- For Class 5, 6, 7a: Provide at least 1 unisex accessible toilet, adjacent to every bank of toilets (where provided) on each storey, compliant with AS1428.1 under BCA/DDA Access Code part F2.4. If more than 1 toilet bank provided on each level, accessible toilet is required at 50% min. of toilet banks at each level.
- An even number of left hand (LH) and right hand (RH) transfer WC pans (accessible toilets) is required within the building. Alternating LH/RH layouts on each subsequent level is the most appropriate and inclusive approach.
- Accessible WC requires 2300mm x 1900mm around the pan with the basin to sit outside this area in accordance with AS1428.1.
- An ambulant cubicle is required within every standard toilet bank adjacent to an accessible toilet under DDA Access Code Part F2.4 compliant with AS1428.1:2009.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

8.5 Common Areas

The BCA and DDA Premises Standards contain requirements for common use areas suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- Accessibility is required to all common use areas.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

8.6 Car Parking

- Class 5 commercial, 9b development: Provide 1 accessible car bay for every 100 car bays or part thereof, compliant with AS2890.6.
- Class 6 retail development: Provide 1 accessible car bay for every 50 car bays or part thereof, compliant with AS2890.6.

- Accessible car bays require 2.4 metre with 2.4 metre shared area.
- All accessible car bays to be located near relevant lifts and/or associated building entry points to minimise distance to relevant lift and ensure accessible path of travel between these areas.
- Ensure 2.5m min. height clearance, compliant with AS2890.6 fig 2.7 over accessible car bays with 2.2 m min. vertical clearance leading to the accessible and adaptable unit car bays (Note: consideration for 2.3 or 2.4m min. height preferred for higher vans/adapted vehicles is recommended as good practice).

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements. On the basis of the current level of detail all access requirements appear capable of achieving compliance.

Further work will be required during design development stage to ensure appropriate outcomes are achieved.

9. Mitigation measures

The design development shall keep to the assessment parameters as detailed in section 8.

The following issues and measures will form the design at DA stage and be carried through into the design development stage.

10. Conclusion

MGAC has assessed the proposed scheme for Waterloo Metro Quarter Development Basement level. The proposed drawings indicate that accessibility requirements, pertaining to external site linkages, building access, common area access and sanitary facilities can be readily achieved. It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in building design and external domain design.

WATERLOO METRO QUARTER DEVELOPMENT BASEMENT

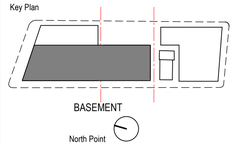
BASEMENT DA DRAWING LIST - SSD10438

SHEET NUMBER	SHEET NAME	SHEET ISSUE DATE	REVISION
WMQ-BMNT-WBG-AR-DRG-DA0001	COVER SHEET	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0090	BASEMENT - FLOOR PLAN LEVEL 00	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0091	BASEMENT - FLOOR PLAN LEVEL P1	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0092	BASEMENT - FLOOR PLAN LEVEL P2	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0101	BASEMENT - LONGITUDINAL SECTION 01	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0102	BASEMENT - CROSS SECTION 01	31/07/20	B
WMQ-BMNT-WBG-AR-DRG-DA0103	BASEMENT - CROSS SECTION 02	31/07/20	B
WMQ-BLD1-WBG-AR-DRG-DA0121	BASEMENT - DEEP PLANTER SECTION 01	31/07/20	B
WMQ-BLD1-WBG-AR-DRG-DA0122	BASEMENT - DEEP PLANTER SECTION 02	31/07/20	B
WMQ-BLD1-WBG-AR-DRG-DA0190	BASEMENT - AREA PLAN 01	31/07/20	B

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan



Client

Waterloo Integrated Station Development
A Joint Venture Project
JOHN HOLLAND
mirvac

NSW GOVERNMENT
sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number
121234

Size check
25mm

Checked
DH

Approved
PM

Sheet size
A1

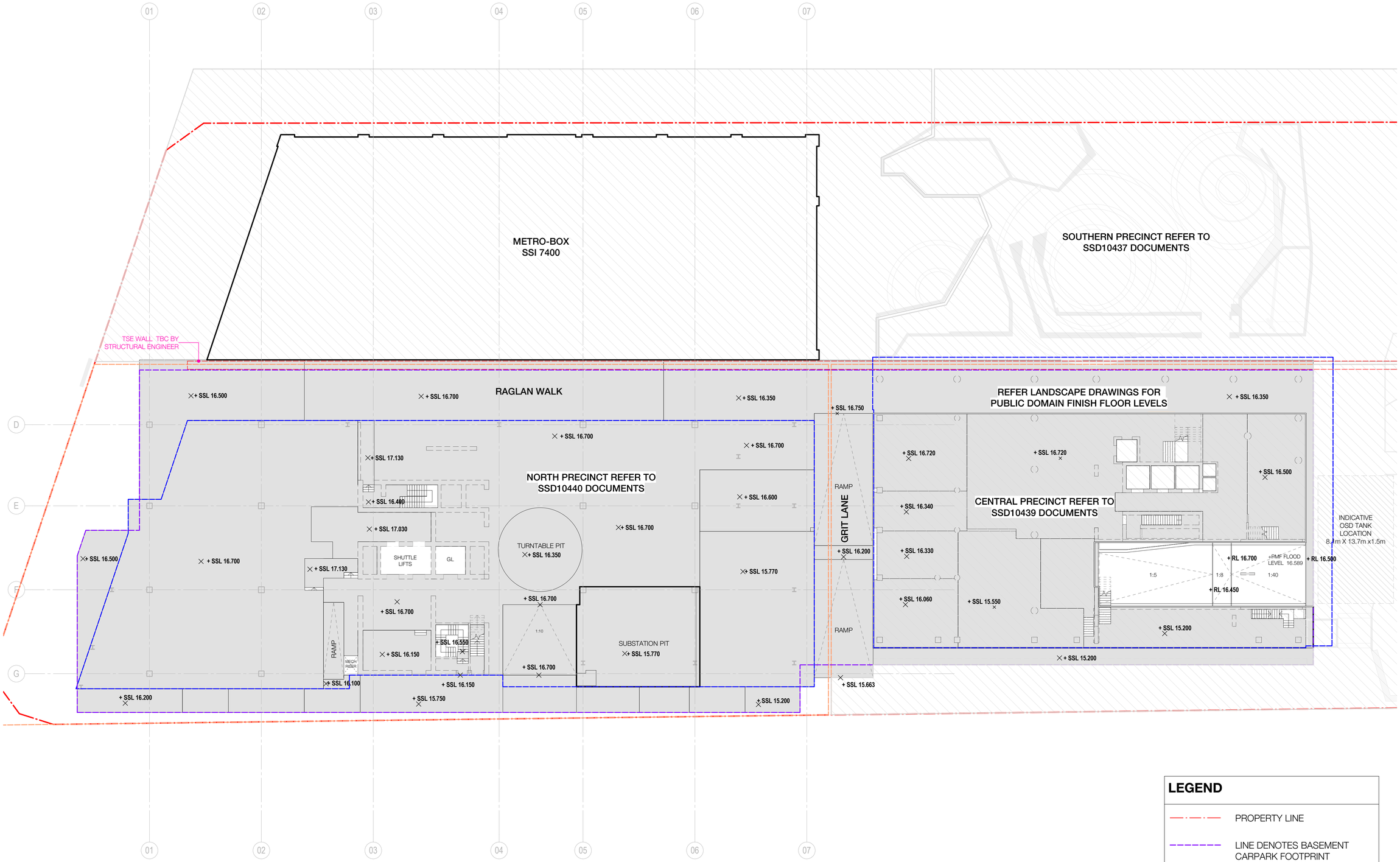
Scale

Sheet title
SSD10438
COVER SHEET

Status
FOR APPROVAL

Sheet number
WMQ-BMNT-WBG-AR-DRG-DA0001

Revision
B



1 LEVEL GROUND BMNT
SCALE 1 : 200

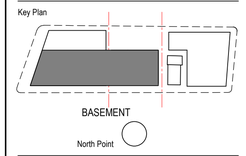
LEGEND

- PROPERTY LINE
- LINE DENOTES BASEMENT CARPARK FOOTPRINT
- LINE DENOTES BUILDING FOOTPRINT
- INDICATIVE TSE WALL
- SSD DA PRECINCT BOUNDARY
- NOT IN SCOPE

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan



BASEMENT

North Point

Client

Waterloo Integrated Station Development
A Joint Venture Project
JOHN HOLLAND
mirvac

NSW GOVERNMENT
sydney METRO

Consultant

WOODS BAGOT

Project
WATERLOO METRO QUARTER DEVELOPMENT

Project number		Size check
121234		25mm
Checked	**Approved**	**Sheet size** / **Scale**
DH	PM	A1 / 1 : 200

Sheet title
SSD10438
BASEMENT - FLOOR PLAN LEVEL 00

Status
FOR APPROVAL

Sheet number
WMQ-BMNT-WBG-AR-DRG-DA0090 B

Revision

1 LEVEL P1 BMNT
SCALE 1 : 200

PARKING ALLOCATION

P1

Affordable Housing	11
Affordable Housing - DDA	1
Car Wash	1
Care Share	4
Childcare	1
Church	2
Commercial	10
Commercial - Small	1
Metro	2
Residential	18
Service	5

Social Housing	6
Social Housing - DDA	2
Visitor - DDA	2
P1: 66	66

P2

Commercial	46
Commercial - DDA	2
Commercial - Small	4
Residential	29
Residential DDA	8
P2: 89	89
Grand total: 155	155

MOTORCYCLE SPACES

P1

Motorbike - Commercial	3
Motorbike - Resi	5
P1: 8	8

P2

Motorbike - Commercial	3
Motorbike - Resi	2
P2: 5	5
Grand total: 13	13

BICYCLE SPACES

LEVEL	COMMERCIAL (END OF TRIP)	RESIDENTIAL (LOCKER)	RETAIL & CHILDCARE
P1 -	236	65	14
P2 -			
TOTAL	236	65	14

STORAGE ALLOCATION

RESIDENTIAL/ BICYCLE STORAGE

P1

Storage	78
P1: 78	
Grand total: 150	

P2

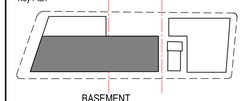
Storage	72
P2: 72	

Date generated 28/07/2020 1:21:27 PM BIM 360://Sydney Metro - Waterloo Station/WMQ-BLD1-WBG-AR-MDL-0001-RVT-R20.rvt

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan



BASEMENT

North Point

Client

Waterloo Integrated Station Development
A Joint Venture Project
JOHN HOLLAND mirvac

NSW GOVERNMENT sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number 121234

Size check 25mm

Checked DH | Approved PM | Sheet size A1 | Scale As indicated

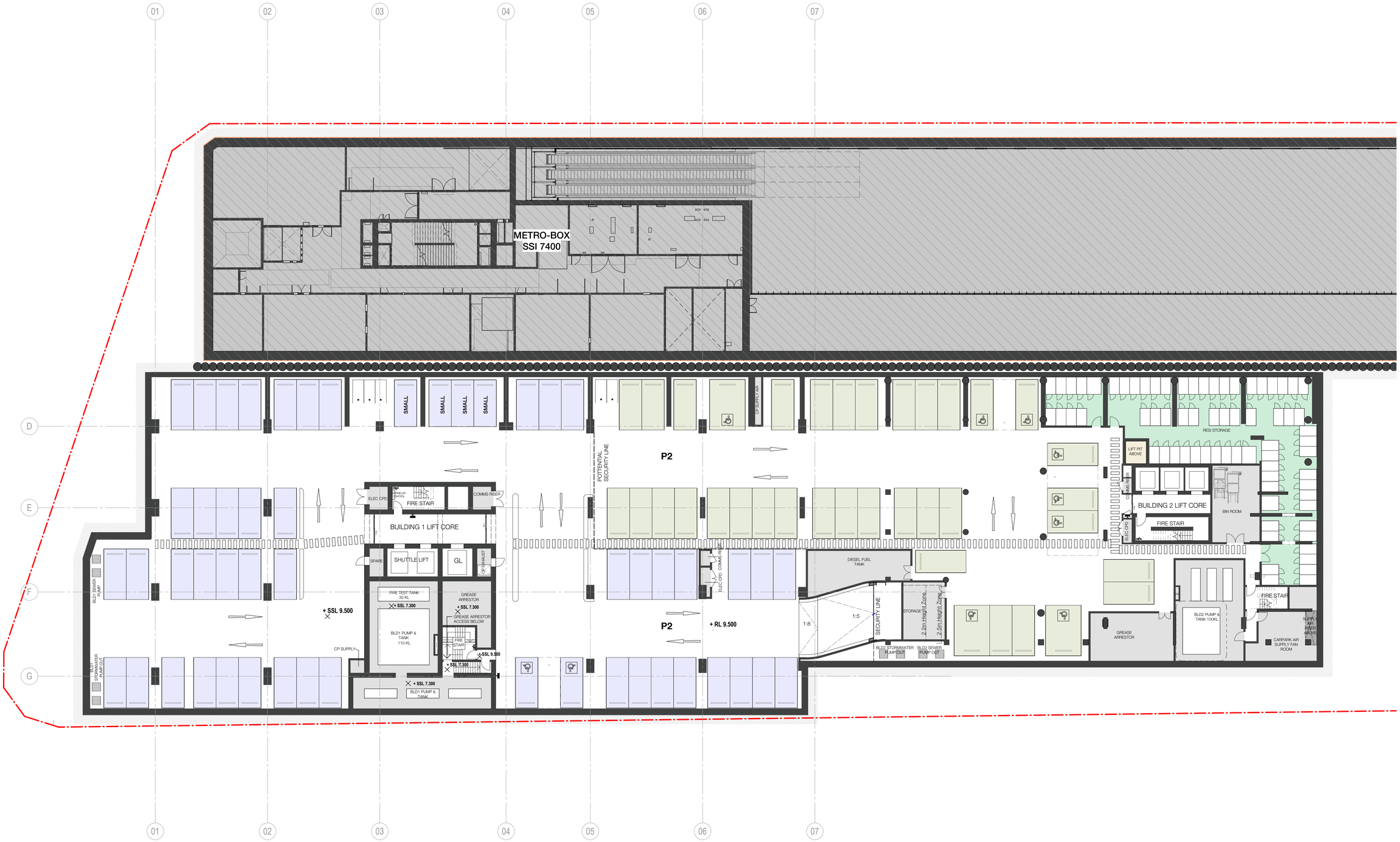
Sheet title

SSD10438
BASEMENT - FLOOR PLAN LEVEL P1

Status

FOR APPROVAL

Sheet number **WMQ-BMNT-WBG-AR-DRG-DA0091** Revision B



1 LEVEL P2 BMNT
SCALE 1 : 200

PARKING ALLOCATION

P1	
Affordable Housing	11
Affordable Housing - DDA	1
Car Wash	1
Care Share	4
Childcare	1
Church	2
Commercial	10
Commercial - Small	1
Metro	2
Residential	18
Service	5

Social Housing	6
Social Housing - DDA	2
Visitor - DDA	2
P1: 66	66

P2	
Commercial	46
Commercial - DDA	2
Commercial - Small	4
Residential	29
Residential DDA	8
P2: 89	89
Grand total: 155	155

MOTORCYCLE SPACES

P1

Motorbike - Commercial	3
Motorbike - Resi	5
P1: 8	8

P2

Motorbike - Commercial	3
Motorbike - Resi	2
P2: 5	5
Grand total: 13	13

BICYCLE SPACES

LEVEL	COMMERCIAL (END OF TRIP)	RESIDENTIAL (LOCKER)	RETAIL & CHILDCARE
P1 -	236	65	14
P2 -			
TOTAL	236	65	14

STORAGE ALLOCATION

RESIDENTIAL/ BICYCLE STORAGE

P1	
Storage	78
P1: 78	
Grand total: 150	

P2	
Storage	72
P2: 72	

Date generated 28/07/2020 1:22:15 PM BIM 360://Sydney Metro - Waterloo Station/WMQ-BLD1-WBG-AR-MDL-0001-RVT-R20.rvt

Recent revision history

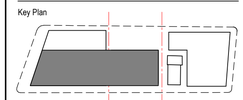
#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Notes

Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

Key Plan



BASEMENT

North Point

Client

Waterloo Integrated Station Development
A Joint Venture Project
JOHN HOLLAND mirvac

NSW GOVERNMENT sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number 121234

Size check 25mm

Checked DH | Approved PM | Sheet size A1 | Scale As indicated

Sheet title

SSD10438
BASEMENT - FLOOR PLAN LEVEL P2

Status

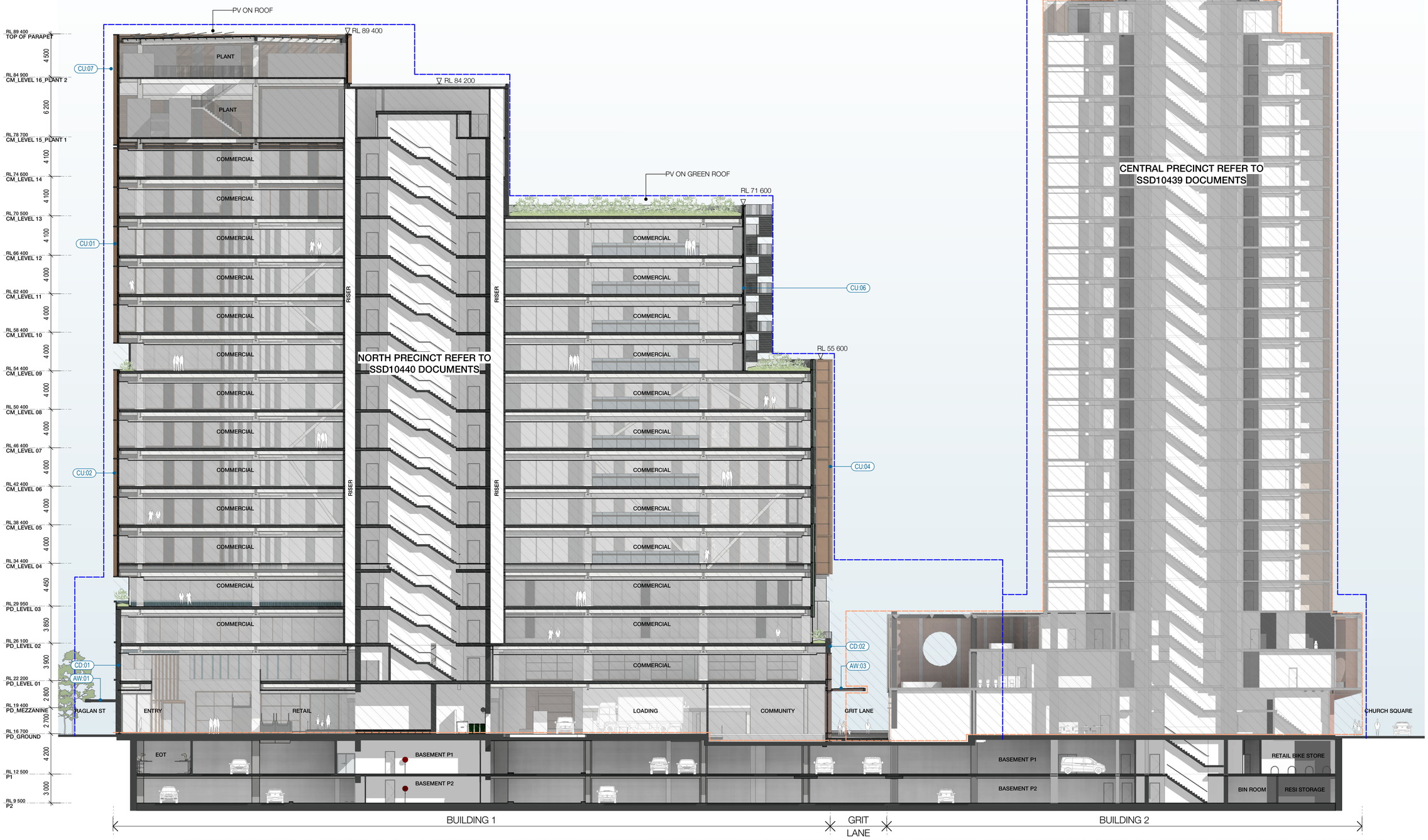
FOR APPROVAL

Sheet number **WMQ-BMNT-WBG-AR-DRG-DA0092** Revision B

LEGEND

- PROPERTY LINE
- PLANNING ENVELOPE PROFILE
- SSD DA PRECINCT BOUNDARY

01 02 03 04 05 06 07



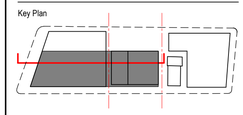
1 LONGITUDINAL SECTION 1
SCALE 1 : 200

Date generated 28/07/2020 1:25:56 PM BIM 360://Sydney Metro - Waterloo Station/WMQ-BLD1-WBG-AR-MDL-0001-RVT-R20.rvt

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan



North Point

Client

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JOHN HOLLAND mirvac

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Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
DH	PM	A1	1 : 200

Sheet title

SSD10438
BASEMENT - LONGITUDINAL SECTION 01

Status

FOR APPROVAL

Sheet number: **WMQ-BMNT-WBG-AR-DRG-DA0101** Revision: B

1 CROSS SECTION 1
SCALE 1 : 200

LEGEND

- PROPERTY LINE
- PLANNING ENVELOPE PROFILE
- SSD DA PRECINCT BOUNDARY

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan

North Point

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JOHN HOLLAND
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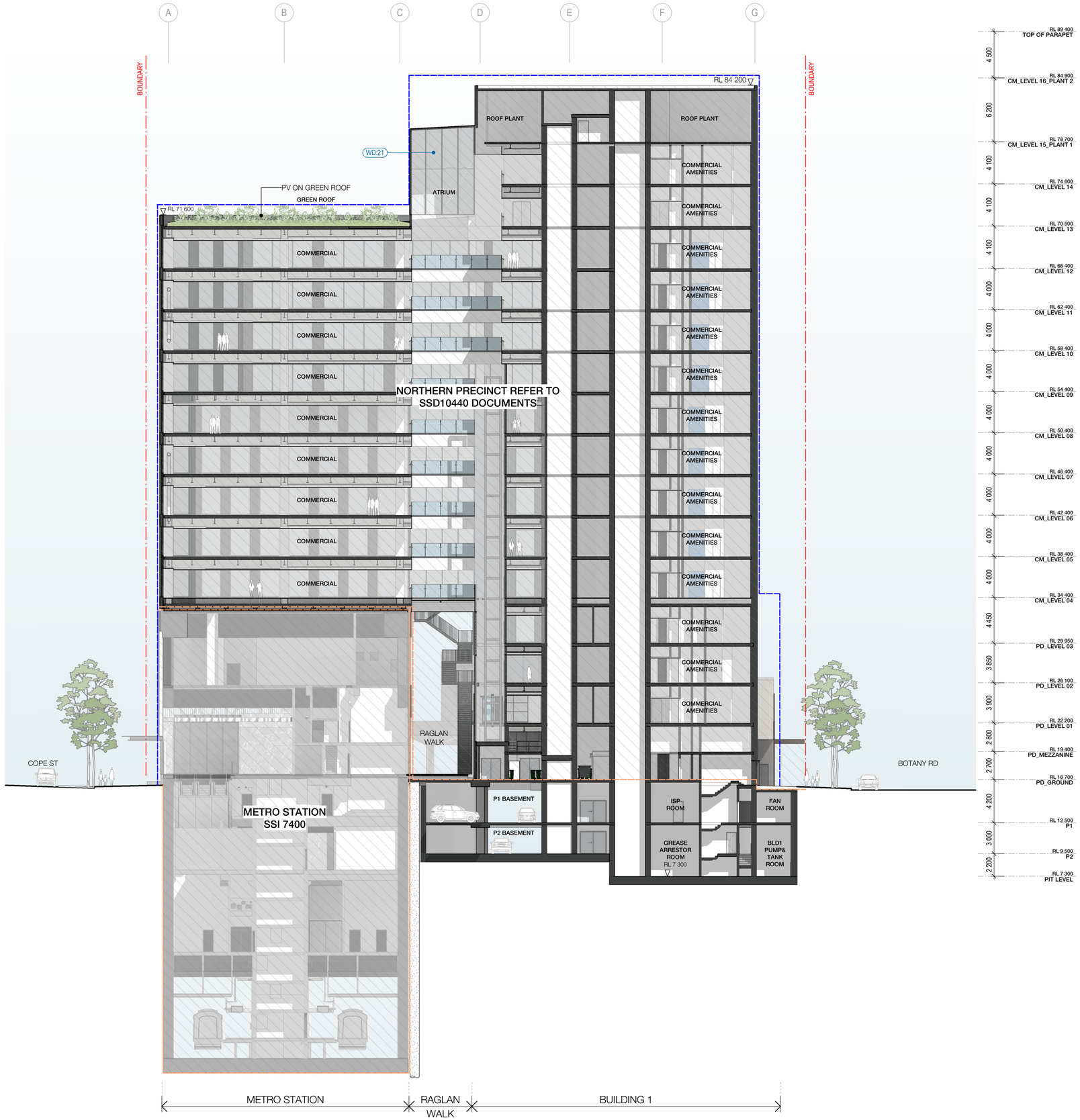
Project
WATERLOO METRO QUARTER DEVELOPMENT

Project number 121234
Size check 25mm
Checked DH
Approved PM
Sheet size A1
Scale 1 : 200

Sheet title
SSD10438
BASEMENT - CROSS SECTION 01

Status
FOR APPROVAL

Sheet number **WMQ-BMNT-WBG-AR-DRG-DA0102** Revision B



1 CROSS SECTION 2
SCALE 1 : 200

LEGEND

- PROPERTY LINE
- PLANNING ENVELOPE PROFILE
- SSD DA PRECINCT BOUNDARY

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan

North Point

Client

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WOODS BAGOT

Project
WATERLOO METRO QUARTER DEVELOPMENT

Project number
121234

Size check
25mm

Checked
DH

Approved
PM

Sheet size
A1

Scale
1 : 200

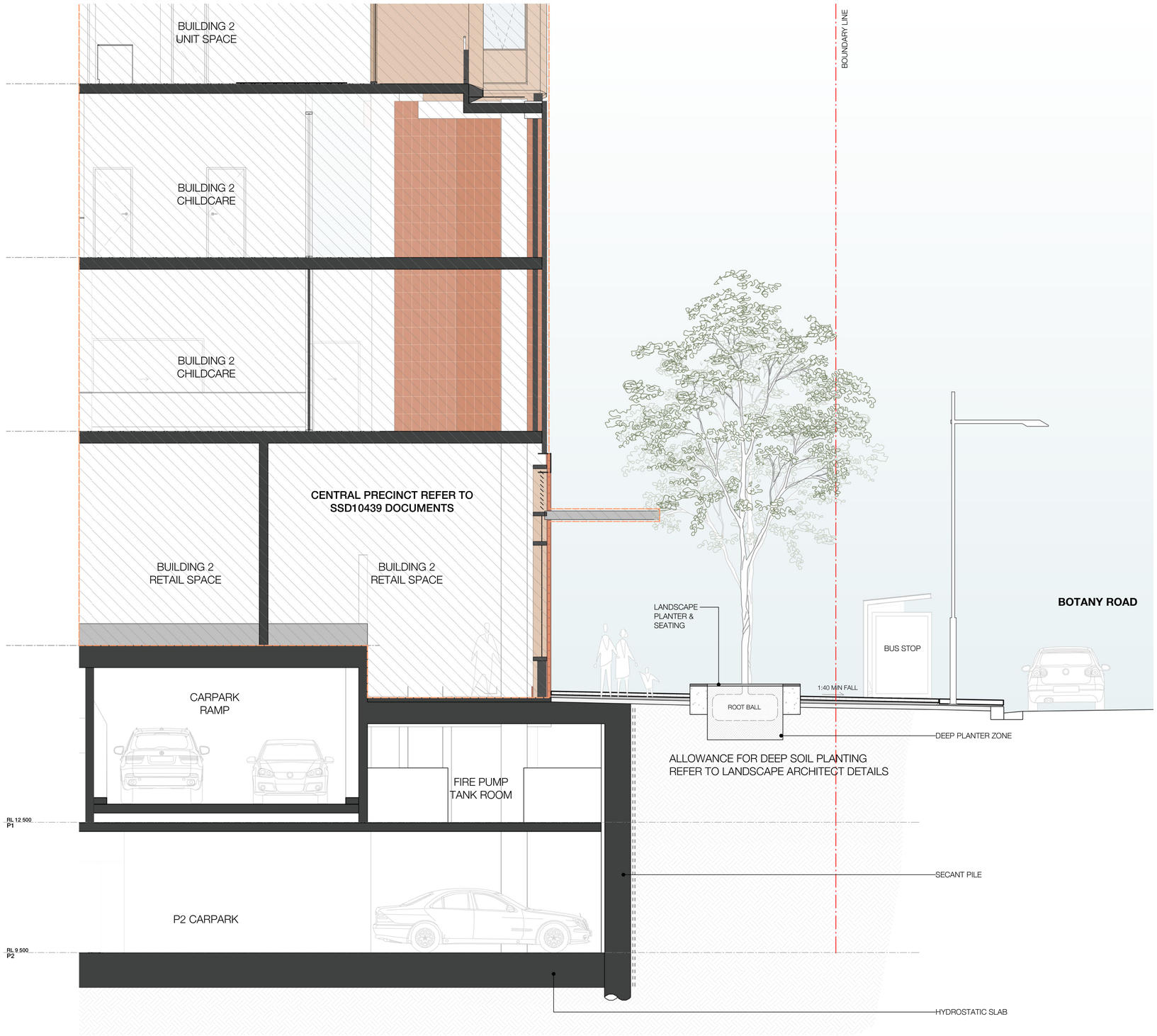
Sheet title
SSD10438
BASEMENT - CROSS SECTION 02

Status
FOR APPROVAL

Sheet number
WMQ-BMNT-WBG-AR-DRG-DA0103 B

Revision

Date generated 28/07/2020 1:31:11 PM BIM 360://Sydney Metro - Waterloo Station/WMQ-BLD1-WBG-AR-MDL-0001-RVT-R20.rvt



1 SECTION BLD2 - DEEP PLANTER
SCALE 1 : 50

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan

North Point

Client

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sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
DH	PM	A1	1 : 50

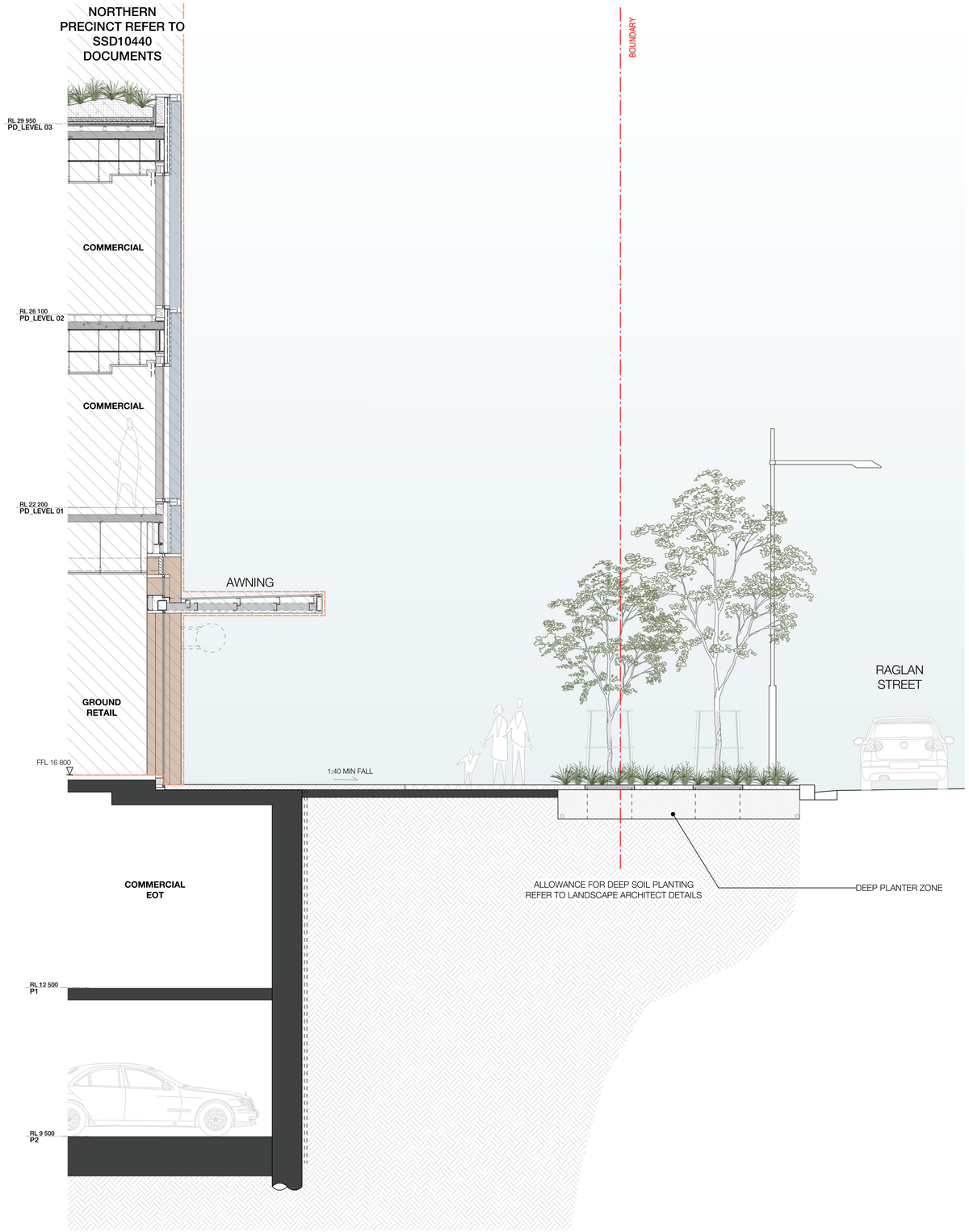
Sheet title

SSD10438
BASEMENT - DEEP PLANTER
SECTION 01

Status

FOR APPROVAL

Sheet number **WMQ-BMNT-WBG-AR-DRG-DA0121** Revision B

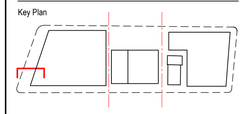


1 SECTION - RAGLAN ST DEEP PLANTER
SCALE 1 : 50

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Key Plan



North Point

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JOHN HOLLAND
mirvac

NSW GOVERNMENT
sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
DH	PM	A1	1 : 50

Sheet title

SSD10438
BASEMENT - DEEP PLANTER
SECTION 02

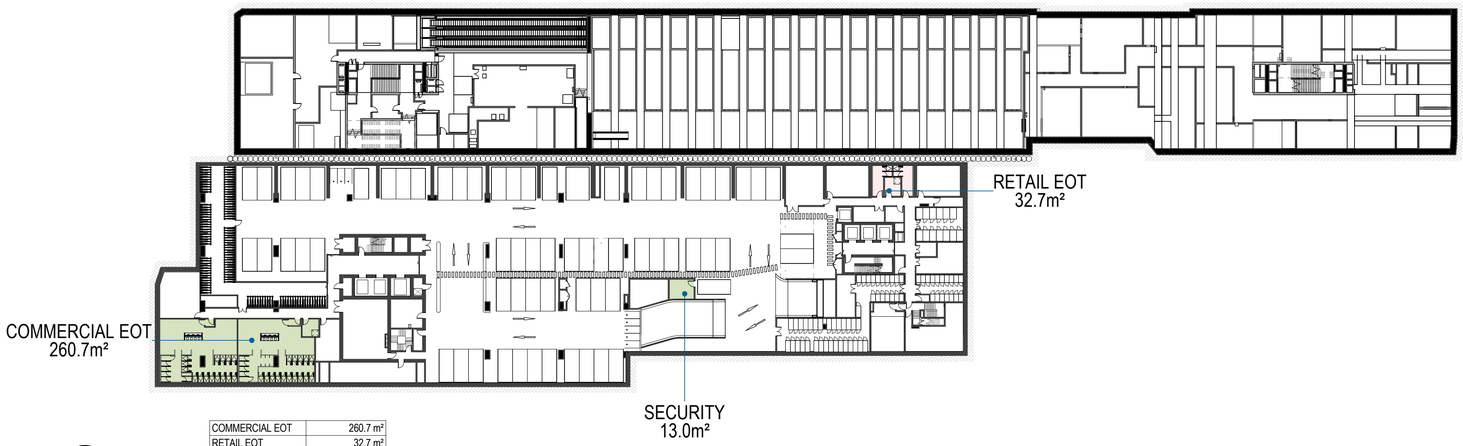
Status

FOR APPROVAL

Sheet number

WMQ-BMNT-WBG-AR-DRG-DA0122 B

Revision



COMMERCIAL EOT	260.7 m²
RETAIL EOT	32.7 m²
SECURITY	13.0 m²
	306.3 m²

1 P1- GFA_DA
SCALE 1 : 500

Recent revision history

#	Status	Description	Date
A		FOR INFORMATION (DA)	15.07.20
B		FOR APPROVAL	31.07.20

Notes

Contractor must verify all dimensions on site before commencing work or preparing shop drawings.

Do not scale drawings.

THE DEFINITION FOR GROSS FLOOR AREA IS SET OUT IN **SYDNEY LEP 2012** AS:

GROSS FLOOR AREA MEANS THE SUM OF THE FLOOR AREA OF EACH FLOOR OF A BUILDING MEASURED FROM THE INTERNAL FACE OF EXTERNAL WALLS, OR FROM THE INTERNAL FACE OF WALLS SEPARATING THE BUILDING FROM ANY OTHER BUILDING, MEASURED AT A HEIGHT OF 1.4 METRES ABOVE THE FLOOR, AND INCLUDES:

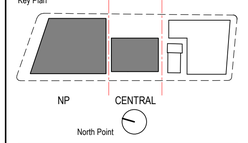
a) THE AREA OF A MEZZANINE, AND
b) HABITABLE ROOMS IN A BASEMENT OR AN ATTIC, AND
c) ANY SHOP, AUDITORIUM, CINEMA, AND THE LIKE, IN A BASEMENT OR AN ATTIC,

BUT EXCLUDES:

d) ANY AREA OF COMMON VERTICAL CIRCULATION, SUCH AS LIFTS AND STAIRS, AND
e) ANY BASEMENT:
  i) STORAGE, AND
  ii) VEHICULAR ACCESS, LOADING AREAS, GARBAGE AND SERVICES, AND
f) PLANT ROOMS, LIFT TOWERS AND OTHER AREAS USED EXCLUSIVELY FOR MECHANICAL SERVICES OR DUCTING, AND
g) CAR PARKING TO MEET ANY REQUIREMENTS OF THE CONSENT AUTHORITY (INCLUDING ACCESS TO THE CAR PARK), AND
h) ANY SPACED USED FOR THE LOADING OR UNLOADING OF GOODS (INCLUDING ACCESS TO IT), AND
i) TERRACES AND BALCONIES WITH OUTER WALLS LESS THAN 1.4 METRES HIGH, AND
j) VOIDS ABOVE A FLOOR AT THE LEVEL OF A STOREY OR STOREY ABOVE

NOTE: GBA, GUA & GEA HAVE BEEN MEASURE USING WMQ METHOD OF MEASUREMENT 2019 VERSION 2.

Key Plan



Client

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A Joint Venture Project
JOHN HOLLAND
mirvac

NSW GOVERNMENT
sydney METRO

Consultant

WOODS BAGOT

Project

WATERLOO METRO QUARTER DEVELOPMENT

Project number	Size check
121234	25mm

Checked	Approved	Sheet size	Scale
DH	PM	A1	As indicated

Sheet title

SSD10438
BASEMENT - AREA PLAN 01

Status

FOR APPROVAL

Sheet number **WMQ-BMNT-WBG-AR-DRG-DA0190** Revision B