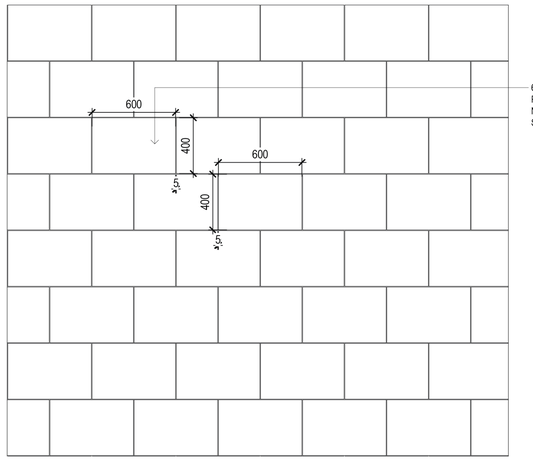
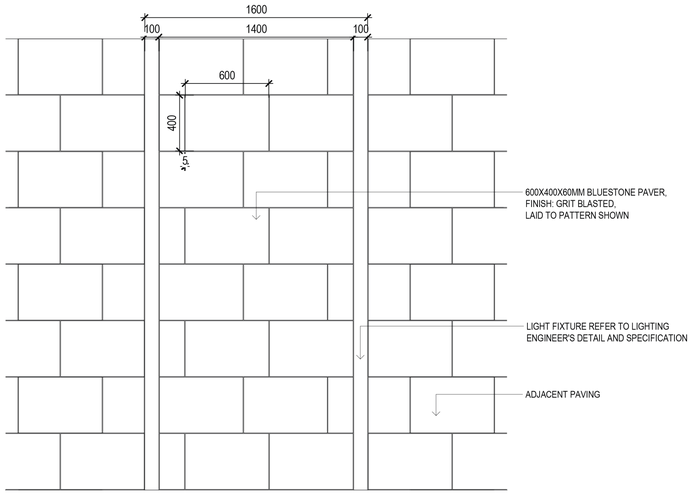
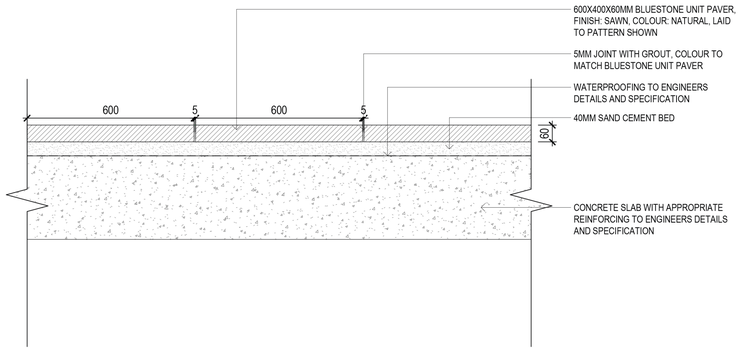


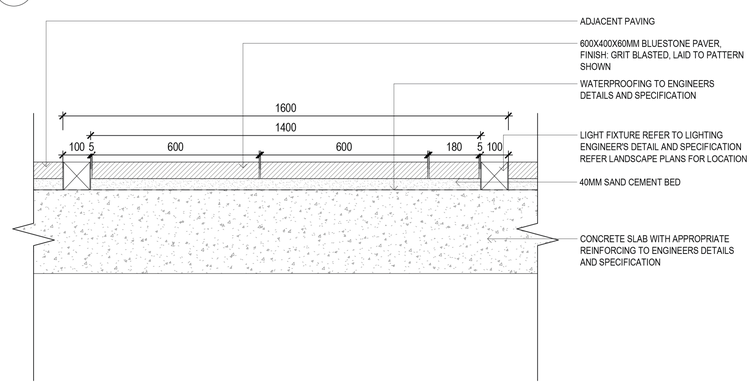
1 PAVING TYPE 1 - PLAN
1 : 20



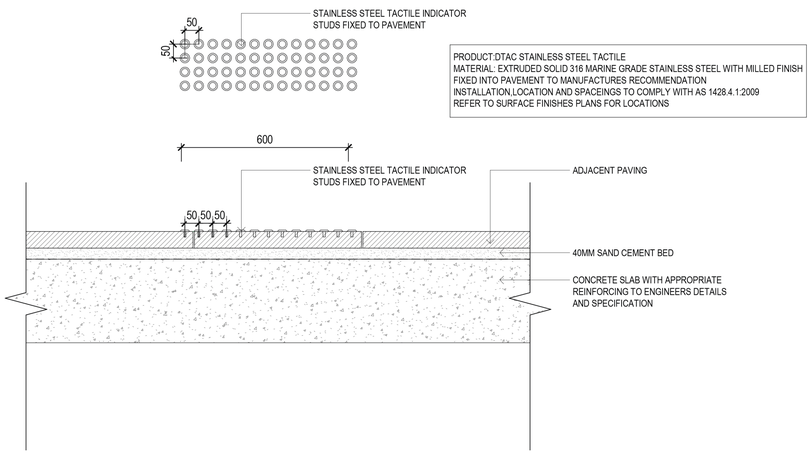
2 PAVING TYPE 2 - PLAN
1 : 20



3 PAVING TYPE 1 - DETAIL
1 : 10



4 PAVING TYPE 2- DETAIL
1 : 10



5 TACTILE INDICATOR - DETAIL
1 : 10

place design group.

SYDNEY
UNIT 3B
830-832 Elizabeth Street
Waterloo NSW 2017
T + 61 2 9290 3300

© Place Design Group Pty Ltd A.C.N. 082 370 063

All information displayed, transmitted or carried within this drawing is protected by Copyright and Intellectual Property laws.
The information contained in this document is confidential.
Recipients of this document are prohibited from disclosing the information herein to any person without the written consent of Place Design Group.
Annotated dimensions take precedence over any measures of scale.
Verify all dimensions on site prior to construction.
This drawing may display with permission a combination of specialist and other consultant(s) input and linework.
Nominated specialist and consultant information contained within this document is referenced from their supplied documentation and is contained in this document as indicative only and not for construction or certification purposes.

PROJECT
42-60 Railway Parade

CLIENT
Holdmark Property Group

NOTES

ALL MEMBER SIZES, CONNECTIONS, FOOTINGS ETC ARE TO BE CONFIRMED BY AN ENGINEER. SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED. CONTRACTOR IS TO PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE COMMENCING CONSTRUCTION.

ALL WATER PROOF MEMBRANES, HYDRAULIC FITTINGS, ELECTRICAL / LIGHTING FITTINGS AND REINFORCED CONCRETE STRUCTURES ETC TO ENGINEERS, ARCHITECTS, HYDRAULIC ENGINEERS, ELECTRICAL ENGINEERS DETAILS AND SPECIFICATIONS.
SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED

FOR APPROVAL

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
A	CON	STAGE 1 TENDER	RW	TF	20/02/25
B	CON	CC2 ISSUE	RW	TF	24/04/25
C	CON	S455 ISSUE	RW	TF	27/06/25

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

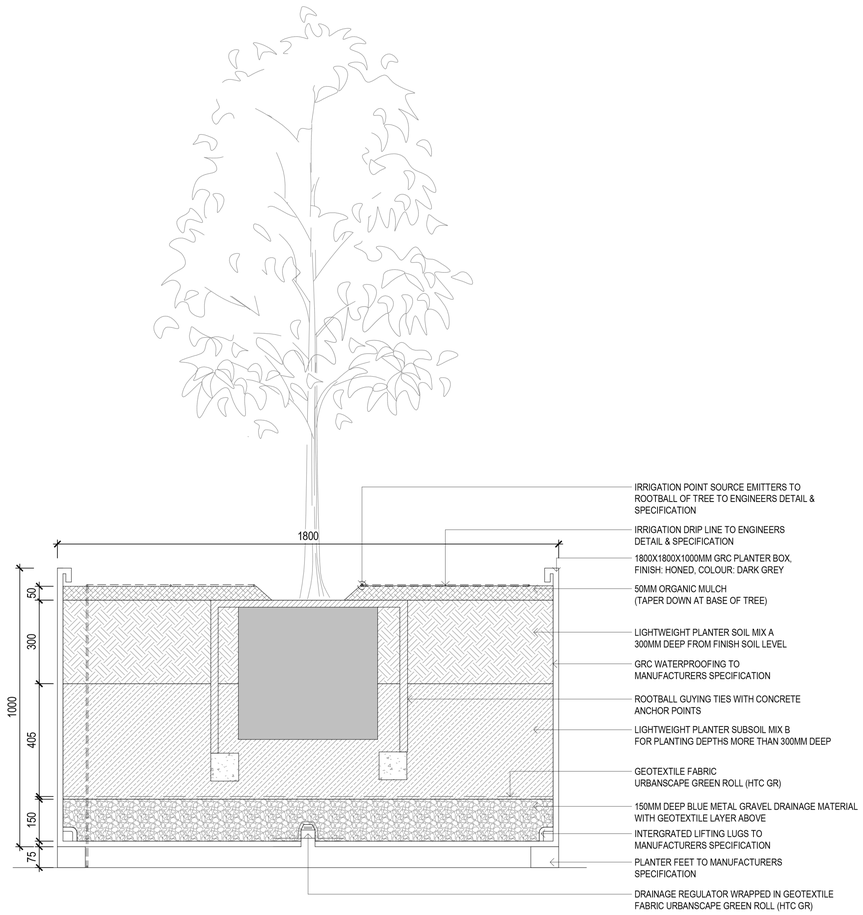
DRAWING TITLE
PAVING DETAILS

DESIGN : TF
DOCUMENT : BP
PROJECT : 2523061

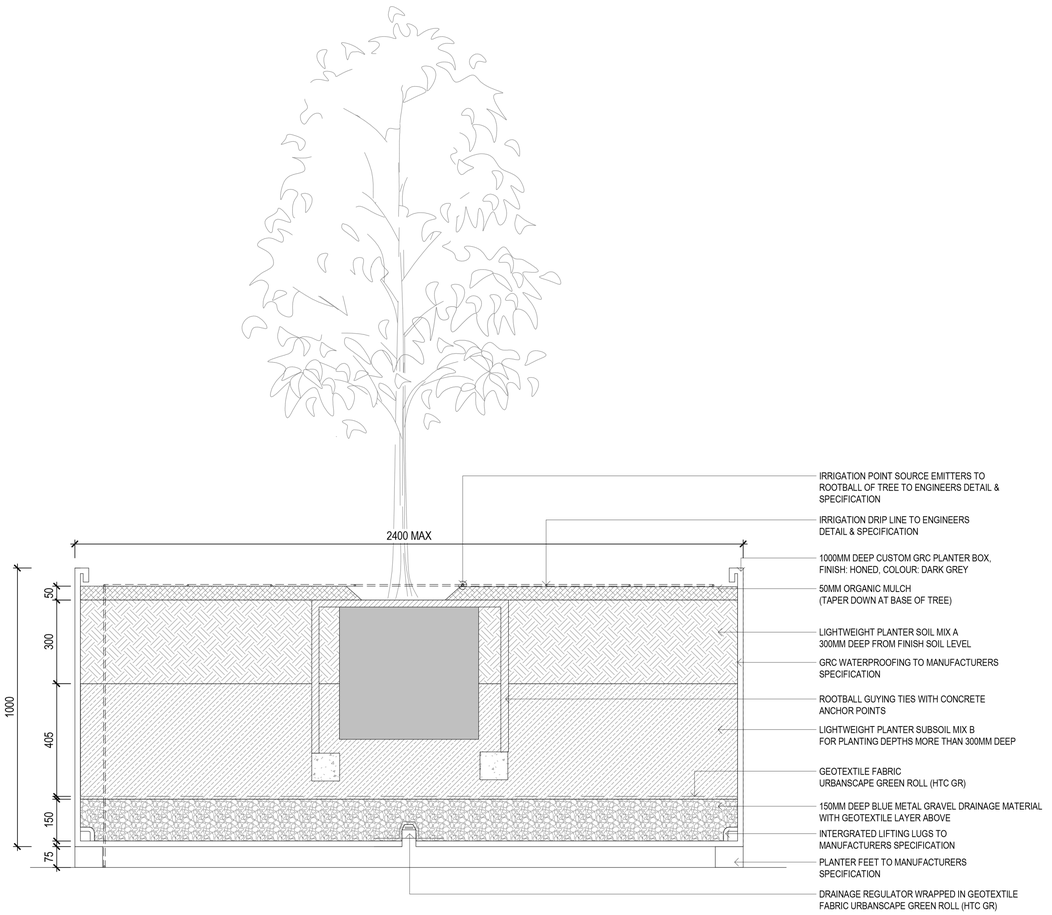
NORTH

1 2 3 4 5 metres
SCALE: As indicated @ A1

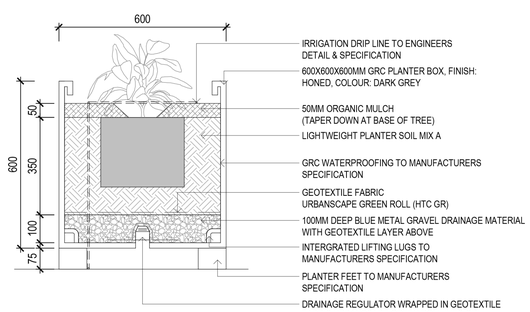
DRAWING NUMBER 2523061-L00-AA901
REVISION C



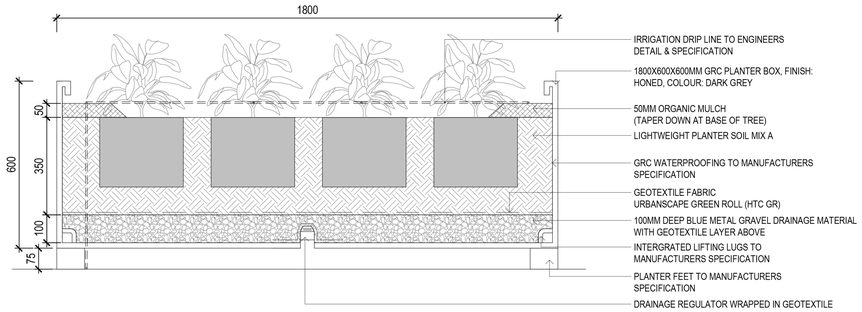
1 PLANTER BOX SQUARE - TYPICAL DETAIL (PL1)
1 : 10



2 PLANTER BOX TROUGH - TYPICAL DETAIL (PL2)
1 : 10



3 PLANTER BOX CUBE - TYPICAL DETAIL
1 : 10



4 PLANTER BOX MODULAR - TYPICAL DETAIL
1 : 10

place design group.

SYDNEY
UNIT 3B
830-832 Elizabeth Street
Waterloo NSW 2017
T + 61 2 9290 3300

© Place Design Group Pty Ltd A.C.N. 082 370 063

All information displayed, transmitted or carried within this drawing is protected by Copyright and Intellectual Property laws.
The information contained in this document is confidential.
Recipients of this document are prohibited from disclosing the information herein to any person without the written consent of Place Design Group.
Annotated dimensions take precedence over any measures of scale.
Verify all dimensions on site prior to construction.
This drawing may display with permission a combination of specialist and other consultant(s) input and linework.
Nominated specialist and consultant information contained within this document is referenced from their supplied documentation and is contained in this document as indicative only and not for construction or certification purposes.

PROJECT
42-60 Railway Parade

CLIENT
Holdmark Property Group

NOTES

ALL MEMBER SIZES, CONNECTIONS, FOOTINGS ETC ARE TO BE CONFIRMED BY AN ENGINEER. SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED. CONTRACTOR IS TO PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE COMMENCING CONSTRUCTION.

ALL WATER PROOF MEMBRANES, HYDRAULIC FITTINGS, ELECTRICAL / LIGHTING FITTINGS AND REINFORCED CONCRETE STRUCTURES ETC TO ENGINEERS, ARCHITECTS, HYDRAULIC ENGINEERS, ELECTRICAL ENGINEERS DETAILS AND SPECIFICATIONS.
SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED

FOR APPROVAL

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
A	CON	STAGE 1 TENDER	RW	TF	20/02/25
B	CON	OC2 ISSUE	RW	TF	24/04/25
C	CON	S455 ISSUE	RW	TF	27/06/25

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

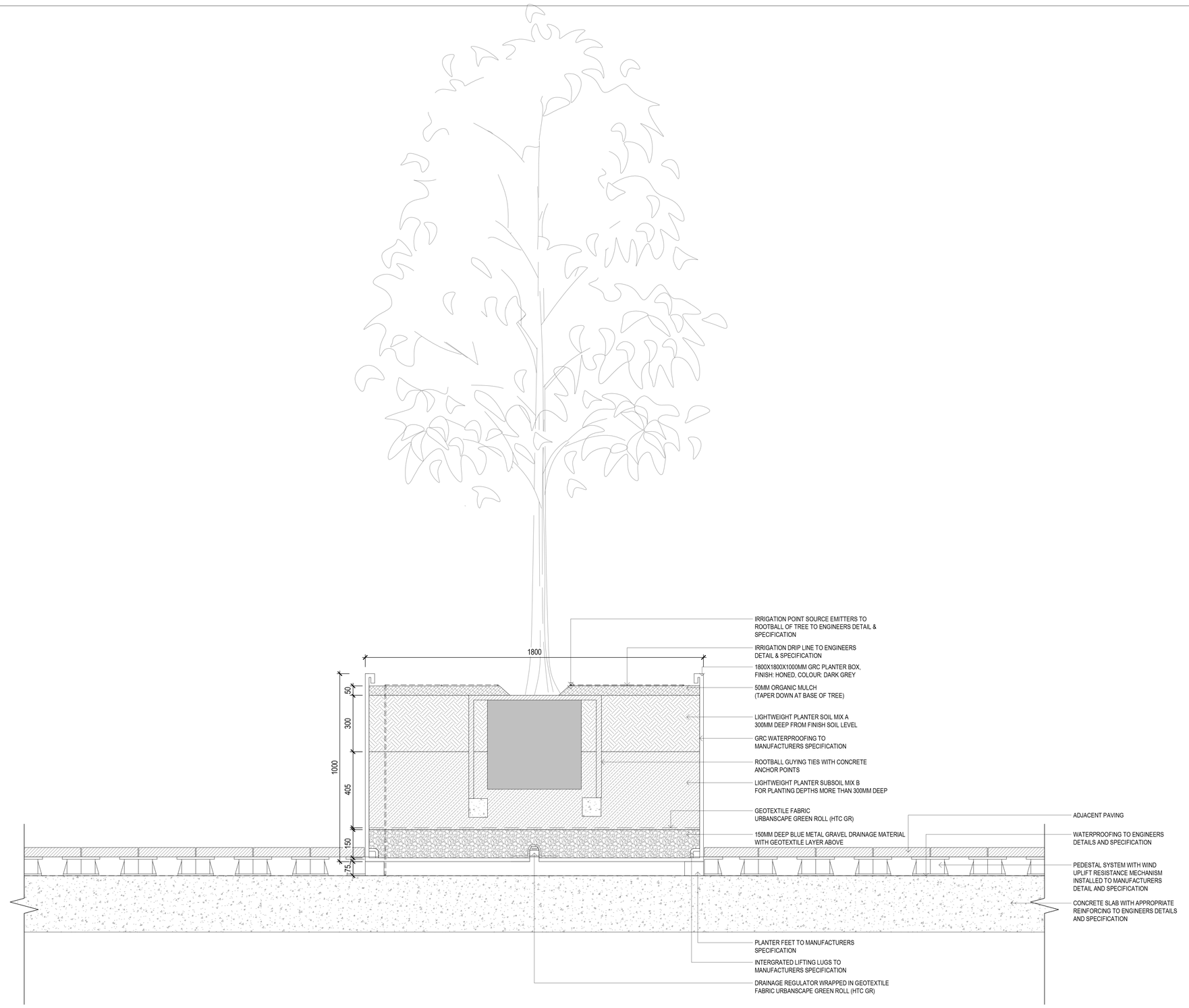
DRAWING TITLE
PLANTER BOX DETAILS

DESIGN : TF
DOCUMENT : BP
PROJECT : 2523061

NORTH

1 0 1 2 3 4 5 metres
SCALE: 1 : 10 @ A1

DRAWING NUMBER 2523061-L00-AA961
REVISION C



1 PLANTER BOX SQUARE - TYPICAL DETAIL ON PODIUM
1 : 10

place design group.

SYDNEY
UNIT 3B
830-832 Elizabeth Street
Waterloo NSW 2017
T + 61 2 9290 3300

© Place Design Group Pty Ltd A.C.N. 082 370 063

All information displayed, transmitted or carried within this drawing is protected by Copyright and Intellectual Property laws.
The information contained in this document is confidential.
Recipients of this document are prohibited from disclosing the information herein to any person without the written consent of Place Design Group.
Annotated dimensions take precedence over any measures of scale.
Verify all dimensions on site prior to construction.
This drawing may display with permission a combination of specialist and other consultant(s) input and linework.
Nominated specialist and consultant information contained within this document is referenced from their supplied documentation and is contained in this document as indicative only and not for construction or certification purposes.

PROJECT
42-60 Railway Parade

CLIENT
Holdmark Property Group

NOTES

ALL MEMBER SIZES, CONNECTIONS, FOOTINGS ETC ARE TO BE CONFIRMED BY AN ENGINEER. SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED. CONTRACTOR IS TO PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE COMMENCING CONSTRUCTION.

ALL WATER PROOF MEMBRANES, HYDRAULIC FITTINGS, ELECTRICAL / LIGHTING FITTINGS AND REINFORCED CONCRETE STRUCTURES ETC TO ENGINEERS, ARCHITECTS, HYDRAULIC ENGINEERS, ELECTRICAL ENGINEERS DETAILS AND SPECIFICATIONS.
SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED

FOR APPROVAL

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
A	CON	S455 ISSUE	RW	TF	27/06/25

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

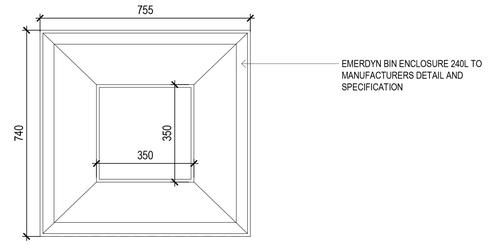
DRAWING TITLE
PLANTER BOX DETAILS

DESIGN : TF
DOCUMENT : BP
PROJECT : 2523061

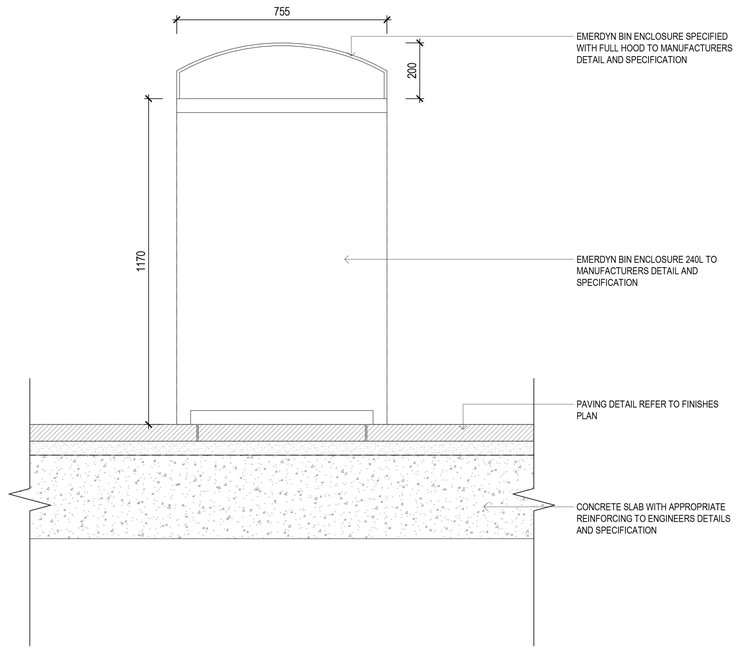
NORTH

1 0 1 2 3 4 5 metres
SCALE: 1 : 10 @ A1

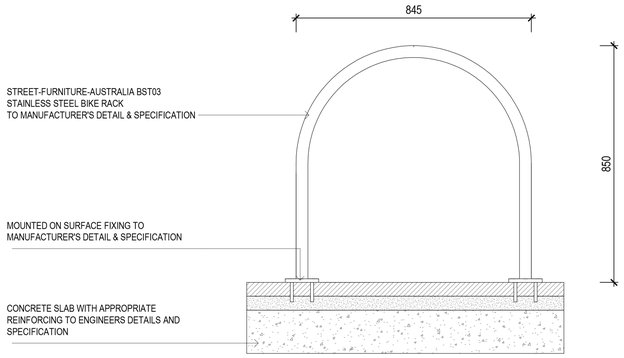
DRAWING NUMBER 2523061-L00-AA962
REVISION A



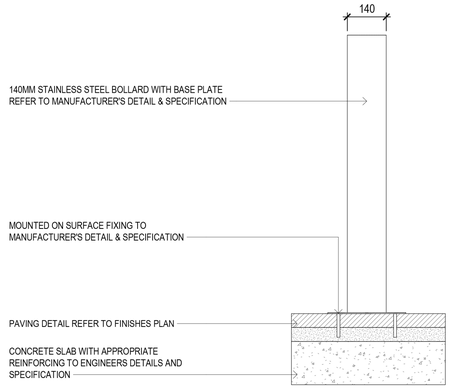
1 RUBBISH BIN - PLAN
1 : 10



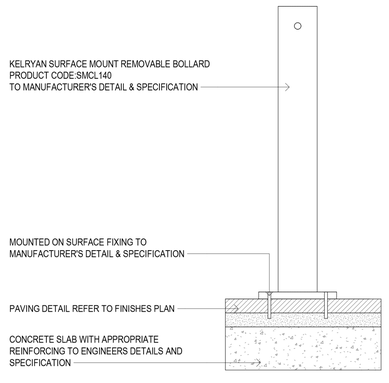
2 RUBBISH BIN - ELEVATION
1 : 10



4 BIKE RACK
1 : 10



5 BOLLARD - FIXED
1 : 10



6 BOLLARD - REMOVABLE
1 : 10

place design group.

SYDNEY
UNIT 3B
830-832 Elizabeth Street
Waterloo NSW 2017
T + 61 2 9290 3300

© Place Design Group Pty Ltd A.C.N. 082 370 063

All information displayed, transmitted or carried within this drawing is protected by Copyright and Intellectual Property laws.
The information contained in this document is confidential.
Recipients of this document are prohibited from disclosing the information herein to any person without the written consent of Place Design Group.
Annotated dimensions take precedence over any measures of scale.
Verify all dimensions on site prior to construction.
This drawing may display with permission a combination of specialist and other consultant(s) input and linework.
Nominated specialist and consultant information contained within this document is referenced from their supplied documentation and is contained in this document as indicative only and not for construction or certification purposes.

PROJECT

42-60 Railway Parade

CLIENT

Holdmark Property Group

NOTES

ALL MEMBER SIZES, CONNECTIONS, FOOTINGS ETC ARE TO BE CONFIRMED BY AN ENGINEER. SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED. CONTRACTOR IS TO PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE COMMENCING CONSTRUCTION.

ALL WATER PROOF MEMBRANES, HYDRAULIC FITTINGS, ELECTRICAL / LIGHTING FITTINGS AND REINFORCED CONCRETE STRUCTURES ETC TO ENGINEERS, ARCHITECTS, HYDRAULIC ENGINEERS, ELECTRICAL ENGINEERS DETAILS AND SPECIFICATIONS.
SIZES NOMINATED ARE INDICATIVE OF FINAL APPEARANCE REQUIRED

FOR APPROVAL

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
A	CON	STAGE 1 TENDER	RW	TF	20/02/25
B	CON	DC2 ISSUE	RW	TF	24/04/25
C	CON	S455 ISSUE	RW	TF	27/06/25

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

FURNITURE DETAILS

DESIGN : TF
DOCUMENT : BP
PROJECT : 2523061

NORTH

1 0 1 2 3 4 5 metres

SCALE: 1 : 10 @ A1

DRAWING NUMBER 2523061-L00-AA970

REVISION C

LANDSCAPE REPORT | S4.55

42-60 RAILWAY PARADE BURWOOD

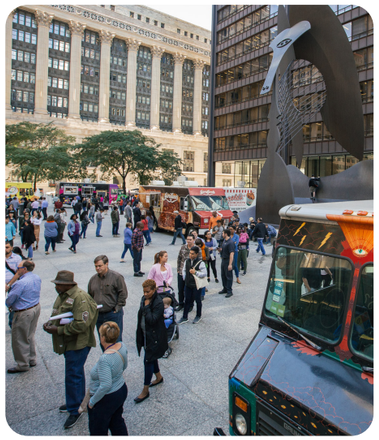
PREPARED FOR BURWOOD TOWER HOLDINGS PTY LTD
JUNE 2025

HOLDMARK

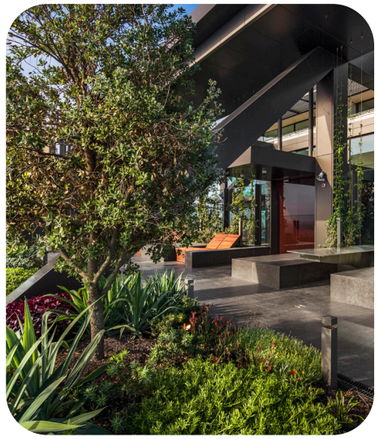
Studio.SC place design group.

DESIGN STATEMENT | PUBLIC & PRIVATE DOMAIN













PROJECT OVERVIEW

Burwood Place will set a new benchmark for urban living in Burwood. Located nearby Burwood's transport hub, this site has an important responsibility
to create friendly and active interfaces with its surroundings. Activation potential for this precinct will significantly increase with considered through site connections.

The proposed retail edges will create an active ground floor appropriate to the urban context, the public domain design has been considered to optimise the safety and legibility, encourage habitation, and contributes to reinstating the urban forest.

PUBLIC DOMAIN

The ground plane serves as a new urban public outdoor living room for the inhabitants of Burwood. In order to establish a unique and benchmarking public domain, the ground floor will be designed in consideration of existing and future place character and heritage, as well the unique cultural collective within Burwood.

Different elements of public domain in the heart of Burwood Place Plaza provides the dynamic rhythm that emphasises the position of the plaza as the active centre of Burwood, a place to play, relax and work.

Railway Parade is accentuated with generous street trees providing shade amenity for pedestrians and delivering a soft character. It will support pedestrian movement, through material consideration and a considered selection of furniture and fixtures to ensure pedestrian safety.

The retail breakout will provide for a mix of fixed and mobile seating, with planting hubs to create intimate spaces for users.

PODIUM LANDSCAPES

The upper levels communal and private open space shall complement the project aspiration whilst maximising usability and comfort. The communal open space between both the Eastern and Western towers will consist of Seating, play elements, fitness equipment and spaces for respite. New planting shall be grown within adequate soil volume as per Apartment Design Guide. Cascading plants on level 2 podium support the urban forest outcome and provides a softer and green edge.

TOWER LANDSCAPES

An assortment of private terraces on tower A, B, C and D incorporate planted edges providing solar shading to building façades and terraces as well as a green outlook from internal spaces. Tower E also incorporates a number of generous planting edges and seating nooks at its upper level and a roof-garden. New planting shall be grown within adequate soil volume as per Apartment Design Guide.

URBAN ELEMENTS

The urban furniture shall be consistent and complimentary to Council's existing palette and Architectural design. The material shall range from urban hardy steel and concrete to warm and soft hardwood timber creating a welcoming but resilience public space.

AMENITY

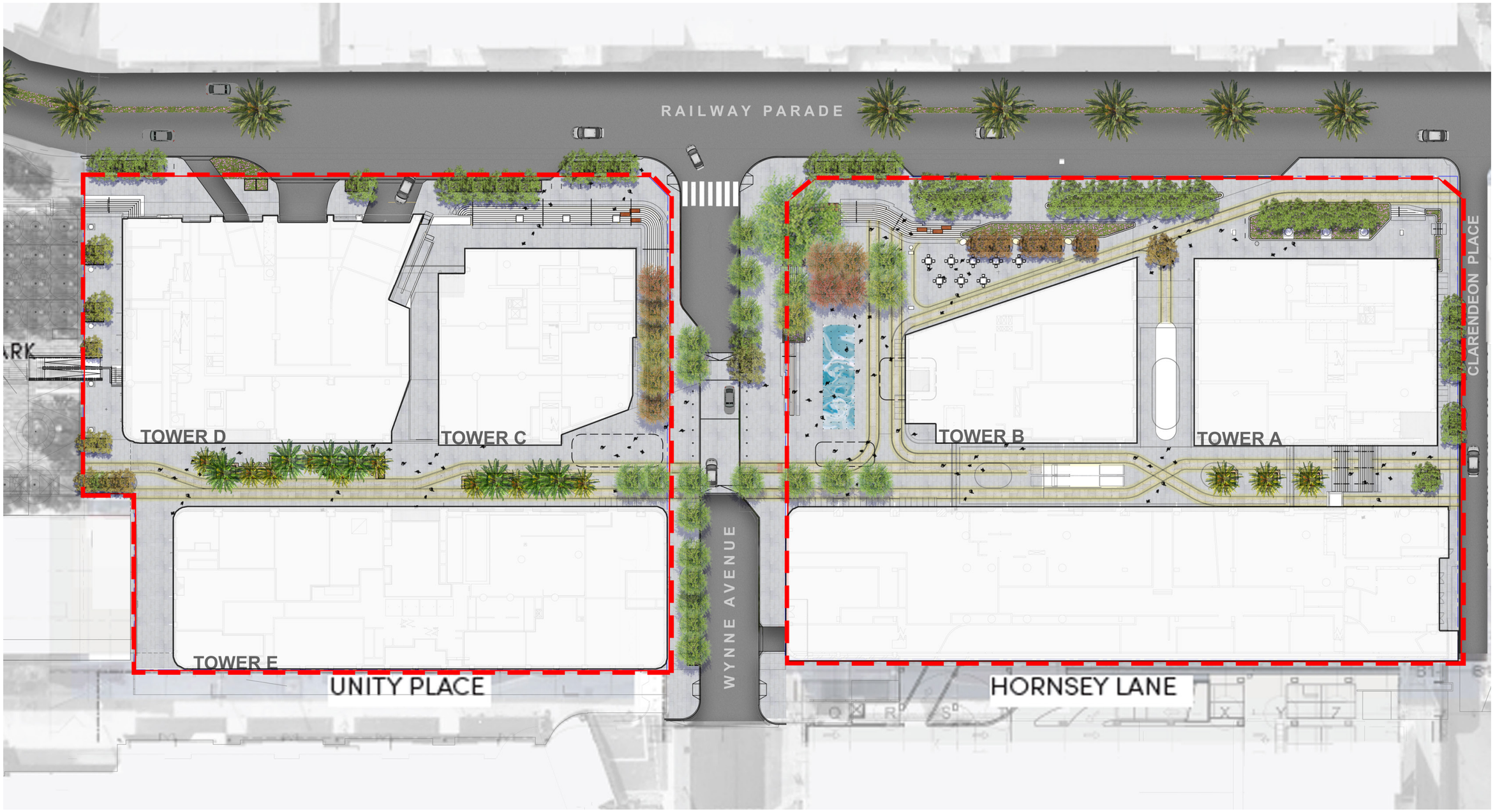
The design incorporates a variety of amenities such as seating, social deck space, and communal BBQ areas. This aligns with the need to provide a rich collection of spaces and activities for people of all ages and backgrounds. Many of these spaces are sheltered by either planting or awnings, which will help to mitigate weather.

ACCESSIBILITY

All residents of the new development can access and enjoy the communal areas. Universal access seamlessly connects people to all places without compromising on the quality of experience.

Gently graded pathways provide accessibility for all age groups and degrees of mobility, ensuring that residents can access site amenities comfortably. Paths are rationally laid out into a clear and identifiable network, assisting orientation for visitors and access to and from building entries and service areas.

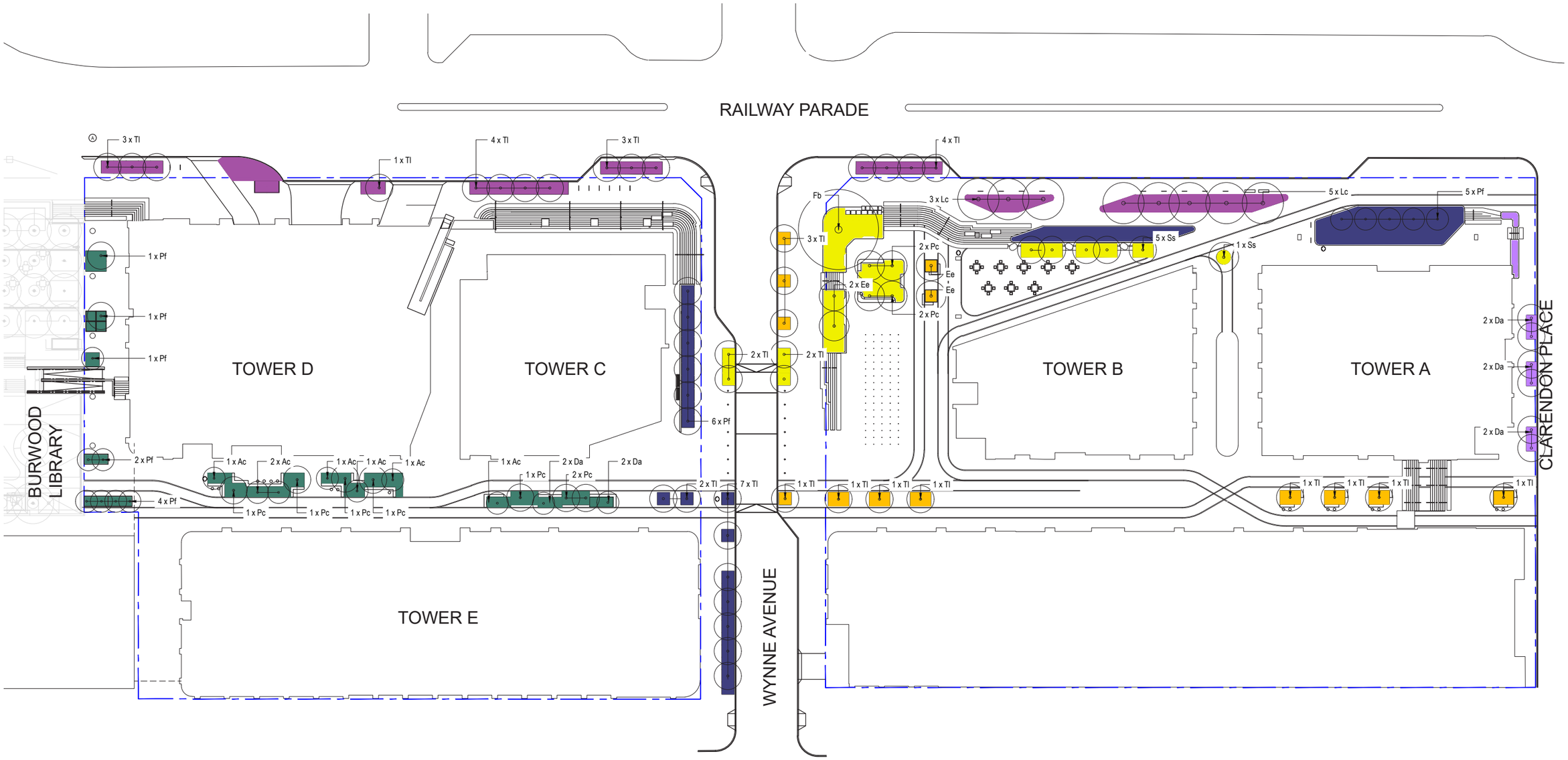
SITE PLAN | OVERALL GROUND PLAN



SCALE
1:600@A3

0 10 20 30 40M

PLANTING PLAN | PUBLIC DOMAIN



LEGEND

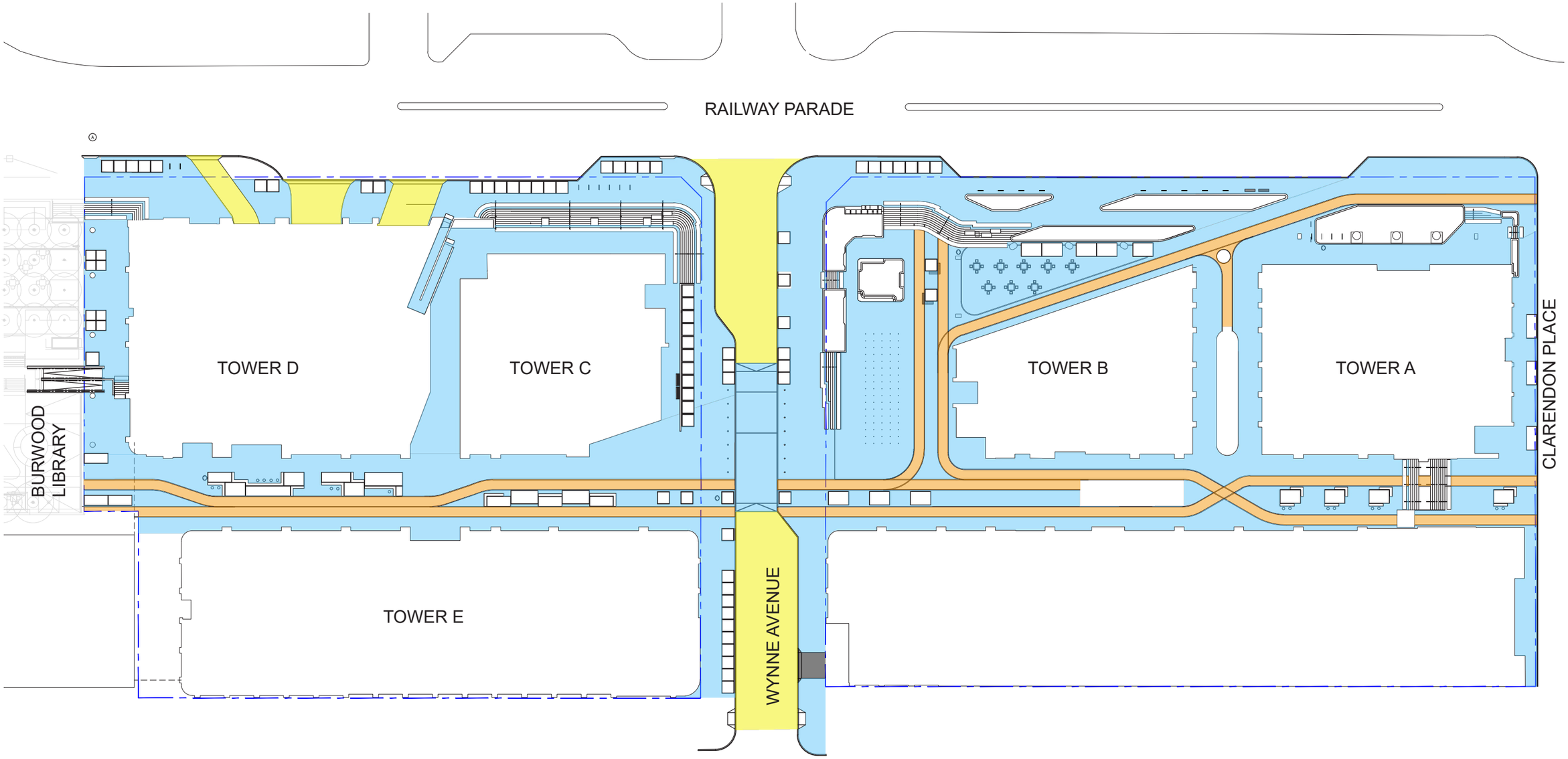
	MIX 1		MIX 3
	MIX 2		MIX 4
	MIX 2B		MIX 5

NOTE:
REFER TO PLANTING SCHEDULE DRW NO. 2523061-050 & 2523061-051
FOR TREE & PLANTING SPECIES MIX

SCALE
1:600@A3

0 10 20 30 40M

PAVING PLAN | PUBLIC DOMAIN



LEGEND

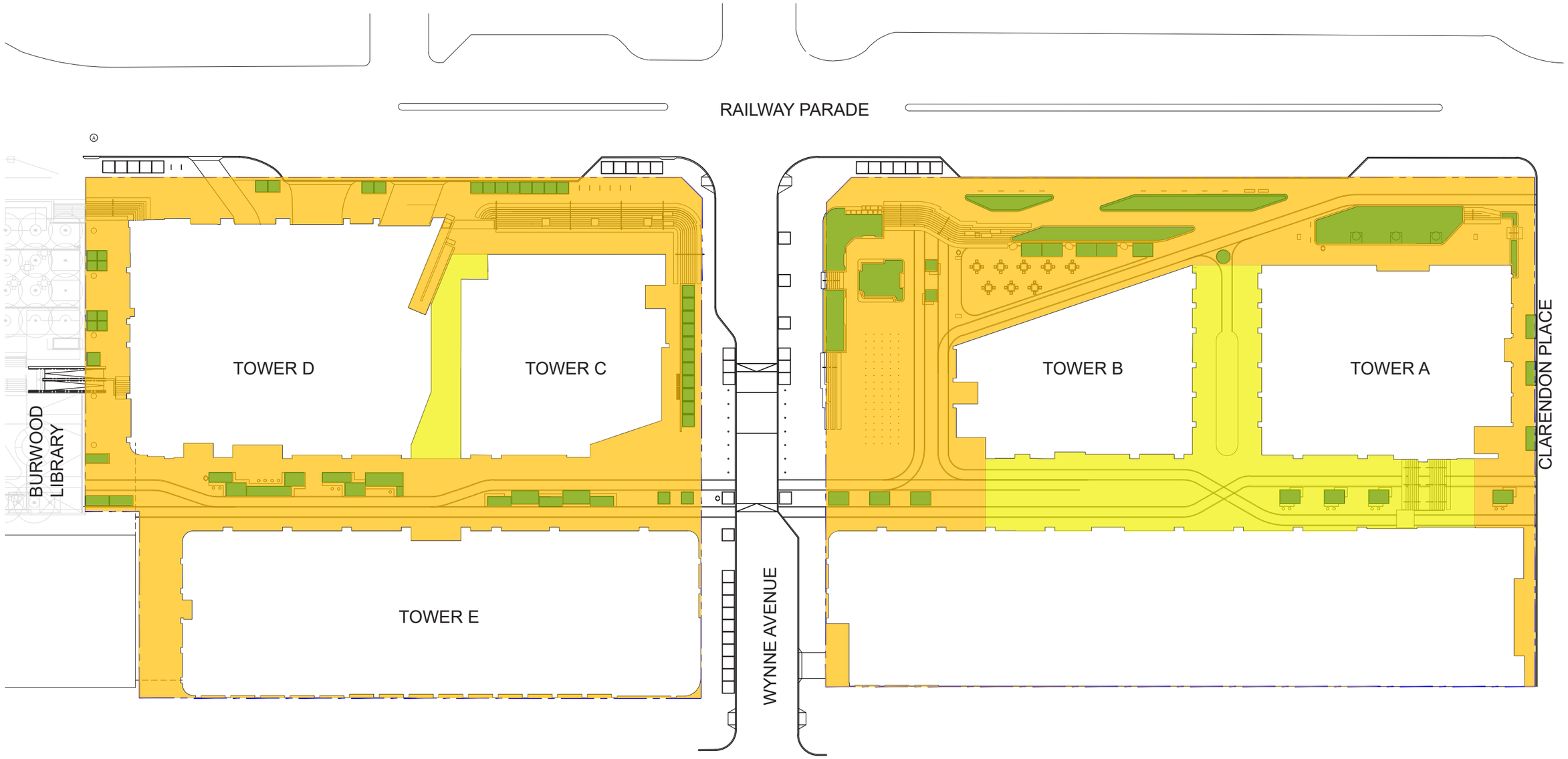
- PAVING TYPE 1
- PAVING TYPE 2
- ASPHALT ROAD

NOTE:
REFER TO MATERIALS SCHEDULE DRW NO. 2523061-001
FOR PAVING SPECIFICATIONS

SCALE
1:600@A3

0 10 20 30 40M

PUBLIC ACCESS PLAN | PUBLIC DOMAIN



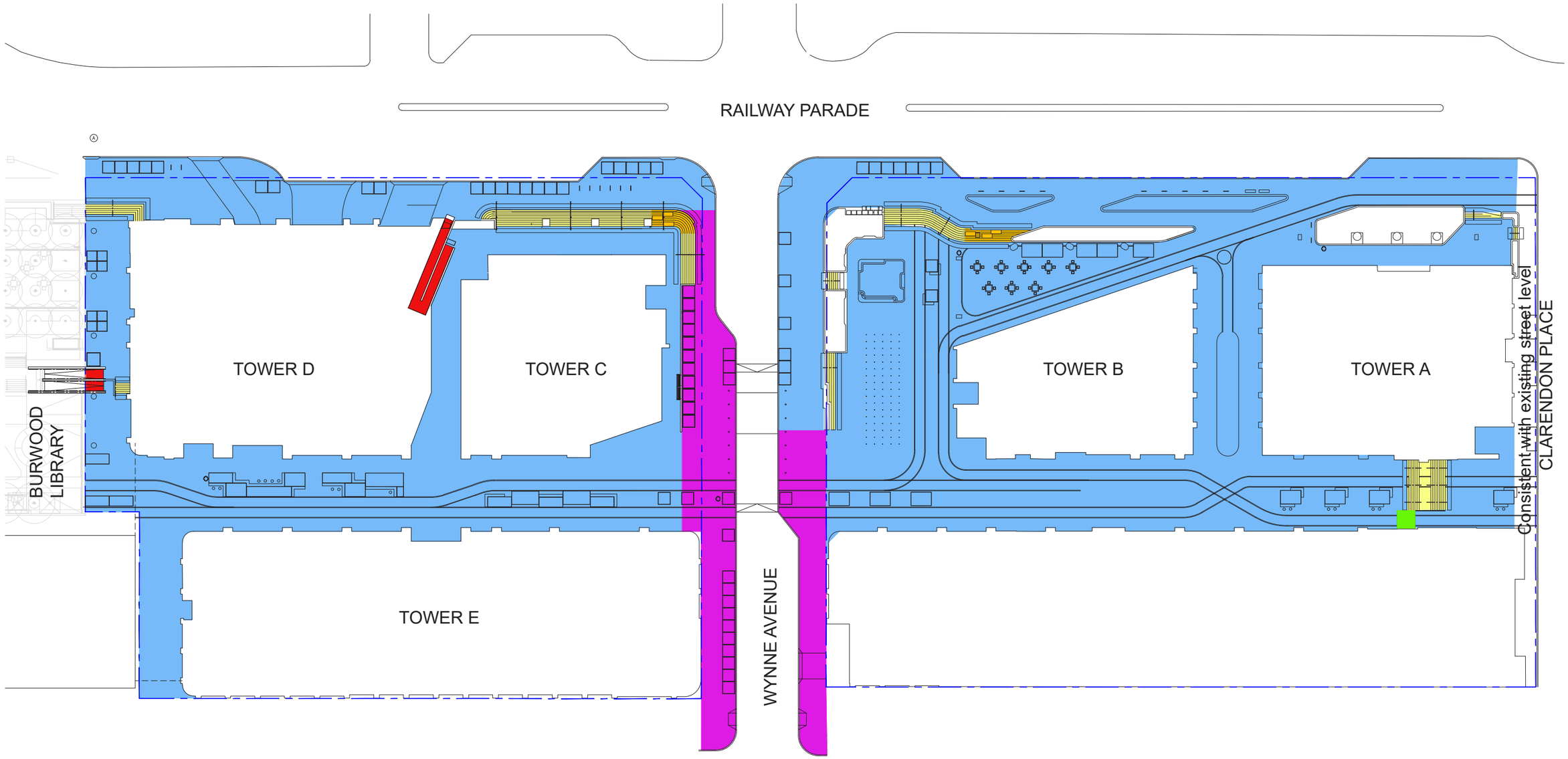
LEGEND

- SOFT LANDSCAPE: 621m2 / 14% (of publicly accessible open space)
- PUBLICLY ACCESSIBLE OPEN SPACE: 4433m2
- MANAGED ACCESS

SCALE
1:600@A3

0 10 20 30 40M

UNIVERSAL ACCESS PLAN | PUBLIC DOMAIN



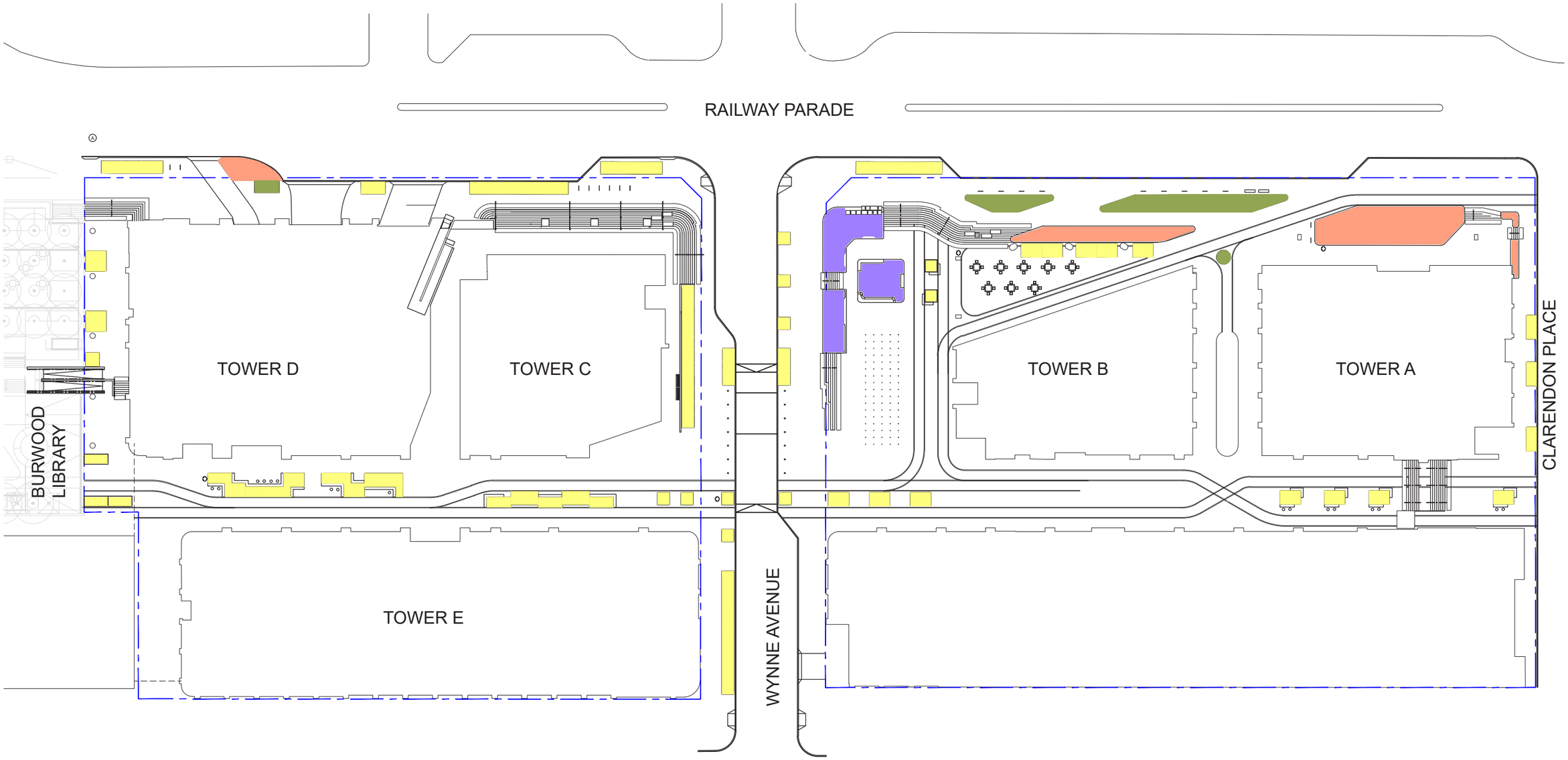
LEGEND

- STAIRS
- BLEACHER STEPS / SEATS
- 1:14 RAMPS
- 1:20-1:33 RAMPS
- FULLY ACCESSIBLE
- STAIR LIFT

SCALE
1:600@A3

0 10 20 30 40M

SOIL DEPTH PLAN | PUBLIC DOMAIN



LEGEND

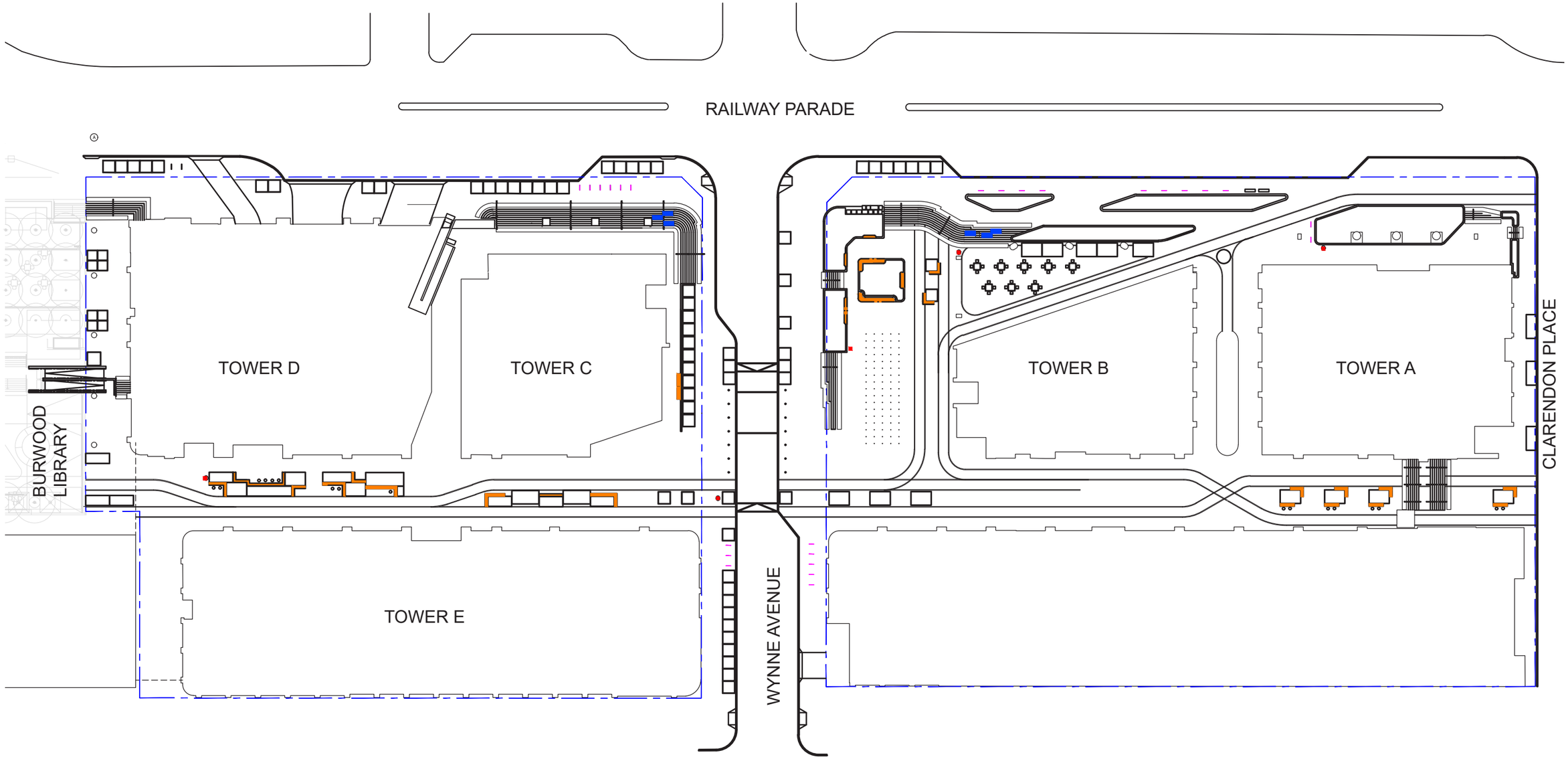
- MIN. 500MM
- MIN: 800MM
- MIN: 1000MM
- MIN: 1200MM

NOTE:
DIAGRAM SHOWS THE SOIL DEPTH WITHIN RAISED PLANTERS ABOVE THE STRUCTURAL SLAB IN EACH ZONE

SCALE
1:600@A3

0 10 20 30 40M

AMENITY PLAN | PUBLIC DOMAIN



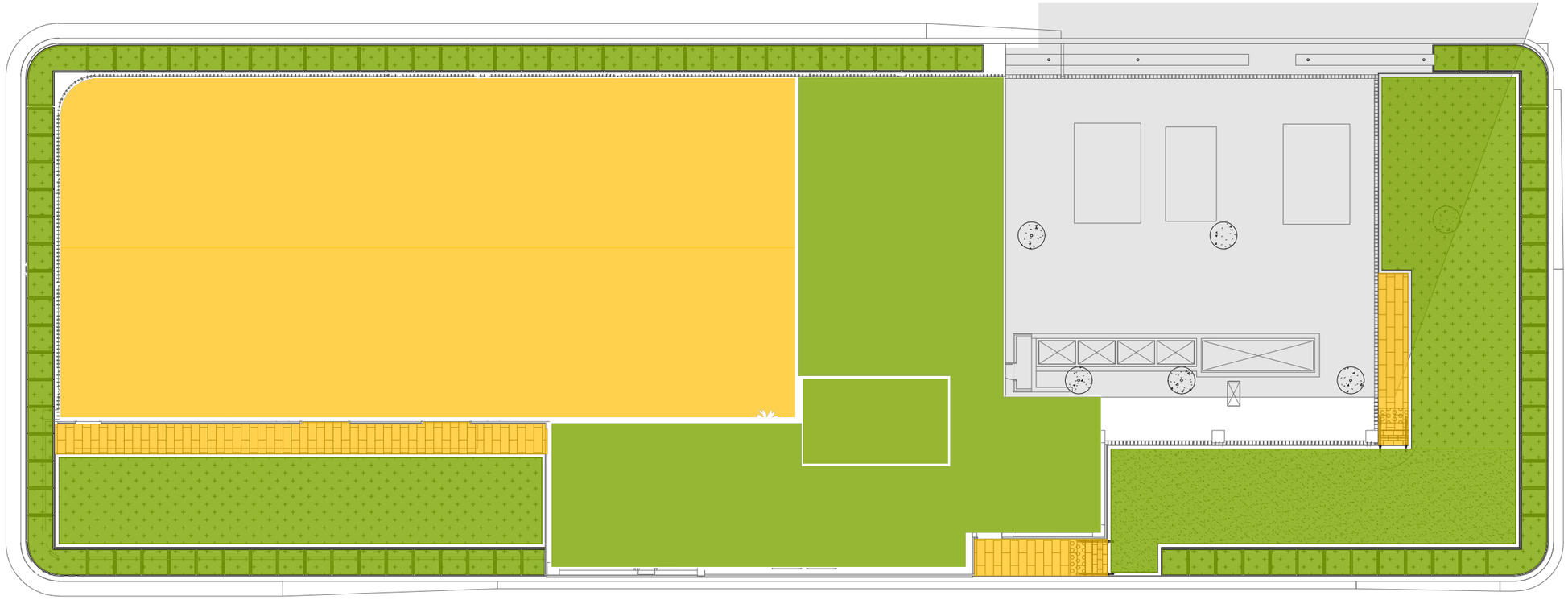
LEGEND

- TIMBER BENCH INTEGRATED TO RAISED PLANTERS x 27no.
- BENCH WITHIN STEPS x 6no.
- BIKE RACK x 54no.
- BINS x 5no.

SCALE
1:600@A3

0 10 20 30 40M

TOWER E ROOFTOP | GENERAL ARRANGEMENT



LEGEND

- SOFT LANDSCAPE: 561m2 / 51.1%
- TOTAL OPEN ROOFTOP: 1098m2

SCALE
1:200@A3

0 5 10 15M

Plan of Management

Hawkers' Market

at 42-60 Railway Parade, Burwood (Burwood Place)

dated July 2025

1. Introduction

This Plan of Management (PoM) outlines the operational protocols, management responsibilities, and mitigation strategies for the operation of a permanent hawkers' market situated in the basement of the Burwood Place development. The purpose of this plan is to ensure the market integrates seamlessly with surrounding uses, maintains public amenity, and operates efficiently and safely.

2. Site Context

- **Location**: Basement B2 Carpark (refer to Figure 1 and Figure 2), Burwood Place at 42-60 Railway Parade, Burwood
- **Zoning**: MU1 Mixed Use
- **Adjacent Uses**: The subject site is surrounded by a mix of residential, retail, educational and community uses. To the north is Railway Parade, Burwood Train Station, and the mixed-use development at 1 Railway Parade, with Burwood Park, Westfield, Parramatta Road and the future Burwood North Metro Station further beyond. To the south, across Hornsey Street, are two recently completed mixed-use developments, Emerald Square and Burwood Grand. Directly opposite the site on Burwood Road is an approved DA for the multi-storey 'Burwood Central' development, while to the east, Burwood Road features existing two-storey shop-top housing and ground-floor retail. To the west is Conder Street, Burwood Public School, and Council-owned land containing Burwood Library (a local heritage item) and an above-ground carpark, which is proposed to be transformed into a new urban park.



Figure 1 Basement B2 Carpark Plan, Hawkers' Market highlighted in red (Source: Studio SC)

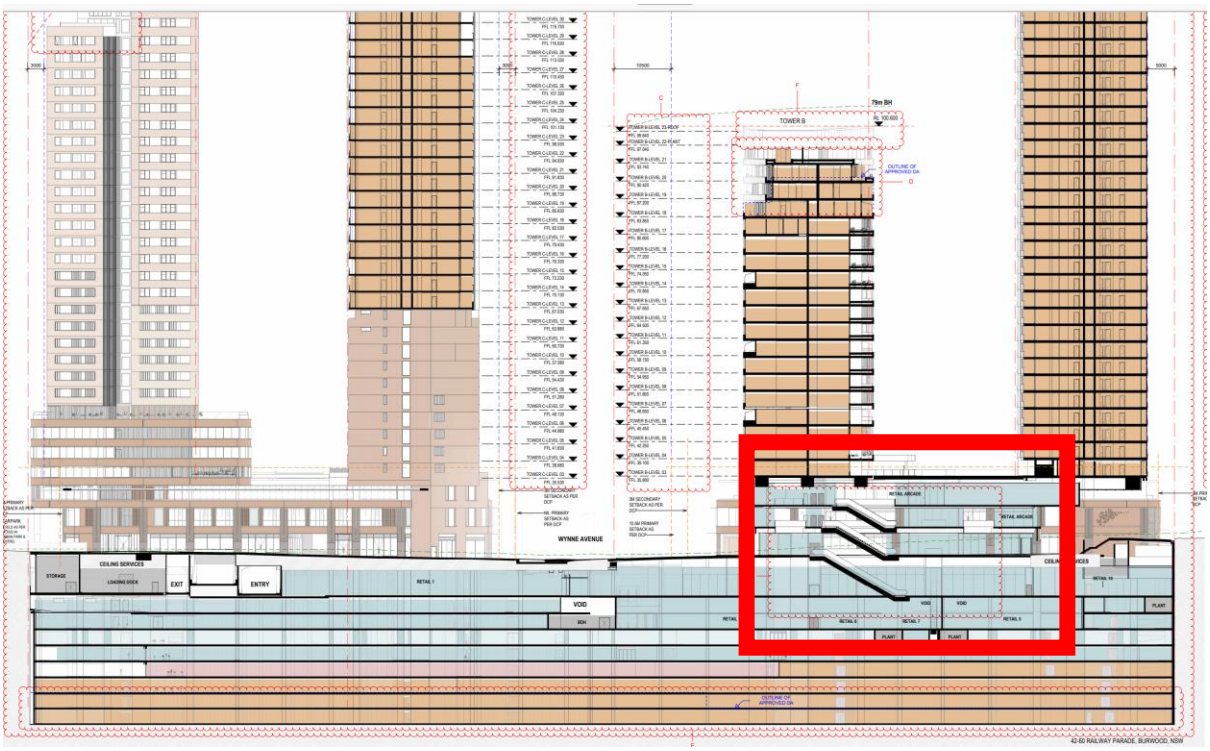


Figure 2 Section of Burwood Place, Hawkers' Market highlighted in red (Source: Studio SC)

3. Market Description

- **Market Type**: Permanent indoor hawkers-style food and retail market
- **Number of Stalls**: 17 retail tenancies with areas ranging from 33 sqm to 711 sqm. Tenancies will comprise small-format food and retail stalls and spaces designed to support diverse food and drink offerings within a shared, open-plan market environment.
- **Stall Types**: Food and beverage, artisanal goods, groceries, and specialty cultural products
- **Common Areas**: Shared dining area, amenities, waste room, storage, and circulation corridors

4. Hours of Operation

It is proposed to operate the hawkers' market 24/7.

5. Access and Circulation

- **Pedestrian Access**: Pedestrian access to the hawkers' market will be facilitated elevators and also via an express escalator (refer to Figure 3) providing direct entry from the public domain into the basement level, allowing for clear and

convenient customer flow into the market. To manage circulation and improve operational flow, a separate series of escalators will be provided for exiting the market, guiding patrons back to ground level via a designated egress path.

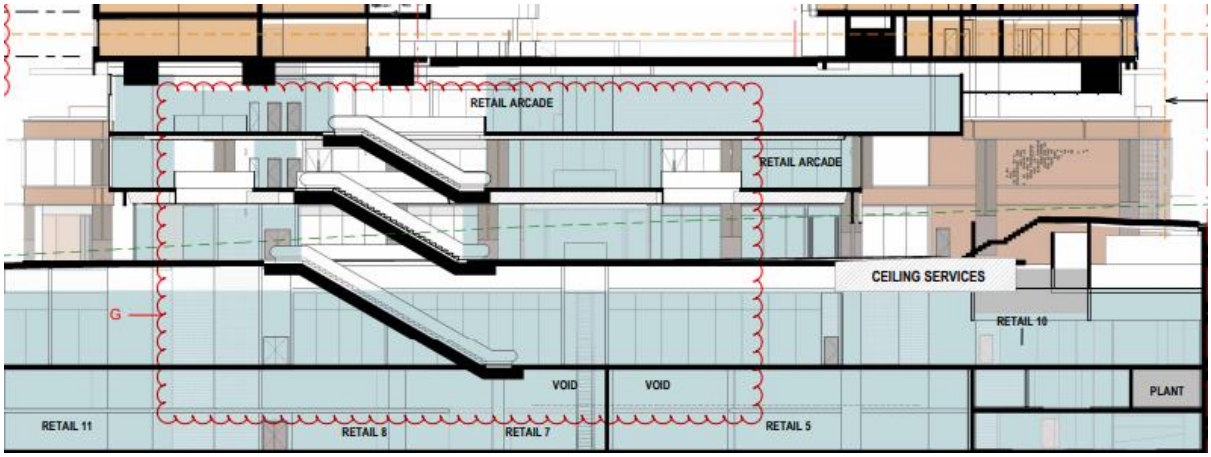


Figure 3 Express entry elevator to Hawkers' Market (Source: Studio SC)

- **Vehicular Access**: The loading dock within Burwood Place is located on the Lower Ground Level and is designed to accommodate the deliveries and waste collection associated with the development. It will serve the commercial, residential, and retail components of the proposed development (including the Hawkers' Market). It will be accessed via Railway Parade via a combined entry / exit driveway.

  The loading dock provides a total of 8 service spaces and will be managed by appointment via a booking / scheduling system. Management of the loading dock shall be the responsibility of the loading dock manager. The dock is to be used in accordance with the loading dock management plan (LDMP), which includes general rules, maintenance, traffic management, general operations, safety, and cleanliness. The LDMP was prepared by PTC (dated 10/6/22) and approved under DA 2021.44.

  In terms of security, the dock shall be under a 24-hour CCTV surveillance to monitor general operations.

6. Waste Management

Waste will be managed in accordance with the approved Waste Management Plan prepare by Elephants Foot, dated 10/10/24.

7. Odour and Ventilation

The hawkers' market includes a mix of general retail, food and beverage, and mini major tenancies, with potential odour primarily arising from cooking activities. To manage this,

commercial-grade kitchen exhaust systems with hoods, filters, and make-up air provisions are installed to capture odours directly at the source. Exhaust air is discharged at roof level, with more than 6 metres separation from site boundaries and ventilation openings, exceeding Australian Standards and minimising odour impact. The market is a fully enclosed, air-conditioned space, with temperature and CO_2 levels actively monitored. Filtered outside air is continuously supplied via fan coil units in retail tenancies and common areas, ensuring adequate ventilation and air quality through a consistent air change rate.

8. Security and Safety

Security for the hawkers' market will be managed as part of the broader mixed-use development, supported by general site-wide security personnel and systems. The design and operations of the basement hawker market have been developed in alignment with the four key principles of Crime Prevention Through Environmental Design (CPTED):

- **Natural Surveillance**: The layout of the hawkers' market ensures clear sightlines throughout the space, with lighting, open sight corridors, and minimal visual obstructions to enhance passive surveillance. CCTV cameras will be strategically installed to provide comprehensive coverage, and surrounding uses, including circulation and service areas, offer additional opportunities for natural observation by staff and patrons.
- **Access Control**: Entry points to the basement market will be well-defined, including secure access from vertical transport elements (elevators and escalators) and monitored entrances. Controlled access systems and staff presence help prevent unauthorised entry, particularly during non-operational hours.
- **Territorial Reinforcement**: The hawkers' market is visually and functionally distinct from surrounding service and loading areas, establishing a clear sense of ownership and purpose. Branded signage, consistent paving treatments, and integrated design elements will reinforce the identity and appropriate use of the space, discouraging anti-social behaviour.
- **Space Management**: The space is actively managed and maintained to a high standard. Cleaning, waste collection, and maintenance will be carried out routinely, and security patrols are conducted regularly throughout the day. Specific, dedicated security for the hawkers' market will be deployed as needed, such as during special events, peak periods, or in response to operational requirements, ensuring a safe and well-managed environment for all users.

Together, these measures will create a secure, inviting, and well-functioning public destination that is resilient to potential safety risks while supporting a vibrant market atmosphere.

9. Complaint Management

A clear and responsive complaint management system will be implemented to ensure that any issues raised by market patrons, tenants, residents, or the general public are addressed promptly and effectively. All complaints relating to the operation of the hawker market, including noise, odour, cleanliness, conduct, or access, will be directed to the Market Manager, whose contact details will be publicly displayed at market entrances and on the market's website (if applicable).

Complaints can be lodged in person, via email, or by phone. Each complaint will be recorded in a central complaints register, including details of the issue, time and date of receipt, and action taken. The Market Manager will investigate all complaints in a timely manner and provide a response to the complainant within five business days. Where appropriate, corrective action will be taken to prevent recurrence.

Recurring issues or unresolved complaints may be escalated to the building's strata management or ownership entity, particularly where they involve shared services or areas outside the direct control of the market operator. The complaints register will be reviewed regularly to identify patterns and inform continuous improvement to the market's operations.

10. Public Amenity and Cleanliness

Cleaning:
A professional cleaning contractor will be engaged to maintain high standards of hygiene and presentation throughout the hawkers' market. Cleaners will be scheduled throughout operating hours to manage day-to-day waste, spills, and high-traffic areas, with additional deep cleaning conducted after trade each day. This includes sanitisation of communal dining areas, floors, stall frontages, and shared facilities. Market tenants will be responsible for maintaining cleanliness within their individual tenancies, while the central cleaning team will oversee all common spaces. Regular audits will be conducted by the Market Manager to ensure compliance with cleanliness standards.

Toilets:
Accessible toilet facilities will be provided within the basement level for use by market patrons and staff. These facilities will include male, female, and accessible amenities. Toilets will be cleaned frequently throughout the day and undergo a full sanitisation

after market close. Usage levels will be monitored to determine peak demand times and adjust cleaning frequency accordingly.

Pest Control:
To maintain a hygienic and safe environment, a licensed pest control contractor will carry out routine inspections and preventative treatments in accordance with health regulations and food safety standards. Pest control will focus on key risk areas such as waste storage zones, food preparation areas, and back-of-house corridors. Any evidence of pest activity will be reported immediately to the Market Manager, and tenants will be required to adhere to strict waste handling and storage procedures to minimise risk. Records of pest control treatments will be maintained and made available for inspection if required.

11. Future Tenancies

Future Development Applications for individual tenancies within the hawker market will be required to operate in accordance with the provisions of this Plan of Management.

GENERAL LEGEND

- BOUNDARY LINE
- EASEMENT LINE
- BUILDING LINE
- BASEMENT LINE
- ROOF AND BALCONY LINE
- RETAINING WALL
- FENCE LINE

SERVICES LEGEND

- EXISTING ELECTRICITY
- EXISTING OVERHANG ELECTRICITY
- EXISTING SEWER
- EXISTING WATER
- EXISTING GAS
- EXISTING TELECOMMUNICATION
- EXISTING STORMWATER

MISCELLANEOUS LAYERS

- SIGNPOST
- PP — POWER POLE

DRAINAGE BLOCKS & LAYERS

- PROPOSED STORMWATER PIT
- PROPOSED STORMWATER PIPE
- EXISTING STORMWATER PIT
- EXISTING STORMWATER PIPE
- PROPOSED HEADWALL
- SS, SP — SUBSOIL DRAIN AND FLUSH POINT
- DP — DOWNPIPE CONNECTION
- RWO — RAINWATER OUTLET
- SWALE
- GRATED DRAIN
- SLOT DRAIN
- DESIGN CONTOURS
- XX.XX — DESIGN SPOT LEVELS
- EXISTING CONTOURS
- TREE PROTECTION ZONE
- PROPOSED TREE
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE DEMOLISHED
- OVERLAND FLOWPATH

PAVEMENT BLOCKS & LAYERS

- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY CONCRETE PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- FOOTPATH PAVEMENT
- LANDSCAPE AREA
- KO — KERB ONLY
- KG — KERB AND GUTTER
- FK — FLUSH KERB
- MK — MOUNTABLE KERB
- PR — PRAM RAMP
- DD — DISH DRAIN
- VC — VEHICULAR CROSSING
- RK — ROLL KERB
- BOL — BOLLARD
- I.J. — ISOLATION JOINT
- S.J. — SAWCUT JOINT
- D.J. — DOWELLED JOINT
- D.E.J. — DOWELEED EXPANSION JOINT
- R.E. — REENTRANT BARS

REVISIONS:

No.	REVISION DESCRIPTION	DRAWN	DATE
A	ISSUED FOR APPROVAL	AB	18.06.24

SCALE BAR

COPYRIGHT ©
THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD, IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.
DISCLAIMER
THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.
NOTE
THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY. UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED. DO NOT SCALE REDUCED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.
IF IN DOUBT • ASK.

van der Meer Consulting
van der meer
LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370
www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT
HOLDMARK
2-4 GIFFNOCK AVENUE
MACQUARIE PARK NSW 2113

ARCHITECT
SCOTT CARVER
LEVEL 1, 1 CHIFLEY SQUARE, SYDNEY NSW 2000

PROJECT TITLE
BURWOOD PLACE
42-60 RAILWAY PARADE
BURWOOD NSW 2134

DRAWING TITLE
EXTERNAL WORKS LEGENDS SHEET

DRAWING STATUS
APPROVAL ISSUE
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
AW	HB/AB		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
HB/AB		DATE DRAWN	A1
JOB No.		DRAWING No.	REVISION
SY232-010		C0501	A

Regulated Design Record				
Project Address: 42- 60 Railway Parade, Burwood NSW 2134				
Project Title: Burwood Place				
Consent No: 2021.44		Body Corporate Reg No:		
Drawing Title:		Drawing No:		
Rev	**Date dd.mm.yy**	**Description**	**DP Full Name**	**Reg No**
X	X	X	X	X

LEGEND

-TEMPORARY CONSTRUCTION VEHICLE EXIT

- SEDIMENT CONTROL FENCE

-STOCKPILE AREA

-SANDBAG KERB INLET SEDIMENT TRAP

CONSTRUCT SEDIMENT CONTROL FENCE AROUND PERIMETER OF WORKS

RAILWAY PARADE

Shaded Area (3.2m²)

BURWOOD PLAZA

BURWOOD COUNCIL AND LIBRARY

NOMINAL STOCKPILE LOCATION

BURWOOD GRAND

WYNNE AVENUE

EMERALD SQUARE

PLAN
SCALE 1:400

REVISIONS:			
B	ISSUED FOR INFORMATION	AB	02.10.24
A	PRELIMINARY	AB	12.04.24
No.	REVISION DESCRIPTION	DRAWN	DATE

SCALE BAR
0 10 20 30 40 50m
SCALE 1:500

COPYRIGHT ©
THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.
DISCLAIMER
THIS DRAWING OR ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.
NOTE
THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY, UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED, DO NOT SCALE REDUCED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.
IF IN DOUBT - ASK.

N

van der Meer Consulting
van der meer
LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370
www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT
HOLDMARK
2-4 GIFFNOCK AVENUE
MACQUARIE PARK NSW 2113

ARCHITECT
SCOTT CARVER
LEVEL 1, 1 CHIFLEY SQUARE, SYDNEY NSW 2000

PROJECT TITLE
BURWOOD PLACE
42-60 RAILWAY PARADE
BURWOOD NSW 2134

DRAWING TITLE
EROSION AND SEDIMENT CONTROL
STAGE 1

DRAWING STATUS
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
AW	HB/AB		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
HB/AB	AS SHOWN	DATE DRAWN	A1
JOB No.		DRAWING No.	REVISION
SY232-010		C0111	B

Regulated Design Record				
Project Address: 42- 60 Railway Parade, Burwood NSW 2134				
Project Title: Burwood Place				
Consent No: 2021.44		Body Corporate Reg No:		
Drawing Title:		Drawing No:		
Rev	**Date dd.mm.yy**	**Description**	**DP Full Name**	**Reg No**
X	X	X	X	X

LEGEND

-TEMPORARY CONSTRUCTION VEHICLE EXIT

- SEDIMENT CONTROL FENCE

-STOCKPILE AREA

-SANDBAG KERB INLET SEDIMENT TRAP

RAILWAY PARADE

BURWOOD COUNCIL AND LIBRARY

BURWOOD GRAND

BURWOOD PLAZA

EMERALD SQUARE

WYNNE AVENUE

CONSTRUCT SEDIMENT CONTROL FENCE AROUND PERIMETER OF WORKS

NOMINAL STOCKPILE LOCATION

BUILDING OR ROOF OVER

TOWER D OUTLINE

TOWER C OUTLINE

TOWER E OUTLINE

RETAIL 2 FFL 20.70 FPL 19.82

FIRE PUMP FFL 22.35 FPL 19.84

FIRE TANK ROOM 2 FFL 22.35 FPL 19.77

FIRE TANK ROOM 1 FFL 22.25 FPL 19.77

RETAIL 3 FFL 20.80 FPL 19.83

RETAIL 4 FFL 21.90 FPL 19.82

TOWER D RESI. LOBBY FFL 22.05 FPL 19.87

COMMERCIAL LOBBY FFL 21.90 FPL 19.87

OSD TANK REFER TO C0451 FOR DETAILS

RETAIL 6 FFL 21.70 FPL 20.74

RETAIL 9 FFL 20.80 FPL 19.77

RETAIL 10 FFL 20.80 FPL 19.77

RETAIL 11

TOWER C RESI. LOBBY FFL 21.90

RETAIL 8 FFL 21.05 FPL 19.77

RETAIL 12 FFL 20.75 FPL 20.14

RETAIL FFL 21.25 FPL 20.74

RETAIL 7 FFL 21.075 FPL 20.74

RETAIL 13 FFL 20.75 FPL 20.74

RETAIL 18 FFL 22.055 FPL 19.87

RETAIL 17 FFL 21.95 FPL 20.74

RETAIL 16 FFL 21.85 FPL 20.74

30KL RAINWATER TANK (TBC)

RETAIL 15 FFL 21.70 FPL 20.74

COMMERCIAL LOBBY FFL 21.40 FPL 20.74

RETAIL LOBBY FFL 21.70 FPL 20.74

RETAIL 14 FFL 21.70 FPL 20.74

SUBSTATION 1

SWITCH ROOM FFL 22.97 FPL 22.97

SUBSTATION 2 FFL 22.65 FPL 22.86

RETAIL 19 FFL 22.94 FPL 22.94

RETAIL FFL 22.90 FPL 22.90

RETAIL 20 FFL 22.80 FPL 22.89

RETAIL 21 FFL 22.80 FPL 22.81

RETAIL 22 FFL 21.90 FPL 21.83

SUBSTATION 3

PLAN

SCALE 1:400

REVISIONS:

No.	REVISION DESCRIPTION	DRAWN	DATE
A	ISSUED FOR INFORMATION	AB	02.10.24

SCALE BAR

0 10 20 30 40 50m

SCALE 1:500

COPYRIGHT ©
THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD, IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.
DISCLAIMER
THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.
NOTE
THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY, UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED, DO NOT SCALE REDUCED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.
IF IN DOUBT - ASK.

van der Meer Consulting
van der meer
LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370
www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT
HOLDMARK
2-4 GIFFNOCK AVENUE
MACQUARIE PARK NSW 2113

ARCHITECT
SCOTT CARVER
LEVEL 1, 1 CHIFLEY SQUARE, SYDNEY NSW 2000

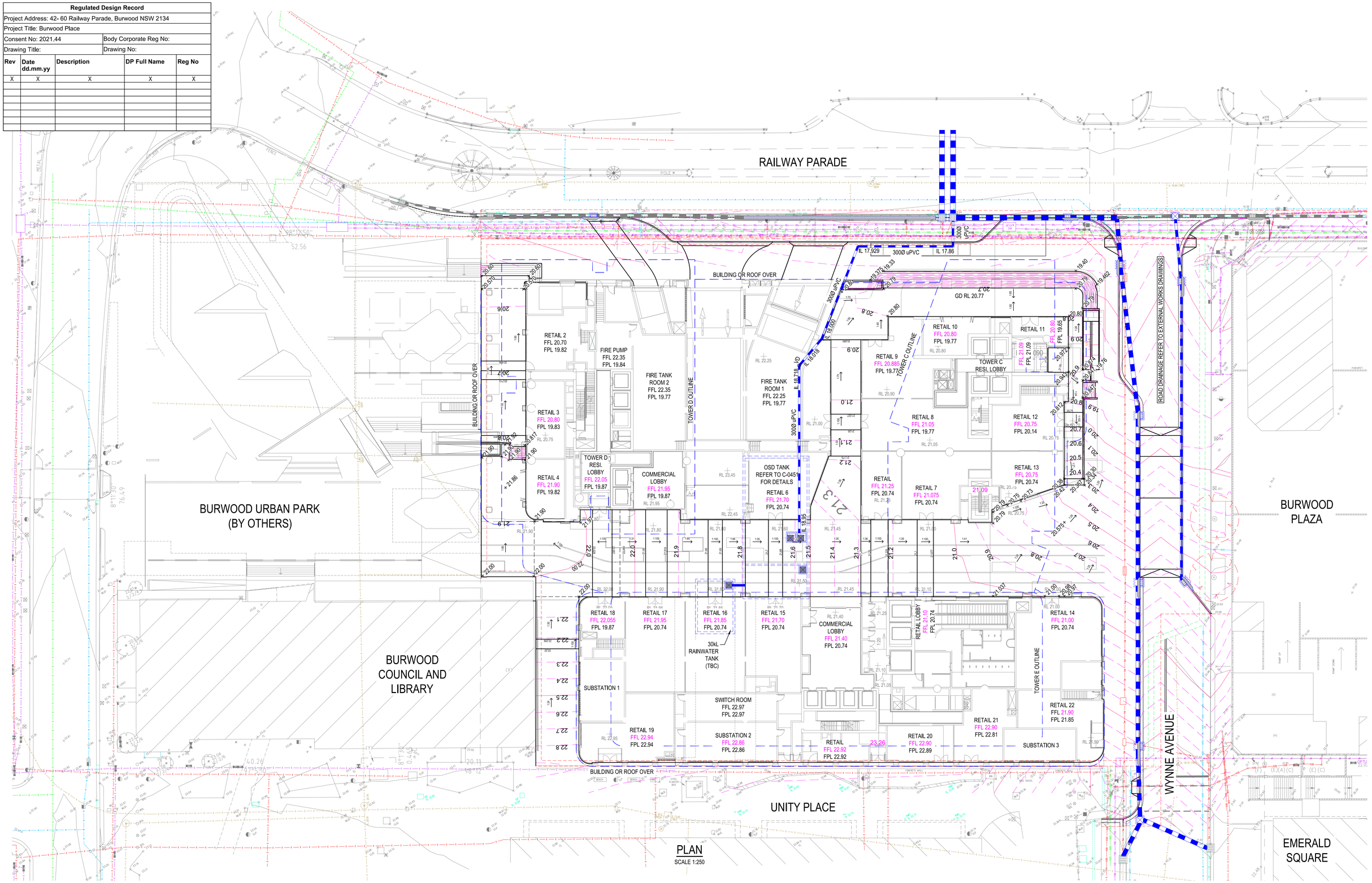
PROJECT TITLE
BURWOOD PLACE
42-60 RAILWAY PARADE
BURWOOD NSW 2134

DRAWING TITLE
EROSION AND SEDIMENT CONTROL
STAGE 2

DRAWING STATUS
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
AW	HB/AB		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
HB/AB	AS SHOWN	DATE DRAWN	A1
JOB No.		DRAWING No.	REVISION
SY232-010		C0112	A

Regulated Design Record				
Project Address: 42- 60 Railway Parade, Burwood NSW 2134				
Project Title: Burwood Place				
Consent No: 2021.44		Body Corporate Reg No:		
Drawing Title:		Drawing No:		
Rev	**Date dd.mm.yy**	**Description**	**DP Full Name**	**Reg No**
X	X	X	X	X



PLAN
SCALE 1:250

REVISIONS:			
No.	REVISION DESCRIPTION	DRAWN	DATE
I	ISSUED FOR INFORMATION	AB	02.10.24
H	ISSUED FOR COORDINATION	AB	12.09.24
G	ISSUED FOR COORDINATION	AB	14.08.24
F	ISSUED FOR COORDINATION	AB	09.08.24
E	ISSUED FOR COORDINATION	AB	07.08.24
D	PRELIMINARY	AB	26.07.24
C	PRELIMINARY	HB	30.05.24
B	PRELIMINARY	AB	03.05.24
A	PRELIMINARY	AB	12.04.24

SCALE BAR
0 1 2 3 4 5 10m 15 20m
SCALE 1:250

COPYRIGHT ©
THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.
DISCLAIMER
THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.
NOTE
THERE IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY, UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED, DO NOT SCALE REDUCED SIZE DRAWINGS, VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.
IF IN DOUBT - ASK.

van der Meer Consulting
van der meer
LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370
www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT
HOLDMARK
2-4 GIFFNOCK AVENUE
MACQUARIE PARK NSW 2113

ARCHITECT
SCOTT CARVER
LEVEL 1, 1 CHIFLEY SQUARE, SYDNEY NSW 2000

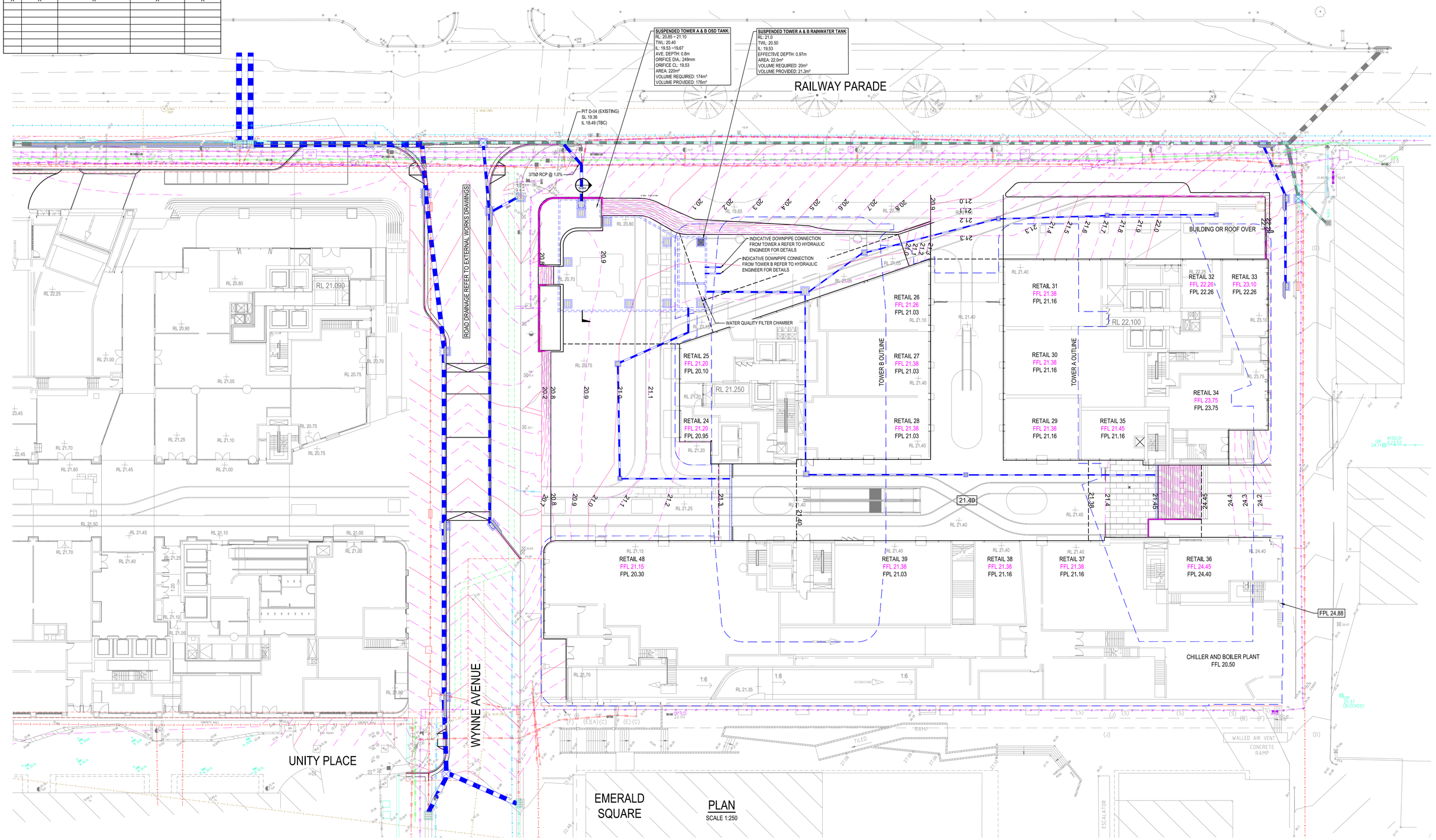
PROJECT TITLE
BURWOOD PLACE
42-60 RAILWAY PARADE
BURWOOD NSW 2134

DRAWING TITLE
DRAINAGE LAYOUT - SHEET 1

DRAWING STATUS
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
AW	HB/AB		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
HB/AB	1:250	DATE DRAWN	A1
JOB No.	DRAWING No.		REVISION
SY232-010	C0401		I

Regulated Design Record				
Project Address: 42- 60 Railway Parade, Burwood NSW 2134				
Project Title: Burwood Place				
Consent No: 2021.44		Body Corporate Reg No:		
Drawing Title:		Drawing No:		
Rev	**Date dd.mm.yy**	**Description**	**DP Full Name**	**Reg No**
X	X	X	X	X



PLAN
SCALE 1:250

REVISIONS:			
D	PRELIMINARY	AB	02.10.24
C	PRELIMINARY	VB	09.08.24
B	PRELIMINARY	HB	30.05.24
A	PRELIMINARY	AB	03.05.24
No.	REVISION DESCRIPTION	DRAWN	DATE

SCALE BAR
0 1 2 3 4 5 10m 15 20m
SCALE 1:250

COPYRIGHT ©
THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD, IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.
DISCLAIMER
THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.
NOTE
THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY. UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED, DO NOT SCALE REDUCED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.
IF IN DOUBT - ASK.

van der Meer Consulting
van der meer
LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370
www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT
HOLDMARK
2-4 GIFFNOCK AVENUE
MACQUARIE PARK NSW 2113

ARCHITECT
SCOTT CARVER
LEVEL 1, 1 CHIFLEY SQUARE, SYDNEY NSW 2000

PROJECT TITLE
BURWOOD PLACE
42-60 RAILWAY PARADE
BURWOOD NSW 2134

DRAWING TITLE
DRAINAGE LAYOUT - SHEET 2

DRAWING STATUS
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
AW	HB/AB		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
HB/AB	1:250	DATE DRAWN	A1
JOB No.		DRAWING No.	REVISION
SY232-010		C0402	D

17 September 2024

Project No: P01182

Head Office Suite
2/2-4 Giffnock Avenue
Macquarie Park NSW 2113

Level 11
117 York Street
Sydney NSW 2000

RE: Compliance of Burwood Place S4.55 Modification

E-LAB Consulting have reviewed the updated architectural design and Sustainability Report [Commercial & Retail] prepared by Cundall and confirm the sustainability aspirations outlined in this report still stand with one change limited to the targeted Green Star Rating Tool outlined in Section 2.10 of the report.

The Commercial Tower E is targeting a certified 5 Star Green Star rating and due to registration requirements set by the GBCA, the Commercial Tower is required to target a Green Star Buildings Rating with Climate positive Pathway.

The updated Green Star Pathway has been workshopped with Holdmark on the 22nd of July 2024 and is attached to support this addendum noting the targeted Credits in this strategy maybe updated as the design progresses.

Attached; Appendix A - Sustainability Report [Commercial & Retail]

Appendix B – Green Star Pathway

Please do not hesitate to contact undersigned for queries.

Engineering Lab NSW Pty Ltd

Ben Loe | Associate – Team Co-Lead, Sustainability

Ben.Loe@e-lab.com.au

Burwood Place - Commercial & Retail

42-60 Railway Parade, Burwood, NSW

Burwood Tower Holdings Pty Ltd

Job No:	1027864
Doc Ref:	RPT-SY-001-Sustainability Report [Commercial & Retail]
Revision:	C
Revision Date:	10 June 2022

Project title	Burwood Place - Commercial & Retail	**Job Number**
Report title	42-60 Railway Parade, Burwood, NSW	1027864

Document Revision History

Revision Ref	Issue Date	Purpose of issue / description of revision
—	26 November 2020	Draft Issue for Comment
A	09 March 2021	Draft Final Issue for Review
B	17 March 2021	Final Issue
C	10 June 2022	Issue for DA 2022

Document Validation (latest issue)

X Isuru Hettiarachchi
Principal author

X
Checked by

X
Verified by

Contents

1.0	**Introduction**	**1**
2.0	**Design Response**	**2**
2.1	Project's design objective	2
2.2	The sustainability design commitment	2
2.3	Integrated architectural design	3
2.4	Minimising energy consumption and greenhouse gas emissions	3
2.5	Reducing potable water consumption	4
2.6	Sustainable transport facilities	4
2.7	Enhanced indoor environment quality (IEQ)	4
2.8	Use of sustainable materials	5
2.9	Waste Reduction and Site Management	5
2.10	Green Star Design and As Built	5

1.0 Introduction

Burwood Place is a mixed-use development located at 42-60 Railway Parade, Burwood, on land zoned for Mixed Use Development (B4) under the Burwood Local Environmental Plan 2012.

The site is bounded by Railway Parade to the North, Clarendon Place to the east, Council carpark to the west and Burwood Grand and Emerald Square (2 mixed use developments) to the South. The site also includes Wynne Avenue and Clarendon Place.

Currently, the property is occupied by a mix of office buildings, a three-level car park, and the Burwood Plaza shopping centre.

The proposed development is the direct response to a site-specific Planning Proposal approved by the NSW Government on 23 December 2020 which increased the height and FSR permissible on the site and specifically sought to facilitate a changed development outcome on the site. The proposed development is a manifestation of the indicative built outcome identified in the planning proposal and consistent with the site specific adopted DCP.

This document is prepared to demonstrate compliance with the environmentally sustainable design (ESD) objectives set out in:

- Burwood LEP 2012, Clause 6.5(i)
- Burwood DCP 2018, Section 6

The proposal includes 4 residential high-rise towers, a 12-storey commercial tower, 3 storey retail podium and commercial podium, a lower ground that includes retail and loading areas and 6 levels of basement. The project also delivers over 4,000 sqm of new public domain areas at ground level.

The project is divided in 2 stages. Stage 1 on the west includes residential Tower C and D and the commercial Tower E as well as retail at ground floor and professional suites on the upper levels of the podium. Stage 2 on the east includes residential Tower A and B and a retail focus podium with cinemas and entertaining in the upper levels.

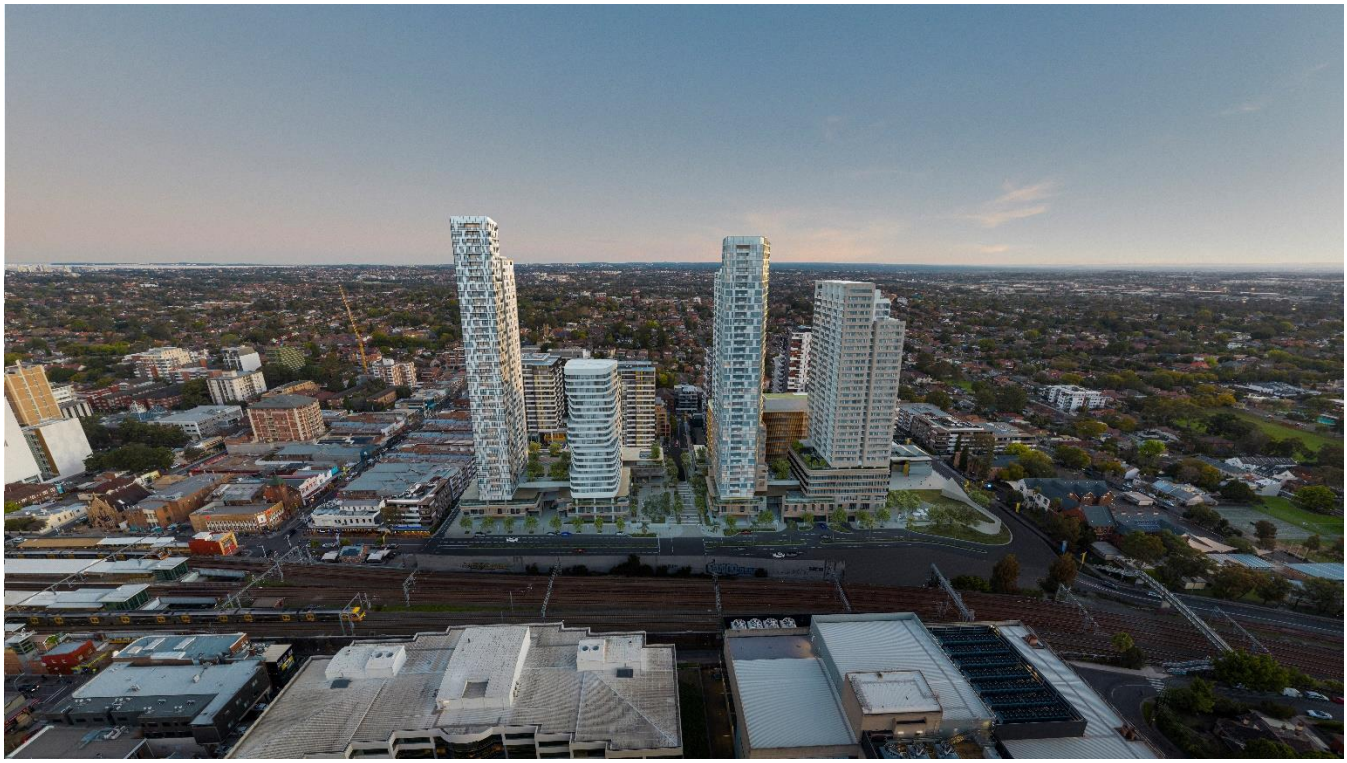


Figure 1 - Architect Impression of the Burwood Place Development

2.0 Design Response

2.1 Project's design objective

Burwood Tower Holdings Pty Ltd aims to promote environmental excellence by constructing a retail development and commercial building which embraces the environment, architectural design and provides a high level of amenity for tenants and visitors to the precinct.

The new project is designed based on environmentally sustainable design principles not only in terms of resource efficiency, maintainability, safety, cost and flexibility, but also in terms of user experience and well-being.

The project's design objectives are as follows:

1. To develop in accordance with the DCP, LEP and design brief.
2. To develop a site that optimises investment consistent with best practice standards for environmentally and climatically sustainable development standards.
3. To create a sustainable development which is in harmony with the surrounding area.
4. Create a high quality, environmentally sustainable and efficiently designed development.

2.2 The sustainability design commitment

The project will consider best sustainable practice in its design, as practically achievable. The project aims to implement sustainability measures where proven to be cost effective and promotes opportunities to reduce the long-term costs of operating and maintaining the commercial building and retail elements of the development. The following strategies will be explored:

- To reduce construction waste, operational waste recycling and management.
- To reduce energy consumption.
- To reduce potable water consumption and waste water discharge.
- The project is aiming to pursue environmental certifications for the commercial component of the development (Tower E):
    - 5-Star Green Star Design & As-Built v1.3 rating
    - 5-Star NABERS Energy base building rating for Offices
- The project is aiming to pursue the following environmental certification for the retail component.
    - 4.5-Star NABERS Energy rating for Shopping Centres
        - Official rating if >15,000m^2 of rateable area.
        - Unofficial equivalent rating if <15,000m^2 of rateable area

The following sections provide details on how the retail and commercial elements of the project aim to achieve the project's sustainability design objectives:

- Integrated Architectural Design
- Minimising Energy Consumption and Greenhouse Gas Emissions
- Reducing Potable Water Consumption
- Sustainable Transport Facilities
- Enhanced Indoor Environment Quality

- Use of Sustainable Materials
- Waste Reduction and Site Management

2.3 Integrated architectural design

The following design initiatives will drive the project to embrace and respond to the surrounding environment:

- Transformation of Wynne Avenue into a pedestrian friendly zone with enhanced connectivity to existing Burwood library, community infrastructure and amenities.
- Improved streetscape and active street frontages achieved through an engaging ground plane with retail and food/beverage tenancies.
- Dedicated land to enhance access to public transport and community travel, in Railway Parade and redevelopment of Clarendon Place.
- Minimisation of overshadowing on adjacent properties in the neighbourhood.
- Landscaping and access to shaded areas to increase pedestrian amenity.
- Design to encourage a safe environment, reduce crime and encourage positive interaction within the development.

2.4 Minimising energy consumption and greenhouse gas emissions

The project plans to incorporate design initiatives to minimise greenhouse gas emissions and meet the anticipated energy consumption for the base building, including:

- Building envelope thermal insulation and glazing to meet the minimum NCC section J requirements.
- Minimise energy demand and consumption through passive design techniques including external shading and building fabric thermal mass.
- Investigation and assessment of on-site energy generation (PV) to reduce greenhouse gas emissions and reliance on mains power.
- Mechanical Services
    - Install carbon monoxide monitoring system and variable speed fan mechanical exhaust system for carpark and lower ground floor garage.
    - Select air handling units with economy cycle with CO_2 demand ventilation control system to provide outdoor air flow control.
    - Variable speed drive or speed control to be provided on major fans.
    - The specific fan power (W/l/s) of fans should not exceed NCC maximum fan motor power requirements.
- Electrical lighting
    - Select long life lamps and high efficiency external and internal light fittings such as LED with highest practical efficacy.
    - Lighting design to ensure lux levels to meet, but not exceed, agreed functional requirements.
    - Use of electronic control gear with a high power factor.
    - Install lighting control system through a combination of strategies including timers, occupancy sensors, appropriate zoning of light circuits and intuitive switching to reduce energy consumption.
- Metering and monitoring
    - Energy consumption to be metered separately for different end uses.
    - BCMS to monitor energy and water consumption and efficiency.

- Lifts
  - Specify energy efficient light fittings.
  - Provide stand-by mode during off-peak and idle period e.g. lift car lighting and ventilation fan switch off when the lift is not in motion.
- Equipment and appliances
  - Energy efficient appliances for all common facilities provided by the building owner/developer.
  - Landlord plug-in equipment and appliances should be selected to have the highest reasonably available Energy Star rating and a low stand-by mode power consumption.

2.5 Reducing potable water consumption

The project will incorporate the following design initiatives to minimise potable water usage, including:

- Select water efficient fixtures and appliances:
  - Minimum 3 star WELS rated fixtures
  - Installation of water saving devices such as flow regulators, dual flush toilets and tap aerators.
- Landscape design to include native plants and low irrigation requirements.
- Select water efficient irrigation system and mulch must be applied to planted areas to limit evaporation, runoff or wastage.
- Cooling tower design to consider water use reduction.
- Reuse of fire system test water.
- Water consumption to be metered separately for different uses.

2.6 Sustainable transport facilities

The following design initiatives will reduce car dependence for all building occupants in the project, including:

- Secured bicycle parking for regular occupants and visitors.
- Commercial and Retail End of Trip facilities to promote increased bicycle mode share.
- Location within walking distance to Burwood Railway Station, bus stands and various public amenities.

2.7 Enhanced indoor environment quality (IEQ)

The project will incorporate the following design initiatives to achieve a high level of IEQ and improves building occupants' health and well-being, including:

- All internally applied paints, adhesives, sealants and carpets shall be low VOCs.
- Optimise façade design to achieve a good level of natural daylight access, reduce glare and provide external views.
- Specify engineered wood products with low formaldehyde emission.

2.8 Use of sustainable materials

The project will seek to incorporate the following design initiatives to reduce the environmental impact of the products and materials used in the project, including:

- Reduce new material consumption and aim to use sustainable materials, including recycled content in concrete, sustainable timber and PVC minimisation.
- Specify timber products to be Forest Stewardship Council (FSC) or Australian Forestry Standard (AFS) certified.
- Specify PVC products used in the project to comply with the *Best Practice Guidelines for PVC in the Built Environment*.

2.9 Waste Reduction and Site Management

The project will incorporate the following design initiatives to reduce waste to landfill and site emissions, including:

- Light pollution
    - The mounting orientation of all external lighting luminaires shall be carefully considered to minimise obtrusive lighting effects and where necessary additional shielding should be considered. External emergency lighting and other lighting related to safety requirements are excluded.
- Environmental management
    - Develop an environmental management plan in accordance with the NSW Environmental Management Systems Guidelines.
    - The formalised environmental management system shall be ISO 14001 certified.
- Operational waste
    - Waste Management Plans during demolition, construction and operational stages to manage waste streams.
    - Separation of waste and provision of recycling bins to reduce waste sent to landfill.
- Demolition and construction waste
    - Target construction waste diversion from landfill in line with targeted Green Star requirements.
    - Develop a demolition and construction waste management plan to identify the type of construction waste and methods to reduce waste.

2.10 Green Star Design and As Built

The commercial Tower E is targeting a 5-Star Green Star rating using the Green Star Design & As Built v1.3 rating tool. A certified 5-Star Green Star rating is achieved if the project achieves at least 60 points. A margin is typically added to minimise risk of achieving the rating.

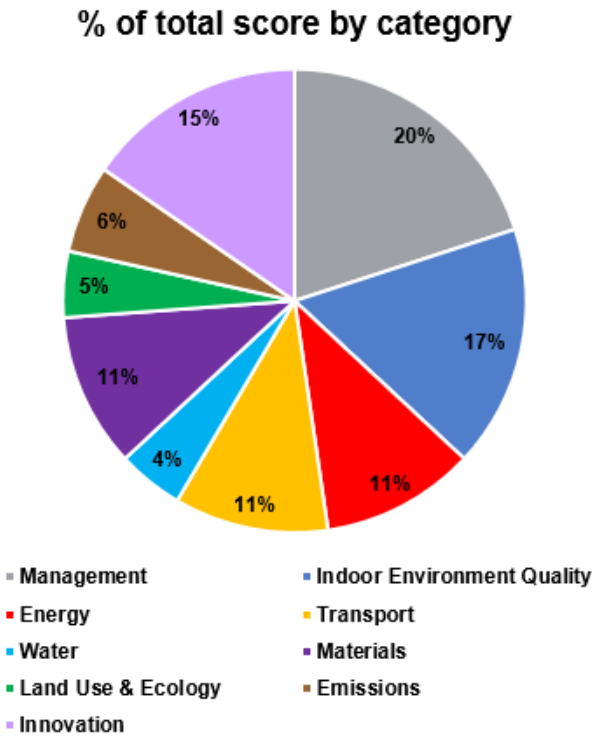


Figure 2 - Indicative Green Star point breakdown by category

The following graph shows points targeted at a high level, against available points in each category.



Figure 3 – Targeted Green Star points targeted vs points available

The proposed Green Star strategy will be workshopped and agreed with the project team before implementation and certification. The strategy may be updated throughout the design as appropriate and final points may differ from the current strategy.

Cundall Johnston & Partners PTY
Level 1 48 Alfred Street Milsons Point NSW 2061
Australia Tel:+61 (0)2 8424 7000
Asia Australia Europe MENA UK and Ireland
www cundall com



Tower E, Burwood Place

Rev 01 | 11/03/2024 | Green Star Buildings v1 rev C (2023 Project Registration) | To support contract negotiations

Rating	5 star
Core	38
At Risk	2
Leadership	2
Total	40
Required	35

High-Level Cost Estimate	
$	< $50,000
$$	$50,000 - $250,000
$$$	> $250,000

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
	Responsible	17	2					
1	Industry Development	1	1	**Credit Achievement** • The owner appoints a Green Star Accredited Professional. • The owner discloses the cost of sustainable building practices to the GBCA. • The owner markets the building's sustainability achievements.	E-LAB Holdmark	No	$$	• GSAP Consultant fees included • Financial transparency + marketing excellence - Project cost impact: circa $10k • Green Star certification fees: circa $50k
2	Responsible Construction	•	•	**Minimum Expectation** • The builder has an environmental management system in place to manage its environmental impacts on site. • The builder has an environmental management plan to cover the scope of construction activities. • The builder diverts at least 80% of construction and demolition waste from landfill. • The builder provides training on the sustainability targets of the building.	Holdmark	No	-	• Business as usual
		1	1	**Credit Achievement** In addition to the Minimum Expectation: • 90% of construction and demolition waste is diverted from landfill, and waste contractors and facilities comply with the Green Star Construction and Demolition Waste Reporting Criteria.	Holdmark	No	-	
3	Verification and Handover	•	•	**Minimum Expectation** • The building is set up for optimum ongoing management due to its appropriate metering and monitoring systems. • The building has set environmental performance targets, designed and tested for airtightness, been commissioned, and will be tuned. • The project team create and deliver operations and maintenance information to the facilities management team at the time of handover. Information is available to building users on how to best use the building.	Architect Services Consultant Façade Engineer E-LAB Holdmark	No	$$	• Exceeds metering and monitoring system provisions of NCC 2022 Part J9D3; advanced system requirements (circa $125k) • Coordinate PPR (incl. targets), Building Logbook, Building User Information (included) • Conduct a services and maintainability review (business as usual - SiD process) and prepare a Services and Maintainability Report; Consultant fees apply (circa $7.5k) • Carry out building commissioning and tuning (business as usual), and airtightness testing (circa $25k)
		1		**Credit Achievement** In addition to the Minimum Expectation: • An independent level of verification is provided to the commissioning and tuning activities through the involvement of an independent commissioning agent. or • The project uses a soft landings approach that involves the future facilities management team. For large projects (Building Services Value > $20m), both must occur.				• Not targeted

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
4	Responsible Resource Management	•	•	**Minimum Expectation** • The building is designed for the collection of separate waste streams. • The building provides a dedicated and adequately sized waste storage area. • The building ensures safe and efficient access to waste storage areas for both occupants and waste collection contractors.	Architect Waste Consultant	No	-	• Business as usual • Waste Consultant fees already included in project costs; OWMP and architectural design response required for DA purposes
5	Responsible Procurement	1		**Credit Achievement** • The building's design and construction procurement processes follow ISO 20400 Sustainable Procurement – Guidance. • A responsible procurement plan is developled to mitigate risks. • At least one identified supply chain risk and opportunity is addressed.				• Not targeted
6	Responsible Structure	3		**Credit Achievement** • 50% of all structural components (by cost) meet a Responsible Products Value of at least 10.				• Not targeted
		2		**Exceptional Performance** In addition to the Credit Achievement: • 10% of all products in the structure (by cost) meet a Responsible Products Value of at least 15. or • 80% of all products in the structure (by cost) have an average Responsible Products Value of at least 10.				
7	Responsible Envelope	2		**Credit Achievement** • 30% of all building envelope components (by cost) meet a Responsible Products Value of at least 10.				• Not targeted
		2		**Exceptional Performance** In addition to the Credit Achievement: • 10% of all products in building envelope (by cost) meet a Responsible Products Value of at least 15. or • 60% of all products in the building envelope (by cost) have an average Responsible Products Value of at least 10.				
8	Responsible Systems	1		**Credit Achievement** • 20% of all active building systems (by cost) meet a Responsible Products Value of at least 6.				• Not targeted
		1		**Exceptional Performance** In addition to the Credit Achievement: • 5% of all active building systems (by cost) meet a Responsible Products Value of at least 11. or • 15% of all active building systems (by cost) have an average Responsible Products Value of at least 8.				
9	Responsible Finishes	1		**Credit Achievement** 40% of all internal building finishes (by cost) meet a Responsible Products Value of at least 7.				• Not targeted
		1		**Exceptional Performance** In addition to the Credit Achievement: • 10% of all internal building finishes (by cost) meet a Responsible Products Value of at least 12. or • 60% of all internal building finishes (by cost) have an average Responsible Products Value of at least 9.				
	Healthy	**14**	**10**					
10	Clean Air	•	•	**Minimum Expectation** • Levels of indoor pollutants are maintained at acceptable levels. • A high level of fresh air is provided (50% above AS1668.2:2012 or CO_2 concentration is maintained below 800ppm). • Pollutants entering the building are minimised.	Services Consultant	No	-	• Business as usual
		2	**2**	**Credit Achievement** In addition to the Minimum Expectation: • The building's ventilation systems allow for easy maintenance. • High levels of outdoor air are provided (~~100% above AS1668.2:2012 or~~ CO_2 concentration is maintained below 700ppm).	Services Consultant	No	-	• Performance based approach - implement CO_2 monitoring and demand response ventilation controls; inherent in NCC 2022 Part J6D4, where mechanical ventilation system provides > 1,000 L/s airflow

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
11	Light Quality	•	•	**Minimum Expectation** • Lighting within the building meets minimum comfort requirements. • Good lighting levels suitable for the typical tasks in each space are available. • The building provides adequate levels of daylight.	Architect Services Consultant E-LAB	No	-	• Good practice
		2	**2**	**Credit Achievement** In addition to the Minimum Expectation: ~~• The building provides best practice artificial lighting.~~ ~~or~~ • The building provides best practice access to daylight (40% receive high levels of daylight).	E-LAB	No	-	• ESD Consultant fees included; Daylight criteria only • Subject to daylight analysis; low risk
		2		**Exceptional Performance** In conjunction with the Credit Achievement: • The building provides best practice artificial lighting. • The building provides best practice access to daylight.				• Not targeted
12	Acoustic Comfort	•	•	**Minimum Expectation** • An Acoustic Comfort Strategy is prepared to describe how the building and acoustic design aims to deliver acoustic comfort to the building occupants.	Acoustic Consultant	No	-	• Business as usual
		2	**2**	**Credit Achievement** In addition to the Minimum Expectation, • Base build (commercial) - achieve the following criteria: - The building achieves maximum internal noise levels. and - The building provides acoustic separation.	Acoustic Consultant	Yes	-	• Business as usual
13	Exposure to Toxins	•	•	**Minimum Expectation** • The building's paints adhesives, sealants, and carpets are low in TVOC or non-toxic. • The building's engineered wood products are low in TVOC or non-toxic. • Occupants are not exposed to banned or highly toxic materials in the building.	Architect Services Consultant Holdmark	No	-	• Business as usual
		2	**2**	**Credit Achievement** In addition to the Minimum Expectation: • On-site tests verify the building has low Volatile Organic Compounds (VOC) and formaldehyde levels.	Performance Testing Specialist	No	$	• Project cost impact: on-site IE testing required (circa $15k)
14	Amenity and Comfort	2	**2**	**Credit Achievement** • The building has dedicated amenity rooms to act as a parent room, relaxation room, or an exercise room.	Architect	No	-	• Base building provisions for building staff (e.g., reception / cleaning / security / etc. staff); dedicated min. 10m^2 room required • Project cost impact: where addressed early in the design process, this is unlikely to materially impact project cost; best practice
15	Connection to Nature	1		**Credit Achievement** • The building provides views. and • The building includes indoor plants and incorporates nature-inspired design. or • 5% of the building's floor area or site area (whichever is greater) is allocated to nature in which occupants can directly engage with.				• Not targeted
		1		**Exceptional Performance** In conjunction with the Credit Achievement: • The building provides views. • The building includes indoor plants and incorporates nature-inspired design. • 5% of the building's floor area or site area (whichever is greater) is allocated to nature in which occupants can directly engage with.				

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
	Resilient	**8**	**2**					
16	Climate Change Resilience	•	•	**Minimum Expectation** • The project team completes the climate change pre-screening checklist. The project team communicates the building's exposure to climate change risks to the developer.	E-LAB	No	-	• Good practice
		1	1	**Credit Achievement** In addition to the Minimum Expectation: • The project team develops a project-specific climate change risk and adaptation assessment for the building. • Extreme and high risks are addressed.	E-LAB	Yes	-	• ESD Consultant fees included • Project cost impact: unlikely to materially impact project cost; good practice
17	Operations Resilience	2		**Credit Achievement** • The project team undertakes a comprehensive review of the acute shocks and chronic stresses likely to influence future building operations. • The building's design and future operational plan addresses any high or extreme system-level interdependency risks. • The building's design maintains a level of survivability and design purpose in a blackout.				• Not targeted
18	Community Resilience	1		**Credit Achievement** • The project team undertakes a needs analysis of the community, identifies shocks and stresses that impact the building's ability to service the community, and develops responses to manage these.				• Not targeted
19	Heat Resilience	1	1	**Credit Achievement** • At least 75% of the whole site area comprises of one or a combination of strategies that reduce the heat island effect.	Architect Landscape Architect Services Consultant	Yes	$$	• Good practice; subject to rooftop plant configuration;medium risk • Project cost impact: < $250k
20	Grid Resilience	3		**Credit Achievement** • The building provides active generation and storage systems. and/or • The building has the infrastructure to deliver an appropriate demand response strategy.				• Not targeted
	Positive	**30**	**16**					
21	Upfront Carbon Emissions		•	**Minimum Expectation** • The building's upfront carbon emissions are at least 10% less than a reference building.	Architect Structural Engineer Façade Engineer Services Engineer Quantity Surveyor E-LAB	No	$$$	• ESD Consultant fees included; see also Credit 26 Life Cycle Impacts • Requires enhanced materials specifications, and construction-related initiatives • Supported by the Embodied Emissions Materials Form, prepared by the Quantity Surveyor, and reflective of the Project Cost Plan • Project cost impact: > $250k
		3	3	**Credit Achievement** – Climate Positive Pathway – In conjunction with the Minimum Expectation: • The building's upfront carbon emissions are at least 20% less than a reference building. • Demolition works are offset.				
		3		**Exceptional Performance** In conjunction with the Credit Achievement: • The building's upfront carbon emissions are at least 40% less than those of a reference building.				
22	Energy Use		•	**Minimum Expectation** • Reference building pathway - The building uses 10% less energy than a reference building. or • NABERS Commitment Agreement pathway - The building is targeting a 5.5 star NABERS Energy rating.	Services Consultant Façade Engineer Architect E-LAB	No	$$	• ESD Consultant fees included • In line with NCC 2022 Section J and NSW Sustainable Buildings SEPP compliance requirements based on Verification Method J1V1 NABERS Energy or J1V2 Green Star Project cost impact: circa $125k; considers the provision of active generation systems
		3	3	**Credit Achievement** – Climate Positive Pathway – In conjunction with the Minimum Expectation: • Reference building pathway - The building uses 20% less energy than a reference building. or • NABERS Commitment Agreement pathway - The building is targeting a 5.5 star (+25%) NABERS Energy rating.				
		3		**Exceptional Performance** In conjunction with the Credit Achievement: • Reference building pathway - The building uses 30% less energy than a reference building. or • NABERS Commitment Agreement pathway - The building is targeting a 6 star NABERS Energy rating.				• Not targeted

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
23	Energy Source		•	**Minimum Expectation** • The building provides a Zero Carbon Action Plan.	E-LAB Services Consultant Architect Holdmark	Yes	-	• ESD Consultant fees included • Transition planning for alternative electric-based technologies to replace residual fossil fuel-based systems (e.g., energy storage in lieu of diesel standby generator for emergency power) • Project cost impact: subject to extend of transition planning required; where addressed early in the design process, this is unlikely to materially impact project cost; best practice
		3	**3**	**Credit Achievement** In conjunction with the Minimum Expectation: • 100% of the building's electricity comes from renewable electricity.	Services Consultant Holdmark	No	OPEX	• All-electric building; fossil fuel-free; basis of design • 100% renewable electricity supply • Project cost impact: none; basis of design
		3	**3**	**Exceptional Performance** – Climate Positive Pathway – In conjunction with the Credit Achievement: • 100% of the building's energy comes from renewables.				
24	Other Carbon Emissions	2	**2**	**Credit Achievement** – Climate Positive Pathway – • The building eliminates emissions from refrigerants. or • The building offsets emissions from refrigerants.	Services Consultant E-LAB Holdmark	No	$	• Eliminate - wherever practicable • Offset - Project cost impact: attributed to offsetting any residual high impact refrigerant plant and equipment (circa $20k)
		2		**Exceptional Performance** In addition to the Credit Achievement: • All other emissions not captured in the Positive category are eliminated or offset.				• Not targeted
25	Water Use	•		**Minimum Expectation** • The building installs efficient water fixtures.	Architect Services Consultant E-LAB	No	-	• Business as usual
		3		**Credit Achievement** In conjunction with the Minimum Expectation: • The building uses 45% less potable water compared to a reference building. • The building has infrastructure for recycled water connection.				• Not targeted; this would require advanced water efficiency technologies, incl. hybrid cooling towers, EOT water reduction initiatives, and increased rainwater/stormwater harvesting
		3		**Exceptional Performance** In conjunction with the Credit Achievement: • The building uses 75% less potable water compared to a reference building.				
26	Life Cycle Impacts	2	**2**	**Credit Achievement** • The project demonstrates a 30% reduction in life cycle impacts when compared to standard practice.	E-LAB	No	-	• ESD Consultant fees included • Project cost impact: where addressed early in the design process, this is unlikely to materially impact project cost
	Places	**8**	**7**					
27	Movement and Place	•	•	**Minimum Expectation** • The building includes showers and changing facilities for building occupants. • The facilities are accessible, inclusive, and located in a safe and protected space.	Architect E-LAB	No	-	• Business as usual • Must include provisions for all building users, excl. visitors
		3	**3**	**Credit Achievement** In addition to the Minimum Expectation: • The building's access prioritises cycling and includes bicycle parking facilities. • A Sustainable Transport Plan (STP) has been prepared and implemented. • The building has EV charging capabilities. • Transport options that reduce the need for private fossil fuel powered vehicles are prioritised. • The building's design and location encourage walking.	Architect Transport Consultant Services Consultant E-LAB Holdmark	Yes	$$	• ESD Consultant fees included • Green Star requirements for EOT facilities are typically more onerous than Council controls • Project cost impact: consider increased spatial allowance for EOT facilities (circa $100k)

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
28	Enjoyable Places	2	2	**Credit Achievement** • The building delivers memorable, beautiful, vibrant communal or public places where people want to gather and participate in the community. • The spaces are inclusive, safe, flexible, and enjoyable.	Architect Landscape Architect Holdmark	Yes	-	• Inherent in the public and communal open space provisions within the context of the wider precinct, incl. a precinct activation strategy
29	Contribution to Place	2	2	**Credit Achievement** • The building's design contributes to the liveability of the wider urban context and enhances the public realm.	Architect Holdmark	No	$	• Additional consultant fees to prepare an enhanced Urban Context Report and demonstrate the design response will positively contribute to the urban context (circa $25k)
30	Culture, Heritage and Identity	1		**Credit Achievement** • The building's design reflects and celebrates local demographics and identities, the history of the place, and any hidden or minority entities.				• Not targeted
	People	9	1					
31	Inclusive Construction Practices	•	•	**Minimum Expectation** • During the building's construction, the builder provides gender inclusive facilities and protective equipment. The builder also installs policies on-site to increase awareness and reduces instances of discrimination, racism, and bullying.	Builder	No	-	• Business as usual
		1	1	**Credit Achievement** In addition to the Minimum Expectation: • Policies and programs implemented are relevant to construction workers on site. • The builder provides high quality staff support on-site to reduce at least five key physical and mental health impacts. • The effectiveness of the interventions is evaluated.				
32	Indigenous Inclusion	2		**Credit Achievement** • The project team plays an active role in the organisational Reconciliation Action Plan. or • The building's design and construction incorporates design elements using the Indigenous design and planning strategies and principles				• Not targeted
33	Procurement and Workforce Inclusion	2		**Credit Achievement** • The project implements a social procurement plan. • At least 2% of the building's total contract value has been directed to generate employment opportunities for disadvantaged and under-represented groups.				• Not targeted
		1		**Exceptional Performance** In conjunction with the Credit Achievement: • The project implements a social procurement plan. • At least 4% of the building's total contract value has been directed to generate employment opportunities for disadvantaged and under-represented groups.				• Not targeted
34	Design for Inclusion	2		**Credit Achievement** • The building is designed and constructed to be inclusive to a diverse range of people with different needs.				• Not targeted
		1		**Exceptional Performance** In addition to the Credit Achievement: • Engagement with target groups to conduct a needs analysis has informed the inclusive design.				• Not targeted

No.	Credit	Points Available	5 star	Credit Requirements	Responsible Party	Spatial Impact	Cost Impact	Comments
	Nature	14	0					
35	Impacts to Nature	•	•	**Minimum Expectation** • The building was not built on, or significantly impacted, a site with a high ecological value. • The building's light pollution has been minimised.	Services Consultant Holdmark	No	-	• Sensitive sites - compliant • Light pollution - business as usual
		2		**Credit Achievement** In addition to the Minimum Expectation: • The building's design and construction conserves existing natural soil, hydrological flows, and vegetation elements.				• Not targeted
36	Biodiversity Enhancement	2		**Credit Achievement** • The building's site includes an appropriate landscape area (15% of site area) • The landscaping includes a diversity of species and prioritises the use of climate-resilient and indigenous plants. • The project team develops a site-specific Biodiversity Management Plan and provides it to the building owner or building owner representative.				• Not targeted
		2		**Exceptional Performance** In addition to the Credit Achievement: • A greater area of landscaping is provided (30% of site area) • The landscaping includes critically endangered and/or endangered plant species native to the bioregion.				• Not targeted
37	Nature Connectivity	2		**Credit Achievement** • The site must be built to encourage species connectivity through the site, and to adjacent sites. If the project sits within a blue or green grid strategy it must contribute to the goals of the strategy.				• Not achievable
38	Nature Stewardship	2		**Credit Achievement** • The area of restoration must be equivalent to the total GFA of the development or site area, whichever is greater. • Areas of restoration or protection are provided. • Restoration or protection activities are beyond the development's boundary. • The building owner, as part of the project's development, undertakes activities that protects or restores biodiversity at scale. • These actions occur beyond legislated requirements				• Not targeted
39	Waterway Protection	2		**Credit Achievement** • The project demonstrates a reduction in average annual stormwater discharge (ML/yr.) of 40% across the whole site. • Specified pollution reduction targets are met (TSS 85%, GP 90%, TN 45%, TP 65%)				• Not targeted; similar to Credit 25 Water Use; the civil works required to meet the criteria would detriment the upfront carbon emissions reduction strategy
		2		**Exceptional Performance** In conjunction with the Credit Achievement: • The project demonstrates a reduction in average annual stormwater discharge (ML/yr.) of 80% across the whole site. • Specified pollution reduction targets are met (TSS 90%, GP 95%, TN 60%, TP 70%)				
	Leadership	5	2					
40	Market Transformation							• Not targeted
41	Leadership Challenges	5	1	• Climate Positive Pathway (1 point)	E-LAB	No	-	• Climate Positive Pathway included
			1	• Fossil Fuel Free Construction Site (Credit Achievement; 1 point) - 20% of high emitting construction equipment is fossil fuel-free - Site offices are powered by 100% renewable electricity - All electricity used by the construction site is 100% renewable electricity	E-LAB Holdmark	No	$$$	• Fossil Fuel Free Construction Site - Project cost impact: subject to site (e.g., temporary electrical supply) and construction (e.g., program, supply chain, etc.) constraints; high risk (> $250k)

17 September 2024

Project No: P01182

Head Office Suite
2/2-4 Giffnock Avenue
Macquarie Park NSW 2113

Level 11
117 York Street
Sydney NSW 2000

RE: Compliance of Burwood Place S4.55 Modification

E-LAB Consulting have reviewed the updated architectural design and Sustainability Report [Residential] prepared by Cundall and confirm the sustainability targets outlined in this report still stand.

The changes that have influenced the BASIX Energy and Water Scores are summarised below:

- Extent of Glazing to the Residential Towers
- Rainwater catchment area reduced by ~50%
- Inclusion of 5kW of PV per Residential Tower
- Inclusion of 4 Star Washing Machine and 4 Star Dryer
- Proposed Electrical Heat Pump for Domestic Hot Water
- Individual Unit Heating and Cooling by FCU

These changes have been documented in the current NatHERS and BASIX Report and changes to the scores are sumamrised below.

Item	Target (Minimum Requirement)	DA Score	S4.55 Score
Building A			
BASIX (Energy)	25	25	26
BASIX (Water)	40	40	41
Minimum NatHERS	6.5 Star average	6.5 Star average	7.7 Star average
Number of Units	N/A	346	345
Building B			
BASIX (Energy)	25	25	25
BASIX (Water)	40	40	40
Minimum NatHERS	6.5 Star average	6.5 Star average	7.8 Star average

Number of Units	N/A	176	117
Building C			
BASIX (Energy)	25	25	25
BASIX (Water)	40	40	41
Minimum NatHERS	6.5 Star average	6.5 Star average	7.8 Star average
Number of Units	N/A	309	307
Building D			
BASIX (Energy)	25	25	25
BASIX (Water)	40	40	40
Minimum NatHERS	6.5 Star average	6.5 Star average	8.1 Star average
Number of Units	N/A	210	212

Attached; Appendix A - Sustainability Report [Residential]

Appendix B – BASIX Reports

Please do not hesitate to contact undersigned for queries.

Engineering Lab NSW Pty Ltd



Ben Loe | Associate – Team Co-Lead, Sustainability

Ben.Loe@e-lab.com.au

Burwood Place - Residential

42-60 Railway Parade, Burwood, NSW

Burwood Tower Holdings Pty Ltd

Job No:	1027864
Doc Ref:	RPT-SY-002
Revision:	C
Revision Date:	23 June 2022

Project title	Environmentally Sustainability Design DA Report	**Job Number**
Report title	42-60 Railway Parade, Burwood, NSW	1027864

Document Revision History

Revision Ref	Issue Date	Purpose of issue / description of revision
—	25 November 2020	Draft Issue for Comment
A	9 March 2021	Draft Issue for Comment
B	17 March 2021	Draft Issue for Comment
C	23 June 2022	Draft Final Issue for Comment

Document Validation (latest issue)

X	X	X
Principal author	Checked by	Verified by

© Cundall Johnston & Partners LLP ("Cundall") owns the copyright in this report and it has been written for the sole and confidential use of Burwood Tower Holdings Pty Ltd. It must not be reproduced whole or in part without the express written authorisation of Cundall Johnston & Partners LLP. Parties other than those specifically named in this disclaimer must not rely upon this report. Any third party relying on this report does so at their own risk. Cundall accepts no duty or responsibility (including in negligence) to any such third party.

Executive Summary

Burwood Place is a proposed new mixed-use development comprising of four residential towers and six levels of basement with commercial, retail, and serviced and residential apartments. Ecologically Sustainable Design (ESD) principles are being applied in the design, delivery and operation of the project and a number of ambitious environmental and wellbeing certifications are being targeted.

Differing targets have been set for each component of the development. This report outlines the sustainability commitments for the residential component (Class 2), which are as follows:

- Meet the minimum BASIX requirements for energy and water including:
  - BASIX Energy: 25% saving compared to benchmark greenhouse gas (GHG) emissions
  - BASIX Water: 40% saving compared to benchmark potable water demand

The residential project is implementing the following initiatives:

- Efficient building services, systems, equipment and controls incorporating sub-metering for improved tracking of operational performance.
- Targeting a minimum average 6.5-Star average NatHERS ratings for the apartments through a high-performance facade with low-e double glazing, insulation and fixed shading.
- Provision of energy efficient appliances to all apartments, where applicable.
- Permanent magnet synchronous motor (PMSM) and regenerative drive lifts with superior energy efficiency performance.
- Close proximity to public transport and amenities.
- More sustainable timber and concrete specification.
- Low-VOC paints, carpets, sealants and adhesives and low formaldehyde engineered wood products.
- Diversion of construction waste from landfill and on-site operational waste management facilities.

The buildings also includes a range of other sustainability initiatives described in greater detail throughout the body of the report.

Contents

1.0	**Introduction**	**3**
2.0	**Design Response**	**4**
2.1	Project's design objective	4
2.2	The sustainability design commitment	4
3.0	**Residential**	**5**
3.1	Summary of targets	5
3.2	Minimum regulatory BASIX requirements	5
3.3	BASIX compliance strategy	6
3.4	BCA Section J compliance requirements	12
3.5	Additional Sustainability Initiatives	12
4.0	**Conclusion**	**14**
Appendix A: BASIX and NatHERS Certification		**15**

1.0 Introduction

Burwood Place is a mixed-use development located at 42-60 Railway Parade, Burwood, on land zoned for Mixed Use Development (B4) under the Burwood Local Environmental Plan 2012.

The site is bounded by Railway Parade to the North, Clarendon Place to the east, Council carpark to the west and Burwood Grand and Emerald Square (2 mixed use developments) to the South. The site also includes Wynne Avenue and Clarendon Place.

Currently, the property is occupied by a mix of office buildings, a three-level car park, and the Burwood Plaza shopping centre.

The proposed development is the direct response to a site-specific Planning Proposal approved by the NSW Government on 23 December 2020 which increased the height and FSR permissible on the site and specifically sought to facilitate a changed development outcome on the site. The proposed development is a manifestation of the indicative built outcome identified in the planning proposal and consistent with the site specific adopted DCP.

This document is prepared to demonstrate compliance with the environmentally sustainable design (ESD) objectives set out in:

- Burwood LEP 2012, Clause 6.5(i)
- Burwood DCP 2018, Section 6

The proposal includes 4 residential high-rise towers, a 12-storey commercial tower, 3 storey retail podium and commercial podium, a lower ground that includes retail and loading areas and 6 levels of basement. The project also delivers over 4,000 sqm of new public domain areas at ground level.

The project is divided in 2 stages. Stage 1 on the west includes residential Tower C and D and the commercial Tower E as well as retail at ground floor and professional suites on the upper levels of the podium. Stage 2 on the east includes residential Tower A and B and a retail focus podium with cinemas and entertaining in the upper levels.



Figure 1 - Architect Impression of the Burwood Place Development

2.0 Design Response

2.1 Project's design objective

Burwood Tower Holdings Pty Ltd aims to promote environmental excellence by constructing residential towers which embraces the environment, architectural design and provides a high level of amenity for tenants and visitors to the precinct.

The new project is designed based on environmentally sustainable design principles not only in terms of resource efficiency, maintainability, safety, cost and flexibility, but also in terms of user experience and well-being.

The project's design objectives are as follows:

1. To develop in accordance with the DCP, LEP and design brief.
2. To develop a site that optimises investment consistent with best practice standards for environmentally and climatically sustainable development standards.
3. To create a sustainable development which is in harmony with the surrounding area.
4. Create a high quality, environmentally sustainable and efficiently designed development.

2.2 The sustainability design commitment

The project will consider best sustainable practice in its design, as practically achievable. The project aims to implement sustainability measures where proven to be cost effective and promotes opportunities to reduce the long-term costs of operating and maintaining the building. The following commitments are made:

- To reduce energy consumption – Meet BASIX Energy 25% target
- To reduce potable water consumption and waste water discharge – Meet BASIX Water 40% target
- Minimum NatHERS 6.5-star average rating across each residential tower
- Low VOC materials and finishes
- High levels of amenity including access to public transport
- Maximisation of landscape and access to green spaces

3.0 Residential

3.1 Summary of targets

The following commitments have been made for the residential component of the development:

- Minimum NatHERS 6.5-star average across each residential tower
- Meet the minimum BASIX performance requirements for energy and water including:
  - BASIX Energy: 25% saving compared to benchmark greenhouse gas (GHG) emissions
  - BASIX Water: 40% saving compared to benchmark potable water demand

3.2 Minimum regulatory BASIX requirements

New Class 1 and Class 2 residential development in NSW must comply with BASIX requirements developed by the Department of Planning and Environment. This replaces Section J of Volume 1 of the Building Code of Australia for Class 2 buildings. There are three components with minimum compliance targets varying by type of building and location. The three components are energy, water and thermal comfort.

3.2.1 Energy

The energy section of BASIX aims to reduce the greenhouse gas emissions of all new residential dwellings. The benchmark is 3,292 kgCO_2 per person per year, which was the average for homes prior to the introduction of BASIX in 2004. The energy target ranges from 10% to 50% reductions from the benchmark, depending on the climatic zone and the building type. For this project, located in Burwood and with over 6 storeys of residential units, the energy target is:

	BASIX Target Zone	Target	Building Type
Energy	E1A	**25%**	High Rise (6 storey units or higher)

3.2.2 Water

The water section of BASIX aims to reduce the potable water consumption of all new residential developments. The benchmark is 90,340 litres of water per person per year (or 247 litres per person per day), which was the average potable water consumption of a home prior to the introduction of BASIX in 2004. The water reduction target ranges from 40% to 0% depending on the climatic zone. For this project located in Burwood the target is:

	BASIX Target Zone	Target
Water	Mascot	**40%**

3.2.3 Thermal comfort

The thermal comfort section of BASIX aims to ensure thermal comfort for a dwelling's occupants, appropriate to the climate and season, reduce greenhouse gas emissions from artificial cooling and heating through passive design, and reduce the demand for new, or upgraded, energy infrastructure by managing peak demand for energy required for cooling and heating.

Compliance with BASIX thermal comfort criteria is set out in the BASIX Thermal Comfort Protocol (dated November 2017) and requires all units to be assessed by accredited NatHERS assessors using approved software. The BASIX climate zone for thermal comfort for this project is 56 (Burwood) which gives the following thermal comfort criteria:

Thermal Comfort Criteria	Maximum (MJ/m2)
Average heating load in building	**40**
Average cooling load in building	**26**
Individual heating load in an apartment	**45.4**
Individual cooling load in an apartment	**29.5**

3.3 BASIX compliance strategy

BASIX certification is currently being finalised for the residential development to demonstrate compliance with the minimum commitments.

The following sections outline the agreed strategies to achieve the required performance in each category: energy, water and thermal comfort.

3.3.1 Energy

3.3.1.1 *Summary of Energy Inclusions*

Inclusions in the BASIX Energy model for all four towers are outlined in the following table. Common area ventilation and lighting system type and efficiency measures are outlined in the following table. All common area lighting must be controlled by a central lighting control system.Table 1. Summary of energy inclusions

	Description
Cooling	Water-sourced package units Cooling tower Unit efficiency – Low (COP<3.5)
Heating	Water-sourced package units + heated water Gas boiler Unit efficiency – Low (COP<3.5)
Hot Water	Gas-fired boiler central hot water system Internal and external piping insulation (ringmain and supply riser) must have R1.0 insulation
Vertical Transportation Systems	Permanent magnet synchronous motor (PMSM) and regenerative drive See Section 3.3.1.2 *Lift details* for details
Alternate Energy supply	No inclisions at this stage. Integration of on-site renewable energy generation (Solar PV) is challenging due to limited rooftop area and shading impacts. However, this will be further explored at design development stages as practically feasible.
Pool	Towers A & D: • Gas pool heating system, pump controlled by timer.
Sauna	Towers A & D: • Gas heating source, efficiency measure controlled by BMS
Mechanical Systems (Common Areas)	Car park: Mechanical ventilation (supply and exhaust) with Variable Speed Drive (VSD) and CO_2 sensors Garbage rooms: Mechanical ventilation (exhaust only, continuous) Plant and switch room: Mechanical ventilation (exhaust only) with thermostatic controls

Description	
	Ground floor lobby and internal common areas: Air-conditioned - time clock or BMS controlled Other hallways and lobbies: Mechanical ventilation (supply only) with time clock or BMS controlled
Electrical Systems (Common Areas)	Car park: LED with zoned switching motion sensors Lift cars: LED connected to lift call button Garbage rooms: LED with motion sensors Plant and switch rooms: LED manual on / off Ground floor lobby: LED with daylight and motion sensors Hallways and lobbies: LED with daylight and motion sensors Internal common areas: LED with time clock and motion sensors All lighting except for plant and switch room lighting is connected to a lighting control system
Appliances (installed)	Gas cooktop & electric oven for all dwellings for all towers Refrigerator not specified for any tower, however provisions for well ventilated fridge space have been allocated. 4.5-Star dishwasher for towers A, C & D 2.5-Star dishwasher for towers B Clothes washer not specified for any tower 8-Star clothes dryer for tower A 4.5-Star clothes dryer for Tower C No clothes dryer specified for towers B 8.5-Star clothes dryer for towers D
Dwelling lighting	Dedicated LED fittings, all downlights to be sealed and non-ventilated
Mechanical Systems (Dwellings)	Bathroom exhaust: individual fan, ducted to façade or roof and interlocked to light Laundry exhaust: individual fan, ducted to façade or roof and interlocked to light Kitchen exhaust: individual fan, ducted to façade or roof with manual switch on/ off
Other	Building Management System (BMS): No Active Power Factor Correction: Yes Common area clothes drying line: No Common area electric/gas clothes dryer: None Common area clothes washer: None Indoor clothes drying line: No Air conditioning day-night zoned between bedrooms and living areas: Yes
Energy Saving Achieved	**25% for all towers**
Energy Saving Targeted	**25% for all towers**

3.3.1.2 Lift details

In BASIX, the number of storeys is equal to the number of levels served, that is, number of residential levels that a lift door can open on to, plus the lobby levels and the basements dedicated to residential services.

Two lifts of each building will be serving all of the floors, while all other lifts will be Machine Room Less with a maximum travel of 120m.The following lifts are included in BASIX:

Lift no.	Tower A	Tower B	Tower C	Tower D
1	8	23	32	32
2	8	23	32	32
3	34	NA	39	32
4	34	N/A	39	N/A
5	41	N/A	N/A	N/A
6	41	N/A	N/A	N/A

3.3.2 Water systems

3.3.2.1 Summary of Water Inclusions

Inclusions in the BASIX Water model are outlined in the following table.

Table 2. Summary of water inclusions.

Description	
Fixtures (Common areas)	No common area fixtures
Fixtures (Dwellings)	WELS 4-star (> 6 but ≤ 7.5 L/min) Showerhead(s) for all towers WELS 4-Star toilets for all towers WELS 4-Star Kitchen and Bathroom taps for tower C WELS 5-Star Kitchen and Bathroom taps for towers A, B and D
Appliances[1]	WELS 4.5-Star dishwashers for towers C and D WELS 4-Star dishwashers for tower A WELS 3.5-Star dishwashers for tower B No clothes washer specified for any tower
Pool	Tower A: Volume of swimming pool: 135 kL Tower D: Volume of swimming ppol: 195 kL
Rainwater tank	Each Tower is provided with a 10kL rainwater tank
Landscape	Towers A & B: ▪ Common area lawn: None ▪ Common area garden: 197.5 sqm (each) ▪ Area of indigenous or low water use species: 20.7 sqm (each) ▪ Rainwater used for irrigation of 197.5 sqm of common landscaped area on the site Towers C: ▪ Common area lawn: None ▪ Commn area garden: 114 sqm ▪ Area of indigenous or low water use species: 11.9 sqm ▪ Rainwater used for irrigation of 114 sqm of common landscaped area on the site Tower D: ▪ Common area lawn: None ▪ Commn area garden: 348 sqm ▪ Area of indigenous or low water use species: 36.5 sqm ▪ Rainwater used for irrigation of 348 sqm of common landscaped area on the site
Other	Fire sprinkler test water contained in a closed system Private water meter on make-up line not connected to BMS Conductivity controller installed
Water Saving Required	**40% for all towers**
Water Saving Targeted	**40% for all towers**

3.3.3 Thermal Comfort

Thermal comfort modelling has been undertaken on all apartment units across the four towers. The results of which show that all units pass the BASIX requirements for heating and cooling loads for Climate Zone 56 - Mascot.

NatHERS modelling has been completed using FirstRate5 5.3.0a (3.21) Thermal Comfort Modelling software. Modelling protocol is compliant with NatHERS modelling requirements.

The project is targeting a certified average rating of **6.5-Stars** across all four towers based on the following thermal constructions which have been included in the modelling:

Thermal Comfort Modelling Details	
Section Details	Floor to ceiling height: 2,700mm Floor-to-floor height: 3,100mm
Glazing Doors / Windows	**<u>Tower A:</u>** Aluminium framed double glazing to units TA-0910, TA-1010, TA-1110, TA-1210, TA-1310, TA-1410, TA-1510, TA-1610, TA-1710, TA-1810, TA-1910 and TA-3707: U-value: 2.9 (equal to or lower than) SHGC: 0.38 (±10%) – Fixed glazing U-value: 3.38 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 3.18 (equal to or lower than) SHGC: 0.39 (±10%) – Sliding Doors U-value: 3.32 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows Aluminium framed double glazing to units TA-1301, TA-1801, TA-2301, TA-2801 and TA-3301: U-value: 2.5 (equal to or lower than) SHGC: 0.38 (±10%) – Fixed glazing U-value: 2.93 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 2.98 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows Aluminium framed double glazing to all other units not listed above: U-value: 3.54 (equal to or lower than) SHGC: 0.39 (±10%) – Fixed glazing U-value: 3.74 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 3.62 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 4.16 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows **Tower B:** Aluminium non-thermally broken framed double glazing to all units: U-value: 3.54 (equal to or lower than) SHGC: 0.39 (±10%) – Fixed glazing U-value: 3.74 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 3.62 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 4.16 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows **Tower C:** Aluminium non-thermally broken framed double glazing to all units (except TC-3607):

Thermal Comfort Modelling Details	
	U-value: 3.54 (equal to or lower than) SHGC: 0.39 (±10%) – Fixed glazing U-value: 3.74 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 3.62 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 4.16 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows Additionally to the above: U-value: 4.17 (equal to or lower than) SHGC: 0.34 (±10%) – Master bedroom awning windows to apartments TC-XX04 (for all levels) and TC-XX07 (levels 14 and above) as per elevations U-value: 3.54 (equal to or lower than) SHGC: 0.35 (±10%) – Master bedroom fixed glazing to apartments TC-XX04 (for all levels) and TC-XX07 (levels 14 and above) as per elevations Aluminium non-thermally broken framed double glazing to unit TC-3607: U-value: 2.5 (equal to or lower than) SHGC: 0.38 (±10%) – Fixed glazing U-value: 3.38 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 2.93 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 2.98 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows **Tower D:** U-value: 3.54 (equal to or lower than) SHGC: 0.39 (±10%) – Fixed glazing U-value: 3.74 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding windows U-value: 3.62 (equal to or lower than) SHGC: 0.38 (±10%) – Sliding Doors U-value: 4.16 (equal to or lower than) SHGC: 0.38 (±10%) – Awning windows Given values are NFRC, total window system values (glass and frames)
Ceiling	200mm suspended slab, no insulation required to units with units above 200mm suspended slab, minimum R1.0 insulation (insulation only) required to units with balcony / unconditioned spaces above Refer to stamped drawings for additional insulation requirements
External Wall	Insulated walls to balcony – minimum R2.5 added insulation Curtain wall – minimum R2.5 added insulation
Inter-tenancy Walls	Dividing wall – minimum R1.5 added insulation to all walls between neighbouring units and adjacent common areas
Internal Walls within dwellings	Plasterboard on studs – no insulation required
Floors	200mm concrete suspended floor, no insulation required to units with units below 200mm concrete suspended floor, minimum R1.0 insulation (insulation only) required to units with balcony / unconditioned spaces below

Thermal Comfort Modelling Details	
	Refer to stamped drawings for additional insulation requirements
Floor Covering	▪ Bedrooms, WIR: carpet ▪ Wet areas and kitchens: tiles ▪ All other areas: timber
Artificial Lighting within units	All light fittings within each room are to have LED fixtures installed. Lighting assumed to be 1 (100x100x50mm) for every 2.5sqm of floor area
Ventilation within units	Bathroom: individual ducted fans 250x250 Laundry: individual ducted fans 250x250 Kitchen range hood: individual ducted fans 250x250

3.4 BCA Section J compliance requirements

Towers A,B,C & D are a Class 2 residential buildings.

Section J0.2(a) of Volume 1 of the Building Code of Australia (BCA) 2019 requires that sole occupancy units in new Class 2 residential buildings collectively achieve an average of 6 stars NatHERS rating and that no individual unit achieves less than 5 stars. In NSW this requirement is replaced by the state appendix clause NSW J(A)1.2 C which states that *"Compliance is not required with the national BCA provisions of J0.2(a) as those matters are regulated under BASIX."*

All other requirements of Section J apply, with some modifications as set out in the NSW state appendices. These are summarised as:

- Sole-occupancy units – comply with requirements for general thermal construction (J1.2), thermal breaks in roof and wall (J0.4 & J0.5), floor edge insulation (J1.6(b) and J1.6(c)) and building sealing (J3).
- The common areas of Class 2 buildings need to comply with all of the relevant provisions of Section J1 (Building Fabric) and J3 (Building Sealing).
- All building services need to comply with Sections J5 (Air-conditioning and Ventilation Systems), J6 (Artificial Lighting and Power) and J7 (Heated Water Supply and swimming pool & spa pool plant).
- All energy monitoring systems needs to comply with Section J8 (Facilities for Energy Monitoring).

3.5 Additional Sustainability Initiatives

Further to the energy and water initiatives outlined in sections 2.3.1 and 2.3.2, the following initiatives are proposed for the residential towers:

3.5.1 Health & wellbeing

The wellbeing and health of the building occupants and visitors is being addressed the following design features:

- High performance façade incorporating shading, high-performance glazing and insulation will improve occupant comfort and reduce air-conditioning energy and associated costs.
- Sources of indoor air contamination will be ducted to the façade including toilets, laundries and kitchens
- High Visual Light Transmittance glass to maximise daylight penetration while minimising glare discomfort through internal blinds
- Use of low VOC paints, adhesives, sealants and carpets and low formaldehyde emission engineered wood products in all internal areas

- Storage space for bicycles to facilitate active transport

3.5.2 Materials, Supply Chain and Waste

The project will aim to use materials from sustainable sources, applying circular economy principles where possible and prioritising products with transparent, ethical supply chains. Reduce resource consumption and divert waste from landfill.

Initiatives include:

- Concrete mixes to reduce Portland Cement content and utlise recycled aggregates
- Timber to be reused or sourced from certified suppliers
- Hazardous material risk assessment to reduce use of toxic materials
- Best practice PVC compliance for formworks, pipes, flooring, blinds & cables
- Preference for materials with a high recycled or reused content, third-party environmental / social certification or materials that are sourced locally or from social enterprises.
- Divert a minimum or 80% of non-hazardous construction / demolition waste from landfill via reuse or recycling.
- Provide space for operational waste separation and storage for recycling.

3.5.3 Transport

The project will reduce the need to travel and encourage walking, cycling and low carbon transport, through:

- Storage space for bicycles to facilitate active transport
- Easy access to public transport and community travel, in Railway parade and redevelopment of Clarendon Place
- Improved links and permeability for greater connectivity with the neighbourhood

3.5.4 Ecology

Site ecology will be improved through the introduction of landscaping and native species selection

4.0 Conclusion

The proposed Burwood Place development is adopting a wide range of ESD initiatives in its design and delivery which will assist to minimise its environmental impact. Some of the initiatives currently adopted and being developed further during remaining project stages include:

- To reduce energy consumption
- To reduce potable water consumption and waste water discharge
- NatHERS 6.5-star average rating
- Low VOC materials and finishes
- High levels of amenity including access to public transport
- Maximisation of landscape and access to green spaces

Appendix A: BASIX and NatHERS Certification

Cundall Johnston & Partners PTY
Level 1 48 Alfred Street Milsons Point NSW 2061
Australia Tel:+61 (0)2 8424 7000

Asia Australia Europe MENA UK and Ireland
www.cundall.com

ONE PLANET LIVING | An initiative by Bioregional

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1131316M_05

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1131316M lodged with the consent authority or certifier on 13 April 2021 with application DA 44/2021.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Wednesday, 18 September 2024
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT

Project summary	
Project name	Burwood Place Tower A_05
Street address	42-50 RAILWAY PARADE BURWOOD 2134
Local Government Area	BURWOOD
Plan type and plan number	Deposited Plan 588368
Lot no.	1
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	345
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score			
Water	✔	41	Target 40
Thermal Comfort	✔	Pass	Target Pass
Energy	✔	26	Target 25

Certificate Prepared by
Name / Company Name: ecomaxhomes
ABN (if applicable): 22805208126

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1139367M_04

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1139367M lodged with the consent authority or certifier on 13 April 2021 with application DA 44/2021.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Wednesday, 18 September 2024
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT

Project summary	
Project name	Burwood Place Tower B_04
Street address	42-50 RAILWAY PARADE BURWOOD 2134
Local Government Area	BURWOOD
Plan type and plan number	Deposited Plan 588368
Lot no.	1
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	177
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔	Target Pass
Energy	✔ 25	Target 25

Certificate Prepared by
Name / Company Name: ecomaxhomes
ABN (if applicable): 22805208126

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1127670M_03

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1127670M lodged with the consent authority or certifier on 13 April 2021 with application DA 44/2021.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Wednesday, 18 September 2024
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT

Project summary	
Project name	Burwood Place Tower C_03
Street address	52-60 RAILWAY PARADE BURWOOD 2134
Local Government Area	BURWOOD
Plan type and plan number	Deposited Plan 832440
Lot no.	16
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	307
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score			
Water	✔	41	Target 40
Thermal Comfort	✔	Pass	Target Pass
Energy	✔	25	Target 25

Certificate Prepared by
Name / Company Name: ecomaxhomes
ABN (if applicable): 22805208126

BASIX® Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1156324M_04

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

This certificate is a revision of certificate number 1156324M lodged with the consent authority or certifier on 13 April 2021 with application DA 44/2021.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary
Date of issue: Wednesday, 18 September 2024
To be valid, this certificate must be lodged within 3 months of the date of issue.

NSW GOVERNMENT

Project summary	
Project name	Burwood Place Tower D_04
Street address	52-60 RAILWAY PARADE BURWOOD 2134
Local Government Area	BURWOOD
Plan type and plan number	Deposited Plan 832440
Lot no.	16
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	212
No. of multi-dwelling houses	0
No. of single dwelling houses	0

Project score			
Water	✔	40	Target 40
Thermal Comfort	✔	Pass	Target Pass
Energy	✔	25	Target 25

Certificate Prepared by
Name / Company Name: ecomaxhomes
ABN (if applicable): 22805208126

10 October 2024

Andrew Khoudeir
Burwood Tower Holdings Pty Ltd
Suite 2
2-4 Giffnock Avenue
Macquarie Park NSW 2113

Dear Andrew

1. Burwood Place – Section 4.55 Parking Assessment

ptc. has been engaged by Burwood Tower Holdings Pty Ltd (Burwood Holdings), to review the revised car parking layouts as part of the Section 4.55 submission for Burwood Place located at 42-60 Railway Parade, Burwood. Reference is made to the DA Conditions of Consent issued by Burwood Council on 5th February 2024 (DA Ref: DA.2021.44).

We have undertaken an assessment of the proposed parking arrangements with reference to the provisions contained in the following Australian Standards:

- *AS2890.1:2004 – Off-street Car Parking;*
- *AS2890.2:2018 – Off-street Commercial Vehicle Facilities;*
- *AS2890.3:2015 – Bicycle Parking; and*
- *AS2890.6:2022 – Off-street Parking for People with Disabilities.*

Our assessment has been undertaken with reference to the drawings prepared by Studio SC (see Attachment 1):

- Drawing No. AR-DA-2101 - Podium Ground Level Plan [Rev R] (dated 10/09/24)
- Drawing No. AR-DA-2108a - Lower Ground Mezzanine Plan [Rev J] (dated 10/09/24)
- Drawing No. AR-DA-2108b - Lower Ground Level Plan [Rev T] (dated 10/09/24)
- Drawing No. AR-DA-2109 - Basement B1 Carpark Plan -Retail [Rev U] (dated 18/09/24)
- Drawing No. AR-DA-2110 - Basement B2 Carpark Plan -Retail [Rev T] (dated 18/09/24)
- Drawing No. AR-DA-2111 - Basement B3 Carpark Plan -Retail [Rev S] (dated 10/09/24)
- Drawing No. AR-DA-2112 - Basement B4 Carpark Plan -Retail [Rev T] (dated 18/09/24)
- Drawing No. AR-DA-2113 - Basement B5 Carpark Plan -Residential, Commercial [Rev S] (dated 10/09/24)
- Drawing No. AR-DA-2114 - Basement B6 Carpark Plan -Residential, Visitors [Rev S] (dated 10/09/24)

- Drawing No. AR-DA-2120 - Basement B7 Carpark Plan -Residential, Visitors [Rev T] (dated 10/09/24)
- Drawing No. AR-DA-2121 - Basement B8 Carpark Plan -Residential, Visitors [Rev J] (dated 10/09/24)

2. Development Yield Summary

A summary of the revised yields for the Burwood Place development associated with the S4.55 scheme is outlined in Table 1.

Table 1 - Development Yield Summary

Use Type	Proposed Units / GFA (m^2) / No. of Children
Residential – Studio	28
Residential – 1 Bedroom	201
Residential – 2 Bedroom	582
Residential – 3 Bedroom	230
Residential Total	**1,041 units** **(including 106 adaptable units)**
Commercial	**15,244m^2**
Retail	**27,153m^2**
Childcare Centre	**200 children capacity**

3. Parking Provision Assessment

The following subsections outline an assessment of the revised parking provisions with reference to the updated development yields.

3.1. Condition 165

Condition 165 within the Conditions of Consent outlines the following approved car parking provisions from the DA scheme:

The approved parking spaces must be allocated as detailed below. All spaces must be appropriately line-marked and labelled according to this requirement prior to the issue of an Occupation Certificate. If the development is to be strata subdivided, the car park layout must respect the required allocation:

(a) 761 residential parking spaces (including 22 mobility parking spaces);

(b) 149 residential visitor parking spaces;

(c) 125 commercial parking spaces (including 2 mobility parking spaces);

(d) 656 retail parking spaces (including 10 mobility parking spaces);

(e) 32 Retail car wash parking spaces;

(f) 20 car share parking spaces; and

(G) 14 child care centre spaces.

3.2. Car Parking

Applying the minimum DCP parking requirement to the updated yields, results in the following minimum car parking requirements for the development:

Table 2 - Parking Provision Summary

Land Use	Proposed Units / GFA (m^2) / Spaces	DCP Minimum Parking Rate	DCP Minimum Parking Requirement	Proposed Parking Provision
Residential - Studio	28 units	0.5 spaces / studio or bed-sitter unit	14	
Residential – 1 Bedroom	201 units	1 space / one and two bedroom unit	201	
Residential – 2 Bedroom	582 units	1 space / one and two bedroom unit	582	
Residential – 3 Bedroom	230 units	1.5 spaces / 3 bedroom unit	345	
		Total Resident Spaces	**1027**	**766**
Residential – Visitor (Studio)	28 units	1 visitor space per 5 units[1]	2.8	
Residential – Visitor	1,013 units	1 visitor space per 5 units	202.6	
		Total Resident Visitor Spaces	**206**	**150**
Commercial	15,244m^2	• 1 space for first 400m^2 or part thereof, plus • 1 space / 120m^2 or part thereof additional to the first 400m^2	125	119
Council Space		• As per VPA requirements	40	40
		Total Commercial Spaces	**125**	**159**
Retail	27,153m^2	• 1 space for first 400m^2 or part thereof, plus • 1 space / 40m^2 or part thereof additional to the first 400m^2	670	677
		Total Retail Spaces	**670**	**677**

[1] As per the Table 2 within the Burwood DCP, a studio is counted as half a unit for the purposes of calculating visitor parking.

Land Use	Proposed Units / GFA (m²) / Spaces	DCP Minimum Parking Rate	DCP Minimum Parking Requirement	Proposed Parking Provision
Retail – Car Wash	32 spaces	No DCP Requirement.	32	24
		Total Retail Car Wash Spaces	**32**	**24**[2]
Childcare Centre	200 children 18 FTE staff	• 1 space / 10 children; and • 1 space / 2 staff	29	29
		Total Childcare Spaces	**29**	**29**
Car Share	-	Site specific DCP for 42-60 Railway Parade, Burwood stipulates a minimum of six car share spaces shall be provided.	6	6
		Total Car Share	**6**	**6**
		TOTAL	**2095**	**1,811**

As outlined in Table 2, the proposed car parking provisions associated with the S4.55 scheme is less than the minimum DCP parking requirements. It is noted that the development is located within the central transport hub of Burwood and has excellent public transport connections.

A summary of the approved DA car parking provisions and the proposed S4.55 car parking provisions are provided in Table 3 for ease of reference. There has been a minor increase in the total number of parking spaces from the approved DA number due to GFA increases, apartment mix changes, and the inclusion of the council parking requirements per the VPA.

Table 3 - Summary of Approved DA Car Parking and Proposed S4.55 Car Parking Provisions

Land Use	Approved DA Parking Provision	Proposed S4.55 Parking Provision
Residential	761	766
Residential Visitor	149	150
Commercial	125	159[3]
Retail	656	677
Retail Car Wash	32	24
Childcare	14	29
Car Share	20	6
Total	**1,757**	**1,811**

[2] Reduced retail car wash parking provision of 24 spaces has been agreed by developer as being viable for business operation.
[3] Includes Council Parking requirements per the VPA

3.3. Accessible Parking

The Burwood DCP does not outline specific parking rates for accessible parking. In lieu of this information, reference has been made to Part D4D6: Accessible Carparking within the *National Construction Code – Building Code of Australia Volume One 2022* (BCA) to determine the required accessible parking requirements.

The applicable building classifications for the development land uses are outlined as follows:

- Residential Class 2
- Commercial Class 5
- Retail Class 6
- Childcare Centre Class 9b

A summary of the minimum DCP required and proposed accessible car parking is outlined in Table 4.

Table 4 - Accessible Parking Summary

Land Use	Proposed Units / GFA (m²) / Spaces	BCA Minimum Parking Rate	Minimum Parking Requirement	Proposed Parking Provision
Residential - Adaptable	106 adaptable units	1 accessible space / adaptable unit	106	108
Residential - Visitor	150 visitor spaces	1 accessible space / 60 visitor car spaces	2.5	9
Commercial	159 commercial spaces	1 accessible space for every 100 carparking spaces or part thereof.	1.6	2
Retail	677 retail spaces	i. With up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and ii. For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space.	13.5	35
Childcare Centre	29 childcare spaces	For other assembly buildings— With up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and For each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space.	0.6	4
		Total	**125**	**158**

As outlined in Table 4, the total proposed accessible parking provision of 158 spaces exceeds the minimum requirement of 125 accessible spaces associated with the S4.55 scheme.

3.4. EV Parking

Condition 173 of the DA Conditions of Consent stipulates that every resident parking space (excluding residential visitor spaces) shall have the required cabling to enable installation of EV chargers if required by owners/residents in the future. Studio SC have confirmed that EV chargers for all resident parking spaces have been provisioned for in the design to satisfy this requirement.

In addition, a minimum of 14 retail EV parking spaces are required as per the DA Conditions of Consent. The development proposes 15 retail EV parking spaces which exceeds this minimum requirement.

3.5. Motorcycle Parking

Although not required within the DCP, a total of 27 motorcycle spaces have been provided as an alternative transport mode and should be considered on merit.

3.6. Bicycle Parking

In accordance with Part P5 of Section 3.9 within the Burwood DCP, bicycle parking provisions are to be calculated based on the requirements outlined in the *NSW Planning Guidelines for Walking and Cycling (2004)*. A summary of the required and proposed bicycle parking associated with the S4.55 scheme is outlined in Table 5.

Table 5 - Bicycle Parking Summary

Land Use	Proposed Units / Staff	Minimum Bicycle Parking Rate	Minimum Bicycle Parking Requirement	Proposed Bicycle Parking Provision
Resident	1,041 units	20-30% of units	209	210
Residential - Visitor	1,041 units	5-10% of units	53	53
Commercial - Staff	1,700 FTE staff	3–5% of staff	51	286
Commercial - Visitor	1,700 FTE staff	5-10% of staff	85	100
Retail - Staff	350 FTE staff	3–5% of staff	11	18
Retail - Visitor	350 FTE staff	5-10% of staff	18	336
Childcare Centre - Staff	18 FTE staff	3–5% of staff	1	4
Childcare – Visitor	18 FTE staff	5-10% of staff	1	4
		Tota Resident Bicycle Spaces	**209**	**210**
		Total Staff Bicycle Spaces	**63**	**308**
		Total Visitor Bike Spaces	**157**	**493**

As outlined in Table 5, the proposed resident, staff and visitor bicycle parking provisions satisfy the minimum requirements of the *NSW Planning Guidelines for Walking & Cycling* for the S4.55 scheme.

3.7. End of Trip Facilities (EOTF)

The requirements for the End of Trip Facilities have been determined with reference to the *NSW Planning Guidelines for Walking & Cycling*. A summary of the minimum required and proposed EOTF amenities are summarised in Table 6.

Table 6 – EOTF Provision Summary

Land Use	Proposed Bicycle Spaces / FTE Staff	Minimum EOTF Rate	Minimum EOTF Requirement
Personal Lockers	209 spaces	1 locker / 3 racks	70
Showers	2,068 FTE staff	• 8 (4 male and 4 female), plus • 1 female shower + 1 male shower for every 250 staff above 500	21
Change Rooms	2,068 FTE staff	• 2 (1 male and 1 female), plus • 1 female change room + 1 male change room for every 250 staff above 500	15

The minimum EOTF provisions outlined in Table 6 will be accommodated and detailed in the architectural drawings prior to CC.

3.8. Service Vehicle Parking

The loading dock accommodates the following service spaces:

- 1 x Major tenant (supermarket) HRV Space (up to 14.5m long rigid)
- 2 x HRV Space (up to 12.5m long rigid)
- 2 x MRV Spaces (up to 8.8m long rigid)
- 1 x SRV Space (up to 6.4m long rigid)

In addition to the heavy vehicle bays within the loading dock, 14 resident loading bays capable of accommodating B99 courier vans/utes are provided on Basement Levels B5-B8 to assist with move-in/move-out activities.

4. Car Park Assessment

The following section presents an assessment of the revised S4.55 car parking layouts with reference to the requirements of *AS2890.1:2004 Off-street Car Parking*; *AS2890.2:2018 Off-street Commercial Vehicle Facilities*; *AS2890.3:2015 Bicycle Parking*; and *AS2890.6:2022 Off-street Parking for People with Disabilities.*

The following sections should be read in conjunction with the architectural plans prepared by Studio SC (Attachment 1) and **ptc.**'s review of the proposed car parking arrangements (included in Attachment 2). It is noted that a detailed design review is to be undertaken during the design development stage, prior to the issue of a Construction Certificate.

4.1. Car Park Classification

The basement car parking involves multiple car parking classifications due to the mixed-use nature of the development. These user classes are defined in accordance with Table 1.1 of *AS2890.1:2004*. The following users are summarised below:

- Basement B1, B2, B3, B4: Class 3A retail
- Basement B5: Class 1A (commercial staff/residential), Class 3 (short-term childcare)
- Basement B6, B7, B8: Class 1A (residential)

4.2. Typical Requirements

Table 1.1 of *AS2890.1* presents a number of car park classifications applicable to different land-uses. The parking space dimensions and associated aisle width requirements for the various uses are as follows:

- Class 1A Space: 2.4m x 5.4m
- Class 3 Space: 2.6m x 5.4m
- Class 3A Space: 2.6m x 5.4m or 2.7m x 5.4m
- Class 1A / Class 3 Aisle widths: 5.8m (plus an additional 300mm to any vertical obstructions greater than 150mm in height including, but not limited to, walls, bollards etc.)
- Class 3A Aisle Widths: 6.6m for 2.6m wide spaces, or 6.2m for 2.7m wide spaces.

4.3. Accessible Parking

Accessible parking spaces are to satisfy minimum dimensions 2.4m x 5.4m, and an adjacent shared bay of equal dimensions. Shared bays and accessible spaces shall be installed in accordance with AS2890.6:2022, including the installation of bollards and relevant pavement markings.

4.4. Headroom Requirements

- A minimum height clearance of 2.2m shall be maintained in all vehicular circulation areas (including motorcycle and bicycle access paths) and above all car parking bays.
- A minimum height clearance of 2.5m shall be maintained above all accessible and shared bays.
- Wherever access is required by heavy vehicles, a minimum clear headroom of 4.5m shall be provided (i.e. within the loading dock and along the entire heavy vehicle access paths). This clear headroom is to be measured to the underside of any overhead obstructions including, but not limited to, utilities, mechanical ducts, sprinklers, lighting or any other overhead fixtures, etc.).

4.5. Typical Grade Requirements

In terms of driveway grades, AS2890.1 and AS2890.2 requires the following grade requirements:

- A 1:20 maximum grade for the first 6m into the site measured from the property boundary (or to the wheelbase of the largest vehicle likely to use the driveway, whichever is greater);
- Maximum ramp grade of 1:5 for ramps up to 20m in length (for B99 vehicle access only);
- Maximum ramp grade of 1:6 for ramps greater than 20m in length (for B99 vehicle access only);
- Maximum transition grades of 1:8 (for B99 vehicle access only);
- Maximum ramp grades of 1:6.5 (for heavy vehicle access); and
- Maximum transition grades of 1:16 running for at least 7m (for heavy vehicle access).

Where access is required by heavy vehicles, all grades are to comply with the provisions of Table 3.2 of *AS2890.2: 2018 Off-street Commercial Vehicle Facilities*. All access within the loading dock and ramp is to be designed for the largest design vehicle (i.e. 14.5m HRV).

In terms of standard car parking spaces, grades shall be limited to the following as per AS2890.1:2004:

- A maximum of 1:20 (5%) measured parallel to the angle of parking; and
- A maximum of 1:16 (6.25%) measured in any other direction.

Accessible parking bays and shared bays shall be limited to a maximum grade of 1:40 in any direction, or a maximum of 1:33 if the surface is a bituminous seal and the parking space is outdoors.

Loading and service bays shall be limited to a maximum of 1:25 (4%) in any direction.

4.6. Car Park Compliance Assessment Summary

An assessment of the components of the car park against the requirements of the relevant Australian Standards are presented in Table 7. Due to ongoing design development, a full assessment of the car parking arrangements will need to be undertaken prior to issue of CC.

Table 7 - Compliance Assessment

Component	Requirement	Provided	Compliance	Notes
Class 1A Residential, Domestic and Employee Parking (AS2890.1)				
Space Length	5.4m	5.4m	✓	
Space Width	2.4m	2.4m	✓	
Aisle Width	5.8m (6.1m to a high wall)	5.8m (min)	✓	
Door Opening Area	300mm	300mm	✓	
Class 3A Short-term high turnover parking at shopping centres				
Space Length	5.4m	5.4m	✓	
Space Width	2.6m	2.6m	✓	Aisle width is 6.6m for retail car spaces that are 2.6m wide
Aisle Width	6.6m	6.6m (min)	✓	
Space Width	2.7m	2.7m	✓	Aisle width is 6.2m for retail car spaces that are 2.7m wide
Aisle Width	6.2m	6.2m (min)	✓	
Door Opening Area	300mm	300mm	✓	
Accessible Parking (AS2890.6)				
Space Length	5.4m	5.4m	✓	
Space Width	2.4m	2.4m	✓	
Shared Area Width	2.4m	2.4m	✓	
Aisle Width	5.8m (6.1m to a high wall)	5.8m (min), 6.6m at retail car parks	✓	
Small Car Parking				
Space Length	5.0m	5.0 (min)	✓	
Space Width	2.3m	2.3m (min)	✓	
Aisle Width	5.8m (6.1m to a high wall)	5.8m (min), 6.6m at retail car parks	✓	
Parallel Parking (AS2890.1)				
Aisle Width	3.0m	3.9m	✓	
Space Length (obstructed end spaces)	6.6m	6.6m	✓	
Space Length	6.3m	6.3m	✓	

Component	Requirement	Provided	Compliance	Notes
Motorbike Parking (AS2890.1)				
Space Length	2.5m	2.5m	✓	
Space Width	1.2m	1.2m	✓	
Bicycle Parking (AS2890.3)				
Horizontal Space Length	1.8m	1.8m	✓	
Vertical Space Length	1.2m	1.2m	✓	
Space Width	0.5m	0.5m	✓	
Aisle Width	1.5m	1.5m	✓	

5. Loading Dock

5.1. Service Vehicle Access

The proposed loading dock is located on the Lower Ground Level and is designed to accommodate the deliveries and waste collection associated with the development. It will serve the commercial, residential, and retail components of the proposed development. The loading dock will be accessed via Railway Parade, where a combined entry / exit driveway into the loading dock is proposed.

The western portion of the loading dock has been designed to accommodate up to a 14.5m long Heavy Rigid Vehicle (HRV) which is anticipated to be the largest vehicle accessing the site. The eastern portion of the loading dock can accommodate vehicles up to a 12.5m long HRV.

The proposed loading dock layout is presented in Figure 1.

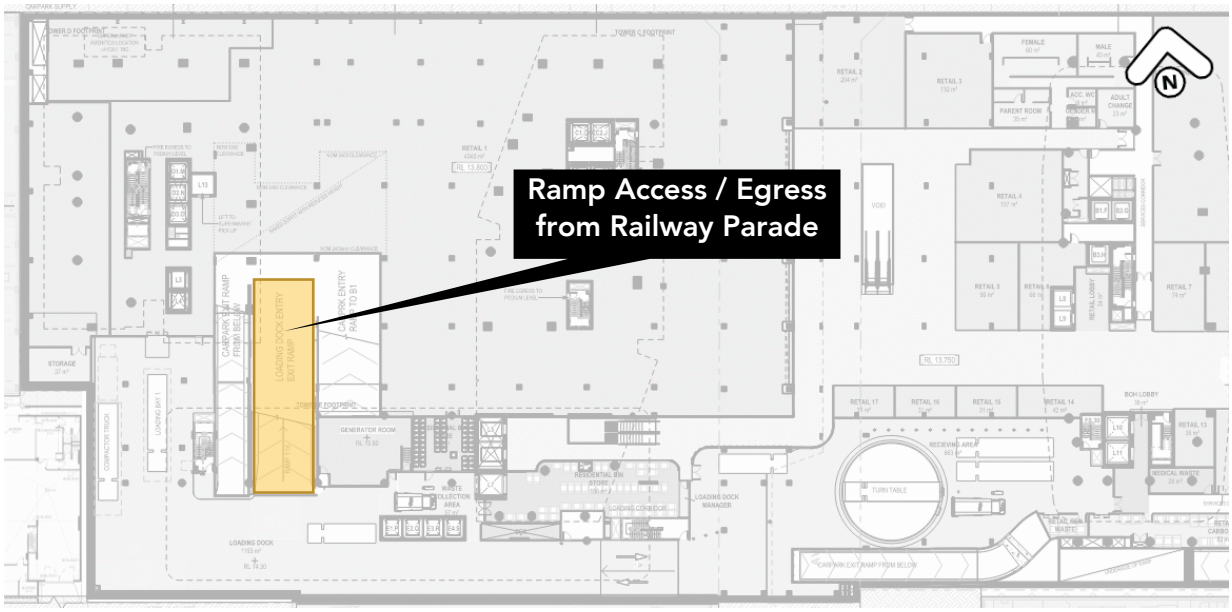


Figure 1 - Loading Dock Layout

A turn table is provided towards the east of the loading dock to assist vehicle manoeuvres within the dock.

The proposed loading dock access arrangement allows heavy vehicles to enter and exit the site in a forward direction.

A swept path analysis has been conducted to demonstrate the vehicular manoeuvres within the loading dock and confirm access are provided for each loading bay. The swept paths for the loading dock are included in Attachment 2.

As outlined in Section 3.8, resident loading bays which can accommodate B99 vans/utes are provided on Basement Levels B5-B8 for the purposes of resident move-in/move-out activities.

Where access is required by heavy vehicles, all grades are to comply with the provisions of Table 3.2 of *AS2890.2: 2018 Off-street Commercial Vehicle Facilities*. All access within the loading dock is to be designed for the largest design vehicle (i.e. 14.5m HRV).

5.2. Waste Collection

Residential waste collection is expected to be undertaken by Council and non-residential waste collection to be undertaken by private waste contractor. All refuse collection vehicles will utilise the loading dock on the Lower Ground Floor.

5.3. Loading Dock Management

The proposed loading and service vehicle bays will be managed by a loading dock booking system. Further details of the operations of the loading dock are outlined within the LDMP which has been prepared separately.

6. Summary

Based on our assessment, **ptc.** confirms that the revised design of the car park, loading dock and access arrangements are capable of complying with the relevant Australian Standards being AS2890.1:2004, AS2890.2:2018, AS2890.3:2015 and AS2890.6:2022.

Should you have any queries relating to a parking matter, please contact the undersigned on (02) 8920 0800.

Kind Regards,



Steve Wellman
Project Director

Document Control: Prepared by *HL* on *26 September 2024*. Reviewed by *SW* on *26 September 2024*.

Attachment 1. Architectural Plans (Studio SC)

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	-	01/03/24
G	-	28/03/24
H	-	19/04/24
I	-	30/04/24
J	-	31/05/24
K	-	28/06/24
L	-	15/07/24
M	-	22/07/24
N	-	02/08/24
O	-	22/08/24
P	-	29/08/24
Q	-	03/09/24
R	FOR S4.55 SUBMISSION	10/09/24

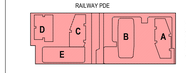
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL COMMUNAL
- COMMERCIAL
- RETAIL
- RETAIL CIRCULATION
- PLANT/SERVICES/BOH
- STAGING BOUNDARY
- DCP BUILDING SETBACK
- DCP BUILDING SETBACK ABOVE RL 37.50

KeyPlan



Client
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5540
HOLDMARK

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect — Reg. No
EDWARD SALIB — 9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
PODIUM GROUND LEVEL PLAN

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
Bar Scale 1:250 (0, 2.5, 5, 7.5, 10, 12.5 m)

North Point

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No — Rev
AR-DA-2101 — R

NOTE: LANDSCAPE PLAN INDICATIVE ONLY - REFER TO LANDSCAPE ARCHITECT REPORT AND DOCUMENTATION FOR DETAILED DESIGN.

PRINT IN COLOUR

2024-09-10 9:11:43 AM

Rev#	Description	Date
A	-	19/04/24
B	-	30/04/24
C	-	31/05/24
D	-	28/06/24
E	-	15/07/24
F	-	22/07/24
G	-	22/08/24
H	-	29/08/24
I	-	03/09/24
J	FOR S4.55 SUBMISSION	10/09/24

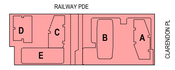
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
HOLDMARK
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5345

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect
EDWARD SALIB
Reg. No
9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
LOWER GROUND MEZZANINE PLAN

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

North Point

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No
AR-DA-2108a
Rev
J

PRINT IN COLOUR

2024-09-10 11:24:04 AM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND S4.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	19/04/24
K	-	30/04/24
L	-	31/05/24
M	-	28/06/24
N	-	16/07/24
O	-	22/07/24
P	-	01/08/24
Q	-	22/08/24
R	-	29/08/24
S	-	03/09/24
T	FOR S4.55 SUBMISSION	10/09/24

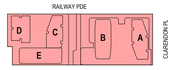
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5340
HOLDMARK

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect: EDWARD SALIB — Reg. No: 9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
LOWER GROUND LEVEL PLAN

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale: 1 : 250 @ A0
Bar Scale 1:250 (0 2.5 5 7.5 10 12.5 m)

North Point

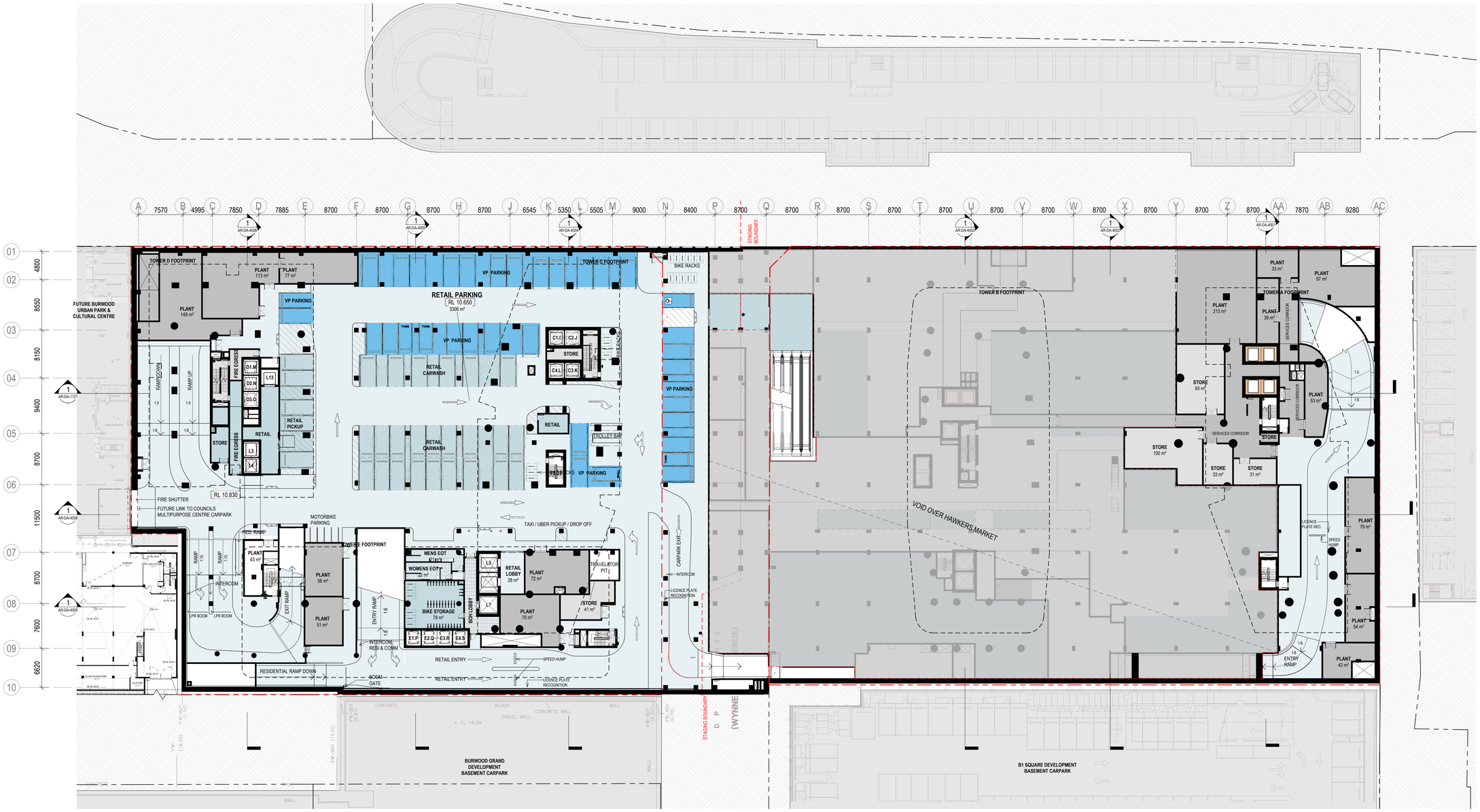
Project No	Drawn By	Check By
20230055	ES	SC

Dwg No: AR-DA-2108b — Rev: T

PRINT IN COLOUR

2024-09-11 4:46:12 PM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND S4.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	01/08/24
P	-	02/08/24
Q	-	22/08/24
R	-	29/08/24
S	-	03/09/24
T	-	10/09/24
U	FOR S4.55 SUBMISSION	16/09/24



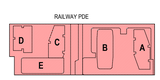
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
2-4 Giffrock Avenue
Macquarie Park NSW
2113-Australia
www.holdmark.com.au
HOLDMARK +61 2 9889 5540

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect EDWARD SALIB Reg. No 9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
BASEMENT B1 CARPARK PLAN - RETAIL

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

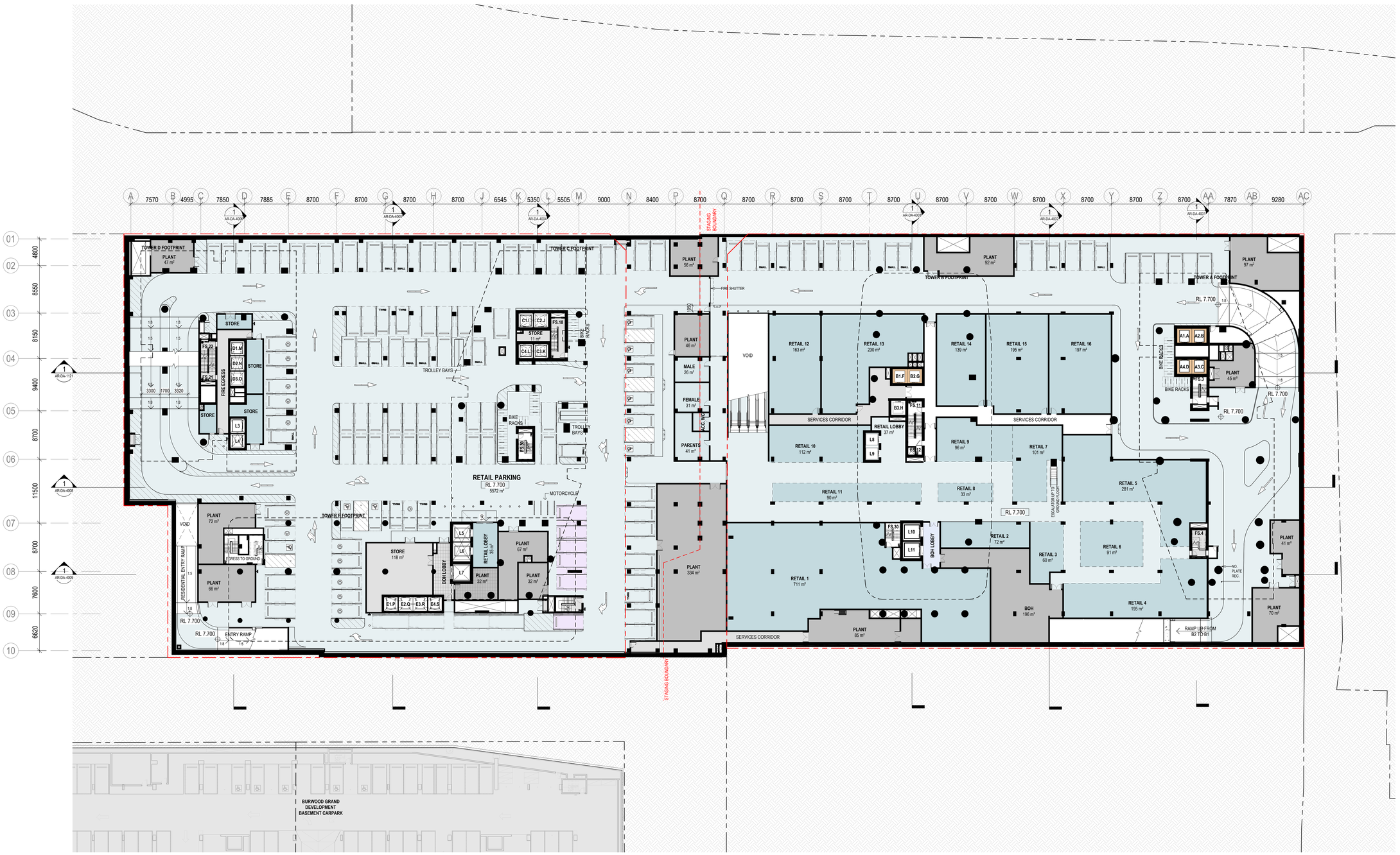
North Point

Project No 20230055 | Drawn By ES | Check By SC

Dwg No AR-DA-2109 Rev U

PRINT IN COLOUR

2024-09-19 3:11:06 PM



Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND 54.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	02/08/24
P	-	22/08/24
Q	-	29/08/24
R	-	03/09/24
S	-	10/09/24
T	FOR S4.55 SUBMISSION	18/09/24

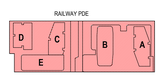
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5540
HOLDMARK

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect
EDWARD SALIB
Reg. No
9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
BASEMENT B2 CARPARK PLAN - RETAIL

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

North Point

Project No
20230055
Drawn By
ES
Check By
SC

Dwg No
AR-DA-2110
Rev
T

PRINT IN COLOUR

2024-09-18 3:24:31 PM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND 54.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	02/08/24
P	-	22/08/24
Q	-	29/08/24
R	-	03/09/24
S	FOR S4.55 SUBMISSION	10/09/24

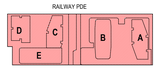
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client

HOLDMARK

2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5540

Architect

Studio.SC
Formerly Scott Carver

Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect — Reg. No
EDWARD SALIB — 9469

Project

BURWOOD PLACE

42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title

BASEMENT B3 CARPARK PLAN - RETAIL

Project Status

DEVELOPMENT APPLICATION (S4.55)

Scale

1 : 250 @ A0

0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

North Point

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No — Rev

AR-DA-2111 — S

PRINT IN COLOUR

2024-09-10 11:26:36 AM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND 54.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	02/08/24
P	-	22/08/24
Q	-	29/08/24
R	-	03/09/24
S	-	10/09/24
T	FOR S4.55 SUBMISSION	18/09/24

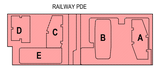
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5040
HOLDMARK

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.framsay.com.au

Nominated Architect — Reg. No
EDWARD SALIB — 9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
BASEMENT B4 CARPARK PLAN - RETAIL

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

North Point

Project No — Drawn By — Check By
20230055 — ES — SC

Dwg No — Rev
AR-DA-2112 — T

PRINT IN COLOUR

2024-09-19 10:56:28 AM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND S4.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	02/08/24
P	-	22/08/24
Q	-	29/08/24
R	-	03/09/24
S	FOR S4.55 SUBMISSION	10/09/24

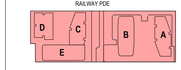
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client
2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5040
HOLDMARK

Architect
Studio.SC
Formerly Scott Carver
Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.framsay.com.au

Nominated Architect — Reg. No
EDWARD SALIB — 9469

Project
BURWOOD PLACE
42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title
BASEMENT B5 CARPARK PLAN - RESIDENTIAL, COMMERCIAL

Project Status
DEVELOPMENT APPLICATION (S4.55)

Scale
1 : 250 @ A0
Bar Scale 1:250 (0, 2.5, 5, 7.5, 10, 12.5 m)

North Point

Project No — Drawn By — Check By
20230055 — ES — SC

Dwg No — Rev
AR-DA-2113 — S

PRINT IN COLOUR

2024-09-10 11:31:11 AM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	13/08/21
C	FOR DEVELOPMENT APPLICATION	03/06/22
D	RESPONSE TO ETHOS URBAN RFI	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2222 DA UPDATE	16/11/22
G	ACQUISITION LAND S4.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	22/07/24
O	-	02/08/24
P	-	22/08/24
Q	-	29/08/24
R	-	03/09/24
S	FOR S4.55 SUBMISSION	10/09/24

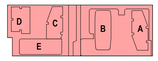
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client

2-4 Giffnock Avenue
Macquarie Park NSW
2113-Australia
www.holdmark.com.au
+61 2 9889 5040

HOLDMARK

Architect

Studio.SC
Formerly Scott Carver

Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect — Reg. No
EDWARD SALIB — 9469

Project

BURWOOD PLACE

42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title

BASEMENT B6 CARPARK PLAN - RESIDENTIAL, VISITORS

Project Status

DEVELOPMENT APPLICATION (S4.55)

Scale — North Point

1 : 250 @ A0

0 2.5 5 7.5 10 12.5 m
Bar Scale 1:250

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No — Rev

AR-DA-2114 — S

PRINT IN COLOUR

2024-09-11 4:21:05 PM

Rev#	Description	Date
A	FOR DEVELOPMENT APPLICATION	12/02/21
B	-	03/06/22
C	-	13/08/21
D	-	02/09/22
E	JUNE 2022 DA UPDATE	16/09/22
F	NOVEMBER 2022 DA UPDATE	16/11/22
G	ACQUISITION LAND S4.55 SUBMISSION	01/05/23
H	-	01/03/24
I	-	28/03/24
J	-	30/04/24
K	-	31/05/24
L	-	28/06/24
M	-	15/07/24
N	-	18/07/24
O	-	22/07/24
P	-	02/08/24
Q	-	22/08/24
R	-	29/08/24
S	-	03/09/24
T	FOR S4.55 SUBMISSION	10/09/24



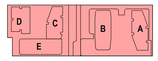
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client

HOLDMARK

2-4 Giffnock Avenue
Macquarie Park NSW
2113-Australia
www.holdmark.com.au
+61 2 9869 5040

Architect

Studio.SC
Formerly Scott Carver

Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.framsay.com.au

Nominated Architect: EDWARD SALIB — Reg. No: 9469

Project

BURWOOD PLACE

42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title

BASEMENT B7 CARPARK PLAN - RESIDENTIAL, VISITORS

Project Status

DEVELOPMENT APPLICATION (S4.55)

Scale: 1 : 250 @ A0

Bar Scale 1:250 — 0 2.5 5 7.5 10 12.5 m

North Point

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No: AR-DA-2120 — Rev: T

PRINT IN COLOUR

2024-09-10 11:32:17 AM



Rev#	Description	Date
A	-	31/05/24
B	-	28/06/24
C	-	15/07/24
D	-	18/07/24
E	-	22/07/24
F	-	02/08/24
G	-	22/08/24
H	-	29/08/24
I	-	03/09/24
J	FOR S4.55 SUBMISSION	10/09/24

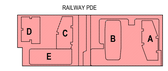
General Notes

- THIS DOCUMENT IS THE COPYRIGHT OF STUDIO.SC
- ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE.
- IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY

LEGEND:

- RESIDENTIAL
- RESIDENTIAL PARKING
- RESIDENTIAL VISITORS PARKING
- COMMERCIAL
- COMMERCIAL PARKING
- CHILDCARE PARKING
- RETAIL
- RETAIL PARKING
- RETAIL VALET PARKING
- RETAIL CARSHARE
- PLANT
- LINEMARKING
- STORAGE CAGE
- STAGING BOUNDARY

KeyPlan



Client

2-4 Giffnock Avenue
Macquarie Park NSW
2113 Australia
www.holdmark.com.au
+61 2 9889 5540

HOLDMARK

Architect

Studio.SC
Formerly Scott Carver

Level 1, One Chifley Square, Sydney, NSW, 2000, Australia
www.studiosc.com.au +61 2 9957 3988

Consultants

Structural Engineer
Van Der Meer
www.vandermeer.com.au

Mechanical / Electrical / Fire / Hydraulic Engineer
Goldfish and Bay
www.goldfishandbay.com.au

Vertical Transportation Engineer
KONE Elevators Pty Ltd
www.kone.com.au

Civil Engineer
Van Der Meer
www.vandermeer.com.au

Landscape Architect
Place Design Group
www.placedesigngroup.com

Surveyor
Ramsay Surveyors Pty Ltd
www.hramsay.com.au

Nominated Architect: EDWARD SALIB — Reg. No: 9469

Project

BURWOOD PLACE

42-60 RAILWAY PARADE, BURWOOD, NSW

Drawing Title

BASEMENT B8 CARPARK PLAN - RESIDENTIAL, VISITORS

Project Status

DEVELOPMENT APPLICATION (S4.55)

Scale: 1 : 250 @ A0

Bar Scale 1:250 — 0 2.5 5 7.5 10 12.5 m

North Point

Project No	Drawn By	Check By
20230055	ES	SC

Dwg No: AR-DA-2121 — Rev: J

PRINT IN COLOUR

2024-09-10 11:33:03 AM

Attachment 2. Car Park Review (ptc.)

A1

15 STOREY
RESIDENTIAL BUILDING

17 STOREY RESIDENTIAL BUILDING
ROOF RL 78.21 APPROX.

20 STOREY RESIDENTIAL BUILDING
ROOF RL 87.21 APPROX.

20 STOREY RESIDENTIAL BUILDING
ROOF RL 86.21 APPROX.

RAILWAY PARADE

STAGE 01

STAGE 02

STAGING BOUNDARY

TOWER D FOOTPRINT

TOWER C FOOTPRINT

TOWER B FOOTPRINT

TOWER A FOOTPRINT

TOWER E FOOTPRINT

FUTURE BURWOOD
URBAN PARK &
CULTURAL CENTRE

BURWOOD LIBRARY

BURWOOD LANE

UNITY PLACE

WYNNE AVENUE

CLARENDON PLACE

BURWOOD
CENTRAL
DEVELOPM

B1 SQUARE DEVELOPMENT

6m PRIMARY SETBACK AS PER DCP

3m PRIMARY SETBACK AS PER DCP

7m SECONDARY SETBACK AS PER DCP

10.5m PRIMARY SETBACK AS PER DCP

3m SECONDARY SETBACK AS PER DCP

NIL PRIMARY SETBACK AS PER DCP

1.5m PRIMARY SETBACK AS PER DCP

PODIUM OVERHEAD

PODIUM ABOVE

VOID OVER

VOID/OVER

PMU TO STAGE 2 CONNECTION

EGRESS FROM RESI

EGRESS FROM BASEMENT

FIRE EGRESS FROM TOWER B

FIRE EGRESS FROM BASEMENT

FIRE EGRESS FROM TOWER A

SERVICES CORRIDOR

RAMP DOWN TO EOTF

CARPARK EXIT

CARPARK ENTRY ONLY
USING EXISTING EASEMENT

CARPARK EXIT FROM B2

FIRE SHUTTER

SUBSTATION BELOW

Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
PODIUM LEVEL

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

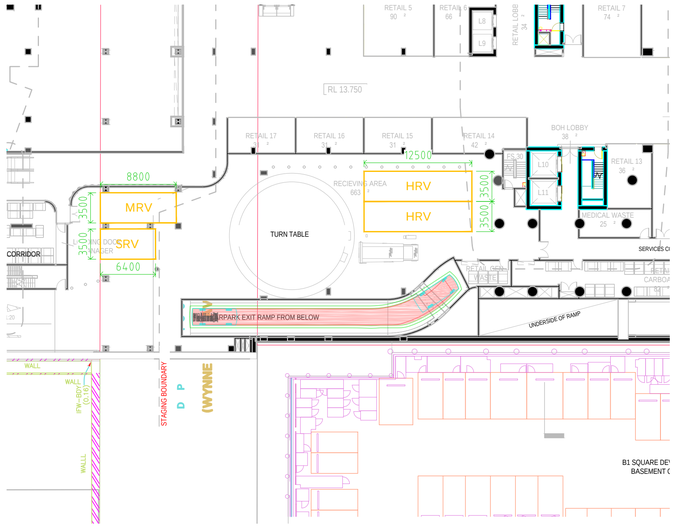
SECTION 4.55 APPLICATION

DRAWING # PTC.S2.P1

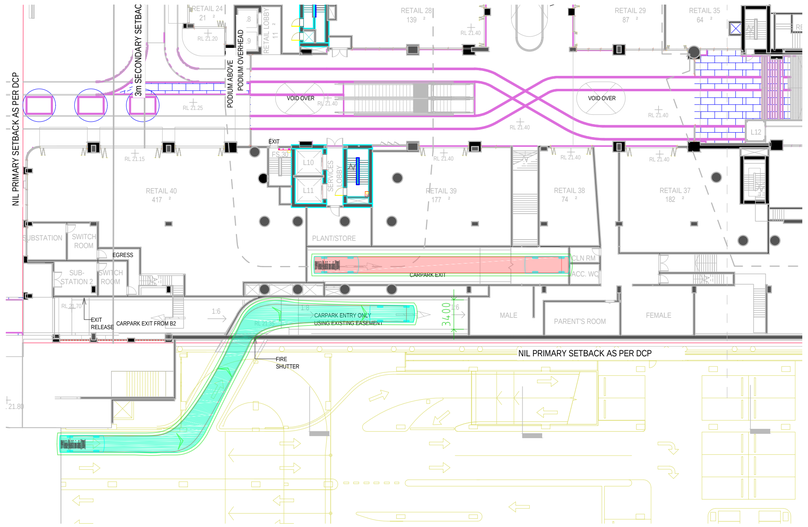
PROJECT # 0612

SCALE NTS

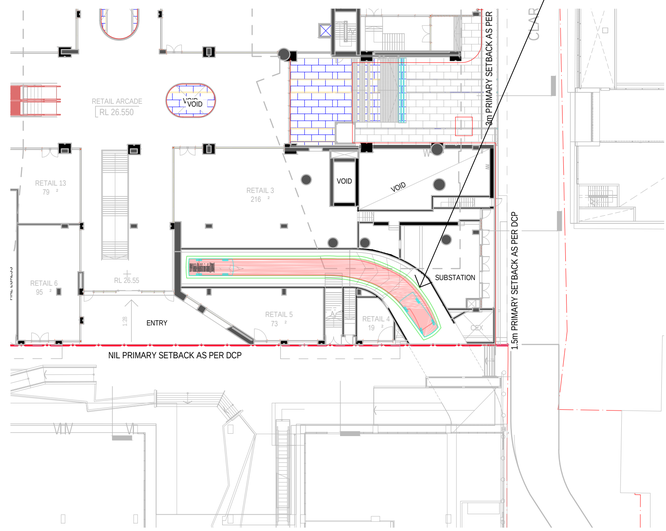
REV 29



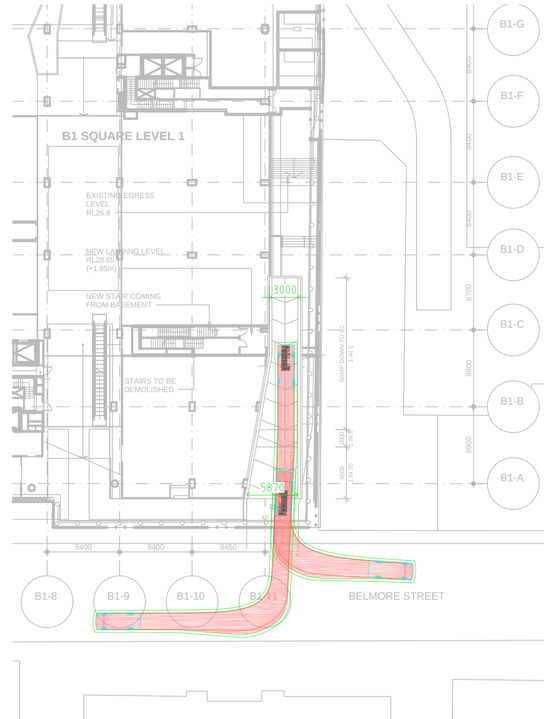
LOWER GROUND LEVEL



PODIUM GROUND LEVEL



PODIUM LEVEL 1



BELMORE STREET EXISTING
RAMP AND DRIVEWAY

Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking
General, Small Car

Retail
Valet, Small Car, Car Wash

Car Share

Commercial Parking
General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking
General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking
m/c

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
PODIUM LEVEL

BELMORE STREET EXIT

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

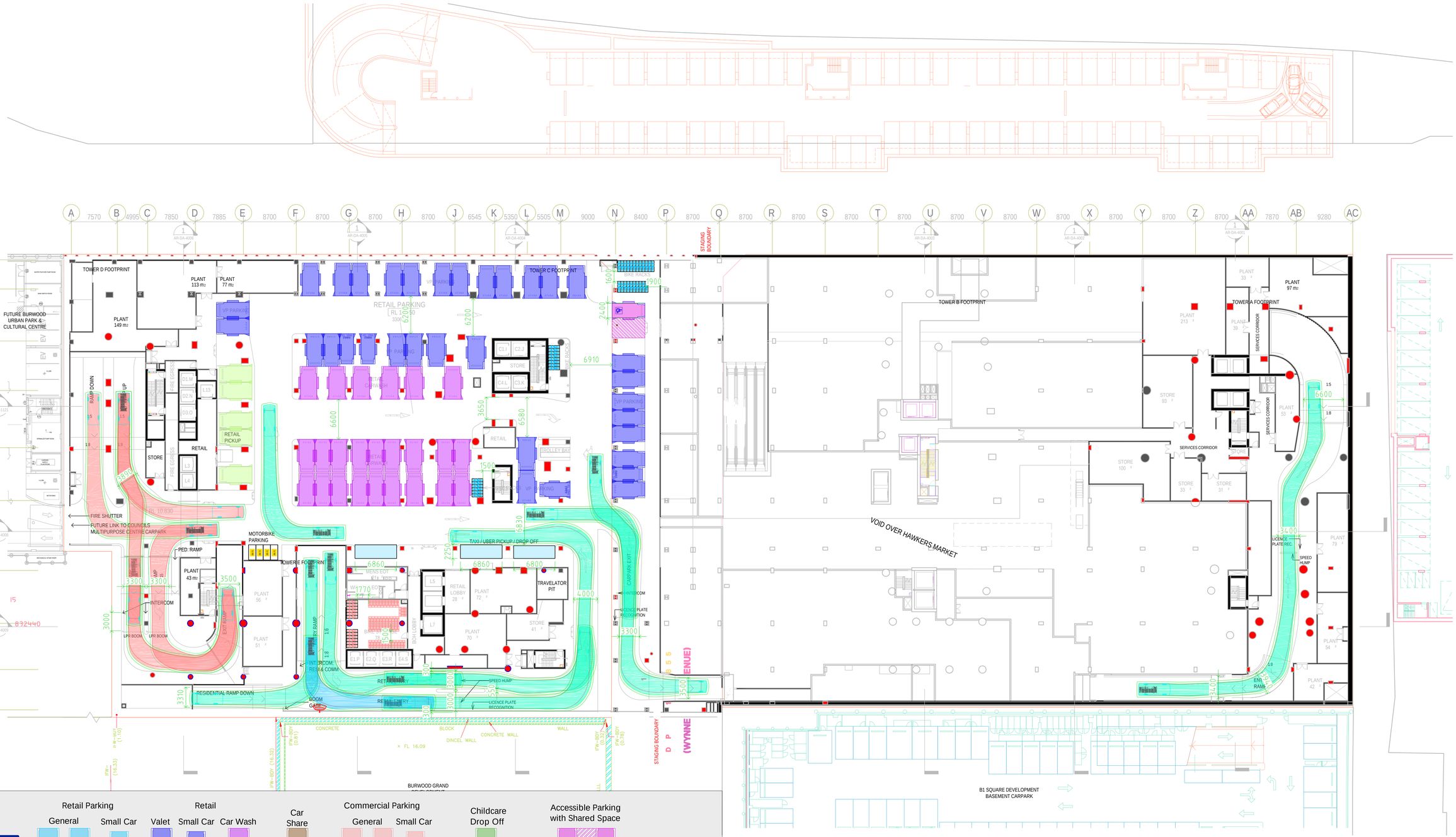
DRAWING # PTC.S2.P2

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B1

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B1

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
RESIDENT
RESIDENT
RESIDENT
COMMERC
COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B2

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B2

PROJECT # 0612

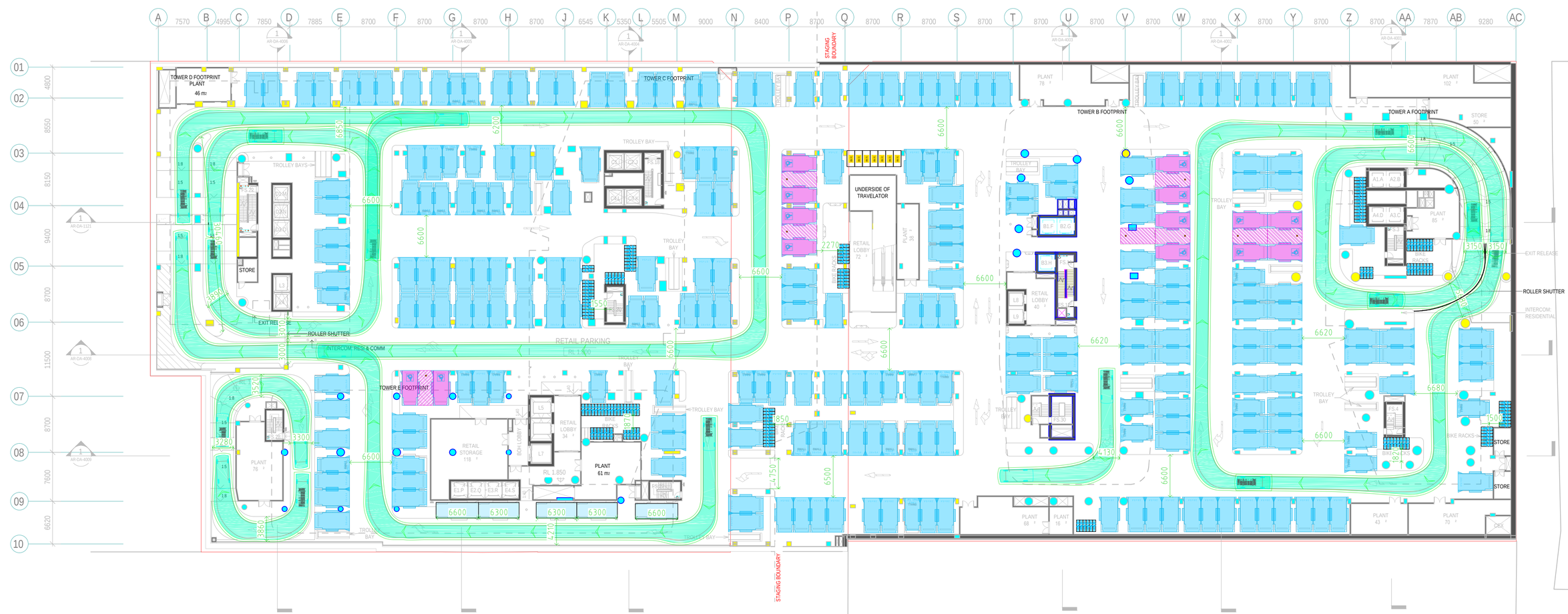
SCALE NTS

REV 29

A1


TOWER D FOOTPRINT
TOWER C FOOTPRINT
TOWER B FOOTPRINT
TOWER A FOOTPRINT
STAGING BOUNDARY
TROLLEY BAYS
TROLLEY BAY
RETAIL PARKING
RL4.750
12577
BIKE RACKS
MOTORCYCLE
VOID
RETAIL LOBBY
RETAIL STORAGE
LIFT PIT
ESCALATOR PIT
STORE
A1.A
A2.B
A4.D
A3.C
B1.F
B2.G
C1.I
C2.J
C3.K
C4.L
C5.M
C6.N
C7.O
C8.P
E1.P
E2.Q
E3.R
E4.S
E5.T
E6.U
E7.V
E8.W
E9.X
E10.Y
E11.Z
E12.AA
E13.AB
E14.AC
E15.AD
E16.AE
E17.AF
E18.AG
E19.AH
E20.AI
E21.AJ
E22.AK
E23.AL
E24.AM
E25.AN
E26.AO
E27.AP
E28.AQ
E29.AR
E30.AS
E31.AT
E32.AU
E33.AV
E34.AW
E35.AX
E36.AY
E37.AZ
E38.BA
E39.BB
E40.BC
E41.BD
E42.BE
E43.BF
E44.BG
E45.BH
E46.BI
E47.BJ
E48.BK
E49.BL
E50.BM
E51.BN
E52.BO
E53.BP
E54.BQ
E55.BR
E56.BS
E57.BT
E58.BU
E59.BV
E60.BW
E61.BX
E62.BY
E63.BZ
E64.CA
E65.CB
E66.CC
E67.CD
E68.CE
E69.CF
E70.CG
E71.CH
E72.CI
E73.CJ
E74.CK
E75.CL
E76.CM
E77.CN
E78.CO
E79.CP
E80.CQ
E81.CR
E82.CS
E83.CT
E84.CU
E85.CV
E86.CW
E87.CX
E88.CY
E89.CZ
E90.DA
E91.DB
E92.DC
E93.DD
E94.DE
E95.DF
E96.DG
E97.DH
E98.DI
E99.DJ
E100.DK
E101.DL
E102.DM
E103.DN
E104.DO
E105.DP
E106.DQ
E107.DR
E108.DS
E109.DT
E110.DU
E111.DV
E112.DW
E113.DX
E114.DY
E115.DZ
E116.EA
E117.EB
E118.EC
E119.ED
E120.EE
E121.EF
E122.EG
E123.EH
E124.EI
E125.EJ
E126.EK
E127.EL
E128.EM
E129.EN
E130.EO
E131.EP
E132.EQ
E133.ER
E134.ES
E135.ET
E136.EU
E137.EV
E138.EW
E139.EX
E140.EY
E141.EZ
E142.FA
E143.FB
E144.FC
E145.FD
E146.FE
E147.FF
E148.FG
E149.FH
E150.FI
E151.FJ
E152.FK
E153.FL
E154.FM
E155.FN
E156.FO
E157.FP
E158.FQ
E159.FR
E160.FS
E161.FT
E162.FU
E163.FV
E164.FW
E165.FX
E166.FY
E167.FZ
E168.GA
E169.GB
E170.GC
E171.GD
E172.GE
E173.GF
E174.GG
E175.GH
E176.GI
E177.GJ
E178.GK
E179.GL
E180.GM
E181.GN
E182.GO
E183.GP
E184.GQ
E185.GR
E186.GS
E187.GT
E188.GU
E189.GV
E190.GW
E191.GX
E192.GY
E193.GZ
E194.HA
E195.HB
E196.HC
E197.HD
E198.HE
E199.HF
E200.HG
E201.HH
E202.HI
E203.HJ
E204.HK
E205.HL
E206.HM
E207.HN
E208.HO
E209.HP
E210.HQ
E211.HR
E212.HS
E213.HT
E214.HU
E215.HV
E216.HW
E217.HX
E218.HY
E219.HZ
E220.IA
E221.IB
E222.IC
E223.ID
E224.IE
E225.IF
E226.IG
E227.IH
E228.II
E229.IJ
E230.IK
E231.IL
E232.IM
E233.IN
E234.IO
E235.IP
E236.IQ
E237.IR
E238.IS
E239.IT
E240.IU
E241.IV
E242.IW
E243.IX
E244.IY
E245.IZ
E246.JA
E247.JB
E248.JC
E249.JD
E250.JE
E251.JF
E252.JG
E253.JH
E254.JI
E255.JJ
E256.JK
E257.JL
E258.JM
E259.JN
E260.JO
E261.JP
E262.JQ
E263.JR
E264.JS
E265.JT
E266.JU
E267.JV
E268.JW
E269.JX
E270.JY
E271.JZ
E272.KA
E273.KB
E274.KC
E275.KD
E276.KE
E277.KF
E278.KG
E279.KH
E280.KI
E281.KJ
E282.KK
E283.KL
E284.KM
E285.KN
E286.KO
E287.KP
E288.KQ
E289.KR
E290.KS
E291.KT
E292.KU
E293.KV
E294.KW
E295.KX
E296.KY
E297.KZ
E298.LA
E299.LB
E300.LC
E301.LD
E302.LE
E303.LF
E304.LG
E305.LH
E306.LI
E307.LJ
E308.LK
E309.LL
E310.LM
E311.LN
E312.LO
E313.LP
E314.LQ
E315.LR
E316.LS
E317.LT
E318.LU
E319.LV
E320.LW
E321.LX
E322.LY
E323.LZ
E324.MA
E325.MB
E326.MC
E327.MD
E328.ME
E329.MF
E330.MG
E331.MH
E332.MI
E333.MJ
E334.MK
E335.ML
E336.MM
E337.MN
E338.MO
E339.MP
E340.MQ
E341.MR
E342.MS
E343.MT
E344.MU
E345.MV
E346.MW
E347.MX
E348.MY
E349.MZ
E350.NA
E351.NB
E352.NC
E353.ND
E354.NE
E355.NF
E356.NG
E357.NH
E358.NI
E359.NJ
E360.NK
E361.NL
E362.NM
E363.NN
E364.NO
E365.NP
E366.NQ
E367.NR
E368.NS
E369.NT
E370.NU
E371.NV
E372.NW
E373.NX
E374.NY
E375.NZ
E376.OA
E377.OB
E378.OC
E379.OD
E380.OE
E381.OF
E382.OG
E383.OH
E384.OI
E385.OJ
E386.OK
E387.OL
E388.OM
E389.ON
E390.OO
E391.OP
E392.OQ
E393.OR
E394.OS
E395.OT
E396.OU
E397.OV
E398.OW
E399.OX
E400.OY
E401.OZ
E402.PA
E403.PB
E404.PC
E405.PD
E406.PE
E407.PF
E408.PG
E409.PH
E410.PI
E411.PJ
E412.PK
E413.PL
E414.PM
E415.PN
E416.PO
E417.PP
E418.PQ
E419.PR
E420.PS
E421.PT
E422.PU
E423.PV
E424.PW
E425.PX
E426.PY
E427.PZ
E428.QA
E429.QB
E430.QC
E431.QD
E432.QE
E433.QF
E434.QG
E435.QH
E436.QI
E437.QJ
E438.QK
E439.QL
E440.QM
E441.QN
E442.QO
E443.QP
E444.QQ
E445.QR
E446.QS
E447.QT
E448.QU
E449.QV
E450.QW
E451.QX
E452.QY
E453.QZ
E454.RA
E455.RB
E456.RC
E457.RD
E458.RE
E459.RF
E460.RG
E461.RH
E462.RI
E463.RJ
E464.RK
E465.RL
E466.RM
E467.RN
E468.RO
E469.RP
E470.RQ
E471.RR
E472.RS
E473.RT
E474.RU
E475.RV
E476.RW
E477.RX
E478.RY
E479.RZ
E480.SA
E481.SB
E482.SC
E483.SD
E484.SE
E485.SF
E486.SG
E487.SH
E488.SI
E489.SJ
E490.SK
E491.SL
E492.SM
E493.SN
E494.SO
E495.SP
E496.SQ
E497.SR
E498.SS
E499.ST
E500.SU
E501.SV
E502.SW
E503.SX
E504.SY
E505.SZ
E506.TA
E507.TB
E508.TC
E509.TD
E510.TE
E511.TF
E512.TG
E513.TH
E514.TI
E515.TJ
E516.TK
E517.TL
E518.TM
E519.TN
E520.TO
E521.TP
E522.TQ
E523.TR
E524.TS
E525.TT
E526.TU
E527.TV
E528.TW
E529.TX
E530.TY
E531.TZ
E532.UA
E533.UB
E534.UC
E535.UD
E536.UE
E537.UF
E538.UG
E539.UH
E540.UI
E541.UJ
E542.UK
E543.UL
E544.UM
E545.UN
E546.UO
E547.UP
E548.UQ
E549.UR
E550.US
E551.UT
E552.UU
E553.UV
E554.UW
E555.UX
E556.UY
E557.UZ
E558.VA
E559.VB
E560.VC
E561.VD
E562.VE
E563.VF
E564.VG
E565.VH
E566.VI
E567.VJ
E568.VK
E569.VL
E570.VM
E571.VN
E572.VO
E573.VP
E574.VQ
E575.VR
E576.VS
E577.VT
E578.VU
E579.VV
E580.VW
E581.VX
E582.VY
E583.VZ
E584.WA
E585.WB
E586.WC
E587.WD
E588.WE
E589.WF
E590.WG
E591.WH
E592.WI
E593.WJ
E594.WK
E595.WL
E596.WM
E597.WN
E598.WO
E599.WP
E600.WQ
E601.WR
E602.WS
E603.WT
E604.WU
E605.WV
E606.WW
E607.WX
E608.WY
E609.WZ
E610.XA
E611.XB
E612.XC
E613.XD
E614.XE
E615.XF
E616.XG
E617.XH
E618.XI
E619.XJ
E620.XK
E621.XL
E622.XM
E623.XN
E624.XO
E625.XP
E626.XQ
E627.XR
E628.XS
E629.XT
E630.XU
E631.XV
E632.XW
E633.XX
E634.XY
E635.XZ
E636.YA
E637.YB
E638.YC
E639.YD
E640.YE
E641.YF
E642.YG
E643.YH
E644.YI
E645.YJ
E646.YK
E647.YL
E648.YM
E649.YN
E650.YO
E651.YP
E652.YQ
E653.YR
E654.YS
E655.YT
E656.YU
E657.YV
E658.YW
E659.YX
E660.YY
E661.YZ
E662.ZA
E663.ZB
E664.ZC
E665.ZD
E666.ZE
E667.ZF
E668.ZG
E669.ZH
E670.ZI
E671.ZJ
E672.ZK
E673.ZL
E674.ZM
E675.ZN
E676.ZO
E677.ZP
E678.ZQ
E679.ZR
E680.ZS
E681.ZT
E682.ZU
E683.ZV
E684.ZW
E685.ZX
E686.ZY
E687.ZZ
E688.AAA
E689.AAB
E690.AAC
E691.AAD
E692.AAE
E693.AAF
E694.AAG
E695.AAH
E696.AAI
E697.AAJ
E698.AAK
E699.AAL
E700.AAM
E701.AAN
E702.AAO
E703.AAP
E704.AAQ
E705.AAR
E706.AAS
E707.AAT
E708.AAU
E709.AAV
E710.AAW
E711.AAX
E712.AAY
E713.AAZ
E714.ABA
E715.ABB
E716.ABC
E717.ABD
E718.ABE
E719.ABF
E720.ABG
E721.ABH
E722.ABI
E723.ABJ
E724.ABK
E725.ABL
E726.ABM
E727.ABN
E728.ABO
E729.ABP
E730.ABQ
E731.ABR
E732.ABS
E733.ABT
E734.ABU
E735.ABV
E736.ABW
E737.ABX
E738.ABY
E739.ABZ
E740.ACA
E741.ACB
E742.ACC
E743.ACD
E744.ACE
E745.ACF
E746.ACG
E747.ACH
E748.ACI
E749.ACJ
E750.ACK
E751.ACL
E752.ACM
E753.ACN
E754.ACO
E755.ACP
E756.ACQ
E757.ACR
E758.ACS
E759.ACT
E760.ACU
E761.ACV
E762.ACW
E763.ACX
E764.ACY
E765.ACZ
E766.ADA
E767.ADB
E768.ADC
E769.ADD
E770.ADE
E771.ADF
E772.ADG
E773.ADH
E774.ADI
E775.ADJ
E776.ADK
E777.ADL
E778.ADM
E779.ADN
E780.ADO
E781.ADP
E782.ADQ
E783.ADR
E784.ADS
E785.ADT
E786.ADU
E787.ADV
E788.ADW
E789.ADX
E790.ADY
E791.ADZ
E792.AEA
E793.AEB
E794.AEC
E795.AED
E796.AEE
E797.AEF
E798.AEG
E799.AEH
E800.AEI
E801.AEJ
E802.AEK
E803.AEL
E804.AEM
E805.AEN
E806.AEO
E807.AEP
E808.AEQ
E809.AER
E810.AES
E811.AET
E812.AEU
E813.AEV
E814.AEW
E815.AEX
E816.AEY
E817.AEZ
E818.AFA
E819.AFB
E820.AFC
E821.AFD
E822.AFE
E823.AFF
E824.AFG
E825.AFH
E826.AFI
E827.AFJ
E828.AFK
E829.AFL
E830.AFM
E831.AFN
E832.AFO
E833.AFP
E834.AFQ
E835.AFR
E836.AFS
E837.AFT
E838.AFU
E839.AFV
E840.AFW
E841.AFX
E842.AFY
E843.AFZ
E844.AGA
E845.AGB
E846.AGC
E847.AGD
E848.AGE
E849.AGF
E850.AGG
E851.AGH
E852.AGI
E853.AGJ
E854.AGK
E855.AGL
E856.AGM
E857.AGN
E858.AGO
E859.AGP
E860.AGQ
E861.AGR
E862.AGS
E863.AGT
E864.AGU
E865.AGV
E866.AGW
E867.AGX
E868.AGY
E869.AGZ
E870.AHA
E871.AHB
E872.AHC
E873.AHD
E874.AHE
E875.AHF
E876.AHG
E877.AHH
E878.AHI
E879.AHJ
E880.AHK
E881.AHL
E882.AHM
E883.AHN
E884.AHO
E885.AHP
E886.AHQ
E887.AHR
E888.AHS
E889.AHT
E890.AHU
E891.AHV
E892.AHW
E893.AHX
E894.AHY
E895.AHZ
E896.AIA
E897.AIB
E898.AIC
E899.AID
E900.AIE
E901.AIF
E902.AIG
E903.AIH
E904.AII
E905.AIJ
E906.AIK
E907.AIL
E908.AIM
E909.AIN
E910.AIO
E911.AIP
E912.AIQ
E913.AIR
E914.AIS
E915.AIT
E916.AIU
E917.AIV
E918.AIW
E919.AIX
E920.AIY
E921.AIZ
E922.AJA
E923.AJB
E924.AJC
E925.AJD
E926.AJE
E927.AJF
E928.AJG
E929.AJH
E930.AJI
E931.AJJ
E932.AJK
E933.AJL
E934.AJM
E935.AJN
E936.AJO
E937.AJP
E938.AJQ
E939.AJR
E940.AJS
E941.AJT
E942.AJU
E943.AJV
E944.AJW
E945.AJX
E946.AJY
E947.AJZ
E948.AKA
E949.AKB
E950.AKC
E951.AKD
E952.AKE
E953.AKF
E954.AKG
E955.AKH
E956.AKI
E957.AKJ
E958.AKK
E959.AKL
E960.AKM
E961.AKN
E962.AKO
E963.AKP
E964.AKQ
E965.AKR
E966.AKS
E967.AKT
E968.AKU
E969.AKV
E970.AKW
E971.AKX
E972.AKY
E973.AKZ
E974.ALA
E975.ALB
E976.ALC
E977.ALD
E978.ALE
E979.ALF
E980.ALG
E981.ALH
E982.ALI
E983.ALJ
E984.ALK
E985.ALL
E986.ALM
E987.ALN
E988.ALO
E989.ALP
E990.ALQ
E991.ALR
E992.ALS
E993.ALT
E994.ALU
E995.ALV
E996.ALW
E997.ALX
E998.ALY
E999.ALZ
E1000.AMA
E1001.AMB
E1002.AMC
E1003.AMD
E1004.AME
E1005.AMF
E1006.AMG
E1007.AMH
E1008.AMI
E1009.AMJ
E1010.AMK
E1011.AML
E1012.AMM
E1013.AMN
E1014.AMO
E1015.AMP
E1016.AMQ
E1017.AMR
E1018.AMS
E1019.AMT
E1020.AMU
E1021.AMV
E1022.AMW
E1023.AMX
E1024.AMY
E1025.AMZ
E1026.ANA
E1027.ANB
E1028.ANC
E1029.AND
E1030.ANE
E1031.ANF
E1032.ANG
E1033.ANH
E1034.ANI
E1035.ANJ
E1036.ANK
E1037.ANL
E1038.ANM
E1039.ANN
E1040.ANO
E1041.ANP
E1042.ANQ
E1043.ANR
E1044.ANS
E1045.ANT
E1046.ANU
E1047.ANV
E1048.ANW
E1049.ANX
E1050.ANY
E1051.ANZ
E1052.AOA
E1053.AOB
E1054.AOC
E1055.AOD
E1056.AOE
E1057.AOF
E1058.AOG
E1059.AOH
E1060.AOI
E1061.AOJ
E1062.AOK
E1063.AOL
E1064.AOM
E1065.AON
E1066.AOO
E1067.AOP
E1068.AOQ
E1069.AOR
E1070.AOS
E1071.AOT
E1072.AOU
E1073.AOV
E1074.AOW
E1075.AOX
E1076.AOY
E1077.AOZ
E1078.APA
E1079.APB
E1080.APC
E1081.APD
E1082.APE
E1083.APF
E1084.APG
E1085.APH
E1086.API
E1087.APJ
E1088.APK
E1089.APL
E1090.APM
E1091.APN
E1092.APO
E1093.APP
E1094.APQ
E1095.APR
E1096.APS
E1097.APT
E1098.APU
E1099.APV
E1100.APW
E1101.APX
E1102.APY
E1103.APZ
E1104.AQA
E1105.AQB
E1106.AQC
E1107.AQD
E1108.AQE
E1109.AQF
E1110.AQG
E1111.AQH
E1112.AQI
E1113.AQJ
E1114.AQK
E1115.AQL
E1116.AQM
E1117.AQN
E1118.AQO
E1119.AQP
E1120.AQQ
E1121.AQR
E1122.AQS
E1123.AQT
E1124.AQU
E1125.AQV
E1126.AQW
E1127.AQX
E1128.AQY
E1129.AQZ
E1130.ARA
E1131.ARB
E1132.ARC
E1133.ARD
E1134.ARE
E1135.ARF
E1136.ARG
E1137.ARH
E1138.ARI
E1139.ARJ
E1140.ARK
E1141.ARL
E1142.ARM
E1143.ARN
E1144.ARO
E1145.ARP
E1146.ARQ
E1147.ARR
E1148.ARS
E1149.ART
E1150.ARU
E1151.ARV
E1152.ARW
E1153.ARX
E1154.ARY
E1155.ARZ
E1156.ASA
E1157.ASB
E1158.ASC
E1159.ASD
E1160.ASE
E1161.ASF
E1162.ASG
E1163.ASH
E1164.ASI
E1165.ASJ
E1166.ASK
E1167.ASL
E1168.ASM
E1169.ASN
E1170.ASO
E1171.ASP
E1172.ASQ
E1173.ASR
E1174.ASS
E1175.AST
E1176.ASU
E1177.ASV
E1178.ASW
E1179.ASX
E1180.ASY
E1181.ASZ
E1182.ATA
E1183.ATB
E1184.ATC
E1185.ATD
E1186.ATE
E1187.ATF
E1188.ATG
E1189.ATH
E1190.ATI
E1191.ATJ
E1192.ATK
E1193.ATL
E1194.ATM
E1195.ATN
E1196.ATO
E1197.ATP
E1198.ATQ
E1199.ATR
E1200.ATS
E1201.ATT
E1202.ATU
E1203.ATV
E1204.ATW
E1205.ATX
E1206.ATY
E1207.ATZ
E1208.AUA
E1209.AUB
E1210.AUC
E1211.AUD
E1212.AUE
E1213.AUF
E1214.AUG
E1215.AUH
E1216.AUI
E1217.AUJ
E1218.AUK
E1219.AUL
E1220.AUM
E1221.AUN
E1222.AUO
E1223.AUP
E1224.AUQ
E1225.AUR
E1226.AUS
E1227.AUT
E1228.AUU
E1229.AUV
E1230.AUW
E1231.AUX
E1232.AUY
E1233.AUZ
E1234.AVA
E1235.AVB
E1236.AVC
E1237.AVD
E1238.AVE
E1239.AVF
E1240.AVG
E1241.AVH
E1242.AVI
E1243.AVJ
E1244.AVK
E1245.AVL
E1246.AVM
E1247.AVN
E1248.AVO
E1249.AVP
E1250.AVQ
E1251.AVR
E1252.AVS
E1253.AVT
E1254.AVU
E1255.AVV
E1256.AVW
E1257.AVX
E1258.AVY
E1259.AVZ
E1260.AWA
E1261.AWB
E1262.AWC
E1263.AWD
E1264.AWE
E1265.AWF
E1266.AWG
E1267.AWH
E1268.AWI
E1269.AWJ
E1270.AWK
E1271.AWL
E1272.AWM
E1273.AWN
E1274.AWO
E1275.AWP
E1276.AWQ
E1277.AWR
E1278.AWS
E1279.AWT
E1280.AWU
E1281.AWV
E1282.AWW
E1283.AWX
E1284.AWY
E1285.AWZ
E1286.AXA
E1287.AXB
E1288.AXC
E1289.AXD
E1290.AXE
E1291.AXF
E1292.AXG
E1293.AXH
E1294.AXI
E1295.AXJ
E1296.AXK
E1297.AXL
E1298.AXM
E1299.AXN
E1300.AXO
E1301.AXP
E1302.AXQ
E1303.AXR
E1304.AXS
E1305.AXT
E1306.AXU
E1307.AXV
E1308.AXW
E1309.AXX
E1310.AXY
E1311.AXZ
E1312.AYA
E1313.AYB
E1314.AYC
E1315.AYD
E1316.AYE
E1317.AYF
E1318.AYG
E1319.AYH
E1320.AYI
E1321.AYJ
E1322.AYK
E1323.AYL
E1324.AYM
E1325.AYN
E1326.AYO
E1327.AYP
E1328.AYQ
E1329.AYR
E1330.AYS
E1331.AYT
E1332.AYU
E1333.AYV
E1334.AYW
E1335.AYX
E1336.AYY
E1337.AYZ
E1338.AZA
E1339.AZB
E1340.AZC
E1341.AZD
E1342.AZE
E1343.AZF
E1344.AZG
E1345.AZH
E1346.AZI
E1347.AZJ
E1348.AZK
E1349.AZL
E1350.AZM
E1351.AZN
E1352.AZO
E1353.AZP
E1354.AZQ
E1355.AZR
E1356.AZS
E1357.AZT
E1358.AZU
E1359.AZV
E1360.AZW
E1361.AZX
E1362.AZY
E1363.AZZ
E1364.BAA
E1365.BAB
E1366.BAC
E1367.BAD
E1368.BAE
E1369.BAF
E1370.BAG
E1371.BAH
E1372.BAI
E1373.BAJ
E1374.BAK
E1375.BAL
E1376.BAM
E1377.BAN
E1378.BAO
E1379.BAP
E1380.BAQ
E1381.BAR
E1382.BAS
E1383.BAT
E1384.BAU
E1385.BAV
E1386.BAW
E1387.BAX
E1388.BAY
E1389.BAZ
E1390.BBA
E1391.BBB
E1392.BBC
E1393.BBD
E1394.BBE
E1395.BBF
E1396.BBG
E1397.BBH
E1398.BBI
E1399.BBJ
E1400.BBK
E1401.BBL
E1402.BBM
E1403.BBN
E1404.BBO
E1405.BBP
E1406.BBQ
E1407.BBR
E1408.BBS
E1409.BBT
E1410.BBU
E1411.BBV
E1412.BBW
E1413.BBX
E1414.BBY
E1415.BBZ
E1416.BCA
E1417.BCB
E1418.BCC
E1419.BCD
E1420.BCE
E1421.BCF
E1422.BCG
E1423.BCH
E1424.BCI
E1425.BCJ
E1426.BCK
E1427.BCL
E1428.BCM
E1429.BCN
E1430.BCO
E1431.BCP
E1432.BCQ
E1433.BCR
E1434.BCS
E1435.BCT
E1436.BCU
E1437.BCV
E1438.BCW
E1439.BCX
E1440.BCY
E1441.BCZ
E1442.BDA
E1443.BDB
E1444.BDC
E1445.BDD
E1446.BDE
E1447.BDF
E1448.BDG
E1449.BDH
E1450.BDI
E1451.BDJ
E1452.BDK
E1453.BDL
E1454.BDM
E1455.BDN
E1456.BDO
E1457.BDP
E1458.BDQ
E1459.BDR
E1460.BDS
E1461.BDT
E1462.BDU
E1463.BDV
E1464.BDW
E1465.BDX
E1466.BDY
E1467.BDZ
E1468.BEA
E1469.BEB
E1470.BEC
E1471.BED
E1472.BEE
E1473.BEF
E1474.BEG
E1475.BEH
E1476.BEI
E1477.BEJ
E1478.BEK
E1479.BEL
E1480.BEM
E1481.BEN
E1482.BEO
E1483.BEP
E1484.BEQ
E1485.BER
E1486.BES
E1487.BET
E1488.BEU
E1489.BEV
E1490.BEW
E1491.BEX
E1492.BEY
E1493.BEZ
E1494.BFA
E1495.BFB
E1496.BFC
E1497.BFD
E1498.BFE
E1499.BFF
E1500.BFG
E1501.BFH
E1502.BFI
E1503.BFJ
E1504.BFK
E1505.BFL
E1506.BFM
E1507.BFN
E1508.BFO
E1509.BFP
E1510.BFQ
E1511.BFR
E1512.BFS
E1513.BFT
E1514.BFU
E1515.BFV
E1516.BFW
E1517.BFX
E1518.BFY
E1519.BFZ
E1520.BGA
E1521.BGB
E1522.BGC
E1523.BGD
E1524.BGE
E1525.BGF
E1526.BGG
E1527.BGH
E1528.BGI
E1529.BGJ
E1530.BGK
E1531.BGL
E1532.BGM
E1533.BGN
E1534.BGO
E1535.BGP
E1536.BGQ
E1537.BGR
E1538.BGS
E1539.BGT
E1540.BGU
E1541.BGV
E1542.BGW
E1543.BGX
E1544.BGY
E1545.BGZ
E1546.BHA
E1547.BHB
E1548.BHC
E1549.BHD
E1550.BHE
E1551.BHF
E1552.BHG
E1553.BHH
E1554.BHI
E1555.BHJ
E1556.BHK
E1557.BHL
E1558.BHM
E1559.BHN
E1560.BHO
E1561.BHP
E1562.BHQ
E1563.BHR
E1564.BHS
E1565.BHT
E1566.BHU
E1567.BHV
E1568.BHW
E1569.BHX
E1570.BHY
E1571.BHZ
E1572.BIA
E1573.BIB
E1574.BIC
E1575.BID
E1576.BIE
E1577.BIF
E1578.BIG
E1579.BIH
E1580.BII
E1581.BIJ
E1582.BIK
E1583.BIL
E1584.BIM
E1585.BIN
E1586.BIO
E1587.BIP
E1588.BIQ
E1589.BIR
E1590.BIS
E1591.BIT
E1592.BIU
E1593.BIV
E1594.BIW
E1595.BIX
E1596.BIY
E1597.BIZ
E1598.BJA
E1599.BJB
E1600.BJC
E1601.BJD
E1602.BJE
E1603.BJF
E1604.BJG
E1605.BJH
E1606.BJI
E1607.BJJ
E1608.BJK
E1609.BJL
E1610.BJM
E1611.BJN
E1612.BJO
E1613.BJP
E1614.BJQ
E1615.BJR
E1616.BJS
E1617.BJT
E1618.BJU
E1619.BJV
E1620.BJW
E1621.BJX
E1622.BJY
E1623.BJZ
E1624.BKA
E1625.BKB
E1626.BKC
E1627.BKD
E1628.BKE
E1629.BKF
E1630.BKG
E1631.BKH
E1632.BKI
E1633.BKJ
E1634.BKK
E1635.BKL
E1636.BKM
E1637.BKN
E1638.BKO
E1639.BKP
E1640.BKQ
E1641.BKR
E1642.BKS
E1643.BKT
E1644.BKU
E1645.BKV
E1646.BKW
E1647.BKX
E1648.BKY
E1649.BKZ
E1650.BLA
E1651.BLB
E1652.BLC
E1653.BLD
E1654.BLE
E1655.BLF
E1656.BLG
E1657.BLH
E1658.BLI
E1659.BLJ
E1660.BLK
E1661.BLL
E1662.BLM
E1663.BLN
E1664.BLO
E1665.BLP
E1666.BLQ
E1667.BLR
E1668.BLS
E1669.BLT
E1670.BLU
E1671.BLV
E1672.BLW
E1673.BLX
E1674.BLY
E1675.BLZ
E1676.BMA
E1677.BMB
E1678.BMC
E1679.BMD
E1680.BME
E1681.BMF
E1682.BMG
E1683.BMH
E1684.BMI
E1685.BMJ
E1686.BMK
E1687.BML
E1688.BMM
E1689.BMN
E1690.BMO
E1691.BMP
E1692.BMQ
E1693.BMR
E1694.BMS
E1695.BMT
E1696.BMU
E1697.BMV
E1698.BMW
E1699.BMX
E1700.BMY
E1701.BMZ
E1702.BNA
E1703.BNB
E1704.BNC
E1705.BND
E1706.BNE
E1707.BNF
E1708.BNG
E1709.BNH
E1710.BNI
E1711.BNJ
E1712.BNK
E1713.BNL
E1714.BNM
E1715.BNN
E1716.BNO
E1717.BNP
E1718.BNQ
E1719.BNR
E1720.BNS
E1721.BNT
E1722.BNU
E1723.BNV
E1724.BNW
E1725.BNX
E1726.BNY
E1727.BNZ
E1728.BOA
E1729.BOB
E1730.BOC
E1731.BOD
E1732.BOE
E1733.BOF
E1734.BOG
E1735.BOH
E1736.BOI
E1737.BOJ
E1738.BOK
E1739.BOL
E1740.BOM
E1741.BON
E1742.BOO
E1743.BOP
E1744.BOQ
E1745.BOR
E1746.BOS
E1747.BOT
E1748.BOU
E1749.BOV
E1750.BOW
E1751.BOX
E1752.BOY
E1753.BOZ
E1754.BPA
E1755.BPB
E1756.BPC
E1757.BPD
E1758.BPE
E1759.BPF
E1760.BPG
E1761.BPH
E1762.BPI
E1763.BPJ
E1764.BPK
E1765.BPL
E1766.BPM
E1767.BPN
E1768.BPO
E1769.BPP
E1770.BPQ
E1771.BPR
E1772.BPS
E1773.BPT
E1774.BPU
E1775.BPV
E1776.BPW
E1777.BPX
E1778.BPY
E1779.BPZ
E1780.BQA
E1781.BQB
E1782.BQC
E1783.BQD
E1784.BQE
E1785.BQF
E1786.BQG
E1787.BQH
E1788.BQI
E1789.BQJ
E1790.BQK
E1791.BQL
E1792.BQM
E1793.BQN
E1794.BQO
E1795.BQP
E1796.BQQ
E1797.BQR
E1798.BQS
E1799.BQT
E1800.BQU
E1801.BQV
E1802.BQW
E1803.BQX
E1804.BQY
E1805.BQZ
E1806.BRA
E1807.BRB
E1808.BRC
E1809.BRD
E1810.BRE
E1811.BRF
E1812.BRG
E1813.BRH
E1814.BRI
E1815.BRJ
E1816.BRK
E1817.BRL
E1818.BRM
E1819.BRN
E1820.BRO
E1821.BRP
E1822.BRQ
E1823.BRR
E1824.BRS
E1825.BRT
E1826.BRU
E1827.BRV
E1828.BRW
E1829.BRX
E1830.BRY
E1831.BRZ
E1832.BSA
E1833.BSB
E1834.BSC
E1835.BSD
E1836.BSE
E1837.BSF
E1838.BSG
E1839.BSH
E1840.BSI
E1841.BSJ
E1842.BSK
E1843.BSL
E1844.BSM
E1845.BSN
E1846.BSO
E1847.BSP
E1848.BSQ
E1849.BSR
E1850.BSS
E1851.BST
E1852.BSU
E1853.BSV
E1854.BSW
E1855.BSX
E1856.BSY
E1857.BSZ
E1858.BTA
E1859.BTB
E1860.BTC
E1861.BTD
E1862.BTE
E1863.BTF
E1864.BTG
E1865.BTH
E1866.BTI
E1867.BTJ
E1868.BTK
E1869.BTL
E1870.BTM
E1871.BTN
E1872.BTO
E1873.BTP
E1874.BTQ
E1875.BTR
E1876.BTS
E1877.BTT
E1878.BTU
E1879.BTV
E1880.BTW
E1881.BTX
E1882.BTY
E1883.BTZ
E1884.BUA
E1885.BUB
E1886.BUC
E1887.BUD
E1888.BUE
E1889.BUF
E1890.BUG
E1891.BUH
E1892.BUI
E1893.BUJ
E1894.BUK
E1895.BUL
E1896.BUM
E1897.BUN
E1898.BUO
E1899.BUP
E1900.BUQ
E1901.BUR
E1902.BUS
E1903.BUT
E1904.BUU
E1905.BUV
E1906.BUW
E1907.BUX
E1908.BUY
E1909.BUZ
E1910.BVA
E1911.BVB
E1912.BVC
E1913.BVD
E1914.BVE
E1915.BVF
E1916.BVG
E1917.BVH
E1918.BVI
E1919.BVJ
E1920.BVK
E1921.BVL
E1922.BVM
E1923.BVN
E1924.BVO
E1925.BVP
E1926.BVQ
E1927.BVR
E1928.BVS
E1929.BVT
E1930.BVU
E1931.BVV
E1932.BVW
E1933.BVX
E1934.BVY
E1935.BVZ
E1936.BWA
E1937.BWB
E1938.BWC
E1939.BWD
E1940.BWE
E1941.BWF
E1942.BWG
E1943.BWH
E1944.BWI
E1945.BWJ
E1946.BWK
E1947.BWL
E1948.BWM
E1949.BWN
E1950.BWO
E1951.BWP
E1952.BWQ
E1953.BWR
E1954.BWS
E1955.BWT
E1956.BWU
E1957.BWV
E1958.BWW
E1959.BWX
E1960.BWY
E1961.BWZ
E1962.BXA
E1963.BXB
E1964.BXC
E1965.BXD
E1966.BXE
E1967.BXF
E1968.BXG
E1969.BXH
E1970.BXI
E1971.BXJ
E1972.BXK
E1973.BXL
E1974.BXM
E1975.BXN
E1976.BXO
E1977.BXP
E1978.BXQ
E1979.BXR
E1980.BXS
E1981.BXT
E1982.BXU
E1983.BXV
E1984.BXW
E1985.BXX
E1986.BXY
E1987.BXZ
E1988.BYA
E1989.BYB
E1990.BYC
E1991.BYD
E1992.BYE
E1993.BYF
E1994.BYG
E1995.BYH
E1996.BYI
E1997.BYJ
E1998.BYK
E1999.BYL
E2000.BYM
E2001.BYN
E2002.BYO
E2003.BYP
E2004.BYQ
E2005.BYR
E2006.BYS
E2007.BYT
E2008.BYU
E2009.BYV
E2010.BYW
E2011.BYX
E2012.BYY
E2013.BYZ
E2014.BZA
E2015.BZB
E2016.BZC
E2017.BZD
E2018.BZE
E2019.BZF
E2020.BZG
E2021.BZH
E2022.BZI
E2023.BZJ
E2024.BZK
E2025.BZL
E2026.BZM
E2027.BZN
E2028.BZO
E2029.BZP
E2030.BZQ
E2031.BZR
E2032.BZS
E2033.BZT
E2034.BZU
E2035.BZV
E2036.BZW
E2037.BZX
E2038.BZY
E2039.BZZ
E2040.CAA
E2041.CAB
E2042.CAC
E2043.CAD
E2044.CAE
E2045.CAF
E2046.CAG
E2047.CAH
E2048.CAI
E2049.CAJ
E2050.CAK
E2051.CAL
E2052.CAM
E2053.CAN
E2054.CAO
E2055.CAP
E2056.CAQ
E2057.CAR
E2058.CAS
E2059.CAT
E2060.CAU
E2061.CAV
E2062.CAW
E2063.CAX
E2064.CAY
E2065.CAZ
E2066.CBA
E2067.CBB
E2068.CBC
E2069.CBD
E2070.CBE
E2071.CBF
E2072.CBG
E2073.CBH
E2074.CBI
E2075.CBJ
E2076.CBK
E2077.CBL
E2078.CBM
E2079.CBN
E2080.CBO
E2081.CBP
E2082.CBQ
E2083.CBR
E2084.CBS
E2085.CBT
E2086.CBU
E2087.CBV
E2088.CBW
E2089.CBX
E2090.CBY
E2091.CBZ
E2092.CCA
E2093.CCB
E2094.CCC
E2095.CCD
E2096.CCE
E2097.CCF
E2098.CCG
E2099.CCH
E2100.CCI
E2101.CCJ
E2102.CCK
E2103.CCL
E2104.CCM
E2105.CCN
E2106.CCO
E2107.CCP
E2108.CCQ
E2109.CCR
E2110.CCS
E2111.CCT
E2112.CCU
E2113.CCV
E2114.CCW
E2115.CCX
E2116.CCY
E2117.CCZ
E2118.CDA
E2119.CDB
E2120.CDC
E2121.CDD
E2122.CDE
E2123.CDF
E2124.CDG
E2125.CDH
E2126.CDI
E2127.CDJ
E2128.CDK
E2129.CDL
E2130.CDM
E2131.CDN
E2132.CDO
E2133.CDP
E2134.CDQ
E2135.CDR
E2136.CDS
E2137.CDT
E2138.CDU
E2139.CDV
E2140.CDW
E2141.CDX
E2142.CDY
E2143.CDZ
E2144.CEA
E2145.CEB
E2

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B4

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B4

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B5

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B5

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B6

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

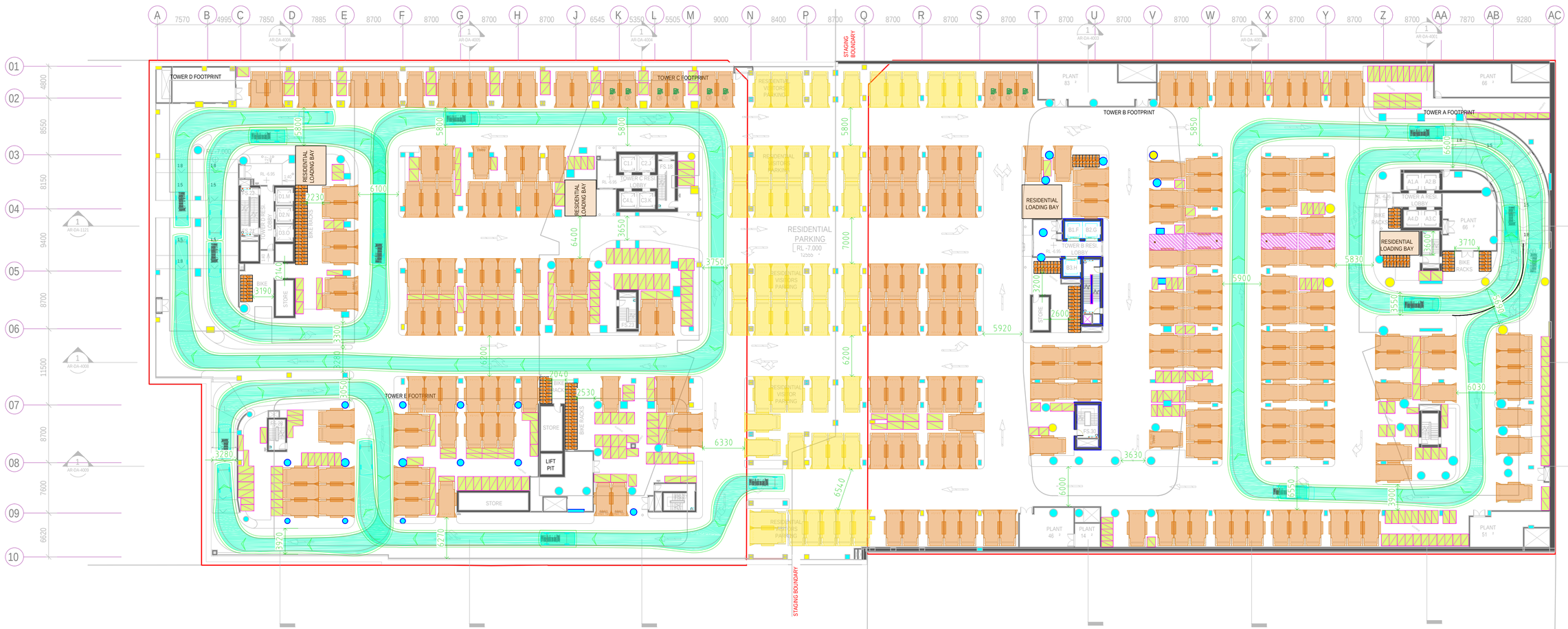
DRAWING # PTC.S2.B6

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking: m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B7

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B7

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B8

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B8

PROJECT # 0612

SCALE NTS

REV 29

A1

TOWER E FOOTPRINT

GENERATOR ROOM BELOW

MALE EOT FACILITIES

FEMALE EOT FACILITIES

L5

L7

EOT WC

ACC WC

1620

1500

1500

2180

2270

1610

1620

COMMERCIAL BIKE STORE

RL 18.30

CLNR'S

EGRESS

SE

E1.P

E2.Q

E3.R

E4.S

KE

1650

RL 20.00

RAMP FROM GROUND

1:12

EGRESS TO UNITY LANE

FIRE STAIR

STAIR TO PODIUM GROUND FLOOR

D OVER
NG DOCK

REFER TO DRAWING
1/AR-DA-2218

VOID TO LOWER GROUND FLOOR

1

1 1 2 5 8 5 5

AVENUE)

STAGING BOUNDARY

D P

(WYNNE

CONCRETE

WALL

CONCRETE

BLOCK

WALL

IFW–BDY (0.16)

IFW–BDY (16.18)

x FL 19.05

WALLL

BURWOOD GRAND
DEVELOPMENT
BASEMENT CARPARK

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
TOWER E - LOWER GROUND MEZZANINE

COMMERCIAL EOTF

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

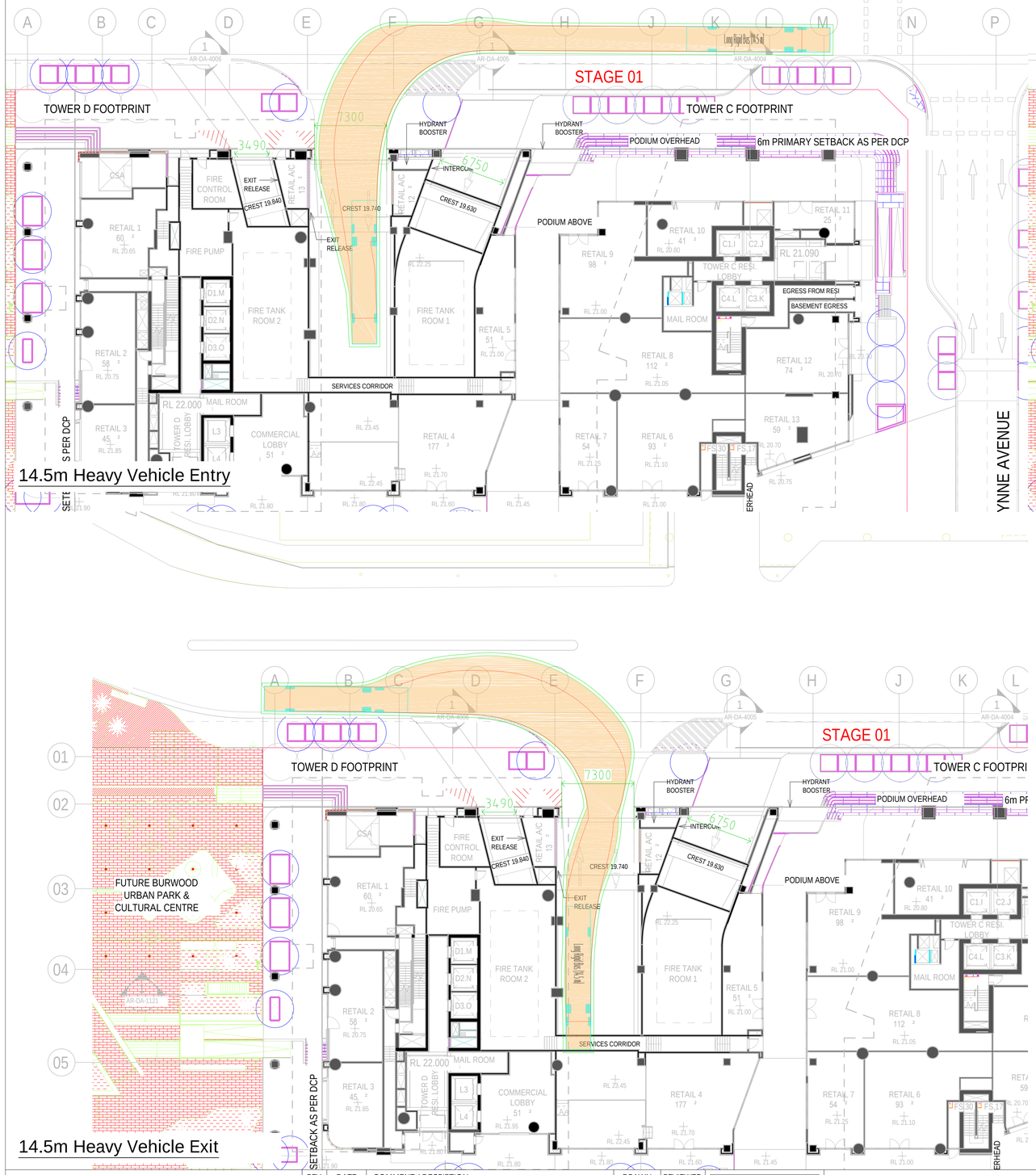
SECTION 4.55 APPLICATION

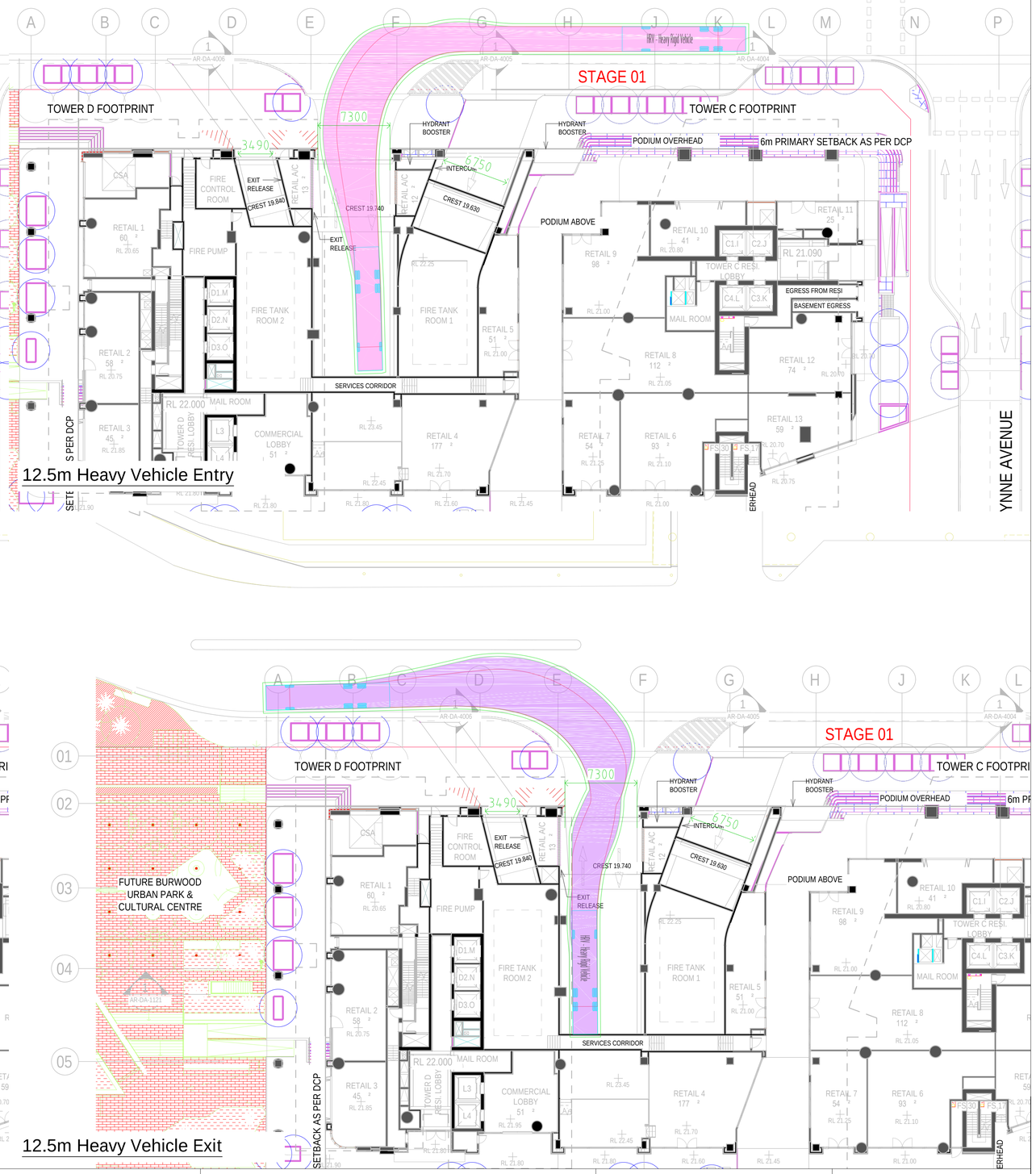
DRAWING # PTC.S2.P1

PROJECT # 0612

SCALE 1:100

REV 29





ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
LOADING DOCK SWEPT PATHS
PODIUM LEVEL

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

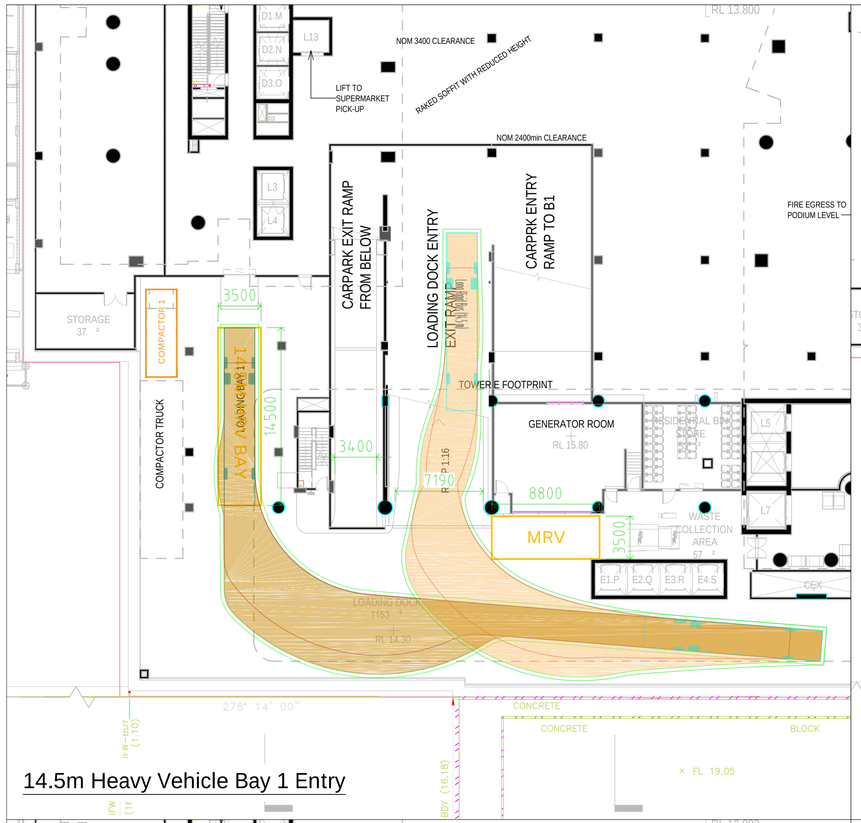
SECTION 4.55 APPLICATION

DRAWING # PTC.LD.P1

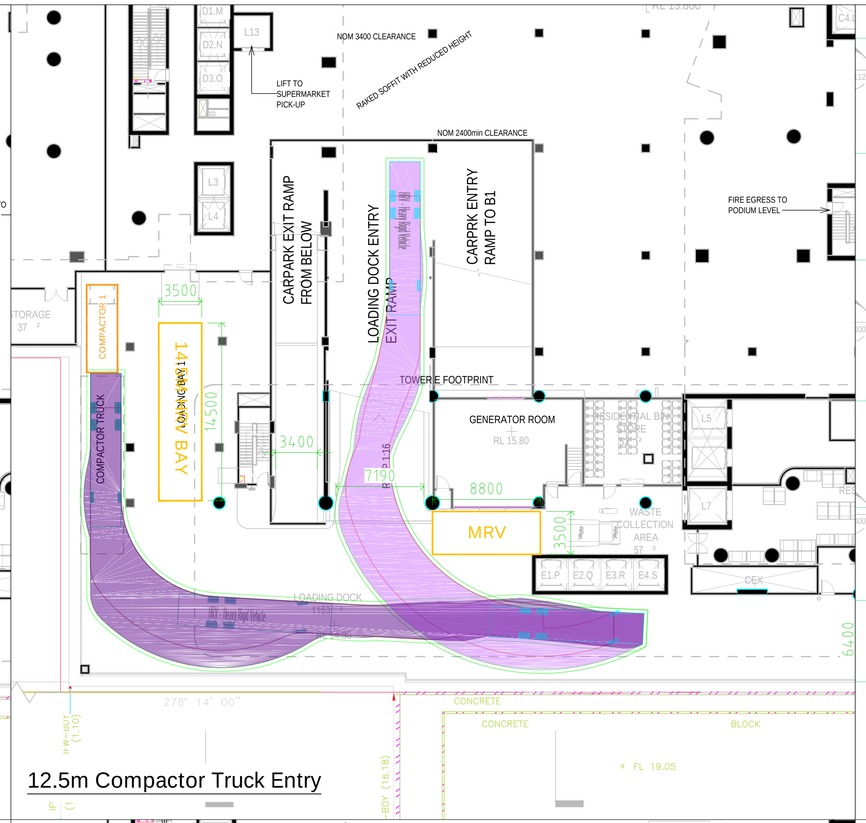
PROJECT # 0612

SCALE NTS

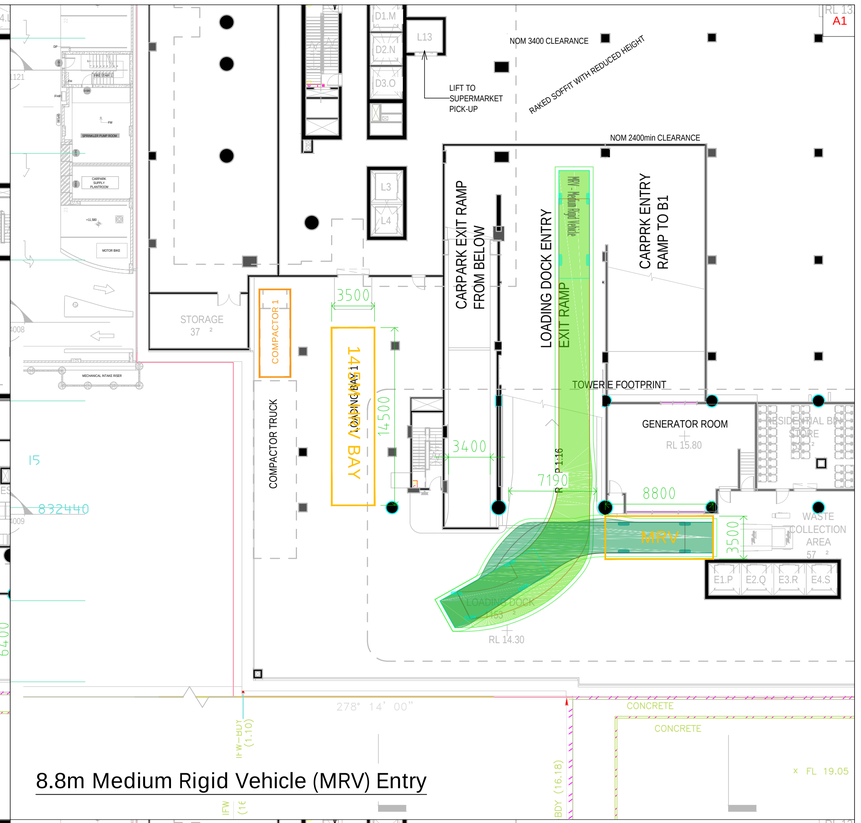
REV 29



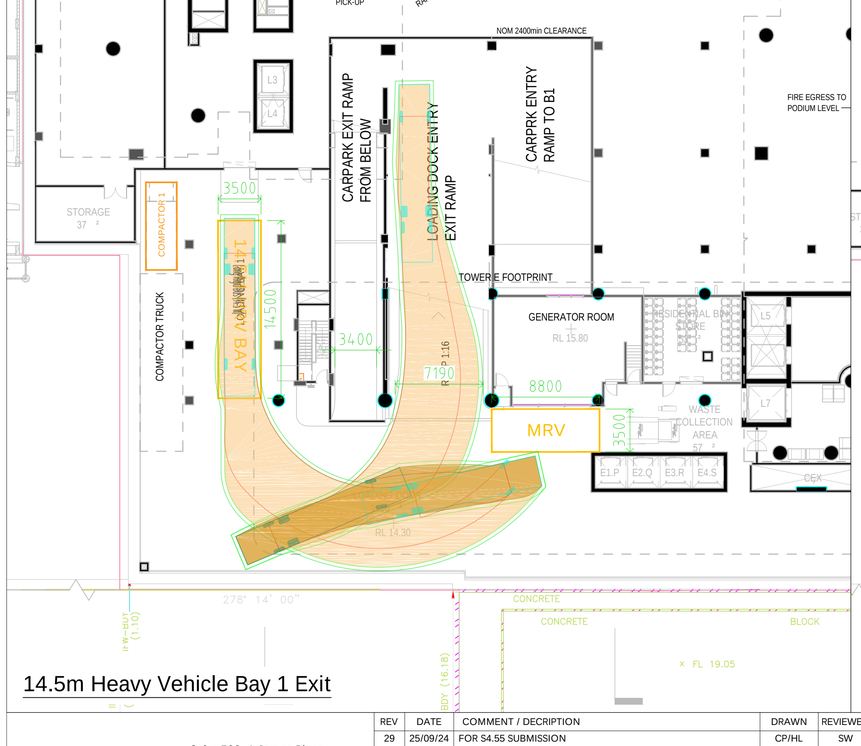
14.5m Heavy Vehicle Bay 1 Entry



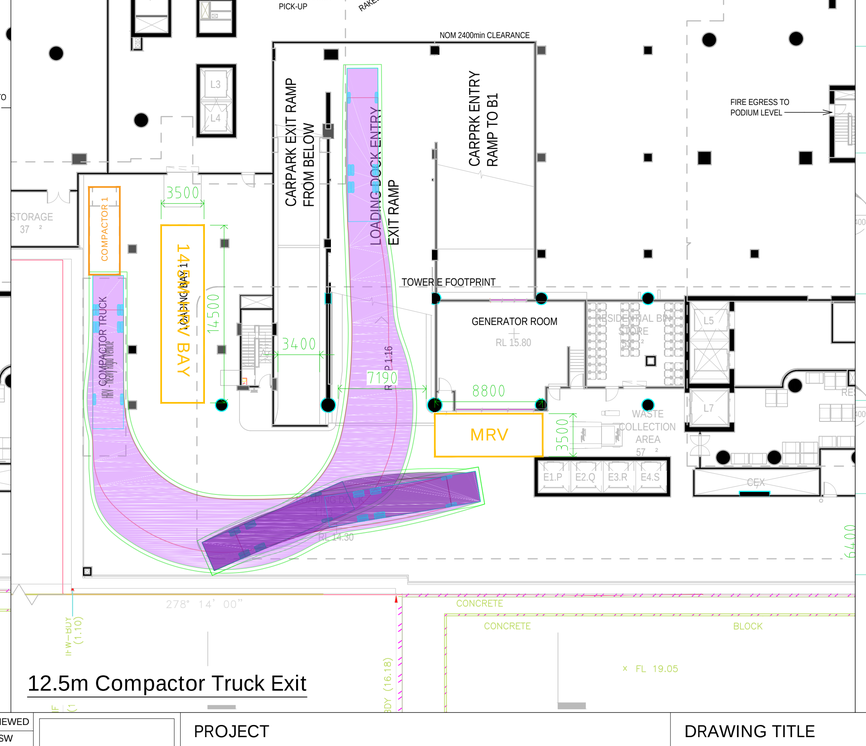
12.5m Compactor Truck Entry



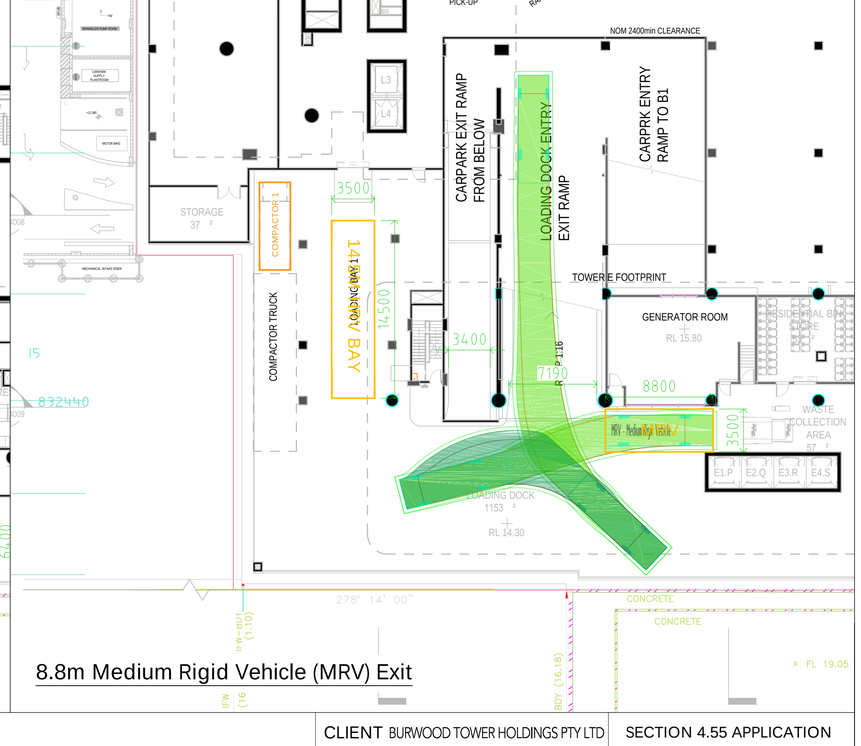
8.8m Medium Rigid Vehicle (MRV) Entry



14.5m Heavy Vehicle Bay 1 Exit



12.5m Compactor Truck Exit



8.8m Medium Rigid Vehicle (MRV) Exit

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
LOADING DOCK SWEPT PATHS
LOWER GROUND LEVEL
PART 1

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.LD.LG1

PROJECT # 0612

SCALE NTS

REV 29

A1



12.5m Heavy Rigid Vehicle (HRV) Entry

12.5m Heavy Rigid Vehicle (HRV) Exit

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT

BURWOOD PLACE

DRAWING TITLE

LOADING DOCK SWEPT PATHS
LOWER GROUND LEVEL
PART 2
12.5M HRV

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.LD.LG2

PROJECT # 0612

SCALE NTS

REV 29



8.8m Medium Rigid Vehicle (MRV) Entry

8.8m Medium Rigid Vehicle (MRV) Exit

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
LOADING DOCK SWEPT PATHS
LOWER GROUND LEVEL
PART 3
8.8M MRV

CLIENT BURWOOD TOWER HOLDINGS PTY LTD
SECTION 4.55 APPLICATION
DRAWING # PTC.LD.LG3
PROJECT # 0612
SCALE NTS
REV 29



6.4m Small Rigid Vehicle (SRV) Entry

6.4m Small Rigid Vehicle (SRV) Exit

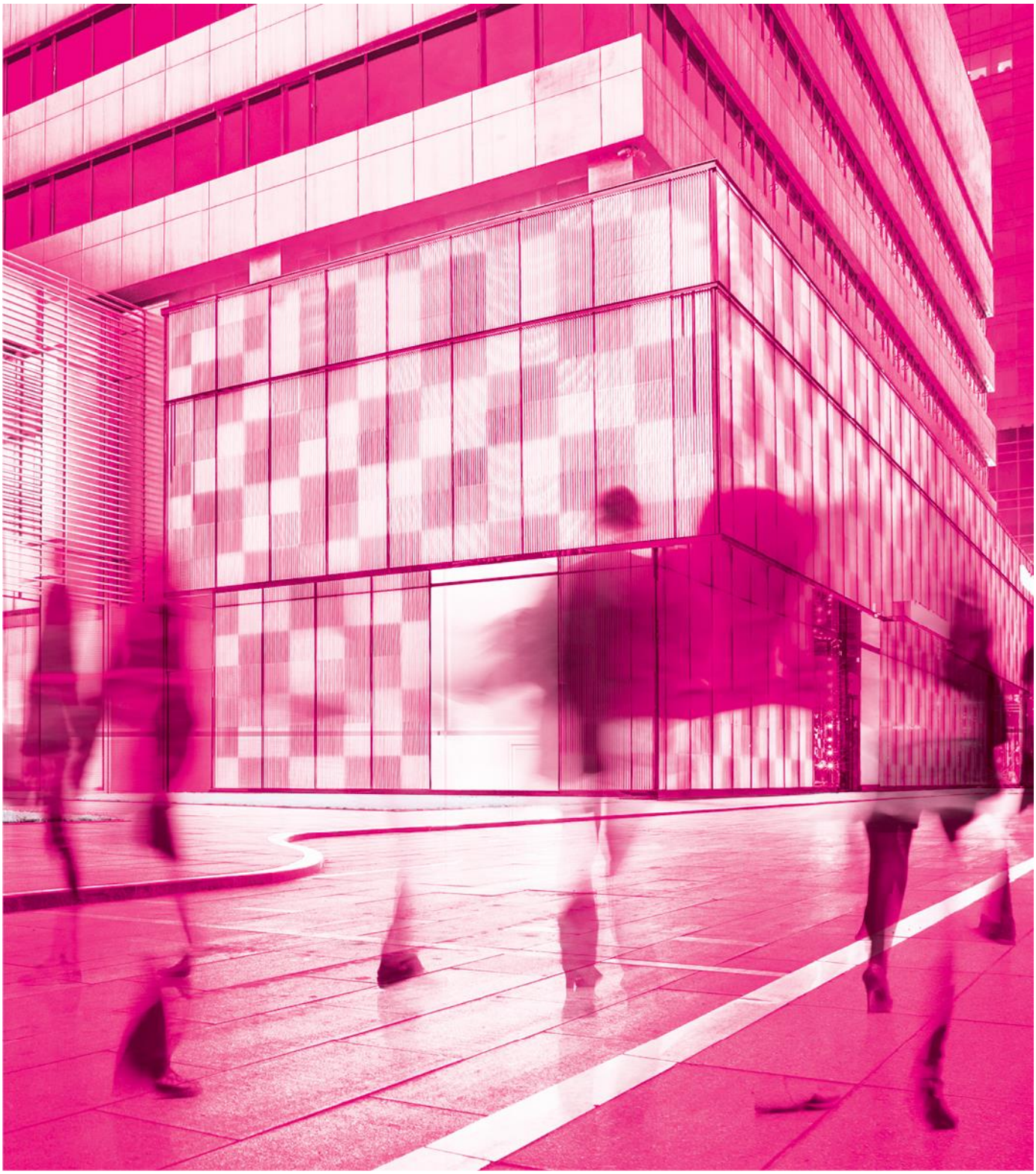
ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
LOADING DOCK SWEPT PATHS
LOWER GROUND LEVEL
PART 4
6.4M SRV

CLIENT BURWOOD TOWER HOLDINGS PTY LTD
SECTION 4.55 APPLICATION
DRAWING # PTC.LD.LG4
PROJECT # 0612
SCALE NTS
REV 29



report;

Burwood Place - Car Park Management Plan

For Burwood Tower Holdings Pty Ltd

25 September 2024

parking;
traffic;
civil design;
wayfinding;

ptc.

Document Control

Burwood Place - Car Park Management Plan, Report

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	06.11.2020	CPMP	GM	KW	Mark Davey
2	09.11.2020	CPMP v2	GM	DS	Mark Davey
3	02.03.2021	CPMP v3	GM	DS	Fred Samaha
4	09.03.2021	CPMP v4	GM	DS	Fred Samaha
5	23.03.2021	CPMP v5	GM	DS	Fred Samaha
6	20.05.2022	CPMP v6	DS	-	Fred Samaha
7	03.06.2022	CPMP v7	DS	-	Fred Samaha
8	09.06.2022	CPMP v8	DS	-	Fred Samaha
9	16.06.2022	CPMP v9	DS	-	Fred Samaha
10	01.09.2022	CPMP v10	DS	-	Fred Samaha
11	01.09.2022	CPMP v11	DS	-	Fred Samaha
12	23.09.2022	For DA	DS	-	Fred Samaha
13	05.05.2023	For S4.55	DS	SC	Fred Samaha
14	08.05.2023	For S4.55	SC	DS	Fred Samaha
15	11.09.2024	For S4.55	CP	HL/SW	Fred Samaha
16	13.09.2024	For S4.55	CP	HL/SW	Fred Samaha
17	25.09.2024	For S4.55	CP	HL/SW	Fred Samaha

Contact

Steve Wellman
Project Director
+61 2 8920 0800
+61 421 810 979
steve.wellman@ptcconsultants.co

COMMERCIAL IN CONFIDENCE

The information contained in this document, including any intellectual property rights arising from designs developed and documents created, is confidential and proprietary to ptc.

This document may only be used by the person/organisation to whom it is addressed for the stated purpose for which it is provided and must not be imparted to or reproduced, in whole or in part, by any third person without the prior written approval of a ptc. authorised representative. ptc. reserves all legal rights and remedies in relation to any infringement of its rights in respect of its intellectual property and/or confidential information.

© 2024

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
info@ptcconsultants.co
t + 61 2 8920 0800
ptcconsultants.co

Contents

1. Introduction 2
2. Car Park Management Plan 4

2.1 Information 4
2.1.1 Car Park Levels 4
2.1.2 Expected Fee Structure - Casual (retail) parking 4
2.1.3 User Groups Identified 4
2.2 Equipment Design 5
2.2.1 Ticketless Parking 5
2.2.2 Pros 5
2.2.3 Cons 5
2.3 Access Control Equipment Recommendation 6
2.4 Access Control Equipment Locations 6
2.4.1 Stage 1- Entry from Railway Parade 6
2.4.2 Stage 1- Exit to Railway Parade 7
2.4.3 Stage 1 Summary 7
2.4.4 Stage 2 7
2.4.5 Payment Locations 8
2.5 Other Technology Solutions 8
2.6 User Experience and Procedures 8
2.6.1 Retail Customers Entry 8
2.6.2 Retail Customer Car Wash and Car Share 9
2.6.3 Retail Customer Exit 9
2.6.4 Childcare Drop Off / Pick Up 9
2.6.5 Commercial Users 10
2.6.6 Commercial Stage 1 and 2 10
2.6.7 Residents 11
2.6.8 Stage 1 and 2 Residential 11
2.6.9 Residential Visitors 11
2.6.10 Free Parking Time Consolidation 12
2.7 Other Sub Groups 12
2.7.1 Extended Free Time 12
2.7.2 Free Parking 12

Attachment 1 Traffic Flow Strategy 13
Attachment 2 Car Park User Groups 14

Figure 1 - Location of Development 3
Figure 2 - Burwood Place Stage 1 and Stage 2 3

© Copyright; ptc.

1. Introduction

Burwood Place is a mixed-use development located at 42-60 Railway Parade, Burwood, on land zoned for Mixed Use Development (B4) under the Burwood Local Environmental Plan 2012.

The site is bounded by Railway Parade to the North, Clarendon Place to the east, Council carpark to the west and Burwood Grand and Emerald Square (2 mixed use developments) to the South. The site also includes Wynne Avenue and Clarendon Place.

Currently, the property is occupied by a mix of office buildings, a three-level car park, and the Burwood Plaza shopping centre.

The proposed development is the direct response to a site-specific Planning Proposal approved by the NSW Government on 23 December 2020 which increased the height and FSR permissible on the site and specifically sought to facilitate a changed development outcome on the site. The proposed development is a manifestation of the indicative built outcome identified in the planning proposal and consistent with the site specific adopted DCP.

The proposal includes 4 residential high-rise towers, a 11-storey commercial tower, 3 storey retail podium and commercial podium, a lower ground that includes retail and loading areas and 8 levels of basement. The project also delivers over 4,000 sqm of new public domain areas at ground level.

The project is divided in 2 stages. Stage 1 on the west includes residential Tower C and D and the commercial Tower E as well as retail at ground floor and professional suites on the upper levels of the podium. Stage 2 on the east includes residential Tower A and B and a retail focus podium with cinemas and entertaining in the upper levels.

The development will be featuring the following amenities:

- A major supermarket
- Food and retail stores
- Specialty food (Deli, Butcher, Health Food Store, Baker, etc)
- Entertainment precinct (Restaurants, Bars)
- Essential services (Child Care Centre, Pharmacy, Medical, Post Office, Bank, etc)
- 1041 apartments
- Commercial area for business
- Residential car park

© Copyright; ptc.



Figure 1 - Location of Development

Currently, the site consists of Burwood Plaza which will be demolished and redeveloped for the current proposal as Burwood Place.

The site will be developed in 2 stages with approximately 1811 total parking bays at the completion of both the stages.

ptc. has been engaged to provide assistance with the preparation of a Car Park Management Plan (CPMP) detailing how each user group (residential, retail, childcare, commercial tenants, etc.) will access the car park.

Stage 1 and Stage 2 of the development are illustrated in Figure 2.



© Copyright; ptc.

2. Car Park Management Plan

The following Car Park Management Plan (CPMP) highlights each user group that will be able to utilise car park facilities in the Burwood Place development and provides a methodology of management of entry / exit and parking fee payments (where applicable).

Additionally, there are several technologies that can be applied to the site for management of these user groups in addition to effective traffic management once inside the facility. This report provided brief information regarding the systems available that will be utilised within this site based on the design of parking access and user groups that need to be managed.

2.1 Information

2.1.1 Car Park Levels

The Burwood Place Car Park will include the following car park levels:

- Basement B1 - Retail
- Basement B2 - Retail
- Basement B3 - Retail
- Basement B4 - Retail
- Basement B5 – Commercial/Childcare and Residential
- Basement B6 – Residential
- Basement B7 – Residential
- Basement B8 – Residential

2.1.2 Expected Fee Structure - Casual (retail) parking

The actual fee structure of the car park is not yet confirmed; however, any fee structure would incorporate a 2-hour free parking period for retail users.

2.1.3 User Groups Identified

The following list includes all user groups and subgroups:

- Retail (access for shopping and services)
- Retail Valet
- Retail Car Share
- Retail Electric Vehicle (EV) Parking / Charging Bays
- Car Wash (special management of car wash patrons)
- Commercial
- Child Care - Drop off and pick up

© Copyright; ptc.

- Residential
- Residential Visitors
- Residential Electric Vehicle (EV) Parking / Charging Bays

2.2 Equipment Design

As there will be a 2-hour free parking period, and the site is a retail development adjacent to a major transportation hub, licence plate recognition (LPR) will be important in managing the free time available to any one licence plate on any one day. A ticketless LPR system will be utilised and incorporated in the management of the car parking facilities.

A description of the ticketless parking system is provided below.

2.2.1 Ticketless Parking

Ticketless parking systems utilise LPR technology to manage the car park. These systems have the following key features:

2.2.2 Pros

- Faster entry time than a traditional ticketed system, as no need to take a ticket and no need for entry boom gates.
- Provides management of free parking time for any specific period of time or day consolidated over several visits.
- Ability to identify paid or free transactions for hands free exit.
- Shopping Centre customers appear to like such systems[1], due to removal of the need to take a ticket at entry and insert it at exit.
- Possibility of incorporating a frictionless entry (without boom gates).
- Removal of tickets can fit well with a company's commitment to Sustainable Development.
- Can effectively accommodate parents dropping off and picking up children from the Childcare Centre (i.e. they can access the Car Park without the need to take a ticket).
- Expected lower maintenance costs due to frictionless entry methodology and less wear and tear on equipment.
- Improved management of pre-booked / reserved parking in that LPR can be utilised as the booking identifier (residential visitor, retail parking at peak times, etc.)

2.2.3 Cons

- An accuracy rate of c.92% indicates that potentially 8 of every 100 users may require intervention from operations staff in some form.
- Many retail systems are set to "Neutral Exit" whereby any plate that cannot be read is let out of the car park without payment. This generally translates to a 9% reduction in revenue with 3-hour free periods,

[1] Based on general industry feedback from retail car park operators

© Copyright; ptc.

and 12% of revenue for 2 hours free periods (when compared to ticketed LPR systems). However, this practice minimises customer inconvenience when plates are not matched by the system database.

- There will be additional operational costs required in relation to the car park Operator to provide offsite services to undertake manual licence plate matching to minimise the effect of LPR inaccuracy up to the level stated above.
- Many customers may not know (or remember) their licence plate number when attending paystations and some additional marketing may be required to counter this to a degree.
- Application of discounted parking for cinema / car wash etc. will require appropriate online terminals in these locations for entry of licence plate details of discounted users that will be recognised by the system.
- Appropriate business rules will need to be established within the LPR system for car park users who validly require more than one 2-hour free parking session per day (e.g. childcare drop off in morning, pick up in afternoon).
- All residential and commercial users will require a secondary identifier (i.e. card) for situations where LPR was not able to read the plate.

2.3 Access Control Equipment Recommendation

There will be issues in relation to some user groups with any system provided for complex retail, commercial, and residential sites. However, from a retail perspective, we believe newer technology for access would be preferred over more traditional technologies for a new development of this nature. We also believe that the appearance of being more sustainable is an advantage. The development of smart phone applications and other blue tooth access technologies is likely to increase over time and may provide a more solution-based approach to access in these types of developments over time.

A ticketless solution will be adopted for the retail environment with mitigation by secondary identifiers to minimise inconvenience to commercial and residential tenants to the extent possible, whilst maintaining reasonable levels of management, segregation and control on all users. We are also confident that most systems will include an AI (artificial intelligence) component in the near future that will use vehicle make and colour to assist in vehicle identification (in addition to licence plate reading).

2.4 Access Control Equipment Locations

The current design includes the following access control equipment locations:

2.4.1 Stage 1- Entry from Railway Parade

- Access for Retail - Direct access to B1 with two (2) vehicle access control points located on the B1 floor.
- Access for Commercial - Direct access to B5 with one (1) access control point located on the B1 floor without the need to travel through the retail car park Access for Residents - One (1) access control point on B1 and one (1) additional access control point at B5 without the need to travel through the retail and / or commercial car park.
- Residential Visitors - Direct access to B6 to B8 with one (1) access control point located on the level B1 and one (1) additional control point at level B5 without the need to travel through the retail car park

© Copyright; ptc.

- Childcare – Direct access to B5 with one (1) access control point at level B1 without the need to travel through the retail car park.
- Indirect Access to Commercial - via retail car park from levels B1 to B4, with two (2) access control points at B1 and one (1) additional access control point at B4
- Indirect Access to Childcare – via retail car park from level B1 to B4, with two (2) access control points at B1 and one (1) additional control point at B4
- Indirect Access to Residential/Residential Visitors - via retail car park from levels B1 to B4, with two (2) access control points at B1 and commercial car park at level B5, with one (1) access control point at B4 and one (1) access control point at B5

2.4.2 Stage 1- Exit to Railway Parade

- Exit from all the car park levels will be via level B1 with two (2) Vehicle Access Control Points

2.4.3 Stage 1 Summary

- No of entry control points for retail – 2
- No. of exit control points for retail - 2
- No of entry control points for commercial – 1 (Direct Access) and 2 (Indirect Access)
- No of exit control points for commercial - 2
- No of entry control points for residential – 2 (Direct Access) and 4 (Indirect Access)
- No of exit control points for residential - 2

Control at residential areas may be restricted to LPR cameras on ramps only without boom gates to ensure that residential users park in their designated area. Commercial users who utilise the residential car park would also be flagged if they enter and park in the residential area.

2.4.4 Stage 2

Stage 2 includes expansion of the control points as follows:

- One (1) additional entry Vehicle Access Control Point onto level B1 from Wynne Ave. for Retail, Commercial, and Residential. This access is undertaken through the neighbouring Emerald Square.
- One (1) additional exit control point on B2 for all users (as above) with direct access to Wynne Avenue.
- One (1) additional entry control point for Residential on Level B4. The residential control point will be accessed by RFID remote provided to each resident. In addition, there is a backup intercom to allow resident to communicate to car park attendant if needed (e.g. if the resident forgets their remote).
- One (1) additional exit control point utilising current easement to Belmore Street on Level B1.

© Copyright; ptc.

Notes: The exit control point utilising the current easement to Belmore Street will provide a minimum of one (1) additional exit control point as part of Stage 2 works.

Control at residential areas may be restricted to LPR cameras on ramps only without boom gates to ensure that residential users park in their designated area. Commercial users who utilise the residential car park would also be flagged if they enter and park in the residential area.

2.4.5 Payment Locations

Pay stations would be provided in convenient locations to allow payment of parking fees prior to arrival at the exit. It is expected that most retail centres will remain with credit card only payments. Therefore, there is the expectation that all automatic pay stations will be credit card only with all payments undertaken in a cashless environment. (Locations of automatic pay station would be assessed and confirmed at the time of access control equipment procurement)

Additionally, credit card only payments will also be possible directly at any retail car park exit.

2.5 Other Technology Solutions

The entry to the retail car park levels has been designed so that choice of level or car park (i.e. B1 to B4) can be made during the entry process by the use of "Parking Guidance Systems" (PGS) prior to arrival on any parking floor. For minimisation of unnecessary vehicle movement and conflict throughout all car park areas installation of a PGS would be adopted.

This system could be extended during the stage 2 development as the car park significantly increases in size and complexity. PGS is usually integrated with other vehicle wayfinding which is considered important for access to the nearest exit, resulting in internal traffic minimisation/conflict in addition to managing the even distribution of exit traffic during peak times.

A camera-based detection that can incorporate an LPR component of monitoring will be utilised for vehicle detection. This LPR monitoring, integrated with the access control system ensures that pre-registered residential and commercial users can be identified down to the actual location parked and allow further action if required.

Note: PGS will be applied to retail car park areas only (not residential or commercial)

2.6 User Experience and Procedures

The following provides details of equipment requirements and management of each user group for stage 1 and 2 (note: some user groups may not be required until Stage 2)

2.6.1 Retail Customers Entry

Customers will enter from Railway Parade or Wynne Avenue and proceed down the ramp to the entry control location on level B1 (direct access to B2 in the stage 1 car park location only).

The entries would be managed by dual LPR cameras (forward and rear facing ceiling mounted - depending on supplier technology). There are no boom gates at the access control point at B1 to maintain free flow entry.

Each vehicle number plate will be recorded by the LPR system at entry.

© Copyright; ptc.

2.6.2 Retail Customer Car Wash and Car Share

Retail customers enter from Railway Parade and turn left onto B1 to access car wash services. The car share spaces are located on B2. Customers enter from Railway Parade and turn left on B1 to the ramp down to B2 to return car share.

2.6.3 Retail Customer Exit

To exit, retail customers will go through one of the following processes:

Stay less than 2 hours

For retail customers who have stayed less than 2 hours, they will simply proceed to the exit and the boom gate will open automatically (the LPR system will check that they have been in the car park less than 2 hours).

Stay longer than 2 hours

Retail customers who have stayed longer than 2 hours will need to visit one of the automatic pay stations prior to exiting. Alternatively, they can pay (by credit card only) at the exit boom gates where a credit card reader is incorporated, which is further explained below.

At the pay station customers will be asked to enter their license plate details, using the touch screen. The pay station will then display the required fee (if any).

After making the necessary payment, customers will proceed to their car and drive to the exit boom gate. If the required payment has been made, the boom gate will open allowing the vehicle to exit.

In the event that payment has not been made and the customer has overstayed the 2-hour free parking period, the boom gate will not open. The exit unit screen will display the fee that needs to be paid and the customer will make payment via credit card. Upon completion of payment, the boom gate will open allowing the vehicle to exit.

2.6.4 Childcare Drop Off / Pick Up

Similar to Residential Visitors , those dropping off / picking up their children at the Childcare Centre will enter the car park from either Wynne Avenue (stage 2) or Railway Parade (stage 1). This activity will be undertaken within the Commercial car park. As this process is likely not to take more than 20-mins to half an hour, vehicles will simply enter and exit as per residential visitor.

They will then proceed to one of the reserved spaces for Childcare Drop-off with restriction of use between specific times (e.g. 7am-10am and 2pm – 6pm).

Note: PGS can be deployed to reserve these bays at specific times and open these spaces to commercial parking outside of these times. Use of individual bay sensing and colour coded parking bay indicators for reserved and standard parking spaces can be scheduled by the PGS.

Given that their visit is most likely to be shorter than 2 hours (free parking period), they will simply proceed to the exit boom gate which will open automatically allowing them to exit.

© Copyright; ptc.

Should they stay for longer than 2 hours, they will follow the same procedure as Retail Customers (see Section 2.6.3).

2.6.5 Commercial Users

Commercial users would access the car park via the Railway Parade entry (stage 1) with the option to enter via Wynne Avenue (in stage 2 only). Access from Railway Parade and control point located at B1 will allow direct arrival to level B5 commercial car park via the internal ramp system without the need to traverse the retail car park. In stage 2, the option to enter from Wynne Avenue will require a relatively short path within the retail car park area for access to B5. However, Railway Parade should be considered the primary entry for commercial users.

The proposed LPR based access control system would be used to manage commercial users of the Car Park. The license plate details of commercial user vehicles can be pre-programmed into the LPR system, which would then activate a boom gate automatically once the LPR camera reads the license plate and matches it to the list of pre-registered licence plates. This process is considered hands free entry.

Exit from the commercial area and subsequently at any of the retail exits would also essentially be a hands-free process.

As LPR will include an inherent inaccuracy from time to time, each commercial entry and exit (in addition to the retail exits) will also provide a secondary identifier reader and intercom. The secondary identifier proposed is a short-range RFID (proximity) card. The card would be utilised in the event LPR does not accurately read the licence plate.

However, there are management requirements supporting LPR methodology:

- The license plate details of commercial users would need to be updated and maintained in a database within the LPR System, which could lead to additional administrative costs.
- It does not allow commercial users to use a non-registered vehicle (e.g. if they have a loan or hire vehicle). However, in these situations, the RFID card can be utilised and would be transferable between vehicles. However, the licence plate and the card are connected in the database in that one vehicle entering with the card will not allow a second vehicle (with the right plates) to enter, and vice versa.
- Multiple vehicles can be assigned to any one account.

2.6.6 Commercial Stage 1 and 2

The stage 2 access for commercial (and a possibility for Stage 1 Commercial parking) is that it will be possible for commercial users to access the commercial car park on level B5 via the retail car park area.

In order to protect misuse of the retail car park and reserve these spaces for retail customers, commercial users will be able to transit the retail car park and a specific time will be granted in order to undertake this transit (i.e. transit time). Should a commercial tenant remain in the retail car park after this transit time has expired, casual parking rates will apply. This transit time also applies for vehicles exiting the commercial area and overstaying within the retail car park areas.

© Copyright; ptc.

2.6.7 Residents

Residents would enter and exit by the same method as commercial users. Residential users will be able to access the residential parking levels at B6 to B8 directly or to proceed to the residential entry after entering the commercial entry on B5.

The process of entry and exit through the commercial and residential control points would be hands free. (subject to LPR accuracy) however accuracy rates for residential (and commercial) access can be set to 80% (or other percentage) plate matching which will minimise LPR inaccuracy issues.

Historically, pre-registered plate accuracy is generally higher than random plate reading however a secondary identifier (i.e. RFID card) will also be provided to residents in the event a licence plate is not read correctly at the commercial car park entry/exit or at retail exits. Intercoms would also be provided in locations where control points include boom gates (i.e. commercial entry/exit, retail exit).

2.6.8 Stage 1 and 2 Residential

Access to the residential car park on B5 to B8will be possible either via express ramp from level B1 and via the retail and / or commercial car park area.

In order to protect misuse of the retail car park and reserve these spaces for retail customers, residential users will be able to transit the retail car park and a specific time will be granted in order to undertake this transit (i.e. transit time). Should a residential tenant remain in the retail car park after this transit time has expired, casual parking rates will apply. This transit time also applies for vehicles exiting the residential area and overstaying within the retail car park areas.

2.6.9 Residential Visitors

Residential visitor parking will be provided on levels B6, B7 and B8 which is accessible from Railway Parade via the express ramp and level B5 in stage 1, or access via Wynne Avenue through the retail car park area in stage 2.

Identification of a residential visitor will be required prior to entry so that retail fees are not to be applied to the residential visitors when traversing through the ticketless LPR retail environment. Nevertheless, residential intercom systems located on entry lanes (in retail of commercial parking areas) will still be provided as a backup.

The preferred option is for a pre-booking system that can be accessed by residents that will allow the booking of 1 or more vehicles between specific time parameters. This pre-booking function would be accessible to residents via the internet (either through an app or through a website) and enable licence plates of visitor vehicles to be identified at the retail entries, and/or directly at the commercial entry to B5. The process of entry would be hands free via LPR.

As a back-up measure, if a residential visitor is not pre-registered, the control locations at B1, B4 and B5 will also incorporate intercom and LPR camera units to allow direct contact with the car park operator should there be any access issues. The car park operator/management will then manually enter the licence plate into their system as a residential visitor.

At the completion of the visit, the visitor would leave the car park similar to a commercial tenant in a hands-free environment. Similar to commercial users, if visitors access the car park through the retail area, and do not proceed to the residential visitor car park they will attract casual parking fees at the exit.

© Copyright; ptc.

Pre-booking systems are generally operated by a third party integrated to the access control system. Additional integration licences may be required in addition to a small booking fee (approximately 15c per transaction depending on level of use).

2.6.10 Free Parking Time Consolidation

The LPR systems manage total time within a specific time period where multiple entries and exits are consolidated to ensure that any one vehicle cannot spend more than 2 hours in the car park without attracting a parking fee. This function is more about ensuring that retail staff do not simply drive out, then back into the car park for multiple free periods.

There are however valid reasons for multiple entries and exits as per the example above. Should a childcare drop off happen twice a day at 0.5 hrs each visit, then these users would only be allowed 1 hour of additional free parking in any one day. To ensure that these users are not penalised for using childcare (or any other valid reason) the consolidation of total park time can be reset after, say 4 hours. This stops the retail staff' 2-hour parking shuffle' but permits multi entry / exit without penalty for valid user groups.

Each user group must park within their specific user group parking location (e.g. residential visitors must park within the residential car park located in level B6 to B8). The LPR system will log their licence plates as they travel through various access control points to determine their parking location. If a residential visitor parks within the retail level, they will be charged as a retail customer.

2.7 Other Sub Groups

Within any car park environment there are other subgroups of retail users as follows:

- Car Wash - where car wash facilities may require a vehicle to be present for more than the 2-hour free period.
- Subcontractors and Centre Management Visitors
- Visitors to commercial tenants and VIPs
- Library or other community facility.

For many of these subgroups, facilities can be provided to allow management for each subgroup via identification of any licence plate by the system at a different rate or management method as follows:

2.7.1 Extended Free Time

In the case of car wash or other specific requirements access to the system is made available for entering licence plate details. In this case, 3 or 4 hours free may apply to plates in this category.

2.7.2 Free Parking

In the case of centre management meetings, or subcontractors to the centre, access to the system can be available for entering licence plates that will not have to pay any parking fee.

© Copyright; ptc.

Attachment 1 Traffic Flow Strategy

© Copyright; ptc.

A1

15 STOREY RESIDENTIAL BUILDING

17 STOREY RESIDENTIAL BUILDING ROOF RL 78.21 APPROX.

20 STOREY RESIDENTIAL BUILDING ROOF RL 87.21 APPROX.

20 STOREY RESIDENTIAL BUILDING ROOF RL 86.21 APPROX.

RAILWAY PARADE

STAGE 01

STAGE 02

STAGING BOUNDARY

PAU TO STAGE 2 CONNECTION

TOWER D FOOTPRINT

TOWER C FOOTPRINT

TOWER B FOOTPRINT

TOWER A FOOTPRINT

TOWER E FOOTPRINT

FUTURE BURWOOD URBAN PARK & CULTURAL CENTRE

BURWOOD LIBRARY

BURWOOD LANE

UNITY PLACE

WYNNE AVENUE

CLARENDON PLACE

BURWOOD CENTRAL DEVELOPMENT

BURWOOD GRAND DEVELOPMENT

B1 SQUARE DEVELOPMENT

6m PRIMARY SETBACK AS PER DCP

NIL PRIMARY SETBACK AS PER DCP

3m PRIMARY SETBACK AS PER DCP

7m SECONDARY SETBACK AS PER DCP

10.5m PRIMARY SETBACK AS PER DCP

3m SECONDARY SETBACK AS PER DCP

1.5m PRIMARY SETBACK AS PER DCP

PODIUM OVERHEAD

PODIUM ABOVE

VOID OVER

VOID

SERVICES CORRIDOR

EGRESS FROM RESI

BASEMENT EGRESS

EGRESS FROM BASEMENT

FIRE EGRESS FROM TOWER A

FIRE EGRESS FROM TOWER B

FIRE EGRESS FROM BASEMENT

CARPARK EXIT

CARPARK EXIT FROM B2

EXIT RELEASE

FIRE SHUTTER

SUBSTATION BELOW

Legend

Traffic Flow

- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
PODIUM LEVEL
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

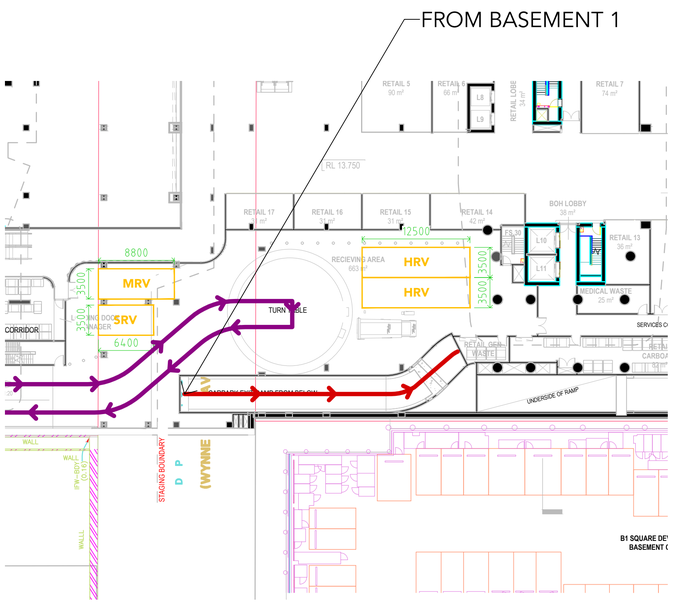
SECTION 4.55 APPLICATION

DRAWING # PTC.T2.P1

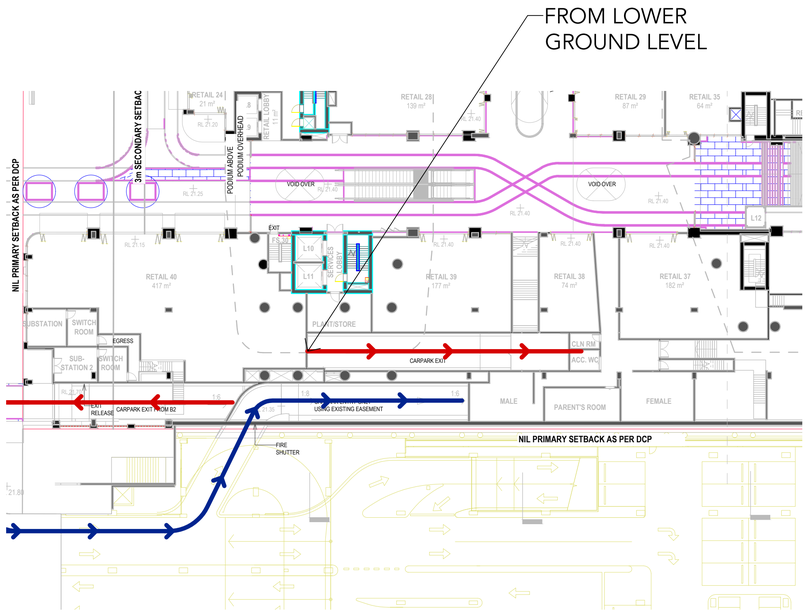
PROJECT # 0612

SCALE NTS

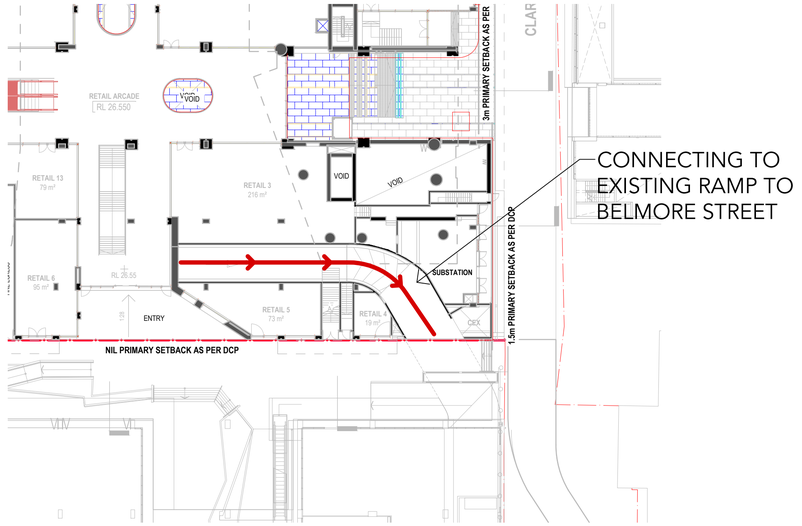
REV 29



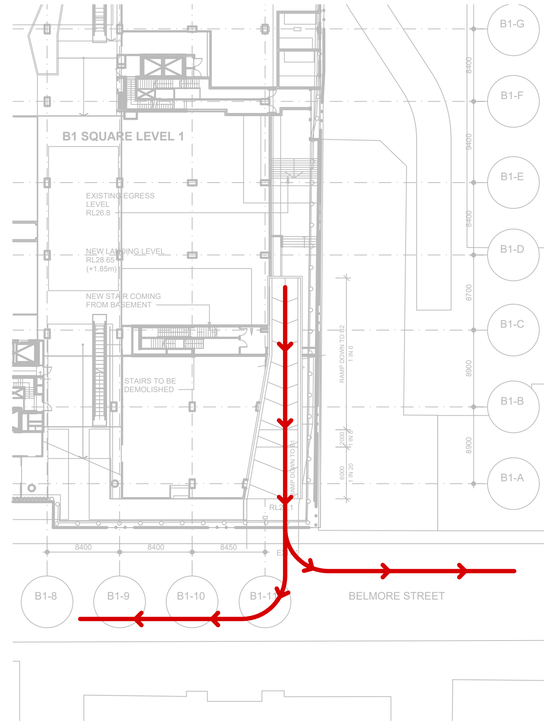
LOWER GROUND LEVEL



PODIUM GROUND LEVEL



PODIUM LEVEL 1



BELMORE STREET EXISTING
RAMP AND DRIVEWAY

Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car
Retail: Valet, Small Car, Car Wash
Car Share
Commercial Parking: General, Small Car
Childcare Drop Off
Accessible Parking with Shared Space
EV Charging
Residential Parking: General, Visitors, Car Wash
Resident Service Bay
Bicycle Parking
Motorcycle Parking (m/c)

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
EXIT ONTO BELMORE STREET
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD
SECTION 4.55 APPLICATION
DRAWING # PTC.T2.P2
PROJECT # 0612
SCALE NTS
REV 29

A1

A 7570 B 4995 C 7850 D 7885 E 8700 F 8700 G 8700 H 8700 J 6545 K 5350 L 5505 M 9000 N 8400 P 8700 Q 8700 R 8700 S 8700 T 8700 U 8700 V 8700 W 8700 X 8700 Y 8700 Z 8700 AA 7870 AB 9280 AC

1 AR-DA-4006 · 1 AR-DA-4005 · 1 AR-DA-4004 · 1 AR-DA-4003 · 1 AR-DA-4002 · 1 AR-DA-4001

CARPARK SUPPLY

STAGING BOUNDARY

TOWER D FOOTPRINT

SUPERMARKET AMENITIES LOCATION LAYOUT TBC

TOWER C FOOTPRINT

TOWER B FOOTPRINT

TOWER A FOOTPRINT

RE BURWOOD
AN PARK &
RAL CENTRE

EV

STORAGE 37 m²

COMPACTOR

COMPACTOR TRUCK

14.5m LOADING BAY

RETAIL 1 4040 m² RL 13.800

RETAIL 2 204 m²

RETAIL 3 132 m²

FEMALE 60 m² · MALE 40 m² · PARENT ROOM 35 m² · ACC. WC 3 m² · GENDER N 3 m² · ADULT CHANGE 23 m²

VOID

RETAIL 4 157 m²

RETAIL 5 90 m² · RETAIL 6 66 m² · RETAIL LOBBY 34 m²

RETAIL 7 74 m² · RETAIL 8 140 m² · RETAIL 9 1349 m²

SERVICES CORRIDOR

EXPRESS ELEVATOR FROM GROUND TO BASEMENT 2 RETAIL

PLANT

FIRE CORRIDOR

RETAIL 10 1472 m² RL 13.750

RETAIL 11 144 m² · RETAIL 12 171 m² · RETAIL 13 36 m² · RETAIL 14 42 m² · RETAIL 15 31 m² · RETAIL 16 31 m² · RETAIL 17 31 m²

BOH LOBBY 38 m²

MEDICAL WASTE 25 m²

SERVICES CORRIDOR

RETAIL CARBOARD 32 m² · RETAIL CO-MINGLED RECYCLING 70 m² · RETAIL GEN. WASTE

RECIEVING AREA 663 m²

HRV · HRV

TURN TABLE

FIRE EGRESS TO PODIUM LEVEL

FIRE EGRESS TO PODIUM LEVEL

FIRE EGRESS TO PODIUM LEVEL

FIRE EGRESS TO PODIUM LEVEL

FIRE EGRESS TO PODIUM LEVEL

FIRE EGRESS TO PODIUM LEVEL

NOM 3300 CLEARANCE

NOM 3400 CLEARANCE

NOM 3400 CLEARANCE

RAKED SOFFIT WITH REDUCED HEIGHT

LIFT TO SUPERMARKET PICK-UP

NOM 2400min CLEARANCE

CARPARK EXIT RAMP FROM BELOW

LOADING DOCK ENTRY EXIT RAMP

CARPRK ENTRY RAMP TO B1

RAMP 1:16

TOWER E FOOTPRINT

GENERATOR ROOM RL 15.80

RESIDENTIAL BIN STORE 1 (135 m²)

RESIDENTIAL BIN STORE 2 (135 m²)

WASTE COLLECTION AREA 57 m²

LOADING DOCK 153 m² RL 14.30

LOADING CORRIDOR

LOADING DOCK MANAGER

CEX

MRV · MRV · SRV

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13

E1.P E2.Q E3.R E4.S

C1.I C2.J C3.K C4.L D1.M D2.N D3.O

B1.F B2.G B3.H

FS.30

RAMP 1:16

CARPARK EXIT RAMP FROM BELOW

UNDERSIDE OF RAMP

EXIT RAMP

ENTRY RAMP

VOID OVER RAMP

VOID OVER PLANT

CONCRETE WALL CONCRETE BLOCK WALL

FL 19.05

IFW–BD17 (1:10) · IFW– (16.23) · IFW–BD3Y (16.18) · IFW–ADP (16.10)

WTALT

BURWOOD GRAND DEVELOPMENT BASEMENT CARPARK

STAGING BOUNDARY

D P

(WYNNE

B1 SQUARE DEVELOPMENT BASEMENT CARPARK

Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General · Small Car

Retail: Valet · Small Car · Car Wash

Car Share

Commercial Parking: General · Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General · Visitors · Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B1
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

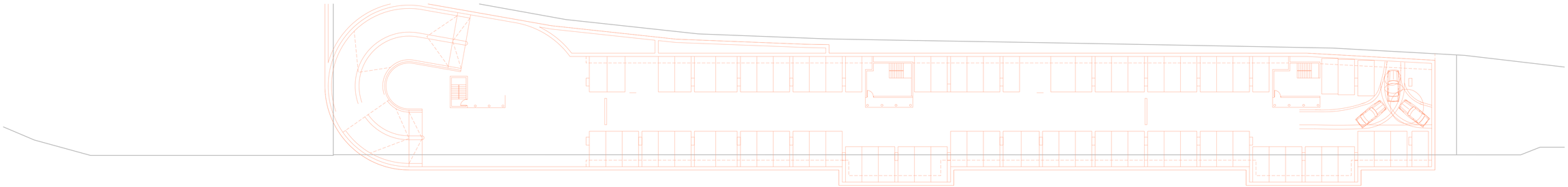
DRAWING # PTC.T2.B1

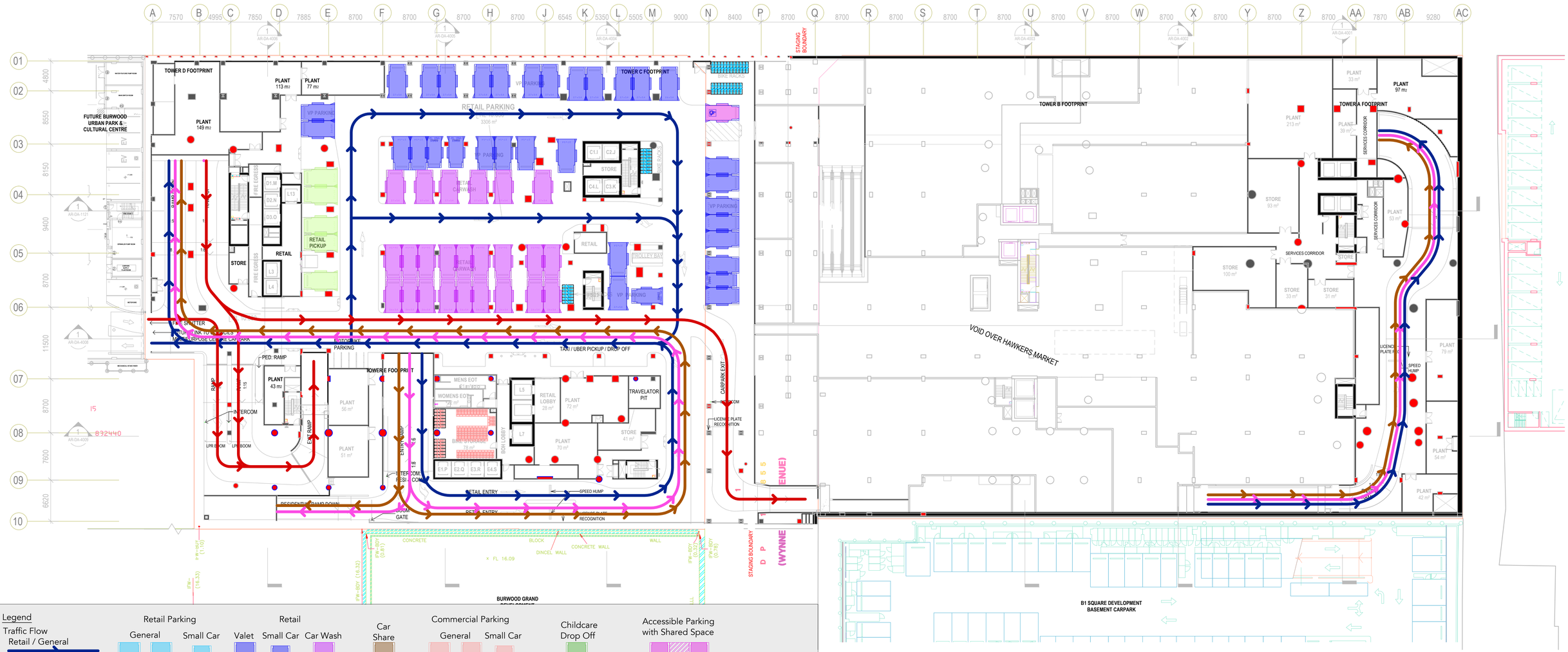
PROJECT # 0612

SCALE NTS

REV 29

A1





Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B1
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B1

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
RESIDENT
RESIDENT
RESIDENT
COMMERC
COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B2
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B2

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B3
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

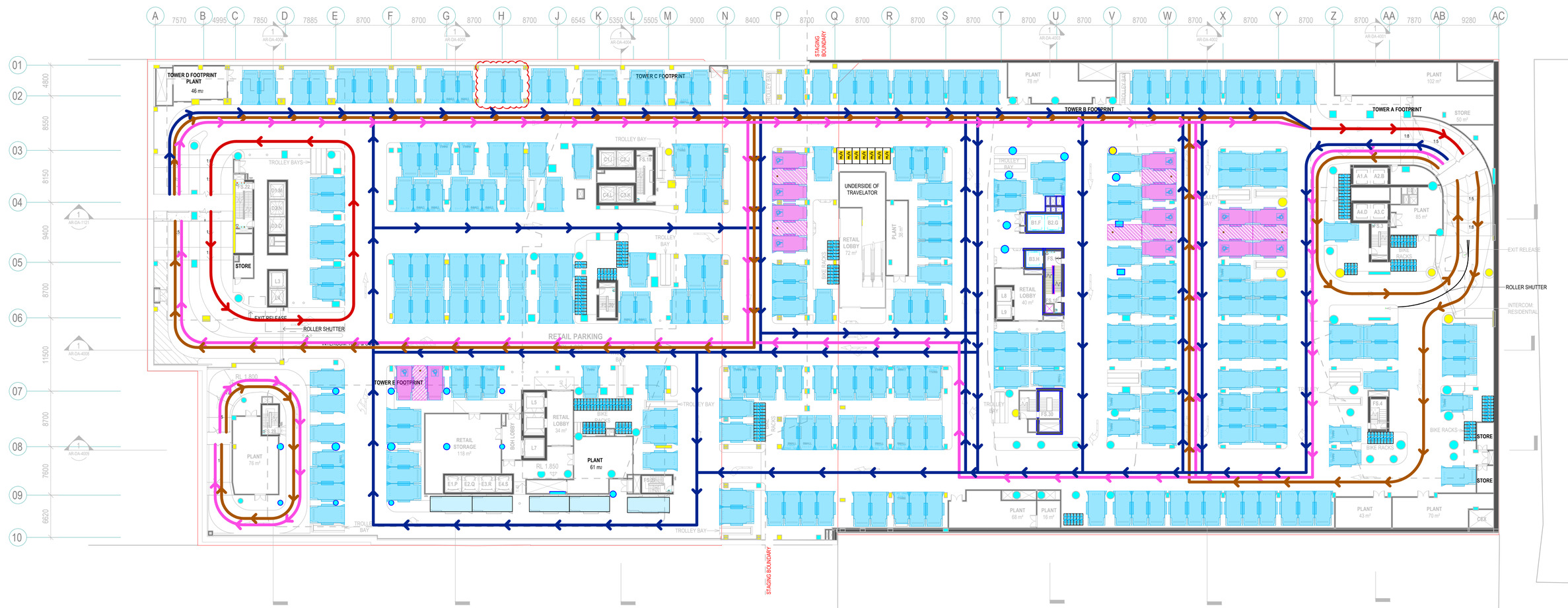
DRAWING # PTC.T2.B3

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B4
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

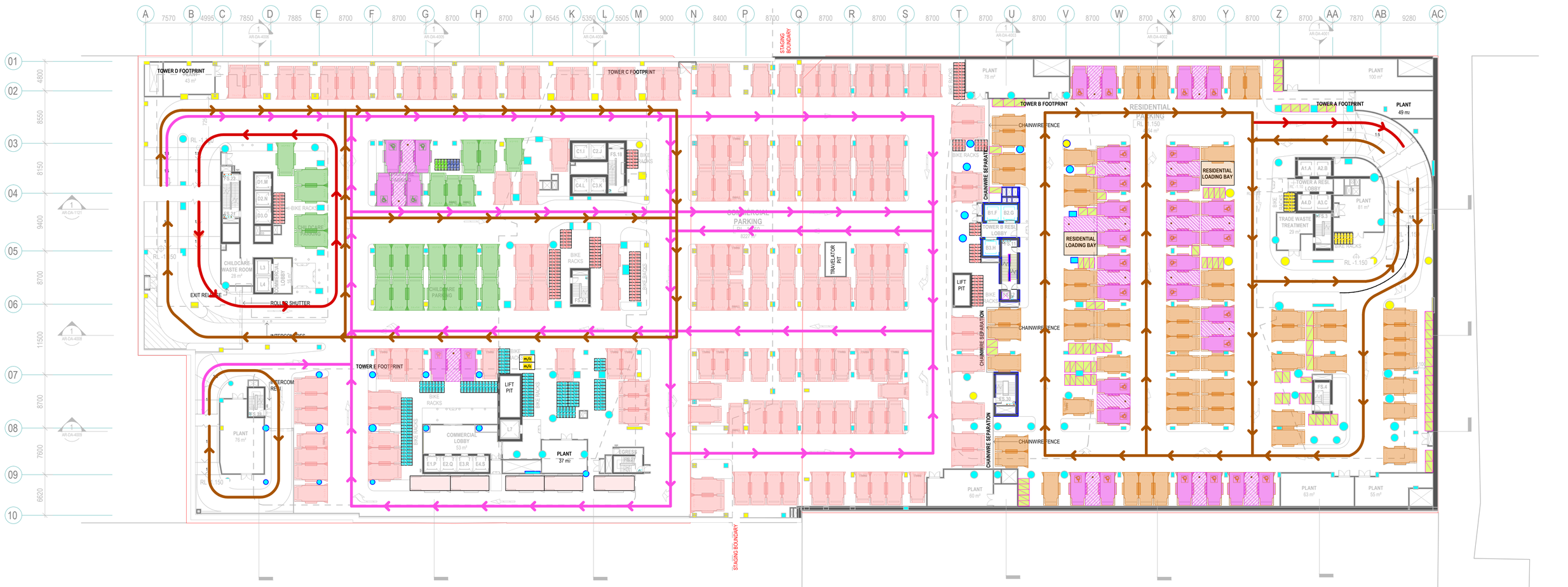
DRAWING # PTC.T2.B4

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B5
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B5

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B6
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B6

PROJECT # 0612

SCALE NTS

REV 29



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B7
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B7

PROJECT # 0612

SCALE NTS

REV 29



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B8
TRAFFIC FLOWS

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.T2.B8

PROJECT # 0612

SCALE NTS

REV 29

Attachment 2 Car Park User Groups

© Copyright; ptc.

A1

15 STOREY RESIDENTIAL BUILDING

17 STOREY RESIDENTIAL BUILDING ROOF RL 78.21 APPROX.

20 STOREY RESIDENTIAL BUILDING ROOF RL 87.21 APPROX.

20 STOREY RESIDENTIAL BUILDING ROOF RL 86.21 APPROX.

RAILWAY PARADE

STAGE 01

STAGE 02

STAGING BOUNDARY

TOWER D FOOTPRINT

TOWER C FOOTPRINT

TOWER B FOOTPRINT

TOWER A FOOTPRINT

TOWER E FOOTPRINT

FUTURE BURWOOD URBAN PARK & CULTURAL CENTRE

BURWOOD LIBRARY

BURWOOD LANE

UNITY PLACE

WYNNE AVENUE

CLARENDON PLACE

BURWOOD CENTRAL DEVELOPM

B1 SQUARE DEVELOPMENT

PODIUM OVERHEAD

PODIUM ABOVE

6m PRIMARY SETBACK AS PER DCP

3m PRIMARY SETBACK AS PER DCP

7m SECONDARY SETBACK AS PER DCP

10.5m PRIMARY SETBACK AS PER DCP

3m SECONDARY SETBACK AS PER DCP

NIL PRIMARY SETBACK AS PER DCP

1.5m PRIMARY SETBACK AS PER DCP

PMU TO STAGE 2 CONNECTION

CARPARK EXIT

CARPARK EXIT FROM B2

CARPARK ENTRY ONLY USING EXISTING EASEMENT

FIRE SHUTTER

Legend

Traffic Flow

- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking

m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT

BURWOOD PLACE

DRAWING TITLE

PODIUM LEVEL

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

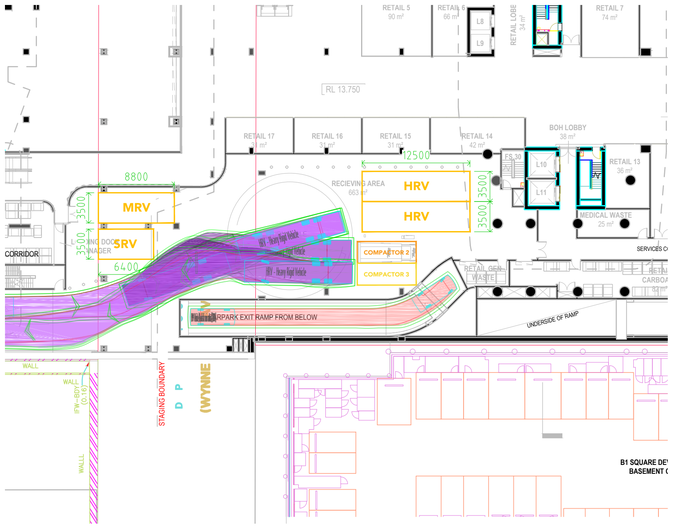
SECTION 4.55 APPLICATION

DRAWING # PTC.S2.P1

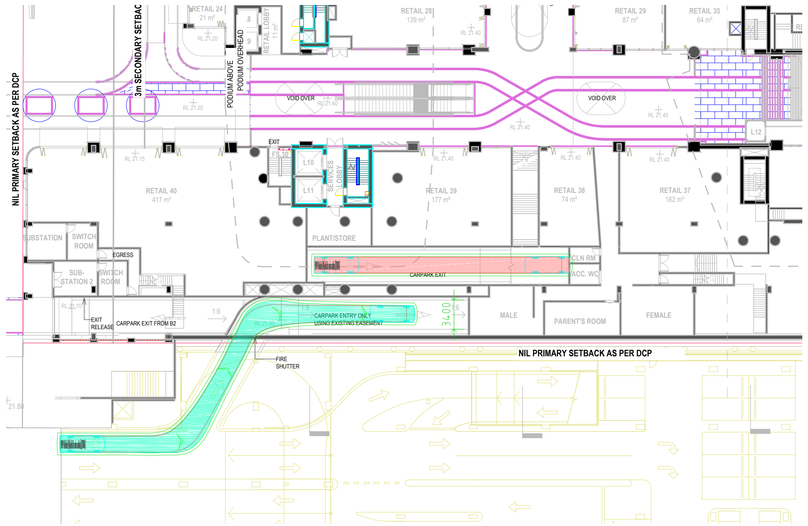
PROJECT # 0612

SCALE NTS

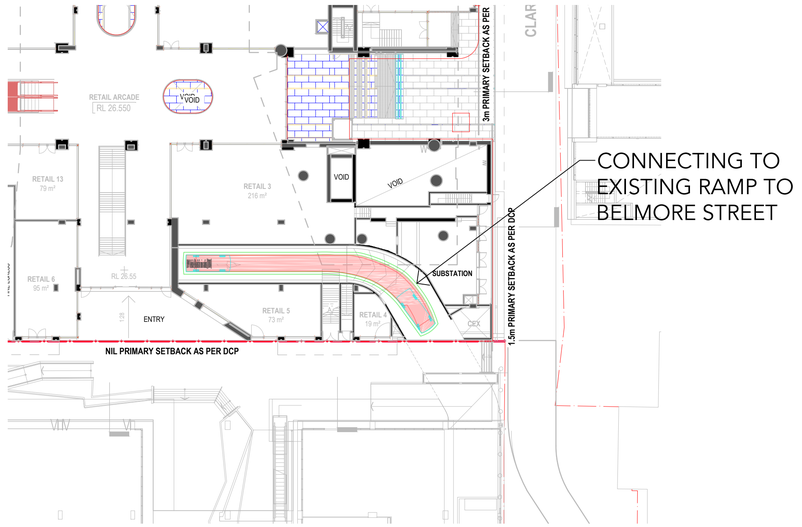
REV 29



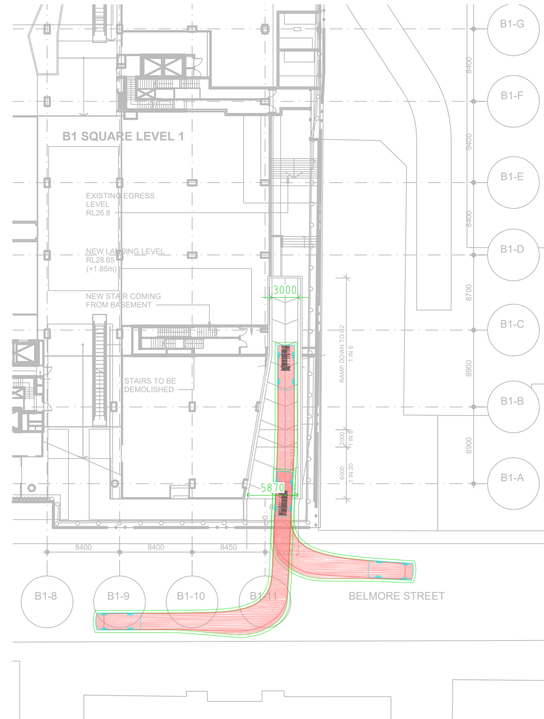
LOWER GROUND LEVEL



PODIUM GROUND LEVEL



PODIUM LEVEL 1



BELMORE STREET EXISTING RAMP AND DRIVEWAY

Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking

m/c

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
PODIUM LEVEL

BELMORE STREET EXIT

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

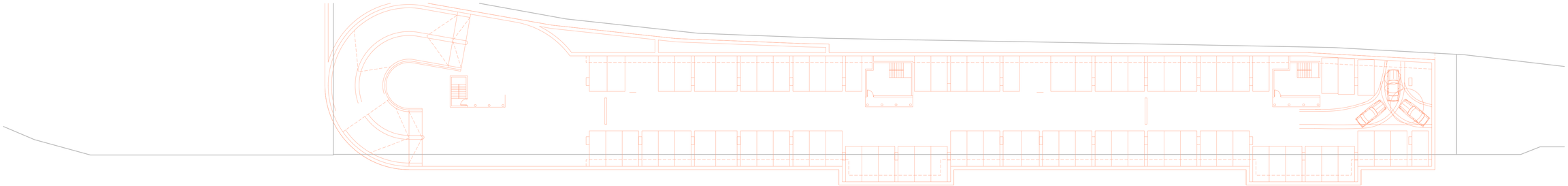
DRAWING # PTC.S2.P2

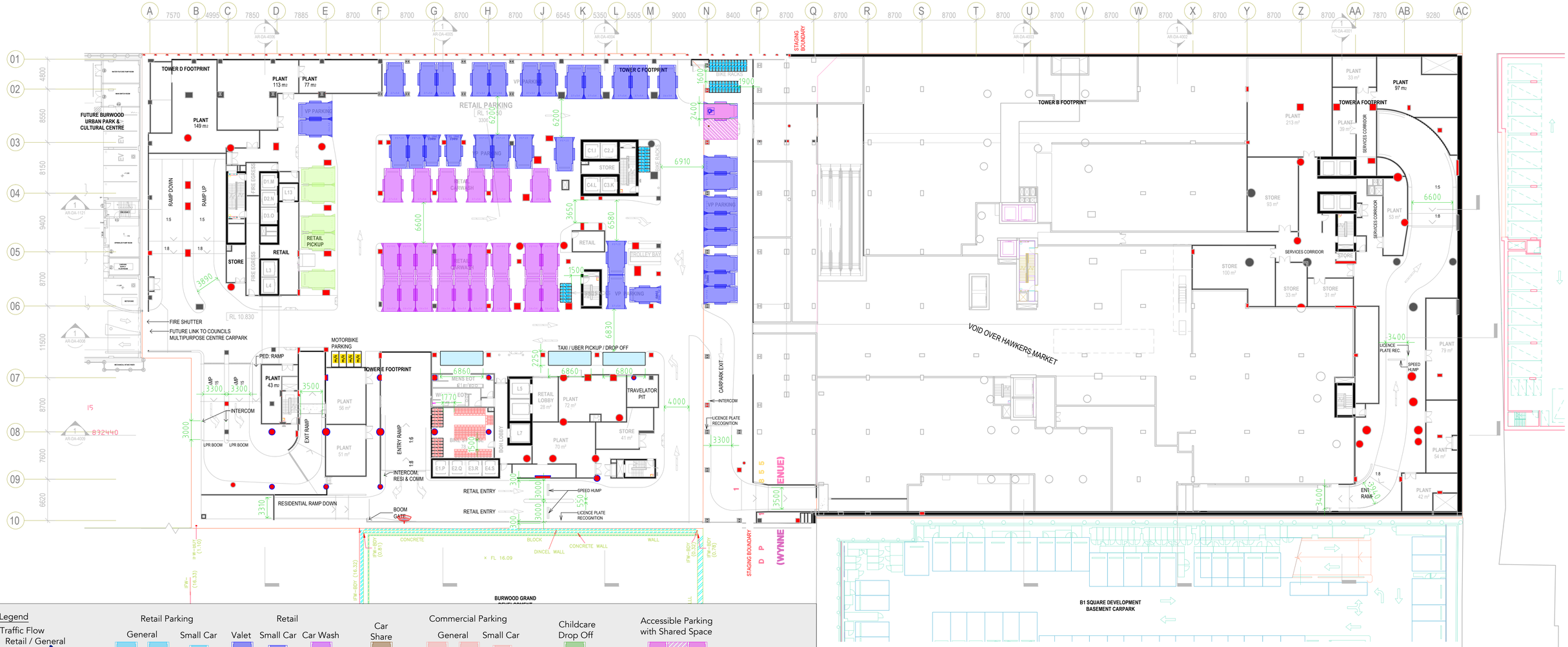
PROJECT # 0612

SCALE NTS

REV 29

A1





Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car
Retail: Valet, Small Car, Car Wash
Car Share
Commercial Parking: General, Small Car
Childcare Drop Off
Accessible Parking with Shared Space
EV Charging
Residential Parking: General, Visitors, Car Wash
Resident Service Bay
Bicycle Parking
Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B1

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B1

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car
Retail: Valet, Small Car, Car Wash
Car Share
Commercial Parking: General, Small Car
Childcare Drop Off
Accessible Parking with Shared Space
EV Charging
Residential Parking: General, Visitors, Car Wash
Resident Service Bay
Bicycle Parking
Motorcycle Parking (m/c)

LEGEND:
RESIDENT
RESIDENT
RESIDENT
COMMERC
COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B2

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B2

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

LEGEND:
- RESIDENT
- RESIDENT
- RESIDENT
- COMMERC
- COMMERC

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B3

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

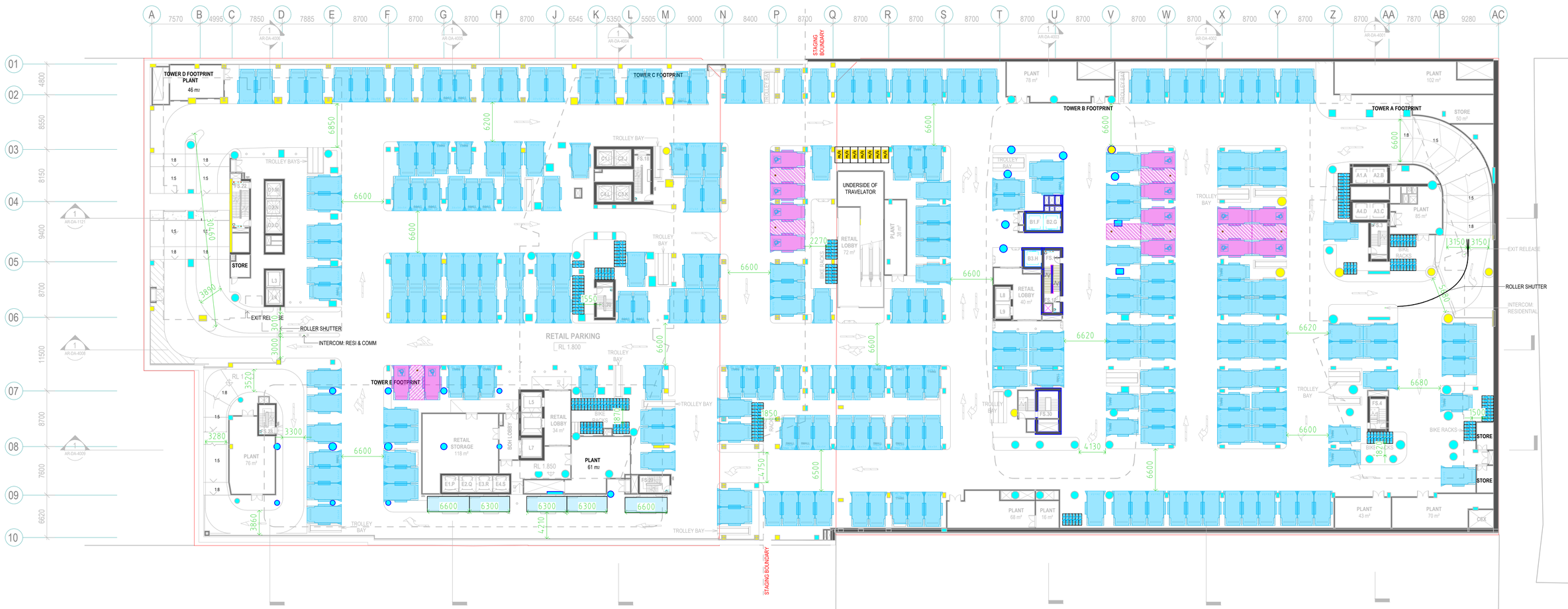
DRAWING # PTC.S2.B3

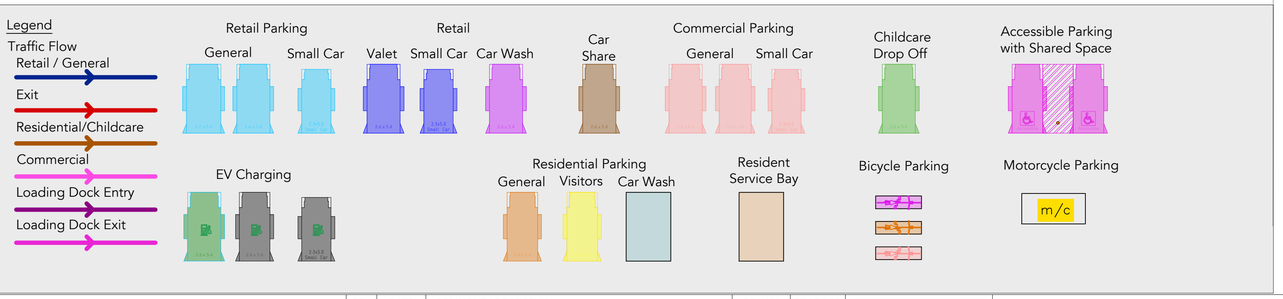
PROJECT # 0612

SCALE NTS

REV 29

A1





LEGEND:
RESIDENT
RESIDENT
RESIDENT
COMMERC
COMMERC

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B4

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B4

PROJECT # 0612

SCALE NTS

REV 29

A1


TOWER D FOOTPRINT
TOWER C FOOTPRINT
TOWER E FOOTPRINT
TOWER B FOOTPRINT
TOWER A FOOTPRINT
STAGING BOUNDARY
COMMERCIAL PARKING
RL -1.150
8227 m²
RESIDENTIAL PARKING
RL -1.150
4254 m²
CHILDCARE PARKING
CHILDCARE WASTE ROOM
28 m²
EXIT RELEASE
ROLLER SHUTTER
INTERCOM: RES
INTERCOM: RESI
BIKE RACKS
TRAVELATOR PIT
LIFT PIT
COMMERCIAL LOBBY
53 m²
PLANT
37 m²
PLANT
76 m²
PLANT
78 m²
PLANT
100 m²
PLANT
49 m²
PLANT
81 m²
PLANT
60 m²
PLANT
63 m²
PLANT
55 m²
TRADE WASTE TREATMENT
29 m²
CHAINWIRE FENCE
CHAINWIRE SEPARATION
RESIDENTIAL LOADING BAY
TOWER B RESI LOBBY
TOWER A RESI LOBBY
EGRESS
A 01
A 02
A 03
A 04
A 05
A 06
A 07
A 08
A 09
A 10
A 11
A 12
A 13
A 14
A 15
A 16
A 17
A 18
A 19
A 20
A

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking

m/c

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B6

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B6

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking — General, Small Car

Retail — Valet, Small Car, Car Wash

Car Share

Commercial Parking — General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking — General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking — m/c

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B7

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B7

PROJECT # 0612

SCALE NTS

REV 29

A1



Legend

Traffic Flow
- Retail / General
- Exit
- Residential/Childcare
- Commercial
- Loading Dock Entry
- Loading Dock Exit

Retail Parking: General, Small Car

Retail: Valet, Small Car, Car Wash

Car Share

Commercial Parking: General, Small Car

Childcare Drop Off

Accessible Parking with Shared Space

EV Charging

Residential Parking: General, Visitors, Car Wash

Resident Service Bay

Bicycle Parking

Motorcycle Parking (m/c)

ptc.

Suite 502, 1 James Place
North Sydney NSW 2060

t +61 2 8920 0800

ptcconsultants.co

REV	DATE	COMMENT / DECRIPTION	DRAWN	REVIEWED
29	25/09/24	FOR S4.55 SUBMISSION	CP/HL	SW
28	09/09/24	FOR COORDINATION	CP/HL	SW
27	29/08/24	FOR COORDINATION	HL	SW
26	14/08/24	FOR COORDINATION	HL	-
25	13/08/24	FOR COORDINATION	HL	JAJ/SW
24	22/06/24	FOR COORDINATION	MA	SW
23	08/05/24	FOR COORDINATION	HL	SW

PROJECT
BURWOOD PLACE

DRAWING TITLE
BASEMENT B8

CLIENT BURWOOD TOWER HOLDINGS PTY LTD

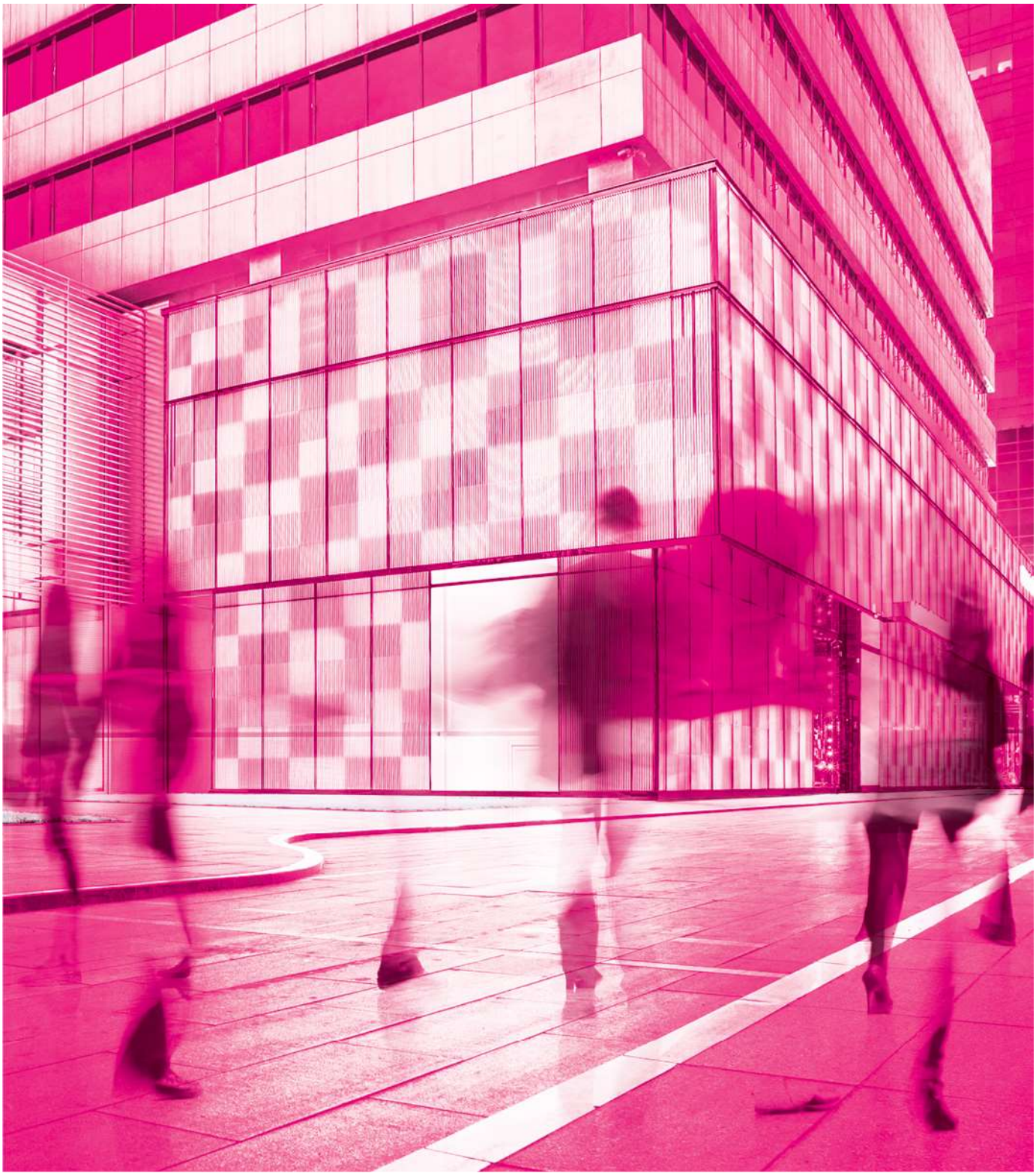
SECTION 4.55 APPLICATION

DRAWING # PTC.S2.B8

PROJECT # 0612

SCALE NTS

REV 29



LDMP;

42-60 Railway Parade, Burwood - Burwood Place

For Burwood Tower Holdings Pty Ltd

25 September 2024

parking;
traffic;
civil design;
wayfinding;

ptc.

Document Control

42-60 Railway Parade, Burwood - Burwood Place, LDMP

Issue	Date	Issue Details	Author	Reviewed	For the attention of
1	09.09.20	Draft Issue	JJ	DS	Jano Yousseph
2	04.03.21	Revised	FM	DS	Fred Samaha
3	15.03.21	Revised	FM	DS	Fred Samaha
4	22.03.21	Revised	FM	DS	Fred Samaha
5	29.03.21	Revised	DS	-	Fred Samaha
6	20.05.22	Updated	DS	-	Fred Samaha
7	03.06.22	Updated	DS	-	Fred Samaha
8	10.06.22	Updated	DS	-	Fred Samaha
9	10.06.22	Updated	DS	-	Fred Samaha
10	26.09.22	For DA	DS	-	Fred Samaha
11	10/09/24	For S4.55 (Draft)	HL	SW	Fred Samaha
12	25/09/24	For S4.55 (Final)	HL	SW	Fred Samaha

Contact

Steve Wellman
Project Director
+61 2 8920 0800
+61 421 810 979
steve.wellman@ptcconsultants.co

COMMERCIAL IN CONFIDENCE

The information contained in this document, including any intellectual property rights arising from designs developed and documents created, is confidential and proprietary to ptc.

This document may only be used by the person/organisation to whom it is addressed for the stated purpose for which it is provided and must not be imparted to or reproduced, in whole or in part, by any third person without the prior written approval of a ptc. authorised representative. ptc. reserves all legal rights and remedies in relation to any infringement of its rights in respect of its intellectual property and/or confidential information.

© 2024

ptc.
Suite 502, 1 James Place
North Sydney NSW 2060
info@ptcconsultants.co
t + 61 2 8920 0800
ptcconsultants.co

Contents

1. Introduction 2

1.1 Project Summary 2
1.2 Loading Dock 3
1.3 Heavy Vehicle Service Bays 4
1.4 B99 Courier Service Bays 5
1.5 Purpose of the LDMP 7

2. Rules for Tenants & Contractors using the Loading Dock and Service Bays 8

2.1 Appointments 8
2.2 Management 10
2.3 General Rules 10
2.4 Amendments 11

3. Traffic Management of the Loading Dock 12

3.1 Vehicular Access 12
3.2 Loading Dock Operation 12
3.3 Loading Dock Capacity 12
3.4 Loading Dock Bays Vehicle Limits 14

4. Other Considerations 15

4.1 Pedestrian Safety 15
4.2 Cleanliness 15
4.3 Maintenance 15

5. Summary 16

Attachment 1 Loading Dock Timesheet 1

Figure 1 - Site Location (Source: Nearmap) 2
Figure 2 - Loading Dock Layout 3
Figure 3 - Loading Dock Overview 4
Figure 4 - Level B5 Resident Service Bays 5
Figure 5 - Level B6 Resident Service Bays 5
Figure 6 – Level B7 Resident Service Bays 6
Figure 7 - Level B8 Resident Service Bays 6
Figure 8 - Booking System - Web Based Example 9
Figure 9 - Booking System - Mobile Based Example 9

© Copyright; ptc.

1. Introduction

1.1 Project Summary

ptc. has been engaged by Burwood Tower Holdings Pty Ltd to prepare a Loading Dock Management Plan (LDMP) in relation to the loading arrangements within the proposed mixed-use development located at 42-60 Railway Parade, Burwood.

This LDMP has been prepared to ensure the safe and efficient movement of people, goods and vehicles within the proposed loading dock and is intended to be adopted by the Building Management.

The location of the site is shown in Figure 1.

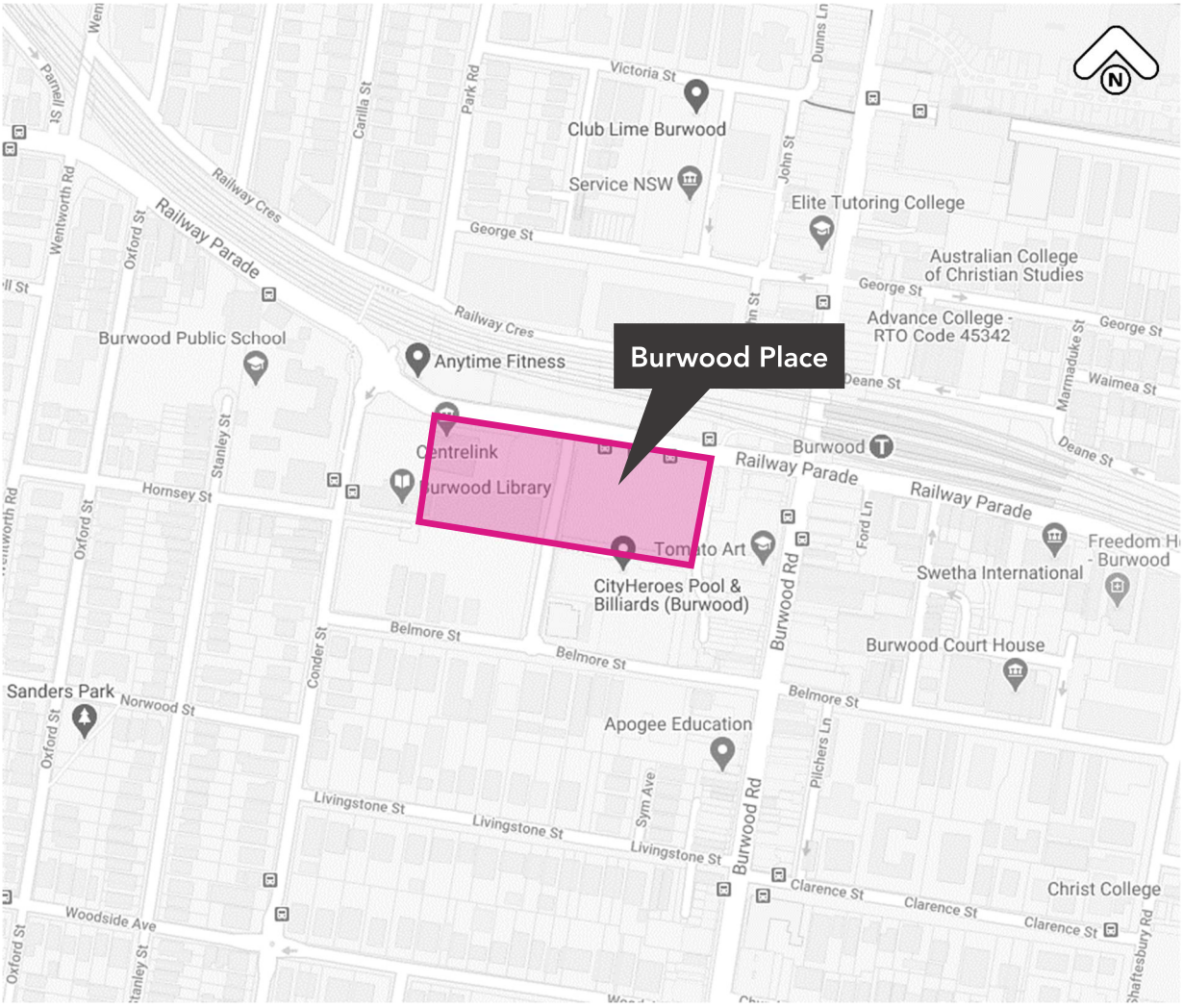


Figure 1 - Site Location (Source: Nearmap)

© Copyright; ptc.

1.2 Loading Dock

The proposed loading dock is to be located on the Lower Ground Level and is anticipated to accommodate the deliveries and waste collection associated with the development. It will serve the commercial, residential and retail components of the proposed development.

The loading dock has been designed to accommodate up to a 14.5m long Heavy Rigid Vehicle (HRV) which is anticipated to be the largest vehicle accessing the site.

The proposed layout of the loading dock is shown in Figure 2.

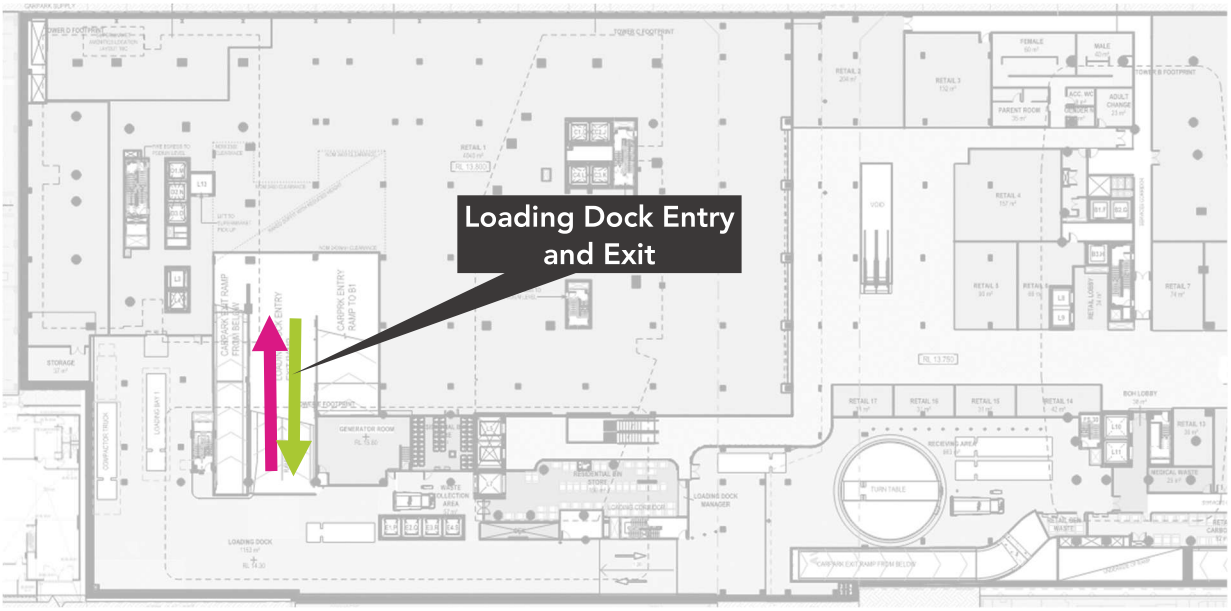


Figure 2 - Loading Dock Layout

© Copyright; ptc.

1.3 Heavy Vehicle Service Bays

The proposed loading dock is to provide the following service spaces:

- 1x Major tenant (supermarket) HRV Space (up to 14.5m long rigid)
- 2x HRV Space (up to 12.5m long rigid)
- 2x MRV Spaces (up to 8.8m long rigid)
- 1x SRV Space (up to 6.4m long rigid)

The spaces itemised above are identified in Figure 3. The loading dock also accommodates waste compactors for waste management and collection.

The service bay located on the western side of the proposed loading dock is to be solely dedicated to major supermarket. The rest of the shared service bays are provided to service the various uses of the proposed development. This involves but is not limited to:

- Deliveries to owners and tenants; and
- Maintenance services and courier deliveries.

The proposed loading dock is anticipated to be utilised by multiple owners and tenants associated with the proposed development hence it is essential that the set traffic management rules are strictly enforced.

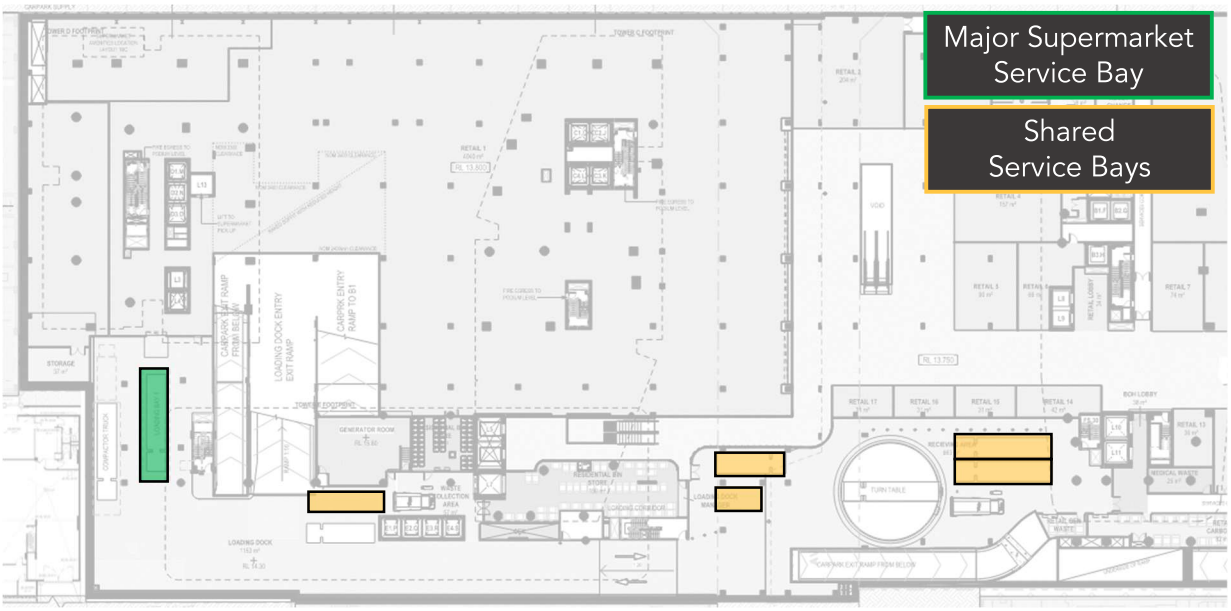


Figure 3 - Loading Dock Overview

© Copyright; ptc.

1.4 B99 Courier Service Bays

In addition to the loading dock provision for heavy vehicles, there are 14 resident service bays capable of accommodating B99 courier vans/utes for move-in/move-out provided on Basement Levels B5 – B8.

- Level B5: 2 resident service bays
- Level B6: 4 resident service bays
- Level B7: 4 resident service bays
- Level B8: 4 resident service bays

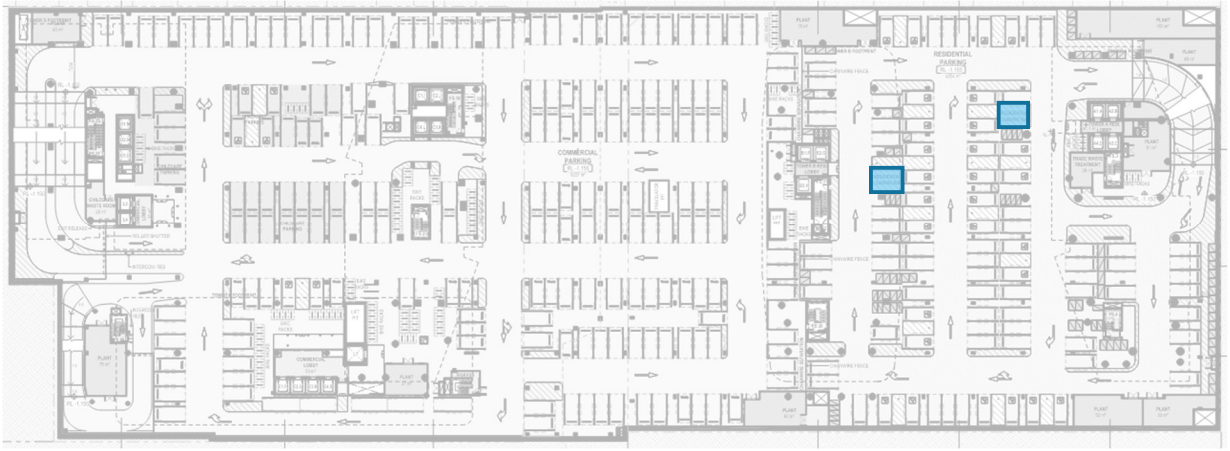


Figure 4 - Level B5 Resident Service Bays



Figure 5 - Level B6 Resident Service Bays

© Copyright; ptc.



Figure 6 – Level B7 Resident Service Bays



Figure 7 - Level B8 Resident Service Bays

© Copyright; ptc.

1.5 Purpose of the LDMP

The intent of the LDMP is to ensure that the users and management of the loading and service areas understand the operational procedures of the loading dock and service bays, and their responsibilities.

The overall objectives of these recommendations are as follows:

- Increase safety around the loading dock between all user groups;
- Maintain a high level of access and efficiency of the loading dock and service bay facilities;
- Reduce conflicts within the loading dock and service bays; and
- Outline the rules associated with the use of the loading dock and service bays.

© Copyright; ptc.

2. Rules for Tenants & Contractors using the Loading Dock and Service Bays

2.1 Appointments

- The Loading Dock will be available for use by the Owners and Occupiers entitled to use the dock, by appointment only;
- The Service Bays in the Lower Ground Level will be available for use by the Owners and Occupiers entitled to use the bays, by appointment only;
- Owners and Occupiers entitled to use the Loading Dock and Service Bays must only use these spaces during those times booked with a Building Manager;
- The Building Manager will be responsible for establishing and maintaining the booking schedule;
- For regular activities (at least once per week, such as refuse collection / retail deliveries), a regular time slot should be determined in coordination with the Building Manager and allocated within the booking system;
- The refuse collection should be allocated a regular, fixed time slot, set during business off-peak periods, such as early mornings;
- Owners and Occupiers must be made aware of the loading dock regulations and booking system, as loading dock use will not be permitted for residents and tenants without appointment. This will be communicated in the Owners / Occupier's Manual issued to each resident and tenant upon moving in;
- Bookings will be managed by an electronic 'app' based booking management system. This type of system allows the Building Manager, tenants and vehicles using the loading dock to book in time slots and see in real time the availability of loading docks and service bays for use;
- Each individual bay would require a separate booking profile within the management app and regular timeslots for (waste collection etc.) would be allocated within the booking system. An example of the booking system is shown in Figure 8 and Figure 9;
- An indicative loading dock timetable (see Attachment 1) with each individual bay requiring a separate logbook register.

© Copyright; ptc.

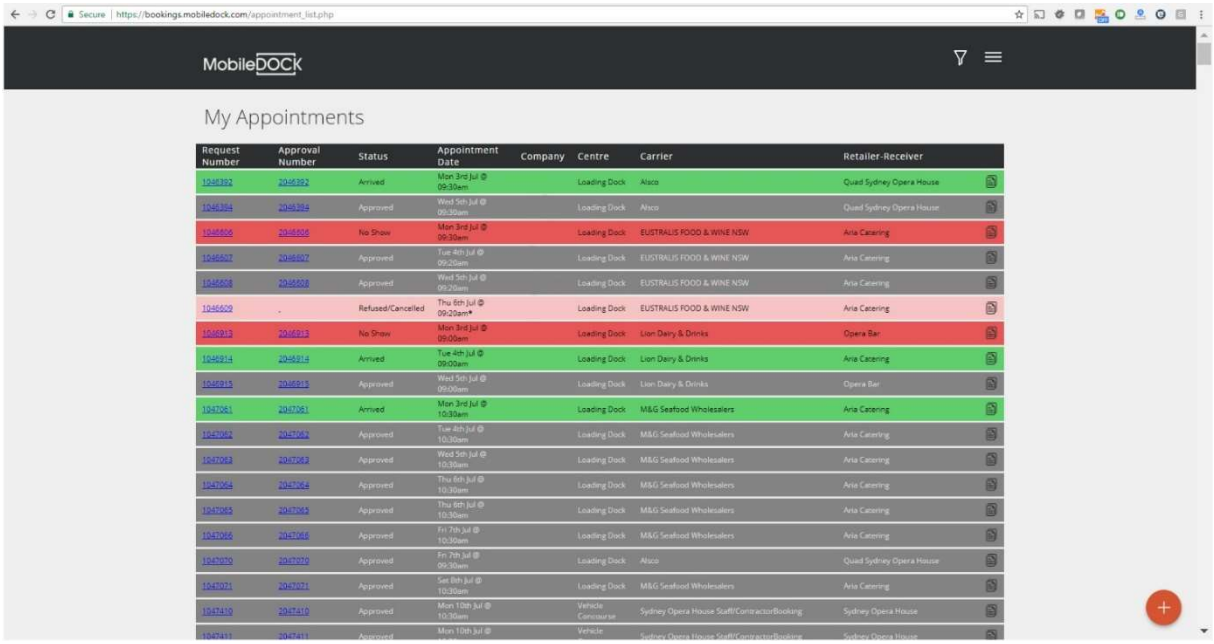


Figure 8 - Booking System - Web Based Example

Source: Bestrane MobileDock™

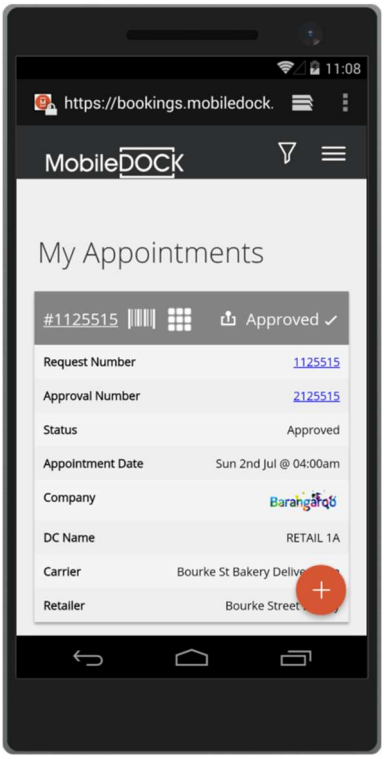


Figure 9 - Booking System - Mobile Based Example

Source: Bestrane MobileDock™

© Copyright; ptc.

2.2 Management

The management of the loading dock shall be the responsibility of an appointed Building Manager. The Building Manager will be stationed in the vicinity of the loading dock.

The loading dock area is to be under 24-hour CCTV surveillance which will allow the Building Manager to monitor the general operation of the loading dock. The loading dock may also provide an intercom which provides the contractors with direct contact with the Building Manager.

In addition to any standard managerial tasks, the Building Manager will be responsible for:

- Maintaining the booking schedule for the use of the loading docks, and ensure all users have reasonable access respective to their needs, monitoring any changes in demand over time;
- Ensure all equipment and traffic control features (signage, linemarking and mirrors) are appropriately maintained and functioning;
- Ensure the loading docks are being utilised in accordance with the procedures recommended within this LDMP;
- Keep a register of visitors to the loading dock that will include the vehicle details, contractor details and delivery details;
- Maintain the relevancy of the LDMP over time, updating it as required to maintain the principles of the LDMP stated in the previous section.

2.3 General Rules

a) All authorised users of the loading dock must obey the following general rules:

    - The loading docks are only to be used in accordance with this LDMP and any other rules determined by the Building Manager;
    - Adhere to the allocated time slot. The Building Manager reserves the right to terminate activities that overrun their allocated period, at their discretion. If the Building Manager perceives that the activity cannot be reasonably completed within the available time, they may refuse access;
    - The loading dock is strictly for the use of contractors servicing the residents and tenants of the building. No vehicles are permitted to park within these areas. No objects are to be stored in the loading docks or obstruct access to and from these areas;
    - The loading and unloading of goods are to be carried out wholly within the loading docks;
    - Vehicles must be positioned within the designated areas unless specifically permitted by the Building Manager;
    - All hazards, accidents or 'near-misses' must be immediately reported to the relevant site personnel.

b) If any damages to the Building occurs, the Building Manager or any person authorised by the Building Manager may rectify such damage and the costs associated with the works may be a debt payable by the contractor.

© Copyright; ptc.

2.4 Amendments

It may be necessary for Management to amend rules (either temporarily or permanently) and impose conditions in relation to the use of the loading dock, including:

- The hours in which access is permitted;
- The manner in which large objects or deliveries to and from the loading dock is to be transported;
- Insurance requirements;
- Any other provisions which Management considers to be necessary.

Provided that such rules and conditions will not adversely impact on the use and operations of the lots.

The Management must not repeal this LDMP without the prior consent of Council.

© Copyright; ptc.

3. Traffic Management of the Loading Dock

3.1 Vehicular Access

The access to the loading dock has been designed to accommodate up to a 14.5m long HRV which has an overall body length of 14.5m. Access into the loading dock is also restricted to vehicles with a maximum height of 4.3m to be accommodated within the minimum 4.5m headroom (clear of all services, utilities, etc.).

Access for service vehicles will be managed by the Building Manager / Facilities Manager to ensure that service / delivery vehicles are scheduled appropriately and that the loading dock is not overloaded.

3.2 Loading Dock Operation

The general operational hours of the loading dock are 5am to 8pm, 7 days a week.

Access to the loading dock and the service bays are to be managed to ensure access/egress to the bays are maintained and vehicles enter and exit the site in a forward direction. The bays are to be managed such that only one vehicle is permitted to occupy it at any one time.

The following points are to be adopted to ensure single occupancy, efficiency and maintain safe access and egress to each service bay:

- The loading docks are to be vacant whilst vehicles require access;
- All vehicles are to enter the loading dock in a forward direction and use the provided area to reverse into its designated service bays;
- Should there be no sufficient room to turn around, a turntable is provided to assist in manoeuvring;
- All vehicles are to exit the loading dock in a forward direction;
- The use of the service bays must be pre-booked and approved by the Building Manager.

3.3 Loading Dock Capacity

As discussed in Section 1.3, the loading dock will accommodate six (6) service vehicle spaces, with varying sizes. One space will be dedicated to the exclusive use of the major supermarket tenant. It is noted that there are also 14 resident loading bays which can accommodate B99 courier utes/vans within Basement Levels B5 - B8 for resident move-in/move-out.

Assuming 30-minute timeslots for each of the six bays and operational hours from 5am – 8pm, the loading dock has a maximum capacity of 180 deliveries per day. In addition to the loading dock capacity, the 14 resident loading bays within Basement Levels B5 – B8 have a maximum capacity of 420 deliveries per day.

With regards to the loading dock capacity, an estimate of the number of daily service vehicles to access the site has been undertaken to ensure that the loading dock arrangements are able to accommodate the daily demand. The mixed-use development involves major retailers, which is anticipated to generate daily deliveries. General/specialty retailers are expected to generate deliveries at a regular basis, albeit not daily. It has been estimated that the development will generate approximately 100 daily inbound vehicle

© Copyright; ptc.

movements to the loading dock on average, comprising the following delivery estimates for a typical weekday[1]:

- Main supermarket has their own dedicated loading bay (i.e. all available time slots have been allocated for exclusive use by the main supermarket). Assume all 30 available daily time slots for this bay are utilised for a robust assessment.
- Supermarket 2: 1 - 2 deliveries per day
- Asian Supermarket: 2 HRV deliveries per day
  6 courier vans per day
- Fashion Anchor: 1 HRV delivery per day
- General / Specialty Retail: 38 deliveries per day (mix of HRV, MRV)
- Commercial: 16 courier vans per day
- Retail / Commercial Waste: 2 times per day
- Residential Waste: 3 times per week
- Retail Glass: 2 times per week
- Retail / Commercial Cardboard: 3 times per week

Remaining free time slots can be used for any bulky residential needs (moving in / out), or additional commercial or retail needs. The resident loading bays within the basement car park are available for general resident move-in/move-out use throughout the week from 9am – 6pm.

An indicative timetable has been prepared to demonstrate that the capacity of the loading dock is able to accommodate the daily demand for deliveries / servicing. This is included in this report as Attachment 1. Nevertheless, it is noted that deliveries are to be managed using a booking system, as noted in Section 2, to ensure there is no overlap in deliveries and ensure a smooth operation of the loading dock.

[1] For waste collection which are staggered at various times during the week, it has been assumed that one of these trips will occur on the 'typical weekday' for a robust assessment.

© Copyright; ptc.

3.4 Loading Dock Bays Vehicle Limits

The following physical limits apply to the loading dock use:

- The maximum vehicle size is limited to an overall body length of 14.5m;
- The maximum vehicle size is limited to an overall body width of 2.5m;
- The maximum vehicle size is limited to an overall body height less than 4.3m, to be accommodated within the minimum 4.5m headroom (clear of all services, utilities, ducting etc.).

The Building Manager is to ensure that no vehicles larger than the limits provided are to use the loading docks.

© Copyright; ptc.

4. Other Considerations

4.1 Pedestrian Safety

Only authorised personnel shall be allowed within the loading dock areas and will be required to wear high visibility safety gear at all times.

All the vehicles using the loading docks will be required to be equipped with audible reverse alarms.

All vehicles must enter and exit the loading docks in a forward direction.

4.2 Cleanliness

The loading docks must be maintained in a clean condition. The maintenance of these docks is the responsibility of the contractors using the docks. The delivery company or the occupier will be charged if cleaning is required after the delivery of goods.

No goods or rubbish are to be left in the loading docks without approval from the Building Manager. If goods or rubbish are left in these areas without approval, they will be removed at their own expense.

4.3 Maintenance

Stakeholders are expected to communicate with the Building Manager on issues that may impact on others and impact on the operation of the loading docks. All matters relating to cleaning or servicing of the onsite equipment is to be communicated to the Building Manager so that access and alternative arrangements can be made.

All requests for maintenance of the loading docks should be forwarded to the Building Manager.

© Copyright; ptc.

5. Summary

The loading dock within Burwood Place is located on the Lower Ground Level and is designed to accommodate the deliveries and waste collection associated with the development. It will serve the commercial, residential, and retail components of the proposed development. It will be accessed via Railway Parade via a combined entry / exit driveway.

The loading dock provides a total of six (6) service spaces and there are also 14 resident service bays which will be managed by appointment via a booking / scheduling system. Management of the loading dock shall be the responsibility of the loading dock manager. The dock is to be used in accordance with the loading dock management plan (LDMP), which includes general rules, maintenance, traffic management, general operations, safety, and cleanliness.

In terms of security, the dock shall be under a 24-hour CCTV surveillance to monitor general operations.

© Copyright; ptc.

Attachment 1 Loading Dock Timesheet

© Copyright; ptc.

Burwood Place - Loading Dock

Timetable Allocations (for a Typical Weekday)
Updated: 10/09/2024

DAILY SLOT NO.	TIME SLOT COMMENCING	LOADING DOCK						BASEMENT													
		HRV BAY 1 SUPERMARKET USE	HRV BAY 2 GENERAL USE	HRV BAY 3 GENERAL USE	MRV BAY 4 GENERAL USE	MRV BAY 5 GENERAL USE	SRV BAY 6 GENERAL USE	RESI COURIER / SERVICE BAY 1	RESI COURIER / SERVICE BAY 2	RESI COURIER / SERVICE BAY 3	RESI COURIER / SERVICE BAY 4	RESI COURIER / SERVICE BAY 5	RESI COURIER / SERVICE BAY 6	RESI COURIER / SERVICE BAY 7	RESI COURIER / SERVICE BAY 8	RESI COURIER / SERVICE BAY 9	RESI COURIER / SERVICE BAY 10	RESI COURIER / SERVICE BAY 11	RESI COURIER / SERVICE BAY 12	RESI COURIER / SERVICE BAY 13	RESI COURIER / SERVICE BAY 14
	12:00 AM																				
	12:30 AM																				
	1:00 AM																				
	1:30 AM																				
	2:00 AM																				
	2:30 AM																				
	3:00 AM																				
	3:30 AM																				
	4:00 AM																				
	4:30 AM																				
1	5:00 AM	1	1	1			1														
2	5:30 AM	1	1	1			1														
3	6:00 AM	1	1	1			1														
4	6:30 AM	1	1	1			1														
5	7:00 AM	1	1	1			1														
6	7:30 AM	1	1	1			1														
7	8:00 AM	1	1	1			1														
8	8:30 AM	1	1	1			1														
9	9:00 AM	1	1	1	1		1														
10	9:30 AM	1	1	1	1		1														
11	10:00 AM	1	1	1	1		1														
12	10:30 AM	1	1	1	1		1														
13	11:00 AM	1	1	1	1	1	1														
14	11:30 AM	1	1	1	1	1	1														
15	12:00 PM	1		1	1	1	1														
16	12:30 PM	1			1	1	1														
17	1:00 PM	1			1	1	1														
18	1:30 PM	1			1	1	1														
19	2:00 PM	1				1	1														
20	2:30 PM	1				1	1														
21	3:00 PM	1				1	1														
22	3:30 PM	1					1														
23	4:00 PM	1																			
24	4:30 PM	1																			
25	5:00 PM	1																			
26	5:30 PM	1																			
27	6:00 PM	1																			
28	6:30 PM	1																			
29	7:00 PM	1																			
30	7:30 PM	1																			
	8:00 PM																				
	8:30 PM																				
	9:00 PM																				
	9:30 PM																				
	10:00 PM																				
	10:30 PM																				
	11:00 PM																				
	11:30 PM																				

DAILY USE

LEGEND HRV HRV

- Supermarket
- Waste
- Commercial
- Retail
- Free time slot
- Outside General Operation Hours

NOTES:

During the general operational hours between 5am - 8pm, a summary of the loading bay demand and available timeslots are provided as follows:

LOADING DOCK CAPACITY
In normal dock operations Monday to Sunday 5:00AM to 8:00PM there are:

30 x 3 = 90 time slots for HRV
30 x 2 = 60 time slots for MRV
30 x 1 = 30 time slots for SRV
30 x 14 = 420 time slots for resident B99 courier van/utes

LOADING DOCK UTILISATION
In light of the above timetable allocations, the available time slots readily acommodates the expected usage with a significant number of free time slots provided throughout the day.

*Indicative Only