PENRITH WESTFIELD SHOPPING CENTRE

Mondo Plaza Redevelopment Traffic Report

Prepared for:

Scentre Limited 85 Castlereagh Street SYDNEY NSW 2170

SLR

SLR Ref: 620.12434-R01 Version No: -v1.0 February 2019

Document Set ID: 8609597 Version: 1, Version Date: 11/03/2019

PREPARED BY

SLR Consulting Australia Pty Ltd ABN 29 001 584 612 Level 2, 15 Astor Terrace Spring Hill QLD 4000 Australia (PO Box 26 Spring Hill QLD 4004) T: +61 7 3858 4800 E: brisbane@slrconsulting.com www.slrconsulting.com

BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Scentre Limited (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
620.12434-R01-v1.0	26 February 2019	Benjamin Park	Kris Stone	Kris Stone

CONTENTS

1	INTRODUCTION
1.1	Overview
2	PROPOSED REDEVELOPMENT
3	SERVICING ARRANGEMENTS7
4	EXTERNAL TRAFFIC ASSESSMENT
4.1	Existing Traffic Generation8
4.2	Post-Development Traffic Generation9
5	CAR PARKING 11
5.1	Existing Parking Demand11
5.2	Post-Development Parking Demand11
6	SUMMARY AND CONCLUSIONS

DOCUMENT REFERENCES

TABLES

Table 1	Proposed Mondo Expansion Yield (including demolished areas)	6
Table 2	Calibrated Traffic Generation for Expansion GLA	9
Table 3	Existing and Future Parking Demand1	2

FIGURES

Figure 1	Site Context	4
Figure 2	Proposed Expansion Yield	5
Figure 3	Proposed Restaurant/Bar – Servicing Alterations and Goods Routes	7
Figure 4	Saturday Daily Traffic Movements – 2017 Calendar Year	8
Figure 5	Shopping Centre Traffic Generation Decay Curve	9
Figure 6	Historical Carpark Occupancy1	1
Figure 7	Parking Demand Assessment – Surveyed Period1	2

APPENDICES

Appendix A Plans of Development



1 Introduction

SLR Consulting Pty Ltd (SLR) has been engaged by Scentre Group Pty Ltd to provide traffic engineering and transport planning advice in relation to the proposed 'Mondo Precinct' redevelopment of the Penrith Westfield shopping centre, located in Penrith, NSW.

1.1 Overview

Penrith Westfield is a regional shopping centre that comprises approximately 90,000m² of GLA. The centre incorporates a variety of major tenants including a Myer department store, Target, Big W, Aldi, Woolworths, HOYTS Cinemas, JB Hi-Fi, and Rebel Sport. Penrith Westfield also incorporates numerous specialty store offerings and kiosks and provides a car parking supply of 3,521 spaces.

The location of the Mondo Precinct with respect to the overall Penrith Westfield site and the surrounding road network is identified in Figure 1. The existing tenancies located within the area identified as the Mondo Precinct include a café and community college.

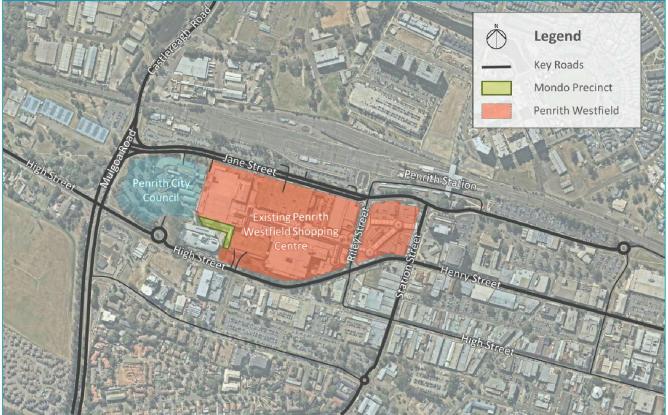


Figure 1 Site Context

Source: Nearmap



2 Proposed Redevelopment

The Mondo Precinct redevelopment is proposed to repurpose a number of existing tenancies that currently exist and also to construct additional new floor area to include the following elements:

- Five new food and beverage tenancies
- One specialty retail tenancy
- Weather protected outdoor seating
- Redesigned outdoor landscaping with new furniture
- Additional amenities.

Based on the plans of development, the proposal will result in a net GLA <u>increase</u> of approximately 1,838m². Figure 2 below illustrates the new/incremental yield (identified by the red dashed line), with a summary of the specific tenancy amendments identified in Table 2.



Figure 2 Proposed Expansion Yield

Note: Coloured areas denote additional GLA.



Tenancy Number / Location	Tenancy Number	Demolished GLA (m ²)	Proposed GLA (m ²)	
	R1	-496	712	
	R2	-203	238	
	R3		73	
First Floor	R5		207	
	R6		179	
	R9		270	
	Total	-699	1679	
	R6		229	
Second Floor	R9		331	
	Total	0	560	
	R9		298	
Roof Terrace	Total	0	298	
Cumulating Tatal		-699	2537	
Cumulative Total		~1838		

Table 1 Proposed Mondo Expansion Yield (including demolished areas)

SLR understands that the tenants anticipated to occupy the redeveloped floor area contained in the Mondo Precinct will be generally consistent with previously approved applications, the current Penrith Westfield offer, and uses that are permissible and/or typical of large sites that incorporate circa 90,000m² of floor area.

The following is also noted with respect to the proposal:

- No change to the current vehicular access locations/arrangements.
- No change to the fronting or nearby transport system including roads, intersections etc.
- No significant change to existing car parking arrangements.



3 Servicing Arrangements

The proposed Mondo Precinct redevelopment does not introduce any land uses that are significantly different to what is currently featured within the shopping centre. Accordingly, the proposal is not anticipated to result in any significant increase and/or change to the current servicing demands and arrangements that are already facilitated across the site by way of current loading docks and servicing facilities.

SLR understand that the southernmost tenancy (R9) is a minor exception whereby prospective tenants have indicated the desire for proximate van servicing that is available 24 hours a day. It is proposed that larger deliveries (HRVs etc.) would still be accommodated via the existing Jane Street service area with goods transferred within the centre. Smaller deliveries, made by medium sized vans (equivalent to a B99 vehicle defined in Australian Standards AS2890) would service the tenancy via a new dedicated loading bay located on the first floor of the existing carpark, directly adjacent to the proposed restaurant/bar location.

This proposed van servicing arrangement would convert two existing publicly accessible car spaces into a dedicated loading area that could accommodate B99 vehicles (vans). In addition to this conversion, an additional two parking spaces in the northern part of the parking level would be converted to provide a waste storage room. These two changes would reduce the current site-wide parking supply available to patrons of the Penrith Westfield by 4 spaces (0.1%) to 3,517 spaces.

The proposed servicing alterations and goods delivery travelled path for the restaurant/bar tenancy are illustrated on Figure 3.



Figure 3 Proposed Restaurant/Bar – Servicing Alterations and Goods Routes



4 External Traffic Assessment

4.1 Existing Traffic Generation

In order to identify the potential traffic impact of the proposed Mondo Precinct redevelopment, SLR has sourced a collection of historical traffic survey data.

The historical dataset includes approximately seven months of traffic data collected automatically via the parking control system that operates across the Westfield Penrith site and includes all car park entry and exit movements. The data can be queried to establish the daily and hourly traffic generation observed throughout the seven month period from 24 May 2017 to 31 December 2017.

The dataset was analysed to determine a relevant design scenario that should be used to confirm the existing site potential and comparative benchmarking. Specifically, the data was interrogated to establish an 85th percentile Saturday, i.e. the 7-8th busiest Saturday of the year, based on two-way vehicle trips. This design event is typically accepted in documented industry guidance as representing a reasonable design event for the purpose of traffic and transport planning.

Figure 4 illustrates the site-wide, one hour peak sum of traffic movements observed by the car parking control system for each of the 32 individual Saturdays that form part of the dataset.

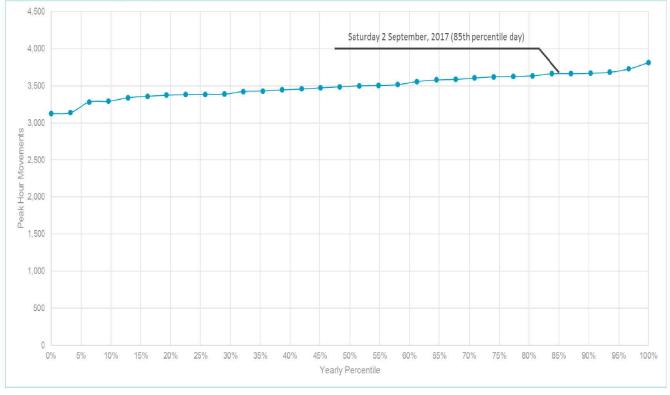


Figure 4 Saturday Daily Traffic Movements – 2017 Calendar Year

As identified in Figure 4, the 85th percentile traffic generation day occurred on 2 September 2017 during which time the maximum one hour, two-way traffic demand was 3,664 trips occurring between 12:00-13:00. Based on the current yield at the Penrith Westfield centre, this surveyed traffic demand equates to a traffic generation rate approximating 4.04 vehicles per 100m² of GLA.



4.2 **Post-Development Traffic Generation**

The traffic generation rate of a retail centre is significantly influenced by the size of the centre. That is, as the floor area of a centre increases, there is <u>not</u> a proportional increase in the centre catchment area or traffic generation. That is, new floor area will generate traffic at a <u>decreasing</u> rate per unit area as the scale of the centre increases. To account for this phenomenon, SLR has assessed the traffic generation rate of decay from data published by NSW RMS in the *Guide to Traffic Generating Development: Updated Traffic Surveys* (2013).

The existing traffic generation rate identified in Section 4.1 was found to be slightly higher than the generation rate that can be estimated using the NSW RMS surveys and decay curve. This is likely the result of the NSW RMS surveys not being calibrated to 85th percentile days.

To establish the incremental traffic generation resulting from the proposed Mondo Precinct redevelopment, the NSW RMS curve was <u>factored up</u> to reflect the observed 85th percentile traffic generation. The amended decay curve is illustrated on Figure 5 and in Table 2.

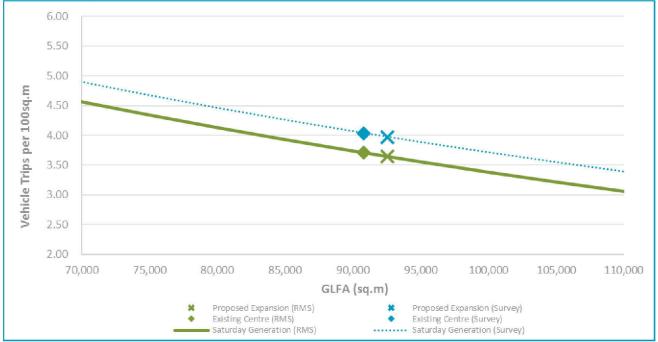


Figure 5 Shopping Centre Traffic Generation Decay Curve

Table 2 Calibrated Traffic Generation for Expansion GLA

Connerio	Total Yield	Saturday AM		
Scenario	(m² GLA)	Generation (vph/100m ² GLA)	Trips (vph)	
Existing Penrith Westfield	90,787	4.04	3,665	
Post-Mondo Expansion	92,625	3.97	3,677	
Incremental Change	1,838	-	12	



It is clear from Figure 5 and Table 2 that the proposed Mondo Precinct expansion <u>will not</u> generate a significant increase in traffic beyond the current situation. The factored RMS traffic generation curve indicates that the expansion will generate an additional 12 trips during the Saturday peak hour period. This increase is approximately 0.3% over-and-above the current situation.

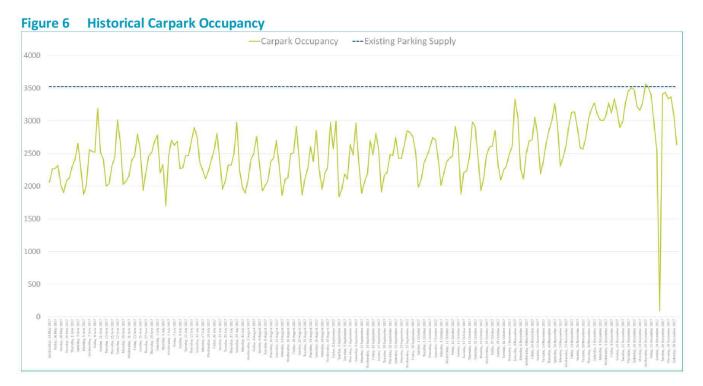
Accordingly, the post-development traffic demands will not generate any significant new or changed impacts on the surrounding transport system that would necessitate detailed analysis or capacity upgrading.



5 Car Parking

5.1 Existing Parking Demand

SLR has analysed the historical parking data to identify the <u>maximum</u> car park accumulation observed across the site during the seven month period. Scentre Group has confirmed that the existing parking supply is 3,521 spaces. After factoring the conversion of four existing spaces for loading and waste storage, the car parking supply will reduce to 3,517 spaces. Figure 6 summarises the maximum car park occupancy.



The data set indicates that the peak parking accumulation only exceeded the current 3,521 spaces and the proposed 3,517 spaces on one occasion during the seven month period being Wednesday 20 December 2017. The 3,566 space demand event was 45 spaces greater than the supply although this accumulation figure would also include vehicles that have entered the car park site but are circulating. Accordingly, the actual number of parked cars is likely to be less and may be closer or lower to the 3,521 (future 3,517) space supply.

5.2 Post-Development Parking Demand

For the purposes of this assessment, the post-development parking demand has been estimated using an 85th percentile design event approach consistent with that used for evaluating traffic generation.

The 85th percentile design day for car parking was Saturday 18 November during which the maximum parking accumulation was seen to be 3,261 vehicles or 3.59 spaces per 100m² GLA.

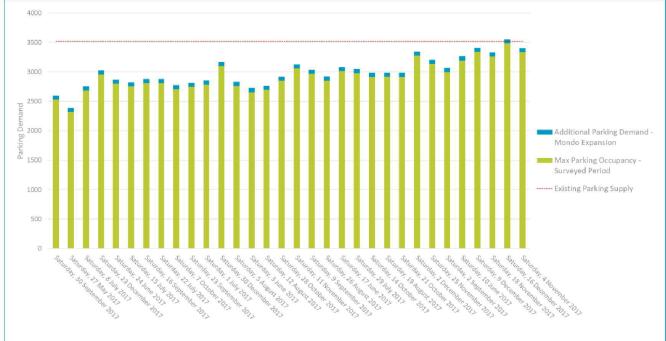
Based on this design rate, the proposed Mondo Precinct redevelopment has the potential to generate an additional peak parking demand for 66 spaces during the 85th percentile Saturday. This incremental demand would increase the current 85th parking event to 3,327 spaces which is still approximately 190 spaces lower than the current and proposed supply.



Scenario	Total Yield (m ² GLA)	Design Parking Rate (spaces/100m ² GLA)	Design Parking Supply (spaces)
Existing Penrith Westfield	90,787		3,261
Post-Mondo Expansion	92,625	3.59	3,327
Incremental Change	1,838		66

Table 3 Existing and Future Parking Demand

Figure 7 illustrates that the additional parking demand generated as a result of the Mondo expansion could be accommodated within the existing parking supply for all Saturdays except for the one-off Saturday 16 December which is already exceeded. Whilst the shortfall is exacerbated, the last Saturday before Christmas would be subject to additional travel demand measures that would mitigate and control any external impacts.







6 Summary and Conclusions

SLR Consulting Pty Ltd (SLR) has been engaged by Scentre Group Pty Ltd to provide traffic engineering and transport planning advice in relation to the proposed Mondo Precinct redevelopment of the Penrith Westfield centre, located in Penrith, NSW.

The Mondo Precinct redevelopment is proposed to repurpose/redevelop existing floor area and deliver new floor area to include the following elements:

- Five new food and beverage tenancies
- One specialty retail tenancy
- Weather protected outdoor seating
- Redesigned outdoor landscaping with new furniture
- Additional amenities

SLR has reviewed a comprehensive array of historical traffic movement observations made during a seven month period between 24 May and 31 December 2017. This data has been analysed to establish the current and traffic and car parking situation and any incremental effects that may be attributable to the proposed Mondo Precinct expansion.

- The incremental development yield delivered as part of the proposed redevelopment has been projected to generate an additional 12 traffic movements (two-way) during the design Saturday peak hour period
- This incremental demand is considered insignificant in the context of the current design peak hour demand which approximates 3,665vph
- Accordingly, the proposed Mondo expansion is not anticipated to have any adverse impact on the surrounding transport network and will not warrant detailed analysis or capacity upgrading works
- No change to the current vehicular access locations and/or forms is proposed
- No change to the current trafficable layout (except for the conversion of four parking spaces noted below) is proposed
- The proposed redevelopment will not significantly alter the current parking supply, but it will convert four existing car spaces in order to facilitate van parking and a waste storage area proximate to the restaurant/bar tenancy
- Parking demand observations indicate that the existing parking supply of 3,521 spaces was exceeded by 45 spaces (1.2%) on one day during the seven month observation period. It is noted that this particular occurrence was on Wednesday 20 December in the lead up to Christmas
- The incremental demand for parking associated with the proposed Mondo Precinct redevelopment is 66 spaces which is accommodated within the post-development supply of 3,517 spaces during the 85th percentile Saturday.

Based on the information reviewed and reported herein, there are no traffic engineering or transport planning issues that would preclude the proposed Mondo precinct within Westfield Penrith to be approved.



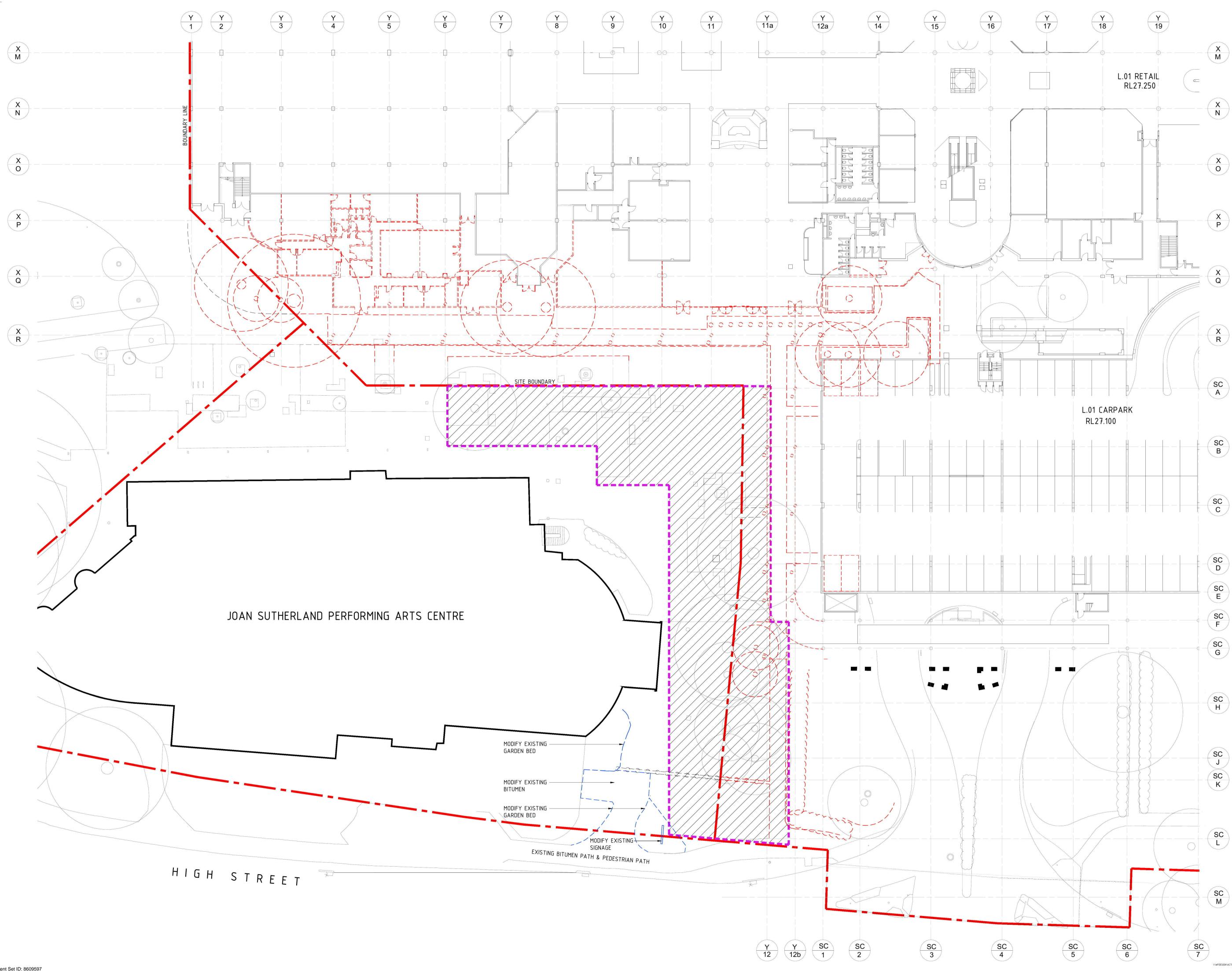


Plans of Development

SCENTRE GROUP

Owner and Operator of Westfield in Australia and New Zealand

PENRITH MONDO			SCHEME	12		(DRAFT)	20/02/2019
L1 TENANCIES							
DEMO			PROPOSE	D			
TENANT	CATEGORY	GLA (m ²)	TENANT	CATEGORY	GLA - INT. (m ²)	GLA - EXT. (m ²)	
NEPEAN COMMUNITY COLLEGE	COMMUNITY	-495.81	R1	RETAIL	712	0	
THE HERITAGE TERRACE CAFÉ	FOOD	-202.69	R2	FOOD	201	37	
			R3	FOOD	73	0	
			R5	FOOD	174	33	
			R6	FOOD	156	23	
			R9	FOOD	220	50	
SUB-TOTAL L1		-698.5			1536	143	
L2 TENANCIES							
DEMO			PROPOSE	D			
TENANT	CATEGORY	GLA (m ²)	TENANT	CATEGORY	GLA - INT. (m ²)	GLA - EXT. (m ²)	
			R6	FOOD	179	50	
			R9	FOOD	292	39	
SUB-TOTAL L2					471	89	
L3 TENANCIES							
DEMO			PROPOSE	D			
TENANT	CATEGORY	GLA (m ²)	TENANT	CATEGORY	GLA - INT. (m ²)	GLA - EXT. (m ²)	
			R9	FOOD	141	157	
SUB-TOTAL L3					141	157	
		TOTAL DEMO GLA			TOTAL NEW GLA - INT. (m ²)	TOTAL NEW GLA - EXT. (m ²)	TOTAL NEW GLA - INT. + EXT. (m ²)
		-698.5			2147	388	2536
							INCREMENTAL GLA - INT. + EXT. (m ²)
							1837



Project No. Drawing No. D6912 Drawing Scale 1:250 @A1 Plot Date Α 20/02/19 FDESIGN\ACTIVE\PENRITH\D6912 SP PENRITH MONDO PROJECT\01 CONCEPTS\02 DESIGN\01 CAD\ACTIVE\SCH12\PE-MONDO-DEMO_L1.DWG

SCHEME 12

WESTFIELD PENRITH

MONDO PRECINCT Centre

LEVEL 1 FLOOR PLAN

Title **EXISTING & DEMO**

85 Castlereagh Street. Sydney NSW 2000 Phone (02) 9358 7000 Fax (02) 9028 8500 GPO Box 4004 Sydney NSW 2001 ACN 000 267 265

Scentre Design and Construction Pty Limited

Owner and Operator of **Westfield** in Australia and New Zealand

SCENTRE GROUP

 Copyright is retained by Scentre Design and Construction. Written authority is required for any reproduction.

 Written dimensions take precedence over scaling and are to be checked on site. Refer to all project documentation before commencing work.

This document describes a Design Intent only.

Refer any discrepancies to the Project Design Manager

NOTES:

DEMOLISH EXISTING

PLANTERS & SEATINGS

REFER LANDSCAPE PLAN FOR DETAILS

TREE TO BE DEMOLISHED

EXISTING TREE TO

LEGEND:

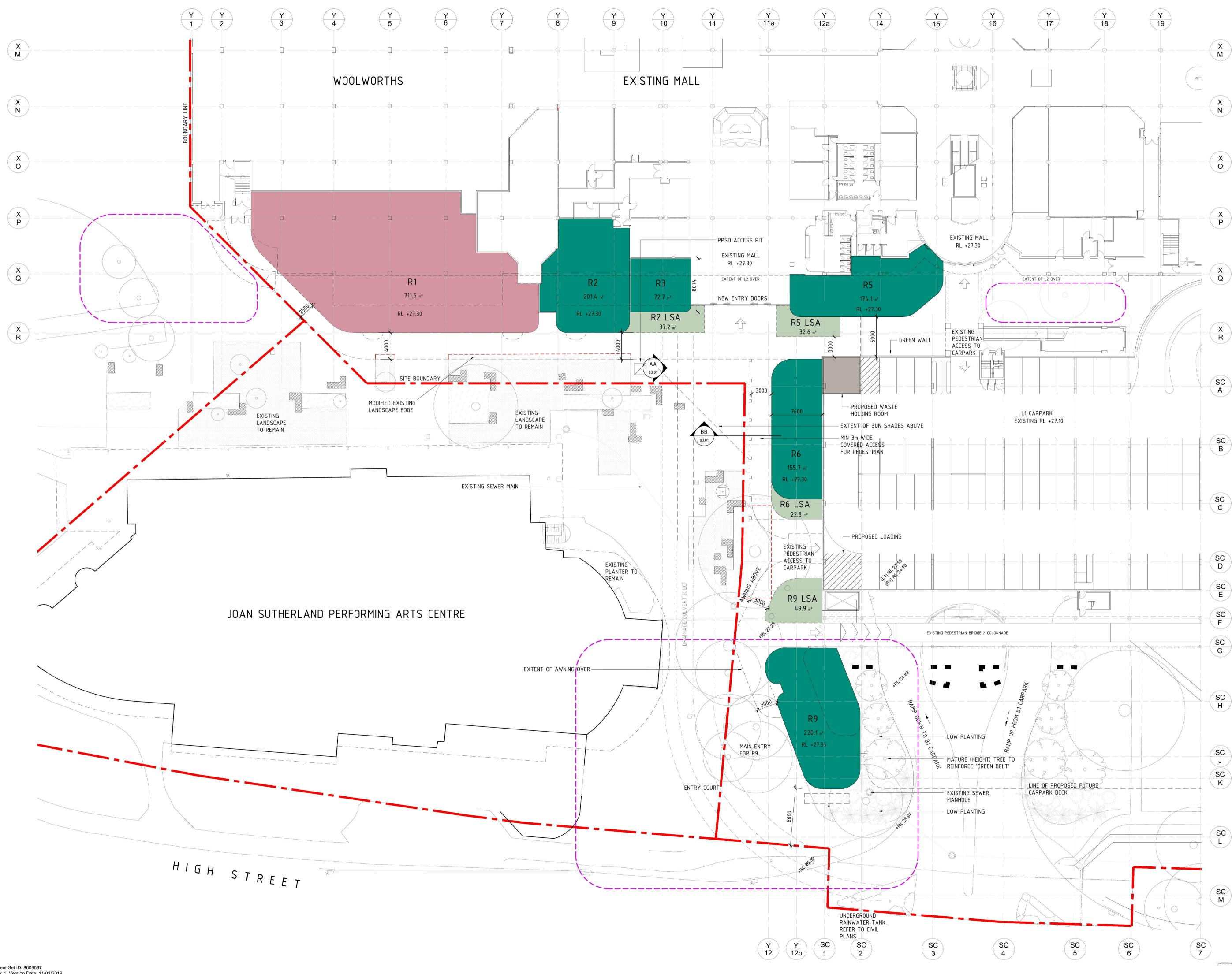
0

L____

EXISTING CENTRE

===== EXTENT OF DEMOLITION

REMAIN



Document Set ID: 8609597 Version: 1, Version Date: 11/03/2019

LEGEND:



NEW OR RELOCATED TREE

NOTES:

STE

to a

- REFER TO URBIS LANDSCAPE DRAWINGS FOR PLAZA WORKS INDICATIVE PLANTING ONLY
- REFER TO ARCADIS CIVIL DOCUMENTATION & PLANS FOR PROPOSED CIVIL WORKS



NOTES:

- This document describes a Design Intent only. Written dimensions take precedence over scaling and are to be
- checked on site.

SCENTRE GROUP

Owner and Operator of **Westfield** in Australia and New Zealand

(GROUND)

MONDO PRECINCT

WESTFIELD PENRITH

SCHEME 12

PRELIMINARY

SK02.02

H\D6912 SP PENRITH MONDO PROJECT\01 CONCEPTS\02 DESIGN\01 CAD\ACTIVE\SCH12\PE-MONDO-PRO L1.DWG

Drawing N

- Refer to all project documentation before commencing work
- Refer any discrepancies to the Project Design Manager Copyright is retained by Scentre Design and Construction

- Written authority is required for any reproduction.

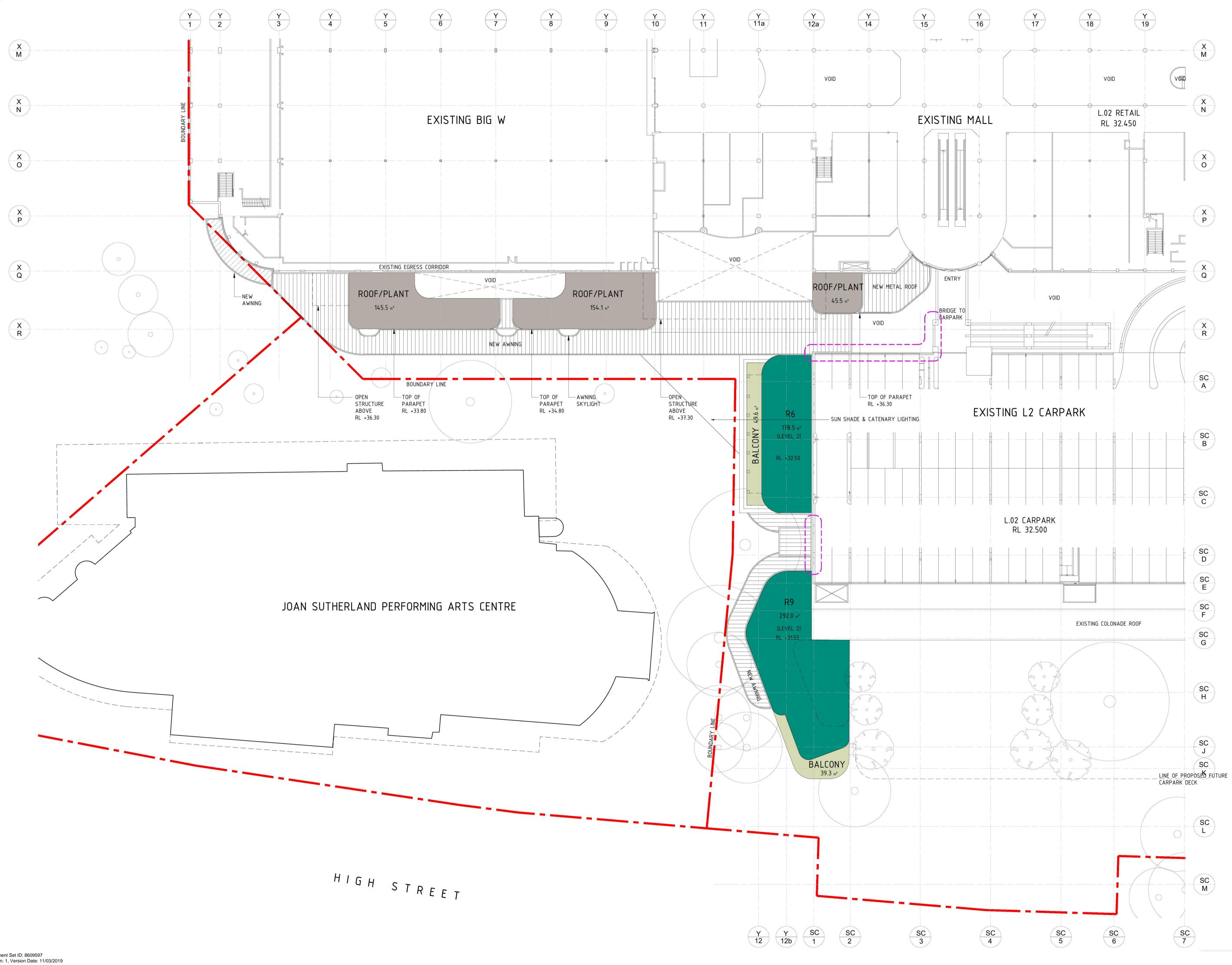
- Scentre Design and Construction Pty Limited 85 Castlereagh Street. Sydney NSW 2000 Phone (02) 9358 7000 Fax (02) 9028 8500 GPO Box 4004 Sydney NSW 2001 ACN 000 267 265 PROPOSED PLAN L1

Centre

Project No.

D6912 Drawing Scale 1:250 @A1 Plot Date

20/02/2019



LEGEND:





SCENTRE GROUP

Owner and Operator of Westfield in Australia and New Zealand

PROPOSED PLAN L2

MONDO PRECINCT

WESTFIELD PENRITH

SCHEME 12

SK02.03

Project No. D6912

Drawing Scal 1:250 @A1

20/02/2019



LEGEND:





NOTES:

- This document describes a Design Intent only. Written dimensions take precedence over scaling and are to be checked on site.
- Refer to all project documentation before commencing work.
- Refer any discrepancies to the Project Design Manager
- Copyright is retained by Scentre Design and Construction. Written authority is required for any reproduction.



06912 SP PENRITH MONDO PROJECT\01 CONCEPTS\02 DESIGN\01 CAD\ACTIVE\SCH12\PE-MONDO-PRO L3.DWG

ASIA PACIFIC OFFICES

BRISBANE

Level 2, 15 Astor Terrace Spring Hill QLD 4000 Australia T: +61 7 3858 4800 F: +61 7 3858 4801

MACKAY

21 River Street Mackay QLD 4740 Australia T: +61 7 3181 3300

SYDNEY

2 Lincoln Street Lane Cove NSW 2066 Australia T: +61 2 9427 8100 F: +61 2 9427 8200

AUCKLAND

68 Beach Road Auckland 1010 New Zealand T: +64 27 441 7849

CANBERRA

GPO 410 Canberra ACT 2600 Australia T: +61 2 6287 0800 F: +61 2 9427 8200

MELBOURNE

Suite 2, 2 Domville Avenue Hawthorn VIC 3122 Australia T: +61 3 9249 9400 F: +61 3 9249 9499

TOWNSVILLE

Level 1, 514 Sturt Street Townsville QLD 4810 Australia T: +61 7 4722 8000 F: +61 7 4722 8001

NELSON

6/A Cambridge Street Richmond, Nelson 7020 New Zealand T: +64 274 898 628

DARWIN

5 Foelsche Street Darwin NT 0800 Australia T: +61 8 8998 0100 F: +61 2 9427 8200

NEWCASTLE

10 Kings Road New Lambton NSW 2305 Australia T: +61 2 4037 3200 F: +61 2 4037 3201

GOLD COAST

Ground Floor, 194 Varsity Parade Varsity Lakes QLD 4227 Australia M: +61 438 763 516

PERTH

Ground Floor, 503 Murray Street Perth WA 6000 Australia T: +61 8 9422 5900 F: +61 8 9422 5901

www.slrconsulting.com