



19 December 2023

Our Ref: 23BRT0076 RP01

Your Ref:

Attention: Stephen Mason

RPS

Level 8, 31 Duncan Street

FORTITUDE VALLEY QLD 4006

Dear Stephen,

RE: Carseldine Village Lot 5001 – Proposed Retail Development

Traffic Engineering Assessment

TTM Consulting Pty Ltd has been engaged by De Luca Corporation Pty Ltd to undertake a traffic engineering assessment of the above-mentioned proposed development.

It is understood that this report will accompany a development application to be lodged with Economic Development Queensland (EDQ).

The traffic-related aspects of the proposal addressed in this assessment include:

- Site access arrangements.
- Car parking arrangements, including supply and design layout.
- Service vehicle arrangements; and
- Identification of likely traffic generation of the proposal and its potential impacts on the surrounding road network.

This assessment has been undertaken with regard to the Fitzgibbon Urban Development Area Development Scheme (3 December 2021) and Brisbane City Council's CityPlan 2014 where relevant.

Reference is also made to the Cardno Traffic Impact Assessment, dated 1st May 2018, which was prepared in support of the Carseldine Village Masterplan.

The assessment is based on the proposed development plans prepared by Architectus, copies of which are included **Attachment A**.

1. Existing Conditions

1.1. The Site

Figure 1 shows the site location being to the immediate south-west of the Beams Road / Plaza Place intersection and approximately 300m walk west of the Carseldine railway and busway station.

The site has previously been referred to as Lot V001 and is currently referred to as Lot 5001 and is situated within Stage V of the Carseldine Village masterplan development.

The site has three existing road frontages; Beams Road along the northern boundary, Plaza Place along the eastern boundary, and Meander Street (currently no through road) along the western boundary.

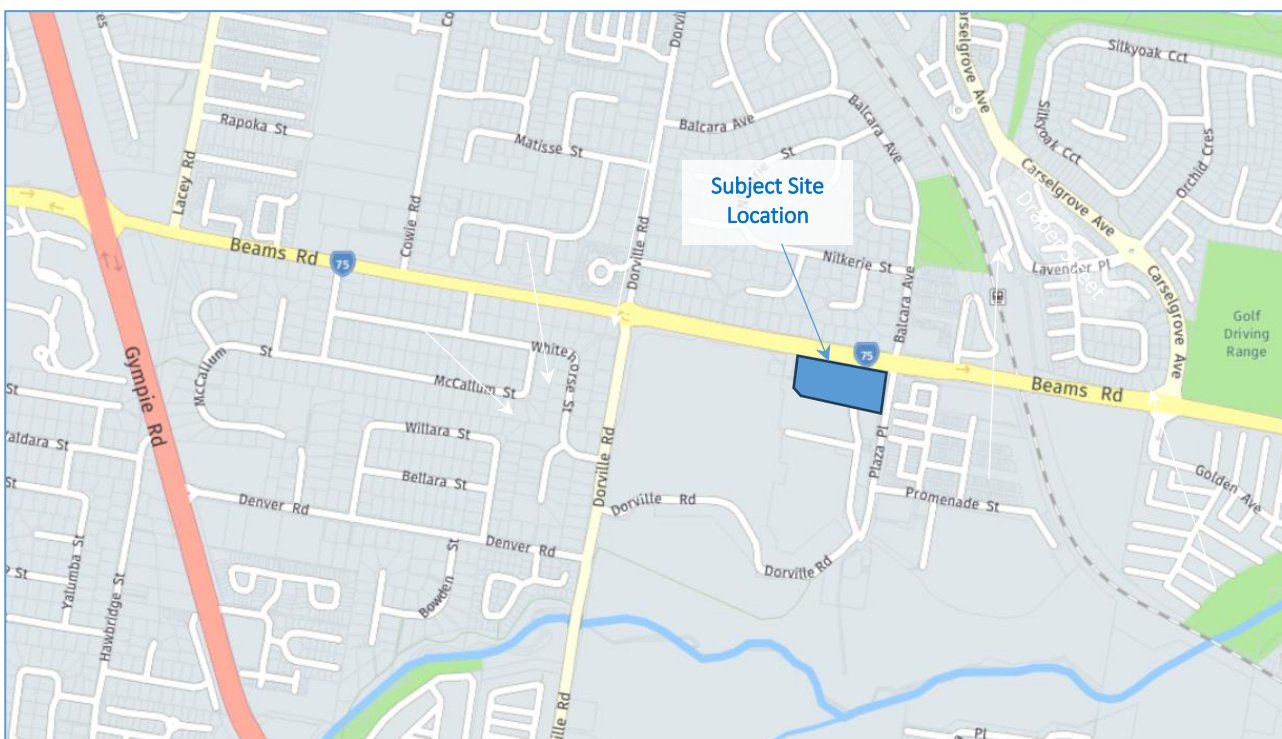


Figure 1: Site Location & Context (Source: Nearmap)

1.2 The Road Network

All roads in the near vicinity of the site are administered by Brisbane City Council.

Beams Road is a 4-lane divided arterial road. Plaza Place is a 2-lane divided main street.

Meander Street, which will be constructed by EDQ through the Stage V area to link Beams Road to Plaza Place, is designed as a 2-lane undivided with kerbside parking.

2. Proposed Development Summary

The proposal is for a retail/commercial development with tenancies over Lot 5001 and the ground level of adjacent Lot 5003.

Table 1 summarises the proposed gross floor areas of each tenancy and its associated land use definition as per the Development Scheme.

Table 1: Proposed Building Areas & Land Use

Level	TENANCY	GFA	Land Use
Ground	Lifestyle/Sport/Recreation	680	Indoor Sport & Recreation
Ground	Retail / Commercial 01A	64	Retail
Ground	Retail / Commercial 01B	49	Retail
Ground	Supermarket	800.5	Retail
Ground	Retail 2A	77.4	Retail
Ground	Retail 2B	77.4	Retail
Ground	Retail 2C	73.8	Retail
Ground	Retail 2D	72.9	Retail
Ground	Retail 2E	80.2	Retail
Ground	Retail 2F	73	Retail
Ground	Retail 3	137.9	Retail
Ground	Retail 5A (Lot 5003)	91.8	Retail
Ground	Retail 5B (Lot 5003)	95.6	Retail
Ground	Retail 5C (Lot 5003)	69.8	Retail
Ground	Retail / Allied Health (186m2)	186.4	Retail
Ground	Retail / Allied Health (245m2)	245.1	Retail
Ground	Retail / Allied Health (241m2)	241.3	Retail
Level 1	Medical / Allied Health / Lifestyle (325m2)	325.6	Commercial
Level 1	Medical / Allied Health / Lifestyle (299m2)	298.9	Commercial
Level 1	Medical / Allied Health / Lifestyle (156m2)	156.4	Commercial
Level 1	Medical / Allied Health / Lifestyle (309m2)	308.6	Commercial
Level 1	Medical / Allied Health / Lifestyle (187m2)	187.4	Commercial
Level 1	Lifestyle / Sport & Recreation	458.3	Indoor Sport & Recreation
Total		4851.3	

3. Site Access Arrangements

3.1 Vehicles

Consistent with the masterplan two vehicular site accesses are proposed to Meander Street, including:

- An 8.0m wide Type B2 entry/exit crossover on the western boundary; and
- An 8.5m wide Type B2 entry/exit crossover on the southern boundary.

The design layout of the accesses is adequate to accommodate the swept paths of the relevant design vehicles as demonstrated in TTM drawing number 23BRT0076-09B (**Attachment B**).

Motorist sight lines from the accesses along Meander Street are clear in all directions and the associated distances are adequate to ensure the safe and efficient operation of the accesses.

Detailed design of the accesses is to ensure pedestrian sight splays, measuring 2m x 2.5m, are provided on the exit side of the accesses which are to be kept clear of all obstructions to visibility (e.g. buildings, landscaping etc).

3.2 Active Transport Modes

A total of five (5) active transport site accesses are proposed for the development providing excellent connectivity to the surrounding active transport network. The accesses are located:

- Adjacent the Beams Rd / Plaza Pl intersection (north-east corner of site)
- Plaza Place (south-east corner of proposed building)
- Meander Street (adjacent Lot 5003)
- Meander Street (west side of southern vehicle site access)
- Meander Street (south side of western vehicle site access)

4. Car Parking Arrangements

4.1 Supply

The Development Scheme requires on-site car parking to be provided in accordance with Table 1 of the scheme. It nominates parking rates for Retail and Commercial uses but does not nominate any rates for Indoor Sport and Recreation uses. As such, reference is made to the parking rates nominated in Council’s Transport, Access, Parking and Servicing Planning Scheme Policy (Table 13) for this use.

Table 2 details the on-site car parking requirements in line with the above Development Scheme requirements for the various land uses proposed. As indicated, a total of 215 on-site car parking spaces should be provided.

The development plan includes a total of 204 on-site parking spaces for the development which represents a shortfall of 11 spaces when compared to the Development Scheme requirement. However, it is understood that it is EDQ’s preference that on-site car parking is minimised as far as practical in the interest of promoting sustainability. Accordingly, the proposed supply is considered to be appropriate and balances the need to promote active transportation and the need to accommodate likely peak parking demands of the development.

It is noted that a total of five (5) PWD parking spaces are proposed which satisfies Council’s requirement rate of 1 PWD per 50 standard spaces.

Table 2: Development Scheme Car Parking Requirements

Use	GFA	Rate	Spaces Required	Rate Source
Retail	2436.1	1 space per 20 m ² GFA	121.8	Table 1 of Fitzgibbon Development Scheme
Commercial	1276.9	1 space per 50 m ² GFA	25.5	Table 1 of Fitzgibbon Development Scheme
Indoor Sport & Recreation (Gym)	458.3	1 space per 10 m ² GFA	45.8	Table 13 of BCC TAPS PSP (Indoor Sport & Recreation - Gymnasium)
Indoor Sport & Recreation (Swim School)	680	15 + 1 space per 100 m ² GFA	21.8	Table 13 of BCC TAPS PSP (Indoor Sport & Recreation - Swimming Pool)
Totals	4851.3		215	

4.2 Design Layout

Review of the development plan indicates that the proposed design layout of the on-site car parking is consistent with the design standards prescribed in Council’s TAPS PSP and good practice. Detailed design of all elements of the on-site car parking area is to be in accordance with all relevant standards and guidelines.

5. Service Vehicle Arrangements

The majority of service vehicles requiring access to the development are provided for within a main shared loading dock area situated to the immediate west of the supermarket tenancy.

A secondary, time-restricted, loading area is also proposed at the north-eastern end of the on-site car parking area (occupying 4 car parking spaces). This area is intended for small delivery vehicles (Vans and Small Rigid Vehicles) and ambulances (if required for medical tenancies).

The main shared loading dock is specifically limited to vehicles of a size up to a 12.5m heavy rigid vehicle.

As demonstrated in TTM drawing number 23BRT0076-09B (**Attachment B**) the proposed development layout and main loading dock is adequate to accommodate the relevant design vehicles, including a front-loading refuse collection vehicle.

All refuse storage and collection for the development is to occur within the main shared loading dock area.

6. Potential Traffic Impacts

Table 3 below details the development yield and traffic generation estimates associated with the currently proposed development and that assumed in the initial traffic impact assessment undertaken by Cardno for the Carseldine Village masterplan development.

The analysis indicates that the currently proposed development would generate approximately 70% of the traffic demands initially assumed in the masterplan assessment. As such, the proposal would not result in any additional traffic impacts on the surrounding road network as contemplated by the masterplan development and its associated traffic impact assessment.

Table 3: Estimated Development Traffic Volumes Comparison

Lot No.	Land Use	Yields				Estimated Trip Generation (peak hour)			
		Original		Proposed		Rate		Proposed	Original
V001 / 5001	Retail	4000	m ²	2436.1	m ²	12.3	vph/100m ²	300	492
	Commercial	1765	m ²	1276.9	m ²	2	vph/100m ²	26	35
	Indoor Sport & Recreation (Gym)	0	m ²	458.3	m ²	3.8	vph/100m ²	17	0
	Indoor Sport & Recreation (Swim School)	0	m ²	680	m ²	2	vph/100m ²	14	0
	<i>Sub-total</i>	<i>5765</i>	<i>m²</i>	<i>4851.3</i>	<i>m²</i>	<i>Sub-total</i>		<i>356</i>	<i>527</i>
V002 / 5002	Residential Dwellings	33	dwellings	33	dwellings	0.575	vph/dwelling	19	19
V003 / 5003	Residential Units	60	units	98	units	0.23	vph/dwelling	23	14
						Totals		398	560

7. Conclusions

From the assessment undertaken and summarised herein the following conclusions are drawn:

- The proposed vehicular and active transport site access arrangements are appropriate for the development and designed and located generally in accordance with applicable standards. Detailed design and construction of all accesses is to ensure compliance with all relevant standards.
- A total of 204 on-site car parking spaces, including 5 PWD spaces, is proposed for the development. This provision represents an 11-space shortfall compared to the Development Scheme car parking requirement (215 spaces). Despite the shortfall the proposed provision represents a balance of promoting sustainability and active transport mode share whilst providing for the practical peak parking demands of the development. The proposed parking layout is consistent with relevant design standards and detailed design and construction is to ensure compliance with such standards.
- The proposed service vehicle arrangements are adequate and appropriate for the development.
- No adverse traffic impacts are anticipated as a result of the proposed development and no impact-mitigating upgrades are warranted.

I trust the information provided herein is adequate for your purposes. Should you require any further information, please contact me by phone on (07) 3327 9500 or by email at dgrummitt@ttmgroup.com.au.

Yours sincerely,



David Grummitt | RPEQ MIEAust NER

Director

TTM Consulting Pty Ltd

Attachments:

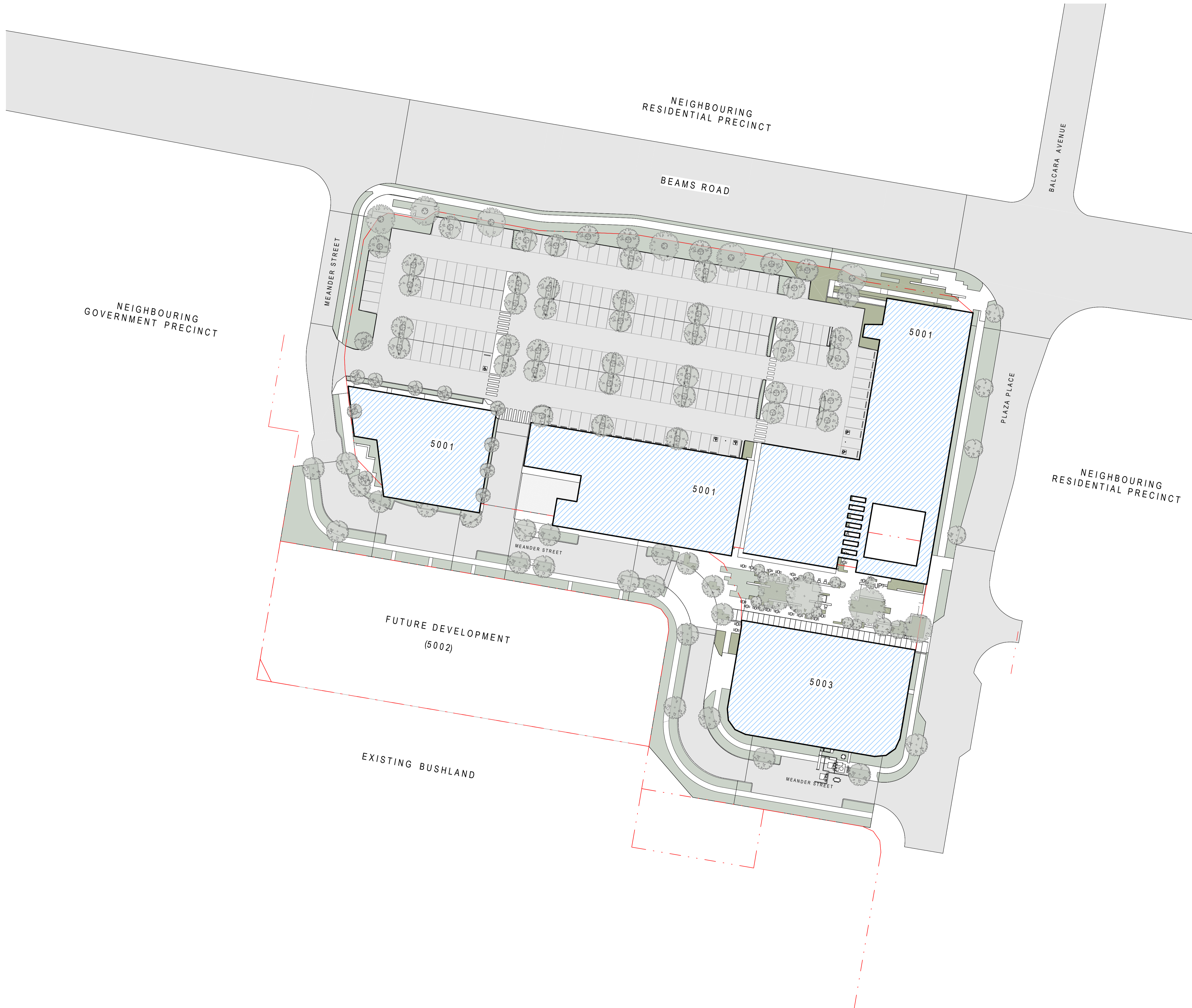
- A. Proposed Development Plan
- B. Vehicle Swept Path Analysis Drawing



ATTACHMENT A

Architectural Development Plans

We acknowledge the Traditional Custodians of the land on which this project is sited, and pay respects to their Elders past, present and emerging.



Revision	REV	DESCRIPTION	DATE	APP.
A	Issued For Information	13/07/2023	JF	
B	Issued For Information	03/11/2023	KL	
C	Issued For Information	14/11/2023	KL	
D	EDO Issue	21/11/2023	KL	
E	DA Issue	12/12/2023	KL	

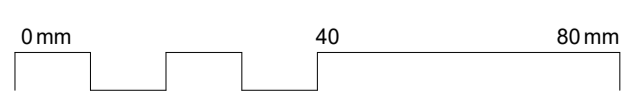
Client
DELUCA

Project
THE VILLAGE CARSELDINE

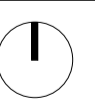
Drawing
SITE PLAN

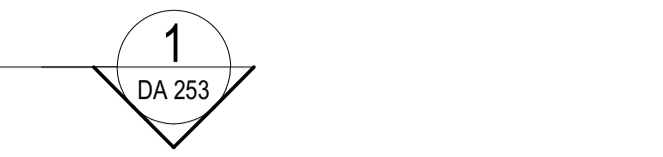
A1 Scale 1 : 500
Project No. 23.0159
Revision E
Number SK - AR - DR - DA 020

Details
© Architectus Conrad Gargett, ACN 131 245 684 ABN 90 131 245 684
Do not scale this drawing and verify all dimensions and levels on site.
Nominated Architect : Lawrence Toalido NSWARB Reg. 10255.
Nominated Architect : Ray Brown NSWARB Reg. 6359.

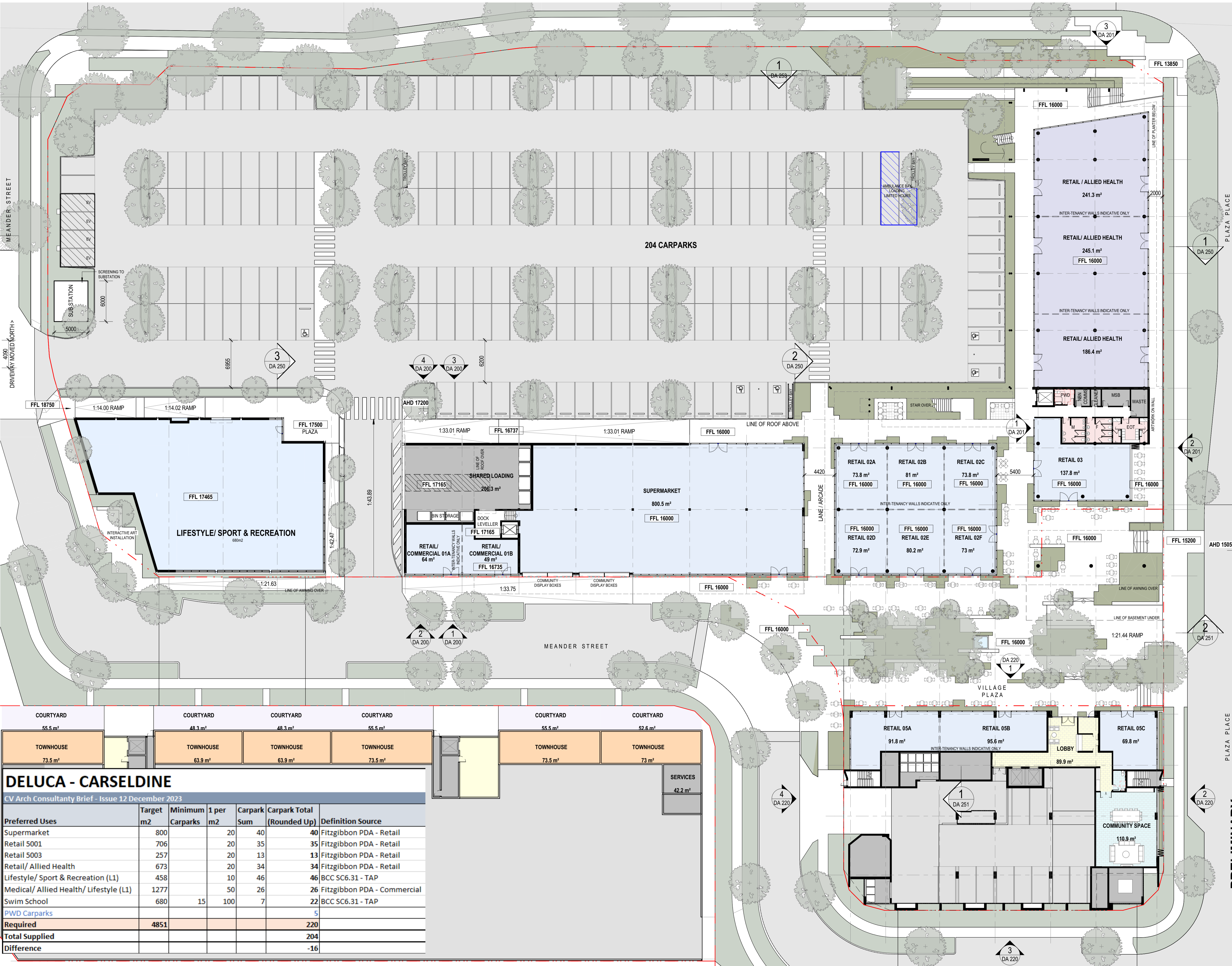


PRELIMINARY





We acknowledge the Traditional Custodians of the land on which this project is sited, and pay respects to their Elders past, present and emerging.



Revision	DESCRIPTION	DATE	APP.
REV Q	Issued For Information	10/11/2023	KL
R	Issued For Information	14/11/2023	KL
S	EDO Issue	21/11/2023	KL
T	Issued For Information	30/11/2023	KL
U	Issued For Information	05/12/2023	KL
V	Issued For Information	07/12/2023	KL
W	DA Issue	12/12/2023	KL

Client
DELUCA

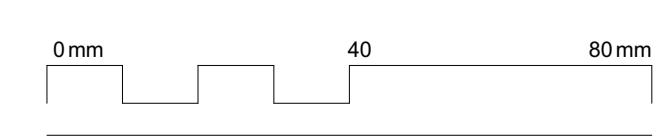
Project
CARSELDINE VILLAGE - STAGE V - LOTS 5001, 9001 & 5003

Drawing
KEY PLAN - GROUND FLOOR

A1 Scale 1 : 250
Project No. 23.0159
Revision W

Number SK - AR - DR - DA 100

Details
© Architectus Conrad Gargett, ACN 131 245 684 ABN 90 131 245 684
Do not scale this drawing and verify all dimensions and levels on site.
Nominated Architect : Lawrence Toalido NSWARB Reg. 10255.
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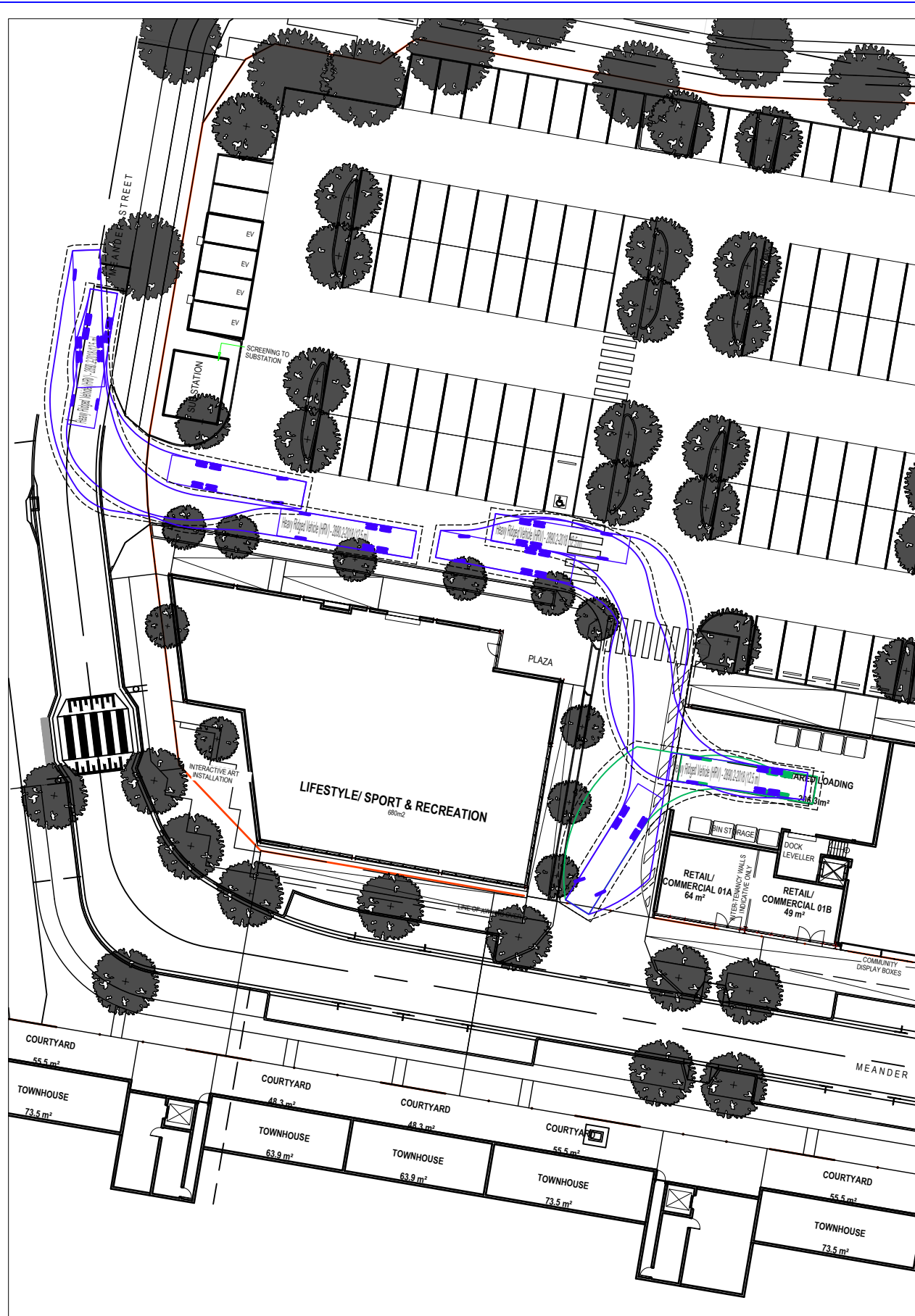
COURTYARD	COURTYARD	COURTYARD	COURTYARD	COURTYARD	COURTYARD	COURTYARD	TOWNHOUSE	TOWNHOUSE	TOWNHOUSE	TOWNHOUSE	TOWNHOUSE	TOWNHOUSE	SERVICES
55.5 m²	48.3 m²	48.3 m²	55.5 m²	55.5 m²	52.6 m²	73.5 m²	73.5 m²	63.9 m²	63.9 m²	73.5 m²	73.5 m²	42.2 m²	
DELUCA - CARSELDINE CV Arch Consultancy Brief - Issue 12 December 2023													
Preferred Uses	Target m2	Minimum Carparks	1 per m2	Carpark Sum	Carpark Total (Rounded Up)	Definition Source							
Supermarket	800	20	40	40	40	Fitzgibbon PDA - Retail							
Retail 5001	706	20	35	35	35	Fitzgibbon PDA - Retail							
Retail 5003	257	20	13	13	13	Fitzgibbon PDA - Retail							
Retail/ Allied Health	673	20	34	34	34	Fitzgibbon PDA - Retail							
Lifestyle/ Sport & Recreation (L1)	458	10	46	46	46	BCC SC6.31 - TAP							
Medical/ Allied Health/ Lifestyle (L1)	1277	50	26	26	26	Fitzgibbon PDA - Commercial							
Swim School	680	15	100	7	22	BCC SC6.31 - TAP							
PWD Carparks					5								
Required	4851				220								
Total Supplied					204								
Difference					-16								

PRELIMINARY



ATTACHMENT B

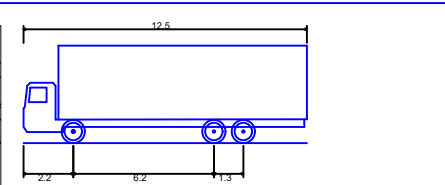
Vehicle Swept Path Analysis Drawing



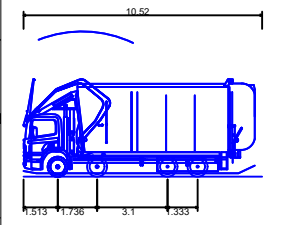
12.5m HEAVY RIGID VEHICLE



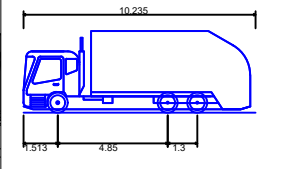
10.5m FRONT-LOADING REFUSE COLLECTION VEHICLE



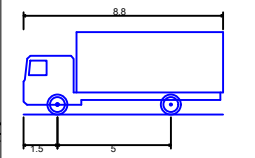
Heavy Rigid Vehicle (HRV) - 2890,2-2018 (12.5 m)
 Overall Length 12.500m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.490m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 12.500m



BCC Front Loading RCV
 Overall Length 10.520m
 Overall Width 2.500m
 Overall Body Height 6.400m
 Min Body Ground Clearance 0.150m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 11.000m



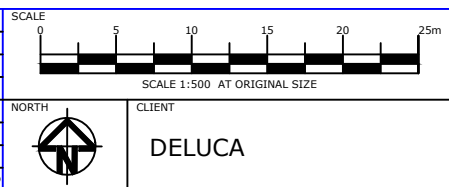
BCC RCV (Rear Loader)
 Overall Length 10.235m
 Overall Width 2.500m
 Overall Body Height 3.600m
 Min Body Ground Clearance 0.150m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 9.500m



MRV - Medium Rigid Vehicle
 Overall Length 8.800m
 Overall Width 2.500m
 Overall Body Height 3.633m
 Min Body Ground Clearance 0.428m
 Track Width 2.500m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 10.000m

David Grummitt
 DIRECTOR
 DAVID GRUMMITT RPEQ 19356
 APPROVED 19 Dec 2023

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
B	19-12-23	GENERAL AMENDMENT	DG	DG	DG
A	14-12-23	ORIGINAL ISSUE	DG	DG	DG



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 E: ttmbri@ttmgroup.com.au W: www.ttmgroup.com.au

PROJECT	CARSELDINE VILLAGE
DRAWING TITLE	VEHICLE SWEEP PATH ANALYSIS LOT 5001 RETAIL SERVICE VEHICLES
PROJECT NUMBER	23BRT0076
DRAWING NUMBER	23BRT0076-09
DATE	19 Dec 2023
ORIGINAL SIZE	A3
REVISION	B
SHEET	1 OF 1