



19 December 2023

Our Ref: 23BRT0076 RP02

Your Ref:

Attention: Stephen Mason

RPS

Level 8, 31 Duncan Street

FORTITUDE VALLEY QLD 4006

Dear Stephen,

RE: Carseldine Village Lot 5003 – Proposed Residential 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 V003 and is currently referred to as Lot 5003 and is situated within Stage V of the Carseldine Village masterplan development.

The site has one existing road frontage; Plaza Place along the eastern boundary.

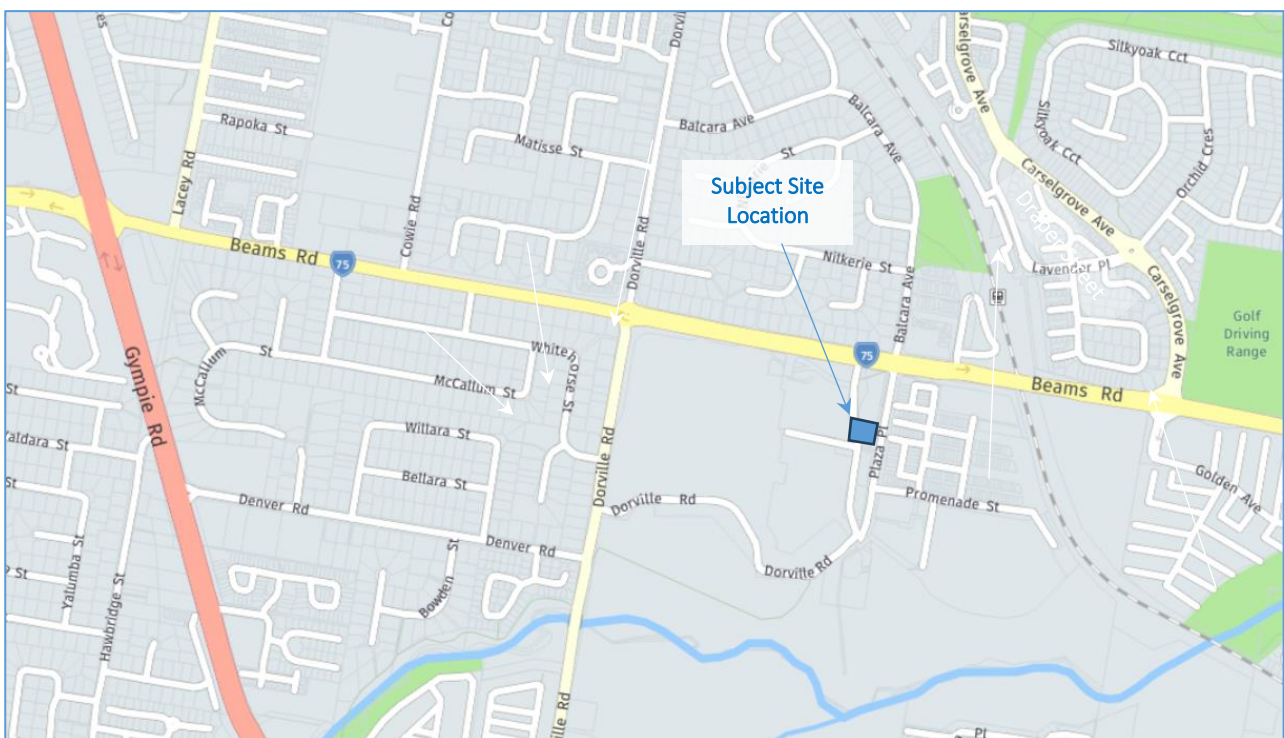


Figure 1: Site Location & Context (Source: Nearmap)

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 an affordable housing residential dwelling building containing a total of 98 dwelling units over seven levels.

Table 1 summarises the proposed dwelling unit breakdown.

Table 1: Proposed Dwelling Types & Quantities

Dwelling Type	Number Units per level	No. Dwelling Units
2-bedroom	4	28
1-bedroom	7	49
Studio	3	21
Total		98

3. Site Access Arrangements

3.1 Vehicles

Consistent with the masterplan one vehicular site access is proposed to Meander Street, including:

- An 6.8m wide Type B2 entry/exit crossover on the western 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 23BRT0076-10A (**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

One active transport site access is proposed for the development on the northern building alignment connecting to the internal building lobby area.

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.

Table 2 details the on-site car parking requirements in line with the above Development Scheme requirements. As indicated, a minimum of 81 on-site car parking spaces should be provided.

The development plan includes a total of 67 on-site parking spaces for the development which represents a shortfall of 14 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. Additionally, it is understood that the intended residential operator is satisfied with the proposed provision.

It is noted that one (1) PWD parking space is proposed within the basement parking area.

Table 2: Development Scheme Car Parking Requirements

Dwelling Type	No. Dwellings	Rate	Spaces Required
2-bedroom	28	1 space per unit	28
1-bedroom	49	0.75 space per unit	36.75
Studio	21	0.75 space per unit	15.75
Totals	98		81

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

A single service vehicle loading bay is proposed within the ground level of the proposed building. It is intended for use by occasional furniture trucks, delivery vehicles associated with the ground level retail tenancies, and refuse collection by Council's rear-loading collection vehicle.

As demonstrated in TTM drawing number 23BRT0076-10A (**Attachment B**) the proposed development layout and loading area is adequate to accommodate the relevant design vehicles, including vehicles up to a 10.3m rear-loading refuse collection vehicle.

6. Potential Traffic Impacts

Table 3 below details the development yield and traffic generation estimates associated with the currently proposed development, inclusive of all three development lots within Stage V, 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 67 on-site car parking spaces, including 1 PWD space, is proposed for the development. This provision represents an 14-space shortfall compared to the Development Scheme car parking requirement (81 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:

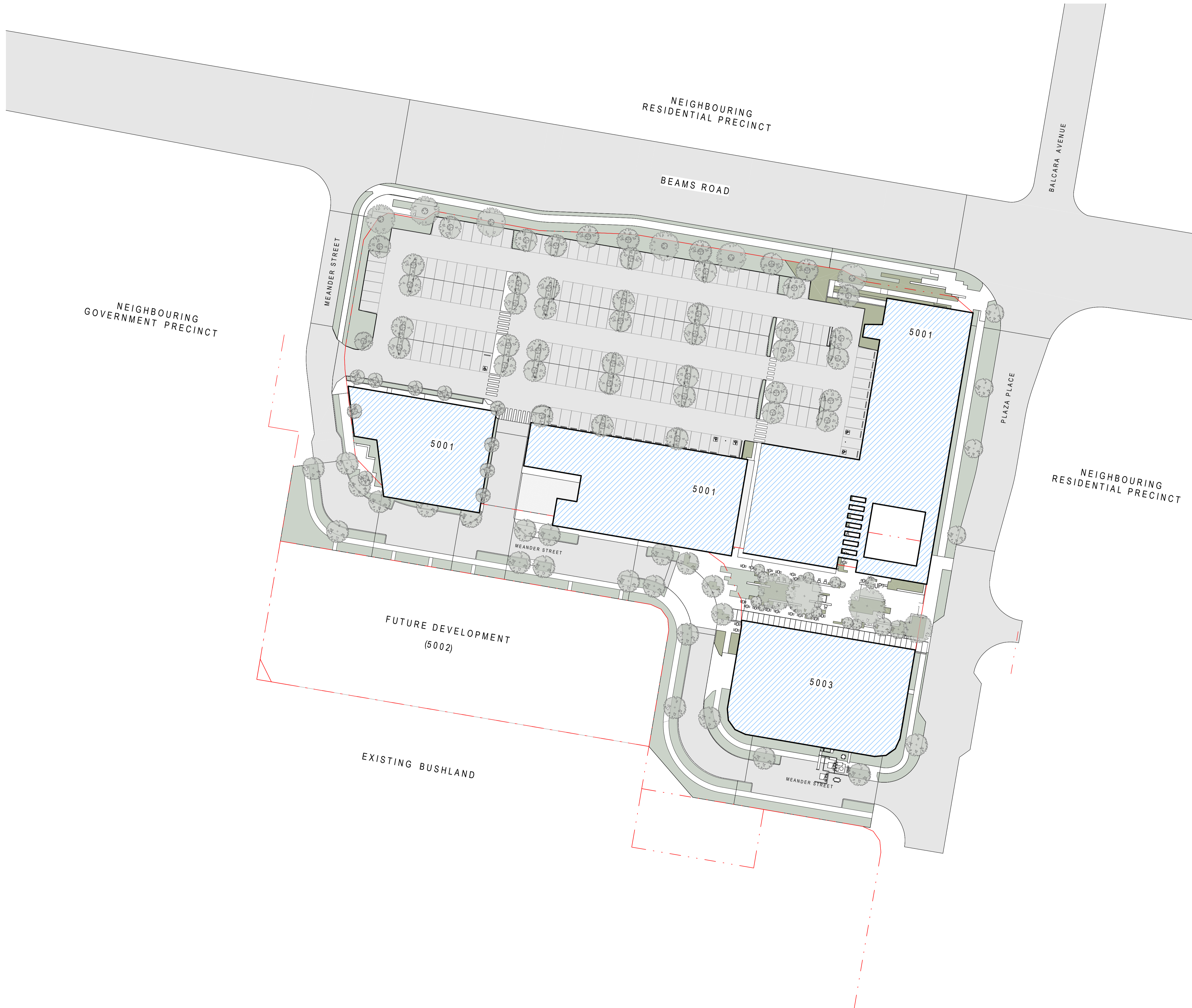
- A. Proposed Development Plan
- B. Vehicle Swept Path Analysis Drawing



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	

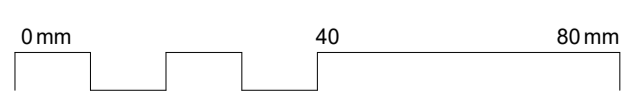
Client
DELUCA

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

DELUCA - CARSELDINE

CV Arch Consultancy Brief - Issue 12 December 2023

Type	No. per level	Levels	Rate	Carpark Sum	Definition Source
2B	4	7	1	28	Fitzgibbon PDA - 400m of a Railway Station
1B	7	7	0.75	37	Fitzgibbon PDA - 400m of a Railway Station
Studio	3	7	0.75	16	Fitzgibbon PDA - 400m of a Railway Station
PWD Carparks	1			1	
Required				82	
Total	14			67	
Difference				15	

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REV	DESCRIPTION	DATE	APP.
C	Issued For Information	19/10/2023	KL
D	Issued For Information	24/10/2023	KL
E	Issued For Information	14/11/2023	KL
F	EDO Issue	21/11/2023	KL
G	Issued For Information	05/12/2023	KL
H	Issued For Information	07/12/2023	KL
J	DA Issue	12/12/2023	KL

Client
DELUCA

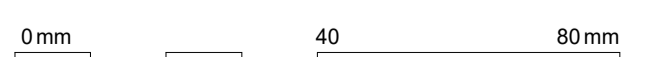
Project
**THE VILLAGE
CARSELDINE**

Drawing
5003 - BASEMENT - 1-100

A1 Scale 1 : 100
Project No. 23.0159
Revision J

Number SK - AR - DR - DA 120

Details
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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	REV	DESCRIPTION	DATE	APP.
C	Issued For Information	19/10/2023	KL	
D	Issued For Information	24/10/2023	KL	
E	Issued For Information	14/11/2023	KL	
F	EDO Issue	21/11/2023	KL	
G	Issued For Information	05/12/2023	KL	
H	Issued For Information	07/12/2023	KL	
J	DA Issue	12/12/2023	KL	

Client
DELUCA

Project
THE VILLAGE CARSELDINE

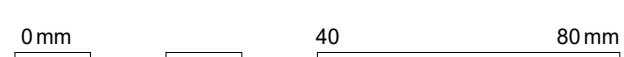
Drawing
5003 - GROUND FLOOR - 1-100

A1 Scale 1 : 100
Project No. 23.0159

Revision J

Number SK - AR - DR - DA 121

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.

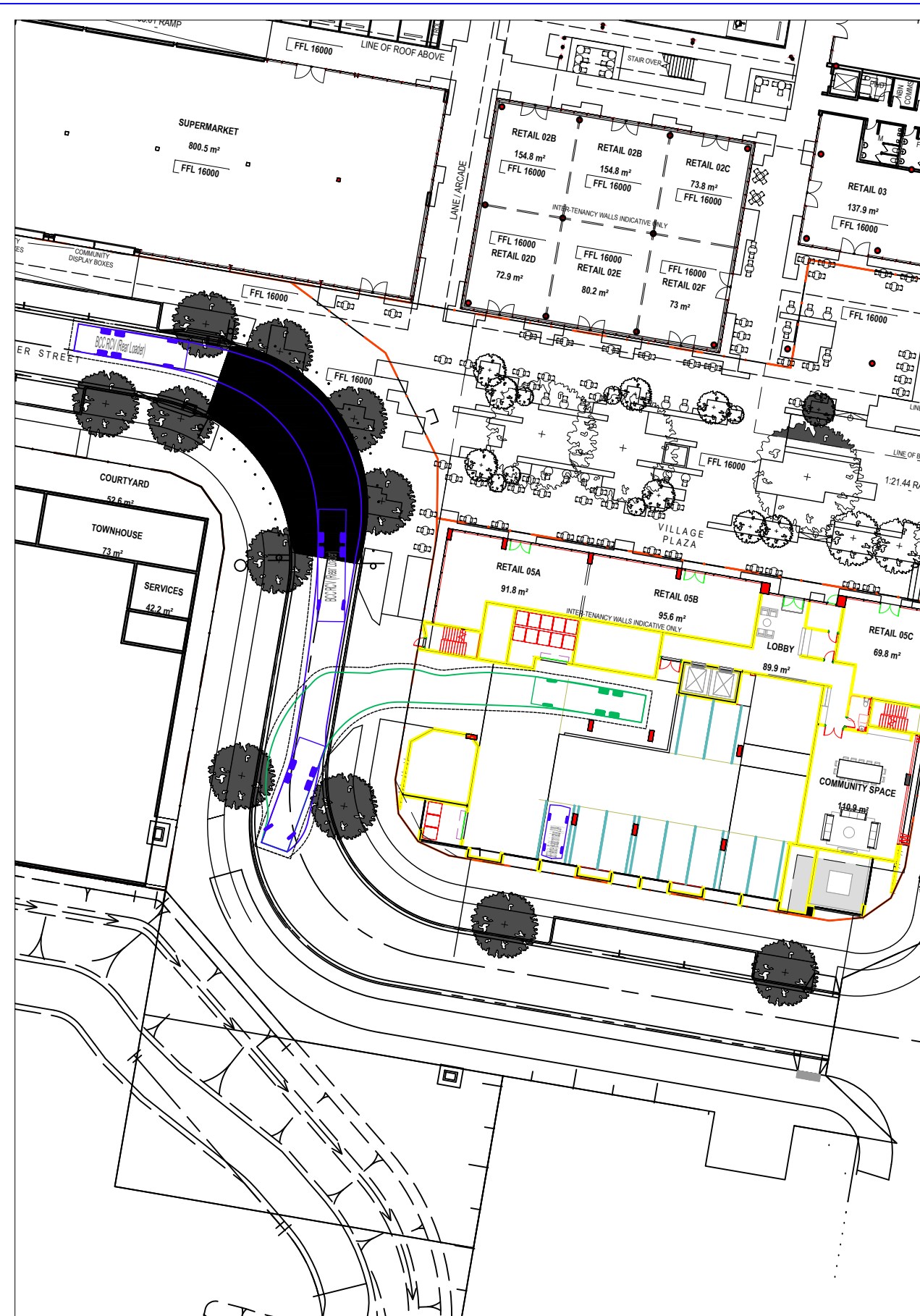


PRELIMINARY



ATTACHMENT B

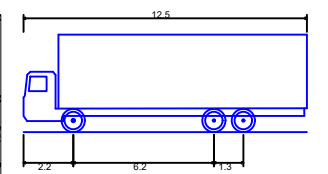
Vehicle Swept Path Analysis Drawing



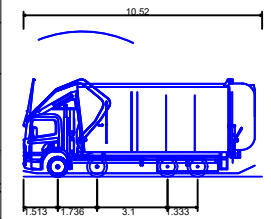
10.3m REAR-LOADING REFUSE COLLECTION VEHICLE



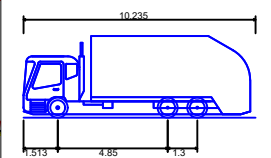
8.8m MEDIUM RIGID VEHICLE



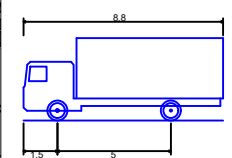
Heavy Rigid Vehicle (HRV) - 2890,2-2018 (12.5 m)
 Overall Length 12.500m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.490m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 12.500m



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

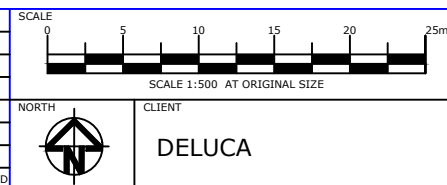


MRV - Medium Rigid Vehicle
 Overall Length 8.800m
 Overall Width 2.500m
 Overall Body Height 3.633m
 Min Body Ground Clearance 0.428m
 Track Width 2.500m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 10.000m

DIRECTOR

 DAVID GRUMMITT RPEQ 19356
 APPROVED 14 Dec 2023

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



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PROJECT **CARSELDINE VILLAGE**
 DRAWING TITLE **VEHICLE SWEEP PATH ANALYSIS**
LOT 5003 RESIDENTIAL SERVICE VEHICLES

PROJECT NUMBER	ORIGINAL SIZE
23BRT0076	A3
DRAWING NUMBER	REVISION
23BRT0076-10	A
DATE	SHEET
14 Dec 2023	1 OF 1